### 1. Symbols

### a) Main.o:

0 R const\_variables

0 T main

 $0 D R_ODR$ 

### b) **Startup.o:**

U \_E bss

U \_E\_DATA

U \_E\_text

U \_S\_bss

U S DATA

U \_stack\_top

0 W Bus\_Fault

0 T Default\_Handler

0 W H\_fault\_Handler

U main

0 W MM\_Fault\_Handler

0 W NMI\_Handler

0000000c T Reset\_Handler

0 W Usage\_Fault\_Handler

0 D vectors

## c) Learn in depth.elf:

20000004 B \_E\_bss

20000004 D \_E\_DATA

8000184 T \_E\_text

20000004 B \_S\_bss

20000000 D \_S\_DATA

20001004 B \_stack\_top

0800001c W Bus\_Fault

8000180 T const\_variables

0800001c T Default\_Handler 0800001c W H\_fault\_Handler 080000d8 T main 0800001c W MM\_Fault\_Handler 0800001c W NMI\_Handler R\_ODR 20000000 D 8000028 T Reset\_Handler 0800001c W Usage\_Fault\_Handler 8000000 T vectors 0800001c W Usage\_Fault\_Handler 8000000 T vectors

## 2. Sections:

Idx	Name	Size	VMA	LMA	File off	Algn
0	.text	000000a8	00000000	00000000	00000034	2**2
		CONTENTS,	ALLOC, LOA	AD, RELOC,	READONLY,	CODE
1	.data	00000004	00000000	00000000	00000dc	2**2
		CONTENTS,	ALLOC, LOA	AD, DATA		
2	.bss	00000000	00000000	00000000	000000e0	2**0
		ALLOC				
3	.rodata	00000004	00000000	00000000	000000e0	2**2
		CONTENTS,	ALLOC, LOA	AD, READONI	Y, DATA	
4	.debug_info	00000152	00000000	00000000	00000e4	2**0
	5-	CONTENTS,	RELOC, REA	ADONLY, DEE		
5	.debug_abbrev	000000e5	00000000	00000000	00000236	2**0
	5-	CONTENTS,	READONLY.	DEBUGGING		
6	.debug_loc	00000038	00000000	00000000	0000031b	2**0
	<b>5</b>	CONTENTS,	READONLY,	DEBUGGING		
7	.debug_aranges		00000000	00000000	00000353	2**0
-	<u>g_</u> g	CONTENTS,		ADONLY, DE		
8	.debug_line	000000a3	00000000	00000000	00000373	2**0
	<u>j</u>	CONTENTS,		ADONLY, DE	BUGGING	
9	.debug_str	0000010b	00000000	00000000	00000416	2**0
-	- u. u. u. y u u.	CONTENTS,	READONLY,	DEBUGGING		_ •
10	.comment				00000521	2**0
	. commerce				00000322	
11	.ARM.attribute			0000000	00000533	3 2**0
12	.debug frame			00000000	00000568	2**2
						- <b>-</b>
11	.comment .ARM.attribute .debug_frame	00000012 CONTENTS,	00000000 READONLY 3 00000000 READONLY 00000000	00000000	00000568	3 2**0

#### a) Main.o:

Idx Name Size VMA LMA File off Algn 0 .text 00000050 00000000 00000000 00000034 2\*\*2 CONTENTS, ALLOC, LOAD, READONLY, CODE

1	.data	00000000	00000000	00000000	00000084	2**0
2	.bss	CONTENTS, 00000000 ALLOC	ALLOC, LO. 00000000	AD, DATA 00000000	00000084	2**0
3	.debug_info	0000005c	00000000	00000000	00000084	2**0
4	.debug_abbrev	CONTENTS, 00000051	00000Ó00	ADONLY, DEF 00000000	BUGGING 000000e0	2**0
5	.debug_loc	CONTENTS, 0000002c	READONLY, 00000000	00000000	00000131	2**0
6	.debug_aranges		READONLY, 00000000	00000000	0000015d	2**0
7	.debug_line	CONTENTS, 0000003d	RELOC, RE. 00000000	ADONLY, DEF 00000000	BUGGING 0000017d	2**0
8	.debug_str	CONTENTS, 00000056	RELOC, RE. 0000000	ADONLY, DEF 00000000	BUGGING 000001ba	2**0
9	.comment	CONTENTS, 00000012	READONLY, 00000000	DEBUGGING 0000000	00000210	2**0
10	.ARM.attribute	CONTENTS,	READONLY			2**0
		CONTENTS,	READONLY			2**2
11	.debug_frame	00000028 CONTENTS,	00000000 RELOC, RE	00000000 ADONLY, DEI	00000254 BUGGING	Z^^Z

## b) Startup.o:

Idx 0	Name .text	Size 000000bc	VMA 00000000	LMA 00000000	File off 00000034	Algn 2**2
U	. text					
1	.data	CONTENTS, 00000000	00000000	AD, RELOC, 00000000	READONLY, 000000f0	CODE 2**0
2	.bss	CONTENTS, 00000000	ALLOC, LO. 00000000	00000000	000000f0	2**0
3	.vectors	ALLOC 0000001c	00000000	00000000	000000f0	2**2
		CONTENTS,		AD, RELOC,	DATA	
4	.debug_info	00000168	00000000	00000000	0000010c	2**0
		CONTENTS,	RELOC, REA	ADONLY, DEI	BUGGING	
5	.debug_abbrev	00000c2	00000000	00000000	00000274	2**0
	3—	CONTENTS,	READONLY.	DEBUGGING		
6	.debug_loc	00000064	00000000	00000000	00000336	2**0
_		CONTENTS,		DEBUGGING		
7	.debug_arange:				0000039a	2**0
		CONTENTS,		ADONLY, DEI	BUGGING	
8	.debug_line	000000ae	00000000	00000000	000003ba	2**0
	3—	CONTENTS.	RELOC. RE	ADONLY, DEI	BUGGING	
9	.debug_str	0000013f	00000000	00000000	00000468	2**0
-	- u. u. u. y_u u.	CONTENTS.				_ •
10	.comment	00000012	00000000	00000000	000005a7	2**0
10	· Commerce	CONTENTS,	READONLY	0000000	00000347	2 0
11	.ARM.attribut			0 0000000	000005b9	9 2**0
тт	.ANM. atti IDUL				5 00000303	2 2 0
12	dabua £mama	CONTENTS,		0000000	0000050-	2442
12	.debug_frame	0000004c	00000000	0000000	000005ec	2**2
		CONTENTS,	RELOC, REA	ADONLY, DEI	BUGGING	

# c) Learn\_in\_depth.elf:

Idx	Name	Size	VMA	LMA	File off	Algn
0	.text	00000184	08000000	08000000	0008000	2**2
_		CONTENTS,				
1	.data	00000004	20000000	08000184	00010000	2**2
		CONTENTS.	ALLOC, LOA	AD. DATA		
2	.bss	00001000	20000004	08000188	00010004	2**0
		ALLOC				_
3	.debug_info	000002ba	00000000	00000000	00010004	2**0
		CONTENTS,	READONLY,	DEBUGGING		
4	.debug_abbrev	000001a7	00000000	00000000	000102be	2**0
	<b>5</b>	CONTENTS,	READONLY,	DEBUGGING		-
5	.debug_loc	0000009c	00000000	00000000	00010465	2**0
		CONTENTS,	READONLY,	DEBUGGING		
6	.debug_aranges		0000000Ó	00000000	00010501	2**0
	<b>5_ 5</b>	CONTENTS,		DEBUGGING		
7	.debug_line	00000151	00000000	00000000	00010541	2**0
	3–	CONTENTS,	READONLY,	DEBUGGING		
8	.debug_str	0000014f	00000000	00000000	00010692	2**0
	3–	CONTENTS,	READONLY,	DEBUGGING		
9	.comment	00000011	00000000	00000000	000107e1	2**0
		CONTENTS,	READONLY			
10	.ARM.attribute			00000000	000107f2	2**0
		CONTENTS,	READONLY			
11	.debug_frame	00000078	00000000	00000000	00010828	2**2
	<b>5-</b>		READONLY,	DEBUGGING		
		,	,			