

Object files for main and startup

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MINGW64~/ahmed/Documents/Embedded systems/Mastering Embedded System/Working_Dir/Embedded_system_online_diploma/unit3_Embedded_C/unit3_lesson3/Lab_3_startupC
son3/Lab_3_startupC (main)
$ arm-none-eabi-objdump.exe -h startup.o
startup.o:      file format elf32-littlearm

Sections:
Idx Name          Size      VMA           LMA     File off  Algn
 0 .text          000000bc 00000000 00000000 00000034 2**2
CONTENTS, ALLOC, LOAD, RELOC, READONLY, CODE
 1 .data          00000000 00000000 00000000 000000f0 2**0
CONTENTS, ALLOC, LOAD, DATA
 2 .bss           00000000 00000000 00000000 000000f0 2**0
ALLOC
 3 .vectors        0000001c 00000000 00000000 000000f0 2**2
CONTENTS, ALLOC, LOAD, RELOC, DATA
 4 .debug_info     00000176 00000000 00000000 0000010c 2**0
CONTENTS, RELOC, READONLY, DEBUGGING
 5 .debug_abbrev    00000006 00000000 00000000 00000252 2**0
CONTENTS, READONLY, DEBUGGING
 6 .debug_loc       00000004 00000000 00000000 00000338 2**0
CONTENTS, READONLY, DEBUGGING
 7 .debug_ranges   00000020 00000000 00000000 000003bc 2**0
CONTENTS, RELOC, READONLY, DEBUGGING
 8 .debug_line      000000ae 00000000 00000000 000003dc 2**0
CONTENTS, RELOC, READONLY, DEBUGGING
 9 .debug_str       000001b6 00000000 00000000 0000048a 2**0
CONTENTS, READONLY, DEBUGGING
10 .comment         00000012 00000000 00000000 00000647 2**0
CONTENTS, READONLY
11 .ARM.attributes 00000033 00000000 00000000 00000659 2**0
CONTENTS, READONLY
12 .debug_frame     0000004c 00000000 00000000 0000068c 2**2
CONTENTS, RELOC, READONLY, DEBUGGING

ahmed@ahmed-cvpc:~/Documents/~/ahmed/Documents/Embedded systems/Mastering Embedded system/working_dir/Embedded_system_online_diploma/unit3_Embedded_C/unit3_les
son3/Lab_3_startupC (main)
$ arm-none-eabi-objdump.exe -h main.o
main.o:         file format elf32-littlearm

Sections:
Idx Name          Size      VMA           LMA     File off  Algn
 0 .text          000000b4 00000000 00000000 00000034 2**2
CONTENTS, ALLOC, LOAD, READONLY, CODE
 1 .data          00000004 00000000 00000000 00000048 2**2
CONTENTS, ALLOC, LOAD, DATA
 2 .bss           00000000 00000000 00000000 000000ec 2**0
ALLOC
 3 .rodata         00000004 00000000 00000000 000000ec 2**2
CONTENTS, ALLOC, LOAD, READONLY, DATA
 4 .debug_info     000000f2 00000000 00000000 000000f0 2**0
CONTENTS, RELOC, READONLY, DEBUGGING
 5 .debug_abbrev    00000006 00000000 00000000 000001a2 2**0
CONTENTS, READONLY, DEBUGGING
 6 .debug_loc       00000018 00000000 00000000 0000027f 2**0
CONTENTS, READONLY, DEBUGGING
 7 .debug_ranges   00000020 00000000 00000000 000002b7 2**0
CONTENTS, RELOC, READONLY, DEBUGGING
 8 .debug_line      00000096 00000000 00000000 000002d7 2**0
CONTENTS, RELOC, READONLY, DEBUGGING
 9 .debug_str       00000160 00000000 00000000 00000372 2**0
CONTENTS, READONLY, DEBUGGING
10 .comment         00000012 00000000 00000000 000004d2 2**0
CONTENTS, READONLY
11 .ARM.attributes 00000033 00000000 00000000 000004e4 2**0
CONTENTS, READONLY
12 .debug_frame     0000002c 00000000 00000000 00000518 2**2
CONTENTS, RELOC, READONLY, DEBUGGING
```

Map file

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D:\ahmed\Documents\Embedded systems\Mastering Embedded System\Working_Dir\Embedded_system_online_diploma\unit3_Embedded_C\unit3_lesson3\Lab_3_startupC\Map_file.map - Sublime Text (UNREGISTERED)
File Edit Selection Find View Goto Tools Project Preferences Help

linker_script.ld  Map_file.map - Lab_3_startupC  Map_file.map - Lab_2_startup5

1
2 Allocating common symbols
3 Common symbol      size      file
4
5 x                  0x3      main.o
6
7 Memory Configuration
8
9 Name               Origin          Length          Attributes
10 flash              0x08000000      0x00020000      xr
11 sram                0x20000000      0x00005000      xrw
12 *default*          0x00000000      0xffffffff
13
14 Linker script and memory map
15
16
17 .text               0x08000000      0x190
18 *(.vectors*)
19 .vectors            0x08000000      0x1c startup.o
20                  0x08000000      vectors
21
22 *(.text*)
23 .text               0x0800001c      0xb4 main.o
24                  0x0800001c      main
25 .text               0x080000d0      0xbc startup.o
26                  0x080000d0      H_Fault_Handler
27                  0x080000d0      BPS_Fault
28                  0x080000d0      MM_Fault_Handler
29                  0x080000d0      Usage_Fault_Handler
30                  0x080000d0      Default_Handler
31                  0x080000d0      NMI_Handler
32                  0x080000d0      Reset_Handler
33
34 *(.rodata)
35 .rodata             0x0800018c      0x4 main.o
36                  0x0800018c      const_variables
37                  0x08000190      _F_text = .
38
39 .glue_7              0x08000190      0x0
40 .glue_7             0x00000000      0x0 linker stubs
41
42 .glue_7t            0x08000190      0x0
43 .glue_7t            0x00000000      0x0 linker stubs
44
45 .vfp11_veneer        0x08000190      0x0
46 .vfp11_veneer       0x00000000      0x0 linker stubs
47
48 .v4_bx               0x08000190      0x0
49 .v4_bx              0x00000000      0x0 linker stubs
50
51 .ip1t                0x08000190      0x0
52 .ip1t               0x00000000      0x0 main.o
53
```

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D:\ahmed\Documents\Embedded systems\Mastering Embedded System\Working_Dir\Embedded_system_online_diploma\unit3_Embedded_C\unit3_lesson3\Lab_3_startup\Map_file.map - Sublime Text (UNREGISTERED)
File Edit Selection Find View Goto Tools Project Preferences Help
linker_script.ld  Map_file.map — Lab_3_startupC  Map_file.map — Lab_2_startupS
52 .rel_dyn 0x00000190 0x0
53 .rel_plt 0x00000000 0x0 main.o
54
55 .data 0x20000000 0x4 load address 0x00000190
56 0x20000000 _S_data = .
57
58 *(.data) 0x20000000 0x4 main.o
59 0x20000000 g_variables
60 .data 0x20000004 0x0 startup.o
61 0x20000004 . = ALIGN (0x4)
62 0x20000004 _E_data = .
63
64 .igot.plt 0x20000004 0x0 load address 0x00000194
65 .igot.plt 0x00000000 0x0 main.o
66
67 .bss 0x20000004 0x1003 load address 0x00000194
68 0x20000004 _S_bss = .
69
70 *(.bss) 0x20000004 0x0 main.o
71 .bss 0x20000004 0x0 startup.o
72 0x20000004 _E_bss = .
73 0x20000004 . = ALIGN (0x4)
74 0x20000004 . = (. + 0x1000)
75 *Fill* 0x20000004 0x1000
76 0x20000004 _stack_top = .
77 COMMON 0x20000004 0x3 main.o
78 0x20000004 x
79
80 LOAD main.o
81 LOAD startup.o
82 OUTPUT(ahmed_cortexM3.elf elf32-littlearm)
83
84 .debug_info 0x00000000 0x268
85 .debug_info 0x00000000 0xf2 main.o
86 .debug_info 0x000000f2 0x176 startup.o
87
88 .debug_abbrev 0x00000000 0x173
89 .debug_abbrev 0x00000000 0x9d main.o
90 .debug_abbrev 0x0000009d 0xd6 startup.o
91
92 .debug_loc 0x00000000 0x9c
93 .debug_loc 0x00000000 0x38 main.o
94 .debug_loc 0x00000038 0x64 startup.o
95
96 .debug_ranges 0x00000000 0x40
97 .debug_ranges 0x00000000 0x20 main.o
98 .debug_ranges 0x00000020 0x20 startup.o
99
100
101 .debug_line 0x00000000 0x149
102 .debug_line 0x00000000 0x9b main.o
103 .debug_line 0x0000009b 0xae startup.o
104
105 .debug_str 0x00000000 0x1ac
106 .debug_str 0x00000000 0x12c main.o
107 .debug_str 0x0000012c 0x160 (size before relaxing)
108 0x0 startup.o
109 0x1bd (size before relaxing)
110
111 .comment 0x00000000 0x11
112 .comment 0x00000000 0x11 main.o
113 .comment 0x00000000 0x12 (size before relaxing)
114 .comment 0x00000000 0x12 startup.o
115
116 .ARM.attributes 0x00000000 0x33
117 .ARM.attributes 0x00000000 0x33 main.o
118 .ARM.attributes 0x00000033 0x33 startup.o
119
120 .debug_frame 0x00000000 0x78
121 .debug_frame 0x00000000 0x2c main.o
122 .debug_frame 0x0000002c 0x4c startup.o
123
124
125
126
Line 72, Column 21 main (3) Spaces: 4 Plain Text
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File Edit Selection Find View Goto Tools Project Preferences Help
linker_script.ld  Map_file.map — Lab_3_startupC  Map_file.map — Lab_2_startupS
85 .debug_info 0x000000f2 0x176 startup.o
86
87 .debug_abbrev 0x00000000 0x173
88 .debug_abbrev 0x00000000 0x9d main.o
89 .debug_abbrev 0x0000009d 0xd6 startup.o
90
91 .debug_loc 0x00000000 0x9c
92 .debug_loc 0x00000000 0x38 main.o
93 .debug_loc 0x00000038 0x64 startup.o
94
95 .debug_ranges 0x00000000 0x40
96 .debug_ranges 0x00000000 0x20 main.o
97 .debug_ranges 0x00000020 0x20 startup.o
98
99
100 .debug_line 0x00000000 0x149
101 .debug_line 0x00000000 0x9b main.o
102 .debug_line 0x0000009b 0xae startup.o
103
104 .debug_str 0x00000000 0x1ac
105 .debug_str 0x00000000 0x12c main.o
106 .debug_str 0x0000012c 0x160 (size before relaxing)
107 0x0 startup.o
108 0x1bd (size before relaxing)
109
110
111 .comment 0x00000000 0x11
112 .comment 0x00000000 0x11 main.o
113 .comment 0x00000000 0x12 (size before relaxing)
114 .comment 0x00000000 0x12 startup.o
115
116 .ARM.attributes 0x00000000 0x33
117 .ARM.attributes 0x00000000 0x33 main.o
118 .ARM.attributes 0x00000033 0x33 startup.o
119
120 .debug_frame 0x00000000 0x78
121 .debug_frame 0x00000000 0x2c main.o
122 .debug_frame 0x0000002c 0x4c startup.o
123
124
125
126
Line 72, Column 21 main (3) Spaces: 4 Plain Text
```