**Product: MDK-ARM Standard 5.10**

**Component: ARM Compiler 5.04 update 1 (build 49)**

**Tool: armlink [5040049]**

**==============================================================================**

**Memory Map of the image**

**Image Entry point:** 0x000000cc

**Load Region LR\_IROM1** (Base: 0x00000000, Size: 0x00005814, Max: 0x0003d000, ABSOLUTE, COMPRESSED [0x000056f4])

**Execution Region ER\_IROM1** (Base: 0x00000000, Size: 0x000056e4, Max: 0x0003d000, ABSOLUTE)

**Base Addr Size Type Attr Idx E Section Name Object**

0x00000000 0x000000cc Code RO 3 RESET lpc2300.o

0x000000cc 0x00000008 Code RO 713 \* !!!main c\_t.l(\_\_main.o)

0x000000d4 0x0000003c Code RO 921 !!!scatter c\_t.l(\_\_scatter.o)

0x00000110 0x00000044 Code RO 919 !!dczerorl c\_t.l(\_\_dczerorl.o)

0x00000154 0x0000002c Code RO 923 !!handler\_zi c\_t.l(\_\_scatter\_zi.o)

0x00000180 0x00000004 Ven RO 684 .ARM.Collect$$\_printf\_percent$$00000000 c\_t.l(\_printf\_percent.o)

0x00000184 0x00000000 Code RO 684 .ARM.Collect$$\_printf\_percent$$00000000 c\_t.l(\_printf\_percent.o)

0x00000184 0x00000008 Code RO 683 .ARM.Collect$$\_printf\_percent$$00000009 c\_t.l(\_printf\_d.o)

0x0000018c 0x00000008 Code RO 682 .ARM.Collect$$\_printf\_percent$$0000000C c\_t.l(\_printf\_x.o)

0x00000194 0x00000008 Code RO 681 .ARM.Collect$$\_printf\_percent$$00000014 c\_t.l(\_printf\_s.o)

0x0000019c 0x00000008 Code RO 746 .ARM.Collect$$\_printf\_percent$$00000017 c\_t.l(\_printf\_percent\_end.o)

0x000001a4 0x00000008 Ven RO 798 .ARM.Collect$$libinit$$00000000 c\_t.l(libinit.o)

0x000001ac 0x00000002 Code RO 798 .ARM.Collect$$libinit$$00000000 c\_t.l(libinit.o)

0x000001ae 0x00000000 Code RO 811 .ARM.Collect$$libinit$$00000002 c\_t.l(libinit2.o)

0x000001ae 0x00000000 Code RO 814 .ARM.Collect$$libinit$$00000008 c\_t.l(libinit2.o)

0x000001ae 0x00000000 Code RO 816 .ARM.Collect$$libinit$$0000000A c\_t.l(libinit2.o)

0x000001ae 0x00000000 Code RO 818 .ARM.Collect$$libinit$$0000000C c\_t.l(libinit2.o)

0x000001ae 0x00000000 Code RO 821 .ARM.Collect$$libinit$$0000000F c\_t.l(libinit2.o)

0x000001ae 0x00000000 Code RO 823 .ARM.Collect$$libinit$$00000011 c\_t.l(libinit2.o)

0x000001ae 0x00000000 Code RO 825 .ARM.Collect$$libinit$$00000013 c\_t.l(libinit2.o)

0x000001ae 0x00000000 Code RO 827 .ARM.Collect$$libinit$$00000015 c\_t.l(libinit2.o)

0x000001ae 0x00000000 Code RO 829 .ARM.Collect$$libinit$$00000017 c\_t.l(libinit2.o)

0x000001ae 0x00000000 Code RO 831 .ARM.Collect$$libinit$$00000019 c\_t.l(libinit2.o)

0x000001ae 0x00000000 Code RO 833 .ARM.Collect$$libinit$$0000001B c\_t.l(libinit2.o)

0x000001ae 0x00000000 Code RO 835 .ARM.Collect$$libinit$$0000001D c\_t.l(libinit2.o)

0x000001ae 0x00000000 Code RO 837 .ARM.Collect$$libinit$$0000001F c\_t.l(libinit2.o)

0x000001ae 0x00000000 Code RO 839 .ARM.Collect$$libinit$$00000021 c\_t.l(libinit2.o)

0x000001ae 0x00000000 Code RO 841 .ARM.Collect$$libinit$$00000023 c\_t.l(libinit2.o)

0x000001ae 0x00000000 Code RO 845 .ARM.Collect$$libinit$$0000002A c\_t.l(libinit2.o)

0x000001ae 0x00000000 Code RO 847 .ARM.Collect$$libinit$$0000002C c\_t.l(libinit2.o)

0x000001ae 0x00000000 Code RO 849 .ARM.Collect$$libinit$$0000002E c\_t.l(libinit2.o)

0x000001ae 0x00000000 Code RO 851 .ARM.Collect$$libinit$$00000030 c\_t.l(libinit2.o)

0x000001ae 0x0000000c Code RO 852 .ARM.Collect$$libinit$$00000031 c\_t.l(libinit2.o)

0x000001ba 0x00000002 PAD

0x000001bc 0x00000008 Ven RO 876 .ARM.Collect$$libshutdown$$00000000 c\_t.l(libshutdown.o)

0x000001c4 0x00000004 Code RO 876 .ARM.Collect$$libshutdown$$00000000 c\_t.l(libshutdown.o)

0x000001c8 0x00000000 Code RO 903 .ARM.Collect$$libshutdown$$00000003 c\_t.l(libshutdown2.o)

0x000001c8 0x00000000 Code RO 906 .ARM.Collect$$libshutdown$$00000006 c\_t.l(libshutdown2.o)

0x000001c8 0x00000000 Code RO 909 .ARM.Collect$$libshutdown$$00000009 c\_t.l(libshutdown2.o)

0x000001c8 0x00000000 Code RO 911 .ARM.Collect$$libshutdown$$0000000B c\_t.l(libshutdown2.o)

0x000001c8 0x00000000 Code RO 914 .ARM.Collect$$libshutdown$$0000000E c\_t.l(libshutdown2.o)

0x000001c8 0x00000006 Code RO 915 .ARM.Collect$$libshutdown$$0000000F c\_t.l(libshutdown2.o)

0x000001ce 0x00000002 PAD

0x000001d0 0x00000000 Code RO 735 .ARM.Collect$$rtentry$$00000000 c\_t.l(rtentry.o)

0x000001d0 0x00000000 Code RO 761 .ARM.Collect$$rtentry$$00000002 c\_t.l(rtentry2.o)

0x000001d0 0x00000008 Code RO 773 .ARM.Collect$$rtentry$$00000004 c\_t.l(rtentry4.o)

0x000001d8 0x00000000 Code RO 763 .ARM.Collect$$rtentry$$00000009 c\_t.l(rtentry2.o)

0x000001d8 0x00000004 Code RO 764 .ARM.Collect$$rtentry$$0000000A c\_t.l(rtentry2.o)

0x000001dc 0x00000000 Code RO 766 .ARM.Collect$$rtentry$$0000000C c\_t.l(rtentry2.o)

0x000001dc 0x00000028 Code RO 767 .ARM.Collect$$rtentry$$0000000D c\_t.l(rtentry2.o)

0x00000204 0x00000004 Ven RO 802 .ARM.Collect$$rtexit$$00000000 c\_t.l(rtexit.o)

0x00000208 0x00000004 Code RO 802 .ARM.Collect$$rtexit$$00000000 c\_t.l(rtexit.o)

0x0000020c 0x00000000 Code RO 854 .ARM.Collect$$rtexit$$00000002 c\_t.l(rtexit2.o)

0x0000020c 0x00000004 Code RO 855 .ARM.Collect$$rtexit$$00000003 c\_t.l(rtexit2.o)

0x00000210 0x00000008 Code RO 856 .ARM.Collect$$rtexit$$00000004 c\_t.l(rtexit2.o)

0x00000218 0x00000020 Code RO 4 .text lpc2300.o

0x00000238 0x00000250 Code RO 11 .text main.o

0x00000488 0x000003a8 Code RO 123 .text adc.o

0x00000830 0x00000178 Code RO 187 .text ads7828.o

0x000009a8 0x000002c0 Code RO 223 .text errorinput.o

0x00000c68 0x00000100 Code RO 259 .text pwm.o

0x00000d68 0x0000052c Code RO 312 .text leddriver.o

0x00001294 0x000001e8 Code RO 333 .text mischardware.o

0x0000147c 0x00000010 Code RO 377 .text retarget.o

0x0000148c 0x0000014c Code RO 405 .text lm73.o

0x000015d8 0x0000009c Code RO 420 .text pcu.o

0x00001674 0x000002bc Code RO 438 .text pcucommands.o

0x00001930 0x000007fc Code RO 450 .text SharedLibrary.lib(i2c.o)

0x0000212c 0x0000043c Code RO 484 .text SharedLibrary.lib(timer.o)

0x00002568 0x00000230 Code RO 501 .text SharedLibrary.lib(irq.o)

0x00002798 0x00000100 Code RO 513 .text SharedLibrary.lib(pll.o)

0x00002898 0x00000480 Code RO 528 .text SharedLibrary.lib(ssp.o)

0x00002d18 0x000007c0 Code RO 546 .text SharedLibrary.lib(storedconfig.o)

0x000034d8 0x000010a4 Code RO 570 .text SharedLibrary.lib(serial.o)

0x0000457c 0x00000138 Code RO 594 .text SharedLibrary.lib(queue.o)

0x000046b4 0x00000448 Code RO 606 .text SharedLibrary.lib(spiflash.o)

0x00004afc 0x00000004 Code RO 622 .text c\_t.l(use\_no\_semi.o)

0x00004b00 0x00000008 Ven RO 626 .text c\_t.l(noretval\_\_2printf.o)

0x00004b08 0x0000001c Code RO 626 .text c\_t.l(noretval\_\_2printf.o)

0x00004b24 0x00000056 Code RO 634 .text c\_t.l(\_printf\_pad.o)

0x00004b7a 0x00000058 Code RO 636 .text c\_t.l(\_printf\_str.o)

0x00004bd2 0x00000002 PAD

0x00004bd4 0x00000008 Ven RO 638 .text c\_t.l(\_printf\_dec.o)

0x00004bdc 0x00000070 Code RO 638 .text c\_t.l(\_printf\_dec.o)

0x00004c4c 0x00000008 Ven RO 643 .text c\_t.l(\_printf\_hex\_int.o)

0x00004c54 0x0000005c Code RO 643 .text c\_t.l(\_printf\_hex\_int.o)

0x00004cb0 0x0000019c Code RO 678 .text c\_t.l(\_\_printf\_flags\_ss\_wp.o)

0x00004e4c 0x000000d4 Code RO 685 .text c\_t.l(rt\_memcpy.o)

0x00004f20 0x00000040 Code RO 687 .text c\_t.l(rt\_memclr.o)

0x00004f60 0x00000054 Code RO 689 .text c\_t.l(rt\_memclr\_w.o)

0x00004fb4 0x00000020 Code RO 691 .text c\_t.l(uread4.o)

0x00004fd4 0x00000020 Code RO 693 .text c\_t.l(uwrite4.o)

0x00004ff4 0x00000180 Code RO 695 .text c\_t.l(aeabi\_sdiv.o)

0x00005174 0x00000006 Code RO 711 .text c\_t.l(heapauxi.o)

0x0000517a 0x000000ba Code RO 740 .text c\_t.l(\_printf\_intcommon.o)

0x00005234 0x00000008 Ven RO 742 .text c\_t.l(\_printf\_char.o)

0x0000523c 0x00000032 Code RO 742 .text c\_t.l(\_printf\_char.o)

0x0000526e 0x00000002 PAD

0x00005270 0x0000002c Code RO 744 .text c\_t.l(\_printf\_char\_file.o)

0x0000529c 0x00000064 Code RO 747 .text c\_t.l(rt\_memcpy\_w.o)

0x00005300 0x00000004 Ven RO 749 .text c\_t.l(rtudiv10.o)

0x00005304 0x0000002c Code RO 749 .text c\_t.l(rtudiv10.o)

0x00005330 0x00000030 Code RO 777 .text c\_t.l(\_printf\_char\_common.o)

0x00005360 0x00000060 Code RO 779 .text c\_t.l(sys\_stackheap\_outer.o)

0x000053c0 0x0000000c Code RO 787 .text c\_t.l(exit.o)

0x000053cc 0x0000000c Code RO 799 .text c\_t.l(libspace.o)

0x000053d8 0x00000024 Code RO 696 .text\_udiv c\_t.l(aeabi\_sdiv.o)

0x000053fc 0x00000008 Ven RO 934 Veneer$$Code anon$$obj.o

0x00005404 0x00000002 Code RO 632 i.\_\_ARM\_common\_call\_via\_r1 c\_t.l(\_\_printf.o)

0x00005406 0x00000002 Code RO 630 i.\_\_ARM\_common\_call\_via\_r2 c\_t.l(\_\_printf.o)

0x00005408 0x0000000e Code RO 671 i.\_is\_digit c\_t.l(\_\_printf\_wp.o)

0x00005416 0x00000002 PAD

0x00005418 0x00000054 Code RO 725 x$fpl$ffixu fz\_ts.l(ffixu.o)

0x0000546c 0x0000005c Code RO 730 x$fpl$fflt fz\_ts.l(fflt\_noclz.o)

0x000054c8 0x00000100 Code RO 733 x$fpl$fmul fz\_ts.l(fmul.o)

0x000055c8 0x000000a8 Code RO 755 x$fpl$fnaninf fz\_ts.l(fnaninf.o)

0x00005670 0x00000010 Code RO 757 x$fpl$fretinf fz\_ts.l(fretinf.o)

0x00005680 0x00000000 Code RO 759 x$fpl$usenofp fz\_ts.l(usenofp.o)

0x00005680 0x00000008 Data RO 191 .constdata ads7828.o

0x00005688 0x00000028 Data RO 644 .constdata c\_t.l(\_printf\_hex\_int.o)

0x000056b0 0x00000011 Data RO 679 .constdata c\_t.l(\_\_printf\_flags\_ss\_wp.o)

0x000056c1 0x00000003 PAD

0x000056c4 0x00000020 Data RO 917 Region$$Table anon$$obj.o

**Execution Region RW\_IRAM1** (Base: 0x40000000, Size: 0x00002658, Max: 0x00008000, ABSOLUTE, COMPRESSED [0x00000010])

**Base Addr Size Type Attr Idx E Section Name Object**

0x40000000 0x00000014 Data RW 12 .data main.o

0x40000014 0x00000008 Data RW 131 .data adc.o

0x4000001c 0x00000018 Data RW 192 .data ads7828.o

0x40000034 0x00000010 Data RW 228 .data errorinput.o

0x40000044 0x00000014 Data RW 265 .data pwm.o

0x40000058 0x0000002c Data RW 315 .data leddriver.o

0x40000084 0x00000002 Data RW 339 .data mischardware.o

0x40000086 0x00000002 PAD

0x40000088 0x00000004 Data RW 379 .data retarget.o

0x4000008c 0x0000000c Data RW 407 .data lm73.o

0x40000098 0x00000024 Data RW 452 .data SharedLibrary.lib(i2c.o)

0x400000bc 0x00000010 Data RW 485 .data SharedLibrary.lib(timer.o)

0x400000cc 0x00000010 Data RW 529 .data SharedLibrary.lib(ssp.o)

0x400000dc 0x00000010 Data RW 548 .data SharedLibrary.lib(storedconfig.o)

0x400000ec 0x00000040 Data RW 572 .data SharedLibrary.lib(serial.o)

0x4000012c 0x00000001 Data RW 607 .data SharedLibrary.lib(spiflash.o)

0x4000012d 0x00000003 PAD

0x40000130 0x00000020 Zero RW 130 .bss adc.o

0x40000150 0x00000030 Zero RW 190 .bss ads7828.o

0x40000180 0x00000030 Zero RW 227 .bss errorinput.o

0x400001b0 0x00000320 Zero RW 264 .bss pwm.o

0x400004d0 0x00000060 Zero RW 314 .bss leddriver.o

0x40000530 0x00000030 Zero RW 406 .bss lm73.o

0x40000560 0x00000014 Zero RW 451 .bss SharedLibrary.lib(i2c.o)

0x40000574 0x00000038 Zero RW 547 .bss SharedLibrary.lib(storedconfig.o)

0x400005ac 0x00001b40 Zero RW 571 .bss SharedLibrary.lib(serial.o)

0x400020ec 0x00000060 Zero RW 800 .bss c\_t.l(libspace.o)

0x4000214c 0x00000004 PAD

0x40002150 0x00000000 Zero RW 2 HEAP lpc2300.o

0x40002150 0x00000508 Zero RW 1 STACK lpc2300.o

**==============================================================================**

**Image component sizes**

**Code (inc. data) RO Data RW Data ZI Data Debug Object Name**

936 32 0 8 32 4085 adc.o

376 20 8 24 48 1715 ads7828.o

704 72 0 16 48 2852 errorinput.o

1324 56 0 44 96 5052 leddriver.o

332 16 0 12 48 1698 lm73.o

236 56 0 0 1288 548 lpc2300.o

592 52 0 20 0 18304 main.o

488 56 0 2 0 2949 mischardware.o

156 0 0 0 0 1633 pcu.o

700 64 0 0 0 1858 pcucommands.o

256 12 0 20 800 1688 pwm.o

16 0 0 4 0 2395 retarget.o

**----------------------------------------------------------------------**

6124 436 40 152 2360 44777 Object Totals

8 0 32 0 0 0 (incl. Generated)

0 0 0 2 0 0 (incl. Padding)

**----------------------------------------------------------------------**

**Code (inc. data) RO Data RW Data ZI Data Debug Library Member Name**

2044 140 0 36 20 15507 i2c.o

560 164 0 0 0 2532 irq.o

256 16 0 0 0 705 pll.o

312 88 0 0 0 1762 queue.o

4260 116 0 64 6976 10503 serial.o

1096 60 0 1 0 4402 spiflash.o

1152 220 0 16 0 2767 ssp.o

1984 44 0 16 56 8782 storedconfig.o

1084 128 0 16 0 4213 timer.o

68 2 0 0 0 0 \_\_dczerorl.o

8 0 0 0 0 68 \_\_main.o

4 0 0 0 0 120 \_\_printf.o

412 6 17 0 0 92 \_\_printf\_flags\_ss\_wp.o

14 0 0 0 0 60 \_\_printf\_wp.o

60 8 0 0 0 0 \_\_scatter.o

44 0 0 0 0 0 \_\_scatter\_zi.o

58 0 0 0 0 112 \_printf\_char.o

48 4 0 0 0 96 \_printf\_char\_common.o

44 6 0 0 0 88 \_printf\_char\_file.o

8 0 0 0 0 0 \_printf\_d.o

120 18 0 0 0 88 \_printf\_dec.o

100 4 40 0 0 84 \_printf\_hex\_int.o

186 0 0 0 0 96 \_printf\_intcommon.o

86 0 0 0 0 116 \_printf\_pad.o

4 0 0 0 0 0 \_printf\_percent.o

8 0 0 0 0 0 \_printf\_percent\_end.o

8 0 0 0 0 0 \_printf\_s.o

88 0 0 0 0 84 \_printf\_str.o

8 0 0 0 0 0 \_printf\_x.o

420 0 0 0 0 148 aeabi\_sdiv.o

12 0 0 0 0 64 exit.o

6 0 0 0 0 136 heapauxi.o

10 0 0 0 0 0 libinit.o

12 0 0 0 0 0 libinit2.o

12 0 0 0 0 0 libshutdown.o

6 0 0 0 0 0 libshutdown2.o

12 4 0 0 96 68 libspace.o

36 6 0 0 0 84 noretval\_\_2printf.o

64 0 0 0 0 68 rt\_memclr.o

84 0 0 0 0 80 rt\_memclr\_w.o

212 0 0 0 0 68 rt\_memcpy.o

100 0 0 0 0 80 rt\_memcpy\_w.o

0 0 0 0 0 0 rtentry.o

44 4 0 0 0 0 rtentry2.o

8 0 0 0 0 0 rtentry4.o

8 0 0 0 0 0 rtexit.o

12 0 0 0 0 0 rtexit2.o

48 0 0 0 0 68 rtudiv10.o

96 0 0 0 0 80 sys\_stackheap\_outer.o

32 0 0 0 0 68 uread4.o

4 0 0 0 0 68 use\_no\_semi.o

32 0 0 0 0 68 uwrite4.o

84 4 0 0 0 84 ffixu.o

92 0 0 0 0 68 fflt\_noclz.o

256 4 0 0 0 84 fmul.o

168 0 0 0 0 96 fnaninf.o

16 0 0 0 0 68 fretinf.o

0 0 0 0 0 0 usenofp.o

**----------------------------------------------------------------------**

16020 1046 60 152 7152 53825 Library Totals

10 0 3 3 4 0 (incl. Padding)

**----------------------------------------------------------------------**

Code (inc. data) RO Data RW Data ZI Data Debug Library Name

12748 976 0 149 7052 51173 SharedLibrary.lib

2646 62 57 0 96 2252 c\_t.l

616 8 0 0 0 400 fz\_ts.l

**----------------------------------------------------------------------**

16020 1046 60 152 7152 53825 Library Totals

**----------------------------------------------------------------------**

**==============================================================================**

**Code (inc. data) RO Data RW Data ZI Data Debug**

22144 1482 100 304 9512 95278 Grand Totals

22144 1482 100 16 9512 95278 ELF Image Totals (compressed)

22144 1482 100 16 0 0 ROM Totals

**==============================================================================**

**Total RO Size (Code + RO Data) 22244 ( 21.72kB)**

**Total RW Size (RW Data + ZI Data) 9816 ( 9.59kB)**

**Total ROM Size (Code + RO Data + RW Data) 22260 ( 21.74kB)**

**==============================================================================**