



RTEMS POSIX 1003.1 Compliance Guide

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CONTENTS

1	Preface	3
2	Standards	5
3	RTEMS Complete Profile	7
3.1	Summary	8
3.2	<aio.h>	9
3.3	<arpa/inet.h>	10
3.4	<assert.h>	11
3.5	<complex.h>	12
3.6	<ctype.h>	14
3.7	<devctl.h>	15
3.8	<dirent.h>	16
3.9	<dlfcn.h>	17
3.10	<errno.h>	18
3.11	<fcntl.h>	19
3.12	<fenv.h>	20
3.13	<fmtmsg.h>	21
3.14	<fnmatch.h>	22
3.15	<ftw.h>	23
3.16	<glob.h>	24
3.17	<grp.h>	25
3.18	<iconv.h>	26
3.19	<inttypes.h>	27
3.20	<langinfo.h>	28
3.21	<libgen.h>	29
3.22	<locale.h>	30
3.23	<math.h>	31
3.24	<monetary.h>	37
3.25	<mqueue.h>	38
3.26	<ndbm.h>	39
3.27	<net/if.h>	40
3.28	<netdb.h>	41
3.29	<nl_types.h>	42
3.30	<poll.h>	43
3.31	<pthread.h>	44
3.32	<pwd.h>	48
3.33	<regex.h>	49

3.34	<sched.h>	50
3.35	<search.h>	51
3.36	<semaphore.h>	52
3.37	<setjmp.h>	53
3.38	<signal.h>	54
3.39	<spawn.h>	55
3.40	<stdarg.h>	56
3.41	<stddef.h>	57
3.42	<stdio.h>	58
3.43	<stdlib.h>	61
3.44	<string.h>	64
3.45	<strings.h>	66
3.46	<stropts.h>	67
3.47	<sys/ipc.h>	68
3.48	<sys/mman.h>	69
3.49	<sys/msg.h>	70
3.50	<sys/resource.h>	71
3.51	<sys/select.h>	72
3.52	<sys/sem.h>	73
3.53	<sys/shm.h>	74
3.54	<sys/socket.h>	75
3.55	<sys/stat.h>	76
3.56	<sys/statvfs.h>	77
3.57	<sys/time.h>	78
3.58	<sys/times.h>	79
3.59	<sys/uio.h>	80
3.60	<sys/utsname.h>	81
3.61	<sys/wait.h>	82
3.62	<syslog.h>	83
3.63	<termios.h>	84
3.64	<threads.h>	85
3.65	<time.h>	86
3.66	<trace.h>	88
3.67	<ulimit.h>	90
3.68	<unistd.h>	91
3.69	<utime.h>	94
3.70	<utmpx.h>	95
3.71	<wchar.h>	96
3.72	<wctype.h>	99
3.73	<wordexp.h>	101
4	POSIX-2008	103
4.1	Summary	104
4.2	<aio.h>	105
4.3	<arpa/inet.h>	106
4.4	<assert.h>	107
4.5	<complex.h>	108
4.6	<ctype.h>	110
4.7	<dirent.h>	111
4.8	<dlfcn.h>	112
4.9	<errno.h>	113

4.10	<fcntl.h>	114
4.11	<fenv.h>	115
4.12	<fmtmsg.h>	116
4.13	<fnmatch.h>	117
4.14	<ftw.h>	118
4.15	<glob.h>	119
4.16	<grp.h>	120
4.17	<iconv.h>	121
4.18	<inttypes.h>	122
4.19	<langinfo.h>	123
4.20	<libgen.h>	124
4.21	<locale.h>	125
4.22	<math.h>	126
4.23	<monetary.h>	132
4.24	<queue.h>	133
4.25	<ndbm.h>	134
4.26	<net/if.h>	135
4.27	<netdb.h>	136
4.28	<nl_types.h>	137
4.29	<poll.h>	138
4.30	<pthread.h>	139
4.31	<pwd.h>	143
4.32	<regex.h>	144
4.33	<sched.h>	145
4.34	<search.h>	146
4.35	<semaphore.h>	147
4.36	<setjmp.h>	148
4.37	<signal.h>	149
4.38	<spawn.h>	150
4.39	<stdarg.h>	151
4.40	<stddef.h>	152
4.41	<stdio.h>	153
4.42	<stdlib.h>	156
4.43	<string.h>	158
4.44	<strings.h>	160
4.45	<stropts.h>	161
4.46	<sys/ipc.h>	162
4.47	<sys/mman.h>	163
4.48	<sys/msg.h>	164
4.49	<sys/resource.h>	165
4.50	<sys/select.h>	166
4.51	<sys/sem.h>	167
4.52	<sys/shm.h>	168
4.53	<sys/socket.h>	169
4.54	<sys/stat.h>	170
4.55	<sys/statvfs.h>	171
4.56	<sys/time.h>	172
4.57	<sys/times.h>	173
4.58	<sys/uio.h>	174
4.59	<sys/utsname.h>	175
4.60	<sys/wait.h>	176

4.61	<syslog.h>	177
4.62	<termios.h>	178
4.63	<time.h>	179
4.64	<trace.h>	181
4.65	<ulimit.h>	183
4.66	<unistd.h>	184
4.67	<utime.h>	187
4.68	<utmpx.h>	188
4.69	<wchar.h>	189
4.70	<wctype.h>	192
4.71	<wordexp.h>	194
5	POSIX-2003	195
5.1	Summary	196
5.2	<aio.h>	197
5.3	<arpa/inet.h>	198
5.4	<assert.h>	199
5.5	<complex.h>	200
5.6	<ctype.h>	202
5.7	<dirent.h>	203
5.8	<dlfcn.h>	204
5.9	<errno.h>	205
5.10	<fcntl.h>	206
5.11	<fenv.h>	207
5.12	<fmtmsg.h>	208
5.13	<fnmatch.h>	209
5.14	<ftw.h>	210
5.15	<glob.h>	211
5.16	<grp.h>	212
5.17	<iconv.h>	213
5.18	<inttypes.h>	214
5.19	<langinfo.h>	215
5.20	<libgen.h>	216
5.21	<locale.h>	217
5.22	<math.h>	218
5.23	<monetary.h>	224
5.24	<mqueue.h>	225
5.25	<ndbm.h>	226
5.26	<net/if.h>	227
5.27	<netdb.h>	228
5.28	<nl_types.h>	229
5.29	<poll.h>	230
5.30	<pthread.h>	231
5.31	<pwd.h>	234
5.32	<regex.h>	235
5.33	<sched.h>	236
5.34	<search.h>	237
5.35	<semaphore.h>	238
5.36	<setjmp.h>	239
5.37	<signal.h>	240
5.38	<spawn.h>	241

5.39	<stdarg.h>	242
5.40	<stddef.h>	243
5.41	<stdio.h>	244
5.42	<stdlib.h>	246
5.43	<string.h>	249
5.44	<strings.h>	250
5.45	<stropts.h>	251
5.46	<sys/ipc.h>	252
5.47	<sys/mman.h>	253
5.48	<sys/msg.h>	254
5.49	<sys/resource.h>	255
5.50	<sys/select.h>	256
5.51	<sys/sem.h>	257
5.52	<sys/shm.h>	258
5.53	<sys/socket.h>	259
5.54	<sys/stat.h>	260
5.55	<sys/statvfs.h>	261
5.56	<sys/time.h>	262
5.57	<sys/times.h>	263
5.58	<sys/uio.h>	264
5.59	<sys/utsname.h>	265
5.60	<sys/wait.h>	266
5.61	<syslog.h>	267
5.62	<termios.h>	268
5.63	<time.h>	269
5.64	<trace.h>	271
5.65	<ulimit.h>	273
5.66	<unistd.h>	274
5.67	<utime.h>	277
5.68	<utmpx.h>	278
5.69	<wchar.h>	279
5.70	<wctype.h>	281
5.71	<wordexp.h>	282
6	POSIX PSE51 - Minimal	283
6.1	Summary	284
6.2	<ctype.h>	285
6.3	<errno.h>	286
6.4	<fcntl.h>	287
6.5	<fenv.h>	288
6.6	<inttypes.h>	289
6.7	<locale.h>	290
6.8	<pthread.h>	291
6.9	<sched.h>	294
6.10	<semaphore.h>	295
6.11	<setjmp.h>	296
6.12	<signal.h>	297
6.13	<stdarg.h>	298
6.14	<stdio.h>	299
6.15	<stdlib.h>	301
6.16	<string.h>	302

6.17	<sys/mman.h>	303
6.18	<sys/utsname.h>	304
6.19	<time.h>	305
6.20	<unistd.h>	306
7	POSIX PSE52 - Real-Time Controller	307
7.1	Summary	308
7.2	<complex.h>	309
7.3	<ctype.h>	311
7.4	<dirent.h>	312
7.5	<errno.h>	313
7.6	<fcntl.h>	314
7.7	<fenv.h>	315
7.8	<inttypes.h>	316
7.9	<locale.h>	317
7.10	<math.h>	318
7.11	<mqueue.h>	324
7.12	<pthread.h>	325
7.13	<sched.h>	328
7.14	<semaphore.h>	329
7.15	<setjmp.h>	330
7.16	<signal.h>	331
7.17	<stdarg.h>	332
7.18	<stdio.h>	333
7.19	<stdlib.h>	335
7.20	<string.h>	336
7.21	<sys/mman.h>	337
7.22	<sys/stat.h>	338
7.23	<sys/utsname.h>	339
7.24	<time.h>	340
7.25	<trace.h>	341
7.26	<unistd.h>	343
7.27	<utime.h>	344
8	POSIX PSE53 - Dedicated	345
8.1	Summary	346
8.2	<aio.h>	347
8.3	<arpa/inet.h>	348
8.4	<assert.h>	349
8.5	<complex.h>	350
8.6	<ctype.h>	352
8.7	<dirent.h>	353
8.8	<errno.h>	354
8.9	<fcntl.h>	355
8.10	<fenv.h>	356
8.11	<inttypes.h>	357
8.12	<locale.h>	358
8.13	<math.h>	359
8.14	<mqueue.h>	365
8.15	<net/if.h>	366
8.16	<netdb.h>	367
8.17	<pthread.h>	368

8.18	<sched.h>	371
8.19	<semaphore.h>	372
8.20	<setjmp.h>	373
8.21	<signal.h>	374
8.22	<spawn.h>	375
8.23	<stdarg.h>	376
8.24	<stdio.h>	377
8.25	<stdlib.h>	379
8.26	<string.h>	381
8.27	<sys/mman.h>	382
8.28	<sys/select.h>	383
8.29	<sys/socket.h>	384
8.30	<sys/stat.h>	385
8.31	<sys/time.h>	386
8.32	<sys/times.h>	387
8.33	<sys/utsname.h>	388
8.34	<sys/wait.h>	389
8.35	<time.h>	390
8.36	<trace.h>	391
8.37	<unistd.h>	393
8.38	<utime.h>	395

9 POSIX PSE54 - Multipurpose 397

9.1	Summary	398
9.2	<aio.h>	399
9.3	<arpa/inet.h>	400
9.4	<assert.h>	401
9.5	<complex.h>	402
9.6	<ctype.h>	404
9.7	<dirent.h>	405
9.8	<dlfcn.h>	406
9.9	<errno.h>	407
9.10	<fcntl.h>	408
9.11	<fenv.h>	409
9.12	<fnmatch.h>	410
9.13	<glob.h>	411
9.14	<grp.h>	412
9.15	<inttypes.h>	413
9.16	<locale.h>	414
9.17	<math.h>	415
9.18	<mqueue.h>	421
9.19	<net/if.h>	422
9.20	<netdb.h>	423
9.21	<pthread.h>	424
9.22	<pwd.h>	427
9.23	<regex.h>	428
9.24	<sched.h>	429
9.25	<semaphore.h>	430
9.26	<setjmp.h>	431
9.27	<signal.h>	432
9.28	<spawn.h>	433

9.29	<stdarg.h>	434
9.30	<stdio.h>	435
9.31	<stdlib.h>	437
9.32	<string.h>	439
9.33	<sys/mman.h>	440
9.34	<sys/select.h>	441
9.35	<sys/socket.h>	442
9.36	<sys/stat.h>	443
9.37	<sys/time.h>	444
9.38	<sys/times.h>	445
9.39	<sys/utsname.h>	446
9.40	<sys/wait.h>	447
9.41	<syslog.h>	448
9.42	<termios.h>	449
9.43	<time.h>	450
9.44	<trace.h>	451
9.45	<unistd.h>	453
9.46	<utime.h>	455
9.47	<wchar.h>	456
9.48	<wctype.h>	458
9.49	<wordexp.h>	459
10 C99 Standard Library		461
10.1	Summary	462
10.2	<assert.h>	463
10.3	<complex.h>	464
10.4	<ctype.h>	466
10.5	<errno.h>	467
10.6	<fenv.h>	468
10.7	<inttypes.h>	469
10.8	<locale.h>	470
10.9	<math.h>	471
10.10	<setjmp.h>	477
10.11	<signal.h>	478
10.12	<stdarg.h>	479
10.13	<stddef.h>	480
10.14	<stdio.h>	481
10.15	<stdlib.h>	483
10.16	<string.h>	485
10.17	<time.h>	486
10.18	<wchar.h>	487
10.19	<wctype.h>	489
11 C11 Standard Library		491
11.1	Summary	492
11.2	<assert.h>	493
11.3	<complex.h>	494
11.4	<ctype.h>	496
11.5	<errno.h>	497
11.6	<fenv.h>	498
11.7	<inttypes.h>	499
11.8	<locale.h>	500

11.9	<math.h>	501
11.10	<setjmp.h>	507
11.11	<signal.h>	508
11.12	<stdarg.h>	509
11.13	<stddef.h>	510
11.14	<stdio.h>	511
11.15	<stdlib.h>	513
11.16	<string.h>	515
11.17	<threads.h>	516
11.18	<time.h>	517
11.19	<wchar.h>	518
11.20	<wctype.h>	520
12	FACE 2.1 Security	521
12.1	Summary	522
12.2	<arpa/inet.h>	523
12.3	<ctype.h>	524
12.4	<devctl.h>	525
12.5	<errno.h>	526
12.6	<math.h>	527
12.7	<netdb.h>	528
12.8	<pthread.h>	529
12.9	<sched.h>	531
12.10	<semaphore.h>	532
12.11	<signal.h>	533
12.12	<stdlib.h>	534
12.13	<string.h>	535
12.14	<sys/mman.h>	536
12.15	<sys/socket.h>	537
12.16	<sys/stat.h>	538
12.17	<time.h>	539
12.18	<unistd.h>	540
13	FACE 2.1 Safety Base	541
13.1	Summary	542
13.2	<arpa/inet.h>	543
13.3	<ctype.h>	544
13.4	<devctl.h>	545
13.5	<dirent.h>	546
13.6	<errno.h>	547
13.7	<fcntl.h>	548
13.8	<math.h>	549
13.9	<mqueue.h>	550
13.10	<netdb.h>	551
13.11	<pthread.h>	552
13.12	<sched.h>	554
13.13	<semaphore.h>	555
13.14	<signal.h>	556
13.15	<stdio.h>	557
13.16	<stdlib.h>	558
13.17	<string.h>	559
13.18	<sys/mman.h>	560

13.19	<sys/select.h>	561
13.20	<sys/socket.h>	562
13.21	<sys/stat.h>	563
13.22	<time.h>	564
13.23	<unistd.h>	565
14	FACE 2.1 Safety Extended	567
14.1	Summary	568
14.2	<arpa/inet.h>	569
14.3	<ctype.h>	570
14.4	<devctl.h>	571
14.5	<dirent.h>	572
14.6	<errno.h>	573
14.7	<fcntl.h>	574
14.8	<math.h>	575
14.9	<mqueue.h>	576
14.10	<netdb.h>	577
14.11	<pthread.h>	578
14.12	<sched.h>	580
14.13	<semaphore.h>	581
14.14	<setjmp.h>	582
14.15	<signal.h>	583
14.16	<spawn.h>	584
14.17	<stdarg.h>	585
14.18	<stdio.h>	586
14.19	<stdlib.h>	587
14.20	<string.h>	588
14.21	<sys/mman.h>	589
14.22	<sys/select.h>	590
14.23	<sys/socket.h>	591
14.24	<sys/stat.h>	592
14.25	<sys/times.h>	593
14.26	<sys/utsname.h>	594
14.27	<sys/wait.h>	595
14.28	<time.h>	596
14.29	<unistd.h>	597
15	FACE 2.1 General Purpose	599
15.1	Summary	600
15.2	<aio.h>	601
15.3	<arpa/inet.h>	602
15.4	<assert.h>	603
15.5	<complex.h>	604
15.6	<ctype.h>	606
15.7	<devctl.h>	607
15.8	<dirent.h>	608
15.9	<errno.h>	609
15.10	<fcntl.h>	610
15.11	<fenv.h>	611
15.12	<inttypes.h>	612
15.13	<locale.h>	613
15.14	<math.h>	614

15.15	<mqueue.h>	620
15.16	<net/if.h>	621
15.17	<netdb.h>	622
15.18	<pthread.h>	623
15.19	<sched.h>	626
15.20	<semaphore.h>	627
15.21	<setjmp.h>	628
15.22	<signal.h>	629
15.23	<spawn.h>	630
15.24	<stdarg.h>	631
15.25	<stdio.h>	632
15.26	<stdlib.h>	634
15.27	<string.h>	636
15.28	<sys/mman.h>	637
15.29	<sys/select.h>	638
15.30	<sys/socket.h>	639
15.31	<sys/stat.h>	640
15.32	<sys/times.h>	641
15.33	<sys/utsname.h>	642
15.34	<sys/wait.h>	643
15.35	<time.h>	644
15.36	<unistd.h>	645
15.37	<wchar.h>	647
15.38	<wctype.h>	649
16	FACE 3.0 Security	651
16.1	Summary	652
16.2	<arpa/inet.h>	653
16.3	<ctype.h>	654
16.4	<devctl.h>	655
16.5	<errno.h>	656
16.6	<math.h>	657
16.7	<netdb.h>	658
16.8	<pthread.h>	659
16.9	<sched.h>	661
16.10	<semaphore.h>	662
16.11	<signal.h>	663
16.12	<stdlib.h>	664
16.13	<string.h>	665
16.14	<sys/mman.h>	666
16.15	<sys/socket.h>	667
16.16	<sys/stat.h>	668
16.17	<time.h>	669
16.18	<unistd.h>	670
17	FACE 3.0 Safety Base	671
17.1	Summary	672
17.2	<arpa/inet.h>	673
17.3	<ctype.h>	674
17.4	<devctl.h>	675
17.5	<dirent.h>	676
17.6	<errno.h>	677

17.7	<fcntl.h>	678
17.8	<math.h>	679
17.9	<mqueue.h>	680
17.10	<netdb.h>	681
17.11	<pthread.h>	682
17.12	<sched.h>	684
17.13	<semaphore.h>	685
17.14	<signal.h>	686
17.15	<stdio.h>	687
17.16	<stdlib.h>	688
17.17	<string.h>	689
17.18	<sys/mman.h>	690
17.19	<sys/select.h>	691
17.20	<sys/socket.h>	692
17.21	<sys/stat.h>	693
17.22	<time.h>	694
17.23	<unistd.h>	695
18	FACE 3.0 Safety Extended	697
18.1	Summary	698
18.2	<arpa/inet.h>	699
18.3	<ctype.h>	700
18.4	<devctl.h>	701
18.5	<dirent.h>	702
18.6	<errno.h>	703
18.7	<fcntl.h>	704
18.8	<math.h>	705
18.9	<mqueue.h>	706
18.10	<netdb.h>	707
18.11	<pthread.h>	708
18.12	<sched.h>	710
18.13	<semaphore.h>	711
18.14	<setjmp.h>	712
18.15	<signal.h>	713
18.16	<spawn.h>	714
18.17	<stdarg.h>	715
18.18	<stdio.h>	716
18.19	<stdlib.h>	717
18.20	<string.h>	718
18.21	<sys/mman.h>	719
18.22	<sys/select.h>	720
18.23	<sys/socket.h>	721
18.24	<sys/stat.h>	722
18.25	<sys/times.h>	723
18.26	<sys/utsname.h>	724
18.27	<sys/wait.h>	725
18.28	<time.h>	726
18.29	<unistd.h>	727
19	FACE 3.0 General Purpose	729
19.1	Summary	730
19.2	<aio.h>	731

19.3	<arpa/inet.h>	732
19.4	<assert.h>	733
19.5	<complex.h>	734
19.6	<ctype.h>	736
19.7	<devctl.h>	737
19.8	<dirent.h>	738
19.9	<errno.h>	739
19.10	<fcntl.h>	740
19.11	<fenv.h>	741
19.12	<inttypes.h>	742
19.13	<locale.h>	743
19.14	<math.h>	744
19.15	<mqueue.h>	750
19.16	<net/if.h>	751
19.17	<netdb.h>	752
19.18	<pthread.h>	753
19.19	<sched.h>	756
19.20	<semaphore.h>	757
19.21	<setjmp.h>	758
19.22	<signal.h>	759
19.23	<spawn.h>	760
19.24	<stdarg.h>	761
19.25	<stdio.h>	762
19.26	<stdlib.h>	764
19.27	<string.h>	766
19.28	<sys/mman.h>	767
19.29	<sys/select.h>	768
19.30	<sys/socket.h>	769
19.31	<sys/stat.h>	770
19.32	<sys/times.h>	771
19.33	<sys/utsname.h>	772
19.34	<sys/wait.h>	773
19.35	<time.h>	774
19.36	<unistd.h>	775
19.37	<wchar.h>	777
19.38	<wctype.h>	779
20	SCA 2.2.2 AEP	781
20.1	Summary	782
20.2	<ctype.h>	783
20.3	<dirent.h>	784
20.4	<fcntl.h>	785
20.5	<locale.h>	786
20.6	<math.h>	787
20.7	<pthread.h>	788
20.8	<semaphore.h>	791
20.9	<setjmp.h>	792
20.10	<signal.h>	793
20.11	<stdio.h>	794
20.12	<stdlib.h>	796
20.13	<string.h>	797

20.14	<sys/stat.h>	798
20.15	<time.h>	799
20.16	<unistd.h>	800
20.17	<utime.h>	801
21	SCA 4.1 Ultra Lightweight AEP	803
21.1	Summary	804
21.2	<math.h>	805
21.3	<mqueue.h>	806
21.4	<pthread.h>	807
21.5	<semaphore.h>	808
21.6	<time.h>	809
22	SCA 4.1 Lightweight AEP	811
22.1	Summary	812
22.2	<ctype.h>	813
22.3	<fcntl.h>	814
22.4	<math.h>	815
22.5	<mqueue.h>	816
22.6	<pthread.h>	817
22.7	<semaphore.h>	818
22.8	<stdio.h>	819
22.9	<stdlib.h>	820
22.10	<string.h>	821
22.11	<time.h>	822
22.12	<unistd.h>	823
23	SCA 4.1 [Full] AEP	825
23.1	Summary	826
23.2	<arpa/inet.h>	827
23.3	<ctype.h>	828
23.4	<dirent.h>	829
23.5	<errno.h>	830
23.6	<fcntl.h>	831
23.7	<math.h>	832
23.8	<mqueue.h>	833
23.9	<pthread.h>	834
23.10	<semaphore.h>	836
23.11	<signal.h>	837
23.12	<stdarg.h>	838
23.13	<stdio.h>	839
23.14	<stdlib.h>	841
23.15	<string.h>	842
23.16	<sys/select.h>	843
23.17	<sys/socket.h>	844
23.18	<sys/stat.h>	845
23.19	<time.h>	846
23.20	<unistd.h>	847
24	Glossary	849
	Index	851

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The RTEMS Project is hosted at <https://www.rtems.org>. Any inquiries concerning RTEMS, its related support components, or its documentation should be directed to the RTEMS Project community.

RTEMS Online Resources

Home	https://www.rtems.org
Documentation	https://docs.rtems.org
Mailing Lists	https://lists.rtems.org
Bug Reporting	https://devel.rtems.org/wiki/Developer/Bug_Reporting
Git Repositories	https://git.rtems.org
Developers	https://devel.rtems.org

PREFACE

RTEMS supports a variety of POSIX and BSD features including some POSIX methods that are now deemed obsolete and some methods for compatibility with GNU/Linux and FreeBSD. There are multiple POSIX standard versions as well as multiple efforts to tailor (e.g. profile) POSIX for embedded environments. They range in size from less than 200 required capabilities to the full POSIX standard which has over 1200 required capabilities. This document reports on the alignment of RTEMS with various standard versions and defined profiles.

RTEMS supports a number of POSIX process, user, and group oriented routines in what is referred to as a “SUSP” (Single-User, Single Process) manner. RTEMS supports a single process, multithreaded POSIX environment. In a pure world, there would be no reason to even include routines like `getpid()` when there can only be one process. But providing routines like `getpid()` and making them work in a sensible fashion for an embedded environment while not returning `ENOSYS` (for not implemented) makes it significantly easier to port code from a UNIX environment without modifying it.

In general, adding missing methods is always an open project for a volunteer. If considering addressing missing methods, please discuss this on mailing list. Some are properly implemented in the Newlib C Standard Library used by RTEMS. Others may require target architecture specific implementations. Still others may be impossible to implement without multiple processes or can only be implemented in a restricted fashion.

Missing methods required by the C99 standard or FACE Technical Standard Edition 3.0 General Purpose Profile are good candidates to add. Proposals to add missing methods from the C11 standard should be reviewed by RTEMS core developers to ensure the effort is well spent. There are rumors that some optional methods that are not being widely implemented will be removed in a future versino of the C Programming Language standard.

The next chapter in this document describes each of the standards with which the RTEMS alignment is tracked. Each subsequent chapter in this document presents the alignment of RTEMS with a specific standard version or defined profile. Each section with a chapter details the alignment of a specific header file relative to the chapter’s standard or profile. The implementation status of the items required by the standard are listed.

STANDARDS

This chapter describes each of the standards which RTEMS tracks API alignment with. As a general rule, these standards are related to the POSIX or C programming language standards. Many are the result of domain specific efforts to define subsets or profiles or the full POSIX standard which are suitable for a specific domain. Each API set is considered a “profile” against which the full capability set of RTEMS is evaluated.

The RTEMS Complete Profile is the complete set of POSIX, BSD, and C programming language methods supported by RTEMS. This profile is independent of any standard and represents a union of multiple standards. For example, RTEMS supports BSD derived methods that are not in POSIX.

The IEEE Standard 1003.1 is the POSIX standard. Specifically, IEEE Standard 1003.1-2008 is the 2003 edition of the POSIX standard and IEEE Standard 1003.1-2008 is the 2008 edition. The 2008 is an update from the 2003 edition. Each edition of the POSIX standard tends to add some methods, deprecate some methods, and obsolete (e.g. remove) other methods.

PSE51 through PSE54 are Open Group defined profiles of the 2003 edition of the POSIX standard. These profiles are:

- Profile 54 - Multipurpose
 - 1003.1-2003 Base Multi-process, Threads and File System
- Profile 53 - Dedicated
 - Multi-process, Threads and File System
- Profile 52 - Controller
 - Single Process, Threads, and File System
- Profile 51 - Minimal
 - Single Process, Threads, with No File System

The C99 Programming Language standard defines the Standard C Library. This library is largely included by reference in the POSIX standard.

The C11 Programming Language standard also defines an updated version of the Standard C Library. It deletes a few methods from the C99 version but adds many methods. A large portion of these methods are optional and not commonly implemented.

The Open Group FACE Consortium (<https://www.opengroup.org/face>) has defined four POSIX profiles targeting the avionics application domain. The FACE Technical Standard has been

through multiple revisions and the POSIX API profiles are identical in Editions 1.0, 2.0, 2.1, and 2.1.1. In these editions, the profiles are as follows:

- Security - 163 APIs, single process, no FILE *
- Safety Basic - 246 APIs, single process, some FILE *
- Safety Extended - 335 APIs, multi-process, more FILE *
- General Purpose - 812 APIs, multi-process, much more

FACE Technical Standard Edition 3.0 adds the requirement for an operating system to support `clock_nanosleep()` in all profiles and defines one additional subcommand for the `posix_devctl()` methods.

RTEMS provides all of the methods required by the FACE Safety BASE profile and all of the methods in the Safety Extended profile which do not require multiple processes. Similarly, RTEMS provides most of the methods in the General Purpose profile which do not require multiple processes.

The Software Communications Architecture (SCA) specification targets the requirements for software-defined radios. This specification was originally developed in support of the Joint Tactical Radio System (JTRS) program in conjunction with the Object Management Group (OMG). This standard is now maintained by the Wireless Innovation Forum with support from the U.S. Navy Joint Tactical Network Center (JTNC). Some URLs of interest:

- SCA at Wireless Innovation Forum - <http://www.wirelessinnovation.org/sca-based-standards-library>
- JTRS - https://en.wikipedia.org/wiki/Joint_Tactical_Radio_System
- JTNC - <http://www.public.navy.mil/jtnc/Pages/home.aspx>

The SCA standard is hosted at the Wireless Innovation Forum with JTNC hosting supplemental information.

RTEMS includes all methods required by the SCA POSIX profiles.

RTEMS COMPLETE PROFILE

This chapter has a subsection per header file to detail the methods provided by RTEMS that are in that header file.

3.1 Summary

The follow table summarizes RTEMS supported methods for all tracked standards:

Supported	989
ENOSYS	19
Not supported	226

3.2 <aio.h>

The following methods and variables in <aio.h> are supported:

- aio_cancel()
- aio_error()
- aio_fsync()
- aio_read()
- aio_return()
- aio_write()

The following methods in <aio.h> are implemented as stubs returning -1 and setting errno to ENOSYS:

- aio_suspend()
- lio_listio()

3.3 <arpa/inet.h>

The following methods and variables in <arpa/inet.h> are supported:

- htonl()
- htons()
- inet_addr()
- inet_ntoa()
- inet_ntop()
- inet_pton()
- ntohl()
- ntohs()

3.4 <assert.h>

The following methods and variables in <assert.h> are supported:

- assert()

3.5 <complex.h>

The following methods and variables in <complex.h> are supported:

- `cabs()`
- `cabsf()`
- `cabsl()`
- `cacos()`
- `cacosf()`
- `cacosh()`
- `cacoshf()`
- `cacoshl()`
- `cacosl()`
- `carg()`
- `cargf()`
- `cargl()`
- `casin()`
- `casinf()`
- `casinh()`
- `casinhf()`
- `casinhl()`
- `casinl()`
- `catan()`
- `catanf()`
- `catanh()`
- `catanhf()`
- `catanhl()`
- `catanl()`
- `ccos()`
- `ccosf()`
- `ccosh()`
- `ccoshf()`
- `ccoshl()`
- `ccosl()`
- `cexp()`
- `cexpf()`

- `cexpl()`
- `cimag()`
- `cimagf()`
- `cimagl()`
- `clog()`
- `clogf()`
- `clogl()`
- `conj()`
- `conjf()`
- `conjl()`
- `cpow()`
- `cpowf()`
- `cpowl()`
- `cproj()`
- `cprojf()`
- `cprojl()`
- `creal()`
- `crealf()`
- `creall()`
- `csin()`
- `csinf()`
- `csinh()`
- `csinhf()`
- `csinhl()`
- `csinl()`
- `csqrt()`
- `csqrtf()`
- `csqrtl()`
- `ctan()`
- `ctanf()`
- `ctanh()`
- `ctanhf()`
- `ctanhl()`
- `ctanl()`

3.6 <ctype.h>

The following methods and variables in <ctype.h> are supported:

- `_tolower()`
- `_toupper()`
- `isalnum()`
- `isalnum_l()`
- `isalpha()`
- `isalpha_l()`
- `isascii()`
- `isblank()`
- `isblank_l()`
- `iscntrl()`
- `iscntrl_l()`
- `isdigit()`
- `isdigit_l()`
- `isgraph()`
- `isgraph_l()`
- `islower()`
- `islower_l()`
- `isprint()`
- `isprint_l()`
- `ispunct()`
- `ispunct_l()`
- `isspace()`
- `isspace_l()`
- `isupper()`
- `isupper_l()`
- `isxdigit()`
- `isxdigit_l()`
- `toascii()`
- `tolower()`
- `tolower_l()`
- `toupper()`
- `toupper_l()`

3.7 <devctl.h>

The following methods and variables in <devctl.h> are supported:

- posix_devctl()

3.8 <dirent.h>

The following methods and variables in <dirent.h> are supported:

- `alphasort()`
- `closedir()`
- `opendir()`
- `readdir()`
- `readdir_r()`
- `rewinddir()`
- `scandir()`
- `seekdir()`
- `telldir()`

The following methods and variables in <dirent.h> are not supported:

- `dirfd()`
- `fdopendir()`

3.9 <dlfcn.h>

The following methods and variables in <dlfcn.h> are supported:

- dlclose()
- dlerror()
- dlopen()
- dlsym()

3.10 <errno.h>

The following methods and variables in <errno.h> are supported:

- errno

3.11 <fcntl.h>

The following methods and variables in <fcntl.h> are supported:

- creat()
- fcntl()
- open()

The following methods and variables in <fcntl.h> are not supported:

- openat()
- posix_fadvise()
- posix_fallocate()
- posix_openpt()

3.12 <fenv.h>

The following methods and variables in <fenv.h> are not supported:

- `feclearexcept()`
- `fegetenv()`
- `fegetexceptflag()`
- `fegetround()`
- `feholdexcept()`
- `feraiseexcept()`
- `fesetenv()`
- `fesetexceptflag()`
- `fesetround()`
- `fetestexcept()`
- `feupdateenv()`

3.13 <fmtmsg.h>

The following methods and variables in <fmtmsg.h> are not supported:

- `fmtmsg()`

3.14 <fnmatch.h>

The following methods and variables in <fnmatch.h> are supported:

- fnmatch()

3.15 <ftw.h>

The following methods and variables in <ftw.h> are not supported:

- ftw()
- nftw()

3.16 <glob.h>

The following methods and variables in <glob.h> are supported:

- glob()
- globfree()

3.17 <grp.h>

The following methods and variables in <grp.h> are supported:

- endgrent()
- getgrent()
- getgrgid()
- getgrgid_r()
- getgrnam()
- getgrnam_r()
- setgrent()

3.18 <iconv.h>

The following methods and variables in <iconv.h> are supported:

- iconv()
- iconv_close()
- iconv_open()

3.19 <inttypes.h>

The following methods and variables in <inttypes.h> are supported:

- `imaxabs()`
- `imaxdiv()`
- `strtoimax()`
- `strtoumax()`
- `wcstoimax()`
- `wcstoumax()`

3.20 <langinfo.h>

The following methods and variables in <langinfo.h> are supported:

- nl_langinfo()
- nl_langinfo_l()

3.21 <libgen.h>

The following methods and variables in <libgen.h> are supported:

- `basename()`
- `dirname()`

3.22 <locale.h>

The following methods and variables in <locale.h> are supported:

- duplocale()
- freelocale()
- localeconv()
- newlocale()
- setlocale()
- uselocale()

3.23 <math.h>

The following methods and variables in <math.h> are supported:

- `acos()`
- `acosf()`
- `acosh()`
- `acoshf()`
- `acoshl()`
- `acosl()`
- `asin()`
- `asinf()`
- `asinh()`
- `asinhf()`
- `asinh1()`
- `asinl()`
- `atan()`
- `atan2()`
- `atan2f()`
- `atan2l()`
- `atanf()`
- `atanh()`
- `atanhf()`
- `atanhl()`
- `atanl()`
- `cbrt()`
- `cbrtf()`
- `cbrtl()`
- `ceil()`
- `ceilf()`
- `ceill()`
- `copysign()`
- `copysignf()`
- `copysignl()`
- `cos()`
- `cosf()`

- cosh()
- coshf()
- coshl()
- cosl()
- erf()
- erfc()
- erfcf()
- erfcl()
- erff()
- erfl()
- exp()
- exp2()
- exp2f()
- exp2l()
- expf()
- expl()
- expm1()
- expm1f()
- expm1l()
- fabs()
- fabsf()
- fabsl()
- fdim()
- fdimf()
- fdiml()
- floor()
- floorf()
- floorl()
- fma()
- fmaf()
- fmal()
- fmax()
- fmaxf()
- fmaxl()

- `fmin()`
- `fminf()`
- `fminl()`
- `fmod()`
- `fmodf()`
- `fmodl()`
- `frexp()`
- `frexpf()`
- `frexpl()`
- `hypot()`
- `hypotf()`
- `hypotl()`
- `ilogb()`
- `ilogbf()`
- `ilogbl()`
- `isinf()`
- `isnan()`
- `ldexp()`
- `ldexpf()`
- `ldexpl()`
- `lgamma()`
- `lgammaf()`
- `lgammal()`
- `llrint()`
- `llrintf()`
- `llrintl()`
- `llround()`
- `llroundf()`
- `llroundl()`
- `log()`
- `log10()`
- `log10f()`
- `log10l()`
- `log1p()`

- `log1pf()`
- `log1pl()`
- `log2()`
- `log2f()`
- `log2l()`
- `logb()`
- `logbf()`
- `logbl()`
- `logf()`
- `logl()`
- `lrint()`
- `lrintf()`
- `lrintl()`
- `lround()`
- `lroundf()`
- `lroundl()`
- `modf()`
- `modff()`
- `modfl()`
- `nan()`
- `nanf()`
- `nanl()`
- `nearbyint()`
- `nearbyintf()`
- `nearbyintl()`
- `nextafter()`
- `nextafterf()`
- `nextafterl()`
- `nexttoward()`
- `nexttowardl()`
- `pow()`
- `powf()`
- `powl()`
- `remainder()`

- remainderf()
- remainderl()
- remquo()
- remquof()
- remquol()
- rint()
- rintf()
- rintl()
- round()
- roundf()
- roundl()
- scalb()
- scalbln()
- scalblnf()
- scalblnl()
- scalbn()
- scalbnf()
- scalbnl()
- sin()
- sinf()
- sinh()
- sinhf()
- sinh1()
- sinl()
- sqrt()
- sqrtf()
- sqrtl()
- tan()
- tanf()
- tanh()
- tanhf()
- tanh1()
- tanl()
- tgamma()

- `tgammaf()`
- `tgamma()`
- `trunc()`
- `truncf()`
- `truncl()`

The following methods and variables in `<math.h>` are not supported:

- `fpclassify()`
- `isfinite()`
- `isgreater()`
- `isgreaterequal()`
- `isless()`
- `islessequal()`
- `islessgreater()`
- `isnormal()`
- `isunordered()`
- `j0()`
- `j1()`
- `jn()`
- `nexttowardf()`
- `signbit()`
- `signgam`
- `y0()`
- `y1()`
- `yn()`

3.24 <monetary.h>

The following methods and variables in <monetary.h> are not supported:

- `strfmon()`
- `strfmon_l()`

3.25 <mqeue.h>

The following methods and variables in <mqeue.h> are supported:

- mq_close()
- mq_getattr()
- mq_notify()
- mq_open()
- mq_receive()
- mq_send()
- mq_setattr()
- mq_timedreceive()
- mq_timedsend()
- mq_unlink()

3.26 <ndbm.h>

The following methods and variables in <ndbm.h> are not supported:

- dbm_clearerr()
- dbm_close()
- dbm_delete()
- dbm_error()
- dbm_fetch()
- dbm_firstkey()
- dbm_nextkey()
- dbm_open()
- dbm_store()

3.27 <net/if.h>

The following methods and variables in <net/if.h> are supported:

- if_freenameindex()
- if_indextoname()
- if_nameindex()
- if_nametoindex()

3.28 <netdb.h>

The following methods and variables in <netdb.h> are supported:

- `endhostent()`
- `endnetent()`
- `endprotoent()`
- `endservent()`
- `freeaddrinfo()`
- `gai_strerror()`
- `getaddrinfo()`
- `gethostbyaddr()`
- `gethostbyname()`
- `gethostent()`
- `getnameinfo()`
- `getnetbyaddr()`
- `getnetbyname()`
- `getnetent()`
- `getprotobyname()`
- `getprotobynumber()`
- `getprotoent()`
- `getservbyname()`
- `getservbyport()`
- `getservent()`
- `h_errno`
- `sethostent()`
- `setnetent()`
- `setprotoent()`
- `setservent()`

3.29 <nl_types.h>

The following methods and variables in <nl_types.h> are not supported:

- `catclose()`
- `catgets()`
- `catopen()`

3.30 <poll.h>

The following methods and variables in <poll.h> are not supported:

- poll()

3.31 <pthread.h>

The following methods and variables in <pthread.h> are supported:

- pthread_attr_destroy()
- pthread_attr_getdetachstate()
- pthread_attr_getguardsize()
- pthread_attr_getinheritsched()
- pthread_attr_getschedparam()
- pthread_attr_getschedpolicy()
- pthread_attr_getscope()
- pthread_attr_getstack()
- pthread_attr_getstackaddr()
- pthread_attr_getstacksize()
- pthread_attr_init()
- pthread_attr_setdetachstate()
- pthread_attr_setguardsize()
- pthread_attr_setinheritsched()
- pthread_attr_setschedparam()
- pthread_attr_setschedpolicy()
- pthread_attr_setscope()
- pthread_attr_setstack()
- pthread_attr_setstackaddr()
- pthread_attr_setstacksize()
- pthread_barrier_destroy()
- pthread_barrier_init()
- pthread_barrier_wait()
- pthread_barrierattr_destroy()
- pthread_barrierattr_getpshared()
- pthread_barrierattr_init()
- pthread_barrierattr_setpshared()
- pthread_cancel()
- pthread_cleanup_pop()
- pthread_cleanup_push()
- pthread_cond_broadcast()
- pthread_cond_destroy()

- pthread_cond_init()
- pthread_cond_signal()
- pthread_cond_timedwait()
- pthread_cond_wait()
- pthread_condattr_destroy()
- pthread_condattr_getclock()
- pthread_condattr_getpshared()
- pthread_condattr_init()
- pthread_condattr_setclock()
- pthread_condattr_setpshared()
- pthread_create()
- pthread_detach()
- pthread_equal()
- pthread_exit()
- pthread_getconcurrency()
- pthread_getschedparam()
- pthread_getspecific()
- pthread_join()
- pthread_key_create()
- pthread_key_delete()
- pthread_mutex_destroy()
- pthread_mutex_getprioceiling()
- pthread_mutex_init()
- pthread_mutex_lock()
- pthread_mutex_setprioceiling()
- pthread_mutex_timedlock()
- pthread_mutex_trylock()
- pthread_mutex_unlock()
- pthread_mutexattr_destroy()
- pthread_mutexattr_getprioceiling()
- pthread_mutexattr_getprotocol()
- pthread_mutexattr_getpshared()
- pthread_mutexattr_gettype()
- pthread_mutexattr_init()

- `pthread_mutexattr_setprioceiling()`
- `pthread_mutexattr_setprotocol()`
- `pthread_mutexattr_setpshared()`
- `pthread_mutexattr_settype()`
- `pthread_once()`
- `pthread_rwlock_destroy()`
- `pthread_rwlock_init()`
- `pthread_rwlock_rdlock()`
- `pthread_rwlock_timedrdlock()`
- `pthread_rwlock_timedwrlock()`
- `pthread_rwlock_tryrdlock()`
- `pthread_rwlock_trywrlock()`
- `pthread_rwlock_unlock()`
- `pthread_rwlock_wrlock()`
- `pthread_rwlockattr_destroy()`
- `pthread_rwlockattr_getpshared()`
- `pthread_rwlockattr_init()`
- `pthread_rwlockattr_setpshared()`
- `pthread_self()`
- `pthread_setcancelstate()`
- `pthread_setcanceltype()`
- `pthread_setconcurrency()`
- `pthread_setschedparam()`
- `pthread_setschedprio()`
- `pthread_setspecific()`
- `pthread_spin_destroy()`
- `pthread_spin_init()`
- `pthread_spin_lock()`
- `pthread_spin_trylock()`
- `pthread_spin_unlock()`
- `pthread_testcancel()`

The following methods in `<pthread.h>` are implemented as stubs returning `-1` and setting `errno` to `ENOSYS`:

- `pthread_atfork()`
- `pthread_getcpuclockid()`

The following methods and variables in <pthread.h> are not supported:

- pthread_mutex_consistent()
- pthread_mutexattr_getrobust()
- pthread_mutexattr_setrobust()

3.32 <pwd.h>

The following methods and variables in <pwd.h> are supported:

- `endpwent()`
- `getpwent()`
- `getpwnam()`
- `getpwnam_r()`
- `getpwuid()`
- `getpwuid_r()`
- `setpwent()`

3.33 <regex.h>

The following methods and variables in <regex.h> are supported:

- regcomp()
- regerror()
- regexec()
- regfree()

3.34 <sched.h>

The following methods and variables in <sched.h> are supported:

- sched_get_priority_max()
- sched_get_priority_min()
- sched_rr_get_interval()
- sched_yield()

The following methods in <sched.h> are implemented as stubs returning -1 and setting errno to ENOSYS:

- sched_getparam()
- sched_getscheduler()
- sched_setparam()
- sched_setscheduler()

3.35 <search.h>

The following methods and variables in <search.h> are supported:

- hcreate()
- hdestroy()
- hsearch()
- tdelete()
- tfind()
- tsearch()
- twalk()

The following methods and variables in <search.h> are not supported:

- insque()
- lfind()
- lsearch()
- remque()

3.36 <semaphore.h>

The following methods and variables in <semaphore.h> are supported:

- `sem_close()`
- `sem_destroy()`
- `sem_getvalue()`
- `sem_init()`
- `sem_open()`
- `sem_post()`
- `sem_timedwait()`
- `sem_trywait()`
- `sem_unlink()`
- `sem_wait()`

3.37 <setjmp.h>

The following methods and variables in <setjmp.h> are supported:

- longjmp()
- setjmp()
- siglongjmp()
- sigsetjmp()

The following methods and variables in <setjmp.h> are not supported:

- _longjmp()
- _setjmp()

3.38 <signal.h>

The following methods and variables in <signal.h> are supported:

- `bsd_signal()`
- `kill()`
- `psignal()`
- `pthread_kill()`
- `pthread_sigmask()`
- `raise()`
- `sigaction()`
- `sigaddset()`
- `sigdelset()`
- `sigemptyset()`
- `sigfillset()`
- `sigismember()`
- `signal()`
- `sigpending()`
- `sigprocmask()`
- `sigqueue()`
- `sigsuspend()`
- `sigtimedwait()`
- `sigwait()`
- `sigwaitinfo()`

The following methods and variables in <signal.h> are not supported:

- `killpg()`
- `psiginfo()`
- `sigaltstack()`
- `sighold()`
- `sigignore()`
- `siginterrupt()`
- `sigpause()`
- `sigrelse()`
- `sigset()`

3.39 <spawn.h>

The following methods and variables in <spawn.h> are not supported:

- posix_spawn()
- posix_spawn_file_actions_addclose()
- posix_spawn_file_actions_adddup2()
- posix_spawn_file_actions_addopen()
- posix_spawn_file_actions_destroy()
- posix_spawn_file_actions_init()
- posix_spawnattr_destroy()
- posix_spawnattr_getflags()
- posix_spawnattr_getpgroup()
- posix_spawnattr_getschedparam()
- posix_spawnattr_getschedpolicy()
- posix_spawnattr_getsigdefault()
- posix_spawnattr_getsigmask()
- posix_spawnattr_init()
- posix_spawnattr_setflags()
- posix_spawnattr_setpgroup()
- posix_spawnattr_setschedparam()
- posix_spawnattr_setschedpolicy()
- posix_spawnattr_setsigdefault()
- posix_spawnattr_setsigmask()
- posix_spawnnp()

3.40 <stdarg.h>

The following methods and variables in <stdarg.h> are supported:

- va_arg()
- va_copy()
- va_end()
- va_start()

3.41 <stddef.h>

The following methods and variables in <stddef.h> are supported:

- `offsetof()`

3.42 <stdio.h>

The following methods and variables in <stdio.h> are supported:

- clearerr()
- ctermid()
- dprintf()
- fclose()
- fdopen()
- feof()
- ferror()
- fflush()
- fgetc()
- fgetpos()
- fgets()
- fileno()
- flockfile()
- fmemopen()
- fopen()
- fprintf()
- fputc()
- fputs()
- fread()
- freopen()
- fscanff()
- fseek()
- fseeko()
- fsetpos()
- ftell()
- ftello()
- ftrylockfile()
- funlockfile()
- fwrite()
- getc()
- getc_unlocked()
- getchar()

- `getchar_unlocked()`
- `gets()`
- `open_memstream()`
- `perror()`
- `printf()`
- `putc()`
- `putc_unlocked()`
- `putchar()`
- `putchar_unlocked()`
- `puts()`
- `remove()`
- `rename()`
- `rewind()`
- `scanf()`
- `setbuf()`
- `setvbuf()`
- `snprintf()`
- `sprintf()`
- `sscanf()`
- `stderr`
- `stdin`
- `stdout`
- `tempnam()`
- `tmpfile()`
- `tmpnam()`
- `ungetc()`
- `vdprintf()`
- `vfprintf()`
- `vfscanf()`
- `vprintf()`
- `vscanf()`
- `vsprintf()`
- `vsprintf()`
- `vsscanf()`

The following methods and variables in `<stdio.h>` are not supported:

- `getdelim()`
- `getline()`
- `pclose()`
- `popen()`
- `renameat()`

3.43 <stdlib.h>

The following methods and variables in <stdlib.h> are supported:

- _Exit()
- a64l()
- abort()
- abs()
- atexit()
- atof()
- atoi()
- atol()
- atoll()
- bsearch()
- calloc()
- div()
- drand48()
- ecvt()
- erand48()
- exit()
- fcvt()
- free()
- gcvt()
- getenv()
- getsubopt()
- jrand48()
- l64a()
- labs()
- lcong48()
- ldiv()
- llabs()
- lldiv()
- lrand48()
- malloc()
- mblen()
- mbstowcs()

- `mbtowc()`
- `mkdtemp()`
- `mkstemp()`
- `rand48()`
- `rand48()`
- `posix_memalign()`
- `putenv()`
- `qsort()`
- `rand()`
- `rand_r()`
- `random()`
- `realloc()`
- `realpath()`
- `seed48()`
- `setenv()`
- `srand()`
- `srand48()`
- `srandom()`
- `strtod()`
- `strtof()`
- `strtol()`
- `strtold()`
- `strtoll()`
- `strtoul()`
- `strtoull()`
- `unsetenv()`
- `wcstombs()`
- `wctomb()`

The following methods in `<stdlib.h>` are implemented as stubs returning `-1` and setting `errno` to `ENOSYS`:

- `system()`

The following methods and variables in `<stdlib.h>` are not supported:

- `grantpt()`
- `initstate()`
- `ptsname()`

- `setkey()`
- `setstate()`
- `unlockpt()`

3.44 <string.h>

The following methods and variables in <string.h> are supported:

- memccpy()
- memchr()
- memcmp()
- memcpy()
- memmove()
- memset()
- stpcpy()
- stpncpy()
- strcat()
- strchr()
- strcmp()
- strcoll()
- strcoll_l()
- strcpy()
- strcspn()
- strdup()
- strerror()
- strerror_l()
- strerror_r()
- strlen()
- strncat()
- strncmp()
- strncpy()
- strndup()
- strnlen()
- strpbrk()
- strrchr()
- strsignal()
- strspn()
- strstr()
- strtok()
- strtok_r()

- `strxfrm()`
- `strxfrm_l()`

3.45 <strings.h>

The following methods and variables in <strings.h> are supported:

- `bcmp()`
- `bcopy()`
- `ffs()`
- `index()`
- `rindex()`
- `strcasecmp()`
- `strcasecmp_l()`
- `strncasecmp()`
- `strncasecmp_l()`

3.46 <stropts.h>

The following methods and variables in <stropts.h> are supported:

- ioctl()

The following methods and variables in <stropts.h> are not supported:

- fattach()
- fdetach()
- getmsg()
- getpmsg()
- isastream()
- putmsg()
- putpmsg()

3.47 <sys/ipc.h>

The following methods and variables in <sys/ipc.h> are not supported:

- ftok()

3.48 <sys/mman.h>

The following methods and variables in <sys/mman.h> are supported:

- mlock()
- mlockall()
- mmap()
- mprotect()
- msync()
- munlock()
- munlockall()
- munmap()
- posix_madvise()
- shm_open()
- shm_unlink()

The following methods and variables in <sys/mman.h> are not supported:

- posix_mem_offset()
- posix_typed_mem_get_info()
- posix_typed_mem_open()

3.49 <sys/msg.h>

The following methods and variables in <sys/msg.h> are not supported:

- msgctl()
- msgget()
- msgrcv()
- msgsnd()

3.50 <sys/resource.h>

The following methods and variables in <sys/resource.h> are supported:

- getrusage()

The following methods and variables in <sys/resource.h> are not supported:

- getpriority()
- getrlimit()
- setpriority()
- setrlimit()

3.51 <sys/select.h>

The following methods and variables in <sys/select.h> are supported:

- FD_CLR()
- FD_ISSET()
- FD_SET()
- FD_ZERO()
- select()

The following methods and variables in <sys/select.h> are not supported:

- pselect()

3.52 <sys/sem.h>

The following methods and variables in <sys/sem.h> are not supported:

- semctl()
- semget()
- semop()

3.53 <sys/shm.h>

The following methods and variables in <sys/shm.h> are not supported:

- `shmat()`
- `shmctl()`
- `shmdt()`
- `shmget()`

3.54 <sys/socket.h>

The following methods and variables in <sys/socket.h> are supported:

- accept()
- bind()
- connect()
- getpeername()
- getsockname()
- getsockopt()
- listen()
- recv()
- recvfrom()
- recvmsg()
- send()
- sendmsg()
- sendto()
- setsockopt()
- shutdown()
- socket()
- socketpair()

The following methods and variables in <sys/socket.h> are not supported:

- sockatmark()

3.55 <sys/stat.h>

The following methods and variables in <sys/stat.h> are supported:

- chmod()
- fchmod()
- fstat()
- lstat()
- mkdir()
- mkfifo()
- mknod()
- stat()
- umask()

The following methods and variables in <sys/stat.h> are not supported:

- fchmodat()
- fstatat()
- futimens()
- mkdirat()
- mkfifoat()
- mknodat()
- utimensat()

3.56 <sys/statvfs.h>

The following methods and variables in <sys/statvfs.h> are supported:

- statvfs()

The following methods and variables in <sys/statvfs.h> are not supported:

- fstatvfs()

3.57 <sys/time.h>

The following methods and variables in <sys/time.h> are supported:

- `gettimeofday()`
- `utimes()`

The following methods in <sys/time.h> are implemented as stubs returning -1 and setting `errno` to `ENOSYS`:

- `getitimer()`
- `setitimer()`

3.58 <sys/times.h>

The following methods and variables in <sys/times.h> are supported:

- times()

3.59 <sys/uio.h>

The following methods and variables in <sys/uio.h> are supported:

- readv()
- writev()

3.60 <sys/utsname.h>

The following methods and variables in <sys/utsname.h> are supported:

- `uname()`

3.61 <sys/wait.h>

The following methods and variables in <sys/wait.h> are supported:

- wait()
- waitpid()

The following methods and variables in <sys/wait.h> are not supported:

- waitid()

3.62 <syslog.h>

The following methods and variables in <syslog.h> are not supported:

- `closelog()`
- `openlog()`
- `setlogmask()`
- `syslog()`

3.63 <termios.h>

The following methods and variables in <termios.h> are supported:

- cfgetispeed()
- cfgetospeed()
- cfsetispeed()
- cfsetospeed()
- tcdrain()
- tcflow()
- tcflush()
- tcgetattr()
- tcsendbreak()
- tcsetattr()

The following methods and variables in <termios.h> are not supported:

- tcgetsid()

3.64 <threads.h>

The following methods and variables in <threads.h> are supported:

- `call_once()`
- `cond_broadcast()`
- `cond_destroy()`
- `cond_init()`
- `cond_signal()`
- `cond_timedwait()`
- `cond_wait()`
- `mtx_destroy()`
- `mtx_init()`
- `mtx_lock()`
- `mtx_timedlock()`
- `mtx_trylock()`
- `mtx_unlock()`
- `thrd_create()`
- `thrd_current()`
- `thrd_detach()`
- `thrd_equal()`
- `thrd_exit()`
- `thrd_join()`
- `thrd_sleep()`
- `thrd_yield()`
- `tss_create()`
- `tss_delete()`
- `tss_get()`
- `tss_set()`

3.65 <time.h>

The following methods and variables in <time.h> are supported:

- asctime()
- asctime_r()
- clock()
- clock_getres()
- clock_gettime()
- clock_nanosleep()
- clock_settime()
- ctime()
- ctime_r()
- difftime()
- gmtime()
- gmtime_r()
- localtime()
- localtime_r()
- mktime()
- nanosleep()
- strftime()
- strftime_l()
- strptime()
- time()
- timer_create()
- timer_delete()
- timer_getoverrun()
- timer_gettime()
- timer_settime()
- timezone
- tzname
- tzset()

The following methods in <time.h> are implemented as stubs returning -1 and setting errno to ENOSYS:

- clock_getcpuclockid()

The following methods and variables in <time.h> are not supported:

- daylight
- getdate()
- getdate_err

3.66 <trace.h>

The following methods and variables in <trace.h> are not supported:

- `posix_trace_attr_destroy()`
- `posix_trace_attr_getclockres()`
- `posix_trace_attr_getcreatetime()`
- `posix_trace_attr_getgenversion()`
- `posix_trace_attr_getinherited()`
- `posix_trace_attr_getlogfullpolicy()`
- `posix_trace_attr_getlogsize()`
- `posix_trace_attr_getmaxdatasize()`
- `posix_trace_attr_getmaxsystemeventsizesize()`
- `posix_trace_attr_getmaxusereventsizesize()`
- `posix_trace_attr_getname()`
- `posix_trace_attr_getstreamfullpolicy()`
- `posix_trace_attr_getstreamsize()`
- `posix_trace_attr_init()`
- `posix_trace_attr_setinherited()`
- `posix_trace_attr_setlogfullpolicy()`
- `posix_trace_attr_setlogsize()`
- `posix_trace_attr_setmaxdatasize()`
- `posix_trace_attr_setname()`
- `posix_trace_attr_setstreamfullpolicy()`
- `posix_trace_attr_setstreamsize()`
- `posix_trace_clear()`
- `posix_trace_close()`
- `posix_trace_create()`
- `posix_trace_create_withlog()`
- `posix_trace_event()`
- `posix_trace_eventid_equal()`
- `posix_trace_eventid_get_name()`
- `posix_trace_eventid_open()`
- `posix_trace_eventset_add()`
- `posix_trace_eventset_del()`
- `posix_trace_eventset_empty()`

- `posix_trace_eventset_fill()`
- `posix_trace_eventset_ismember()`
- `posix_trace_eventtypelist_getnext_id()`
- `posix_trace_eventtypelist_rewind()`
- `posix_trace_flush()`
- `posix_trace_get_attr()`
- `posix_trace_get_filter()`
- `posix_trace_get_status()`
- `posix_trace_getnext_event()`
- `posix_trace_open()`
- `posix_trace_rewind()`
- `posix_trace_set_filter()`
- `posix_trace_shutdown()`
- `posix_trace_start()`
- `posix_trace_stop()`
- `posix_trace_timedgetnext_event()`
- `posix_trace_trid_eventid_open()`
- `posix_trace_trygetnext_event()`

3.67 <ulimit.h>

The following methods and variables in <ulimit.h> are not supported:

- ulimit()

3.68 <unistd.h>

The following methods and variables in <unistd.h> are supported:

- `_exit()`
- `access()`
- `alarm()`
- `chdir()`
- `chown()`
- `close()`
- `dup()`
- `dup2()`
- `environ`
- `fchdir()`
- `fchown()`
- `fdatasync()`
- `fpathconf()`
- `fsync()`
- `ftruncate()`
- `getcwd()`
- `getegid()`
- `geteuid()`
- `getgid()`
- `getgroups()`
- `gethostname()`
- `getlogin()`
- `getlogin_r()`
- `getopt()`
- `getpgrp()`
- `getpid()`
- `getppid()`
- `getuid()`
- `isatty()`
- `lchown()`
- `link()`
- `lseek()`

- `optarg`
- `opterr`
- `optind`
- `optopt`
- `pathconf()`
- `pause()`
- `pipe()`
- `pread()`
- `pwrite()`
- `read()`
- `readlink()`
- `rmdir()`
- `setegid()`
- `seteuid()`
- `setgid()`
- `setpgid()`
- `setsid()`
- `setuid()`
- `sleep()`
- `swab()`
- `symlink()`
- `sync()`
- `sysconf()`
- `tcgetpgrp()`
- `tcsetpgrp()`
- `truncate()`
- `ttyname()`
- `ttyname_r()`
- `ualarm()`
- `unlink()`
- `usleep()`
- `write()`

The following methods in `<unistd.h>` are implemented as stubs returning `-1` and setting `errno` to `ENOSYS`:

- `execl()`

- `execl()`
- `execlp()`
- `execv()`
- `execve()`
- `execvp()`
- `fork()`

The following methods and variables in `<unistd.h>` are not supported:

- `confstr()`
- `crypt()`
- `encrypt()`
- `faccessat()`
- `fchownat()`
- `fexecve()`
- `gethostid()`
- `getpgid()`
- `getsid()`
- `linkat()`
- `lockf()`
- `nice()`
- `readlinkat()`
- `setpgrp()`
- `setregid()`
- `setreuid()`
- `symlinkat()`
- `unlinkat()`

3.69 <utime.h>

The following methods and variables in <utime.h> are supported:

- `utime()`

3.70 <utmpx.h>

The following methods and variables in <utmpx.h> are not supported:

- endutxent()
- getutxent()
- getutxid()
- getutxline()
- pututxline()
- setutxent()

3.71 <wchar.h>

The following methods and variables in <wchar.h> are supported:

- btowc()
- fgetwc()
- fgetws()
- fputwc()
- fputws()
- fwide()
- fwprintf()
- fwscanf()
- getwc()
- getwchar()
- mbrlen()
- mbrtowc()
- mbsinit()
- mbsnrtowcs()
- mbsrtowcs()
- open_wmemstream()
- putwc()
- putwchar()
- swprintf()
- swscanf()
- ungetwc()
- vfwprintf()
- vfwscanf()
- vswprintf()
- vswscanf()
- vwprintf()
- vwscanf()
- wcpcpy()
- wcpncpy()
- wcrntomb()
- wcscasecmp()
- wcscasecmp_l()

- `wscat()`
- `wchr()`
- `wscmp()`
- `wscoll()`
- `wscoll_l()`
- `wscopy()`
- `wscspn()`
- `wcsdup()`
- `wcsftime()`
- `wcslen()`
- `wscnsecmp()`
- `wscncat()`
- `wscncmp()`
- `wscncpy()`
- `wcsnlen()`
- `wcsnrtoombs()`
- `wcspbrk()`
- `wcsrchr()`
- `wcsrtombs()`
- `wcsspn()`
- `wcsstr()`
- `wcstod()`
- `wcstof()`
- `wcstok()`
- `wcstol()`
- `wcstold()`
- `wcstoll()`
- `wcstoul()`
- `wcstoull()`
- `wcswidth()`
- `wcsxfrm()`
- `wcsxfrm_l()`
- `wctob()`
- `wcwidth()`

- `wmemchr()`
- `wmemcmp()`
- `wmemcpy()`
- `wmemmove()`
- `wmemset()`
- `wprintf()`
- `wscanf()`

The following methods and variables in `<wchar.h>` are not supported:

- `wcsncasemcp_l()`

3.72 <wctype.h>

The following methods and variables in <wctype.h> are supported:

- iswalnum()
- iswalnum_l()
- iswalpha()
- iswalpha_l()
- iswblank()
- iswblank_l()
- iswcntrl()
- iswcntrl_l()
- iswctype()
- iswctype_l()
- iswdigit()
- iswdigit_l()
- iswgraph()
- iswgraph_l()
- iswlower()
- iswlower_l()
- iswprint()
- iswprint_l()
- iswpunct()
- iswpunct_l()
- iswspace()
- iswspace_l()
- iswupper()
- iswupper_l()
- iswxdigit()
- iswxdigit_l()
- towctrans()
- towctrans_l()
- tolower()
- tolower_l()
- towupper()
- towupper_l()

- `wctrans()`
- `wctrans_l()`
- `wctype()`
- `wctype_l()`

3.73 <wordexp.h>

The following methods and variables in <wordexp.h> are not supported:

- wordexp()
- wordfree()

POSIX-2008

This chapter has a subsection per header file to detail the methods provided by RTEMS that are in that header file.

4.1 Summary

The follow table summarizes alignment with the POSIX-2008 standard:

Supported	949
ENOSYS	19
Not supported	226

4.3 <arpa/inet.h>

The following methods and variables in <arpa/inet.h> are supported:

- htonl()
- htons()
- inet_addr()
- inet_ntoa()
- inet_ntop()
- inet_pton()
- ntohl()
- ntohs()

4.4 <assert.h>

The following methods and variables in <assert.h> are supported:

- `assert()`

4.5 <complex.h>

The following methods and variables in <complex.h> are supported:

- `cabs()`
- `cabsf()`
- `cabsl()`
- `cacos()`
- `cacosf()`
- `cacosh()`
- `cacoshf()`
- `cacoshl()`
- `cacosl()`
- `carg()`
- `cargf()`
- `cargl()`
- `casin()`
- `casinf()`
- `casinh()`
- `casinhf()`
- `casinhl()`
- `casinl()`
- `catan()`
- `catanf()`
- `catanh()`
- `catanhf()`
- `catanhl()`
- `catanl()`
- `ccos()`
- `ccosf()`
- `ccosh()`
- `ccoshf()`
- `ccoshl()`
- `ccosl()`
- `cexp()`
- `cexpf()`

- `cexpl()`
- `cimag()`
- `cimagf()`
- `cimagl()`
- `clog()`
- `clogf()`
- `clogl()`
- `conj()`
- `conjf()`
- `conjl()`
- `cpow()`
- `cpowf()`
- `cpowl()`
- `cproj()`
- `cprojf()`
- `cprojl()`
- `creal()`
- `crealf()`
- `creall()`
- `csin()`
- `csinf()`
- `csinh()`
- `csinhf()`
- `csinhl()`
- `csinl()`
- `csqrt()`
- `csqrtf()`
- `csqrtl()`
- `ctan()`
- `ctanf()`
- `ctanh()`
- `ctanhf()`
- `ctanhl()`
- `ctanl()`

4.6 <ctype.h>

The following methods and variables in <ctype.h> are supported:

- `_tolower()`
- `_toupper()`
- `isalnum()`
- `isalnum_l()`
- `isalpha()`
- `isalpha_l()`
- `isascii()`
- `isblank()`
- `isblank_l()`
- `iscntrl()`
- `iscntrl_l()`
- `isdigit()`
- `isdigit_l()`
- `isgraph()`
- `isgraph_l()`
- `islower()`
- `islower_l()`
- `isprint()`
- `isprint_l()`
- `ispunct()`
- `ispunct_l()`
- `isspace()`
- `isspace_l()`
- `isupper()`
- `isupper_l()`
- `isxdigit()`
- `isxdigit_l()`
- `toascii()`
- `tolower()`
- `tolower_l()`
- `toupper()`
- `toupper_l()`

4.7 <dirent.h>

The following methods and variables in <dirent.h> are supported:

- `alphasort()`
- `closedir()`
- `opendir()`
- `readdir()`
- `readdir_r()`
- `rewinddir()`
- `scandir()`
- `seekdir()`
- `telldir()`

The following methods and variables in <dirent.h> are not supported:

- `dirfd()`
- `fdopendir()`

4.8 <dlfcn.h>

The following methods and variables in <dlfcn.h> are supported:

- dlclose()
- dlerror()
- dlopen()
- dlsym()

4.9 <errno.h>

The following methods and variables in <errno.h> are supported:

- errno

4.10 <fcntl.h>

The following methods and variables in <fcntl.h> are supported:

- creat()
- fcntl()
- open()

The following methods and variables in <fcntl.h> are not supported:

- openat()
- posix_fadvise()
- posix_fallocate()
- posix_openpt()

4.11 <fenv.h>

The following methods and variables in <fenv.h> are not supported:

- `feclearexcept()`
- `fegetenv()`
- `fegetexceptflag()`
- `fegetround()`
- `fehldexcept()`
- `feraiseexcept()`
- `fesetenv()`
- `fesetexceptflag()`
- `fesetround()`
- `fetestexcept()`
- `feupdateenv()`

4.12 <fmtmsg.h>

The following methods and variables in <fmtmsg.h> are not supported:

- `fmtmsg()`

4.13 <fnmatch.h>

The following methods and variables in <fnmatch.h> are supported:

- fnmatch()

4.14 <ftw.h>

The following methods and variables in <ftw.h> are not supported:

- `ftw()`
- `nftw()`

4.15 <glob.h>

The following methods and variables in <glob.h> are supported:

- glob()
- globfree()

4.16 <grp.h>

The following methods and variables in <grp.h> are supported:

- `endgrent()`
- `getgrent()`
- `getgrgid()`
- `getgrgid_r()`
- `getgrnam()`
- `getgrnam_r()`
- `setgrent()`

4.18 <inttypes.h>

The following methods and variables in <inttypes.h> are supported:

- `imaxabs()`
- `imaxdiv()`
- `strtoimax()`
- `strtoumax()`
- `wcstoimax()`
- `wcstoumax()`

4.19 <langinfo.h>

The following methods and variables in <langinfo.h> are supported:

- nl_langinfo()
- nl_langinfo_l()

4.20 <libgen.h>

The following methods and variables in <libgen.h> are supported:

- `basename()`
- `dirname()`

4.21 <locale.h>

The following methods and variables in <locale.h> are supported:

- duplocale()
- freelocale()
- localeconv()
- newlocale()
- setlocale()
- uselocale()

4.22 <math.h>

The following methods and variables in <math.h> are supported:

- `acos()`
- `acosf()`
- `acosh()`
- `acoshf()`
- `acoshl()`
- `acosl()`
- `asin()`
- `asinf()`
- `asinh()`
- `asinhf()`
- `asinh1()`
- `asinl()`
- `atan()`
- `atan2()`
- `atan2f()`
- `atan2l()`
- `atanf()`
- `atanh()`
- `atanhf()`
- `atanhl()`
- `atanl()`
- `cbrt()`
- `cbrtf()`
- `cbrtl()`
- `ceil()`
- `ceilf()`
- `ceill()`
- `copysign()`
- `copysignf()`
- `copysignl()`
- `cos()`
- `cosf()`

- `cosh()`
- `coshf()`
- `coshl()`
- `cosl()`
- `erf()`
- `erfc()`
- `erfcf()`
- `erfcl()`
- `erff()`
- `erfl()`
- `exp()`
- `exp2()`
- `exp2f()`
- `exp2l()`
- `expf()`
- `expl()`
- `expm1()`
- `expm1f()`
- `expm1l()`
- `fabs()`
- `fabsf()`
- `fabsl()`
- `fdim()`
- `fdimf()`
- `fdiml()`
- `floor()`
- `floorf()`
- `floorl()`
- `fma()`
- `maf()`
- `fmal()`
- `fmax()`
- `fmaxf()`
- `fmaxl()`

- `fmin()`
- `fminf()`
- `fminl()`
- `fmod()`
- `fmodf()`
- `fmodl()`
- `frexp()`
- `frexpf()`
- `frexpl()`
- `hypot()`
- `hypotf()`
- `hypotl()`
- `ilogb()`
- `ilogbf()`
- `ilogbl()`
- `isinf()`
- `isnan()`
- `ldexp()`
- `ldexpf()`
- `ldexpl()`
- `lgamma()`
- `lgammaf()`
- `lgammal()`
- `llrint()`
- `llrintf()`
- `llrintl()`
- `llround()`
- `llroundf()`
- `llroundl()`
- `log()`
- `log10()`
- `log10f()`
- `log10l()`
- `log1p()`

- `log1pf()`
- `log1pl()`
- `log2()`
- `log2f()`
- `log2l()`
- `logb()`
- `logbf()`
- `logbl()`
- `logf()`
- `logl()`
- `lrint()`
- `lrintf()`
- `lrintl()`
- `lround()`
- `lroundf()`
- `lroundl()`
- `modf()`
- `modff()`
- `modfl()`
- `nan()`
- `nanf()`
- `nanl()`
- `nearbyint()`
- `nearbyintf()`
- `nearbyintl()`
- `nextafter()`
- `nextafterf()`
- `nextafterl()`
- `nexttoward()`
- `nexttowardl()`
- `pow()`
- `powf()`
- `powl()`
- `remainder()`

- remainderf()
- remainderl()
- remquo()
- remquof()
- remquol()
- rint()
- rintf()
- rintl()
- round()
- roundf()
- roundl()
- scalbln()
- scalblnf()
- scalblnl()
- scalbn()
- scalbnf()
- scalbnl()
- sin()
- sinf()
- sinh()
- sinhlf()
- sinhl()
- sinl()
- sqrt()
- sqrtf()
- sqrtl()
- tan()
- tanf()
- tanh()
- tanhf()
- tanhl()
- tanl()
- tgamma()
- tgammaf()

- `tgammal()`
- `trunc()`
- `truncf()`
- `truncl()`

The following methods and variables in `<math.h>` are not supported:

- `fpclassify()`
- `isfinite()`
- `isgreater()`
- `isgreaterequal()`
- `isless()`
- `islessequal()`
- `islessgreater()`
- `isnormal()`
- `isunordered()`
- `j0()`
- `j1()`
- `jn()`
- `nexttowardf()`
- `signbit()`
- `signgam`
- `y0()`
- `y1()`
- `yn()`

4.23 <monetary.h>

The following methods and variables in <monetary.h> are not supported:

- `strfmon()`
- `strfmon_l()`

4.24 <queue.h>

The following methods and variables in <queue.h> are supported:

- mq_close()
- mq_getattr()
- mq_notify()
- mq_open()
- mq_receive()
- mq_send()
- mq_setattr()
- mq_timedreceive()
- mq_timedsend()
- mq_unlink()

4.25 <ndbm.h>

The following methods and variables in <ndbm.h> are not supported:

- dbm_clearerr()
- dbm_close()
- dbm_delete()
- dbm_error()
- dbm_fetch()
- dbm_firstkey()
- dbm_nextkey()
- dbm_open()
- dbm_store()

4.26 <net/if.h>

The following methods and variables in <net/if.h> are supported:

- if_freenameindex()
- if_indextoname()
- if_nameindex()
- if_nametoindex()

4.27 <netdb.h>

The following methods and variables in <netdb.h> are supported:

- `endhostent()`
- `endnetent()`
- `endprotoent()`
- `endservent()`
- `freeaddrinfo()`
- `gai_strerror()`
- `getaddrinfo()`
- `gethostent()`
- `getnameinfo()`
- `getnetbyaddr()`
- `getnetbyname()`
- `getnetent()`
- `getprotobyname()`
- `getprotobynumber()`
- `getprotoent()`
- `getservbyname()`
- `getservbyport()`
- `getservent()`
- `sethostent()`
- `setnetent()`
- `setprotoent()`
- `setservent()`

4.28 <nl_types.h>

The following methods and variables in <nl_types.h> are not supported:

- `catclose()`
- `catgets()`
- `catopen()`

4.29 <poll.h>

The following methods and variables in <poll.h> are not supported:

- poll()

4.30 <pthread.h>

The following methods and variables in <pthread.h> are supported:

- pthread_attr_destroy()
- pthread_attr_getdetachstate()
- pthread_attr_getguardsize()
- pthread_attr_getinheritsched()
- pthread_attr_getschedparam()
- pthread_attr_getschedpolicy()
- pthread_attr_getscope()
- pthread_attr_getstack()
- pthread_attr_getstackaddr()
- pthread_attr_getstacksize()
- pthread_attr_init()
- pthread_attr_setdetachstate()
- pthread_attr_setguardsize()
- pthread_attr_setinheritsched()
- pthread_attr_setschedparam()
- pthread_attr_setschedpolicy()
- pthread_attr_setscope()
- pthread_attr_setstack()
- pthread_attr_setstackaddr()
- pthread_attr_setstacksize()
- pthread_barrier_destroy()
- pthread_barrier_init()
- pthread_barrier_wait()
- pthread_barrierattr_destroy()
- pthread_barrierattr_getpshared()
- pthread_barrierattr_init()
- pthread_barrierattr_setpshared()
- pthread_cancel()
- pthread_cleanup_pop()
- pthread_cleanup_push()
- pthread_cond_broadcast()
- pthread_cond_destroy()

- `pthread_cond_init()`
- `pthread_cond_signal()`
- `pthread_cond_timedwait()`
- `pthread_cond_wait()`
- `pthread_condattr_destroy()`
- `pthread_condattr_getclock()`
- `pthread_condattr_getpshared()`
- `pthread_condattr_init()`
- `pthread_condattr_setclock()`
- `pthread_condattr_setpshared()`
- `pthread_create()`
- `pthread_detach()`
- `pthread_equal()`
- `pthread_exit()`
- `pthread_getconcurrency()`
- `pthread_getschedparam()`
- `pthread_getspecific()`
- `pthread_join()`
- `pthread_key_create()`
- `pthread_key_delete()`
- `pthread_mutex_destroy()`
- `pthread_mutex_getprioceiling()`
- `pthread_mutex_init()`
- `pthread_mutex_lock()`
- `pthread_mutex_setprioceiling()`
- `pthread_mutex_timedlock()`
- `pthread_mutex_trylock()`
- `pthread_mutex_unlock()`
- `pthread_mutexattr_destroy()`
- `pthread_mutexattr_getprioceiling()`
- `pthread_mutexattr_getprotocol()`
- `pthread_mutexattr_getpshared()`
- `pthread_mutexattr_gettype()`
- `pthread_mutexattr_init()`

- pthread_mutexattr_setprioceiling()
- pthread_mutexattr_setprotocol()
- pthread_mutexattr_setpshared()
- pthread_mutexattr_settype()
- pthread_once()
- pthread_rwlock_destroy()
- pthread_rwlock_init()
- pthread_rwlock_rdlock()
- pthread_rwlock_timedrdlock()
- pthread_rwlock_timedwrlock()
- pthread_rwlock_tryrdlock()
- pthread_rwlock_trywrlock()
- pthread_rwlock_unlock()
- pthread_rwlock_wrlock()
- pthread_rwlockattr_destroy()
- pthread_rwlockattr_getpshared()
- pthread_rwlockattr_init()
- pthread_rwlockattr_setpshared()
- pthread_self()
- pthread_setcancelstate()
- pthread_setcanceltype()
- pthread_setconcurrency()
- pthread_setschedparam()
- pthread_setschedprio()
- pthread_setspecific()
- pthread_spin_destroy()
- pthread_spin_init()
- pthread_spin_lock()
- pthread_spin_trylock()
- pthread_spin_unlock()
- pthread_testcancel()

The following methods in `<pthread.h>` are implemented as stubs returning `-1` and setting `errno` to `ENOSYS`:

- pthread_atfork()
- pthread_getcpuclockid()

The following methods and variables in <pthread.h> are not supported:

- pthread_mutex_consistent()
- pthread_mutexattr_getrobust()
- pthread_mutexattr_setrobust()

4.31 <pwd.h>

The following methods and variables in <pwd.h> are supported:

- `endpwent()`
- `getpwent()`
- `getpwnam()`
- `getpwnam_r()`
- `getpwuid()`
- `getpwuid_r()`
- `setpwent()`

4.32 <regex.h>

The following methods and variables in <regex.h> are supported:

- regcomp()
- regerror()
- regexec()
- regfree()

4.34 <search.h>

The following methods and variables in <search.h> are supported:

- hcreate()
- hdestroy()
- hsearch()
- tdelete()
- tfind()
- tsearch()
- twalk()

The following methods and variables in <search.h> are not supported:

- insque()
- lfind()
- lsearch()
- remque()

4.35 <semaphore.h>

The following methods and variables in <semaphore.h> are supported:

- `sem_close()`
- `sem_destroy()`
- `sem_getvalue()`
- `sem_init()`
- `sem_open()`
- `sem_post()`
- `sem_timedwait()`
- `sem_trywait()`
- `sem_unlink()`
- `sem_wait()`

4.36 <setjmp.h>

The following methods and variables in <setjmp.h> are supported:

- longjmp()
- setjmp()
- siglongjmp()
- sigsetjmp()

The following methods and variables in <setjmp.h> are not supported:

- _longjmp()
- _setjmp()

4.37 <signal.h>

The following methods and variables in <signal.h> are supported:

- kill()
- psignal()
- pthread_kill()
- pthread_sigmask()
- raise()
- sigaction()
- sigaddset()
- sigdelset()
- sigemptyset()
- sigfillset()
- sigismember()
- signal()
- sigpending()
- sigprocmask()
- sigqueue()
- sigsuspend()
- sigtimedwait()
- sigwait()
- sigwaitinfo()

The following methods and variables in <signal.h> are not supported:

- killpg()
- psiginfo()
- sigaltstack()
- sighold()
- sigignore()
- siginterrupt()
- sigpause()
- sigrelse()
- sigset()

4.38 <spawn.h>

The following methods and variables in <spawn.h> are not supported:

- posix_spawn()
- posix_spawn_file_actions_addclose()
- posix_spawn_file_actions_adddup2()
- posix_spawn_file_actions_addopen()
- posix_spawn_file_actions_destroy()
- posix_spawn_file_actions_init()
- posix_spawnattr_destroy()
- posix_spawnattr_getflags()
- posix_spawnattr_getpgroup()
- posix_spawnattr_getschedparam()
- posix_spawnattr_getschedpolicy()
- posix_spawnattr_getsigdefault()
- posix_spawnattr_getsigmask()
- posix_spawnattr_init()
- posix_spawnattr_setflags()
- posix_spawnattr_setpgroup()
- posix_spawnattr_setschedparam()
- posix_spawnattr_setschedpolicy()
- posix_spawnattr_setsigdefault()
- posix_spawnattr_setsigmask()
- posix_spawnnp()

4.39 <stdarg.h>

The following methods and variables in <stdarg.h> are supported:

- va_arg()
- va_copy()
- va_end()
- va_start()

4.40 <stddef.h>

The following methods and variables in <stddef.h> are supported:

- `offsetof()`

4.41 <stdio.h>

The following methods and variables in <stdio.h> are supported:

- clearerr()
- ctermid()
- dprintf()
- fclose()
- fdopen()
- feof()
- ferror()
- fflush()
- fgetc()
- fgetpos()
- fgets()
- fileno()
- flockfile()
- fmemopen()
- fopen()
- fprintf()
- fputc()
- fputs()
- fread()
- freopen()
- fscanf()
- fseek()
- fseeko()
- fsetpos()
- ftell()
- ftello()
- ftrylockfile()
- funlockfile()
- fwrite()
- getc()
- getc_unlocked()
- getchar()

- `getchar_unlocked()`
- `gets()`
- `open_memstream()`
- `perror()`
- `printf()`
- `putc()`
- `putc_unlocked()`
- `putchar()`
- `putchar_unlocked()`
- `puts()`
- `remove()`
- `rename()`
- `rewind()`
- `scanf()`
- `setbuf()`
- `setvbuf()`
- `snprintf()`
- `sprintf()`
- `sscanf()`
- `stderr`
- `stdin`
- `stdout`
- `tempnam()`
- `tmpfile()`
- `tmpnam()`
- `ungetc()`
- `vdprintf()`
- `vfprintf()`
- `vfscanf()`
- `vprintf()`
- `vscanf()`
- `vsprintf()`
- `vsprintf()`
- `vsscanf()`

The following methods and variables in `<stdio.h>` are not supported:

- `getdelim()`
- `getline()`
- `pclose()`
- `popen()`
- `renameat()`

4.42 <stdlib.h>

The following methods and variables in <stdlib.h> are supported:

- `_Exit()`
- `a64l()`
- `abort()`
- `abs()`
- `atexit()`
- `atof()`
- `atoi()`
- `atol()`
- `atoll()`
- `bsearch()`
- `calloc()`
- `div()`
- `drand48()`
- `erand48()`
- `exit()`
- `free()`
- `getenv()`
- `getsubopt()`
- `jrand48()`
- `l64a()`
- `labs()`
- `lcong48()`
- `ldiv()`
- `llabs()`
- `lldiv()`
- `lrand48()`
- `malloc()`
- `mblen()`
- `mbstowcs()`
- `mbtowc()`
- `mkdtemp()`
- `mkstemp()`

- `mrnd48()`
- `nrnd48()`
- `posix_memalign()`
- `putenv()`
- `qsort()`
- `rand()`
- `rand_r()`
- `random()`
- `realloc()`
- `realpath()`
- `seed48()`
- `setenv()`
- `srand()`
- `srand48()`
- `srandom()`
- `strtod()`
- `strtof()`
- `strtol()`
- `strtold()`
- `strtoll()`
- `strtoul()`
- `strtoull()`
- `unsetenv()`
- `wcstombs()`
- `wctomb()`

The following methods in `<stdlib.h>` are implemented as stubs returning `-1` and setting `errno` to `ENOSYS`:

- `system()`

The following methods and variables in `<stdlib.h>` are not supported:

- `grantpt()`
- `initstate()`
- `ptsname()`
- `setkey()`
- `setstate()`
- `unlockpt()`

4.43 <string.h>

The following methods and variables in <string.h> are supported:

- memccpy()
- memchr()
- memcmp()
- memcpy()
- memmove()
- memset()
- stpcpy()
- stpncpy()
- strcat()
- strchr()
- strcmp()
- strcoll()
- strcoll_l()
- strcpy()
- strcspn()
- strdup()
- strerror()
- strerror_l()
- strerror_r()
- strlen()
- strncat()
- strncmp()
- strncpy()
- strndup()
- strnlen()
- strpbrk()
- strrchr()
- strsignal()
- strspn()
- strstr()
- strtok()
- strtok_r()

- `strxfrm()`
- `strxfrm_l()`

4.44 <strings.h>

The following methods and variables in <strings.h> are supported:

- ffs()
- strcasecmp()
- strcasecmp_l()
- strncasecmp()
- strncasecmp_l()

4.45 <stropts.h>

The following methods and variables in <stropts.h> are supported:

- ioctl()

The following methods and variables in <stropts.h> are not supported:

- fattach()
- fdetach()
- getmsg()
- getpmsg()
- isastream()
- putmsg()
- putpmsg()

4.46 <sys/ipc.h>

The following methods and variables in <sys/ipc.h> are not supported:

- ftok()

4.47 <sys/mman.h>

The following methods and variables in <sys/mman.h> are supported:

- `mlock()`
- `mlockall()`
- `mmap()`
- `mprotect()`
- `msync()`
- `munlock()`
- `munlockall()`
- `munmap()`
- `posix_madvise()`
- `shm_open()`
- `shm_unlink()`

The following methods and variables in <sys/mman.h> are not supported:

- `posix_mem_offset()`
- `posix_typed_mem_get_info()`
- `posix_typed_mem_open()`

4.48 <sys/msg.h>

The following methods and variables in <sys/msg.h> are not supported:

- msgctl()
- msgget()
- msgrcv()
- msgsnd()

4.49 <sys/resource.h>

The following methods and variables in <sys/resource.h> are supported:

- getrusage()

The following methods and variables in <sys/resource.h> are not supported:

- getpriority()
- getrlimit()
- setpriority()
- setrlimit()

4.50 <sys/select.h>

The following methods and variables in <sys/select.h> are supported:

- FD_CLR()
- FD_ISSET()
- FD_SET()
- FD_ZERO()
- select()

The following methods and variables in <sys/select.h> are not supported:

- pselect()

4.51 <sys/sem.h>

The following methods and variables in <sys/sem.h> are not supported:

- semctl()
- semget()
- semop()

4.52 <sys/shm.h>

The following methods and variables in <sys/shm.h> are not supported:

- `shmat()`
- `shmctl()`
- `shmdt()`
- `shmget()`

4.53 <sys/socket.h>

The following methods and variables in <sys/socket.h> are supported:

- accept()
- bind()
- connect()
- getpeername()
- getsockname()
- getsockopt()
- listen()
- recv()
- recvfrom()
- recvmsg()
- send()
- sendmsg()
- sendto()
- setsockopt()
- shutdown()
- socket()
- socketpair()

The following methods and variables in <sys/socket.h> are not supported:

- sockatmark()

4.54 <sys/stat.h>

The following methods and variables in <sys/stat.h> are supported:

- chmod()
- fchmod()
- fstat()
- lstat()
- mkdir()
- mkfifo()
- mknod()
- stat()
- umask()

The following methods and variables in <sys/stat.h> are not supported:

- fchmodat()
- fstatat()
- futimens()
- mkdirat()
- mkfifoat()
- mknodat()
- utimensat()

4.55 <sys/statvfs.h>

The following methods and variables in <sys/statvfs.h> are supported:

- statvfs()

The following methods and variables in <sys/statvfs.h> are not supported:

- fstatvfs()

4.56 <sys/time.h>

The following methods and variables in <sys/time.h> are supported:

- `gettimeofday()`
- `utimes()`

The following methods in <sys/time.h> are implemented as stubs returning -1 and setting `errno` to `ENOSYS`:

- `getitimer()`
- `setitimer()`

4.57 <sys/times.h>

The following methods and variables in <sys/times.h> are supported:

- times()

4.58 <sys/uio.h>

The following methods and variables in <sys/uio.h> are supported:

- readv()
- writev()

4.59 <sys/utsname.h>

The following methods and variables in <sys/utsname.h> are supported:

- `uname()`

4.60 <sys/wait.h>

The following methods and variables in <sys/wait.h> are supported:

- wait()
- waitpid()

The following methods and variables in <sys/wait.h> are not supported:

- waitid()

4.61 <syslog.h>

The following methods and variables in <syslog.h> are not supported:

- `closelog()`
- `openlog()`
- `setlogmask()`
- `syslog()`

4.62 <termios.h>

The following methods and variables in <termios.h> are supported:

- cfgetispeed()
- cfgetospeed()
- cfsetispeed()
- cfsetospeed()
- tcdrain()
- tcflow()
- tcflush()
- tcgetattr()
- tcsendbreak()
- tcsetattr()

The following methods and variables in <termios.h> are not supported:

- tcgetsid()

4.63 <time.h>

The following methods and variables in <time.h> are supported:

- asctime()
- asctime_r()
- clock()
- clock_getres()
- clock_gettime()
- clock_nanosleep()
- clock_settime()
- ctime()
- ctime_r()
- difftime()
- gmtime()
- gmtime_r()
- localtime()
- localtime_r()
- mktime()
- nanosleep()
- strftime()
- strftime_l()
- strptime()
- time()
- timer_create()
- timer_delete()
- timer_getoverrun()
- timer_gettime()
- timer_settime()
- timezone
- tzname
- tzset()

The following methods in <time.h> are implemented as stubs returning -1 and setting errno to ENOSYS:

- clock_getcpuclockid()

The following methods and variables in <time.h> are not supported:

- daylight
- getdate()
- getdate_err

4.64 <trace.h>

The following methods and variables in <trace.h> are not supported:

- posix_trace_attr_destroy()
- posix_trace_attr_getclockres()
- posix_trace_attr_getcreatetime()
- posix_trace_attr_getgenversion()
- posix_trace_attr_getinherited()
- posix_trace_attr_getlogfullpolicy()
- posix_trace_attr_getlogsize()
- posix_trace_attr_getmaxdatasize()
- posix_trace_attr_getmaxsystemeventsizesize()
- posix_trace_attr_getmaxusereventsizesize()
- posix_trace_attr_getname()
- posix_trace_attr_getstreamfullpolicy()
- posix_trace_attr_getstreamsize()
- posix_trace_attr_init()
- posix_trace_attr_setinherited()
- posix_trace_attr_setlogfullpolicy()
- posix_trace_attr_setlogsize()
- posix_trace_attr_setmaxdatasize()
- posix_trace_attr_setname()
- posix_trace_attr_setstreamfullpolicy()
- posix_trace_attr_setstreamsize()
- posix_trace_clear()
- posix_trace_close()
- posix_trace_create()
- posix_trace_create_withlog()
- posix_trace_event()
- posix_trace_eventid_equal()
- posix_trace_eventid_get_name()
- posix_trace_eventid_open()
- posix_trace_eventset_add()
- posix_trace_eventset_del()
- posix_trace_eventset_empty()

- `posix_trace_eventset_fill()`
- `posix_trace_eventset_ismember()`
- `posix_trace_eventtypelist_getnext_id()`
- `posix_trace_eventtypelist_rewind()`
- `posix_trace_flush()`
- `posix_trace_get_attr()`
- `posix_trace_get_filter()`
- `posix_trace_get_status()`
- `posix_trace_getnext_event()`
- `posix_trace_open()`
- `posix_trace_rewind()`
- `posix_trace_set_filter()`
- `posix_trace_shutdown()`
- `posix_trace_start()`
- `posix_trace_stop()`
- `posix_trace_timedgetnext_event()`
- `posix_trace_trid_eventid_open()`
- `posix_trace_trygetnext_event()`

4.65 <ulimit.h>

The following methods and variables in <ulimit.h> are not supported:

- ulimit()

4.66 <unistd.h>

The following methods and variables in <unistd.h> are supported:

- `_exit()`
- `access()`
- `alarm()`
- `chdir()`
- `chown()`
- `close()`
- `dup()`
- `dup2()`
- `environ`
- `fchdir()`
- `fchown()`
- `fdatasync()`
- `fpathconf()`
- `fsync()`
- `ftruncate()`
- `getcwd()`
- `getegid()`
- `geteuid()`
- `getgid()`
- `getgroups()`
- `gethostname()`
- `getlogin()`
- `getlogin_r()`
- `getopt()`
- `getpgrp()`
- `getpid()`
- `getppid()`
- `getuid()`
- `isatty()`
- `lchown()`
- `link()`
- `lseek()`

- optarg
- opterr
- optind
- optopt
- pathconf()
- pause()
- pipe()
- pread()
- pwrite()
- read()
- readlink()
- rmdir()
- setegid()
- seteuid()
- setgid()
- setpgid()
- setsid()
- setuid()
- sleep()
- swab()
- symlink()
- sync()
- sysconf()
- tcgetpgrp()
- tcsetpgrp()
- truncate()
- ttyname()
- ttyname_r()
- unlink()
- write()

The following methods in <unistd.h> are implemented as stubs returning -1 and setting errno to ENOSYS:

- execl()
- execle()
- execlp()

- `execv()`
- `execve()`
- `execvp()`
- `fork()`

The following methods and variables in `<unistd.h>` are not supported:

- `confstr()`
- `crypt()`
- `encrypt()`
- `faccessat()`
- `fchmodat()`
- `fexecve()`
- `gethostid()`
- `getpgid()`
- `getsid()`
- `linkat()`
- `lockf()`
- `nice()`
- `readlinkat()`
- `setpgrp()`
- `setregid()`
- `setreuid()`
- `symlinkat()`
- `unlinkat()`

4.68 <utmpx.h>

The following methods and variables in <utmpx.h> are not supported:

- endutxent()
- getutxent()
- getutxid()
- getutxline()
- pututxline()
- setutxent()

4.69 <wchar.h>

The following methods and variables in <wchar.h> are supported:

- btowc()
- fgetwc()
- fgetws()
- fputwc()
- fputws()
- fwide()
- fwprintf()
- fwscanf()
- getwc()
- getwchar()
- mbrlen()
- mbrtowc()
- mbsinit()
- mbsnrtowcs()
- mbsrtowcs()
- open_wmemstream()
- putwc()
- putwchar()
- swprintf()
- swscanf()
- ungetwc()
- vfwprintf()
- vfwscanf()
- vswprintf()
- vswscanf()
- vwprintf()
- vwscanf()
- wcpcpy()
- wcpncpy()
- wcrtoomb()
- wcscasecmp()
- wcscasecmp_l()

- `wscat()`
- `wchr()`
- `wscmp()`
- `wscoll()`
- `wscoll_l()`
- `wscopy()`
- `wscspn()`
- `wcsdup()`
- `wcsftime()`
- `wcslen()`
- `wcsncasecmp()`
- `wcsncat()`
- `wcsncmp()`
- `wcsncpy()`
- `wcsnlen()`
- `wcsnrtombs()`
- `wcspbrk()`
- `wcsrchr()`
- `wcsrtombs()`
- `wcsspn()`
- `wcsstr()`
- `wcstod()`
- `wcstof()`
- `wcstok()`
- `wcstol()`
- `wcstold()`
- `wcstoll()`
- `wcstoul()`
- `wcstoull()`
- `wcswidth()`
- `wcsxfrm()`
- `wcsxfrm_l()`
- `wctob()`
- `wcwidth()`

- `wmemchr()`
- `wmemcmp()`
- `wmemcpy()`
- `wmemmove()`
- `wmemset()`
- `wprintf()`
- `wscanf()`

The following methods and variables in `<wchar.h>` are not supported:

- `wcsncasemcp_l()`

4.70 <wctype.h>

The following methods and variables in <wctype.h> are supported:

- `iswalnum()`
- `iswalnum_l()`
- `iswalpha()`
- `iswalpha_l()`
- `iswblank()`
- `iswblank_l()`
- `iswcntrl()`
- `iswcntrl_l()`
- `iswctype()`
- `iswctype_l()`
- `iswdigit()`
- `iswdigit_l()`
- `iswgraph()`
- `iswgraph_l()`
- `iswlower()`
- `iswlower_l()`
- `iswprint()`
- `iswprint_l()`
- `iswpunct()`
- `iswpunct_l()`
- `iswspace()`
- `iswspace_l()`
- `iswupper()`
- `iswupper_l()`
- `iswxdigit()`
- `iswxdigit_l()`
- `towctrans()`
- `towctrans_l()`
- `towlower()`
- `towlower_l()`
- `towupper()`
- `towupper_l()`

- `wctrans()`
- `wctrans_l()`
- `wctype()`
- `wctype_l()`

4.71 <wordexp.h>

The following methods and variables in <wordexp.h> are not supported:

- wordexp()
- wordfree()

POSIX-2003

This chapter has a subsection per header file to detail the methods provided by RTEMS that are in that header file.

5.1 Summary

The follow table summarizes alignment with the POSIX-2003 standard:

Supported	897
ENOSYS	19
Not supported	199

5.2 <aio.h>

The following methods and variables in <aio.h> are supported:

- aio_cancel()
- aio_error()
- aio_fsync()
- aio_read()
- aio_return()
- aio_write()

The following methods in <aio.h> are implemented as stubs returning -1 and setting errno to ENOSYS:

- aio_suspend()
- lio_listio()

5.3 <arpa/inet.h>

The following methods and variables in <arpa/inet.h> are supported:

- htonl()
- htons()
- inet_addr()
- inet_ntoa()
- inet_ntop()
- inet_pton()
- ntohl()
- ntohs()

5.4 <assert.h>

The following methods and variables in <assert.h> are supported:

- `assert()`

5.5 <complex.h>

The following methods and variables in <complex.h> are supported:

- `cabs()`
- `cabsf()`
- `cabsl()`
- `cacos()`
- `cacosf()`
- `cacosh()`
- `cacoshf()`
- `cacoshl()`
- `cacosl()`
- `carg()`
- `cargf()`
- `cargl()`
- `casin()`
- `casinf()`
- `casinh()`
- `casinhf()`
- `casinhl()`
- `casinl()`
- `catan()`
- `catanf()`
- `catanh()`
- `catanhf()`
- `catanhl()`
- `catanl()`
- `ccos()`
- `ccosf()`
- `ccosh()`
- `ccoshf()`
- `ccoshl()`
- `ccosl()`
- `cexp()`
- `cexpf()`

- `cexpl()`
- `cimag()`
- `cimagf()`
- `cimagl()`
- `clog()`
- `clogf()`
- `clogl()`
- `conj()`
- `conjf()`
- `conjl()`
- `cpow()`
- `cpowf()`
- `cpowl()`
- `cproj()`
- `cprojf()`
- `cprojl()`
- `creal()`
- `crealf()`
- `creall()`
- `csin()`
- `csinf()`
- `csinh()`
- `csinhf()`
- `csinhl()`
- `csinl()`
- `csqrt()`
- `csqrtf()`
- `csqrtl()`
- `ctan()`
- `ctanf()`
- `ctanh()`
- `ctanhf()`
- `ctanhl()`
- `ctanl()`

5.6 <ctype.h>

The following methods and variables in <ctype.h> are supported:

- `_tolower()`
- `_toupper()`
- `isalnum()`
- `isalpha()`
- `isascii()`
- `isblank()`
- `iscntrl()`
- `isdigit()`
- `isgraph()`
- `islower()`
- `islower_l()`
- `isprint()`
- `ispunct()`
- `isspace()`
- `isupper()`
- `isxdigit()`
- `toascii()`
- `tolower()`
- `toupper()`

5.7 <dirent.h>

The following methods and variables in <dirent.h> are supported:

- `closedir()`
- `opendir()`
- `readdir()`
- `readdir_r()`
- `rewinddir()`
- `seekdir()`

5.8 <dlfcn.h>

The following methods and variables in <dlfcn.h> are supported:

- `dlclose()`
- `dlerror()`
- `dlopen()`
- `dlsym()`

5.9 <errno.h>

The following methods and variables in <errno.h> are supported:

- errno

5.10 <fcntl.h>

The following methods and variables in <fcntl.h> are supported:

- creat()
- fcntl()
- open()

The following methods and variables in <fcntl.h> are not supported:

- posix_fadvise()
- posix_fallocate()
- posix_openpt()

5.11 <fenv.h>

The following methods and variables in <fenv.h> are not supported:

- `feclearexcept()`
- `fegetenv()`
- `fegetexceptflag()`
- `fegetround()`
- `feholdexcept()`
- `feraiseexcept()`
- `fesetenv()`
- `fesetexceptflag()`
- `fesetround()`
- `fetestexcept()`
- `feupdateenv()`

5.12 <fmtmsg.h>

The following methods and variables in <fmtmsg.h> are not supported:

- `fmtmsg()`

5.13 <fnmatch.h>

The following methods and variables in <fnmatch.h> are supported:

- fnmatch()

5.14 <ftw.h>

The following methods and variables in <ftw.h> are not supported:

- `ftw()`
- `nftw()`

5.15 <glob.h>

The following methods and variables in <glob.h> are supported:

- glob()
- globfree()

5.16 <grp.h>

The following methods and variables in <grp.h> are supported:

- `endgrent()`
- `getgrent()`
- `getgrgid()`
- `getgrgid_r()`
- `getgrnam()`
- `getgrnam_r()`
- `setgrent()`

5.17 <iconv.h>

The following methods and variables in <iconv.h> are supported:

- iconv()
- iconv_close()
- iconv_open()

5.18 <inttypes.h>

The following methods and variables in <inttypes.h> are supported:

- `imaxabs()`
- `imaxdiv()`
- `strtoimax()`
- `strtoumax()`
- `wcstoimax()`
- `wcstoumax()`

5.19 <langinfo.h>

The following methods and variables in <langinfo.h> are supported:

- nl_langinfo()

5.20 <libgen.h>

The following methods and variables in <libgen.h> are supported:

- `basename()`
- `dirname()`

5.21 <locale.h>

The following methods and variables in <locale.h> are supported:

- localeconv()
- setlocale()

5.22 <math.h>

The following methods and variables in <math.h> are supported:

- `acos()`
- `acosf()`
- `acosh()`
- `acoshf()`
- `acoshl()`
- `acosl()`
- `asin()`
- `asinf()`
- `asinh()`
- `asinhf()`
- `asinh1()`
- `asinl()`
- `atan()`
- `atan2()`
- `atan2f()`
- `atan2l()`
- `atanf()`
- `atanh()`
- `atanhf()`
- `atanhl()`
- `atanl()`
- `cbrt()`
- `cbrtf()`
- `cbrtl()`
- `ceil()`
- `ceilf()`
- `ceill()`
- `copysign()`
- `copysignf()`
- `copysignl()`
- `cos()`
- `cosf()`

- `cosh()`
- `coshf()`
- `coshl()`
- `cosl()`
- `erf()`
- `erfc()`
- `erfcf()`
- `erfc1()`
- `erff()`
- `erfl()`
- `exp()`
- `exp2()`
- `exp2f()`
- `exp2l()`
- `expf()`
- `expl()`
- `expm1()`
- `expm1f()`
- `expm1l()`
- `fabs()`
- `fabsf()`
- `fabs1()`
- `fdim()`
- `fdimf()`
- `fdiml()`
- `floor()`
- `floorf()`
- `floorl()`
- `fma()`
- `maf()`
- `fmal()`
- `fmax()`
- `fmaxf()`
- `fmaxl()`

- `fmin()`
- `fminf()`
- `fminl()`
- `fmod()`
- `fmodf()`
- `fmodl()`
- `frexp()`
- `frexpf()`
- `frexpl()`
- `hypot()`
- `hypotf()`
- `hypotl()`
- `ilogb()`
- `ilogbf()`
- `ilogbl()`
- `isinf()`
- `isnan()`
- `ldexp()`
- `ldexpf()`
- `ldexpl()`
- `lgamma()`
- `lgammaf()`
- `lgammal()`
- `llrint()`
- `llrintf()`
- `llrintl()`
- `llround()`
- `llroundf()`
- `llroundl()`
- `log()`
- `log10()`
- `log10f()`
- `log10l()`
- `log1p()`

- `log1pf()`
- `log1pl()`
- `log2()`
- `log2f()`
- `log2l()`
- `logb()`
- `logbf()`
- `logbl()`
- `logf()`
- `logl()`
- `lrint()`
- `lrintf()`
- `lrintl()`
- `lround()`
- `lroundf()`
- `lroundl()`
- `modf()`
- `modff()`
- `modfl()`
- `nan()`
- `nanf()`
- `nanl()`
- `nearbyint()`
- `nearbyintf()`
- `nearbyintl()`
- `nextafter()`
- `nextafterf()`
- `nextafterl()`
- `nexttoward()`
- `nexttowardl()`
- `pow()`
- `powf()`
- `powl()`
- `remainder()`

- remainderf()
- remainderl()
- remquo()
- remquof()
- remquol()
- rint()
- rintf()
- rintl()
- round()
- roundf()
- roundl()
- scalb()
- scalbln()
- scalblnf()
- scalblnl()
- scalbn()
- scalbnf()
- scalbnl()
- sin()
- sinf()
- sinh()
- sinhf()
- sinhl()
- sinl()
- sqrt()
- sqrtf()
- sqrtl()
- tan()
- tanf()
- tanh()
- tanhf()
- tanhl()
- tanl()
- tgamma()

- `tgammaf()`
- `tgamma()`
- `trunc()`
- `truncf()`
- `truncl()`

The following methods and variables in `<math.h>` are not supported:

- `fpclassify()`
- `isfinite()`
- `isgreater()`
- `isgreaterequal()`
- `isless()`
- `islessequal()`
- `islessgreater()`
- `isnormal()`
- `isunordered()`
- `j0()`
- `y0()`
- `j1()`
- `y1()`
- `jn()`
- `yn()`
- `nexttowardf()`
- `signbit()`
- `signgam`

5.23 <monetary.h>

The following methods and variables in <monetary.h> are not supported:

- strfmon()

5.24 <queue.h>

The following methods and variables in <queue.h> are supported:

- mq_close()
- mq_getattr()
- mq_notify()
- mq_open()
- mq_receive()
- mq_send()
- mq_setattr()
- mq_timedreceive()
- mq_timedsend()
- mq_unlink()

5.25 <ndbm.h>

The following methods and variables in <ndbm.h> are not supported:

- dbm_clearerr()
- dbm_close()
- dbm_delete()
- dbm_error()
- dbm_fetch()
- dbm_firstkey()
- dbm_nextkey()
- dbm_open()
- dbm_store()

5.26 <net/if.h>

The following methods and variables in <net/if.h> are supported:

- if_freenameindex()
- if_indextoname()
- if_nameindex()
- if_nametoindex()

5.27 <netdb.h>

The following methods and variables in <netdb.h> are supported:

- `endhostent()`
- `endnetent()`
- `endprotoent()`
- `endservent()`
- `freeaddrinfo()`
- `gai_strerror()`
- `getaddrinfo()`
- `gethostbyaddr()`
- `gethostbyname()`
- `gethostent()`
- `getnameinfo()`
- `getnetbyaddr()`
- `getnetbyname()`
- `getnetent()`
- `getprotobyname()`
- `getprotobynumber()`
- `getprotoent()`
- `getservbyname()`
- `getservbyport()`
- `getservent()`
- `h_errno`
- `sethostent()`
- `setnetent()`
- `setprotoent()`
- `setservent()`

5.28 <nl_types.h>

The following methods and variables in <nl_types.h> are not supported:

- catclose()
- catgets()
- catopen()

5.29 <poll.h>

The following methods and variables in <poll.h> are not supported:

- poll()

5.30 <pthread.h>

The following methods and variables in <pthread.h> are supported:

- pthread_attr_destroy()
- pthread_attr_getdetachstate()
- pthread_attr_getguardsize()
- pthread_attr_getinheritsched()
- pthread_attr_getschedparam()
- pthread_attr_getschedpolicy()
- pthread_attr_getscope()
- pthread_attr_getstack()
- pthread_attr_getstackaddr()
- pthread_attr_getstacksize()
- pthread_attr_init()
- pthread_attr_setdetachstate()
- pthread_attr_setguardsize()
- pthread_attr_setinheritsched()
- pthread_attr_setschedparam()
- pthread_attr_setschedpolicy()
- pthread_attr_setscope()
- pthread_attr_setstack()
- pthread_attr_setstackaddr()
- pthread_attr_setstacksize()
- pthread_barrier_destroy()
- pthread_barrier_init()
- pthread_barrier_wait()
- pthread_barrierattr_destroy()
- pthread_barrierattr_getpshared()
- pthread_barrierattr_init()
- pthread_barrierattr_setpshared()
- pthread_cancel()
- pthread_cleanup_pop()
- pthread_cleanup_push()
- pthread_cond_broadcast()
- pthread_cond_destroy()

- `pthread_cond_init()`
- `pthread_cond_signal()`
- `pthread_cond_timedwait()`
- `pthread_cond_wait()`
- `pthread_condattr_destroy()`
- `pthread_condattr_getclock()`
- `pthread_condattr_getpshared()`
- `pthread_condattr_init()`
- `pthread_condattr_setclock()`
- `pthread_condattr_setpshared()`
- `pthread_create()`
- `pthread_detach()`
- `pthread_equal()`
- `pthread_exit()`
- `pthread_getconcurrency()`
- `pthread_getschedparam()`
- `pthread_getspecific()`
- `pthread_join()`
- `pthread_key_create()`
- `pthread_key_delete()`
- `pthread_mutex_destroy()`
- `pthread_mutex_getprioceiling()`
- `pthread_mutex_init()`
- `pthread_mutex_lock()`
- `pthread_mutex_setprioceiling()`
- `pthread_mutex_timedlock()`
- `pthread_mutex_trylock()`
- `pthread_mutex_unlock()`
- `pthread_mutexattr_destroy()`
- `pthread_mutexattr_getprioceiling()`
- `pthread_mutexattr_getprotocol()`
- `pthread_mutexattr_getpshared()`
- `pthread_mutexattr_gettype()`
- `pthread_mutexattr_init()`

- pthread_mutexattr_setprioceiling()
- pthread_mutexattr_setprotocol()
- pthread_mutexattr_setpshared()
- pthread_mutexattr_settype()
- pthread_once()
- pthread_rwlock_destroy()
- pthread_rwlock_init()
- pthread_rwlock_rdlock()
- pthread_rwlock_timedrdlock()
- pthread_rwlock_timedwrlock()
- pthread_rwlock_tryrdlock()
- pthread_rwlock_trywrlock()
- pthread_rwlock_unlock()
- pthread_rwlock_wrlock()
- pthread_rwlockattr_destroy()
- pthread_rwlockattr_getpshared()
- pthread_rwlockattr_init()
- pthread_rwlockattr_setpshared()
- pthread_self()
- pthread_setcancelstate()
- pthread_setcanceltype()
- pthread_setconcurrency()
- pthread_setschedparam()
- pthread_setschedprio()
- pthread_setspecific()
- pthread_spin_destroy()
- pthread_spin_init()
- pthread_spin_lock()
- pthread_spin_trylock()
- pthread_spin_unlock()
- pthread_testcancel()

The following methods in <pthread.h> are implemented as stubs returning -1 and setting errno to ENOSYS:

- pthread_atfork()
- pthread_getcpuclockid()

5.31 <pwd.h>

The following methods and variables in <pwd.h> are supported:

- `endpwent()`
- `getpwent()`
- `getpwnam()`
- `getpwnam_r()`
- `getpwuid()`
- `getpwuid_r()`
- `setpwent()`

5.32 <regex.h>

The following methods and variables in <regex.h> are supported:

- regcomp()
- regerror()
- regexec()
- regfree()

5.33 <sched.h>

The following methods and variables in <sched.h> are supported:

- sched_get_priority_max()
- sched_get_priority_min()
- sched_rr_get_interval()
- sched_yield()

The following methods in <sched.h> are implemented as stubs returning -1 and setting errno to ENOSYS:

- sched_getparam()
- sched_getscheduler()
- sched_setparam()
- sched_setscheduler()

5.34 <search.h>

The following methods and variables in <search.h> are supported:

- hcreate()
- hdestroy()
- hsearch()
- tdelete()
- tfind()
- tsearch()
- twalk()

The following methods and variables in <search.h> are not supported:

- insque()
- lfind()
- lsearch()
- remque()

5.35 <semaphore.h>

The following methods and variables in <semaphore.h> are supported:

- `sem_close()`
- `sem_destroy()`
- `sem_getvalue()`
- `sem_init()`
- `sem_open()`
- `sem_post()`
- `sem_timedwait()`
- `sem_trywait()`
- `sem_unlink()`
- `sem_wait()`

5.36 <setjmp.h>

The following methods and variables in <setjmp.h> are supported:

- longjmp()
- setjmp()
- siglongjmp()
- sigsetjmp()

The following methods and variables in <setjmp.h> are not supported:

- _longjmp()
- _setjmp()

5.37 <signal.h>

The following methods and variables in <signal.h> are supported:

- `bsd_signal()`
- `kill()`
- `pthread_kill()`
- `pthread_sigmask()`
- `raise()`
- `sigaction()`
- `sigaddset()`
- `sigdelset()`
- `sigemptyset()`
- `sigfillset()`
- `sigismember()`
- `signal()`
- `sigpending()`
- `sigprocmask()`
- `sigqueue()`
- `sigsuspend()`
- `sigtimedwait()`
- `sigwait()`
- `sigwaitinfo()`

The following methods and variables in <signal.h> are not supported:

- `killpg()`
- `sighold()`
- `sigignore()`
- `siginterrupt()`
- `sigpause()`
- `sigrelse()`
- `sigset()`

5.38 <spawn.h>

The following methods and variables in <spawn.h> are not supported:

- posix_spawn()
- posix_spawn_file_actions_addclose()
- posix_spawn_file_actions_adddup2()
- posix_spawn_file_actions_addopen()
- posix_spawn_file_actions_destroy()
- posix_spawn_file_actions_init()
- posix_spawnattr_destroy()
- posix_spawnattr_getflags()
- posix_spawnattr_getpgroup()
- posix_spawnattr_getschedparam()
- posix_spawnattr_getschedpolicy()
- posix_spawnattr_getsigdefault()
- posix_spawnattr_getsigmask()
- posix_spawnattr_init()
- posix_spawnattr_setflags()
- posix_spawnattr_setpgroup()
- posix_spawnattr_setschedparam()
- posix_spawnattr_setschedpolicy()
- posix_spawnattr_setsigdefault()
- posix_spawnattr_setsigmask()
- posix_spawnnp()

5.39 <stdarg.h>

The following methods and variables in <stdarg.h> are supported:

- va_arg()
- va_copy()
- va_end()
- va_start()

5.40 <stddef.h>

The following methods and variables in <stddef.h> are supported:

- `offsetof()`

5.41 <stdio.h>

The following methods and variables in <stdio.h> are supported:

- clearerr()
- ctermid()
- fclose()
- fdopen()
- feof()
- ferror()
- fflush()
- fgetc()
- fgetpos()
- fgets()
- fileno()
- flockfile()
- fopen()
- fprintf()
- fputc()
- fputs()
- fread()
- freopen()
- fscanff()
- fseek()
- fseeko()
- fsetpos()
- ftell()
- ftello()
- ftrylockfile()
- funlockfile()
- fwrite()
- getc()
- getc_unlocked()
- getchar()
- getchar_unlocked()
- gets()

- perror()
- printf()
- putc()
- putc_unlocked()
- putchar()
- putchar_unlocked()
- puts()
- remove()
- rename()
- rewind()
- scanf()
- setbuf()
- setvbuf()
- snprintf()
- sprintf()
- sscanf()
- stderr
- stdin
- stdout
- tempnam()
- tmpfile()
- tmpnam()
- ungetc()
- vfprintf()
- vfscanf()
- vprintf()
- vscanf()
- vsnprintf()
- vsprintf()
- vsscanf()

The following methods and variables in <stdio.h> are not supported:

- pclose()
- popen()

5.42 <stdlib.h>

The following methods and variables in <stdlib.h> are supported:

- `_Exit()`
- `a64l()`
- `abort()`
- `abs()`
- `atexit()`
- `atof()`
- `atoi()`
- `atol()`
- `atoll()`
- `bsearch()`
- `calloc()`
- `div()`
- `drand48()`
- `ecvt()`
- `erand48()`
- `exit()`
- `fcvt()`
- `free()`
- `gcvt()`
- `getenv()`
- `getsubopt()`
- `jrand48()`
- `l64a()`
- `labs()`
- `lcong48()`
- `ldiv()`
- `llabs()`
- `lldiv()`
- `lrand48()`
- `malloc()`
- `mblen()`
- `mbstowcs()`

- `mbtowc()`
- `mkstemp()`
- `rand48()`
- `rand48()`
- `posix_memalign()`
- `putenv()`
- `qsort()`
- `rand()`
- `rand_r()`
- `random()`
- `realloc()`
- `realpath()`
- `seed48()`
- `setenv()`
- `srand()`
- `srand48()`
- `srandom()`
- `strtod()`
- `strtof()`
- `strtol()`
- `strtold()`
- `strtoll()`
- `strtoul()`
- `strtoull()`
- `unsetenv()`
- `wcstombs()`
- `wctomb()`

The following methods in `<stdlib.h>` are implemented as stubs returning -1 and setting `errno` to `ENOSYS`:

- `system()`

The following methods and variables in `<stdlib.h>` are not supported:

- `grantpt()`
- `initstate()`
- `ptsname()`
- `setkey()`

- `setstate()`
- `unlockpt()`

5.43 <string.h>

The following methods and variables in <string.h> are supported:

- memccpy()
- memchr()
- memcmp()
- memcpy()
- memmove()
- memset()
- strcat()
- strchr()
- strcmp()
- strcoll()
- strcpy()
- strcspn()
- strdup()
- strerror()
- strerror_r()
- strlen()
- strncat()
- strncmp()
- strncpy()
- strpbrk()
- strrchr()
- strspn()
- strstr()
- strtok()
- strtok_r()
- strxfrm()

5.44 <strings.h>

The following methods and variables in <strings.h> are supported:

- `bcmp()`
- `bcopy()`
- `ffs()`
- `index()`
- `rindex()`
- `strcasecmp()`
- `strncasecmp()`

5.45 <stropts.h>

The following methods and variables in <stropts.h> are supported:

- `ioctl()`

The following methods and variables in <stropts.h> are not supported:

- `fattach()`
- `fdetach()`
- `getmsg()`
- `getpmsg()`
- `isastream()`
- `putmsg()`
- `putpmsg()`

5.46 <sys/ipc.h>

The following methods and variables in <sys/ipc.h> are not supported:

- ftok()

5.47 <sys/mman.h>

The following methods and variables in <sys/mman.h> are supported:

- `mlock()`
- `mlockall()`
- `mmap()`
- `mprotect()`
- `msync()`
- `munlock()`
- `munlockall()`
- `munmap()`
- `posix_madvise()`
- `shm_open()`
- `shm_unlink()`

The following methods and variables in <sys/mman.h> are not supported:

- `posix_mem_offset()`
- `posix_typed_mem_get_info()`
- `posix_typed_mem_open()`

5.48 <sys/msg.h>

The following methods and variables in <sys/msg.h> are not supported:

- msgctl()
- msgget()
- msgrcv()
- msgsnd()

5.49 <sys/resource.h>

The following methods and variables in <sys/resource.h> are supported:

- getrusage()

The following methods and variables in <sys/resource.h> are not supported:

- getpriority()
- getrlimit()
- setpriority()
- setrlimit()

5.50 <sys/select.h>

The following methods and variables in <sys/select.h> are supported:

- FD_CLR()
- FD_ISSET()
- FD_SET()
- FD_ZERO()
- select()

The following methods and variables in <sys/select.h> are not supported:

- pselect()

5.51 <sys/sem.h>

The following methods and variables in <sys/sem.h> are not supported:

- semctl()
- semget()
- semop()

5.52 <sys/shm.h>

The following methods and variables in <sys/shm.h> are not supported:

- `shmat()`
- `shmctl()`
- `shmdt()`
- `shmget()`

5.53 <sys/socket.h>

The following methods and variables in <sys/socket.h> are supported:

- accept()
- bind()
- connect()
- getpeername()
- getsockname()
- getsockopt()
- listen()
- recv()
- recvfrom()
- recvmsg()
- send()
- sendmsg()
- sendto()
- setsockopt()
- shutdown()
- socket()
- socketpair()

The following methods and variables in <sys/socket.h> are not supported:

- sockatmark()

5.54 <sys/stat.h>

The following methods and variables in <sys/stat.h> are supported:

- chmod()
- fchmod()
- fstat()
- lstat()
- mkdir()
- mkfifo()
- mknod()
- stat()
- umask()

5.55 <sys/statvfs.h>

The following methods and variables in <sys/statvfs.h> are supported:

- statvfs()

The following methods and variables in <sys/statvfs.h> are not supported:

- fstatvfs()

5.56 <sys/time.h>

The following methods and variables in <sys/time.h> are supported:

- `gettimeofday()`
- `utimes()`

The following methods in <sys/time.h> are implemented as stubs returning -1 and setting `errno` to `ENOSYS`:

- `getitimer()`
- `setitimer()`

5.57 <sys/times.h>

The following methods and variables in <sys/times.h> are supported:

- times()

5.58 <sys/uio.h>

The following methods and variables in <sys/uio.h> are supported:

- readv()
- writev()

5.59 <sys/utsname.h>

The following methods and variables in <sys/utsname.h> are supported:

- `uname()`

5.60 <sys/wait.h>

The following methods and variables in <sys/wait.h> are supported:

- wait()
- waitpid()

The following methods and variables in <sys/wait.h> are not supported:

- waitid()

5.61 <syslog.h>

The following methods and variables in <syslog.h> are not supported:

- `closelog()`
- `openlog()`
- `setlogmask()`
- `syslog()`

5.62 <termios.h>

The following methods and variables in <termios.h> are supported:

- cfgetispeed()
- cfgetospeed()
- cfsetispeed()
- cfsetospeed()
- tcdrain()
- tcflow()
- tcflush()
- tcgetattr()
- tcsendbreak()
- tcsetattr()

The following methods and variables in <termios.h> are not supported:

- tcgetsid()

5.63 <time.h>

The following methods and variables in <time.h> are supported:

- asctime()
- asctime_r()
- clock()
- clock_getres()
- clock_gettime()
- clock_nanosleep()
- clock_settime()
- ctime()
- ctime_r()
- difftime()
- gmtime()
- gmtime_r()
- localtime()
- localtime_r()
- mktime()
- nanosleep()
- strftime()
- strptime()
- time()
- timer_create()
- timer_delete()
- timer_getoverrun()
- timer_gettime()
- timer_settime()
- timezone
- tzname
- tzset()

The following methods in <time.h> are implemented as stubs returning -1 and setting errno to ENOSYS:

- clock_getcpuclockid()

The following methods and variables in <time.h> are not supported:

- daylight

- `getdate()`
- `getdate_err`

5.64 <trace.h>

The following methods and variables in <trace.h> are not supported:

- posix_trace_attr_destroy()
- posix_trace_attr_getclockres()
- posix_trace_attr_getcreatetime()
- posix_trace_attr_getgenversion()
- posix_trace_attr_getinherited()
- posix_trace_attr_getlogfullpolicy()
- posix_trace_attr_getlogsize()
- posix_trace_attr_getmaxdatasize()
- posix_trace_attr_getmaxsystemeventszize()
- posix_trace_attr_getmaxusereventsizze()
- posix_trace_attr_getname()
- posix_trace_attr_getstreamfullpolicy()
- posix_trace_attr_getstreamsize()
- posix_trace_attr_init()
- posix_trace_attr_setinherited()
- posix_trace_attr_setlogfullpolicy()
- posix_trace_attr_setlogsize()
- posix_trace_attr_setmaxdatasize()
- posix_trace_attr_setname()
- posix_trace_attr_setstreamfullpolicy()
- posix_trace_attr_setstreamsize()
- posix_trace_clear()
- posix_trace_close()
- posix_trace_create()
- posix_trace_create_withlog()
- posix_trace_event()
- posix_trace_eventid_equal()
- posix_trace_eventid_get_name()
- posix_trace_eventid_open()
- posix_trace_eventset_add()
- posix_trace_eventset_del()
- posix_trace_eventset_empty()

- `posix_trace_eventset_fill()`
- `posix_trace_eventset_ismember()`
- `posix_trace_eventtypelist_getnext_id()`
- `posix_trace_eventtypelist_rewind()`
- `posix_trace_flush()`
- `posix_trace_get_attr()`
- `posix_trace_get_filter()`
- `posix_trace_get_status()`
- `posix_trace_getnext_event()`
- `posix_trace_open()`
- `posix_trace_rewind()`
- `posix_trace_set_filter()`
- `posix_trace_shutdown()`
- `posix_trace_start()`
- `posix_trace_stop()`
- `posix_trace_timedgetnext_event()`
- `posix_trace_trid_eventid_open()`
- `posix_trace_trygetnext_event()`

5.65 <ulimit.h>

The following methods and variables in <ulimit.h> are not supported:

- ulimit()

5.66 <unistd.h>

The following methods and variables in <unistd.h> are supported:

- `_exit()`
- `access()`
- `alarm()`
- `chdir()`
- `chown()`
- `close()`
- `dup()`
- `dup2()`
- `environ`
- `fchdir()`
- `fchown()`
- `fdatasync()`
- `fpathconf()`
- `fsync()`
- `ftruncate()`
- `getcwd()`
- `getegid()`
- `geteuid()`
- `getgid()`
- `getgroups()`
- `gethostname()`
- `getlogin()`
- `getlogin_r()`
- `getopt()`
- `getpgrp()`
- `getpid()`
- `getppid()`
- `getuid()`
- `isatty()`
- `lchown()`
- `link()`
- `lseek()`

- `optarg`
- `opterr`
- `optind`
- `optopt`
- `pathconf()`
- `pause()`
- `pipe()`
- `pread()`
- `pwrite()`
- `read()`
- `readlink()`
- `rmdir()`
- `setegid()`
- `seteuid()`
- `setgid()`
- `setpgid()`
- `setsid()`
- `setuid()`
- `sleep()`
- `swab()`
- `symlink()`
- `sync()`
- `sysconf()`
- `tcgetpgrp()`
- `tcsetpgrp()`
- `truncate()`
- `ttyname()`
- `ttyname_r()`
- `ualarm()`
- `unlink()`
- `usleep()`
- `write()`

The following methods in `<unistd.h>` are implemented as stubs returning `-1` and setting `errno` to `ENOSYS`:

- `execl()`

- `execl()`
- `execlp()`
- `execv()`
- `execve()`
- `execvp()`
- `fork()`

The following methods and variables in `<unistd.h>` are not supported:

- `confstr()`
- `crypt()`
- `encrypt()`
- `gethostid()`
- `getpgid()`
- `getsid()`
- `lockf()`
- `nice()`
- `setpgrp()`
- `setregid()`
- `setreuid()`

5.67 <utime.h>

The following methods and variables in <utime.h> are supported:

- `utime()`

5.68 <utmpx.h>

The following methods and variables in <utmpx.h> are not supported:

- endutxent()
- getutxent()
- getutxid()
- getutxline()
- pututxline()
- setutxent()

5.69 <wchar.h>

The following methods and variables in <wchar.h> are supported:

- btowc()
- fgetwc()
- fgetws()
- fputwc()
- fputws()
- fwide()
- fwprintf()
- fwscanf()
- getwc()
- getwchar()
- mbrlen()
- mbrtowc()
- mbsinit()
- mbsrtowcs()
- putwc()
- putwchar()
- swprintf()
- swscanf()
- ungetwc()
- vfwprintf()
- vfwscanf()
- vswprintf()
- vswscanf()
- vwprintf()
- vwscanf()
- wcrntomb()
- wcscat()
- wcschr()
- wcscmp()
- wcscoll()
- wcsncpy()
- wcsncpy()

- wcsftime()
- wcslen()
- wcsncat()
- wcsncmp()
- wcsncpy()
- wcsnlen()
- wcsnrtombs()
- wcsrchr()
- wcsrchr()
- wcsrtombs()
- wcsspn()
- wcsstr()
- wcstod()
- wcstof()
- wcstok()
- wcstol()
- wcstold()
- wcstoll()
- wcstoul()
- wcstoull()
- wcswidth()
- wcsxfrm()
- wctob()
- wcwidth()
- wmemchr()
- wmemcmp()
- wmemcpy()
- wmemmove()
- wmemset()
- wprintf()
- wscanf()

5.70 <wctype.h>

The following methods and variables in <wctype.h> are supported:

- iswalnum()
- iswalpha()
- iswblank()
- iswcntrl()
- iswctype()
- iswdigit()
- iswgraph()
- iswlower()
- iswprint()
- iswpunct()
- iswspace()
- iswupper()
- iswxdigit()
- towctrans()
- tolower()
- towupper()
- wctrans()
- wctype()

5.71 <wordexp.h>

The following methods and variables in <wordexp.h> are not supported:

- wordexp()
- wordfree()

POSIX PSE51 - MINIMAL

This chapter has a subsection per header file to detail the methods provided by RTEMS that are in that header file.

6.1 Summary

The follow table summarizes alignment with the POSIX PSE51 - Minimal standard:

Supported	270
ENOSYS	2
Not supported	12

6.2 <ctype.h>

The following methods and variables in <ctype.h> are supported:

- isalnum()
- isalpha()
- isblank()
- iscntrl()
- isdigit()
- isgraph()
- islower()
- isprint()
- ispunct()
- isspace()
- isupper()
- isxdigit()
- tolower()
- toupper()

6.3 <errno.h>

The following methods and variables in <errno.h> are supported:

- errno

6.4 <fcntl.h>

The following methods and variables in <fcntl.h> are supported:

- open()

6.5 <fenv.h>

The following methods and variables in <fenv.h> are not supported:

- `feclearexcept()`
- `fegetenv()`
- `fegetexceptflag()`
- `fegetround()`
- `feholdexcept()`
- `feraiseexcept()`
- `fesetenv()`
- `fesetexceptflag()`
- `fesetround()`
- `fetestexcept()`
- `feupdateenv()`

6.6 <inttypes.h>

The following methods and variables in <inttypes.h> are supported:

- `imaxabs()`
- `imaxdiv()`
- `strtoimax()`
- `strtoumax()`

6.7 <locale.h>

The following methods and variables in <locale.h> are supported:

- localeconv()
- setlocale()

6.8 <pthread.h>

The following methods and variables in <pthread.h> are supported:

- pthread_attr_destroy()
- pthread_attr_getdetachstate()
- pthread_attr_getguardsize()
- pthread_attr_getinheritsched()
- pthread_attr_getschedparam()
- pthread_attr_getschedpolicy()
- pthread_attr_getscope()
- pthread_attr_getstack()
- pthread_attr_getstackaddr()
- pthread_attr_getstacksize()
- pthread_attr_init()
- pthread_attr_setdetachstate()
- pthread_attr_setguardsize()
- pthread_attr_setinheritsched()
- pthread_attr_setschedparam()
- pthread_attr_setschedpolicy()
- pthread_attr_setscope()
- pthread_attr_setstack()
- pthread_attr_setstackaddr()
- pthread_attr_setstacksize()
- pthread_cancel()
- pthread_cleanup_pop()
- pthread_cleanup_push()
- pthread_cond_broadcast()
- pthread_cond_destroy()
- pthread_cond_init()
- pthread_cond_signal()
- pthread_cond_timedwait()
- pthread_cond_wait()
- pthread_condattr_destroy()
- pthread_condattr_getclock()
- pthread_condattr_init()

- `pthread_condattr_setclock()`
- `pthread_create()`
- `pthread_detach()`
- `pthread_equal()`
- `pthread_exit()`
- `pthread_getconcurrency()`
- `pthread_getschedparam()`
- `pthread_getspecific()`
- `pthread_join()`
- `pthread_key_create()`
- `pthread_key_delete()`
- `pthread_mutex_destroy()`
- `pthread_mutex_getprioceiling()`
- `pthread_mutex_init()`
- `pthread_mutex_lock()`
- `pthread_mutex_setprioceiling()`
- `pthread_mutex_trylock()`
- `pthread_mutex_unlock()`
- `pthread_mutexattr_destroy()`
- `pthread_mutexattr_getprioceiling()`
- `pthread_mutexattr_getprotocol()`
- `pthread_mutexattr_gettype()`
- `pthread_mutexattr_init()`
- `pthread_mutexattr_setprioceiling()`
- `pthread_mutexattr_setprotocol()`
- `pthread_mutexattr_settype()`
- `pthread_once()`
- `pthread_self()`
- `pthread_setcancelstate()`
- `pthread_setcanceltype()`
- `pthread_setconcurrency()`
- `pthread_setschedparam()`
- `pthread_setschedprio()`
- `pthread_setspecific()`

- `pthread_testcancel()`

The following methods in `<pthread.h>` are implemented as stubs returning -1 and setting `errno` to `ENOSYS`:

- `pthread_atfork()`
- `pthread_getcpuclockid()`

6.9 <sched.h>

The following methods and variables in <sched.h> are supported:

- sched_get_priority_max()
- sched_get_priority_min()
- sched_rr_get_interval()

6.10 <semaphore.h>

The following methods and variables in <semaphore.h> are supported:

- `sem_close()`
- `sem_destroy()`
- `sem_getvalue()`
- `sem_init()`
- `sem_open()`
- `sem_post()`
- `sem_timedwait()`
- `sem_trywait()`
- `sem_unlink()`
- `sem_wait()`

6.11 <setjmp.h>

The following methods and variables in <setjmp.h> are supported:

- longjmp()
- setjmp()

6.12 <signal.h>

The following methods and variables in <signal.h> are supported:

- kill()
- pthread_kill()
- pthread_sigmask()
- raise()
- sigaction()
- sigaddset()
- sigdelset()
- sigemptyset()
- sigfillset()
- sigismember()
- signal()
- sigpending()
- sigprocmask()
- sigqueue()
- sigsuspend()
- sigtimedwait()
- sigwait()
- sigwaitinfo()

6.13 <stdarg.h>

The following methods and variables in <stdarg.h> are supported:

- va_arg()
- va_copy()
- va_end()
- va_start()

6.14 <stdio.h>

The following methods and variables in <stdio.h> are supported:

- clearerr()
- fclose()
- fdopen()
- feof()
- ferror()
- fflush()
- fgetc()
- fgets()
- fileno()
- flockfile()
- fopen()
- fprintf()
- fputc()
- fputs()
- fread()
- freopen()
- fscanf()
- ftrylockfile()
- funlockfile()
- fwrite()
- getc()
- getc_unlocked()
- getchar()
- getchar_unlocked()
- gets()
- perror()
- printf()
- putc()
- putc_unlocked()
- putchar()
- putchar_unlocked()
- puts()

- `scanf()`
- `setbuf()`
- `setvbuf()`
- `snprintf()`
- `sprintf()`
- `sscanf()`
- `stderr`
- `stdin`
- `stdout`
- `ungetc()`
- `vfprintf()`
- `vfscanf()`
- `vprintf()`
- `vscanf()`
- `vsprintf()`
- `vsprintf()`
- `vsscanf()`

6.15 <stdlib.h>

The following methods and variables in <stdlib.h> are supported:

- abort()
- abs()
- atof()
- atoi()
- atol()
- atoll()
- bsearch()
- calloc()
- div()
- free()
- getenv()
- labs()
- ldiv()
- llabs()
- lldiv()
- malloc()
- qsort()
- rand()
- rand_r()
- realloc()
- setenv()
- srand()
- strtod()
- strtof()
- strtol()
- strtold()
- strtoll()
- strtoul()
- strtoull()
- unsetenv()

6.16 <string.h>

The following methods and variables in <string.h> are supported:

- memchr()
- memcmp()
- memcpy()
- memmove()
- memset()
- strcat()
- strchr()
- strcmp()
- strcoll()
- strcpy()
- strcspn()
- strerror()
- strerror_r()
- strlen()
- strncat()
- strncmp()
- strncpy()
- strpbrk()
- strrchr()
- strspn()
- strstr()
- strtok()
- strtok_r()
- strxfrm()

6.17 <sys/mman.h>

The following methods and variables in <sys/mman.h> are supported:

- `mlock()`
- `mlockall()`
- `mmap()`
- `munlock()`
- `munmap()`
- `shm_open()`
- `shm_unlink()`

6.18 <sys/utsname.h>

The following methods and variables in <sys/utsname.h> are supported:

- `uname()`

6.19 <time.h>

The following methods and variables in <time.h> are supported:

- asctime()
- asctime_r()
- clock_getres()
- clock_gettime()
- clock_nanosleep()
- clock_settime()
- ctime()
- ctime_r()
- difftime()
- gmtime()
- gmtime_r()
- localtime()
- localtime_r()
- mktime()
- nanosleep()
- strftime()
- time()
- timer_create()
- timer_delete()
- timer_getoverrun()
- timer_gettime()
- timer_settime()
- tzname
- tzset()

6.20 <unistd.h>

The following methods and variables in <unistd.h> are supported:

- alarm()
- close()
- environ
- fdatsync()
- fsync()
- pause()
- read()
- sysconf()
- write()

The following methods and variables in <unistd.h> are not supported:

- confstr()

POSIX PSE52 - REAL-TIME CONTROLLER

This chapter has a subsection per header file to detail the methods provided by RTEMS that are in that header file.

7.1 Summary

The follow table summarizes alignment with the POSIX PSE52 - Real-Time Controller standard:

Supported	553
ENOSYS	2
Not supported	73

7.2 <complex.h>

The following methods and variables in <complex.h> are supported:

- `cabs()`
- `cabsf()`
- `cabsl()`
- `cacos()`
- `cacosf()`
- `cacosh()`
- `cacoshf()`
- `cacoshl()`
- `cacosl()`
- `carg()`
- `cargf()`
- `cargl()`
- `casin()`
- `casinf()`
- `casinh()`
- `casinhf()`
- `casinhl()`
- `casinl()`
- `catan()`
- `catanf()`
- `catanh()`
- `catanhf()`
- `catanhl()`
- `catanl()`
- `ccos()`
- `ccosf()`
- `ccosh()`
- `ccoshf()`
- `ccoshl()`
- `ccosl()`
- `cexp()`
- `cexpf()`

- `cexpl()`
- `cimag()`
- `cimagf()`
- `cimagl()`
- `clog()`
- `clogf()`
- `clogl()`
- `conj()`
- `conjf()`
- `conjl()`
- `cpow()`
- `cpowf()`
- `cpowl()`
- `cproj()`
- `cprojf()`
- `cprojl()`
- `creal()`
- `crealf()`
- `creall()`
- `csin()`
- `csinf()`
- `csinh()`
- `csinhf()`
- `csinhl()`
- `csinl()`
- `csqrt()`
- `csqrtf()`
- `csqrtl()`
- `ctan()`
- `ctanf()`
- `ctanh()`
- `ctanhf()`
- `ctanhl()`
- `ctanl()`

7.3 <ctype.h>

The following methods and variables in <ctype.h> are supported:

- isalnum()
- isalpha()
- isblank()
- iscntrl()
- isdigit()
- isgraph()
- islower()
- isprint()
- ispunct()
- isspace()
- isupper()
- isxdigit()
- tolower()
- toupper()

7.4 <dirent.h>

The following methods and variables in <dirent.h> are supported:

- `closedir()`
- `opendir()`
- `readdir()`
- `readdir_r()`
- `rewinddir()`

7.5 <errno.h>

The following methods and variables in <errno.h> are supported:

- errno

7.6 <fcntl.h>

The following methods and variables in <fcntl.h> are supported:

- creat()
- fcntl()
- open()

7.7 <fenv.h>

The following methods and variables in <fenv.h> are not supported:

- `feclearexcept()`
- `fegetenv()`
- `fegetexceptflag()`
- `fegetround()`
- `feholdexcept()`
- `feraiseexcept()`
- `fesetenv()`
- `fesetexceptflag()`
- `fesetround()`
- `fetestexcept()`
- `feupdateenv()`

7.8 <inttypes.h>

The following methods and variables in <inttypes.h> are supported:

- `imaxabs()`
- `imaxdiv()`
- `strtoimax()`
- `strtoumax()`

7.9 <locale.h>

The following methods and variables in <locale.h> are supported:

- localeconv()
- setlocale()

7.10 <math.h>

The following methods and variables in <math.h> are supported:

- `acos()`
- `acosf()`
- `acosh()`
- `acoshf()`
- `acoshl()`
- `acosl()`
- `asin()`
- `asinf()`
- `asinh()`
- `asinhf()`
- `asinhl()`
- `asinl()`
- `atan()`
- `atan2()`
- `atan2f()`
- `atan2l()`
- `atanf()`
- `atanh()`
- `atanhf()`
- `atanhl()`
- `atanl()`
- `cbrt()`
- `cbrtf()`
- `cbrtl()`
- `ceil()`
- `ceilf()`
- `ceill()`
- `copysign()`
- `copysignf()`
- `copysignl()`
- `cos()`
- `cosf()`

- `cosh()`
- `coshf()`
- `coshl()`
- `cosl()`
- `erf()`
- `erfc()`
- `erfcf()`
- `erfcl()`
- `erff()`
- `erfl()`
- `exp()`
- `exp2()`
- `exp2f()`
- `exp2l()`
- `expf()`
- `expl()`
- `expm1()`
- `expm1f()`
- `expm1l()`
- `fabs()`
- `fabsf()`
- `fabsl()`
- `fdim()`
- `fdimf()`
- `fdiml()`
- `floor()`
- `floorf()`
- `floorl()`
- `fma()`
- `maf()`
- `fmal()`
- `fmax()`
- `fmaxf()`
- `fmaxl()`

- `fmin()`
- `fminf()`
- `fminl()`
- `fmod()`
- `fmodf()`
- `fmodl()`
- `frexp()`
- `frexpf()`
- `frexpl()`
- `hypot()`
- `hypotf()`
- `hypotl()`
- `ilogb()`
- `ilogbf()`
- `ilogbl()`
- `isinf()`
- `isnan()`
- `ldexp()`
- `ldexpf()`
- `ldexpl()`
- `lgamma()`
- `lgammaf()`
- `lgammal()`
- `llrint()`
- `llrintf()`
- `llrintl()`
- `llround()`
- `llroundf()`
- `llroundl()`
- `log()`
- `log10()`
- `log10f()`
- `log10l()`
- `log1p()`

- `log1pf()`
- `log1pl()`
- `log2()`
- `log2f()`
- `log2l()`
- `logb()`
- `logbf()`
- `logbl()`
- `logf()`
- `logl()`
- `lrint()`
- `lrintf()`
- `lrintl()`
- `lround()`
- `lroundf()`
- `lroundl()`
- `modf()`
- `modff()`
- `modfl()`
- `nan()`
- `nanf()`
- `nanl()`
- `nearbyint()`
- `nearbyintf()`
- `nearbyintl()`
- `nextafter()`
- `nextafterf()`
- `nextafterl()`
- `nexttoward()`
- `nexttowardl()`
- `pow()`
- `powf()`
- `powl()`
- `remainder()`

- remainderf()
- remainderl()
- remquo()
- remquof()
- remquol()
- rint()
- rintf()
- rintl()
- round()
- roundf()
- roundl()
- scalbln()
- scalblnf()
- scalblnl()
- scalbn()
- scalbnf()
- scalbnl()
- sin()
- sinf()
- sinh()
- sinhf()
- sinhl()
- sinl()
- sqrt()
- sqrtf()
- sqrtl()
- tan()
- tanf()
- tanh()
- tanhf()
- tanhl()
- tanl()
- tgamma()
- tgammaf()

- `tgammal()`
- `trunc()`
- `truncf()`
- `truncl()`

The following methods and variables in `<math.h>` are not supported:

- `fpclassify()`
- `isfinite()`
- `isgreater()`
- `isgreaterequal()`
- `isless()`
- `islessequal()`
- `islessgreater()`
- `isnormal()`
- `isunordered()`
- `nexttowardf()`
- `signbit()`

7.11 <mqeue.h>

The following methods and variables in <mqeue.h> are supported:

- mq_close()
- mq_getattr()
- mq_notify()
- mq_open()
- mq_receive()
- mq_send()
- mq_setattr()
- mq_timedreceive()
- mq_timedsend()
- mq_unlink()

7.12 <pthread.h>

The following methods and variables in <pthread.h> are supported:

- pthread_attr_destroy()
- pthread_attr_getdetachstate()
- pthread_attr_getguardsize()
- pthread_attr_getinheritsched()
- pthread_attr_getschedparam()
- pthread_attr_getschedpolicy()
- pthread_attr_getscope()
- pthread_attr_getstack()
- pthread_attr_getstackaddr()
- pthread_attr_getstacksize()
- pthread_attr_init()
- pthread_attr_setdetachstate()
- pthread_attr_setguardsize()
- pthread_attr_setinheritsched()
- pthread_attr_setschedparam()
- pthread_attr_setschedpolicy()
- pthread_attr_setscope()
- pthread_attr_setstack()
- pthread_attr_setstackaddr()
- pthread_attr_setstacksize()
- pthread_cancel()
- pthread_cleanup_pop()
- pthread_cleanup_push()
- pthread_cond_broadcast()
- pthread_cond_destroy()
- pthread_cond_init()
- pthread_cond_signal()
- pthread_cond_timedwait()
- pthread_cond_wait()
- pthread_condattr_destroy()
- pthread_condattr_getclock()
- pthread_condattr_init()

- `pthread_condattr_setclock()`
- `pthread_create()`
- `pthread_detach()`
- `pthread_equal()`
- `pthread_exit()`
- `pthread_getconcurrency()`
- `pthread_getschedparam()`
- `pthread_getspecific()`
- `pthread_join()`
- `pthread_key_create()`
- `pthread_key_delete()`
- `pthread_mutex_destroy()`
- `pthread_mutex_getprioceiling()`
- `pthread_mutex_init()`
- `pthread_mutex_lock()`
- `pthread_mutex_setprioceiling()`
- `pthread_mutex_trylock()`
- `pthread_mutex_unlock()`
- `pthread_mutexattr_destroy()`
- `pthread_mutexattr_getprioceiling()`
- `pthread_mutexattr_getprotocol()`
- `pthread_mutexattr_gettype()`
- `pthread_mutexattr_init()`
- `pthread_mutexattr_setprioceiling()`
- `pthread_mutexattr_setprotocol()`
- `pthread_mutexattr_settype()`
- `pthread_once()`
- `pthread_self()`
- `pthread_setcancelstate()`
- `pthread_setcanceltype()`
- `pthread_setconcurrency()`
- `pthread_setschedparam()`
- `pthread_setschedprio()`
- `pthread_setspecific()`

- `pthread_testcancel()`

The following methods in `<pthread.h>` are implemented as stubs returning -1 and setting `errno` to `ENOSYS`:

- `pthread_atfork()`
- `pthread_getcpuclockid()`

7.13 <sched.h>

The following methods and variables in <sched.h> are supported:

- sched_get_priority_max()
- sched_get_priority_min()
- sched_rr_get_interval()

7.14 <semaphore.h>

The following methods and variables in <semaphore.h> are supported:

- `sem_close()`
- `sem_destroy()`
- `sem_getvalue()`
- `sem_init()`
- `sem_open()`
- `sem_post()`
- `sem_timedwait()`
- `sem_trywait()`
- `sem_unlink()`
- `sem_wait()`

7.15 <setjmp.h>

The following methods and variables in <setjmp.h> are supported:

- longjmp()
- setjmp()

7.16 <signal.h>

The following methods and variables in <signal.h> are supported:

- kill()
- pthread_kill()
- pthread_sigmask()
- raise()
- sigaction()
- sigaddset()
- sigdelset()
- sigemptyset()
- sigfillset()
- sigismember()
- signal()
- sigpending()
- sigprocmask()
- sigqueue()
- sigsuspend()
- sigtimedwait()
- sigwait()
- sigwaitinfo()

7.17 <stdarg.h>

The following methods and variables in <stdarg.h> are supported:

- va_arg()
- va_copy()
- va_end()
- va_start()

7.18 <stdio.h>

The following methods and variables in <stdio.h> are supported:

- clearerr()
- fclose()
- fdopen()
- feof()
- ferror()
- fflush()
- fgetc()
- fgetpos()
- fgets()
- fileno()
- flockfile()
- fopen()
- fprintf()
- fputc()
- fputs()
- fread()
- freopen()
- fscanf()
- fseek()
- fseeko()
- fsetpos()
- ftell()
- ftello()
- ftrylockfile()
- funlockfile()
- fwrite()
- getc()
- getc_unlocked()
- getchar()
- getchar_unlocked()
- gets()
- perror()

- printf()
- putc()
- putc_unlocked()
- putchar()
- putchar_unlocked()
- puts()
- remove()
- rename()
- rewind()
- scanf()
- setbuf()
- setvbuf()
- snprintf()
- sprintf()
- sscanf()
- stderr
- stdin
- stdout
- tmpfile()
- tmpnam()
- ungetc()
- vfprintf()
- vfscanf()
- vprintf()
- vscanf()
- vsnprintf()
- vsprintf()
- vsscanf()

7.19 <stdlib.h>

The following methods and variables in <stdlib.h> are supported:

- abort()
- abs()
- atof()
- atoi()
- atol()
- atoll()
- bsearch()
- calloc()
- div()
- free()
- getenv()
- labs()
- ldiv()
- llabs()
- lldiv()
- malloc()
- qsort()
- rand()
- rand_r()
- realloc()
- setenv()
- srand()
- strtod()
- strtof()
- strtol()
- strtold()
- strtoll()
- strtoul()
- strtoull()
- unsetenv()

7.20 <string.h>

The following methods and variables in <string.h> are supported:

- memchr()
- memcmp()
- memcpy()
- memmove()
- memset()
- strcat()
- strchr()
- strcmp()
- strcoll()
- strcpy()
- strcspn()
- strerror()
- strerror_r()
- strlen()
- strncat()
- strncmp()
- strncpy()
- strpbrk()
- strrchr()
- strspn()
- strstr()
- strtok()
- strtok_r()
- strxfrm()

7.21 <sys/mman.h>

The following methods and variables in <sys/mman.h> are supported:

- `mlock()`
- `mlockall()`
- `mmap()`
- `msync()`
- `munlock()`
- `munmap()`
- `shm_open()`
- `shm_unlink()`

7.22 <sys/stat.h>

The following methods and variables in <sys/stat.h> are supported:

- `fstat()`
- `mkdir()`
- `stat()`

7.23 <sys/utsname.h>

The following methods and variables in <sys/utsname.h> are supported:

- `uname()`

7.24 <time.h>

The following methods and variables in <time.h> are supported:

- asctime()
- asctime_r()
- clock_getres()
- clock_gettime()
- clock_nanosleep()
- clock_settime()
- ctime()
- ctime_r()
- difftime()
- gmtime()
- gmtime_r()
- localtime()
- localtime_r()
- mktime()
- nanosleep()
- strftime()
- time()
- timer_create()
- timer_delete()
- timer_getoverrun()
- timer_gettime()
- timer_settime()
- tzname
- tzset()

7.25 <trace.h>

The following methods and variables in <trace.h> are not supported:

- posix_trace_attr_destroy()
- posix_trace_attr_getclockres()
- posix_trace_attr_getcreatetime()
- posix_trace_attr_getgenversion()
- posix_trace_attr_getinherited()
- posix_trace_attr_getlogfullpolicy()
- posix_trace_attr_getlogsize()
- posix_trace_attr_getmaxdatasize()
- posix_trace_attr_getmaxsystemeventszize()
- posix_trace_attr_getmaxusereventsizze()
- posix_trace_attr_getname()
- posix_trace_attr_getstreamfullpolicy()
- posix_trace_attr_getstreamsize()
- posix_trace_attr_init()
- posix_trace_attr_setinherited()
- posix_trace_attr_setlogfullpolicy()
- posix_trace_attr_setlogsize()
- posix_trace_attr_setmaxdatasize()
- posix_trace_attr_setname()
- posix_trace_attr_setstreamfullpolicy()
- posix_trace_attr_setstreamsize()
- posix_trace_clear()
- posix_trace_close()
- posix_trace_create()
- posix_trace_create_withlog()
- posix_trace_event()
- posix_trace_eventid_equal()
- posix_trace_eventid_get_name()
- posix_trace_eventid_open()
- posix_trace_eventset_add()
- posix_trace_eventset_del()
- posix_trace_eventset_empty()

- `posix_trace_eventset_fill()`
- `posix_trace_eventset_ismember()`
- `posix_trace_eventtypelist_getnext_id()`
- `posix_trace_eventtypelist_rewind()`
- `posix_trace_flush()`
- `posix_trace_get_attr()`
- `posix_trace_get_filter()`
- `posix_trace_get_status()`
- `posix_trace_getnext_event()`
- `posix_trace_open()`
- `posix_trace_rewind()`
- `posix_trace_set_filter()`
- `posix_trace_shutdown()`
- `posix_trace_start()`
- `posix_trace_stop()`
- `posix_trace_timedgetnext_event()`
- `posix_trace_trid_eventid_open()`
- `posix_trace_trygetnext_event()`

7.27 <utime.h>

The following methods and variables in <utime.h> are supported:

- `utime()`

POSIX PSE53 - DEDICATED

This chapter has a subsection per header file to detail the methods provided by RTEMS that are in that header file.

8.1 Summary

The follow table summarizes alignment with the POSIX PSE53 - Dedicated standard:

Supported	639
ENOSYS	16
Not supported	96

8.2 <aio.h>

The following methods and variables in <aio.h> are supported:

- aio_cancel()
- aio_error()
- aio_fsync()
- aio_read()
- aio_return()
- aio_write()

The following methods in <aio.h> are implemented as stubs returning -1 and setting errno to ENOSYS:

- aio_suspend()
- lio_listio()

8.3 <arpa/inet.h>

The following methods and variables in <arpa/inet.h> are supported:

- htonl()
- htons()
- inet_addr()
- inet_ntoa()
- inet_ntop()
- inet_pton()
- ntohl()
- ntohs()

8.4 <assert.h>

The following methods and variables in <assert.h> are supported:

- `assert()`

8.5 <complex.h>

The following methods and variables in <complex.h> are supported:

- `cabs()`
- `cabsf()`
- `cabsl()`
- `cacos()`
- `cacosf()`
- `cacosh()`
- `cacoshf()`
- `cacoshl()`
- `cacosl()`
- `carg()`
- `cargf()`
- `cargl()`
- `casin()`
- `casinf()`
- `casinh()`
- `casinhf()`
- `casinhl()`
- `casinl()`
- `catan()`
- `catanf()`
- `catanh()`
- `catanhf()`
- `catanhl()`
- `catanl()`
- `ccos()`
- `ccosf()`
- `ccosh()`
- `ccoshf()`
- `ccoshl()`
- `ccosl()`
- `cexp()`
- `cexpf()`

- `cexpl()`
- `cimag()`
- `cimagf()`
- `cimagl()`
- `clog()`
- `clogf()`
- `clogl()`
- `conj()`
- `conjf()`
- `conjl()`
- `cpow()`
- `cpowf()`
- `cpowl()`
- `cproj()`
- `cprojf()`
- `cprojl()`
- `creal()`
- `crealf()`
- `creall()`
- `csin()`
- `csinf()`
- `csinh()`
- `csinhf()`
- `csinhl()`
- `csinl()`
- `csqrt()`
- `csqrtf()`
- `csqrtl()`
- `ctan()`
- `ctanf()`
- `ctanh()`
- `ctanhf()`
- `ctanhl()`
- `ctanl()`

8.6 <ctype.h>

The following methods and variables in <ctype.h> are supported:

- isalnum()
- isalpha()
- isblank()
- iscntrl()
- isdigit()
- isgraph()
- islower()
- isprint()
- ispunct()
- isspace()
- isupper()
- isxdigit()
- tolower()
- toupper()

8.7 <dirent.h>

The following methods and variables in <dirent.h> are supported:

- `closedir()`
- `opendir()`
- `readdir()`
- `readdir_r()`
- `rewinddir()`

8.8 <errno.h>

The following methods and variables in <errno.h> are supported:

- errno

8.9 <fcntl.h>

The following methods and variables in <fcntl.h> are supported:

- creat()
- fcntl()
- open()

8.10 <fenv.h>

The following methods and variables in <fenv.h> are not supported:

- `feclearexcept()`
- `fegetenv()`
- `fegetexceptflag()`
- `fegetround()`
- `feholdexcept()`
- `feraiseexcept()`
- `fesetenv()`
- `fesetexceptflag()`
- `fesetround()`
- `fetestexcept()`
- `feupdateenv()`

8.11 <inttypes.h>

The following methods and variables in <inttypes.h> are supported:

- `imaxabs()`
- `imaxdiv()`
- `strtoimax()`
- `strtoumax()`

8.12 <locale.h>

The following methods and variables in <locale.h> are supported:

- localeconv()
- setlocale()

8.13 <math.h>

The following methods and variables in <math.h> are supported:

- `acos()`
- `acosf()`
- `acosh()`
- `acoshf()`
- `acoshl()`
- `acosl()`
- `asin()`
- `asinf()`
- `asinh()`
- `asinhf()`
- `asinh1()`
- `asinl()`
- `atan()`
- `atan2()`
- `atan2f()`
- `atan2l()`
- `atanf()`
- `atanh()`
- `atanhf()`
- `atanhl()`
- `atanl()`
- `cbrt()`
- `cbrtf()`
- `cbrtl()`
- `ceil()`
- `ceilf()`
- `ceill()`
- `copysign()`
- `copysignf()`
- `copysignl()`
- `cos()`
- `cosf()`

- cosh()
- coshf()
- coshl()
- cosl()
- erf()
- erfc()
- erfcf()
- erfcl()
- erff()
- erfl()
- exp()
- exp2()
- exp2f()
- exp2l()
- expf()
- expl()
- expm1()
- expm1f()
- expm1l()
- fabs()
- fabsf()
- fabsl()
- fdim()
- fdimf()
- fdiml()
- floor()
- floorf()
- floorl()
- fma()
- fmaf()
- fmal()
- fmax()
- fmaxf()
- fmaxl()

- `fmin()`
- `fminf()`
- `fminl()`
- `fmod()`
- `fmodf()`
- `fmodl()`
- `frexp()`
- `frexpf()`
- `frexpl()`
- `hypot()`
- `hypotf()`
- `hypotl()`
- `ilogb()`
- `ilogbf()`
- `ilogbl()`
- `isinf()`
- `isnan()`
- `ldexp()`
- `ldexpf()`
- `ldexpl()`
- `lgamma()`
- `lgammaf()`
- `lgammal()`
- `llrint()`
- `llrintf()`
- `llrintl()`
- `llround()`
- `llroundf()`
- `llroundl()`
- `log()`
- `log10()`
- `log10f()`
- `log10l()`
- `log1p()`

- `log1pf()`
- `log1pl()`
- `log2()`
- `log2f()`
- `log2l()`
- `logb()`
- `logbf()`
- `logbl()`
- `logf()`
- `logl()`
- `lrint()`
- `lrintf()`
- `lrintl()`
- `lround()`
- `lroundf()`
- `lroundl()`
- `modf()`
- `modff()`
- `modfl()`
- `nan()`
- `nanf()`
- `nanl()`
- `nearbyint()`
- `nearbyintf()`
- `nearbyintl()`
- `nextafter()`
- `nextafterf()`
- `nextafterl()`
- `nexttoward()`
- `nexttowardl()`
- `pow()`
- `powf()`
- `powl()`
- `remainder()`

- remainderf()
- remainderl()
- remquo()
- remquof()
- remquol()
- rint()
- rintf()
- rintl()
- round()
- roundf()
- roundl()
- scalbln()
- scalblnf()
- scalblnl()
- scalbn()
- scalbnf()
- scalbnl()
- sin()
- sinf()
- sinh()
- sinhlf()
- sinhl()
- sinl()
- sqrt()
- sqrtf()
- sqrtl()
- tan()
- tanf()
- tanh()
- tanhf()
- tanhl()
- tanl()
- tgamma()
- tgammaf()

- `tgamma()`
- `trunc()`
- `truncf()`
- `truncl()`

The following methods and variables in `<math.h>` are not supported:

- `fpclassify()`
- `isfinite()`
- `isgreater()`
- `isgreaterequal()`
- `isless()`
- `islessequal()`
- `islessgreater()`
- `isnormal()`
- `isunordered()`
- `nexttowardf()`
- `signbit()`

8.14 <queue.h>

The following methods and variables in <queue.h> are supported:

- mq_close()
- mq_getattr()
- mq_notify()
- mq_open()
- mq_receive()
- mq_send()
- mq_setattr()
- mq_timedreceive()
- mq_timedsend()
- mq_unlink()

8.15 <net/if.h>

The following methods and variables in <net/if.h> are supported:

- `if_freenameindex()`
- `if_indextoname()`
- `if_nameindex()`
- `if_nametoindex()`

8.16 <netdb.h>

The following methods and variables in <netdb.h> are supported:

- `endhostent()`
- `endnetent()`
- `endprotoent()`
- `endservent()`
- `freeaddrinfo()`
- `gai_strerror()`
- `getaddrinfo()`
- `gethostent()`
- `getnameinfo()`
- `getnetbyaddr()`
- `getnetbyname()`
- `getnetent()`
- `getprotobyname()`
- `getprotobynumber()`
- `getprotoent()`
- `getservbyname()`
- `getservbyport()`
- `getservent()`
- `sethostent()`
- `setnetent()`
- `setprotoent()`
- `setservent()`

8.17 <pthread.h>

The following methods and variables in <pthread.h> are supported:

- pthread_attr_destroy()
- pthread_attr_getdetachstate()
- pthread_attr_getguardsize()
- pthread_attr_getinheritsched()
- pthread_attr_getschedparam()
- pthread_attr_getschedpolicy()
- pthread_attr_getscope()
- pthread_attr_getstack()
- pthread_attr_getstackaddr()
- pthread_attr_getstacksize()
- pthread_attr_init()
- pthread_attr_setdetachstate()
- pthread_attr_setguardsize()
- pthread_attr_setinheritsched()
- pthread_attr_setschedparam()
- pthread_attr_setschedpolicy()
- pthread_attr_setscope()
- pthread_attr_setstack()
- pthread_attr_setstackaddr()
- pthread_attr_setstacksize()
- pthread_cancel()
- pthread_cleanup_pop()
- pthread_cleanup_push()
- pthread_cond_broadcast()
- pthread_cond_destroy()
- pthread_cond_init()
- pthread_cond_signal()
- pthread_cond_timedwait()
- pthread_cond_wait()
- pthread_condattr_destroy()
- pthread_condattr_getclock()
- pthread_condattr_getpshared()

- pthread_condattr_init()
- pthread_condattr_setclock()
- pthread_condattr_setpshared()
- pthread_create()
- pthread_detach()
- pthread_equal()
- pthread_exit()
- pthread_getconcurrency()
- pthread_getschedparam()
- pthread_getspecific()
- pthread_join()
- pthread_key_create()
- pthread_key_delete()
- pthread_mutex_destroy()
- pthread_mutex_getprioceiling()
- pthread_mutex_init()
- pthread_mutex_lock()
- pthread_mutex_setprioceiling()
- pthread_mutex_trylock()
- pthread_mutex_unlock()
- pthread_mutexattr_destroy()
- pthread_mutexattr_getprioceiling()
- pthread_mutexattr_getprotocol()
- pthread_mutexattr_getpshared()
- pthread_mutexattr_gettype()
- pthread_mutexattr_init()
- pthread_mutexattr_setprioceiling()
- pthread_mutexattr_setprotocol()
- pthread_mutexattr_setpshared()
- pthread_mutexattr_settype()
- pthread_once()
- pthread_self()
- pthread_setcancelstate()
- pthread_setcanceltype()

- `pthread_setconcurrency()`
- `pthread_setschedparam()`
- `pthread_setschedprio()`
- `pthread_setspecific()`
- `pthread_testcancel()`

The following methods in `<pthread.h>` are implemented as stubs returning -1 and setting `errno` to `ENOSYS`:

- `pthread_atfork()`
- `pthread_getcpuclockid()`

8.18 <sched.h>

The following methods and variables in <sched.h> are supported:

- sched_get_priority_max()
- sched_get_priority_min()
- sched_rr_get_interval()
- sched_yield()

The following methods in <sched.h> are implemented as stubs returning -1 and setting errno to ENOSYS:

- sched_getparam()
- sched_getscheduler()
- sched_setparam()
- sched_setscheduler()

8.19 <semaphore.h>

The following methods and variables in <semaphore.h> are supported:

- `sem_close()`
- `sem_destroy()`
- `sem_getvalue()`
- `sem_init()`
- `sem_open()`
- `sem_post()`
- `sem_timedwait()`
- `sem_trywait()`
- `sem_unlink()`
- `sem_wait()`

8.20 <setjmp.h>

The following methods and variables in <setjmp.h> are supported:

- longjmp()
- setjmp()
- siglongjmp()
- sigsetjmp()

8.21 <signal.h>

The following methods and variables in <signal.h> are supported:

- kill()
- pthread_kill()
- pthread_sigmask()
- raise()
- sigaction()
- sigaddset()
- sigdelset()
- sigemptyset()
- sigfillset()
- sigismember()
- signal()
- sigpending()
- sigprocmask()
- sigqueue()
- sigsuspend()
- sigtimedwait()
- sigwait()
- sigwaitinfo()

8.22 <spawn.h>

The following methods and variables in <spawn.h> are not supported:

- posix_spawn()
- posix_spawn_file_actions_addclose()
- posix_spawn_file_actions_adddup2()
- posix_spawn_file_actions_addopen()
- posix_spawn_file_actions_destroy()
- posix_spawn_file_actions_init()
- posix_spawnattr_destroy()
- posix_spawnattr_getflags()
- posix_spawnattr_getpgroup()
- posix_spawnattr_getschedparam()
- posix_spawnattr_getschedpolicy()
- posix_spawnattr_getsigdefault()
- posix_spawnattr_getsigmask()
- posix_spawnattr_init()
- posix_spawnattr_setflags()
- posix_spawnattr_setpgroup()
- posix_spawnattr_setschedparam()
- posix_spawnattr_setschedpolicy()
- posix_spawnattr_setsigdefault()
- posix_spawnattr_setsigmask()
- posix_spawnnp()

8.23 <stdarg.h>

The following methods and variables in <stdarg.h> are supported:

- va_arg()
- va_copy()
- va_end()
- va_start()

8.24 <stdio.h>

The following methods and variables in <stdio.h> are supported:

- clearerr()
- fclose()
- fdopen()
- feof()
- ferror()
- fflush()
- fgetc()
- fgetpos()
- fgets()
- fileno()
- flockfile()
- fopen()
- fprintf()
- fputc()
- fputs()
- fread()
- freopen()
- fscanf()
- fseek()
- fseeko()
- fsetpos()
- ftell()
- ftello()
- ftrylockfile()
- funlockfile()
- fwrite()
- getc()
- getc_unlocked()
- getchar()
- getchar_unlocked()
- gets()
- perror()

- printf()
- putc()
- putc_unlocked()
- putchar()
- putchar_unlocked()
- puts()
- remove()
- rename()
- rewind()
- scanf()
- setbuf()
- setvbuf()
- snprintf()
- sprintf()
- sscanf()
- stderr
- stdin
- stdout
- tmpfile()
- tmpnam()
- ungetc()
- vfprintf()
- vfscanf()
- vprintf()
- vscanf()
- vsnprintf()
- vsprintf()
- vsscanf()

8.25 <stdlib.h>

The following methods and variables in <stdlib.h> are supported:

- _Exit()
- abort()
- abs()
- atexit()
- atof()
- atoi()
- atol()
- atoll()
- bsearch()
- calloc()
- div()
- exit()
- free()
- getenv()
- labs()
- ldiv()
- llabs()
- lldiv()
- malloc()
- qsort()
- rand()
- rand_r()
- realloc()
- setenv()
- srand()
- strtod()
- strtof()
- strtol()
- strtold()
- strtoll()
- strtoul()
- strtoull()

- `unsetenv()`

8.26 <string.h>

The following methods and variables in <string.h> are supported:

- memchr()
- memcmp()
- memcpy()
- memmove()
- memset()
- strcat()
- strchr()
- strcmp()
- strcoll()
- strcpy()
- strcspn()
- strerror()
- strerror_r()
- strlen()
- strncat()
- strncmp()
- strncpy()
- strpbrk()
- strrchr()
- strspn()
- strstr()
- strtok()
- strtok_r()
- strxfrm()

8.27 <sys/mman.h>

The following methods and variables in <sys/mman.h> are supported:

- `mlock()`
- `mlockall()`
- `mmap()`
- `mprotect()`
- `msync()`
- `munlock()`
- `munmap()`
- `shm_open()`
- `shm_unlink()`

8.28 <sys/select.h>

The following methods and variables in <sys/select.h> are supported:

- FD_CLR()
- FD_ISSET()
- FD_SET()
- FD_ZERO()
- select()

The following methods and variables in <sys/select.h> are not supported:

- pselect()

8.29 <sys/socket.h>

The following methods and variables in <sys/socket.h> are supported:

- `accept()`
- `bind()`
- `connect()`
- `getpeername()`
- `getsockname()`
- `getsockopt()`
- `listen()`
- `recv()`
- `recvfrom()`
- `recvmsg()`
- `send()`
- `sendmsg()`
- `sendto()`
- `setsockopt()`
- `shutdown()`
- `socket()`
- `socketpair()`

The following methods and variables in <sys/socket.h> are not supported:

- `socketatmark()`

8.30 <sys/stat.h>

The following methods and variables in <sys/stat.h> are supported:

- `fstat()`
- `mkdir()`
- `stat()`

8.31 <sys/time.h>

The following methods and variables in <sys/time.h> are supported:

- `utimes()`

8.32 <sys/times.h>

The following methods and variables in <sys/times.h> are supported:

- times()

8.33 <sys/utsname.h>

The following methods and variables in <sys/utsname.h> are supported:

- `uname()`

8.34 <sys/wait.h>

The following methods and variables in <sys/wait.h> are supported:

- wait()

8.35 <time.h>

The following methods and variables in <time.h> are supported:

- asctime()
- asctime_r()
- clock()
- clock_getres()
- clock_gettime()
- clock_nanosleep()
- clock_settime()
- ctime()
- ctime_r()
- difftime()
- gmtime()
- gmtime_r()
- localtime()
- localtime_r()
- mktime()
- nanosleep()
- strftime()
- time()
- timer_create()
- timer_delete()
- timer_getoverrun()
- timer_gettime()
- timer_settime()
- tzname
- tzset()

The following methods in <time.h> are implemented as stubs returning -1 and setting errno to ENOSYS:

- clock_getcpuclockid()

8.36 <trace.h>

The following methods and variables in <trace.h> are not supported:

- posix_trace_attr_destroy()
- posix_trace_attr_getclockres()
- posix_trace_attr_getcreatetime()
- posix_trace_attr_getgenversion()
- posix_trace_attr_getinherited()
- posix_trace_attr_getlogfullpolicy()
- posix_trace_attr_getlogsize()
- posix_trace_attr_getmaxdatasize()
- posix_trace_attr_getmaxsystemeventszize()
- posix_trace_attr_getmaxusereventsizze()
- posix_trace_attr_getname()
- posix_trace_attr_getstreamfullpolicy()
- posix_trace_attr_getstreamsize()
- posix_trace_attr_init()
- posix_trace_attr_setinherited()
- posix_trace_attr_setlogfullpolicy()
- posix_trace_attr_setlogsize()
- posix_trace_attr_setmaxdatasize()
- posix_trace_attr_setname()
- posix_trace_attr_setstreamfullpolicy()
- posix_trace_attr_setstreamsize()
- posix_trace_clear()
- posix_trace_close()
- posix_trace_create()
- posix_trace_create_withlog()
- posix_trace_event()
- posix_trace_eventid_equal()
- posix_trace_eventid_get_name()
- posix_trace_eventid_open()
- posix_trace_eventset_add()
- posix_trace_eventset_del()
- posix_trace_eventset_empty()

- `posix_trace_eventset_fill()`
- `posix_trace_eventset_ismember()`
- `posix_trace_eventtypelist_getnext_id()`
- `posix_trace_eventtypelist_rewind()`
- `posix_trace_flush()`
- `posix_trace_get_attr()`
- `posix_trace_get_filter()`
- `posix_trace_get_status()`
- `posix_trace_getnext_event()`
- `posix_trace_open()`
- `posix_trace_rewind()`
- `posix_trace_set_filter()`
- `posix_trace_shutdown()`
- `posix_trace_start()`
- `posix_trace_stop()`
- `posix_trace_timedgetnext_event()`
- `posix_trace_trid_eventid_open()`
- `posix_trace_trygetnext_event()`

8.37 <unistd.h>

The following methods and variables in <unistd.h> are supported:

- `_exit()`
- `access()`
- `alarm()`
- `chdir()`
- `close()`
- `dup()`
- `dup2()`
- `environ`
- `fdatasync()`
- `fpathconf()`
- `fsync()`
- `ftruncate()`
- `getcwd()`
- `gethostname()`
- `getpgrp()`
- `getpid()`
- `getppid()`
- `link()`
- `lseek()`
- `pathconf()`
- `pause()`
- `pipe()`
- `read()`
- `rmdir()`
- `setsid()`
- `sleep()`
- `sysconf()`
- `unlink()`
- `write()`

The following methods in <unistd.h> are implemented as stubs returning -1 and setting errno to ENOSYS:

- `execl()`

- `execl()`
- `execlp()`
- `execv()`
- `execve()`
- `execvp()`
- `fork()`

The following methods and variables in `<unistd.h>` are not supported:

- `confstr()`

8.38 <utime.h>

The following methods and variables in <utime.h> are supported:

- `utime()`

POSIX PSE54 - MULTIPURPOSE

This chapter has a subsection per header file to detail the methods provided by RTEMS that are in that header file.

9.1 Summary

The follow table summarizes alignment with the POSIX PSE54 - Multipurpose standard:

Supported	783
ENOSYS	17
Not supported	106

9.2 <aio.h>

The following methods and variables in <aio.h> are supported:

- aio_cancel()
- aio_error()
- aio_fsync()
- aio_read()
- aio_return()
- aio_write()

The following methods in <aio.h> are implemented as stubs returning -1 and setting errno to ENOSYS:

- aio_suspend()
- lio_listio()

9.3 <arpa/inet.h>

The following methods and variables in <arpa/inet.h> are supported:

- htonl()
- htons()
- inet_addr()
- inet_ntoa()
- inet_ntop()
- inet_pton()
- ntohl()
- ntohs()

9.4 <assert.h>

The following methods and variables in <assert.h> are supported:

- assert()

9.5 <complex.h>

The following methods and variables in <complex.h> are supported:

- `cabs()`
- `cabsf()`
- `cabsl()`
- `cacos()`
- `cacosf()`
- `cacosh()`
- `cacoshf()`
- `cacoshl()`
- `cacosl()`
- `carg()`
- `cargf()`
- `cargl()`
- `casin()`
- `casinf()`
- `casinh()`
- `casinhf()`
- `casinhl()`
- `casinl()`
- `catan()`
- `catanf()`
- `catanh()`
- `catanhf()`
- `catanhl()`
- `catanl()`
- `ccos()`
- `ccosf()`
- `ccosh()`
- `ccoshf()`
- `ccoshl()`
- `ccosl()`
- `cexp()`
- `cexpf()`

- `cexpl()`
- `cimag()`
- `cimagf()`
- `cimagl()`
- `clog()`
- `clogf()`
- `clogl()`
- `conj()`
- `conjf()`
- `conjl()`
- `cpow()`
- `cpowf()`
- `cpowl()`
- `cproj()`
- `cprojf()`
- `cprojl()`
- `creal()`
- `crealf()`
- `creall()`
- `csin()`
- `csinf()`
- `csinh()`
- `csinhf()`
- `csinhl()`
- `csinl()`
- `csqrt()`
- `csqrtf()`
- `csqrtl()`
- `ctan()`
- `ctanf()`
- `ctanh()`
- `ctanhf()`
- `ctanhl()`
- `ctanl()`

9.6 <ctype.h>

The following methods and variables in <ctype.h> are supported:

- `isalnum()`
- `isalpha()`
- `isblank()`
- `iscntrl()`
- `isdigit()`
- `isgraph()`
- `islower()`
- `isprint()`
- `ispunct()`
- `isspace()`
- `isupper()`
- `isxdigit()`
- `tolower()`
- `toupper()`

9.7 <dirent.h>

The following methods and variables in <dirent.h> are supported:

- `closedir()`
- `opendir()`
- `readdir()`
- `readdir_r()`
- `rewinddir()`

9.8 <dlfcn.h>

The following methods and variables in <dlfcn.h> are supported:

- dlclose()
- dlerror()
- dlopen()
- dlsym()

9.9 <errno.h>

The following methods and variables in <errno.h> are supported:

- errno

9.10 <fcntl.h>

The following methods and variables in <fcntl.h> are supported:

- creat()
- fcntl()
- open()

The following methods and variables in <fcntl.h> are not supported:

- posix_fadvise()
- posix_fallocate()

9.11 <fenv.h>

The following methods and variables in <fenv.h> are not supported:

- `feclearexcept()`
- `fegetenv()`
- `fegetexceptflag()`
- `fegetround()`
- `fehldexcept()`
- `feraiseexcept()`
- `fesetenv()`
- `fesetexceptflag()`
- `fesetround()`
- `fetestexcept()`
- `feupdateenv()`

9.12 <fnmatch.h>

The following methods and variables in <fnmatch.h> are supported:

- fnmatch()

9.14 <grp.h>

The following methods and variables in <grp.h> are supported:

- `getgrgid()`
- `getgrgid_r()`
- `getgrnam()`
- `getgrnam_r()`

9.15 <inttypes.h>

The following methods and variables in <inttypes.h> are supported:

- `imaxabs()`
- `imaxdiv()`
- `strtoimax()`
- `strtoumax()`
- `wcstoimax()`
- `wcstoumax()`

9.16 <locale.h>

The following methods and variables in <locale.h> are supported:

- localeconv()
- setlocale()

9.17 <math.h>

The following methods and variables in <math.h> are supported:

- `acos()`
- `acosf()`
- `acosh()`
- `acoshf()`
- `acoshl()`
- `acosl()`
- `asin()`
- `asinf()`
- `asinh()`
- `asinhf()`
- `asinh1()`
- `asinl()`
- `atan()`
- `atan2()`
- `atan2f()`
- `atan2l()`
- `atanf()`
- `atanh()`
- `atanhf()`
- `atanhl()`
- `atanl()`
- `cbrt()`
- `cbrtf()`
- `cbrtl()`
- `ceil()`
- `ceilf()`
- `ceill()`
- `copysign()`
- `copysignf()`
- `copysignl()`
- `cos()`
- `cosf()`

- `cosh()`
- `coshf()`
- `coshl()`
- `cosl()`
- `erf()`
- `erfc()`
- `erfcf()`
- `erfcl()`
- `erff()`
- `erfl()`
- `exp()`
- `exp2()`
- `exp2f()`
- `exp2l()`
- `expf()`
- `expl()`
- `expm1()`
- `expm1f()`
- `expm1l()`
- `fabs()`
- `fabsf()`
- `fabsl()`
- `fdim()`
- `fdimf()`
- `fdiml()`
- `floor()`
- `floorf()`
- `floorl()`
- `fma()`
- `maf()`
- `fmal()`
- `fmax()`
- `fmaxf()`
- `fmaxl()`

- `fmin()`
- `fminf()`
- `fminl()`
- `fmod()`
- `fmodf()`
- `fmodl()`
- `frexp()`
- `frexpf()`
- `frexpl()`
- `hypot()`
- `hypotf()`
- `hypotl()`
- `ilogb()`
- `ilogbf()`
- `ilogbl()`
- `isinf()`
- `isnan()`
- `ldexp()`
- `ldexpf()`
- `ldexpl()`
- `lgamma()`
- `lgammaf()`
- `lgammal()`
- `llrint()`
- `llrintf()`
- `llrintl()`
- `llround()`
- `llroundf()`
- `llroundl()`
- `log()`
- `log10()`
- `log10f()`
- `log10l()`
- `log1p()`

- `log1pf()`
- `log1pl()`
- `log2()`
- `log2f()`
- `log2l()`
- `logb()`
- `logbf()`
- `logbl()`
- `logf()`
- `logl()`
- `lrint()`
- `lrintf()`
- `lrintl()`
- `lround()`
- `lroundf()`
- `lroundl()`
- `modf()`
- `modff()`
- `modfl()`
- `nan()`
- `nanf()`
- `nanl()`
- `nearbyint()`
- `nearbyintf()`
- `nearbyintl()`
- `nextafter()`
- `nextafterf()`
- `nextafterl()`
- `nexttoward()`
- `nexttowardl()`
- `pow()`
- `powf()`
- `powl()`
- `remainder()`

- remainderf()
- remainderl()
- remquo()
- remquof()
- remquol()
- rint()
- rintf()
- rintl()
- round()
- roundf()
- roundl()
- scalbln()
- scalblnf()
- scalblnl()
- scalbn()
- scalbnf()
- scalbnl()
- sin()
- sinf()
- sinh()
- sinhf()
- sinhl()
- sinl()
- sqrt()
- sqrtf()
- sqrtl()
- tan()
- tanf()
- tanh()
- tanhf()
- tanhl()
- tanl()
- tgamma()
- tgammaf()

- `tgammal()`
- `trunc()`
- `truncf()`
- `truncl()`

The following methods and variables in `<math.h>` are not supported:

- `fpclassify()`
- `isfinite()`
- `isgreater()`
- `isgreaterequal()`
- `isless()`
- `islessequal()`
- `islessgreater()`
- `isnormal()`
- `isunordered()`
- `nexttowardf()`
- `signbit()`

9.18 <queue.h>

The following methods and variables in <queue.h> are supported:

- mq_close()
- mq_getattr()
- mq_notify()
- mq_open()
- mq_receive()
- mq_send()
- mq_setattr()
- mq_timedreceive()
- mq_timedsend()
- mq_unlink()

9.19 <net/if.h>

The following methods and variables in <net/if.h> are supported:

- `if_freenameindex()`
- `if_indextoname()`
- `if_nameindex()`
- `if_nametoindex()`

9.20 <netdb.h>

The following methods and variables in <netdb.h> are supported:

- `endhostent()`
- `endnetent()`
- `endprotoent()`
- `endservent()`
- `freeaddrinfo()`
- `gai_strerror()`
- `getaddrinfo()`
- `gethostent()`
- `getnameinfo()`
- `getnetbyaddr()`
- `getnetbyname()`
- `getnetent()`
- `getprotobyname()`
- `getprotobynumber()`
- `getprotoent()`
- `getservbyname()`
- `getservbyport()`
- `getservent()`
- `sethostent()`
- `setnetent()`
- `setprotoent()`
- `setservent()`

9.21 <pthread.h>

The following methods and variables in <pthread.h> are supported:

- pthread_attr_destroy()
- pthread_attr_getdetachstate()
- pthread_attr_getguardsize()
- pthread_attr_getinheritsched()
- pthread_attr_getschedparam()
- pthread_attr_getschedpolicy()
- pthread_attr_getscope()
- pthread_attr_getstack()
- pthread_attr_getstackaddr()
- pthread_attr_getstacksize()
- pthread_attr_init()
- pthread_attr_setdetachstate()
- pthread_attr_setguardsize()
- pthread_attr_setinheritsched()
- pthread_attr_setschedparam()
- pthread_attr_setschedpolicy()
- pthread_attr_setscope()
- pthread_attr_setstack()
- pthread_attr_setstackaddr()
- pthread_attr_setstacksize()
- pthread_cancel()
- pthread_cleanup_pop()
- pthread_cleanup_push()
- pthread_cond_broadcast()
- pthread_cond_destroy()
- pthread_cond_init()
- pthread_cond_signal()
- pthread_cond_timedwait()
- pthread_cond_wait()
- pthread_condattr_destroy()
- pthread_condattr_getclock()
- pthread_condattr_getpshared()

- pthread_condattr_init()
- pthread_condattr_setclock()
- pthread_condattr_setpshared()
- pthread_create()
- pthread_detach()
- pthread_equal()
- pthread_exit()
- pthread_getconcurrency()
- pthread_getschedparam()
- pthread_getspecific()
- pthread_join()
- pthread_key_create()
- pthread_key_delete()
- pthread_mutex_destroy()
- pthread_mutex_getprioceiling()
- pthread_mutex_init()
- pthread_mutex_lock()
- pthread_mutex_setprioceiling()
- pthread_mutex_trylock()
- pthread_mutex_unlock()
- pthread_mutexattr_destroy()
- pthread_mutexattr_getprioceiling()
- pthread_mutexattr_getprotocol()
- pthread_mutexattr_getpshared()
- pthread_mutexattr_gettype()
- pthread_mutexattr_init()
- pthread_mutexattr_setprioceiling()
- pthread_mutexattr_setprotocol()
- pthread_mutexattr_setpshared()
- pthread_mutexattr_settype()
- pthread_once()
- pthread_self()
- pthread_setcancelstate()
- pthread_setcanceltype()

- `pthread_setconcurrency()`
- `pthread_setschedparam()`
- `pthread_setschedprio()`
- `pthread_setspecific()`
- `pthread_testcancel()`

The following methods in `<pthread.h>` are implemented as stubs returning -1 and setting `errno` to `ENOSYS`:

- `pthread_atfork()`
- `pthread_getcpuclockid()`

9.22 <pwd.h>

The following methods and variables in <pwd.h> are supported:

- `getpwnam()`
- `getpwnam_r()`
- `getpwuid()`
- `getpwuid_r()`

9.23 <regex.h>

The following methods and variables in <regex.h> are supported:

- regcomp()
- regerror()
- regexec()
- regfree()

9.24 <sched.h>

The following methods and variables in <sched.h> are supported:

- sched_get_priority_max()
- sched_get_priority_min()
- sched_rr_get_interval()
- sched_yield()

The following methods in <sched.h> are implemented as stubs returning -1 and setting errno to ENOSYS:

- sched_getparam()
- sched_getscheduler()
- sched_setparam()
- sched_setscheduler()

9.25 <semaphore.h>

The following methods and variables in <semaphore.h> are supported:

- `sem_close()`
- `sem_destroy()`
- `sem_getvalue()`
- `sem_init()`
- `sem_open()`
- `sem_post()`
- `sem_timedwait()`
- `sem_trywait()`
- `sem_unlink()`
- `sem_wait()`

9.26 <setjmp.h>

The following methods and variables in <setjmp.h> are supported:

- longjmp()
- setjmp()
- siglongjmp()
- sigsetjmp()

9.27 <signal.h>

The following methods and variables in <signal.h> are supported:

- pthread_kill()
- pthread_sigmask()
- raise()
- sigaction()
- sigaddset()
- sigdelset()
- sigemptyset()
- sigfillset()
- sigismember()
- signal()
- sigpending()
- sigprocmask()
- sigqueue()
- sigsuspend()
- sigtimedwait()
- sigwait()
- sigwaitinfo()

9.28 <spawn.h>

The following methods and variables in <spawn.h> are not supported:

- posix_spawn()
- posix_spawn_file_actions_addclose()
- posix_spawn_file_actions_adddup2()
- posix_spawn_file_actions_addopen()
- posix_spawn_file_actions_destroy()
- posix_spawn_file_actions_init()
- posix_spawnattr_destroy()
- posix_spawnattr_getflags()
- posix_spawnattr_getpgroup()
- posix_spawnattr_getschedparam()
- posix_spawnattr_getschedpolicy()
- posix_spawnattr_getsigdefault()
- posix_spawnattr_getsigmask()
- posix_spawnattr_init()
- posix_spawnattr_setflags()
- posix_spawnattr_setpgroup()
- posix_spawnattr_setschedparam()
- posix_spawnattr_setschedpolicy()
- posix_spawnattr_setsigdefault()
- posix_spawnattr_setsigmask()
- posix_spawnnp()

9.29 <stdarg.h>

The following methods and variables in <stdarg.h> are supported:

- va_arg()
- va_copy()
- va_end()
- va_start()

9.30 <stdio.h>

The following methods and variables in <stdio.h> are supported:

- clearerr()
- ctermid()
- fclose()
- fdopen()
- feof()
- ferror()
- fflush()
- fgetc()
- fgetpos()
- fgets()
- fileno()
- flockfile()
- fopen()
- fprintf()
- fputc()
- fputs()
- fread()
- freopen()
- fscanf()
- fseek()
- fseeko()
- fsetpos()
- ftell()
- ftello()
- ftrylockfile()
- funlockfile()
- fwrite()
- getc()
- getc_unlocked()
- getchar()
- getchar_unlocked()
- gets()

- perror()
- printf()
- putc()
- putc_unlocked()
- putchar()
- putchar_unlocked()
- puts()
- remove()
- rename()
- rewind()
- scanf()
- setbuf()
- setvbuf()
- snprintf()
- sprintf()
- sscanf()
- stderr
- stdin
- stdout
- tmpfile()
- tmpnam()
- ungetc()
- vfprintf()
- vfscanf()
- vprintf()
- vscanf()
- vsnprintf()
- vsprintf()
- vsscanf()

The following methods and variables in <stdio.h> are not supported:

- pclose()
- popen()

9.31 <stdlib.h>

The following methods and variables in <stdlib.h> are supported:

- _Exit()
- abort()
- abs()
- atexit()
- atof()
- atoi()
- atol()
- atoll()
- bsearch()
- calloc()
- div()
- exit()
- free()
- getenv()
- labs()
- ldiv()
- llabs()
- lldiv()
- malloc()
- mblen()
- mbstowcs()
- mbtowc()
- posix_memalign()
- qsort()
- rand()
- rand_r()
- realloc()
- setenv()
- srand()
- strtod()
- strtof()
- strtol()

- strtold()
- strtoll()
- strtoul()
- strtoull()
- unsetenv()
- wcstombs()
- wctomb()

The following methods in `<stdlib.h>` are implemented as stubs returning -1 and setting `errno` to `ENOSYS`:

- `system()`

9.32 <string.h>

The following methods and variables in <string.h> are supported:

- memchr()
- memcmp()
- memcpy()
- memmove()
- memset()
- strcat()
- strchr()
- strcmp()
- strcoll()
- strcpy()
- strcspn()
- strerror()
- strerror_r()
- strlen()
- strncat()
- strncmp()
- strncpy()
- strpbrk()
- strrchr()
- strspn()
- strstr()
- strtok()
- strtok_r()
- strxfrm()

9.33 <sys/mman.h>

The following methods and variables in <sys/mman.h> are supported:

- `mlock()`
- `mlockall()`
- `mmap()`
- `mprotect()`
- `msync()`
- `munlock()`
- `munmap()`
- `posix_madvise()`
- `shm_open()`
- `shm_unlink()`

9.34 <sys/select.h>

The following methods and variables in <sys/select.h> are supported:

- FD_CLR()
- FD_ISSET()
- FD_SET()
- FD_ZERO()
- select()

The following methods and variables in <sys/select.h> are not supported:

- pselect()

9.35 <sys/socket.h>

The following methods and variables in <sys/socket.h> are supported:

- `accept()`
- `bind()`
- `connect()`
- `getpeername()`
- `getsockname()`
- `getsockopt()`
- `listen()`
- `recv()`
- `recvfrom()`
- `recvmsg()`
- `send()`
- `sendmsg()`
- `sendto()`
- `setsockopt()`
- `shutdown()`
- `socket()`
- `socketpair()`

The following methods and variables in <sys/socket.h> are not supported:

- `socketatmark()`

9.36 <sys/stat.h>

The following methods and variables in <sys/stat.h> are supported:

- chmod()
- fchmod()
- fstat()
- lstat()
- mkdir()
- mkfifo()
- stat()
- umask()

9.37 <sys/time.h>

The following methods and variables in <sys/time.h> are supported:

- `utimes()`

9.38 <sys/times.h>

The following methods and variables in <sys/times.h> are supported:

- times()

9.39 <sys/utsname.h>

The following methods and variables in <sys/utsname.h> are supported:

- `uname()`

9.40 <sys/wait.h>

The following methods and variables in <sys/wait.h> are supported:

- wait()

9.41 <syslog.h>

The following methods and variables in <syslog.h> are not supported:

- `closelog()`
- `openlog()`
- `setlogmask()`
- `syslog()`

9.42 <termios.h>

The following methods and variables in <termios.h> are supported:

- cfgetispeed()
- cfgetospeed()
- cfsetispeed()
- cfsetospeed()
- tcdrain()
- tcflow()
- tcflush()
- tcgetattr()
- tcsendbreak()
- tcsetattr()

9.43 <time.h>

The following methods and variables in <time.h> are supported:

- asctime()
- asctime_r()
- clock()
- clock_getres()
- clock_gettime()
- clock_nanosleep()
- clock_settime()
- ctime()
- ctime_r()
- difftime()
- gmtime()
- gmtime_r()
- localtime()
- localtime_r()
- mktime()
- nanosleep()
- strftime()
- time()
- timer_create()
- timer_delete()
- timer_getoverrun()
- timer_gettime()
- timer_settime()
- tzname
- tzset()

The following methods in <time.h> are implemented as stubs returning -1 and setting errno to ENOSYS:

- clock_getcpuclockid()

9.44 <trace.h>

The following methods and variables in <trace.h> are not supported:

- posix_trace_attr_destroy()
- posix_trace_attr_getclockres()
- posix_trace_attr_getcreatetime()
- posix_trace_attr_getgenversion()
- posix_trace_attr_getinherited()
- posix_trace_attr_getlogfullpolicy()
- posix_trace_attr_getlogsize()
- posix_trace_attr_getmaxdatasize()
- posix_trace_attr_getmaxsystemeventsizesize()
- posix_trace_attr_getmaxusereventsizesize()
- posix_trace_attr_getname()
- posix_trace_attr_getstreamfullpolicy()
- posix_trace_attr_getstreamsize()
- posix_trace_attr_init()
- posix_trace_attr_setinherited()
- posix_trace_attr_setlogfullpolicy()
- posix_trace_attr_setlogsize()
- posix_trace_attr_setmaxdatasize()
- posix_trace_attr_setname()
- posix_trace_attr_setstreamfullpolicy()
- posix_trace_attr_setstreamsize()
- posix_trace_clear()
- posix_trace_close()
- posix_trace_create()
- posix_trace_create_withlog()
- posix_trace_event()
- posix_trace_eventid_equal()
- posix_trace_eventid_get_name()
- posix_trace_eventid_open()
- posix_trace_eventset_add()
- posix_trace_eventset_del()
- posix_trace_eventset_empty()

- `posix_trace_eventset_fill()`
- `posix_trace_eventset_ismember()`
- `posix_trace_eventtypelist_getnext_id()`
- `posix_trace_eventtypelist_rewind()`
- `posix_trace_flush()`
- `posix_trace_get_attr()`
- `posix_trace_get_filter()`
- `posix_trace_get_status()`
- `posix_trace_getnext_event()`
- `posix_trace_open()`
- `posix_trace_rewind()`
- `posix_trace_set_filter()`
- `posix_trace_shutdown()`
- `posix_trace_start()`
- `posix_trace_stop()`
- `posix_trace_timedgetnext_event()`
- `posix_trace_trid_eventid_open()`
- `posix_trace_trygetnext_event()`

9.45 <unistd.h>

The following methods and variables in <unistd.h> are supported:

- `_exit()`
- `access()`
- `chdir()`
- `chown()`
- `close()`
- `dup()`
- `dup2()`
- `environ`
- `fchown()`
- `fdatasync()`
- `fpathconf()`
- `fsync()`
- `ftruncate()`
- `getcwd()`
- `getegid()`
- `geteuid()`
- `getgid()`
- `getgroups()`
- `gethostname()`
- `getlogin()`
- `getlogin_r()`
- `getopt()`
- `getpgrp()`
- `getpid()`
- `getppid()`
- `getuid()`
- `isatty()`
- `link()`
- `lseek()`
- `optarg`
- `opterr`
- `optind`

- `optopt`
- `pathconf()`
- `pipe()`
- `read()`
- `readlink()`
- `rmdir()`
- `setegid()`
- `seteuid()`
- `setgid()`
- `setpgid()`
- `setsid()`
- `setuid()`
- `sleep()`
- `symlink()`
- `sysconf()`
- `tcgetpgrp()`
- `tcsetpgrp()`
- `ttyname()`
- `ttyname_r()`
- `unlink()`
- `write()`

The following methods in `<unistd.h>` are implemented as stubs returning `-1` and setting `errno` to `ENOSYS`:

- `execl()`
- `execle()`
- `execlp()`
- `execv()`
- `execve()`
- `execvp()`
- `fork()`

The following methods and variables in `<unistd.h>` are not supported:

- `confstr()`

9.46 <utime.h>

The following methods and variables in <utime.h> are supported:

- utime()

9.47 <wchar.h>

The following methods and variables in <wchar.h> are supported:

- btowc()
- fgetwc()
- fgetws()
- fputwc()
- fputws()
- fwide()
- fwprintf()
- fwscanf()
- getwc()
- getwchar()
- mbrlen()
- mbrtowc()
- mbsinit()
- mbsrtowcs()
- putwc()
- putwchar()
- swprintf()
- swscanf()
- ungetwc()
- vfwprintf()
- vfwscanf()
- vswprintf()
- vswscanf()
- vwprintf()
- vwscanf()
- wcrctomb()
- wcscat()
- wcschr()
- wcscmp()
- wcscoll()
- wcscpy()
- wcsncpy()

- wcsftime()
- wcslen()
- wcsncat()
- wcsncmp()
- wcsncpy()
- wcsrchr()
- wcsrchr()
- wcsrtombs()
- wcsspn()
- wcsstr()
- wcstod()
- wcstof()
- wcstok()
- wcstol()
- wcstold()
- wcstoll()
- wcstoul()
- wcstoull()
- wcsxfrm()
- wctob()
- wmemchr()
- wmemcmp()
- wmemcpy()
- wmemmove()
- wmemset()
- wprintf()
- wscanf()

9.48 <wctype.h>

The following methods and variables in <wctype.h> are supported:

- `iswalnum()`
- `iswalpha()`
- `iswblank()`
- `iswcntrl()`
- `iswctype()`
- `iswdigit()`
- `iswgraph()`
- `iswlower()`
- `iswprint()`
- `iswpunct()`
- `iswspace()`
- `iswupper()`
- `iswxdigit()`
- `towctrans()`
- `towlower()`
- `towupper()`
- `wctrans()`
- `wctype()`

9.49 <wordexp.h>

The following methods and variables in <wordexp.h> are not supported:

- wordexp()
- wordfree()

C99 STANDARD LIBRARY

This chapter has a subsection per header file to detail the methods provided by RTEMS that are in that header file.

10.1 Summary

The follow table summarizes alignment with the C99 Standard Library standard:

Supported	463
ENOSYS	0
Not supported	22

10.2 <assert.h>

The following methods and variables in <assert.h> are supported:

- assert()

10.3 <complex.h>

The following methods and variables in <complex.h> are supported:

- `cabs()`
- `cabsf()`
- `cabsl()`
- `cacos()`
- `cacosf()`
- `cacosh()`
- `cacoshf()`
- `cacoshl()`
- `cacosl()`
- `carg()`
- `cargf()`
- `cargl()`
- `casin()`
- `casinf()`
- `casinh()`
- `casinhf()`
- `casinhl()`
- `casinl()`
- `catan()`
- `catanf()`
- `catanh()`
- `catanhf()`
- `catanhl()`
- `catanl()`
- `ccos()`
- `ccosf()`
- `ccosh()`
- `ccoshf()`
- `ccoshl()`
- `ccosl()`
- `cexp()`
- `cexpf()`

- `cexpl()`
- `cimag()`
- `cimagf()`
- `cimagl()`
- `clog()`
- `clogf()`
- `clogl()`
- `conj()`
- `conjf()`
- `conjl()`
- `cpow()`
- `cpowf()`
- `cpowl()`
- `cproj()`
- `cprojf()`
- `cprojl()`
- `creal()`
- `crealf()`
- `creall()`
- `csin()`
- `csinf()`
- `csinh()`
- `csinhf()`
- `csinhl()`
- `csinl()`
- `csqrt()`
- `csqrtf()`
- `csqrtl()`
- `ctan()`
- `ctanf()`
- `ctanh()`
- `ctanhf()`
- `ctanhl()`
- `ctanl()`

10.4 <ctype.h>

The following methods and variables in <ctype.h> are supported:

- `isalnum()`
- `isalpha()`
- `isblank()`
- `iscntrl()`
- `isdigit()`
- `isgraph()`
- `islower()`
- `isprint()`
- `ispunct()`
- `isspace()`
- `isupper()`
- `isxdigit()`
- `tolower()`
- `toupper()`

10.5 <errno.h>

The following methods and variables in <errno.h> are supported:

- errno

10.6 <fenv.h>

The following methods and variables in <fenv.h> are not supported:

- `feclearexcept()`
- `fegetenv()`
- `fegetexceptflag()`
- `fegetround()`
- `feholdexcept()`
- `feraiseexcept()`
- `fesetenv()`
- `fesetexceptflag()`
- `fesetround()`
- `fetestexcept()`
- `feupdateenv()`

10.7 <inttypes.h>

The following methods and variables in <inttypes.h> are supported:

- `imaxabs()`
- `imaxdiv()`
- `strtoimax()`
- `strtoumax()`
- `wcstoimax()`
- `wcstoumax()`

10.8 <locale.h>

The following methods and variables in <locale.h> are supported:

- localeconv()
- setlocale()

10.9 <math.h>

The following methods and variables in <math.h> are supported:

- `acos()`
- `acosf()`
- `acosh()`
- `acoshf()`
- `acoshl()`
- `acosl()`
- `asin()`
- `asinf()`
- `asinh()`
- `asinhf()`
- `asinh1()`
- `asinl()`
- `atan()`
- `atan2()`
- `atan2f()`
- `atan2l()`
- `atanf()`
- `atanh()`
- `atanhf()`
- `atanhl()`
- `atanl()`
- `cbrt()`
- `cbrtf()`
- `cbrtl()`
- `ceil()`
- `ceilf()`
- `ceil1()`
- `copysign()`
- `copysignf()`
- `copysignl()`
- `cos()`
- `cosf()`

- `cosh()`
- `coshf()`
- `coshl()`
- `cosl()`
- `erf()`
- `erfc()`
- `erfcf()`
- `erfcl()`
- `erff()`
- `erfl()`
- `exp()`
- `exp2()`
- `exp2f()`
- `exp2l()`
- `expf()`
- `expl()`
- `expm1()`
- `expm1f()`
- `expm1l()`
- `fabs()`
- `fabsf()`
- `fabsl()`
- `fdim()`
- `fdimf()`
- `fdiml()`
- `floor()`
- `floorf()`
- `floorl()`
- `fma()`
- `maf()`
- `fmal()`
- `fmax()`
- `fmaxf()`
- `fmaxl()`

- `fmin()`
- `fminf()`
- `fminl()`
- `fmod()`
- `fmodf()`
- `fmodl()`
- `frexp()`
- `frexpf()`
- `frexpl()`
- `hypot()`
- `hypotf()`
- `hypotl()`
- `ilogb()`
- `ilogbf()`
- `ilogbl()`
- `isinf()`
- `isnan()`
- `ldexp()`
- `ldexpf()`
- `ldexpl()`
- `lgamma()`
- `lgammaf()`
- `lgammal()`
- `llrint()`
- `llrintf()`
- `llrintl()`
- `llround()`
- `llroundf()`
- `llroundl()`
- `log()`
- `log10()`
- `log10f()`
- `log10l()`
- `log1p()`

- `log1pf()`
- `log1pl()`
- `log2()`
- `log2f()`
- `log2l()`
- `logb()`
- `logbf()`
- `logbl()`
- `logf()`
- `logl()`
- `lrint()`
- `lrintf()`
- `lrintl()`
- `lround()`
- `lroundf()`
- `lroundl()`
- `modf()`
- `modff()`
- `modfl()`
- `nan()`
- `nanf()`
- `nanl()`
- `nearbyint()`
- `nearbyintf()`
- `nearbyintl()`
- `nextafter()`
- `nextafterf()`
- `nextafterl()`
- `nexttoward()`
- `nexttowardl()`
- `pow()`
- `powf()`
- `powl()`
- `remainder()`

- `tgammal()`
- `trunc()`
- `truncf()`
- `truncl()`

The following methods and variables in `<math.h>` are not supported:

- `fpclassify()`
- `isfinite()`
- `isgreater()`
- `isgreaterequal()`
- `isless()`
- `islessequal()`
- `islessgreater()`
- `isnormal()`
- `isunordered()`
- `nexttowardf()`
- `signbit()`

10.10 <setjmp.h>

The following methods and variables in <setjmp.h> are supported:

- longjmp()
- setjmp()

10.11 <signal.h>

The following methods and variables in <signal.h> are supported:

- raise()
- signal()

10.12 <stdarg.h>

The following methods and variables in <stdarg.h> are supported:

- va_arg()
- va_copy()
- va_end()
- va_start()

10.13 <stddef.h>

The following methods and variables in <stddef.h> are supported:

- `offsetof()`

10.14 <stdio.h>

The following methods and variables in <stdio.h> are supported:

- clearerr()
- fclose()
- feof()
- ferror()
- fflush()
- fgetc()
- fgetpos()
- fgets()
- fileno()
- fopen()
- fprintf()
- fputc()
- fputs()
- fread()
- freopen()
- fscanf()
- fseek()
- fsetpos()
- ftell()
- fwrite()
- getc()
- getchar()
- gets()
- perror()
- printf()
- putc()
- putchar()
- puts()
- remove()
- rename()
- rewind()
- scanf()

- `setbuf()`
- `setvbuf()`
- `snprintf()`
- `sprintf()`
- `sscanf()`
- `stderr`
- `stdin`
- `stdout`
- `tmpfile()`
- `tmpnam()`
- `ungetc()`
- `vfprintf()`
- `vfscanf()`
- `vprintf()`
- `vscanf()`
- `vsprintf()`
- `vsprintf()`
- `vsscanf()`

10.15 <stdlib.h>

The following methods and variables in <stdlib.h> are supported:

- _Exit()
- abs()
- atexit()
- atof()
- atoi()
- atol()
- atoll()
- bsearch()
- calloc()
- div()
- exit()
- free()
- getenv()
- labs()
- ldiv()
- llabs()
- lldiv()
- malloc()
- mblen()
- mbstowcs()
- mbtowc()
- qsort()
- rand()
- realloc()
- srand()
- strtod()
- strtof()
- strtol()
- strtold()
- strtoll()
- strtoul()
- strtoull()

- `wcstombs()`
- `wctomb()`

10.16 <string.h>

The following methods and variables in <string.h> are supported:

- memchr()
- memcmp()
- memcpy()
- memmove()
- memset()
- strcat()
- strchr()
- strcmp()
- strcoll()
- strcpy()
- strcspn()
- strerror()
- strlen()
- strncat()
- strncmp()
- strncpy()
- strpbrk()
- strrchr()
- strspn()
- strstr()
- strtok()
- strxfrm()

10.17 <time.h>

The following methods and variables in <time.h> are supported:

- `asctime()`
- `clock()`
- `ctime()`
- `difftime()`
- `gmtime()`
- `localtime()`
- `mktime()`
- `strftime()`
- `time()`

10.18 <wchar.h>

The following methods and variables in <wchar.h> are supported:

- btowc()
- fgetwc()
- fgetws()
- fputwc()
- fputws()
- fwide()
- fwprintf()
- fwscanf()
- getwc()
- getwchar()
- mbrlen()
- mbrtowc()
- mbsinit()
- mbsrtowcs()
- putwc()
- putwchar()
- swprintf()
- swscanf()
- ungetwc()
- vfwprintf()
- vfwscanf()
- vswprintf()
- vswscanf()
- vwprintf()
- vwscanf()
- wctomb()
- wcscat()
- wcschr()
- wcscmp()
- wcscoll()
- wcsncpy()
- wcsncpy()

- wcsftime()
- wcslen()
- wcsncat()
- wcsncmp()
- wcsncpy()
- wcsrchr()
- wcsrchr()
- wcsrtombs()
- wcsspn()
- wcsstr()
- wcstod()
- wcstof()
- wcstok()
- wcstol()
- wcstold()
- wcstoll()
- wcstoul()
- wcstoull()
- wcsxfrm()
- wctob()
- wmemchr()
- wmemcmp()
- wmemcpy()
- wmemmove()
- wmemset()
- wprintf()
- wscanf()

10.19 <wctype.h>

The following methods and variables in <wctype.h> are supported:

- iswalnum()
- iswalpha()
- iswblank()
- iswcntrl()
- iswctype()
- iswdigit()
- iswgraph()
- iswlower()
- iswprint()
- iswpunct()
- iswspace()
- iswupper()
- iswxdigit()
- towctrans()
- tolower()
- towupper()
- wctrans()
- wctype()

C11 STANDARD LIBRARY

This chapter has a subsection per header file to detail the methods provided by RTEMS that are in that header file.

11.1 Summary

The follow table summarizes alignment with the C11 Standard Library standard:

Supported	486
ENOSYS	0
Not supported	22

11.2 <assert.h>

The following methods and variables in <assert.h> are supported:

- assert()

11.3 <complex.h>

The following methods and variables in <complex.h> are supported:

- `cabs()`
- `cabsf()`
- `cabsl()`
- `cacos()`
- `cacosf()`
- `cacosh()`
- `cacoshf()`
- `cacoshl()`
- `cacosl()`
- `carg()`
- `cargf()`
- `cargl()`
- `casin()`
- `casinf()`
- `casinh()`
- `casinhf()`
- `casinhl()`
- `casinl()`
- `catan()`
- `catanf()`
- `catanh()`
- `catanhf()`
- `catanhl()`
- `catanl()`
- `ccos()`
- `ccosf()`
- `ccosh()`
- `ccoshf()`
- `ccoshl()`
- `ccosl()`
- `cexp()`
- `cexpf()`

- `cexpl()`
- `cimag()`
- `cimagf()`
- `cimagl()`
- `clog()`
- `clogf()`
- `clogl()`
- `conj()`
- `conjf()`
- `conjl()`
- `cpow()`
- `cpowf()`
- `cpowl()`
- `cproj()`
- `cprojf()`
- `cprojl()`
- `creal()`
- `crealf()`
- `creall()`
- `csin()`
- `csinf()`
- `csinh()`
- `csinhf()`
- `csinhl()`
- `csinl()`
- `csqrt()`
- `csqrtf()`
- `csqrtl()`
- `ctan()`
- `ctanf()`
- `ctanh()`
- `ctanhf()`
- `ctanhl()`
- `ctanl()`

11.4 <ctype.h>

The following methods and variables in <ctype.h> are supported:

- `isalnum()`
- `isalpha()`
- `isblank()`
- `iscntrl()`
- `isdigit()`
- `isgraph()`
- `islower()`
- `isprint()`
- `ispunct()`
- `isspace()`
- `isupper()`
- `isxdigit()`
- `tolower()`
- `toupper()`

11.5 <errno.h>

The following methods and variables in <errno.h> are supported:

- errno

11.6 <fenv.h>

The following methods and variables in <fenv.h> are not supported:

- `feclearexcept()`
- `fegetenv()`
- `fegetexceptflag()`
- `fegetround()`
- `feholdexcept()`
- `feraiseexcept()`
- `fesetenv()`
- `fesetexceptflag()`
- `fesetround()`
- `fetestexcept()`
- `feupdateenv()`

11.7 <inttypes.h>

The following methods and variables in <inttypes.h> are supported:

- `imaxabs()`
- `imaxdiv()`
- `strtoimax()`
- `strtoumax()`
- `wcstoimax()`
- `wcstoumax()`

11.8 <locale.h>

The following methods and variables in <locale.h> are supported:

- localeconv()
- setlocale()

11.9 <math.h>

The following methods and variables in <math.h> are supported:

- `acos()`
- `acosf()`
- `acosh()`
- `acoshf()`
- `acoshl()`
- `acosl()`
- `asin()`
- `asinf()`
- `asinh()`
- `asinhf()`
- `asinh1()`
- `asinl()`
- `atan()`
- `atan2()`
- `atan2f()`
- `atan2l()`
- `atanf()`
- `atanh()`
- `atanhf()`
- `atanhl()`
- `atanl()`
- `cbrt()`
- `cbrtf()`
- `cbrtl()`
- `ceil()`
- `ceilf()`
- `ceil1()`
- `copysign()`
- `copysignf()`
- `copysignl()`
- `cos()`
- `cosf()`

- `cosh()`
- `coshf()`
- `coshl()`
- `cosl()`
- `erf()`
- `erfc()`
- `erfcf()`
- `erfcl()`
- `erff()`
- `erfl()`
- `exp()`
- `exp2()`
- `exp2f()`
- `exp2l()`
- `expf()`
- `expl()`
- `expm1()`
- `expm1f()`
- `expm1l()`
- `fabs()`
- `fabsf()`
- `fabsl()`
- `fdim()`
- `fdimf()`
- `fdiml()`
- `floor()`
- `floorf()`
- `floorl()`
- `fma()`
- `fmaf()`
- `fmal()`
- `fmax()`
- `fmaxf()`
- `fmaxl()`

- `fmin()`
- `fminf()`
- `fminl()`
- `fmod()`
- `fmodf()`
- `fmodl()`
- `frexp()`
- `frexpf()`
- `frexpl()`
- `hypot()`
- `hypotf()`
- `hypotl()`
- `ilogb()`
- `ilogbf()`
- `ilogbl()`
- `isinf()`
- `isnan()`
- `ldexp()`
- `ldexpf()`
- `ldexpl()`
- `lgamma()`
- `lgammaf()`
- `lgammal()`
- `llrint()`
- `llrintf()`
- `llrintl()`
- `llround()`
- `llroundf()`
- `llroundl()`
- `log()`
- `log10()`
- `log10f()`
- `log10l()`
- `log1p()`

- `log1pf()`
- `log1pl()`
- `log2()`
- `log2f()`
- `log2l()`
- `logb()`
- `logbf()`
- `logbl()`
- `logf()`
- `logl()`
- `lrint()`
- `lrintf()`
- `lrintl()`
- `lround()`
- `lroundf()`
- `lroundl()`
- `modf()`
- `modff()`
- `modfl()`
- `nan()`
- `nanf()`
- `nanl()`
- `nearbyint()`
- `nearbyintf()`
- `nearbyintl()`
- `nextafter()`
- `nextafterf()`
- `nextafterl()`
- `nexttoward()`
- `nexttowardl()`
- `pow()`
- `powf()`
- `powl()`
- `remainder()`

- remainderf()
- remainderl()
- remquo()
- remquof()
- remquol()
- rint()
- rintf()
- rintl()
- round()
- roundf()
- roundl()
- scalbln()
- scalblnf()
- scalblnl()
- scalbn()
- scalbnf()
- scalbnl()
- sin()
- sinf()
- sinh()
- sinhf()
- sinhl()
- sinl()
- sqrt()
- sqrtf()
- sqrtl()
- tan()
- tanf()
- tanh()
- tanhf()
- tanhl()
- tanl()
- tgamma()
- tgammaf()

- `tgammal()`
- `trunc()`
- `truncf()`
- `truncl()`

The following methods and variables in `<math.h>` are not supported:

- `fpclassify()`
- `isfinite()`
- `isgreater()`
- `isgreaterequal()`
- `isless()`
- `islessequal()`
- `islessgreater()`
- `isnormal()`
- `isunordered()`
- `nexttowardf()`
- `signbit()`

11.10 <setjmp.h>

The following methods and variables in <setjmp.h> are supported:

- longjmp()
- setjmp()

11.11 <signal.h>

The following methods and variables in <signal.h> are supported:

- raise()
- signal()

11.12 <stdarg.h>

The following methods and variables in <stdarg.h> are supported:

- va_arg()
- va_copy()
- va_end()
- va_start()

11.13 <stddef.h>

The following methods and variables in <stddef.h> are supported:

- `offsetof()`

11.14 <stdio.h>

The following methods and variables in <stdio.h> are supported:

- clearerr()
- fclose()
- feof()
- ferror()
- fflush()
- fgetc()
- fgetpos()
- fgets()
- fopen()
- fprintf()
- fputc()
- fputs()
- fread()
- freopen()
- fscanf()
- fseek()
- fsetpos()
- ftell()
- fwrite()
- getc()
- getchar()
- perror()
- printf()
- putc()
- putchar()
- puts()
- remove()
- rename()
- rewind()
- scanf()
- setbuf()
- setvbuf()

- `snprintf()`
- `sprintf()`
- `sscanf()`
- `stderr`
- `stdin`
- `stdout`
- `tmpfile()`
- `tmpnam()`
- `ungetc()`
- `vfprintf()`
- `vfscanf()`
- `vprintf()`
- `vscanf()`
- `vsprintf()`
- `vsprintf()`
- `vsscanf()`

11.15 <stdlib.h>

The following methods and variables in <stdlib.h> are supported:

- _Exit()
- abs()
- atexit()
- atof()
- atoi()
- atol()
- atoll()
- bsearch()
- calloc()
- div()
- exit()
- free()
- getenv()
- labs()
- ldiv()
- llabs()
- lldiv()
- malloc()
- mblen()
- mbstowcs()
- mbtowc()
- qsort()
- rand()
- realloc()
- srand()
- strtod()
- strtodf()
- strtol()
- strtold()
- strtoll()
- strtoul()
- strtoull()

- `wcstombs()`
- `wctomb()`

11.16 <string.h>

The following methods and variables in <string.h> are supported:

- memchr()
- memcmp()
- memcpy()
- memmove()
- memset()
- strcat()
- strchr()
- strcmp()
- strcoll()
- strcpy()
- strcspn()
- strerror()
- strlen()
- strncat()
- strncmp()
- strncpy()
- strpbrk()
- strrchr()
- strspn()
- strstr()
- strtok()
- strxfrm()

11.17 <threads.h>

The following methods and variables in <threads.h> are supported:

- `call_once()`
- `cnd_broadcast()`
- `cnd_destroy()`
- `cnd_init()`
- `cnd_signal()`
- `cnd_timedwait()`
- `cnd_wait()`
- `mtx_destroy()`
- `mtx_init()`
- `mtx_lock()`
- `mtx_timedlock()`
- `mtx_trylock()`
- `mtx_unlock()`
- `thrd_create()`
- `thrd_current()`
- `thrd_detach()`
- `thrd_equal()`
- `thrd_exit()`
- `thrd_join()`
- `thrd_sleep()`
- `thrd_yield()`
- `tss_create()`
- `tss_delete()`
- `tss_get()`
- `tss_set()`

11.18 <time.h>

The following methods and variables in <time.h> are supported:

- asctime()
- clock()
- ctime()
- difftime()
- gmtime()
- localtime()
- mktime()
- strftime()
- time()

11.19 <wchar.h>

The following methods and variables in <wchar.h> are supported:

- btowc()
- fgetwc()
- fgetws()
- fputwc()
- fputws()
- fwide()
- fwprintf()
- fwscanf()
- getwc()
- getwchar()
- mbrlen()
- mbrtowc()
- mbsinit()
- mbsrtowcs()
- putwc()
- putwchar()
- swprintf()
- swscanf()
- ungetwc()
- vfwprintf()
- vfwscanf()
- vswprintf()
- vswscanf()
- vwprintf()
- vwscanf()
- wctomb()
- wcscat()
- wcschr()
- wcscmp()
- wcscoll()
- wcsncpy()
- wcsncpy()

- wcsftime()
- wcslen()
- wcsncat()
- wcsncmp()
- wcsncpy()
- wcsrchr()
- wcsrchr()
- wcsrtombs()
- wcsspn()
- wcsstr()
- wcstod()
- wcstof()
- wcstok()
- wcstol()
- wcstold()
- wcstoll()
- wcstoul()
- wcstoull()
- wcsxfrm()
- wctob()
- wmemchr()
- wmemcmp()
- wmemcpy()
- wmemmove()
- wmemset()
- wprintf()
- wscanf()

11.20 <wctype.h>

The following methods and variables in <wctype.h> are supported:

- iswalnum()
- iswalpha()
- iswblank()
- iswcntrl()
- iswctype()
- iswdigit()
- iswgraph()
- iswlower()
- iswprint()
- iswpunct()
- iswspace()
- iswupper()
- iswxdigit()
- towctrans()
- tolower()
- toupper()
- wctrans()
- wctype()

FACE 2.1 SECURITY

This chapter has a subsection per header file to detail the methods provided by RTEMS that are in that header file.

12.1 Summary

The follow table summarizes alignment with the FACE 2.1 Security standard:

Supported	162
ENOSYS	1
Not supported	0

12.2 <arpa/inet.h>

The following methods and variables in <arpa/inet.h> are supported:

- htonl()
- htons()
- inet_ntop()
- inet_pton()
- ntohl()
- ntohs()

12.3 <ctype.h>

The following methods and variables in <ctype.h> are supported:

- `isalnum()`
- `isalpha()`
- `iscntrl()`
- `isdigit()`
- `isgraph()`
- `islower()`
- `isprint()`
- `ispunct()`
- `isspace()`
- `isupper()`
- `isxdigit()`
- `tolower()`
- `toupper()`

12.4 <devctl.h>

The following methods and variables in <devctl.h> are supported:

- posix_devctl()

12.5 <errno.h>

The following methods and variables in <errno.h> are supported:

- errno

12.6 <math.h>

The following methods and variables in <math.h> are supported:

- `acos()`
- `acosh()`
- `asin()`
- `asinh()`
- `atan()`
- `atan2()`
- `atanh()`
- `ceil()`
- `cos()`
- `cosh()`
- `exp()`
- `fabs()`
- `floor()`
- `fmod()`
- `frexp()`
- `isinf()`
- `isnan()`
- `ldexp()`
- `log()`
- `log10()`
- `modf()`
- `pow()`
- `sin()`
- `sinh()`
- `sqrt()`
- `tan()`
- `tanh()`

12.7 <netdb.h>

The following methods and variables in <netdb.h> are supported:

- freeaddrinfo()
- getaddrinfo()
- getnameinfo()

12.8 <pthread.h>

The following methods and variables in <pthread.h> are supported:

- pthread_attr_destroy()
- pthread_attr_getinheritsched()
- pthread_attr_getschedparam()
- pthread_attr_getschedpolicy()
- pthread_attr_getscope()
- pthread_attr_getstack()
- pthread_attr_init()
- pthread_attr_setinheritsched()
- pthread_attr_setschedparam()
- pthread_attr_setschedpolicy()
- pthread_attr_setscope()
- pthread_attr_setstack()
- pthread_create()
- pthread_equal()
- pthread_getschedparam()
- pthread_mutex_init()
- pthread_mutex_lock()
- pthread_mutex_timedlock()
- pthread_mutex_trylock()
- pthread_mutex_unlock()
- pthread_mutexattr_destroy()
- pthread_mutexattr_getprioceiling()
- pthread_mutexattr_getprotocol()
- pthread_mutexattr_init()
- pthread_mutexattr_setprioceiling()
- pthread_mutexattr_setprotocol()
- pthread_once()
- pthread_self()
- pthread_setschedparam()
- pthread_setschedprio()

The following methods in <pthread.h> are implemented as stubs returning -1 and setting errno to ENOSYS:

- `pthread_getcpuclockid()`

12.9 <sched.h>

The following methods and variables in <sched.h> are supported:

- sched_get_priority_max()
- sched_get_priority_min()
- sched_yield()

12.10 <semaphore.h>

The following methods and variables in <semaphore.h> are supported:

- `sem_close()`
- `sem_getvalue()`
- `sem_init()`
- `sem_open()`
- `sem_post()`
- `sem_timedwait()`
- `sem_trywait()`
- `sem_wait()`

12.11 <signal.h>

The following methods and variables in <signal.h> are supported:

- pthread_sigmask()
- sigaction()
- sigaddset()
- sigdelset()
- sigemptyset()
- sigfillset()
- sigismember()
- sigpending()
- sigqueue()
- sigsuspend()
- sigtimedwait()
- sigwait()
- sigwaitinfo()

12.12 <stdlib.h>

The following methods and variables in <stdlib.h> are supported:

- abs()
- atof()
- atoi()
- atol()
- div()
- labs()
- ldiv()
- malloc()
- rand_r()
- strtod()
- strtol()
- strtoul()

12.13 <string.h>

The following methods and variables in <string.h> are supported:

- memchr()
- memcmp()
- memcpy()
- memmove()
- memset()
- strcat()
- strchr()
- strcmp()
- strcpy()
- strcspn()
- strlen()
- strncat()
- strncmp()
- strncpy()
- strpbrk()
- strrchr()
- strspn()
- strstr()
- strtok_r()

12.14 <sys/mman.h>

The following methods and variables in <sys/mman.h> are supported:

- mmap()
- shm_open()

12.15 <sys/socket.h>

The following methods and variables in <sys/socket.h> are supported:

- bind()
- connect()
- getpeername()
- getsockname()
- getsockopt()
- recv()
- recvfrom()
- send()
- sendto()
- setsockopt()
- shutdown()
- socket()

12.16 <sys/stat.h>

The following methods and variables in <sys/stat.h> are supported:

- stat()

12.17 <time.h>

The following methods and variables in <time.h> are supported:

- `clock_getres()`
- `clock_gettime()`
- `clock_settime()`
- `nanosleep()`
- `timer_create()`
- `timer_getoverrun()`
- `timer_gettime()`
- `timer_settime()`

12.18 <unistd.h>

The following methods and variables in <unistd.h> are supported:

- alarm()
- ftruncate()
- pause()

FACE 2.1 SAFETY BASE

This chapter has a subsection per header file to detail the methods provided by RTEMS that are in that header file.

13.1 Summary

The follow table summarizes alignment with the FACE 2.1 Safety Base standard:

Supported	245
ENOSYS	1
Not supported	0

13.2 <arpa/inet.h>

The following methods and variables in <arpa/inet.h> are supported:

- htonl()
- htons()
- inet_ntop()
- inet_pton()
- ntohl()
- ntohs()

13.3 <ctype.h>

The following methods and variables in <ctype.h> are supported:

- `isalnum()`
- `isalpha()`
- `iscntrl()`
- `isdigit()`
- `isgraph()`
- `islower()`
- `isprint()`
- `ispunct()`
- `isspace()`
- `isupper()`
- `isxdigit()`
- `tolower()`
- `toupper()`

13.4 <devctl.h>

The following methods and variables in <devctl.h> are supported:

- posix_devctl()

13.5 <dirent.h>

The following methods and variables in <dirent.h> are supported:

- `closedir()`
- `opendir()`
- `readdir()`
- `readdir_r()`
- `rewinddir()`

13.6 <errno.h>

The following methods and variables in <errno.h> are supported:

- errno

13.7 <fcntl.h>

The following methods and variables in <fcntl.h> are supported:

- creat()
- open()

13.8 `<math.h>`

The following methods and variables in `<math.h>` are supported:

- `acos()`
- `acosh()`
- `asin()`
- `asinh()`
- `atan()`
- `atan2()`
- `atanh()`
- `ceil()`
- `cos()`
- `cosh()`
- `exp()`
- `fabs()`
- `floor()`
- `fmod()`
- `frexp()`
- `isinf()`
- `isnan()`
- `ldexp()`
- `log()`
- `log10()`
- `modf()`
- `pow()`
- `sin()`
- `sinh()`
- `sqrt()`
- `tan()`
- `tanh()`

13.9 <mqqueue.h>

The following methods and variables in <mqqueue.h> are supported:

- mq_getattr()
- mq_notify()
- mq_open()
- mq_receive()
- mq_send()
- mq_setattr()
- mq_timedreceive()
- mq_timedsend()

13.10 <netdb.h>

The following methods and variables in <netdb.h> are supported:

- freeaddrinfo()
- getaddrinfo()
- getnameinfo()

13.11 <pthread.h>

The following methods and variables in <pthread.h> are supported:

- pthread_attr_destroy()
- pthread_attr_getinheritsched()
- pthread_attr_getschedparam()
- pthread_attr_getschedpolicy()
- pthread_attr_getscope()
- pthread_attr_getstack()
- pthread_attr_getstacksize()
- pthread_attr_init()
- pthread_attr_setinheritsched()
- pthread_attr_setschedparam()
- pthread_attr_setschedpolicy()
- pthread_attr_setscope()
- pthread_attr_setstack()
- pthread_attr_setstacksize()
- pthread_cond_broadcast()
- pthread_cond_destroy()
- pthread_cond_init()
- pthread_cond_signal()
- pthread_cond_timedwait()
- pthread_cond_wait()
- pthread_condattr_destroy()
- pthread_condattr_getclock()
- pthread_condattr_init()
- pthread_condattr_setclock()
- pthread_create()
- pthread_equal()
- pthread_getconcurrency()
- pthread_getschedparam()
- pthread_getspecific()
- pthread_key_create()
- pthread_mutex_init()
- pthread_mutex_lock()

- `pthread_mutex_timedlock()`
- `pthread_mutex_trylock()`
- `pthread_mutex_unlock()`
- `pthread_mutexattr_destroy()`
- `pthread_mutexattr_getprioceiling()`
- `pthread_mutexattr_getprotocol()`
- `pthread_mutexattr_init()`
- `pthread_mutexattr_setprioceiling()`
- `pthread_mutexattr_setprotocol()`
- `pthread_once()`
- `pthread_self()`
- `pthread_setconcurrency()`
- `pthread_setschedparam()`
- `pthread_setschedprio()`
- `pthread_setspecific()`

The following methods in `<pthread.h>` are implemented as stubs returning `-1` and setting `errno` to `ENOSYS`:

- `pthread_getcpuclockid()`

13.12 <sched.h>

The following methods and variables in <sched.h> are supported:

- sched_get_priority_max()
- sched_get_priority_min()
- sched_yield()

13.13 <semaphore.h>

The following methods and variables in <semaphore.h> are supported:

- `sem_close()`
- `sem_getvalue()`
- `sem_init()`
- `sem_open()`
- `sem_post()`
- `sem_timedwait()`
- `sem_trywait()`
- `sem_wait()`

13.14 <signal.h>

The following methods and variables in <signal.h> are supported:

- pthread_sigmask()
- sigaction()
- sigaddset()
- sigdelset()
- sigemptyset()
- sigfillset()
- sigismember()
- sigpending()
- sigqueue()
- sigsuspend()
- sigtimedwait()
- sigwait()
- sigwaitinfo()

13.15 <stdio.h>

The following methods and variables in <stdio.h> are supported:

- clearerr()
- fclose()
- feof()
- ferror()
- fflush()
- fgetc()
- fgets()
- fileno()
- fopen()
- fprintf()
- fread()
- freopen()
- fseek()
- fseeko()
- ftell()
- ftello()
- fwrite()
- remove()
- rename()
- snprintf()

13.16 <stdlib.h>

The following methods and variables in <stdlib.h> are supported:

- abs()
- atof()
- atoi()
- atol()
- calloc()
- div()
- labs()
- ldiv()
- malloc()
- rand_r()
- strtod()
- strtol()
- strtoul()

13.17 <string.h>

The following methods and variables in <string.h> are supported:

- memchr()
- memcmp()
- memcpy()
- memmove()
- memset()
- strcat()
- strchr()
- strcmp()
- strcpy()
- strcspn()
- strerror_r()
- strlen()
- strncat()
- strncmp()
- strncpy()
- strpbrk()
- strrchr()
- strspn()
- strstr()
- strtok_r()

13.18 <sys/mman.h>

The following methods and variables in <sys/mman.h> are supported:

- mmap()
- shm_open()

13.19 <sys/select.h>

The following methods and variables in <sys/select.h> are supported:

- FD_CLR()
- FD_ISSET()
- FD_SET()
- FD_ZERO()
- select()

13.20 <sys/socket.h>

The following methods and variables in <sys/socket.h> are supported:

- bind()
- connect()
- getpeername()
- getsockname()
- getsockopt()
- recv()
- recvfrom()
- send()
- sendto()
- setsockopt()
- shutdown()
- socket()

13.21 <sys/stat.h>

The following methods and variables in <sys/stat.h> are supported:

- `fstat()`
- `mkdir()`
- `stat()`
- `umask()`

13.22 <time.h>

The following methods and variables in <time.h> are supported:

- asctime_r()
- clock_getres()
- clock_gettime()
- clock_settime()
- ctime_r()
- difftime()
- gmtime_r()
- localtime_r()
- mktime()
- nanosleep()
- time()
- timer_create()
- timer_getoverrun()
- timer_gettime()
- timer_settime()
- tzname
- tzset()

13.23 <unistd.h>

The following methods and variables in <unistd.h> are supported:

- access()
- alarm()
- chdir()
- close()
- fsync()
- ftruncate()
- getcwd()
- gethostname()
- link()
- lseek()
- pause()
- read()
- rmdir()
- unlink()
- write()

FACE 2.1 SAFETY EXTENDED

This chapter has a subsection per header file to detail the methods provided by RTEMS that are in that header file.

14.1 Summary

The follow table summarizes alignment with the FACE 2.1 Safety Extended standard:

Supported	315
ENOSYS	11
Not supported	9

14.2 <arpa/inet.h>

The following methods and variables in <arpa/inet.h> are supported:

- htonl()
- htons()
- inet_ntop()
- inet_pton()
- ntohl()
- ntohs()

14.3 <ctype.h>

The following methods and variables in <ctype.h> are supported:

- `isalnum()`
- `isalpha()`
- `iscntrl()`
- `isdigit()`
- `isgraph()`
- `islower()`
- `isprint()`
- `ispunct()`
- `isspace()`
- `isupper()`
- `isxdigit()`
- `tolower()`
- `toupper()`

14.4 <devctl.h>

The following methods and variables in <devctl.h> are supported:

- `posix_devctl()`

14.5 <dirent.h>

The following methods and variables in <dirent.h> are supported:

- `closedir()`
- `opendir()`
- `readdir()`
- `readdir_r()`
- `rewinddir()`

14.6 <errno.h>

The following methods and variables in <errno.h> are supported:

- errno

14.7 <fcntl.h>

The following methods and variables in <fcntl.h> are supported:

- creat()
- fcntl()
- open()

14.8 `<math.h>`

The following methods and variables in `<math.h>` are supported:

- `acos()`
- `acosh()`
- `asin()`
- `asinh()`
- `atan()`
- `atan2()`
- `atanh()`
- `ceil()`
- `cos()`
- `cosh()`
- `exp()`
- `fabs()`
- `floor()`
- `fmod()`
- `frexp()`
- `isinf()`
- `isnan()`
- `ldexp()`
- `log()`
- `log10()`
- `modf()`
- `pow()`
- `sin()`
- `sinh()`
- `sqrt()`
- `tan()`
- `tanh()`

14.9 <mqqueue.h>

The following methods and variables in <mqqueue.h> are supported:

- mq_getattr()
- mq_notify()
- mq_open()
- mq_receive()
- mq_send()
- mq_setattr()
- mq_timedreceive()
- mq_timedsend()

14.10 <netdb.h>

The following methods and variables in <netdb.h> are supported:

- freeaddrinfo()
- getaddrinfo()
- getnameinfo()

14.11 <pthread.h>

The following methods and variables in <pthread.h> are supported:

- pthread_attr_destroy()
- pthread_attr_getdetachstate()
- pthread_attr_getguardsize()
- pthread_attr_getinheritsched()
- pthread_attr_getschedparam()
- pthread_attr_getschedpolicy()
- pthread_attr_getscope()
- pthread_attr_getstack()
- pthread_attr_getstacksize()
- pthread_attr_init()
- pthread_attr_setdetachstate()
- pthread_attr_setguardsize()
- pthread_attr_setinheritsched()
- pthread_attr_setschedparam()
- pthread_attr_setschedpolicy()
- pthread_attr_setscope()
- pthread_attr_setstack()
- pthread_attr_setstacksize()
- pthread_cancel()
- pthread_cleanup_pop()
- pthread_cleanup_push()
- pthread_cond_broadcast()
- pthread_cond_destroy()
- pthread_cond_init()
- pthread_cond_signal()
- pthread_cond_timedwait()
- pthread_cond_wait()
- pthread_condattr_destroy()
- pthread_condattr_getclock()
- pthread_condattr_init()
- pthread_condattr_setclock()
- pthread_create()

- pthread_detach()
- pthread_equal()
- pthread_exit()
- pthread_getconcurrency()
- pthread_getschedparam()
- pthread_getspecific()
- pthread_join()
- pthread_key_create()
- pthread_key_delete()
- pthread_mutex_destroy()
- pthread_mutex_init()
- pthread_mutex_lock()
- pthread_mutex_timedlock()
- pthread_mutex_trylock()
- pthread_mutex_unlock()
- pthread_mutexattr_destroy()
- pthread_mutexattr_getprioceiling()
- pthread_mutexattr_getprotocol()
- pthread_mutexattr_init()
- pthread_mutexattr_setprioceiling()
- pthread_mutexattr_setprotocol()
- pthread_once()
- pthread_self()
- pthread_setcancelstate()
- pthread_setcanceltype()
- pthread_setconcurrency()
- pthread_setschedparam()
- pthread_setschedprio()
- pthread_setspecific()

The following methods in <pthread.h> are implemented as stubs returning -1 and setting errno to ENOSYS:

- pthread_atfork()
- pthread_getcpuclockid()

14.12 <sched.h>

The following methods and variables in <sched.h> are supported:

- sched_get_priority_max()
- sched_get_priority_min()
- sched_rr_get_interval()
- sched_yield()

The following methods in <sched.h> are implemented as stubs returning -1 and setting errno to ENOSYS:

- sched_getparam()
- sched_getscheduler()
- sched_setparam()
- sched_setscheduler()

14.13 <semaphore.h>

The following methods and variables in <semaphore.h> are supported:

- `sem_close()`
- `sem_destroy()`
- `sem_getvalue()`
- `sem_init()`
- `sem_open()`
- `sem_post()`
- `sem_timedwait()`
- `sem_trywait()`
- `sem_unlink()`
- `sem_wait()`

14.14 <setjmp.h>

The following methods and variables in <setjmp.h> are supported:

- siglongjmp()
- sigsetjmp()

14.15 <signal.h>

The following methods and variables in <signal.h> are supported:

- kill()
- pthread_kill()
- pthread_sigmask()
- raise()
- sigaction()
- sigaddset()
- sigdelset()
- sigemptyset()
- sigfillset()
- sigismember()
- sigpending()
- sigqueue()
- sigsuspend()
- sigtimedwait()
- sigwait()
- sigwaitinfo()

14.16 <spawn.h>

The following methods and variables in <spawn.h> are not supported:

- `posix_spawn()`
- `posix_spawnattr_destroy()`
- `posix_spawnattr_getflags()`
- `posix_spawnattr_getsigdefault()`
- `posix_spawnattr_getsigmask()`
- `posix_spawnattr_init()`
- `posix_spawnattr_setflags()`
- `posix_spawnattr_setsigdefault()`
- `posix_spawnattr_setsigmask()`

14.17 <stdarg.h>

The following methods and variables in <stdarg.h> are supported:

- va_arg()
- va_end()
- va_start()

14.18 <stdio.h>

The following methods and variables in <stdio.h> are supported:

- clearerr()
- fclose()
- feof()
- ferror()
- fflush()
- fgetc()
- fgets()
- fileno()
- flockfile()
- fopen()
- fprintf()
- fread()
- freopen()
- fseek()
- fseeko()
- ftell()
- ftello()
- ftrylockfile()
- funlockfile()
- fwrite()
- remove()
- rename()
- snprintf()
- sscanf()
- vfprintf()
- vsnprintf()

14.19 <stdlib.h>

The following methods and variables in <stdlib.h> are supported:

- `_Exit()`
- `abort()`
- `abs()`
- `atexit()`
- `atof()`
- `atoi()`
- `atol()`
- `bsearch()`
- `calloc()`
- `div()`
- `exit()`
- `free()`
- `getenv()`
- `labs()`
- `ldiv()`
- `malloc()`
- `rand_r()`
- `realloc()`
- `strtod()`
- `strtol()`
- `strtoul()`

14.20 <string.h>

The following methods and variables in <string.h> are supported:

- memchr()
- memcmp()
- memcpy()
- memmove()
- memset()
- strcat()
- strchr()
- strcmp()
- strcpy()
- strcspn()
- strerror_r()
- strlen()
- strncat()
- strncmp()
- strncpy()
- strpbrk()
- strrchr()
- strspn()
- strstr()
- strtok_r()

14.21 <sys/mman.h>

The following methods and variables in <sys/mman.h> are supported:

- mmap()
- shm_open()

14.22 <sys/select.h>

The following methods and variables in <sys/select.h> are supported:

- FD_CLR()
- FD_ISSET()
- FD_SET()
- FD_ZERO()
- select()

14.23 <sys/socket.h>

The following methods and variables in <sys/socket.h> are supported:

- `accept()`
- `bind()`
- `connect()`
- `getpeername()`
- `getsockname()`
- `getsockopt()`
- `listen()`
- `recv()`
- `recvfrom()`
- `send()`
- `sendto()`
- `setsockopt()`
- `shutdown()`
- `socket()`

14.24 <sys/stat.h>

The following methods and variables in <sys/stat.h> are supported:

- chmod()
- fstat()
- lstat()
- mkdir()
- mkfifo()
- stat()
- umask()

14.25 <sys/times.h>

The following methods and variables in <sys/times.h> are supported:

- times()

14.26 <sys/utsname.h>

The following methods and variables in <sys/utsname.h> are supported:

- `uname()`

14.27 <sys/wait.h>

The following methods and variables in <sys/wait.h> are supported:

- waitpid()

14.28 <time.h>

The following methods and variables in <time.h> are supported:

- asctime_r()
- clock()
- clock_getres()
- clock_gettime()
- clock_settime()
- ctime_r()
- difftime()
- gmtime_r()
- localtime_r()
- mktime()
- nanosleep()
- strftime()
- time()
- timer_create()
- timer_delete()
- timer_getoverrun()
- timer_gettime()
- timer_settime()
- tzname
- tzset()

14.29 <unistd.h>

The following methods and variables in <unistd.h> are supported:

- `_exit()`
- `access()`
- `alarm()`
- `chdir()`
- `chown()`
- `close()`
- `dup2()`
- `environ`
- `fsync()`
- `ftruncate()`
- `getcwd()`
- `getegid()`
- `geteuid()`
- `getgid()`
- `getgroups()`
- `gethostname()`
- `getpgrp()`
- `getpid()`
- `getppid()`
- `getuid()`
- `link()`
- `lseek()`
- `pause()`
- `pipe()`
- `read()`
- `rmdir()`
- `setegid()`
- `seteuid()`
- `setgid()`
- `setuid()`
- `sleep()`
- `sysconf()`

- `unlink()`
- `write()`

The following methods in `<unistd.h>` are implemented as stubs returning `-1` and setting `errno` to `ENOSYS`:

- `execl()`
- `execle()`
- `execv()`
- `execve()`
- `fork()`

FACE 2.1 GENERAL PURPOSE

This chapter has a subsection per header file to detail the methods provided by RTEMS that are in that header file.

15.1 Summary

The follow table summarizes alignment with the FACE 2.1 General Purpose standard:

Supported	752
ENOSYS	14
Not supported	46

15.2 <aio.h>

The following methods and variables in <aio.h> are supported:

- aio_cancel()
- aio_error()
- aio_fsync()
- aio_read()
- aio_return()
- aio_write()

The following methods in <aio.h> are implemented as stubs returning -1 and setting errno to ENOSYS:

- aio_suspend()
- lio_listio()

15.3 <arpa/inet.h>

The following methods and variables in <arpa/inet.h> are supported:

- `htonl()`
- `htons()`
- `inet_addr()`
- `inet_ntoa()`
- `inet_ntop()`
- `inet_pton()`
- `ntohl()`
- `ntohs()`

15.4 <assert.h>

The following methods and variables in <assert.h> are supported:

- `assert()`

15.5 <complex.h>

The following methods and variables in <complex.h> are supported:

- `cabs()`
- `cabsf()`
- `cabsl()`
- `cacos()`
- `cacosf()`
- `cacosh()`
- `cacoshf()`
- `cacoshl()`
- `cacosl()`
- `carg()`
- `cargf()`
- `cargl()`
- `casin()`
- `casinf()`
- `casinh()`
- `casinhf()`
- `casinhl()`
- `casinl()`
- `catan()`
- `catanf()`
- `catanh()`
- `catanhf()`
- `catanhl()`
- `catanl()`
- `ccos()`
- `ccosf()`
- `ccosh()`
- `ccoshf()`
- `ccoshl()`
- `ccosl()`
- `cexp()`
- `cexpf()`

- `cexpl()`
- `cimag()`
- `cimagf()`
- `cimagl()`
- `clog()`
- `clogf()`
- `clogl()`
- `conj()`
- `conjf()`
- `conjl()`
- `cpow()`
- `cpowf()`
- `cpowl()`
- `cproj()`
- `cprojf()`
- `cprojl()`
- `creal()`
- `crealf()`
- `creall()`
- `csin()`
- `csinf()`
- `csinh()`
- `csinhf()`
- `csinhl()`
- `csinl()`
- `csqrt()`
- `csqrtf()`
- `csqrtl()`
- `ctan()`
- `ctanf()`
- `ctanh()`
- `ctanhf()`
- `ctanhl()`
- `ctanl()`

15.6 <ctype.h>

The following methods and variables in <ctype.h> are supported:

- `isalnum()`
- `isalpha()`
- `isblank()`
- `iscntrl()`
- `isdigit()`
- `isgraph()`
- `islower()`
- `isprint()`
- `ispunct()`
- `isspace()`
- `isupper()`
- `isxdigit()`
- `tolower()`
- `toupper()`

15.7 <devctl.h>

The following methods and variables in <devctl.h> are supported:

- posix_devctl()

15.8 <dirent.h>

The following methods and variables in <dirent.h> are supported:

- `closedir()`
- `opendir()`
- `readdir()`
- `readdir_r()`
- `rewinddir()`

15.9 <errno.h>

The following methods and variables in <errno.h> are supported:

- errno

15.10 <fcntl.h>

The following methods and variables in <fcntl.h> are supported:

- creat()
- fcntl()
- open()

15.11 <fenv.h>

The following methods and variables in <fenv.h> are not supported:

- `feclearexcept()`
- `fegetenv()`
- `fegetexceptflag()`
- `fegetround()`
- `fehldexcept()`
- `feraiseexcept()`
- `fesetenv()`
- `fesetexceptflag()`
- `fesetround()`
- `fetestexcept()`
- `feupdateenv()`

15.12 <inttypes.h>

The following methods and variables in <inttypes.h> are supported:

- `imaxabs()`
- `imaxdiv()`
- `strtoimax()`
- `strtoumax()`
- `wcstoimax()`
- `wcstoumax()`

15.13 <locale.h>

The following methods and variables in <locale.h> are supported:

- localeconv()
- setlocale()

15.14 <math.h>

The following methods and variables in <math.h> are supported:

- `acos()`
- `acosf()`
- `acosh()`
- `acoshf()`
- `acoshl()`
- `acosl()`
- `asin()`
- `asinf()`
- `asinh()`
- `asinhf()`
- `asinhl()`
- `asinl()`
- `atan()`
- `atan2()`
- `atan2f()`
- `atan2l()`
- `atanf()`
- `atanh()`
- `atanhf()`
- `atanhl()`
- `atanl()`
- `cbrt()`
- `cbrtf()`
- `cbrtl()`
- `ceil()`
- `ceilf()`
- `ceill()`
- `copysign()`
- `copysignf()`
- `copysignl()`
- `cos()`
- `cosf()`

- `cosh()`
- `coshf()`
- `coshl()`
- `cosl()`
- `erf()`
- `erfc()`
- `erfcf()`
- `erfcl()`
- `erff()`
- `erfl()`
- `exp()`
- `exp2()`
- `exp2f()`
- `exp2l()`
- `expf()`
- `expl()`
- `expm1()`
- `expm1f()`
- `expm1l()`
- `fabs()`
- `fabsf()`
- `fabsl()`
- `fdim()`
- `fdimf()`
- `fdiml()`
- `floor()`
- `floorf()`
- `floorl()`
- `fma()`
- `maf()`
- `fmal()`
- `fmax()`
- `fmaxf()`
- `fmaxl()`

- `fmin()`
- `fminf()`
- `fminl()`
- `fmod()`
- `fmodf()`
- `fmodl()`
- `frexp()`
- `frexpf()`
- `frexpl()`
- `hypot()`
- `hypotf()`
- `hypotl()`
- `ilogb()`
- `ilogbf()`
- `ilogbl()`
- `isinf()`
- `isnan()`
- `ldexp()`
- `ldexpf()`
- `ldexpl()`
- `lgamma()`
- `lgammaf()`
- `lgammal()`
- `llrint()`
- `llrintf()`
- `llrintl()`
- `llround()`
- `llroundf()`
- `llroundl()`
- `log()`
- `log10()`
- `log10f()`
- `log10l()`
- `log1p()`

- `log1pf()`
- `log1pl()`
- `log2()`
- `log2f()`
- `log2l()`
- `logb()`
- `logbf()`
- `logbl()`
- `logf()`
- `logl()`
- `lrint()`
- `lrintf()`
- `lrintl()`
- `lround()`
- `lroundf()`
- `lroundl()`
- `modf()`
- `modff()`
- `modfl()`
- `nan()`
- `nanf()`
- `nanl()`
- `nearbyint()`
- `nearbyintf()`
- `nearbyintl()`
- `nextafter()`
- `nextafterf()`
- `nextafterl()`
- `nexttoward()`
- `nexttowardl()`
- `pow()`
- `powf()`
- `powl()`
- `remainder()`

- remainderf()
- remainderl()
- remquo()
- remquof()
- remquol()
- rint()
- rintf()
- rintl()
- round()
- roundf()
- roundl()
- scalbln()
- scalblnf()
- scalblnl()
- scalbn()
- scalbnf()
- scalbnl()
- sin()
- sinf()
- sinh()
- sinhf()
- sinhl()
- sinl()
- sqrt()
- sqrtf()
- sqrtl()
- tan()
- tanf()
- tanh()
- tanhf()
- tanhl()
- tanl()
- tgamma()
- tgammaf()

- `tgammal()`
- `trunc()`
- `truncf()`
- `truncl()`

The following methods and variables in `<math.h>` are not supported:

- `fpclassify()`
- `isfinite()`
- `isgreater()`
- `isgreaterequal()`
- `isless()`
- `islessequal()`
- `islessgreater()`
- `isnormal()`
- `isunordered()`
- `nexttowardf()`
- `signbit()`

15.15 <mqqueue.h>

The following methods and variables in <mqqueue.h> are supported:

- mq_close()
- mq_getattr()
- mq_notify()
- mq_open()
- mq_receive()
- mq_send()
- mq_setattr()
- mq_timedreceive()
- mq_timedsend()
- mq_unlink()

15.16 <net/if.h>

The following methods and variables in <net/if.h> are supported:

- if_freenameindex()
- if_indextoname()
- if_nameindex()
- if_nametoindex()

15.17 <netdb.h>

The following methods and variables in <netdb.h> are supported:

- `endhostent()`
- `endnetent()`
- `endprotoent()`
- `endservent()`
- `freeaddrinfo()`
- `gai_strerror()`
- `getaddrinfo()`
- `gethostent()`
- `getnameinfo()`
- `getnetbyaddr()`
- `getnetbyname()`
- `getnetent()`
- `getprotobyname()`
- `getprotobynumber()`
- `getprotoent()`
- `getservbyname()`
- `getservbyport()`
- `getservent()`
- `sethostent()`
- `setnetent()`
- `setprotoent()`
- `setservent()`

15.18 <pthread.h>

The following methods and variables in <pthread.h> are supported:

- pthread_attr_destroy()
- pthread_attr_getdetachstate()
- pthread_attr_getguardsize()
- pthread_attr_getinheritsched()
- pthread_attr_getschedparam()
- pthread_attr_getschedpolicy()
- pthread_attr_getscope()
- pthread_attr_getstack()
- pthread_attr_getstacksize()
- pthread_attr_init()
- pthread_attr_setdetachstate()
- pthread_attr_setguardsize()
- pthread_attr_setinheritsched()
- pthread_attr_setschedparam()
- pthread_attr_setschedpolicy()
- pthread_attr_setscope()
- pthread_attr_setstack()
- pthread_attr_setstacksize()
- pthread_barrier_destroy()
- pthread_barrier_init()
- pthread_barrier_wait()
- pthread_barrierattr_destroy()
- pthread_barrierattr_init()
- pthread_cancel()
- pthread_cleanup_pop()
- pthread_cleanup_push()
- pthread_cond_broadcast()
- pthread_cond_destroy()
- pthread_cond_init()
- pthread_cond_signal()
- pthread_cond_timedwait()
- pthread_cond_wait()

- `pthread_condattr_destroy()`
- `pthread_condattr_getclock()`
- `pthread_condattr_getpshared()`
- `pthread_condattr_init()`
- `pthread_condattr_setclock()`
- `pthread_condattr_setpshared()`
- `pthread_create()`
- `pthread_detach()`
- `pthread_equal()`
- `pthread_exit()`
- `pthread_getconcurrency()`
- `pthread_getschedparam()`
- `pthread_getspecific()`
- `pthread_join()`
- `pthread_key_create()`
- `pthread_key_delete()`
- `pthread_mutex_destroy()`
- `pthread_mutex_getprioceiling()`
- `pthread_mutex_init()`
- `pthread_mutex_lock()`
- `pthread_mutex_setprioceiling()`
- `pthread_mutex_timedlock()`
- `pthread_mutex_trylock()`
- `pthread_mutex_unlock()`
- `pthread_mutexattr_destroy()`
- `pthread_mutexattr_getprioceiling()`
- `pthread_mutexattr_getprotocol()`
- `pthread_mutexattr_getpshared()`
- `pthread_mutexattr_gettype()`
- `pthread_mutexattr_init()`
- `pthread_mutexattr_setprioceiling()`
- `pthread_mutexattr_setprotocol()`
- `pthread_mutexattr_setpshared()`
- `pthread_mutexattr_settype()`

- `pthread_once()`
- `pthread_rwlock_destroy()`
- `pthread_rwlock_init()`
- `pthread_rwlock_rdlock()`
- `pthread_rwlock_timedrdlock()`
- `pthread_rwlock_timedwrlock()`
- `pthread_rwlock_tryrdlock()`
- `pthread_rwlock_trywrlock()`
- `pthread_rwlock_unlock()`
- `pthread_rwlock_wrlock()`
- `pthread_rwlockattr_destroy()`
- `pthread_rwlockattr_init()`
- `pthread_self()`
- `pthread_setcancelstate()`
- `pthread_setcanceltype()`
- `pthread_setconcurrency()`
- `pthread_setschedparam()`
- `pthread_setschedprio()`
- `pthread_setspecific()`
- `pthread_testcancel()`

The following methods in `<pthread.h>` are implemented as stubs returning `-1` and setting `errno` to `ENOSYS`:

- `pthread_atfork()`
- `pthread_getcpuclockid()`

15.19 <sched.h>

The following methods and variables in <sched.h> are supported:

- sched_get_priority_max()
- sched_get_priority_min()
- sched_rr_get_interval()
- sched_yield()

The following methods in <sched.h> are implemented as stubs returning -1 and setting errno to ENOSYS:

- sched_getparam()
- sched_getscheduler()
- sched_setparam()
- sched_setscheduler()

15.20 <semaphore.h>

The following methods and variables in <semaphore.h> are supported:

- `sem_close()`
- `sem_destroy()`
- `sem_getvalue()`
- `sem_init()`
- `sem_open()`
- `sem_post()`
- `sem_timedwait()`
- `sem_trywait()`
- `sem_unlink()`
- `sem_wait()`

15.21 <setjmp.h>

The following methods and variables in <setjmp.h> are supported:

- longjmp()
- setjmp()
- siglongjmp()
- sigsetjmp()

15.22 <signal.h>

The following methods and variables in <signal.h> are supported:

- kill()
- pthread_kill()
- pthread_sigmask()
- raise()
- sigaction()
- sigaddset()
- sigdelset()
- sigemptyset()
- sigfillset()
- sigismember()
- signal()
- sigpending()
- sigprocmask()
- sigqueue()
- sigsuspend()
- sigtimedwait()
- sigwait()
- sigwaitinfo()

15.23 <spawn.h>

The following methods and variables in <spawn.h> are not supported:

- posix_spawn()
- posix_spawn_file_actions_addclose()
- posix_spawn_file_actions_adddup2()
- posix_spawn_file_actions_addopen()
- posix_spawn_file_actions_destroy()
- posix_spawn_file_actions_init()
- posix_spawnattr_destroy()
- posix_spawnattr_getflags()
- posix_spawnattr_getpgroup()
- posix_spawnattr_getschedparam()
- posix_spawnattr_getschedpolicy()
- posix_spawnattr_getsigdefault()
- posix_spawnattr_getsigmask()
- posix_spawnattr_init()
- posix_spawnattr_setflags()
- posix_spawnattr_setpgroup()
- posix_spawnattr_setschedparam()
- posix_spawnattr_setschedpolicy()
- posix_spawnattr_setsigdefault()
- posix_spawnattr_setsigmask()
- posix_spawnnp()

15.24 <stdarg.h>

The following methods and variables in <stdarg.h> are supported:

- va_arg()
- va_copy()
- va_end()
- va_start()

15.25 <stdio.h>

The following methods and variables in <stdio.h> are supported:

- clearerr()
- fclose()
- fdopen()
- feof()
- ferror()
- fflush()
- fgetc()
- fgetpos()
- fgets()
- fileno()
- flockfile()
- fopen()
- fprintf()
- fputc()
- fputs()
- fread()
- freopen()
- fscanf()
- fseek()
- fseeko()
- fsetpos()
- ftell()
- ftello()
- ftrylockfile()
- funlockfile()
- fwrite()
- getc()
- getc_unlocked()
- getchar()
- getchar_unlocked()
- perror()
- printf()

- `putc()`
- `putc_unlocked()`
- `putchar()`
- `putchar_unlocked()`
- `puts()`
- `remove()`
- `rename()`
- `rewind()`
- `scanf()`
- `setbuf()`
- `setvbuf()`
- `snprintf()`
- `sprintf()`
- `sscanf()`
- `stderr`
- `stdin`
- `stdout`
- `tmpfile()`
- `ungetc()`
- `vfprintf()`
- `vfscanf()`
- `vprintf()`
- `vscanf()`
- `vsnprintf()`
- `vsprintf()`
- `vsscanf()`

15.26 <stdlib.h>

The following methods and variables in <stdlib.h> are supported:

- `_Exit()`
- `abort()`
- `abs()`
- `atexit()`
- `atof()`
- `atoi()`
- `atol()`
- `atoll()`
- `bsearch()`
- `calloc()`
- `div()`
- `exit()`
- `free()`
- `getenv()`
- `labs()`
- `ldiv()`
- `llabs()`
- `lldiv()`
- `malloc()`
- `mblen()`
- `mbstowcs()`
- `mbtowc()`
- `qsort()`
- `rand()`
- `rand_r()`
- `realloc()`
- `setenv()`
- `srand()`
- `strtod()`
- `strtof()`
- `strtol()`
- `strtold()`

- strtoll()
- strtoul()
- strtoull()
- unsetenv()
- wcstombs()
- wctomb()

15.27 <string.h>

The following methods and variables in <string.h> are supported:

- memchr()
- memcmp()
- memcpy()
- memmove()
- memset()
- strcat()
- strchr()
- strcmp()
- strcoll()
- strcpy()
- strcspn()
- strerror()
- strerror_r()
- strlen()
- strncat()
- strncmp()
- strncpy()
- strpbrk()
- strrchr()
- strspn()
- strstr()
- strtok()
- strtok_r()
- strxfrm()

15.28 <sys/mman.h>

The following methods and variables in <sys/mman.h> are supported:

- `mlock()`
- `mlockall()`
- `mmap()`
- `mprotect()`
- `msync()`
- `munlock()`
- `munlockall()`
- `munmap()`
- `shm_open()`
- `shm_unlink()`

15.29 <sys/select.h>

The following methods and variables in <sys/select.h> are supported:

- FD_CLR()
- FD_ISSET()
- FD_SET()
- FD_ZERO()
- select()

The following methods and variables in <sys/select.h> are not supported:

- pselect()

15.30 <sys/socket.h>

The following methods and variables in <sys/socket.h> are supported:

- accept()
- bind()
- connect()
- getpeername()
- getsockname()
- getsockopt()
- listen()
- recv()
- recvfrom()
- recvmsg()
- send()
- sendmsg()
- sendto()
- setsockopt()
- shutdown()
- socket()
- socketpair()

The following methods and variables in <sys/socket.h> are not supported:

- sockatmark()

15.32 <sys/times.h>

The following methods and variables in <sys/times.h> are supported:

- times()

15.33 <sys/utsname.h>

The following methods and variables in <sys/utsname.h> are supported:

- `uname()`

15.34 <sys/wait.h>

The following methods and variables in <sys/wait.h> are supported:

- wait()
- waitpid()

15.35 <time.h>

The following methods and variables in <time.h> are supported:

- asctime_r()
- clock()
- clock_getres()
- clock_gettime()
- clock_nanosleep()
- clock_settime()
- ctime_r()
- difftime()
- gmtime()
- gmtime_r()
- localtime()
- localtime_r()
- mktime()
- nanosleep()
- strftime()
- time()
- timer_create()
- timer_delete()
- timer_getoverrun()
- timer_gettime()
- timer_settime()
- tzname
- tzset()

The following methods in <time.h> are implemented as stubs returning -1 and setting errno to ENOSYS:

- clock_getcpuclockid()

15.36 <unistd.h>

The following methods and variables in <unistd.h> are supported:

- `_exit()`
- `access()`
- `alarm()`
- `chdir()`
- `chown()`
- `close()`
- `dup()`
- `dup2()`
- `environ`
- `fchown()`
- `fdatasync()`
- `fpathconf()`
- `fsync()`
- `ftruncate()`
- `getcwd()`
- `getegid()`
- `geteuid()`
- `getgid()`
- `getgroups()`
- `gethostname()`
- `getlogin()`
- `getpgrp()`
- `getpid()`
- `getppid()`
- `getuid()`
- `link()`
- `lseek()`
- `pathconf()`
- `pause()`
- `pipe()`
- `read()`
- `rmdir()`

- `setegid()`
- `seteuid()`
- `setgid()`
- `setsid()`
- `setuid()`
- `sleep()`
- `sysconf()`
- `unlink()`
- `write()`

The following methods in `<unistd.h>` are implemented as stubs returning -1 and setting `errno` to `ENOSYS`:

- `execl()`
- `execle()`
- `execv()`
- `execve()`
- `fork()`

The following methods and variables in `<unistd.h>` are not supported:

- `confstr()`

15.37 <wchar.h>

The following methods and variables in <wchar.h> are supported:

- btowc()
- fgetwc()
- fgetws()
- fputwc()
- fputws()
- fwide()
- fwprintf()
- fwscanf()
- getwc()
- getwchar()
- mbrlen()
- mbrtowc()
- mbsinit()
- mbsrtowcs()
- putwc()
- putwchar()
- swprintf()
- swscanf()
- ungetwc()
- vfwprintf()
- vfwscanf()
- vswprintf()
- vswscanf()
- vwprintf()
- vwscanf()
- wcrctomb()
- wcscat()
- wcschr()
- wcscmp()
- wcscoll()
- wcscpy()
- wcsncpy()

- wcsftime()
- wcslen()
- wcsncat()
- wcsncmp()
- wcsncpy()
- wcsrbrk()
- wcsrchr()
- wcsrtombs()
- wcsspn()
- wcsstr()
- wcstod()
- wcstof()
- wcstok()
- wcstol()
- wcstold()
- wcstoll()
- wcstoul()
- wcstoull()
- wcsxfrm()
- wctob()
- wmemchr()
- wmemcmp()
- wmemcpy()
- wmemmove()
- wmemset()
- wprintf()
- wscanf()

15.38 <wctype.h>

The following methods and variables in <wctype.h> are supported:

- `iswalnum()`
- `iswalpha()`
- `iswblank()`
- `iswcntrl()`
- `iswctype()`
- `iswdigit()`
- `iswgraph()`
- `iswlower()`
- `iswprint()`
- `iswpunct()`
- `iswspace()`
- `iswupper()`
- `iswxdigit()`
- `towctrans()`
- `towlower()`
- `towupper()`
- `wctrans()`
- `wctype()`

FACE 3.0 SECURITY

This chapter has a subsection per header file to detail the methods provided by RTEMS that are in that header file.

16.1 Summary

The follow table summarizes alignment with the FACE 3.0 Security standard:

Supported	163
ENOSYS	1
Not supported	0

16.2 <arpa/inet.h>

The following methods and variables in <arpa/inet.h> are supported:

- htonl()
- htons()
- inet_ntop()
- inet_pton()
- ntohl()
- ntohs()

16.3 <ctype.h>

The following methods and variables in <ctype.h> are supported:

- `isalnum()`
- `isalpha()`
- `iscntrl()`
- `isdigit()`
- `isgraph()`
- `islower()`
- `isprint()`
- `ispunct()`
- `isspace()`
- `isupper()`
- `isxdigit()`
- `tolower()`
- `toupper()`

16.4 <devctl.h>

The following methods and variables in <devctl.h> are supported:

- posix_devctl()

16.5 <errno.h>

The following methods and variables in <errno.h> are supported:

- errno

16.6 <math.h>

The following methods and variables in <math.h> are supported:

- `acos()`
- `acosh()`
- `asin()`
- `asinh()`
- `atan()`
- `atan2()`
- `atanh()`
- `ceil()`
- `cos()`
- `cosh()`
- `exp()`
- `fabs()`
- `floor()`
- `fmod()`
- `frexp()`
- `isinf()`
- `isnan()`
- `ldexp()`
- `log()`
- `log10()`
- `modf()`
- `pow()`
- `sin()`
- `sinh()`
- `sqrt()`
- `tan()`
- `tanh()`

16.7 <netdb.h>

The following methods and variables in <netdb.h> are supported:

- freeaddrinfo()
- getaddrinfo()
- getnameinfo()

16.8 <pthread.h>

The following methods and variables in <pthread.h> are supported:

- pthread_attr_destroy()
- pthread_attr_getinheritsched()
- pthread_attr_getschedparam()
- pthread_attr_getschedpolicy()
- pthread_attr_getscope()
- pthread_attr_getstack()
- pthread_attr_init()
- pthread_attr_setinheritsched()
- pthread_attr_setschedparam()
- pthread_attr_setschedpolicy()
- pthread_attr_setscope()
- pthread_attr_setstack()
- pthread_create()
- pthread_equal()
- pthread_getschedparam()
- pthread_mutex_init()
- pthread_mutex_lock()
- pthread_mutex_timedlock()
- pthread_mutex_trylock()
- pthread_mutex_unlock()
- pthread_mutexattr_destroy()
- pthread_mutexattr_getprioceiling()
- pthread_mutexattr_getprotocol()
- pthread_mutexattr_init()
- pthread_mutexattr_setprioceiling()
- pthread_mutexattr_setprotocol()
- pthread_once()
- pthread_self()
- pthread_setschedparam()
- pthread_setschedprio()

The following methods in <pthread.h> are implemented as stubs returning -1 and setting errno to ENOSYS:

- `pthread_getcpuclockid()`

16.9 <sched.h>

The following methods and variables in <sched.h> are supported:

- sched_get_priority_max()
- sched_get_priority_min()
- sched_yield()

16.10 <semaphore.h>

The following methods and variables in <semaphore.h> are supported:

- `sem_close()`
- `sem_getvalue()`
- `sem_init()`
- `sem_open()`
- `sem_post()`
- `sem_timedwait()`
- `sem_trywait()`
- `sem_wait()`

16.11 <signal.h>

The following methods and variables in <signal.h> are supported:

- pthread_sigmask()
- sigaction()
- sigaddset()
- sigdelset()
- sigemptyset()
- sigfillset()
- sigismember()
- sigpending()
- sigqueue()
- sigsuspend()
- sigtimedwait()
- sigwait()
- sigwaitinfo()

16.12 <stdlib.h>

The following methods and variables in <stdlib.h> are supported:

- abs()
- atof()
- atoi()
- atol()
- div()
- labs()
- ldiv()
- malloc()
- rand_r()
- strtod()
- strtol()
- strtoul()

16.13 <string.h>

The following methods and variables in <string.h> are supported:

- memchr()
- memcmp()
- memcpy()
- memmove()
- memset()
- strcat()
- strchr()
- strcmp()
- strcpy()
- strcspn()
- strlen()
- strncat()
- strncmp()
- strncpy()
- strpbrk()
- strrchr()
- strspn()
- strstr()
- strtok_r()

16.14 <sys/mman.h>

The following methods and variables in <sys/mman.h> are supported:

- mmap()
- shm_open()

16.15 <sys/socket.h>

The following methods and variables in <sys/socket.h> are supported:

- bind()
- connect()
- getpeername()
- getsockname()
- getsockopt()
- recv()
- recvfrom()
- send()
- sendto()
- setsockopt()
- shutdown()
- socket()

16.16 <sys/stat.h>

The following methods and variables in <sys/stat.h> are supported:

- stat()

16.17 <time.h>

The following methods and variables in <time.h> are supported:

- `clock_getres()`
- `clock_gettime()`
- `clock_nanosleep()`
- `clock_settime()`
- `nanosleep()`
- `timer_create()`
- `timer_getoverrun()`
- `timer_gettime()`
- `timer_settime()`

16.18 <unistd.h>

The following methods and variables in <unistd.h> are supported:

- alarm()
- ftruncate()
- pause()

FACE 3.0 SAFETY BASE

This chapter has a subsection per header file to detail the methods provided by RTEMS that are in that header file.

17.1 Summary

The follow table summarizes alignment with the FACE 3.0 Safety Base standard:

Supported	246
ENOSYS	1
Not supported	0

17.2 <arpa/inet.h>

The following methods and variables in <arpa/inet.h> are supported:

- htonl()
- htons()
- inet_ntop()
- inet_pton()
- ntohl()
- ntohs()

17.3 <ctype.h>

The following methods and variables in <ctype.h> are supported:

- `isalnum()`
- `isalpha()`
- `iscntrl()`
- `isdigit()`
- `isgraph()`
- `islower()`
- `isprint()`
- `ispunct()`
- `isspace()`
- `isupper()`
- `isxdigit()`
- `tolower()`
- `toupper()`

17.4 <devctl.h>

The following methods and variables in <devctl.h> are supported:

- posix_devctl()

17.5 <dirent.h>

The following methods and variables in <dirent.h> are supported:

- `closedir()`
- `opendir()`
- `readdir()`
- `readdir_r()`
- `rewinddir()`

17.6 <errno.h>

The following methods and variables in <errno.h> are supported:

- errno

17.7 <fcntl.h>

The following methods and variables in <fcntl.h> are supported:

- creat()
- open()

17.8 <math.h>

The following methods and variables in <math.h> are supported:

- `acos()`
- `acosh()`
- `asin()`
- `asinh()`
- `atan()`
- `atan2()`
- `atanh()`
- `ceil()`
- `cos()`
- `cosh()`
- `exp()`
- `fabs()`
- `floor()`
- `fmod()`
- `frexp()`
- `isinf()`
- `isnan()`
- `ldexp()`
- `log()`
- `log10()`
- `modf()`
- `pow()`
- `sin()`
- `sinh()`
- `sqrt()`
- `tan()`
- `tanh()`

17.9 <mqqueue.h>

The following methods and variables in <mqqueue.h> are supported:

- mq_getattr()
- mq_notify()
- mq_open()
- mq_receive()
- mq_send()
- mq_setattr()
- mq_timedreceive()
- mq_timedsend()

17.10 <netdb.h>

The following methods and variables in <netdb.h> are supported:

- freeaddrinfo()
- getaddrinfo()
- getnameinfo()

17.11 <pthread.h>

The following methods and variables in <pthread.h> are supported:

- pthread_attr_destroy()
- pthread_attr_getinheritsched()
- pthread_attr_getschedparam()
- pthread_attr_getschedpolicy()
- pthread_attr_getscope()
- pthread_attr_getstack()
- pthread_attr_getstacksize()
- pthread_attr_init()
- pthread_attr_setinheritsched()
- pthread_attr_setschedparam()
- pthread_attr_setschedpolicy()
- pthread_attr_setscope()
- pthread_attr_setstack()
- pthread_attr_setstacksize()
- pthread_cond_broadcast()
- pthread_cond_destroy()
- pthread_cond_init()
- pthread_cond_signal()
- pthread_cond_timedwait()
- pthread_cond_wait()
- pthread_condattr_destroy()
- pthread_condattr_getclock()
- pthread_condattr_init()
- pthread_condattr_setclock()
- pthread_create()
- pthread_equal()
- pthread_getconcurrency()
- pthread_getschedparam()
- pthread_getspecific()
- pthread_key_create()
- pthread_mutex_init()
- pthread_mutex_lock()

- `pthread_mutex_timedlock()`
- `pthread_mutex_trylock()`
- `pthread_mutex_unlock()`
- `pthread_mutexattr_destroy()`
- `pthread_mutexattr_getprioceiling()`
- `pthread_mutexattr_getprotocol()`
- `pthread_mutexattr_init()`
- `pthread_mutexattr_setprioceiling()`
- `pthread_mutexattr_setprotocol()`
- `pthread_once()`
- `pthread_self()`
- `pthread_setconcurrency()`
- `pthread_setschedparam()`
- `pthread_setschedprio()`
- `pthread_setspecific()`

The following methods in `<pthread.h>` are implemented as stubs returning `-1` and setting `errno` to `ENOSYS`:

- `pthread_getcpuclockid()`

17.12 <sched.h>

The following methods and variables in <sched.h> are supported:

- sched_get_priority_max()
- sched_get_priority_min()
- sched_yield()

17.13 <semaphore.h>

The following methods and variables in <semaphore.h> are supported:

- `sem_close()`
- `sem_getvalue()`
- `sem_init()`
- `sem_open()`
- `sem_post()`
- `sem_timedwait()`
- `sem_trywait()`
- `sem_wait()`

17.14 <signal.h>

The following methods and variables in <signal.h> are supported:

- pthread_sigmask()
- sigaction()
- sigaddset()
- sigdelset()
- sigemptyset()
- sigfillset()
- sigismember()
- sigpending()
- sigqueue()
- sigsuspend()
- sigtimedwait()
- sigwait()
- sigwaitinfo()

17.15 <stdio.h>

The following methods and variables in <stdio.h> are supported:

- clearerr()
- fclose()
- feof()
- ferror()
- fflush()
- fgetc()
- fgets()
- fileno()
- fopen()
- fprintf()
- fread()
- freopen()
- fseek()
- fseeko()
- ftell()
- ftello()
- fwrite()
- remove()
- rename()
- snprintf()

17.16 <stdlib.h>

The following methods and variables in <stdlib.h> are supported:

- abs()
- atof()
- atoi()
- atol()
- calloc()
- div()
- labs()
- ldiv()
- malloc()
- rand_r()
- strtod()
- strtol()
- strtoul()

17.17 <string.h>

The following methods and variables in <string.h> are supported:

- memchr()
- memcmp()
- memcpy()
- memmove()
- memset()
- strcat()
- strchr()
- strcmp()
- strcpy()
- strcspn()
- strerror_r()
- strlen()
- strncat()
- strncmp()
- strncpy()
- strpbrk()
- strrchr()
- strspn()
- strstr()
- strtok_r()

17.18 <sys/mman.h>

The following methods and variables in <sys/mman.h> are supported:

- mmap()
- shm_open()

17.19 <sys/select.h>

The following methods and variables in <sys/select.h> are supported:

- FD_CLR()
- FD_ISSET()
- FD_SET()
- FD_ZERO()
- select()

17.20 <sys/socket.h>

The following methods and variables in <sys/socket.h> are supported:

- bind()
- connect()
- getpeername()
- getsockname()
- getsockopt()
- recv()
- recvfrom()
- send()
- sendto()
- setsockopt()
- shutdown()
- socket()

17.21 <sys/stat.h>

The following methods and variables in <sys/stat.h> are supported:

- `fstat()`
- `mkdir()`
- `stat()`
- `umask()`

17.22 <time.h>

The following methods and variables in <time.h> are supported:

- asctime_r()
- clock_getres()
- clock_gettime()
- clock_nanosleep()
- clock_settime()
- ctime_r()
- difftime()
- gmtime_r()
- localtime_r()
- mktime()
- nanosleep()
- time()
- timer_create()
- timer_getoverrun()
- timer_gettime()
- timer_settime()
- tzname
- tzset()

17.23 <unistd.h>

The following methods and variables in <unistd.h> are supported:

- access()
- alarm()
- chdir()
- close()
- fsync()
- ftruncate()
- getcwd()
- gethostname()
- link()
- lseek()
- pause()
- read()
- rmdir()
- unlink()
- write()

FACE 3.0 SAFETY EXTENDED

This chapter has a subsection per header file to detail the methods provided by RTEMS that are in that header file.

18.1 Summary

The follow table summarizes alignment with the FACE 3.0 Safety Extended standard:

Supported	316
ENOSYS	11
Not supported	9

18.2 <arpa/inet.h>

The following methods and variables in <arpa/inet.h> are supported:

- htonl()
- htons()
- inet_ntop()
- inet_pton()
- ntohl()
- ntohs()

18.3 <ctype.h>

The following methods and variables in <ctype.h> are supported:

- `isalnum()`
- `isalpha()`
- `iscntrl()`
- `isdigit()`
- `isgraph()`
- `islower()`
- `isprint()`
- `ispunct()`
- `isspace()`
- `isupper()`
- `isxdigit()`
- `tolower()`
- `toupper()`

18.4 <devctl.h>

The following methods and variables in <devctl.h> are supported:

- posix_devctl()

18.5 <dirent.h>

The following methods and variables in <dirent.h> are supported:

- `closedir()`
- `opendir()`
- `readdir()`
- `readdir_r()`
- `rewinddir()`

18.6 <errno.h>

The following methods and variables in <errno.h> are supported:

- errno

18.7 <fcntl.h>

The following methods and variables in <fcntl.h> are supported:

- creat()
- fcntl()
- open()

18.8 `<math.h>`

The following methods and variables in `<math.h>` are supported:

- `acos()`
- `acosh()`
- `asin()`
- `asinh()`
- `atan()`
- `atan2()`
- `atanh()`
- `ceil()`
- `cos()`
- `cosh()`
- `exp()`
- `fabs()`
- `floor()`
- `fmod()`
- `frexp()`
- `isinf()`
- `isnan()`
- `ldexp()`
- `log()`
- `log10()`
- `modf()`
- `pow()`
- `sin()`
- `sinh()`
- `sqrt()`
- `tan()`
- `tanh()`

18.9 <mqqueue.h>

The following methods and variables in <mqqueue.h> are supported:

- mq_getattr()
- mq_notify()
- mq_open()
- mq_receive()
- mq_send()
- mq_setattr()
- mq_timedreceive()
- mq_timedsend()

18.10 <netdb.h>

The following methods and variables in <netdb.h> are supported:

- freeaddrinfo()
- getaddrinfo()
- getnameinfo()

18.11 <pthread.h>

The following methods and variables in <pthread.h> are supported:

- pthread_attr_destroy()
- pthread_attr_getdetachstate()
- pthread_attr_getguardsize()
- pthread_attr_getinheritsched()
- pthread_attr_getschedparam()
- pthread_attr_getschedpolicy()
- pthread_attr_getscope()
- pthread_attr_getstack()
- pthread_attr_getstacksize()
- pthread_attr_init()
- pthread_attr_setdetachstate()
- pthread_attr_setguardsize()
- pthread_attr_setinheritsched()
- pthread_attr_setschedparam()
- pthread_attr_setschedpolicy()
- pthread_attr_setscope()
- pthread_attr_setstack()
- pthread_attr_setstacksize()
- pthread_cancel()
- pthread_cleanup_pop()
- pthread_cleanup_push()
- pthread_cond_broadcast()
- pthread_cond_destroy()
- pthread_cond_init()
- pthread_cond_signal()
- pthread_cond_timedwait()
- pthread_cond_wait()
- pthread_condattr_destroy()
- pthread_condattr_getclock()
- pthread_condattr_init()
- pthread_condattr_setclock()
- pthread_create()

- pthread_detach()
- pthread_equal()
- pthread_exit()
- pthread_getconcurrency()
- pthread_getschedparam()
- pthread_getspecific()
- pthread_join()
- pthread_key_create()
- pthread_key_delete()
- pthread_mutex_destroy()
- pthread_mutex_init()
- pthread_mutex_lock()
- pthread_mutex_timedlock()
- pthread_mutex_trylock()
- pthread_mutex_unlock()
- pthread_mutexattr_destroy()
- pthread_mutexattr_getprioceiling()
- pthread_mutexattr_getprotocol()
- pthread_mutexattr_init()
- pthread_mutexattr_setprioceiling()
- pthread_mutexattr_setprotocol()
- pthread_once()
- pthread_self()
- pthread_setcancelstate()
- pthread_setcanceltype()
- pthread_setconcurrency()
- pthread_setschedparam()
- pthread_setschedprio()
- pthread_setspecific()

The following methods in `<pthread.h>` are implemented as stubs returning `-1` and setting `errno` to `ENOSYS`:

- pthread_atfork()
- pthread_getcpuclockid()

18.12 <sched.h>

The following methods and variables in <sched.h> are supported:

- sched_get_priority_max()
- sched_get_priority_min()
- sched_rr_get_interval()
- sched_yield()

The following methods in <sched.h> are implemented as stubs returning -1 and setting errno to ENOSYS:

- sched_getparam()
- sched_getscheduler()
- sched_setparam()
- sched_setscheduler()

18.13 <semaphore.h>

The following methods and variables in <semaphore.h> are supported:

- `sem_close()`
- `sem_destroy()`
- `sem_getvalue()`
- `sem_init()`
- `sem_open()`
- `sem_post()`
- `sem_timedwait()`
- `sem_trywait()`
- `sem_unlink()`
- `sem_wait()`

18.14 <setjmp.h>

The following methods and variables in <setjmp.h> are supported:

- siglongjmp()
- sigsetjmp()

18.15 <signal.h>

The following methods and variables in <signal.h> are supported:

- kill()
- pthread_kill()
- pthread_sigmask()
- raise()
- sigaction()
- sigaddset()
- sigdelset()
- sigemptyset()
- sigfillset()
- sigismember()
- sigpending()
- sigqueue()
- sigsuspend()
- sigtimedwait()
- sigwait()
- sigwaitinfo()

18.16 <spawn.h>

The following methods and variables in <spawn.h> are not supported:

- `posix_spawn()`
- `posix_spawnattr_destroy()`
- `posix_spawnattr_getflags()`
- `posix_spawnattr_getsigdefault()`
- `posix_spawnattr_getsigmask()`
- `posix_spawnattr_init()`
- `posix_spawnattr_setflags()`
- `posix_spawnattr_setsigdefault()`
- `posix_spawnattr_setsigmask()`

18.17 <stdarg.h>

The following methods and variables in <stdarg.h> are supported:

- va_arg()
- va_end()
- va_start()

18.18 <stdio.h>

The following methods and variables in <stdio.h> are supported:

- clearerr()
- fclose()
- feof()
- ferror()
- fflush()
- fgetc()
- fgets()
- fileno()
- flockfile()
- fopen()
- fprintf()
- fread()
- freopen()
- fseek()
- fseeko()
- ftell()
- ftello()
- ftrylockfile()
- funlockfile()
- fwrite()
- remove()
- rename()
- snprintf()
- sscanf()
- vfprintf()
- vsnprintf()

18.19 <stdlib.h>

The following methods and variables in <stdlib.h> are supported:

- `_Exit()`
- `abort()`
- `abs()`
- `atexit()`
- `atof()`
- `atoi()`
- `atol()`
- `bsearch()`
- `calloc()`
- `div()`
- `exit()`
- `free()`
- `getenv()`
- `labs()`
- `ldiv()`
- `malloc()`
- `rand_r()`
- `realloc()`
- `strtod()`
- `strtol()`
- `strtoul()`

18.20 <string.h>

The following methods and variables in <string.h> are supported:

- memchr()
- memcmp()
- memcpy()
- memmove()
- memset()
- strcat()
- strchr()
- strcmp()
- strcpy()
- strcspn()
- strerror_r()
- strlen()
- strncat()
- strncmp()
- strncpy()
- strpbrk()
- strrchr()
- strspn()
- strstr()
- strtok_r()

18.21 <sys/mman.h>

The following methods and variables in <sys/mman.h> are supported:

- mmap()
- shm_open()

18.22 <sys/select.h>

The following methods and variables in <sys/select.h> are supported:

- FD_CLR()
- FD_ISSET()
- FD_SET()
- FD_ZERO()
- select()

18.23 <sys/socket.h>

The following methods and variables in <sys/socket.h> are supported:

- accept()
- bind()
- connect()
- getpeername()
- getsockname()
- getsockopt()
- listen()
- recv()
- recvfrom()
- send()
- sendto()
- setsockopt()
- shutdown()
- socket()

18.24 <sys/stat.h>

The following methods and variables in <sys/stat.h> are supported:

- chmod()
- fstat()
- lstat()
- mkdir()
- mkfifo()
- stat()
- umask()

18.25 <sys/times.h>

The following methods and variables in <sys/times.h> are supported:

- times()

18.26 <sys/utsname.h>

The following methods and variables in <sys/utsname.h> are supported:

- `uname()`

18.27 <sys/wait.h>

The following methods and variables in <sys/wait.h> are supported:

- waitpid()

18.28 <time.h>

The following methods and variables in <time.h> are supported:

- asctime_r()
- clock()
- clock_getres()
- clock_gettime()
- clock_nanosleep()
- clock_settime()
- ctime_r()
- difftime()
- gmtime_r()
- localtime_r()
- mktime()
- nanosleep()
- strftime()
- time()
- timer_create()
- timer_delete()
- timer_getoverrun()
- timer_gettime()
- timer_settime()
- tzname
- tzset()

18.29 <unistd.h>

The following methods and variables in <unistd.h> are supported:

- `_exit()`
- `access()`
- `alarm()`
- `chdir()`
- `chown()`
- `close()`
- `dup2()`
- `environ`
- `fsync()`
- `ftruncate()`
- `getcwd()`
- `getegid()`
- `geteuid()`
- `getgid()`
- `getgroups()`
- `gethostname()`
- `getpgrp()`
- `getpid()`
- `getppid()`
- `getuid()`
- `link()`
- `lseek()`
- `pause()`
- `pipe()`
- `read()`
- `rmdir()`
- `setegid()`
- `seteuid()`
- `setgid()`
- `setuid()`
- `sleep()`
- `sysconf()`

- `unlink()`
- `write()`

The following methods in `<unistd.h>` are implemented as stubs returning `-1` and setting `errno` to `ENOSYS`:

- `execl()`
- `execle()`
- `execv()`
- `execve()`
- `fork()`

FACE 3.0 GENERAL PURPOSE

This chapter has a subsection per header file to detail the methods provided by RTEMS that are in that header file.

19.1 Summary

The follow table summarizes alignment with the FACE 3.0 General Purpose standard:

Supported	752
ENOSYS	14
Not supported	46

19.2 <aio.h>

The following methods and variables in <aio.h> are supported:

- aio_cancel()
- aio_error()
- aio_fsync()
- aio_read()
- aio_return()
- aio_write()

The following methods in <aio.h> are implemented as stubs returning -1 and setting errno to ENOSYS:

- aio_suspend()
- lio_listio()

19.3 <arpa/inet.h>

The following methods and variables in <arpa/inet.h> are supported:

- `htonl()`
- `htons()`
- `inet_addr()`
- `inet_ntoa()`
- `inet_ntop()`
- `inet_pton()`
- `ntohl()`
- `ntohs()`

19.4 <assert.h>

The following methods and variables in <assert.h> are supported:

- `assert()`

19.5 <complex.h>

The following methods and variables in <complex.h> are supported:

- `cabs()`
- `cabsf()`
- `cabsl()`
- `cacos()`
- `cacosf()`
- `cacosh()`
- `cacoshf()`
- `cacoshl()`
- `cacosl()`
- `carg()`
- `cargf()`
- `cargl()`
- `casin()`
- `casinf()`
- `casinh()`
- `casinhf()`
- `casinhl()`
- `casinl()`
- `catan()`
- `catanf()`
- `catanh()`
- `catanhf()`
- `catanhl()`
- `catanl()`
- `ccos()`
- `ccosf()`
- `ccosh()`
- `ccoshf()`
- `ccoshl()`
- `ccosl()`
- `cexp()`
- `cexpf()`

- `cexpl()`
- `cimag()`
- `cimagf()`
- `cimagl()`
- `clog()`
- `clogf()`
- `clogl()`
- `conj()`
- `conjf()`
- `conjl()`
- `cpow()`
- `cpowf()`
- `cpowl()`
- `cproj()`
- `cprojf()`
- `cprojl()`
- `creal()`
- `crealf()`
- `creall()`
- `csin()`
- `csinf()`
- `csinh()`
- `csinhf()`
- `csinhl()`
- `csinl()`
- `csqrt()`
- `csqrtf()`
- `csqrtl()`
- `ctan()`
- `ctanf()`
- `ctanh()`
- `ctanhf()`
- `ctanhl()`
- `ctanl()`

19.6 <ctype.h>

The following methods and variables in <ctype.h> are supported:

- `isalnum()`
- `isalpha()`
- `isblank()`
- `iscntrl()`
- `isdigit()`
- `isgraph()`
- `islower()`
- `isprint()`
- `ispunct()`
- `isspace()`
- `isupper()`
- `isxdigit()`
- `tolower()`
- `toupper()`

19.7 <devctl.h>

The following methods and variables in <devctl.h> are supported:

- posix_devctl()

19.8 <dirent.h>

The following methods and variables in <dirent.h> are supported:

- `closedir()`
- `opendir()`
- `readdir()`
- `readdir_r()`
- `rewinddir()`

19.9 <errno.h>

The following methods and variables in <errno.h> are supported:

- errno

19.10 <fcntl.h>

The following methods and variables in <fcntl.h> are supported:

- creat()
- fcntl()
- open()

19.11 <fenv.h>

The following methods and variables in <fenv.h> are not supported:

- `feclearexcept()`
- `fegetenv()`
- `fegetexceptflag()`
- `fegetround()`
- `feholdexcept()`
- `feraiseexcept()`
- `fesetenv()`
- `fesetexceptflag()`
- `fesetround()`
- `fetestexcept()`
- `feupdateenv()`

19.12 <inttypes.h>

The following methods and variables in <inttypes.h> are supported:

- `imaxabs()`
- `imaxdiv()`
- `strtoimax()`
- `strtoumax()`
- `wcstoimax()`
- `wcstoumax()`

19.13 <locale.h>

The following methods and variables in <locale.h> are supported:

- localeconv()
- setlocale()

19.14 <math.h>

The following methods and variables in <math.h> are supported:

- `acos()`
- `acosf()`
- `acosh()`
- `acoshf()`
- `acoshl()`
- `acosl()`
- `asin()`
- `asinf()`
- `asinh()`
- `asinhf()`
- `asinhl()`
- `asinl()`
- `atan()`
- `atan2()`
- `atan2f()`
- `atan2l()`
- `atanf()`
- `atanh()`
- `atanhf()`
- `atanhl()`
- `atanl()`
- `cbrt()`
- `cbrtf()`
- `cbrtl()`
- `ceil()`
- `ceilf()`
- `ceill()`
- `copysign()`
- `copysignf()`
- `copysignl()`
- `cos()`
- `cosf()`

- `cosh()`
- `coshf()`
- `coshl()`
- `cosl()`
- `erf()`
- `erfc()`
- `erfcf()`
- `erfcl()`
- `erff()`
- `erfl()`
- `exp()`
- `exp2()`
- `exp2f()`
- `exp2l()`
- `expf()`
- `expl()`
- `expm1()`
- `expm1f()`
- `expm1l()`
- `fabs()`
- `fabsf()`
- `fabsl()`
- `fdim()`
- `fdimf()`
- `fdiml()`
- `floor()`
- `floorf()`
- `floorl()`
- `fma()`
- `fmaf()`
- `fmal()`
- `fmax()`
- `fmaxf()`
- `fmaxl()`

- `fmin()`
- `fminf()`
- `fminl()`
- `fmod()`
- `fmodf()`
- `fmodl()`
- `frexp()`
- `frexpf()`
- `frexpl()`
- `hypot()`
- `hypotf()`
- `hypotl()`
- `ilogb()`
- `ilogbf()`
- `ilogbl()`
- `isinf()`
- `isnan()`
- `ldexp()`
- `ldexpf()`
- `ldexpl()`
- `lgamma()`
- `lgammaf()`
- `lgammal()`
- `llrint()`
- `llrintf()`
- `llrintl()`
- `llround()`
- `llroundf()`
- `llroundl()`
- `log()`
- `log10()`
- `log10f()`
- `log10l()`
- `log1p()`

- `log1pf()`
- `log1pl()`
- `log2()`
- `log2f()`
- `log2l()`
- `logb()`
- `logbf()`
- `logbl()`
- `logf()`
- `logl()`
- `lrint()`
- `lrintf()`
- `lrintl()`
- `lround()`
- `lroundf()`
- `lroundl()`
- `modf()`
- `modff()`
- `modfl()`
- `nan()`
- `nanf()`
- `nanl()`
- `nearbyint()`
- `nearbyintf()`
- `nearbyintl()`
- `nextafter()`
- `nextafterf()`
- `nextafterl()`
- `nexttoward()`
- `nexttowardl()`
- `pow()`
- `powf()`
- `powl()`
- `remainder()`

- remainderf()
- remainderl()
- remquo()
- remquof()
- remquol()
- rint()
- rintf()
- rintl()
- round()
- roundf()
- roundl()
- scalbln()
- scalblnf()
- scalblnl()
- scalbn()
- scalbnf()
- scalbnl()
- sin()
- sinf()
- sinh()
- sinhf()
- sinhl()
- sinl()
- sqrt()
- sqrtf()
- sqrtl()
- tan()
- tanf()
- tanh()
- tanhf()
- tanhl()
- tanl()
- tgamma()
- tgammaf()

- `tgammal()`
- `trunc()`
- `truncf()`
- `truncl()`

The following methods and variables in `<math.h>` are not supported:

- `fpclassify()`
- `isfinite()`
- `isgreater()`
- `isgreaterequal()`
- `isless()`
- `islessequal()`
- `islessgreater()`
- `isnormal()`
- `isunordered()`
- `nexttowardf()`
- `signbit()`

19.15 <mqqueue.h>

The following methods and variables in <mqqueue.h> are supported:

- mq_close()
- mq_getattr()
- mq_notify()
- mq_open()
- mq_receive()
- mq_send()
- mq_setattr()
- mq_timedreceive()
- mq_timedsend()
- mq_unlink()

19.16 <net/if.h>

The following methods and variables in <net/if.h> are supported:

- if_freenameindex()
- if_indextoname()
- if_nameindex()
- if_nametoindex()

19.17 <netdb.h>

The following methods and variables in <netdb.h> are supported:

- `endhostent()`
- `endnetent()`
- `endprotoent()`
- `endservent()`
- `freeaddrinfo()`
- `gai_strerror()`
- `getaddrinfo()`
- `gethostent()`
- `getnameinfo()`
- `getnetbyaddr()`
- `getnetbyname()`
- `getnetent()`
- `getprotobyname()`
- `getprotobynumber()`
- `getprotoent()`
- `getservbyname()`
- `getservbyport()`
- `getservent()`
- `sethostent()`
- `setnetent()`
- `setprotoent()`
- `setservent()`

19.18 <pthread.h>

The following methods and variables in <pthread.h> are supported:

- pthread_attr_destroy()
- pthread_attr_getdetachstate()
- pthread_attr_getguardsize()
- pthread_attr_getinheritsched()
- pthread_attr_getschedparam()
- pthread_attr_getschedpolicy()
- pthread_attr_getscope()
- pthread_attr_getstack()
- pthread_attr_getstacksize()
- pthread_attr_init()
- pthread_attr_setdetachstate()
- pthread_attr_setguardsize()
- pthread_attr_setinheritsched()
- pthread_attr_setschedparam()
- pthread_attr_setschedpolicy()
- pthread_attr_setscope()
- pthread_attr_setstack()
- pthread_attr_setstacksize()
- pthread_barrier_destroy()
- pthread_barrier_init()
- pthread_barrier_wait()
- pthread_barrierattr_destroy()
- pthread_barrierattr_init()
- pthread_cancel()
- pthread_cleanup_pop()
- pthread_cleanup_push()
- pthread_cond_broadcast()
- pthread_cond_destroy()
- pthread_cond_init()
- pthread_cond_signal()
- pthread_cond_timedwait()
- pthread_cond_wait()

- `pthread_condattr_destroy()`
- `pthread_condattr_getclock()`
- `pthread_condattr_getpshared()`
- `pthread_condattr_init()`
- `pthread_condattr_setclock()`
- `pthread_condattr_setpshared()`
- `pthread_create()`
- `pthread_detach()`
- `pthread_equal()`
- `pthread_exit()`
- `pthread_getconcurrency()`
- `pthread_getschedparam()`
- `pthread_getspecific()`
- `pthread_join()`
- `pthread_key_create()`
- `pthread_key_delete()`
- `pthread_mutex_destroy()`
- `pthread_mutex_getprioceiling()`
- `pthread_mutex_init()`
- `pthread_mutex_lock()`
- `pthread_mutex_setprioceiling()`
- `pthread_mutex_timedlock()`
- `pthread_mutex_trylock()`
- `pthread_mutex_unlock()`
- `pthread_mutexattr_destroy()`
- `pthread_mutexattr_getprioceiling()`
- `pthread_mutexattr_getprotocol()`
- `pthread_mutexattr_getpshared()`
- `pthread_mutexattr_gettype()`
- `pthread_mutexattr_init()`
- `pthread_mutexattr_setprioceiling()`
- `pthread_mutexattr_setprotocol()`
- `pthread_mutexattr_setpshared()`
- `pthread_mutexattr_settype()`

- `pthread_once()`
- `pthread_rwlock_destroy()`
- `pthread_rwlock_init()`
- `pthread_rwlock_rdlock()`
- `pthread_rwlock_timedrdlock()`
- `pthread_rwlock_timedwrlock()`
- `pthread_rwlock_tryrdlock()`
- `pthread_rwlock_trywrlock()`
- `pthread_rwlock_unlock()`
- `pthread_rwlock_wrlock()`
- `pthread_rwlockattr_destroy()`
- `pthread_rwlockattr_init()`
- `pthread_self()`
- `pthread_setcancelstate()`
- `pthread_setcanceltype()`
- `pthread_setconcurrency()`
- `pthread_setschedparam()`
- `pthread_setschedprio()`
- `pthread_setspecific()`
- `pthread_testcancel()`

The following methods in `<pthread.h>` are implemented as stubs returning `-1` and setting `errno` to `ENOSYS`:

- `pthread_atfork()`
- `pthread_getcpuclockid()`

19.19 <sched.h>

The following methods and variables in <sched.h> are supported:

- sched_get_priority_max()
- sched_get_priority_min()
- sched_rr_get_interval()
- sched_yield()

The following methods in <sched.h> are implemented as stubs returning -1 and setting errno to ENOSYS:

- sched_getparam()
- sched_getscheduler()
- sched_setparam()
- sched_setscheduler()

19.20 <semaphore.h>

The following methods and variables in <semaphore.h> are supported:

- `sem_close()`
- `sem_destroy()`
- `sem_getvalue()`
- `sem_init()`
- `sem_open()`
- `sem_post()`
- `sem_timedwait()`
- `sem_trywait()`
- `sem_unlink()`
- `sem_wait()`

19.21 <setjmp.h>

The following methods and variables in <setjmp.h> are supported:

- longjmp()
- setjmp()
- siglongjmp()
- sigsetjmp()

19.22 <signal.h>

The following methods and variables in <signal.h> are supported:

- kill()
- pthread_kill()
- pthread_sigmask()
- raise()
- sigaction()
- sigaddset()
- sigdelset()
- sigemptyset()
- sigfillset()
- sigismember()
- signal()
- sigpending()
- sigprocmask()
- sigqueue()
- sigsuspend()
- sigtimedwait()
- sigwait()
- sigwaitinfo()

19.23 <spawn.h>

The following methods and variables in <spawn.h> are not supported:

- posix_spawn()
- posix_spawn_file_actions_addclose()
- posix_spawn_file_actions_adddup2()
- posix_spawn_file_actions_addopen()
- posix_spawn_file_actions_destroy()
- posix_spawn_file_actions_init()
- posix_spawnattr_destroy()
- posix_spawnattr_getflags()
- posix_spawnattr_getpgroup()
- posix_spawnattr_getschedparam()
- posix_spawnattr_getschedpolicy()
- posix_spawnattr_getsigdefault()
- posix_spawnattr_getsigmask()
- posix_spawnattr_init()
- posix_spawnattr_setflags()
- posix_spawnattr_setpgroup()
- posix_spawnattr_setschedparam()
- posix_spawnattr_setschedpolicy()
- posix_spawnattr_setsigdefault()
- posix_spawnattr_setsigmask()
- posix_spawnnp()

19.24 <stdarg.h>

The following methods and variables in <stdarg.h> are supported:

- va_arg()
- va_copy()
- va_end()
- va_start()

19.25 <stdio.h>

The following methods and variables in <stdio.h> are supported:

- clearerr()
- fclose()
- fdopen()
- feof()
- ferror()
- fflush()
- fgetc()
- fgetpos()
- fgets()
- fileno()
- flockfile()
- fopen()
- fprintf()
- fputc()
- fputs()
- fread()
- freopen()
- fscanf()
- fseek()
- fseeko()
- fsetpos()
- ftell()
- ftello()
- ftrylockfile()
- funlockfile()
- fwrite()
- getc()
- getc_unlocked()
- getchar()
- getchar_unlocked()
- perror()
- printf()

- `putc()`
- `putc_unlocked()`
- `putchar()`
- `putchar_unlocked()`
- `puts()`
- `remove()`
- `rename()`
- `rewind()`
- `scanf()`
- `setbuf()`
- `setvbuf()`
- `snprintf()`
- `sprintf()`
- `sscanf()`
- `stderr`
- `stdin`
- `stdout`
- `tmpfile()`
- `ungetc()`
- `vfprintf()`
- `vfscanf()`
- `vprintf()`
- `vscanf()`
- `vsprintf()`
- `vsprintf()`
- `vsscanf()`

19.26 <stdlib.h>

The following methods and variables in <stdlib.h> are supported:

- _Exit()
- abort()
- abs()
- atexit()
- atof()
- atoi()
- atol()
- atoll()
- bsearch()
- calloc()
- div()
- exit()
- free()
- getenv()
- labs()
- ldiv()
- llabs()
- lldiv()
- malloc()
- mblen()
- mbstowcs()
- mbtowc()
- qsort()
- rand()
- rand_r()
- realloc()
- setenv()
- srand()
- strtod()
- strtof()
- strtol()
- strtold()

19.27 <string.h>

The following methods and variables in <string.h> are supported:

- memchr()
- memcmp()
- memcpy()
- memmove()
- memset()
- strcat()
- strchr()
- strcmp()
- strcoll()
- strcpy()
- strcspn()
- strerror()
- strerror_r()
- strlen()
- strncat()
- strncmp()
- strncpy()
- strpbrk()
- strrchr()
- strspn()
- strstr()
- strtok()
- strtok_r()
- strxfrm()

19.28 <sys/mman.h>

The following methods and variables in <sys/mman.h> are supported:

- `mlock()`
- `mlockall()`
- `mmap()`
- `mprotect()`
- `msync()`
- `munlock()`
- `munlockall()`
- `munmap()`
- `shm_open()`
- `shm_unlink()`

19.29 <sys/select.h>

The following methods and variables in <sys/select.h> are supported:

- FD_CLR()
- FD_ISSET()
- FD_SET()
- FD_ZERO()
- select()

The following methods and variables in <sys/select.h> are not supported:

- pselect()

19.30 <sys/socket.h>

The following methods and variables in <sys/socket.h> are supported:

- accept()
- bind()
- connect()
- getpeername()
- getsockname()
- getsockopt()
- listen()
- recv()
- recvfrom()
- recvmsg()
- send()
- sendmsg()
- sendto()
- setsockopt()
- shutdown()
- socket()
- socketpair()

The following methods and variables in <sys/socket.h> are not supported:

- sockatmark()

19.31 <sys/stat.h>

The following methods and variables in <sys/stat.h> are supported:

- chmod()
- fchmod()
- fstat()
- lstat()
- mkdir()
- mkfifo()
- stat()
- umask()

19.32 <sys/times.h>

The following methods and variables in <sys/times.h> are supported:

- times()

19.33 <sys/utsname.h>

The following methods and variables in <sys/utsname.h> are supported:

- `uname()`

19.34 <sys/wait.h>

The following methods and variables in <sys/wait.h> are supported:

- wait()
- waitpid()

19.35 <time.h>

The following methods and variables in <time.h> are supported:

- asctime_r()
- clock()
- clock_getres()
- clock_gettime()
- clock_nanosleep()
- clock_settime()
- ctime_r()
- difftime()
- gmtime()
- gmtime_r()
- localtime()
- localtime_r()
- mktime()
- nanosleep()
- strftime()
- time()
- timer_create()
- timer_delete()
- timer_getoverrun()
- timer_gettime()
- timer_settime()
- tzname
- tzset()

The following methods in <time.h> are implemented as stubs returning -1 and setting errno to ENOSYS:

- clock_getcpuclockid()

19.36 <unistd.h>

The following methods and variables in <unistd.h> are supported:

- `_exit()`
- `access()`
- `alarm()`
- `chdir()`
- `chown()`
- `close()`
- `dup()`
- `dup2()`
- `environ`
- `fchown()`
- `fdatasync()`
- `fpathconf()`
- `fsync()`
- `ftruncate()`
- `getcwd()`
- `getegid()`
- `geteuid()`
- `getgid()`
- `getgroups()`
- `gethostname()`
- `getlogin()`
- `getpgrp()`
- `getpid()`
- `getppid()`
- `getuid()`
- `link()`
- `lseek()`
- `pathconf()`
- `pause()`
- `pipe()`
- `read()`
- `rmdir()`

- `setegid()`
- `seteuid()`
- `setgid()`
- `setsid()`
- `setuid()`
- `sleep()`
- `sysconf()`
- `unlink()`
- `write()`

The following methods in `<unistd.h>` are implemented as stubs returning -1 and setting `errno` to `ENOSYS`:

- `execl()`
- `execle()`
- `execv()`
- `execve()`
- `fork()`

The following methods and variables in `<unistd.h>` are not supported:

- `confstr()`

19.37 <wchar.h>

The following methods and variables in <wchar.h> are supported:

- btowc()
- fgetwc()
- fgetws()
- fputwc()
- fputws()
- fwide()
- fwprintf()
- fwscanf()
- getwc()
- getwchar()
- mbrlen()
- mbrtowc()
- mbsinit()
- mbsrtowcs()
- putwc()
- putwchar()
- swprintf()
- swscanf()
- ungetwc()
- vfwprintf()
- vfwscanf()
- vswprintf()
- vswscanf()
- vwprintf()
- vwscanf()
- wcrctomb()
- wcscat()
- wcschr()
- wcscmp()
- wcscoll()
- wcsncpy()
- wcsncpy()

- wcsftime()
- wcslen()
- wcsncat()
- wcsncmp()
- wcsncpy()
- wcsrchr()
- wcsrchr()
- wcsrtoombs()
- wcsspn()
- wcsstr()
- wcstod()
- wcstof()
- wcstok()
- wcstol()
- wcstold()
- wcstoll()
- wcstoul()
- wcstoull()
- wcsxfrm()
- wctob()
- wmemchr()
- wmemcmp()
- wmemcpy()
- wmemmove()
- wmemset()
- wprintf()
- wscanf()

19.38 `<wctype.h>`

The following methods and variables in `<wctype.h>` are supported:

- `iswalnum()`
- `iswalpha()`
- `iswblank()`
- `iswcntrl()`
- `iswctype()`
- `iswdigit()`
- `iswgraph()`
- `iswlower()`
- `iswprint()`
- `iswpunct()`
- `iswspace()`
- `iswupper()`
- `iswxdigit()`
- `towctrans()`
- `towlower()`
- `towupper()`
- `wctrans()`
- `wctype()`

SCA 2.2.2 AEP

This chapter has a subsection per header file to detail the methods provided by RTEMS that are in that header file.

20.1 Summary

The follow table summarizes alignment with the SCA 2.2.2 AEP standard:

Supported	244
ENOSYS	0
Not supported	0

20.2 <ctype.h>

The following methods and variables in <ctype.h> are supported:

- isalnum()
- isalpha()
- iscntrl()
- isdigit()
- isgraph()
- islower()
- isprint()
- ispunct()
- isspace()
- isupper()
- isxdigit()
- tolower()
- toupper()

20.3 <dirent.h>

The following methods and variables in <dirent.h> are supported:

- `closedir()`
- `opendir()`
- `readdir()`
- `readdir_r()`
- `rewinddir()`

20.4 <fcntl.h>

The following methods and variables in <fcntl.h> are supported:

- creat()
- open()

20.5 <locale.h>

The following methods and variables in <locale.h> are supported:

- `setlocale()`

20.6 <math.h>

The following methods and variables in <math.h> are supported:

- `acos()`
- `asin()`
- `atan()`
- `atan2()`
- `ceil()`
- `cos()`
- `cosh()`
- `exp()`
- `fabs()`
- `floor()`
- `fmod()`
- `frexp()`
- `ldexp()`
- `log()`
- `log10()`
- `modf()`
- `pow()`
- `sin()`
- `sinh()`
- `sqrt()`
- `tan()`
- `tanh()`

20.7 <pthread.h>

The following methods and variables in <pthread.h> are supported:

- pthread_attr_destroy()
- pthread_attr_getdetachstate()
- pthread_attr_getguardsize()
- pthread_attr_getinheritsched()
- pthread_attr_getschedparam()
- pthread_attr_getschedpolicy()
- pthread_attr_getscope()
- pthread_attr_getstack()
- pthread_attr_getstackaddr()
- pthread_attr_getstacksize()
- pthread_attr_init()
- pthread_attr_setdetachstate()
- pthread_attr_setguardsize()
- pthread_attr_setinheritsched()
- pthread_attr_setschedparam()
- pthread_attr_setschedpolicy()
- pthread_attr_setscope()
- pthread_attr_setstack()
- pthread_attr_setstackaddr()
- pthread_attr_setstacksize()
- pthread_cancel()
- pthread_cleanup_pop()
- pthread_cleanup_push()
- pthread_cond_broadcast()
- pthread_cond_destroy()
- pthread_cond_init()
- pthread_cond_signal()
- pthread_cond_timedwait()
- pthread_cond_wait()
- pthread_condattr_destroy()
- pthread_condattr_getclock()
- pthread_condattr_getpshared()

- pthread_condattr_init()
- pthread_condattr_setclock()
- pthread_condattr_setpshared()
- pthread_create()
- pthread_detach()
- pthread_equal()
- pthread_exit()
- pthread_getschedparam()
- pthread_getspecific()
- pthread_join()
- pthread_key_create()
- pthread_key_delete()
- pthread_mutex_destroy()
- pthread_mutex_getprioceiling()
- pthread_mutex_init()
- pthread_mutex_lock()
- pthread_mutex_setprioceiling()
- pthread_mutex_timedlock()
- pthread_mutex_trylock()
- pthread_mutex_unlock()
- pthread_mutexattr_destroy()
- pthread_mutexattr_getprioceiling()
- pthread_mutexattr_getprotocol()
- pthread_mutexattr_getpshared()
- pthread_mutexattr_gettype()
- pthread_mutexattr_init()
- pthread_mutexattr_setprioceiling()
- pthread_mutexattr_setprotocol()
- pthread_mutexattr_setpshared()
- pthread_mutexattr_settype()
- pthread_once()
- pthread_self()
- pthread_setcancelstate()
- pthread_setcanceltype()

- `pthread_setschedparam()`
- `pthread_setspecific()`
- `pthread_testcancel()`

20.8 <semaphore.h>

The following methods and variables in <semaphore.h> are supported:

- `sem_close()`
- `sem_destroy()`
- `sem_getvalue()`
- `sem_init()`
- `sem_open()`
- `sem_post()`
- `sem_trywait()`
- `sem_unlink()`
- `sem_wait()`

20.9 <setjmp.h>

The following methods and variables in <setjmp.h> are supported:

- longjmp()
- setjmp()

20.10 <signal.h>

The following methods and variables in <signal.h> are supported:

- kill()
- pthread_kill()
- pthread_sigmask()
- raise()
- sigaction()
- sigaddset()
- sigdelset()
- sigemptyset()
- sigfillset()
- sigismember()
- signal()
- sigpending()
- sigprocmask()
- sigsuspend()
- sigwait()

20.11 <stdio.h>

The following methods and variables in <stdio.h> are supported:

- clearerr()
- fclose()
- fdopen()
- feof()
- ferror()
- fflush()
- fgetc()
- fgets()
- fileno()
- fopen()
- fprintf()
- fputc()
- fputs()
- fread()
- freopen()
- fscanf()
- fseek()
- fseeko()
- ftell()
- ftello()
- fwrite()
- getc()
- getchar()
- gets()
- perror()
- printf()
- putc()
- putchar()
- puts()
- remove()
- rename()
- rewind()

- `scanf()`
- `setbuf()`
- `setvbuf()`
- `sprintf()`
- `sscanf()`
- `tmpfile()`
- `tmpnam()`
- `ungetc()`

20.12 <stdlib.h>

The following methods and variables in <stdlib.h> are supported:

- abort()
- abs()
- atof()
- atoi()
- atol()
- bsearch()
- calloc()
- free()
- malloc()
- qsort()
- rand()
- rand_r()
- realloc()
- srand()

20.13 <string.h>

The following methods and variables in <string.h> are supported:

- strcat()
- strchr()
- strcmp()
- strcpy()
- strcspn()
- strlen()
- strncat()
- strncmp()
- strncpy()
- strpbrk()
- strrchr()
- strspn()
- strstr()
- strtok()
- strtok_r()

20.14 <sys/stat.h>

The following methods and variables in <sys/stat.h> are supported:

- `fstat()`
- `mkdir()`
- `stat()`

20.15 <time.h>

The following methods and variables in <time.h> are supported:

- asctime()
- asctime_r()
- clock_getres()
- clock_gettime()
- clock_settime()
- ctime()
- ctime_r()
- gmtime()
- gmtime_r()
- localtime()
- localtime_r()
- mktime()
- nanosleep()
- strftime()
- time()
- timer_create()
- timer_delete()
- timer_getoverrun()
- timer_gettime()
- timer_settime()

20.16 <unistd.h>

The following methods and variables in <unistd.h> are supported:

- access()
- chdir()
- close()
- fpathconf()
- getcwd()
- link()
- lseek()
- pathconf()
- pause()
- read()
- rmdir()
- unlink()
- write()

20.17 <utime.h>

The following methods and variables in <utime.h> are supported:

- `utime()`

SCA 4.1 ULTRA LIGHTWEIGHT AEP

This chapter has a subsection per header file to detail the methods provided by RTEMS that are in that header file.

21.1 Summary

The follow table summarizes alignment with the SCA 4.1 Ultra Lightweight AEP standard:

Supported	22
ENOSYS	0
Not supported	0

21.2 <math.h>

The following methods and variables in <math.h> are supported:

- `exp()`
- `exp2()`

21.3 <mqqueue.h>

The following methods and variables in <mqqueue.h> are supported:

- mq_open()
- mq_receive()
- mq_send()

21.4 <pthread.h>

The following methods and variables in <pthread.h> are supported:

- pthread_attr_getstacksize()
- pthread_attr_init()
- pthread_attr_setinheritsched()
- pthread_create()
- pthread_mutex_init()
- pthread_mutex_lock()
- pthread_mutex_unlock()
- pthread_mutexattr_setprioceiling()
- pthread_mutexattr_settype()
- pthread_self()

21.5 <semaphore.h>

The following methods and variables in <semaphore.h> are supported:

- `sem_init()`
- `sem_post()`
- `sem_wait()`

21.6 <time.h>

The following methods and variables in <time.h> are supported:

- `clock_getres()`
- `clock_gettime()`
- `timer_create()`
- `timer_settime()`

SCA 4.1 LIGHTWEIGHT AEP

This chapter has a subsection per header file to detail the methods provided by RTEMS that are in that header file.

22.1 Summary

The follow table summarizes alignment with the SCA 4.1 Lightweight AEP standard:

Supported	111
ENOSYS	0
Not supported	0

22.2 <ctype.h>

The following methods and variables in <ctype.h> are supported:

- `isalnum()`
- `isalpha()`
- `iscntrl()`
- `isdigit()`
- `isgraph()`
- `islower()`
- `isprint()`
- `ispunct()`
- `isspace()`
- `isupper()`
- `isxdigit()`
- `tolower()`
- `toupper()`

22.3 <fcntl.h>

The following methods and variables in <fcntl.h> are supported:

- open()

22.4 <math.h>

The following methods and variables in <math.h> are supported:

- `acos()`
- `acosh()`
- `asin()`
- `asinh()`
- `atan()`
- `atan2()`
- `atanh()`
- `ceil()`
- `cos()`
- `cosh()`
- `exp()`
- `exp2()`
- `fabs()`
- `floor()`
- `fmod()`
- `frexp()`
- `ldexp()`
- `log()`
- `log10()`
- `log2()`
- `modf()`
- `pow()`
- `round()`
- `sin()`
- `sinh()`
- `sqrt()`
- `tan()`
- `tanh()`
- `trunc()`

22.5 <mqqueue.h>

The following methods and variables in <mqqueue.h> are supported:

- mq_open()
- mq_receive()
- mq_send()

22.6 <pthread.h>

The following methods and variables in <pthread.h> are supported:

- pthread_attr_destroy()
- pthread_attr_getschedparam()
- pthread_attr_getstacksize()
- pthread_attr_init()
- pthread_attr_setinheritsched()
- pthread_cond_broadcast()
- pthread_cond_destroy()
- pthread_cond_init()
- pthread_cond_signal()
- pthread_cond_wait()
- pthread_create()
- pthread_mutex_init()
- pthread_mutex_lock()
- pthread_mutex_unlock()
- pthread_mutexattr_getpshared()
- pthread_mutexattr_setprioceiling()
- pthread_mutexattr_settype()
- pthread_self()

22.7 <semaphore.h>

The following methods and variables in <semaphore.h> are supported:

- `sem_getvalue()`
- `sem_init()`
- `sem_post()`
- `sem_wait()`

22.8 <stdio.h>

The following methods and variables in <stdio.h> are supported:

- `sscanf()`

22.9 <stdlib.h>

The following methods and variables in <stdlib.h> are supported:

- abs()
- atof()
- atoi()
- atol()
- bsearch()
- calloc()
- free()
- malloc()
- qsort()
- rand()
- realloc()
- srand()

22.10 <string.h>

The following methods and variables in <string.h> are supported:

- memchr()
- memcmp()
- memcpy()
- memmove()
- memset()
- strchr()
- strcmp()
- strcspn()
- strlen()
- strncat()
- strncmp()
- strncpy()
- strpbrk()
- strrchr()
- strspn()
- strstr()
- strtok()

22.11 <time.h>

The following methods and variables in <time.h> are supported:

- `clock_getres()`
- `clock_gettime()`
- `gmtime()`
- `localtime()`
- `mktime()`
- `strftime()`
- `time()`
- `timer_create()`
- `timer_gettime()`
- `timer_settime()`

22.12 <unistd.h>

The following methods and variables in <unistd.h> are supported:

- close()
- read()
- write()

SCA 4.1 [FULL] AEP

This chapter has a subsection per header file to detail the methods provided by RTEMS that are in that header file.

23.1 Summary

The follow table summarizes alignment with the SCA 4.1 [Full] AEP standard:

Supported	256
ENOSYS	0
Not supported	0

23.2 <arpa/inet.h>

The following methods and variables in <arpa/inet.h> are supported:

- htonl()
- htons()
- ntohl()
- ntohs()

23.3 <ctype.h>

The following methods and variables in <ctype.h> are supported:

- `isalnum()`
- `isalpha()`
- `isblank()`
- `iscntrl()`
- `isdigit()`
- `isgraph()`
- `islower()`
- `isprint()`
- `ispunct()`
- `isspace()`
- `isupper()`
- `isxdigit()`
- `tolower()`
- `toupper()`

23.4 <dirent.h>

The following methods and variables in <dirent.h> are supported:

- `closedir()`
- `opendir()`
- `readdir()`
- `readdir_r()`
- `rewinddir()`

23.5 <errno.h>

The following methods and variables in <errno.h> are supported:

- errno

23.6 <fcntl.h>

The following methods and variables in <fcntl.h> are supported:

- creat()
- open()

23.7 <math.h>

The following methods and variables in <math.h> are supported:

- `acos()`
- `acosh()`
- `asin()`
- `asinh()`
- `atan()`
- `atan2()`
- `atanh()`
- `ceil()`
- `cos()`
- `cosh()`
- `exp()`
- `exp2()`
- `fabs()`
- `floor()`
- `fmod()`
- `frexp()`
- `ldexp()`
- `log()`
- `log10()`
- `log2()`
- `modf()`
- `pow()`
- `round()`
- `sin()`
- `sinh()`
- `sqrt()`
- `tan()`
- `tanh()`
- `trunc()`

23.8 <mqqueue.h>

The following methods and variables in <mqqueue.h> are supported:

- mq_close()
- mq_getattr()
- mq_notify()
- mq_open()
- mq_receive()
- mq_send()
- mq_setattr()
- mq_unlink()

23.9 <pthread.h>

The following methods and variables in <pthread.h> are supported:

- pthread_attr_destroy()
- pthread_attr_getdetachstate()
- pthread_attr_getschedparam()
- pthread_attr_getstacksize()
- pthread_attr_init()
- pthread_attr_setinheritsched()
- pthread_cancel()
- pthread_cleanup_pop()
- pthread_cleanup_push()
- pthread_cond_broadcast()
- pthread_cond_destroy()
- pthread_cond_init()
- pthread_cond_signal()
- pthread_cond_timedwait()
- pthread_cond_wait()
- pthread_condattr_destroy()
- pthread_condattr_init()
- pthread_create()
- pthread_detach()
- pthread_equal()
- pthread_exit()
- pthread_getschedparam()
- pthread_getspecific()
- pthread_join()
- pthread_key_create()
- pthread_key_delete()
- pthread_mutex_destroy()
- pthread_mutex_init()
- pthread_mutex_lock()
- pthread_mutex_trylock()
- pthread_mutex_unlock()
- pthread_mutexattr_getpshared()

- `pthread_mutexattr_init()`
- `pthread_mutexattr_setprioceiling()`
- `pthread_mutexattr_settype()`
- `pthread_once()`
- `pthread_self()`
- `pthread_setcancelstate()`
- `pthread_setcanceltype()`
- `pthread_setschedparam()`
- `pthread_setspecific()`
- `pthread_testcancel()`

23.10 <semaphore.h>

The following methods and variables in <semaphore.h> are supported:

- `sem_close()`
- `sem_destroy()`
- `sem_getvalue()`
- `sem_init()`
- `sem_open()`
- `sem_post()`
- `sem_timedwait()`
- `sem_trywait()`
- `sem_unlink()`
- `sem_wait()`

23.11 <signal.h>

The following methods and variables in <signal.h> are supported:

- kill()
- pthread_kill()
- pthread_sigmask()
- raise()
- sigaction()
- sigaddset()
- sigdelset()
- sigemptyset()
- sigfillset()
- sigismember()
- signal()
- sigpending()
- sigprocmask()
- sigsuspend()
- sigwait()

23.12 <stdarg.h>

The following methods and variables in <stdarg.h> are supported:

- va_arg()
- va_copy()
- va_end()
- va_start()

23.13 <stdio.h>

The following methods and variables in <stdio.h> are supported:

- clearerr()
- fclose()
- fdopen()
- feof()
- ferror()
- fflush()
- fgetc()
- fgets()
- fileno()
- fopen()
- fprintf()
- fputc()
- fputs()
- fread()
- freopen()
- fscanf()
- fseek()
- fseeko()
- ftell()
- ftello()
- fwrite()
- getc()
- getchar()
- perror()
- printf()
- putc()
- putchar()
- remove()
- rename()
- rewind()
- setbuf()
- setvbuf()

- `snprintf()`
- `sscanf()`
- `ungetc()`
- `vsnprintf()`

23.14 <stdlib.h>

The following methods and variables in <stdlib.h> are supported:

- abort()
- abs()
- atof()
- atoi()
- atol()
- bsearch()
- calloc()
- free()
- labs()
- malloc()
- qsort()
- rand()
- rand_r()
- realloc()
- srand()
- strtod()
- strtol()
- strtoul()

23.15 <string.h>

The following methods and variables in <string.h> are supported:

- memchr()
- memcmp()
- memcpy()
- memmove()
- memset()
- strchr()
- strcmp()
- strcoll()
- strcspn()
- strerror()
- strerror_r()
- strlen()
- strncat()
- strncmp()
- strncpy()
- strpbrk()
- strrchr()
- strspn()
- strstr()
- strtok()
- strtok_r()
- strxfrm()

23.16 <sys/select.h>

The following methods and variables in <sys/select.h> are supported:

- `select()`

23.17 <sys/socket.h>

The following methods and variables in <sys/socket.h> are supported:

- `accept()`
- `bind()`
- `connect()`
- `getsockopt()`
- `listen()`
- `recv()`
- `recvfrom()`
- `send()`
- `sendto()`
- `setsockopt()`
- `socket()`

23.18 <sys/stat.h>

The following methods and variables in <sys/stat.h> are supported:

- `fstat()`
- `mkdir()`
- `stat()`

23.19 <time.h>

The following methods and variables in <time.h> are supported:

- asctime_r()
- clock_getres()
- clock_gettime()
- clock_settime()
- ctime_r()
- gmtime()
- gmtime_r()
- localtime()
- localtime_r()
- mktime()
- nanosleep()
- strftime()
- time()
- timer_create()
- timer_delete()
- timer_getoverrun()
- timer_gettime()
- timer_settime()

23.20 <unistd.h>

The following methods and variables in <unistd.h> are supported:

- access()
- chdir()
- close()
- fpathconf()
- getcwd()
- link()
- lseek()
- pathconf()
- pause()
- read()
- rmdir()
- unlink()
- write()

GLOSSARY

POSIX

Portable Operating System Interface is a family of standards specified by the IEEE Computer Society for maintaining compatibility between operating systems.

INDEX

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POSIX, 849