sarmfsw: SMFSW Toolbox (for ARM, STM32)

0.9

Generated by Doxygen 1.8.11

ii CONTENTS

Contents

1	Clas	s Index		1
	1.1	Class L	_ist	1
2	File	Index		2
	2.1	File Lis	st	2
3	Clas	s Docur	mentation	2
	3.1	StructB	Bitfield16 Struct Reference	2
		3.1.1	Detailed Description	3
		3.1.2	Member Data Documentation	3
	3.2	StructB	Sitfield32 Struct Reference	5
		3.2.1	Detailed Description	6
		3.2.2	Member Data Documentation	6
	3.3	StructB	Bitfield64 Struct Reference	9
		3.3.1	Detailed Description	12
		3.3.2	Member Data Documentation	12
	3.4	StructB	Bitfield8 Struct Reference	17
		3.4.1	Detailed Description	18
		3.4.2	Member Data Documentation	18
	3.5	UnionB	Byte Union Reference	19
		3.5.1	Detailed Description	19
		3.5.2	Member Data Documentation	19
	3.6	UnionD	DWord Union Reference	20
		3.6.1	Detailed Description	21
		3.6.2	Member Data Documentation	21
	3.7	UnionL	.Word Union Reference	22
		3.7.1	Detailed Description	23
		3.7.2	Member Data Documentation	23
	3.8		Vord Union Reference	25
	5	3.8.1	Detailed Description	26
		3.8.2	Member Data Documentation	26
		5.0.2	Mondo: Data Douthertation	20

1 Class Index 1

4	File	Docum	entation	27
	4.1	arm_a	ttributes.h File Reference	27
		4.1.1	Detailed Description	27
		4.1.2	Macro Definition Documentation	28
	4.2	arm_c	msis.h File Reference	28
		4.2.1	Detailed Description	28
	4.3	arm_n	nacros.h File Reference	29
		4.3.1	Detailed Description	31
		4.3.2	Macro Definition Documentation	32
		4.3.3	Function Documentation	35
	4.4	arm_s	tdclib.h File Reference	37
		4.4.1	Detailed Description	38
		4.4.2	Macro Definition Documentation	39
	4.5	arm_s	tm32.h File Reference	39
		4.5.1	Detailed Description	40
		4.5.2	Macro Definition Documentation	40
	4.6	arm_ty	/pedefs.h File Reference	41
		4.6.1	Detailed Description	43
		4.6.2	Typedef Documentation	43
		4.6.3	Enumeration Type Documentation	44
	4.7	sarmfs	w.h File Reference	45
		4.7.1	Detailed Description	45
		4.7.2	Typedef Documentation	46
		4.7.3	Enumeration Type Documentation	46
Inc	dex			47

1 Class Index

1.1 Class List

Here are the classes, structs, unions and interfaces with brief descriptions:

StructBitfield16 Bitfield 16b	2
StructBitfield32 Bitfield 32b	5
StructBitfield64 Bitfield 64b	9
StructBitfield8 Bitfield 8b	17
UnionByte Union for BYTE	19
UnionDWord Union for DWORD	20
UnionLWord Union for LWORD	22
UnionWord Union for WORD	25
2 File Index	
2.1 File List	
Here is a list of all files with brief descriptions:	
arm_attributes.h ARM common gcc attributes	27
arm_cmsis.h ARM link with CMSIS files	28
arm_macros.h ARM common macros	29
arm_stdclib.h ARM common standard c library wrapper macros	37
arm_stm32.h ARM common macros for STM32	39
arm_typedefs.h ARM common typedefs	41
sarmfsw.h ARM common headers for projects	45
3 Class Documentation	
3.1 StructBitfield16 Struct Reference	
Bitfield 16b.	
<pre>#include <arm_typedefs.h></arm_typedefs.h></pre>	

Public Attributes

• WORD b0:1

Bit 0 (LSB)

• WORD b1:1

Bit 1.

• WORD b2:1

Bit 2.

• WORD b3:1

Bit 3.

• WORD b4:1

Bit 4.

• WORD b5:1

Bit 5.

• WORD b6:1

Bit 6.

• WORD b7:1

Bit 7.

• WORD b8:1

Bit 8.

WORD b9:1

Bit 9.

• WORD b10:1

Bit 10.

• WORD b11:1

Bit 11.

• WORD b12:1

Bit 12.

• WORD b13:1

Bit 13.

• WORD b14:1

Bit 14.

• WORD b15:1

Bit 15 (MSB)

3.1.1 Detailed Description

Bitfield 16b.

3.1.2 Member Data Documentation

3.1.2.1 WORD StructBitfield16::b0

Bit 0 (LSB)

3.1.2.2 WORD StructBitfield16::b1

Bit 1.

3.1.2.3 WORD StructBitfield16::b10
Bit 10.
3.1.2.4 WORD StructBitfield16::b11
Bit 11.
3.1.2.5 WORD StructBitfield16::b12
Bit 12.
3.1.2.6 WORD StructBitfield16::b13
Bit 13.
3.1.2.7 WORD StructBitfield16::b14
Bit 14.
3.1.2.8 WORD StructBitfield16::b15
Bit 15 (MSB)
3.1.2.9 WORD StructBitfield16::b2
3.1.2.9 WORD StructBitfield16::b2 Bit 2.
Bit 2.
Bit 2. 3.1.2.10 WORD StructBitfield16::b3
Bit 2. 3.1.2.10 WORD StructBitfield16::b3 Bit 3.
Bit 2. 3.1.2.10 WORD StructBitfield16::b3 Bit 3. 3.1.2.11 WORD StructBitfield16::b4
Bit 2. 3.1.2.10 WORD StructBitfield16::b3 Bit 3. 3.1.2.11 WORD StructBitfield16::b4 Bit 4.
Bit 2. 3.1.2.10 WORD StructBitfield16::b3 Bit 3. 3.1.2.11 WORD StructBitfield16::b4 Bit 4. 3.1.2.12 WORD StructBitfield16::b5
Bit 2. 3.1.2.10 WORD StructBitfield16::b3 Bit 3. 3.1.2.11 WORD StructBitfield16::b4 Bit 4. 3.1.2.12 WORD StructBitfield16::b5 Bit 5.
Bit 2. 3.1.2.10 WORD StructBitfield16::b3 Bit 3. 3.1.2.11 WORD StructBitfield16::b4 Bit 4. 3.1.2.12 WORD StructBitfield16::b5 Bit 5. 3.1.2.13 WORD StructBitfield16::b6

```
3.1.2.15 WORD StructBitfield16::b8
Bit 8.
3.1.2.16 WORD StructBitfield16::b9
Bit 9.
The documentation for this struct was generated from the following file:
```

• arm_typedefs.h

3.2 StructBitfield32 Struct Reference

```
Bitfield 32b.
```

```
#include <arm_typedefs.h>
```

Public Attributes

• DWORD b0:1

Bit 0 (LSB)

• DWORD b1:1

Bit 1.

• DWORD b2:1

Bit 2.

DWORD b3:1

Bit 3.

DWORD b4:1

Bit 4.

• DWORD b5:1

Bit 5.

• DWORD b6:1

Bit 6.

• DWORD b7:1

Bit 7

• DWORD b8:1

Bit 8.

• DWORD b9:1

Bit 9.

• DWORD b10:1

Bit 10.

• DWORD b11:1

Bit 11.

DWORD b12:1

Bit 12.

DWORD b13:1

Bit 13.

• DWORD b14:1

Bit 14.

• DWORD b15:1

Bit 15.

DWORD b16:1

Bit 16.

• DWORD b17:1

Bit 17.

• DWORD b18:1

Bit 18.

• DWORD b19:1

Bit 19.

• DWORD b20:1

Bit 20.

• DWORD b21:1

Bit 21.

DWORD b22:1

Bit 22.

• DWORD b23:1

Bit 23.

• DWORD b24:1

Bit 24.

• DWORD b25:1

Bit 25.

DWORD b26:1

Bit 26.

• DWORD b27:1

Bit 27.

• DWORD b28:1

Bit 28.

• DWORD b29:1

Bit 29.

• DWORD b30:1

Bit 30.

• DWORD b31:1

Bit 31 (MSB)

3.2.1 Detailed Description

Bitfield 32b.

3.2.2 Member Data Documentation

3.2.2.1 DWORD StructBitfield32::b0

Bit 0 (LSB)

3.2.2.2 DWORD StructBitfield32::b1

Bit 1.

3.2.2.3 DWORD StructBitfield32::b10
Bit 10.
3.2.2.4 DWORD StructBitfield32::b11
Bit 11.
3.2.2.5 DWORD StructBitfield32::b12
Bit 12.
3.2.2.6 DWORD StructBitfield32::b13
Bit 13.
3.2.2.7 DWORD StructBitfield32::b14
Bit 14.
3.2.2.8 DWORD StructBitfield32::b15
Bit 15.
3.2.2.9 DWORD StructBitfield32::b16
Bit 16.
3.2.2.10 DWORD StructBitfield32::b17
Bit 17.
3.2.2.11 DWORD StructBitfield32::b18
Bit 18.
3.2.2.12 DWORD StructBitfield32::b19
Bit 19.
3.2.2.13 DWORD StructBitfield32::b2
Bit 2.
3.2.2.14 DWORD StructBitfield32::b20
Bit 20.

3.2.2.15 DWORD StructBitfield32::b21
Bit 21.
3.2.2.16 DWORD StructBitfield32::b22
Bit 22.
3.2.2.17 DWORD StructBitfield32::b23
Bit 23.
3.2.2.18 DWORD StructBitfield32::b24
Bit 24.
3.2.2.19 DWORD StructBitfield32::b25
Bit 25.
3.2.2.20 DWORD StructBitfield32::b26
Bit 26.
3.2.2.21 DWORD StructBitfield32::b27
Bit 27.
3.2.2.22 DWORD StructBitfield32::b28
Bit 28.
3.2.2.23 DWORD StructBitfield32::b29
Bit 29.
3.2.2.24 DWORD StructBitfield32::b3
Bit 3.
3.2.2.25 DWORD StructBitfield32::b30
Bit 30.
3.2.2.26 DWORD StructBitfield32::b31
Bit 31 (MSB)

```
3.2.2.27 DWORD StructBitfield32::b4
Bit 4.
3.2.2.28 DWORD StructBitfield32::b5
Bit 5.
3.2.2.29 DWORD StructBitfield32::b6
Bit 6.
3.2.2.30 DWORD StructBitfield32::b7
Bit 7.
3.2.2.31 DWORD StructBitfield32::b8
Bit 8.
3.2.2.32 DWORD StructBitfield32::b9
Bit 9.
The documentation for this struct was generated from the following file:  \\
    • arm_typedefs.h
3.3 StructBitfield64 Struct Reference
Bitfield 64b.
#include <arm_typedefs.h>
Public Attributes
    • LWORD b0:1
         Bit 0 (LSB)
    • LWORD b1:1
    • LWORD b2:1
         Bit 2.
    • LWORD b3:1
```

Bit 3.

• LWORD b4:1

Bit 4.

• LWORD b5:1

Bit 5.

• LWORD b6:1

Bit 6.

• LWORD b7:1

Bit 7.

LWORD b8:1

Bit 8.

LWORD b9:1

Bit 9.

LWORD b10:1

Bit 10.

• LWORD b11:1

Bit 11.

• LWORD b12:1

Bit 12.

• LWORD b13:1

Bit 13.

• LWORD b14:1

Bit 14.

LWORD b15:1

Bit 15.

• LWORD b16:1

Bit 16.

• LWORD b17:1

Bit 17.

• LWORD b18:1

Bit 18.

• LWORD b19:1

Bit 19.

• LWORD b20:1

Bit 20.

• LWORD b21:1

Bit 21.

• LWORD b22:1

Bit 22.

• LWORD b23:1

Bit 23.

• LWORD b24:1

Bit 24.

• LWORD b25:1

Bit 25.

LWORD b26:1

Bit 26.

• LWORD b27:1

Bit 27.

LWORD b28:1

Bit 28.

• LWORD b29:1

Bit 29.

• LWORD b30:1

Bit 30.

• LWORD b31:1

Bit 31.

LWORD b32:1

Bit 32.

• LWORD b33:1

Bit 33.

• LWORD b34:1

Bit 34.

• LWORD b35:1

Bit 35.

LWORD b36:1

Bit 36.

• LWORD b37:1

Bit 37.

• LWORD b38:1

Bit 38.

• LWORD b39:1

Bit 39.

• LWORD b40:1

Bit 40.

• LWORD b41:1

Bit 41.

LWORD b42:1

Bit 42.

LWORD b43:1

Bit 43.

• LWORD b44:1

Bit 44.

• LWORD b45:1

Bit 45.

• LWORD b46:1

Bit 46.

• LWORD b47:1

Bit 47.

• LWORD b48:1

Bit 48.

• LWORD b49:1

Bit 49.

• LWORD b50:1

Bit 50.

LWORD b51:1

Bit 51.

• LWORD b52:1

Bit 52.

• LWORD b53:1

Bit 53.

• LWORD b54:1

Bit 54.

• LWORD b55:1

Bit 55.

LWORD b56:1

Bit 56.

• LWORD b57:1

```
Bit 57.
    • LWORD b58:1
         Bit 58.
    • LWORD b59:1
         Bit 59.
    • LWORD b60:1
         Bit 60.

    LWORD b61:1

         Bit 61.
    • LWORD b62:1
         Bit 62.
    • LWORD b63:1
         Bit 63 (MSB)
3.3.1 Detailed Description
Bitfield 64b.
3.3.2 Member Data Documentation
3.3.2.1 LWORD StructBitfield64::b0
Bit 0 (LSB)
3.3.2.2 LWORD StructBitfield64::b1
Bit 1.
3.3.2.3 LWORD StructBitfield64::b10
Bit 10.
3.3.2.4 LWORD StructBitfield64::b11
Bit 11.
3.3.2.5 LWORD StructBitfield64::b12
Bit 12.
3.3.2.6 LWORD StructBitfield64::b13
Bit 13.
3.3.2.7 LWORD StructBitfield64::b14
Bit 14.
```

3.3.2.8 LWORD StructBitfield64::b15
Bit 15.
3.3.2.9 LWORD StructBitfield64::b16
Bit 16.
3.3.2.10 LWORD StructBitfield64::b17
Bit 17.
3.3.2.11 LWORD StructBitfield64::b18
Bit 18.
3.3.2.12 LWORD StructBitfield64::b19
Bit 19.
3.3.2.13 LWORD StructBitfield64::b2
Bit 2.
3.3.2.14 LWORD StructBitfield64::b20
Bit 20.
3.3.2.15 LWORD StructBitfield64::b21
Bit 21.
3.3.2.16 LWORD StructBitfield64::b22
Bit 22.
3.3.2.17 LWORD StructBitfield64::b23
Bit 23.
3.3.2.18 LWORD StructBitfield64::b24
Bit 24.
3.3.2.19 LWORD StructBitfield64::b25
Bit 25.

3.3.2.20	LWORD StructBitfield64::b26
Bit 26.	
3.3.2.21	LWORD StructBitfield64::b27
Bit 27.	
3.3.2.22	LWORD StructBitfield64::b28
Bit 28.	
3.3.2.23	LWORD StructBitfield64::b29
Bit 29.	
3.3.2.24	LWORD StructBitfield64::b3
Bit 3.	
3.3.2.25	LWORD StructBitfield64::b30
Bit 30.	
3.3.2.26	LWORD StructBitfield64::b31
Bit 31.	
3.3.2.27	LWORD StructBitfield64::b32
Bit 32.	
3.3.2.28	LWORD StructBitfield64::b33
Bit 33.	
3.3.2.29	LWORD StructBitfield64::b34
Bit 34.	
3.3.2.30	LWORD StructBitfield64::b35
Bit 35.	
3.3.2.31	LWORD StructBitfield64::b36
Bit 36.	

3.3.2.32	LWORD StructBitfield64::b37
Bit 37.	
3.3.2.33	LWORD StructBitfield64::b38
Bit 38.	
3.3.2.34	LWORD StructBitfield64::b39
Bit 39.	
3.3.2.35	LWORD StructBitfield64::b4
Bit 4.	
3.3.2.36	LWORD StructBitfield64::b40
Bit 40.	
3.3.2.37	LWORD StructBitfield64::b41
Bit 41.	
3.3.2.38	LWORD StructBitfield64::b42
Bit 42.	
3.3.2.39	LWORD StructBitfield64::b43
Bit 43.	
3.3.2.40	LWORD StructBitfield64::b44
Bit 44.	
3.3.2.41	LWORD StructBitfield64::b45
Bit 45.	
3.3.2.42	LWORD StructBitfield64::b46
Bit 46.	
3.3.2.43	LWORD StructBitfield64::b47
Bit 47.	

3.3.2.44	LWORD StructBitfield64::b48
Bit 48.	
3.3.2.45	LWORD StructBitfield64::b49
Bit 49.	
3.3.2.46	LWORD StructBitfield64::b5
Bit 5.	
3.3.2.47	LWORD StructBitfield64::b50
Bit 50.	
3.3.2.48	LWORD StructBitfield64::b51
Bit 51.	
3.3.2.49	LWORD StructBitfield64::b52
Bit 52.	
3.3.2.50	LWORD StructBitfield64::b53
Bit 53.	
3.3.2.51	LWORD StructBitfield64::b54
Bit 54.	
3.3.2.52	LWORD StructBitfield64::b55
Bit 55.	
3.3.2.53	LWORD StructBitfield64::b56
Bit 56.	
3.3.2.54	LWORD StructBitfield64::b57
Bit 57.	
3.3.2.55	LWORD StructBitfield64::b58
Bit 58.	

Bit 59. 3.3.2.57 LWORD StructBitfield64::b60 Bit 6. 3.3.2.58 LWORD StructBitfield64::b60 Bit 60. 3.3.2.59 LWORD StructBitfield64::b61 Bit 61. 3.3.2.60 LWORD StructBitfield64::b62 Bit 62. 3.3.2.61 LWORD StructBitfield64::b63 Bit 63 (MSB) 3.3.2.62 LWORD StructBitfield64::b7 Bit 7. 3.3.2.63 LWORD StructBitfield64::b8 Bit 8. 3.3.2.64 LWORD StructBitfield64::b9 Bit 9. The documentation for this struct was generated from the following file: • arm_typedefs.h	3.3.2.56 LWORD StructBitfield64::b59
Bit 6. 3.3.2.58 LWORD StructBitfield64::b60 Bit 60. 3.3.2.59 LWORD StructBitfield64::b61 Bit 61. 3.3.2.60 LWORD StructBitfield64::b62 Bit 62. 3.3.2.61 LWORD StructBitfield64::b63 Bit 63 (MSB) 3.3.2.62 LWORD StructBitfield64::b7 Bit 7. 3.3.2.63 LWORD StructBitfield64::b8 Bit 8. 3.3.2.64 LWORD StructBitfield64::b9 Bit 9. The documentation for this struct was generated from the following file: • arm_typedefs.h	Bit 59.
3.3.2.58 LWORD StructBitfield64::b60 Bit 60. 3.3.2.59 LWORD StructBitfield64::b61 Bit 61. 3.3.2.60 LWORD StructBitfield64::b62 Bit 62. 3.3.2.61 LWORD StructBitfield64::b63 Bit 63 (MSB) 3.3.2.62 LWORD StructBitfield64::b7 Bit 7. 3.3.2.63 LWORD StructBitfield64::b8 Bit 8. 3.3.2.64 LWORD StructBitfield64::b9 Bit 9. The documentation for this struct was generated from the following file: • arm_typedefs.h	3.3.2.57 LWORD StructBitfield64::b6
Bit 60. 3.3.2.59 LWORD StructBitfield64::b61 Bit 61. 3.3.2.60 LWORD StructBitfield64::b62 Bit 62. 3.3.2.61 LWORD StructBitfield64::b63 Bit 63 (MSB) 3.3.2.62 LWORD StructBitfield64::b7 Bit 7. 3.3.2.63 LWORD StructBitfield64::b8 Bit 8. 3.3.2.64 LWORD StructBitfield64::b9 Bit 9. The documentation for this struct was generated from the following file: • arm_typedefs.h	Bit 6.
3.3.2.59 LWORD StructBitfield64::b61 Bit 61. 3.3.2.60 LWORD StructBitfield64::b62 Bit 62. 3.3.2.61 LWORD StructBitfield64::b63 Bit 63 (MSB) 3.3.2.62 LWORD StructBitfield64::b7 Bit 7. 3.3.2.63 LWORD StructBitfield64::b8 Bit 8. 3.3.2.64 LWORD StructBitfield64::b9 Bit 9. The documentation for this struct was generated from the following file: • arm_typedefs.h	3.3.2.58 LWORD StructBitfield64::b60
Bit 61. 3.3.2.60 LWORD StructBitfield64::b62 Bit 62. 3.3.2.61 LWORD StructBitfield64::b63 Bit 63 (MSB) 3.3.2.62 LWORD StructBitfield64::b7 Bit 7. 3.3.2.63 LWORD StructBitfield64::b8 Bit 8. 3.3.2.64 LWORD StructBitfield64::b9 Bit 9. The documentation for this struct was generated from the following file: • arm_typedefs.h	Bit 60.
3.3.2.60 LWORD StructBitfield64::b62 Bit 62. 3.3.2.61 LWORD StructBitfield64::b63 Bit 63 (MSB) 3.3.2.62 LWORD StructBitfield64::b7 Bit 7. 3.3.2.63 LWORD StructBitfield64::b8 Bit 8. 3.3.2.64 LWORD StructBitfield64::b9 Bit 9. The documentation for this struct was generated from the following file: • arm_typedefs.h	3.3.2.59 LWORD StructBitfield64::b61
Bit 62. 3.3.2.61 LWORD StructBitfield64::b63 Bit 63 (MSB) 3.3.2.62 LWORD StructBitfield64::b7 Bit 7. 3.3.2.63 LWORD StructBitfield64::b8 Bit 8. 3.3.2.64 LWORD StructBitfield64::b9 Bit 9. The documentation for this struct was generated from the following file: • arm_typedefs.h	Bit 61.
3.3.2.61 LWORD StructBitfield64::b63 Bit 63 (MSB) 3.3.2.62 LWORD StructBitfield64::b7 Bit 7. 3.3.2.63 LWORD StructBitfield64::b8 Bit 8. 3.3.2.64 LWORD StructBitfield64::b9 Bit 9. The documentation for this struct was generated from the following file: • arm_typedefs.h	3.3.2.60 LWORD StructBitfield64::b62
Bit 63 (MSB) 3.3.2.62 LWORD StructBitfield64::b7 Bit 7. 3.3.2.63 LWORD StructBitfield64::b8 Bit 8. 3.3.2.64 LWORD StructBitfield64::b9 Bit 9. The documentation for this struct was generated from the following file: • arm_typedefs.h	Bit 62.
3.3.2.62 LWORD StructBitfield64::b7 Bit 7. 3.3.2.63 LWORD StructBitfield64::b8 Bit 8. 3.3.2.64 LWORD StructBitfield64::b9 Bit 9. The documentation for this struct was generated from the following file: • arm_typedefs.h	3.3.2.61 LWORD StructBitfield64::b63
Bit 7. 3.3.2.63 LWORD StructBitfield64::b8 Bit 8. 3.3.2.64 LWORD StructBitfield64::b9 Bit 9. The documentation for this struct was generated from the following file: • arm_typedefs.h	Bit 63 (MSB)
3.3.2.63 LWORD StructBitfield64::b8 Bit 8. 3.3.2.64 LWORD StructBitfield64::b9 Bit 9. The documentation for this struct was generated from the following file: • arm_typedefs.h	3.3.2.62 LWORD StructBitfield64::b7
Bit 8. 3.3.2.64 LWORD StructBitfield64::b9 Bit 9. The documentation for this struct was generated from the following file: • arm_typedefs.h	Bit 7.
3.3.2.64 LWORD StructBitfield64::b9 Bit 9. The documentation for this struct was generated from the following file: • arm_typedefs.h	3.3.2.63 LWORD StructBitfield64::b8
Bit 9. The documentation for this struct was generated from the following file: • arm_typedefs.h	Bit 8.
The documentation for this struct was generated from the following file: • arm_typedefs.h	3.3.2.64 LWORD StructBitfield64::b9
• arm_typedefs.h	
	The documentation for this struct was generated from the following file:
3.4 StructBitfield8 Struct Reference	arm_typedefs.h
	3.4 StructBitfield8 Struct Reference
Bitfield 8b.	Bitfield 8b.

#include <arm_typedefs.h>

Public Attributes

```
• BYTE b0:1
          Bit 0 (LSB)
    • BYTE b1:1
          Bit 1.

    BYTE b2:1

          Bit 2.
    • BYTE b3:1
          Bit 3.
    • BYTE b4:1
          Bit 4.
    • BYTE b5:1
          Bit 5.
    • BYTE b6:1
          Bit 6.
    • BYTE b7:1
          Bit 7 (MSB)
3.4.1 Detailed Description
Bitfield 8b.
3.4.2 Member Data Documentation
3.4.2.1 BYTE StructBitfield8::b0
Bit 0 (LSB)
3.4.2.2 BYTE StructBitfield8::b1
Bit 1.
3.4.2.3 BYTE StructBitfield8::b2
Bit 2.
3.4.2.4 BYTE StructBitfield8::b3
Bit 3.
3.4.2.5 BYTE StructBitfield8::b4
Bit 4.
```

3.4.2.6 BYTE StructBitfield8::b5

Bit 5.

3.4.2.7 BYTE StructBitfield8::b6

Bit 6.

3.4.2.8 BYTE StructBitfield8::b7

Bit 7 (MSB)

The documentation for this struct was generated from the following file:

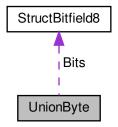
• arm_typedefs.h

3.5 UnionByte Union Reference

Union for BYTE.

#include <arm_typedefs.h>

Collaboration diagram for UnionByte:



Public Attributes

• BYTE Byte

BYTE.

• sBitfield8 Bits

Bits.

3.5.1 Detailed Description

Union for BYTE.

3.5.2 Member Data Documentation

3.5.2.1 sBitfield8 UnionByte::Bits

Bits.

3.5.2.2 BYTE UnionByte::Byte

BYTE.

The documentation for this union was generated from the following file:

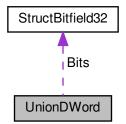
• arm_typedefs.h

3.6 UnionDWord Union Reference

Union for DWORD.

```
#include <arm_typedefs.h>
```

Collaboration diagram for UnionDWord:



Public Attributes

```
    DWORD DWord
```

32b

• WORD Word [2]

Words tab.

• BYTE Byte [4]

Bytes tab.

struct {

WORD W0:16 W0 LSWord.

WORD W1:16 W1 MSWord.

} Words

• struct {
 BYTE B0:8
 B0 LSByte.
BYTE B1:8
 B1.
BYTE B2:8
 B2.
BYTE B3:8

} Bytes

· sBitfield32 Bits

B3 MSByte.

Bits.

3.6.1 Detailed Description
Union for DWORD.
3.6.2 Member Data Documentation
3.6.2.1 BYTE UnionDWord::B0
B0 LSByte.
3.6.2.2 BYTE UnionDWord::B1
B1.
3.6.2.3 BYTE UnionDWord::B2
B2.
3.6.2.4 BYTE UnionDWord::B3
B3 MSByte.
3.6.2.5 sBitfield32 UnionDWord::Bits
Bits.
3.6.2.6 BYTE UnionDWord::Byte[4]
Bytes tab.
3.6.2.7 struct { } UnionDWord::Bytes
3.6.2.8 DWORD UnionDWord::DWord
32b
3.6.2.9 WORD UnionDWord::W0
W0 LSWord.
3.6.2.10 WORD UnionDWord::W1
W1 MSWord.
3.6.2.11 WORD UnionDWord::Word[2]
Words tab.

```
3.6.2.12 struct { ... } UnionDWord::Words
```

The documentation for this union was generated from the following file:

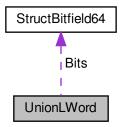
• arm_typedefs.h

3.7 UnionLWord Union Reference

Union for LWORD.

```
#include <arm_typedefs.h>
```

Collaboration diagram for UnionLWord:



Public Attributes

• LWORD LWord

64b

• DWORD DWord [2]

DWords tab.

• WORD Word [4]

Words tab.

• BYTE Byte [8]

Bytes tab.

struct {
 DWORD D0:32
 DW0 LSDWord.
 DWORD D1:32
 DW1 MSDWord.
 } DWords

```
struct {
       WORD W0:16
         W0 LSWord.
       WORD W1:16
         W1.
       WORD W2:16
         W2.
       WORD W3:16
         W3 MSWord.
     } Words
   struct {
       BYTE B0:8
         B0 LSByte.
       BYTE B1:8
         B1.
       BYTE B2:8
         B2.
       BYTE B3:8
         В3.
       BYTE B4:8
         В4.
       BYTE B5:8
         B5.
       BYTE B6:8
         B6.
       BYTE B7:8
         B7 MSByte.
     } Bytes
    • sBitfield64 Bits
        Bits.
3.7.1 Detailed Description
Union for LWORD.
3.7.2 Member Data Documentation
3.7.2.1 BYTE UnionLWord::B0
B0 LSByte.
3.7.2.2 BYTE UnionLWord::B1
B1.
3.7.2.3 BYTE UnionLWord::B2
B2.
```

3.7.2.4 BYTE UnionLWord::B3 B3. 3.7.2.5 BYTE UnionLWord::B4 B4. 3.7.2.6 BYTE UnionLWord::B5 B5. 3.7.2.7 BYTE UnionLWord::B6 B6. 3.7.2.8 BYTE UnionLWord::B7 B7 MSByte. 3.7.2.9 sBitfield64 UnionLWord::Bits Bits. 3.7.2.10 BYTE UnionLWord::Byte[8] Bytes tab. 3.7.2.11 struct { ... } UnionLWord::Bytes 3.7.2.12 DWORD UnionLWord::D0 DW0 LSDWord. 3.7.2.13 DWORD UnionLWord::D1 DW1 MSDWord. 3.7.2.14 DWORD UnionLWord::DWord[2] DWords tab. 3.7.2.15 struct $\{ \dots \}$ UnionLWord::DWords 3.7.2.16 LWORD UnionLWord::LWord

64b

3.7.2.17 WORD UnionLWord::W0

W0 LSWord.

3.7.2.18 WORD UnionLWord::W1

W1.

3.7.2.19 WORD UnionLWord::W2

W2.

3.7.2.20 WORD UnionLWord::W3

W3 MSWord.

3.7.2.21 WORD UnionLWord::Word[4]

Words tab.

3.7.2.22 struct { ... } UnionLWord::Words

The documentation for this union was generated from the following file:

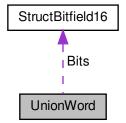
• arm_typedefs.h

3.8 UnionWord Union Reference

Union for WORD.

#include <arm_typedefs.h>

Collaboration diagram for UnionWord:



Public Attributes

arm_typedefs.h

```
• WORD Word
          16b
    • BYTE Byte [2]
         Bytes tab.
    struct {
        BYTE B0:8
          LSByte.
        BYTE B1:8
          MSByte.
      } Bytes
    • sBitfield16 Bits
         Bits.
3.8.1 Detailed Description
Union for WORD.
3.8.2 Member Data Documentation
3.8.2.1 BYTE UnionWord::B0
LSByte.
3.8.2.2 BYTE UnionWord::B1
MSByte.
3.8.2.3 sBitfield16 UnionWord::Bits
Bits.
3.8.2.4 BYTE UnionWord::Byte[2]
Bytes tab.
3.8.2.5 struct { ... } UnionWord::Bytes
3.8.2.6 WORD UnionWord::Word
16b
The documentation for this union was generated from the following file:
```

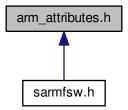
4 File Documentation 27

4 File Documentation

4.1 arm_attributes.h File Reference

ARM common gcc attributes.

This graph shows which files directly or indirectly include this file:



Macros

```
• #define INLINE___attribute__((always_inline))
```

Inline attribute for gcc

#define WEAK___attribute__((weak))

Weak attribute for gcc

• #define PACK__ _attribute__((__packed__))

Packed attribute for gcc

4.1.1 Detailed Description

ARM common gcc attributes.

Author

SMFSW

Version

v0.9

Date

2017

Copyright

MIT (c) 2017, SMFSW

4.1.2 Macro Definition Documentation

4.1.2.1 #define INLINE__ _attribute__((always_inline))

Inline attribute for gcc

4.1.2.2 #define PACK___attribute__((__packed__))

Packed attribute for gcc

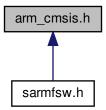
4.1.2.3 #define WEAK__ _attribute__((weak))

Weak attribute for gcc

4.2 arm_cmsis.h File Reference

ARM link with CMSIS files.

This graph shows which files directly or indirectly include this file:



4.2.1 Detailed Description

ARM link with CMSIS files.

Author

SMFSW

Version

v0.9

Date

2017

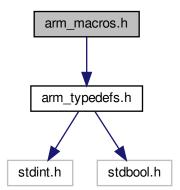
Copyright

MIT (c) 2017, SMFSW

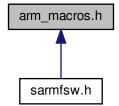
4.3 arm_macros.h File Reference

ARM common macros.

```
#include "arm_typedefs.h"
Include dependency graph for arm_macros.h:
```



This graph shows which files directly or indirectly include this file:



Macros

• #define Undefined -1

Undefined value.

• #define Null 0

Null Value.

#define pNull (void *) 0

Null pointer -> same as NULL in Stdlib.h.

• #define charNUL '\0'

Null Chai

• #define MAKEWORD(b1, b2) ((WORD) (((BYTE) (b1)) | ((WORD) ((BYTE) (b2))) * 0x100))

```
Make WORD from b1 and b2 with b1 as LSB.

    #define MAKELONG(w1, w2) ((DWORD) (((WORD) (w1)) | ((DWORD) ((WORD) (w2))) * 0x10000))

     Make LONG from w1 and w2 with w1 as LSB.

    #define LOWORD(I) ((WORD) (I))

     Get WORD LSW from LONG I.

    #define HIWORD(I) ((WORD) ((DWORD) (I) / 0x10000))

     Get WORD MSW from LONG I.

    #define LOBYTE(w) ((BYTE) (w))

     Get BYTE LSB from WORD w.

    #define HIBYTE(w) ((BYTE) ((WORD) (w) / 0x100))

     Get BYTE MSB from WORD w.

    #define BYTE_TO_PERC(b) ((BYTE) (((b) * 100) / 255))

     Converts a BYTE b (0-255) to percent (0-100)

    #define PERC_TO_BYTE(p) ((BYTE) (((p) > 100 ? 100 : (p)) * 255 / 100))

      Converts a BYTE p percentage (0-100) to BYTE (0-255) with max checking.

    #define TPSSUP MS(v, t) ((DWORD) (HAL GetTick() - (DWORD) (v)) > (DWORD) (t))

      Tests if v (a HStart variable) has reached time lapse stated in t (ms)

    #define TPSINF MS(v, t) ((DWORD) (HAL GetTick() - (DWORD) (v)) < (DWORD) (t))</li>

      Tests if v (a HStart variable) has not reached time lapse stated in t (ms)
#define OFFSETOF(typ, mbr) ((size_t) & (((typ*)0)->mbr))
      Computes the offset member mbr from struct typ.
• #define CAT(a, b) a##b
     Preprocessor Name concatenation.
• #define XCAT(a, b) CAT(a, b)
     Preprocessor Name concatenation (possible nesting)

    #define STR(s) ("" #s)

     Stringify an expression.

    #define binEval(exp) ((exp) ? true : false)

     boolean evaluation of expression exp

    #define nbinEval(exp) (!binEval(exp))

     complemented boolean evaluation of expression exp
• #define \max(a, b) ((a) >= (b) ? (a) : (b))
     Returns max value between a and b.

    #define min(a, b) ((a) <= (b) ? (a) : (b))</li>

     Returns min value between a and b.
• #define MIN3(a, b, c) ((b) \leq= (c) ? ((a) \leq= (b) ? (a) : (b)) : ((a) \leq= (c) ? (a) : (c)))
      Returns max value between a, b and c.
• #define MAX3(a, b, c) ((b) >= (c) ? ((a) >= (b) ? (a) : (b)) : ((a) >= (c) ? (a) : (c)))
     Returns min value between a, b and c.

    #define CLAMP(v, min, max) ((v) < (min) ? (min) : ((v) > (max) ? (max) : (v)))

     Returns the value between min and max from val.

    #define OneThird ((float) (1.0 / 3.0))

      1/3 approximation

    #define TwoThird ((float) (2.0 / 3.0))

     2/3 approximation

    #define Pi 3.141593f

     Approximate Pi calculation (4 * atan(1))

    #define RADIAN TO FLOAT(r) ((float) (((r) > 2*Pi ? 2*Pi : (r)) / 2*Pi))

    #define FLOAT_TO_RADIAN(f) ((float) ((((f) > 1.0f ? 1.0f : (f)) < 0.0f ? 0.0f : (f)) * 2*Pi)</li>

    #define DEGREE TO FLOAT(d) ((float) (((d) > 360.0f ? 360.0f : (d)) / 360.0f))
```

#define FLOAT_TO_DEGREE(f) ((float) ((((f) > 1.0f ? 1.0f : (f)) < 0.0f ? 0.0f : (f)) * 360.0f))

```
    #define conv8upto16Bits(val, nb) ((WORD) ((WORD) ((val) << (nb)) + (WORD) ((val) & (0xFF >> (8-(nb))))))

          converts val (8bits) to 8+nb bits (nb must be comprised between 0 & 8 bits)
    #define conv16upto32Bits(val, nb) ((DWORD) ((DWORD) ((val) << (nb)) + (DWORD) ((val) & (0xFFFF >>
      (16-(nb))))))
          converts val (16bits) to 16+nb bits (nb must be comprised between 0 & 16 bits)

    #define SWAP_BYTE(a, b) { BYTE c; c=(a); a=(b); b=c; }

          Swap BYTEs a & b.

    #define SWAP_WORD(a, b) { WORD c; c=(a); a=(b); b=c; }

          Swap WORDs a & b.
    • #define SWAP_DWORD(a, b) { DWORD c; c=(a); a=(b); b=c; }
          Swap DWORDs a & b.
Functions
    • uint16 t SWAP END16B (uint16 t w)
          Swap endians of the contents of a 16b value.

    uint32_t SWAP_END32B (uint32_t d)

          Swap endians of the contents of a 32b value.

    void SWAP_END16B_TAB (uint16_t tab[], uint16_t nb)

          Swap endians of a 16b tab.
    void SWAP_END32B_TAB (uint32_t tab[], uint16_t nb)
          Swap endians of a 32b tab.
    • bool inTolerance (int16_t val, int16_t ref, int16_t tolerance)
          Checks if val given as parameter is in tolerance.

    bool inRange (int16_t val, int16_t low, int16_t high)

          Checks if val given as parameter is in range.
4.3.1 Detailed Description
ARM common macros.
Author
     SMFSW
Version
      v0.9
Date
      2017
Copyright
```

MIT (c) 2017, SMFSW

```
4.3.2 Macro Definition Documentation
        #define binEval( exp ) ((exp) ? true : false)
boolean evaluation of expression exp
4.3.2.2 #define BYTE_TO_PERC( b ) ((BYTE) (((b) * 100) / 255))
Converts a BYTE b (0-255) to percent (0-100)
4.3.2.3 #define CAT( a, b) a##b
Preprocessor Name concatenation.
Warning
      No possible nesting, use XCAT in this case
4.3.2.4 #define charNUL '\0'
Null Char.
4.3.2.5 #define CLAMP(v, min, max) ((v) < (min) ? (min) : ((v) > (max) ? (max) : (v)))
Returns the value between min and max from val.
4.3.2.6 #define conv16upto32Bits( val, nb ) ((DWORD) ((DWORD) ((val) << (nb)) + (DWORD) ((val) & (0xFFFF >>
        (16-(nb))))))
converts val (16bits) to 16+nb bits (nb must be comprised between 0 & 16 bits)
Warning
      conversion output shall not exceed 32bits (input shall strictly be unsigned 16bits)
      nb shall be in range 0-16 (note that using 0 doesn't change val)
4.3.2.7 #define conv8upto16Bits( val, nb ) ((WORD) ((WORD) ((val) << (nb)) + (WORD) ((val) & (0xFF >> (8-(nb)))))
converts val (8bits) to 8+nb bits (nb must be comprised between 0 & 8 bits)
Warning
      conversion output shall not exceed 16bits (input shall strictly be unsigned 8bits)
      nb shall be in range 0-8 (note that using 0 doesn't change val)
```

```
4.3 arm_macros.h File Reference
4.3.2.8 #define DEGREE_TO_FLOAT( d) ((float) (((d) > 360.0f ? 360.0f : (d)) / 360.0f))
4.3.2.9 #define FLOAT_TO_DEGREE( f) ((float) ((((f) > 1.0f ? 1.0f : (f)) < 0.0f ? 0.0f : (f)) * 360.0f))
4.3.2.10 #define FLOAT_TO_RADIAN( f) ((float) ((((f) > 1.0f ? 1.0f : (f)) < 0.0f ? 0.0f : (f)) * 2*Pi)
4.3.2.11 #define HIBYTE( w) ((BYTE) ((WORD) (w) / 0x100))
Get BYTE MSB from WORD w.
4.3.2.12 #define HIWORD( / ) ((WORD) ((DWORD) (I) / 0x10000))
Get WORD MSW from LONG I.
4.3.2.13 #define LOBYTE( w) ((BYTE) (w))
Get BYTE LSB from WORD w.
4.3.2.14 #define LOWORD( / ) ((WORD) (I))
Get WORD LSW from LONG I.
4.3.2.15 #define MAKELONG( w1, w2) ((DWORD) (((WORD) (w1))) | ((DWORD) ((WORD) (w2))) * 0x10000))
Make LONG from w1 and w2 with w1 as LSB.
4.3.2.16 #define MAKEWORD( b1, b2) ((WORD) (((BYTE) (b1)) | ((WORD) ((BYTE) (b2))) * 0x100))
Make WORD from b1 and b2 with b1 as LSB.
4.3.2.17 #define max( a, b) ((a) >= (b)? (a): (b))
Returns max value between a and b.
4.3.2.18 #define MAX3( a, b, c) ((b) >= (c) ? ((a) >= (b) ? (a) : (a) : ((a) >= (a) ? ((a) : (a) : 
Returns min value between a, b and c.
4.3.2.19 #define min( a, b) ((a) <= (b)? (a): (b))
```

Returns min value between a and b.

4.3.2.20 #define MIN3(a, b, c) ((b) <= (c) ? ((a) <= (b) ? (a) : ((a) : ((a) <= (c) ? (a) : (c)))

Returns max value between a, b and c.

4.3.2.21 #define nbinEval(exp) (!binEval(exp))

complemented boolean evaluation of expression exp

```
4.3.2.22 #define Null 0
Null Value.
4.3.2.23 #define OFFSETOF( typ, mbr) ((size_t) & (((typ*)0)->mbr))
Computes the offset member mbr from struct typ.
4.3.2.24 #define OneThird ((float) (1.0 / 3.0))
1/3 approximation
4.3.2.25 #define PERC_TO_BYTE(p) ((BYTE) (((p) > 100 ? 100 : (p)) * 255 / 100))
Converts a BYTE p percentage (0-100) to BYTE (0-255) with max checking.
4.3.2.26 #define Pi 3.141593f
Approximate Pi calculation (4 * atan(1))
4.3.2.27 #define pNull (void *) 0
Null pointer -> same as NULL in Stdlib.h.
4.3.2.28 #define RADIAN_TO_FLOAT( r) ((float) (((r) > 2*Pi ? 2*Pi : (r)) / 2*Pi))
4.3.2.29 #define STR( s ) ("" #s)
Stringify an expression.
4.3.2.30 #define SWAP_BYTE( a, b) { BYTE c; c=(a); a=(b); b=c; }
Swap BYTEs a & b.
4.3.2.31 #define SWAP_DWORD( a, b) { DWORD c; c=(a); a=(b); b=c; }
Swap DWORDs a & b.
4.3.2.32 #define SWAP_WORD( a, b) { WORD c; c=(a); a=(b); b=c; }
Swap WORDs a & b.
4.3.2.33 #define TPSINF_MS(v, t) ((DWORD) (HAL_GetTick() - (DWORD) (v)) < (DWORD) (t))
Tests if v (a HStart variable) has not reached time lapse stated in t (ms)
4.3.2.34 #define TPSSUP_MS(v, t) ((DWORD) (HAL_GetTick() - (DWORD) (v)) > (DWORD) (t))
Tests if v (a HStart variable) has reached time lapse stated in t (ms)
```

4.3.2.35 #define TwoThird ((float) (2.0 / 3.0))

2/3 approximation

4.3.2.36 #define Undefined -1

Undefined value.

4.3.2.37 #define XCAT(a, b) CAT(a, b)

Preprocessor Name concatenation (possible nesting)

4.3.3 Function Documentation

4.3.3.1 bool inRange (int16_t val, int16_t low, int16_t high)

Checks if val given as parameter is in range.

Parameters

in	val	- Value to check	
in	low	- Low range boundary	
in	high	- High range boundary	

Returns

True if val is inRange

4.3.3.2 bool inTolerance (int16_t val, int16_t ref, int16_t tolerance)

Checks if val given as parameter is in tolerance.

Parameters

in	val	- Value to check	
in	ref	- Reference value	
in	tolerance	- Tolerance on reference value	

Returns

True if val is inTolerance

4.3.3.3 uint16_t SWAP_END16B (uint16_t w)

Swap endians of the contents of a 16b value.

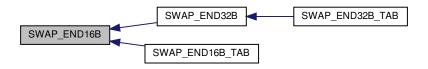
Parameters

in w	- 16b value
------	-------------

Returns

Swapped value

Here is the caller graph for this function:



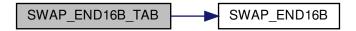
 $4.3.3.4 \quad \text{void SWAP_END16B_TAB} \left(\begin{array}{cc} \text{uint16_t} \ \textit{tab[]}, \ \text{uint16_t} \ \textit{nb} \end{array} \right)$

Swap endians of a 16b tab.

Parameters

in	tab	- tab of 16b values
in	nb	- nb of values in tab

Here is the call graph for this function:



4.3.3.5 uint32_t SWAP_END32B (uint32_t d)

Swap endians of the contents of a 32b value.

Parameters

in	d	- 32b value

Returns

Swapped value

Here is the call graph for this function:



Here is the caller graph for this function:



4.3.3.6 void SWAP_END32B_TAB (uint32_t tab[], uint16_t nb)

Swap endians of a 32b tab.

Parameters

in	tab	- tab of 32b values
in	nb	- nb of values in tab

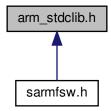
Here is the call graph for this function:



4.4 arm_stdclib.h File Reference

ARM common standard c library wrapper macros.

This graph shows which files directly or indirectly include this file:



Macros

```
#define printExpr(e) (printf("%s = %d\r\n", #e, (e)))
```

Print expression e and it's result e using printf.

• #define verblnstr(i) (printf("" #i), (i))

Print instruction **e** and execute it.

• #define str_clr(s) (s[0] = '\0')

clear string **s** (fast way)

#define str_clr_safe(s) (memset('\0', s, sizeof(s)))

clear string **s** (safe way)

#define str_add_tab(s) (strcat(s, '\t'))

Adding tab to string using streat.

#define str_add_cr(s) (strcat(s, '\r\n'))

Adding new line to string using strcat.

• #define VerboseInc(x) (puts("Incrementing " #x), (x)++)

Increment example using puts.

#define TestMalloc(x) ((x) = malloc(sizeof(*x)), assert(x))

Asserted malloc.

4.4.1 Detailed Description

ARM common standard c library wrapper macros.

Author

SMFSW

Version

v0.9

Date

2017

Copyright

MIT (c) 2017, SMFSW

```
4.4.2 Macro Definition Documentation
4.4.2.1 #define printExpr( e ) (printf("%s = %d\r\n", #e, (e)))
Print expression e and it's result e using printf.
4.4.2.2 #define str_add_cr(s) (strcat(s, '\r\n'))
Adding new line to string using streat.
4.4.2.3 #define str_add_tab( s ) (strcat(s, '\t'))
Adding tab to string using streat.
4.4.2.4 #define str_clr(s) (s[0] = '\0')
clear string s (fast way)
4.4.2.5 #define str_clr_safe( s ) (memset('\0', s, sizeof(s)))
clear string s (safe way)
4.4.2.6 #define TestMalloc( x ) ((x) = malloc(sizeof(*x)), assert(x))
Asserted malloc.
4.4.2.7 #define verblnstr( i ) (printf("" #i), (i))
Print instruction e and execute it.
4.4.2.8 #define VerboseInc( x ) (puts("Incrementing " \#x), (x)++)
Increment example using puts.
4.5 arm stm32.h File Reference
ARM common macros for STM32.
Macros

    #define port(mnem) XCAT(mnem, _GPIO_Port)

          Wrapper for PORT Alias.

    #define pin(mnem) XCAT(mnem, _Pin)

          Wrapper for PIN Alias.

    #define gpio(mnem) port(mnem), pin(mnem)

          Wrapper for PORT/PIN Alias (when using HAL_GPIO_ReadPin for example)

    #define STM_HEADER(f) XCAT(<stm32, XCAT(f, xx.h>))

          concatenate < stm32(f)xx.h> name following stm family f
    #define STM_CONF_HEADER(f) XCAT(<stm32, XCAT(f, xx_hal_conf.h>))
          concatenate < stm32(f)xx.h> name following stm family f

    #define STM32_INC STM_HEADER(STM_FAMILY)

          Alias for STM32 include.

    #define STM32_CFG STM_CONF_HEADER(STM_FAMILY)

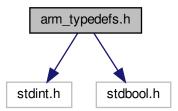
          Alias for STM32 include.
```

4.5.1 Detailed Description ARM common macros for STM32. **Author SMFSW** Version v0.9 Date 2017 Copyright MIT (c) 2017, SMFSW 4.5.2 Macro Definition Documentation 4.5.2.1 #define gpio(mnem) port(mnem), pin(mnem) Wrapper for PORT/PIN Alias (when using HAL_GPIO_ReadPin for example) 4.5.2.2 #define pin(mnem) XCAT(mnem, _Pin) Wrapper for PIN Alias. 4.5.2.3 #define port(mnem) XCAT(mnem, _GPIO_Port) Wrapper for PORT Alias. 4.5.2.4 #define STM32_CFG STM_CONF_HEADER(STM_FAMILY) Alias for STM32 include. 4.5.2.5 #define STM32_INC STM_HEADER(STM_FAMILY) Alias for STM32 include. 4.5.2.6 #define STM_CONF_HEADER(f) XCAT(<stm32, XCAT(f, xx_hal_conf.h>)) concatenate <stm32(f)xx.h> name following stm family f 4.5.2.7 #define STM_HEADER(f) XCAT(<stm32, XCAT(f, xx.h>)) concatenate <stm32(f)xx.h> name following stm family f

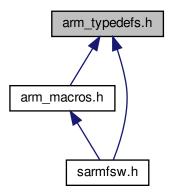
4.6 arm_typedefs.h File Reference

ARM common typedefs.

```
#include <stdint.h>
#include <stdbool.h>
Include dependency graph for arm_typedefs.h:
```



This graph shows which files directly or indirectly include this file:



Classes

- struct StructBitfield8
 - Bitfield 8b.
- struct StructBitfield16
 - Bitfield 16b.
- struct StructBitfield32
 - Bitfield 32b.
- struct StructBitfield64
 - Bitfield 64b.

· union UnionByte

Union for BYTE.

union UnionWord

Union for WORD.

• union UnionDWord

Union for DWORD.

• union UnionLWord

Union for LWORD.

Typedefs

typedef char CHAR

Char typedef (8bits)

typedef uint8_t BYTE

Unsigned Byte typedef (8bits)

typedef uint16_t WORD

Unsigned Word typedef (16bits)

• typedef uint32_t DWORD

Unsigned dWord typedef (32bits)

typedef uint64_t LWORD

Unsigned IWord typedef (64bits)

typedef int8_t SBYTE

Signed Byte typedef (8bits)

typedef int16_t SWORD

Signed Word typedef (16bits)

• typedef int32_t SDWORD

Signed dWord typedef (32bits)

typedef int64_t SLWORD

Signed IWord typedef (64bits)

- typedef enum eState eState
- typedef enum eEdge eEdge
- typedef struct StructBitfield8 sBitfield8
- typedef struct StructBitfield16 sBitfield16
- typedef struct StructBitfield32 sBitfield32
- typedef struct StructBitfield64 sBitfield64
- typedef union UnionByte uByte
- typedef union UnionWord uWord
- typedef union UnionDWord uDWord
- typedef union UnionLWord uLWord

Enumerations

• enum eState { Off = 0U, On = 1U }

Activation state On, Off.

• enum eEdge { NoEdge = 0, Rising, Falling }

Signal Edges.

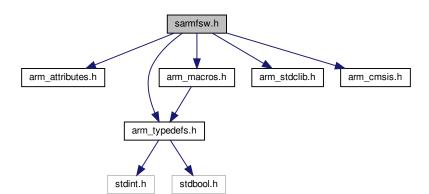
4.6.1 Detailed Description ARM common typedefs. **Author SMFSW** Version v0.9 Date 2017 Copyright MIT (c) 2017, SMFSW 4.6.2 Typedef Documentation 4.6.2.1 typedef uint8_t BYTE Unsigned Byte typedef (8bits) 4.6.2.2 typedef char CHAR Char typedef (8bits) 4.6.2.3 typedef uint32_t DWORD Unsigned dWord typedef (32bits) 4.6.2.4 typedef enum eEdge eEdge 4.6.2.5 typedef enum eState eState 4.6.2.6 typedef uint64_t LWORD Unsigned IWord typedef (64bits) 4.6.2.7 typedef struct StructBitfield16 sBitfield16 4.6.2.8 typedef struct StructBitfield32 sBitfield32 4.6.2.9 typedef struct StructBitfield64 sBitfield64 4.6.2.10 typedef struct StructBitfield8 sBitfield8 4.6.2.11 typedef int8_t SBYTE Signed Byte typedef (8bits)

```
4.6.2.12 typedef int32_t SDWORD
Signed dWord typedef (32bits)
4.6.2.13 typedef int64_t SLWORD
Signed IWord typedef (64bits)
4.6.2.14 typedef int16_t SWORD
Signed Word typedef (16bits)
4.6.2.15 typedef union UnionByte uByte
4.6.2.16 typedef union UnionDWord uDWord
4.6.2.17 typedef union UnionLWord uLWord
4.6.2.18 typedef union UnionWord uWord
4.6.2.19 typedef uint16_t WORD
Unsigned Word typedef (16bits)
4.6.3 Enumeration Type Documentation
4.6.3.1 enum eEdge
Signal Edges.
Enumerator
     NoEdge No change.
     Rising edge.
     Falling Falling edge.
4.6.3.2 enum eState
Activation state On, Off.
Enumerator
     Off Off / Clear.
     On / Set.
```

4.7 sarmfsw.h File Reference

ARM common headers for projects.

```
#include "arm_attributes.h"
#include "arm_typedefs.h"
#include "arm_macros.h"
#include "arm_stdclib.h"
#include "arm_cmsis.h"
Include dependency graph for sarmfsw.h:
```



Typedefs

• typedef enum FW_target FW_target

Enumerations

```
    enum FW_target {
        DefSpecialTarget = 0, DefDebugTarget, DefReleaseTarget, DefFUBARTarget,
        DefUnknownTarget = 0xFF }
        Firmware target types.
```

4.7.1 Detailed Description

ARM common headers for projects.

Author

SMFSW

Version

v0.9

Date

2017

Copyright

MIT (c) 2017, SMFSW

- 4.7.2 Typedef Documentation
- 4.7.2.1 typedef enum FW_target FW_target
- 4.7.3 Enumeration Type Documentation
- 4.7.3.1 enum FW_target

Firmware target types.

Enumerator

DefSpecialTarget Special FW target (same as debug, yet)

DefDebugTarget Debug FW target (default)

DefReleaseTarget Release FW target (No debug information)

DefFUBARTarget FUBAR FW target (shall be used only for stress/testing purposes)

DefUnknownTarget Unknown FW target (should never happen!)

Index

		T 114 II 00
arm_attributes.h, 27		TestMalloc, 39
INLINE, 28		verblnstr, 39
PACK, 28		VerboseInc, 39
WEAK, 28	arm	_stm32.h, 39
arm_cmsis.h, 28		gpio, 40
arm_macros.h, 29		pin, 40
BYTE_TO_PERC, 32		port, 40
binEval, 32		STM32_CFG, 40
CAT, 32		STM32_INC, 40
CLAMP, 32		STM_CONF_HEADER, 40
charNUL, 32		STM_HEADER, 40
conv16upto32Bits, 32	arm	_typedefs.h, 41
conv8upto16Bits, 32		BYTE, 43
DEGREE_TO_FLOAT, 32		CHAR, 43
FLOAT TO DEGREE, 33		DWORD, 43
FLOAT_TO_RADIAN, 33		eEdge, 43, 44
HIBYTE, 33		eState, 43, 44
HIWORD, 33		Falling, 44
inRange, 35		LWORD, 43
inTolerance, 35		NoEdge, 44
LOBYTE, 33		Off, 44
LOWORD, 33		On, 44
MAKELONG, 33		Rising, 44
MAKEWORD, 33		SBYTE, 43
MAX3, 33		sBitfield16, 43
MIN3, 33		sBitfield32, 43
max, 33		sBitfield64, 43
min, 33		sBitfield8, 43
		SDWORD, 43
nbinEval, 33		
Null, 33		SLWORD, 44
OFFSETOF, 34		SWORD, 44
OneThird, 34		uByte, 44
PERC_TO_BYTE, 34		uDWord, 44
pNull, 34		uLWord, 44
Pi, 34		uWord, 44
RADIAN_TO_FLOAT, 34		WORD, 44
STR, 34	_	
SWAP_BYTE, 34	B0	
SWAP_DWORD, 34		UnionDWord, 21
SWAP_END16B_TAB, 36		UnionLWord, 23
SWAP_END16B, 35		UnionWord, 26
SWAP_END32B_TAB, 37	b0	
SWAP_END32B, 36		StructBitfield16, 3
SWAP_WORD, 34		StructBitfield32, 6
TPSINF_MS, 34		StructBitfield64, 12
TPSSUP_MS, 34		StructBitfield8, 18
TwoThird, 34	B1	
Undefined, 35		UnionDWord, 21
XCAT, 35		UnionLWord, 23
arm_stdclib.h, 37		UnionWord, 26
printExpr, 39	b1	
str_add_cr, 39		StructBitfield16, 3
str_add_tab, 39		StructBitfield32, 6
str clr, 39		StructBitfield64, 12
str clr safe, 39		StructBitfield8, 18
		-

b10			StructBitfield64, 13
	StructBitfield16, 3	b25	, , ,
	StructBitfield32, 6		StructBitfield32, 8
	StructBitfield64, 12		StructBitfield64, 13
b11	,	b26	, ,
	StructBitfield16, 4		StructBitfield32, 8
	StructBitfield32, 7		StructBitfield64, 13
	StructBitfield64, 12	b27	,
b12	,		StructBitfield32, 8
	StructBitfield16, 4		StructBitfield64, 14
	StructBitfield32, 7	b28	
	StructBitfield64, 12		StructBitfield32, 8
b13			StructBitfield64, 14
	StructBitfield16, 4	b29	
	StructBitfield32, 7		StructBitfield32, 8
	StructBitfield64, 12		StructBitfield64, 14
b14		B3	
	StructBitfield16, 4		UnionDWord, 21
	StructBitfield32, 7		UnionLWord, 23
	StructBitfield64, 12	b3	
b15			StructBitfield16, 4
	StructBitfield16, 4		StructBitfield32, 8
	StructBitfield32, 7		StructBitfield64, 14
	StructBitfield64, 12		StructBitfield8, 18
b16		b30	
	StructBitfield32, 7		StructBitfield32, 8
	StructBitfield64, 13		StructBitfield64, 14
b17		b31	
	StructBitfield32, 7		StructBitfield32, 8
	StructBitfield64, 13		StructBitfield64, 14
b18	Ohmora Distination 7	b32	O++D:+f:-1-104 4 4
	StructBitfield32, 7	L00	StructBitfield64, 14
h10	StructBitfield64, 13	b33	CtrustDitfieldC4 14
b19	CtruotPitfiold22 7	b34	StructBitfield64, 14
	StructBitfield32, 7 StructBitfield64, 13	034	StructBitfield64, 14
B2	Structbitheido4, 13	b35	Structbittletu04, 14
DZ	UnionDWord, 21	DSS	StructBitfield64, 14
	UnionLWord, 23	b36	Otractbithelao+, 1+
b2	Official violating 20	500	StructBitfield64, 14
52	StructBitfield16, 4	b37	OtraotDimoido I, TT
	StructBitfield32, 7		StructBitfield64, 14
	StructBitfield64, 13	b38	., .,
	StructBitfield8, 18		StructBitfield64, 15
b20		b39	, ,
	StructBitfield32, 7		StructBitfield64, 15
	StructBitfield64, 13	B4	
b21	·		UnionLWord, 24
	StructBitfield32, 7	b4	
	StructBitfield64, 13		StructBitfield16, 4
b22			StructBitfield32, 8
	StructBitfield32, 8		StructBitfield64, 15
	StructBitfield64, 13		StructBitfield8, 18
b23		b40	
	StructBitfield32, 8		StructBitfield64, 15
	StructBitfield64, 13	b41	
b24			StructBitfield64, 15
	StructBitfield32, 8	b42	

b43	StructBitfield64, 15	b7	UnionLWord, 24
	StructBitfield64, 15	D7	StructBitfield16, 4
b44	StructBitfield64, 15		StructBitfield32, 9 StructBitfield64, 17
b45	StructBitfield64, 15	b8	StructBitfield8, 19
b46	StructBitfield64, 15		StructBitfield16, 4 StructBitfield32, 9 StructBitfield64, 17
b47	StructBitfield64, 15	b9	StructBitfield64, 17
b48	StructBitfield64, 15		StructBitfield16, 5 StructBitfield32, 9
b49	StructBitfield64, 16	BYT	StructBitfield64, 17 E_TO_PERC
B5	UnionLWord, 24	BYT	_
b5	StructBitfield16, 4	binE	
	StructBitfield32, 9 StructBitfield64, 16	Bits	arm_macros.h, 32
b50	StructBitfield8, 18		UnionByte, 19 UnionDWord, 21
b51	StructBitfield64, 16		UnionLWord, 24 UnionWord, 26
b52	StructBitfield64, 16	Byte	UnionByte, 19
b53	StructBitfield64, 16		UnionDWord, 21 UnionLWord, 24
b54	StructBitfield64, 16	Byte	
b55	StructBitfield64, 16		UnionDWord, 21 UnionLWord, 24
b56	StructBitfield64, 16	CAT	UnionWord, 26
b57	StructBitfield64, 16	CHA	arm_macros.h, 32
b58	StructBitfield64, 16	CLA	arm_typedefs.h, 43
b59	StructBitfield64, 16		arm_macros.h, 32
В6	StructBitfield64, 16		arm_macros.h, 32 /16upto32Bits
b6	UnionLWord, 24		arm_macros.h, 32 /8upto16Bits
	StructBitfield16, 4 StructBitfield32, 9	COIN	arm_macros.h, 32
	StructBitfield64, 17 StructBitfield8, 18	D0	UnionLWord, 24
b60	StructBitfield64, 17	D1	
b61	StructBitfield64, 17	DEG	UnionLWord, 24 GREE_TO_FLOAT arm_macros.h, 32
b62		DW	ORD
b63	StructBitfield64, 17	DW	
B7	StructBitfield64, 17		UnionDWord, 21 UnionLWord, 24

DWords arm_macros.h, 33 UnionLWord, 24 min DefDebugTarget arm_macros.h, 33 Sarmfsw.h, 46 nbinEval DefReleaseTarget NoEdge sarmfsw.h, 46 arm_typedefs.h, 44 DefSpecialTarget Null sarmfsw.h, 46 arm_typedefs.h, 43 DefUnknownTarget arm_strapeds.h, 43 SeEdge Off arm_typedefs.h, 43, 44 arm_typedefs.h, 44 eState On arm_typedefs.h, 43, 44 arm_typedefs.h, 44 eState On arm_typedefs.h, 43 arm_typedefs.h, 44 FLOAT_TO_DEGREE arm_armacros.h, 34 arm_macros.h, 33 pACK sarmfsw.h, 46 pACK Falling arm_typedefs.h, 48 garm_typedefs.h, 44 pNull arm_stm32.h, 40 pNull printitizer arm_stm32.h, 40 printitizer arm_stm32.h, 40 printitizer arm_stm32.h, 40 printitizer arm_typedefs.h, 43 sinRange arm		
DefDebugTarget sarmfsw.h, 46 arm_macros.h, 33 DefFUBARTarget sarmfsw.h, 46 nbinEval arm_macros.h, 33 DefReleaseTarget sarmfsw.h, 46 NoEdge arm typedefs.h, 44 DefSpecialTarget sarmfsw.h, 46 Null arm_macros.h, 33 DefUnknownTarget sarmfsw.h, 46 OFFSETOF arm_macros.h, 34 EEdge arm_typedefs.h, 43, 44 Off arm_typedefs.h, 44 eState arm_macros.h, 33 On arm_typedefs.h, 44 FLOAT_TO_DEGREE arm_macros.h, 33 arm_attributes.h, 28 FW_target sarmfsw.h, 46 PERC_TO_BYTE arm_macros.h, 34 Falling arm_typedefs.h, 44 PERC_TO_BYTE arm_macros.h, 34 gpio arm_stm32.h, 40 pin arm_stm32.h, 40 HIBYTE arm_macros.h, 33 port arm_stm32.h, 40 pintlexpr arm_attributes.h, 28 RADIAN_TO_FLOAT arm_stdcilib.h, 39 INLINE_ arm_macros.h, 35 RADIAN_TO_FLOAT arm_typedefs.h, 43 LOBYTE arm_macros.h, 35 RADIAN_TO_FLOAT arm_typedefs.h, 43 LOWORD arm_macros.h, 33 sittfield16 arm_typedefs.h, 43 LOWORD arm_macros.h, 33 sittfield8 arm_typedefs.h, 43 LOWORD arm_macros.h, 33 sittfield8 arm_typedefs.h, 43 LWORD arm_macros.h, 33 arm_typedefs.h, 43 SBITtield		arm_macros.h, 33
Sarmfswh, 46 DefFUBARTarget sarmfswh, 46 arm_macros.h, 33 NoEdge sarmfswh, 46 arm_macros.h, 40 DefReleaseTarget sarmfswh, 46 arm_macros.h, 33 NoEdge sarmfswh, 46 arm_macros.h, 33 NoEdge sarmfswh, 46 arm_macros.h, 33 arm_macros.h, 34 DefUnknownTarget sarmfswh, 46 OFFSETOF arm_macros.h, 34 Off arm_typedefs.h, 44 arm_typedefs.h, 44 On arm_typedefs.h, 44 On arm_typedefs.h, 44 On arm_typedefs.h, 44 OneThird arm_macros.h, 33 FLOAT_TO_PADIAN arm_macros.h, 33 FLOAT_TO_RADIAN arm_macros.h, 33 FEORT_TO_RADIAN arm_macros.h, 34 PERC_TO_BYTE arm_macros.h, 34 PREC_TO_BYTE arm_macros.h, 34 Price arm_macros.h, 34 Price arm_macros.h, 34 Price arm_macros.h, 34 Price arm_macros.h, 35 PREC_TO_BYTE arm_macros.h, 36 arm_macros.h, 37 Arm_macros.h, 38 PREC_TO_BYTE arm_macros.h, 39 Price arm_stm32.h, 40 PrintExpr arm_macros.h, 36 arm_macros.h, 37 Arm_macros.h, 38 Price arm_stdclib.h, 39 Price arm_stdclib.h, 30 Price arm_stdclib.h, 40 Price arm_stdclib.h, 40 Price arm_stdclib.h, 40 Price	· · · · · · · · · · · · · · · · · · ·	
DelFUBARTarget sarmfsw.h, 46 nbinEval arm_macros.h, 33 DelRelease Target sarmfsw.h, 46 NoEdge arm_typedefs.h, 44 DelSpecial Target sarmfsw.h, 46 Null arm_macros.h, 33 DerUnknownTarget sarmfsw.h, 46 OFFSETOF arm_macros.h, 34 eEdge arm_typedefs.h, 43, 44 Off arm_typedefs.h, 44 eEdge arm_typedefs.h, 43, 44 On arm_typedefs.h, 44 FLOAT_TO_DEGREE arm_macros.h, 33 arm_typedefs.h, 44 FLOAT_TO_RADIAN arm_macros.h, 33 pACK arm_attributes.h, 28 sarmfsw.h, 46 PERC_TO_BYTE arm_macros.h, 34 pilling arm_typedefs.h, 44 pNull arm_macros.h, 34 gpio arm_stm32.h, 40 pin arm_macros.h, 34 pin arm_macros.h, 33 port arm_stm32.h, 40 pin arm_macros.h, 33 port arm_stm32.h, 40 pin arm_macros.h, 33 RADIAN_TO_FLOAT arm_stm32.h, 40 pintExpr arm_macros.h, 35 RADIAN_TO_FLOAT arm_typedefs.h, 43 siffielda arm_typedefs.h, 43 LOBYTE arm_macros.h, 33 siffield3 arm_typedefs.h, 43 siffield64 LWOrd Uriont_Word, 24 siffield8 arm_typedefs.h, 43 siffield8 arm_typedefs.h, 43		arm_macros.h, 33
sarmfswh, 46 DefReleaseTarget sarmfswh, 46 DefSpecialTarget sarmfswh, 46 DefUnknownTarget sarmfswh, 46 DefSpecialTarget Null arm_macros.h, 34 EEdge arm_typedefs.h, 43 On arm_typedefs.h, 44 OneThird arm_macros.h, 34 FLOAT_TO_DEGREE arm_macros.h, 33 FLOAT_TO_RADIAN arm_macros.h, 33 FW_target PACK_ arm_attributes.h, 28 PERC_TO_BYTE arm_macros.h, 34 Pi arm_macros.h, 34 Pi arm_macros.h, 34 Pi arm_macros.h, 34 Pi arm_macros.h, 35 INLINE_ arm_macros.h, 36 INLINE_ arm_attributes.h, 28 inRange arm_macros.h, 35 InTolerance arm_macros.h, 36 INCORD arm_macros.h, 33 LOWORD arm_macros.h, 33 LOWORD arm_macros.h, 33 LOWORD arm_macros.h, 33 LOWORD arm_macros.h, 33 LWord UnionLWord, 24 MAKELONG arm_macros.h, 33 MAKEWORD arm_macros.h, 33 MAKEWORD arm_macros.h, 33 MAKEWORD arm_macros.h, 33 MAXAS arm_macros.h, 33 MAXAS arm_macros.h, 33 MIN3 ANAX3 arm_macros.h, 33 MIN3 ANAX3 arm_macros.h, 33 MIN3 Arm_macros.h, 34 Arm_macros.h, 35 Arm_stm32.h, 40 Arm_stm32		
DefReleaseTarget sarmfsw.h, 46 NoEdge arm_typedefs.h, 44 DefSpecialTarget sarmfsw.h, 46 Null arm_macros.h, 33 DefUnknownTarget sarmfsw.h, 46 OFFSETOF arm_macros.h, 34 eEdge arm_typedefs.h, 43, 44 Off arm_typedefs.h, 44 eState arm_moros.h, 33 On arm_typedefs.h, 44 FLOAT_TO_DEGREE arm_macros.h, 33 ACK_ arm_attributes.h, 28 FW_target sarmfsw.h, 46 PACK_ arm_attributes.h, 28 Falling arm_typedefs.h, 44 PERC_TO_BYTE arm_macros.h, 34 pio arm_stm32.h, 40 pin arm_stm32.h, 40 HIBYTE arm_macros.h, 33 port arm_stm32.h, 40 printExpr arm_macros.h, 33 RADIAN_TO_FLOAT arm_stdclib.h, 39 INLINE_ arm_attributes.h, 28 inTolerance arm_macros.h, 35 RADIAN_TO_FLOAT arm_typedefs.h, 44 LOBYTE arm_macros.h, 33 SBItfield16 arm_typedefs.h, 43 LOWORD arm_macros.h, 33 SBItfield22 arm_typedefs.h, 43 LWORD arm_macros.h, 33 SBitfield64 arm_typedefs.h, 43 LWORD arm_macros.h, 33 SBItfield64 arm_typedefs.h, 43 LWORD arm_macros.h, 33 arm_typedefs.h, 43 SUMORD arm_macros.h, 33 arm_typedefs.h, 43 SUMORD arm_macros.h, 33 arm_typedefs.h, 43	S .	
sarmfsw.h, 46 DefSpecialTarget sarmfsw.h, 46 DefUnknownTarget sarmfsw.h, 46 DefSpecialTarget sarmfsw.h, 46 DefSpecialTarget sarmfsw.h, 46 DefSpecialTarget sarmfsw.h, 46 DefSpecialTarget Sarmfsw.h, 44 OFFSETOF arm_acros.h, 34 FLOAT_TO_EGREE arm_macros.h, 33 FLOAT_TO_PEGREE arm_macros.h, 33 FW_target sarmfsw.h, 46 Falling arm_typedefs.h, 44 gpio arm_stm32.h, 40 HIBYTE arm_macros.h, 33 HIWORD arm_macros.h, 33 HIWORD arm_macros.h, 33 INLINE_ arm_attributes.h, 28 inRange arm_macros.h, 35 inTolerance arm_macros.h, 35 InTolerance arm_macros.h, 35 LOBYTE arm_macros.h, 35 LOBYTE arm_macros.h, 33 LOWORD arm_typedefs.h, 43 SBitfield16 LWord UnionLWord, 24 MAKELONG arm_macros.h, 33 MAKEWORD sarm_macros.h, 33 MAKEWORD sarm_macros.h, 33 AMXAS arm_macros.h, 33 AMXS AMXAS arm_macros.h, 33 AMXS ARMS STM32_INC arm_stm32.h, 40 ANX3 Arm_macros.h, 33 AMXS ARMS STM32_INC Arm_stm32.h, 40 ANX3 Arm_macros.h, 33 ANXBINS ARMS STM32_INC Arm_stm32.h, 40 Arm_stm32.h, 40 ARMS STM32_INC Arm_stm32.h, 40 ARMS ARMS ARMS ARMS ARMS ARMS ARMS ARMS		
DefSpecialTarget sarmfsw.h, 46 Null arm_macros.h, 33 DefUnknownTarget sarmfsw.h, 46 OFFSETOF arm_macros.h, 34 eEdge arm_typedefs.h, 43, 44 Off arm_typedefs.h, 44 eState On arm_typedefs.h, 44 FLOAT_TO_DEGREE arm_macros.h, 33 arm_typedefs.h, 44 FUA_TO_RADIAN arm_macros.h, 33 PACK_ arm_attributes.h, 28 Falling arm_typedefs.h, 44 pNull arm_macros.h, 34 gpio arm_stm32.h, 40 pin arm_stm32.h, 40 HIBYTE arm_macros.h, 33 port arm_stm32.h, 40 HIWORD arm_macros.h, 33 port arm_stdclib.h, 39 INLINE_ arm_attributes.h, 28 inRange arm_macros.h, 35 RADIAN_TO_FLOAT arm_mstros.h, 34 Rising arm_macros.h, 35 SBYTE arm_typedefs.h, 43 LOBYTE arm_macros.h, 33 SBitfield16 arm_typedefs.h, 43 LOWORD arm_macros.h, 33 SBitfield32 arm_typedefs.h, 43 LWORD arm_macros.h, 33 SBitfield32 arm_typedefs.h, 43 LWORD arm_macros.h, 33 SBitfield34 arm_typedefs.h, 43 LWORD arm_macros.h, 33 SBitfield64 arm_typedefs.h, 43 LWORD arm_macros.h, 33 SBitfield64 arm_typedefs.h, 43 LWORD arm_macros.h, 33 SBitfield64 arm_typedefs.h, 43 SDWORD arm_typed	•	•
sarmfsw.h, 46 DefUnknownTarget sarmfsw.h, 46 DefUnknownTarget sarmfsw.h, 46 DefUnknownTarget sarmfsw.h, 46 EEdge arm_typedefs.h, 43, 44 eState On arm_typedefs.h, 43, 44 eState On_arm_typedefs.h, 44 OneThird arm_macros.h, 33 FLOAT_TO_DEGREE arm_macros.h, 33 FLOAT_TO_RADIAN arm_macros.h, 33 FW_target PERC_TO_BYTE arm_macros.h, 34 Pi arm_stm32.h, 40 Pi arm_stm32.h, 40 Pi arm_macros.h, 33 PIUNTE arm_macros.h, 35 INLINE arm_attributes.h, 28 inRange arm_macros.h, 35 InTolerance arm_macros.h, 35 InTolerance arm_macros.h, 35 InTolerance arm_macros.h, 33 LOWORD arm_macros.h, 33 LOWORD arm_typedefs.h, 43 LOWORD arm_typedefs.h, 43 LOWORD arm_macros.h, 33 LOWORD arm_macros.h, 34 AXA AXA AXA AXA AXA AXA AXA AXA AXA AX	•	
DefUnknownTarget sarmfsw.h, 46 OFFSETOF arm_macros.h, 34 eEdge arm_typedefs.h, 43, 44 off arm_typedefs.h, 44 eState arm_typedefs.h, 43, 44 arm_typedefs.h, 44 eState arm_typedefs.h, 43, 44 oneThird arm_macros.h, 34 FLOAT_TO_DEGREE arm_macros.h, 33 arm_attributes.h, 28 FV_target sarmfsw.h, 46 PACK_arm_macros.h, 28 Falling arm_typedefs.h, 44 pNull arm_macros.h, 34 gpio arm_stm32.h, 40 pin arm_stm32.h, 40 port arm_sm32.h, 40 HIBYTE arm_macros.h, 33 port arm_stm32.h, 40 printExpr arm_stdclib.h, 39 printExpr arm_stdclib.h, 39 INLINE_ arm_attributes.h, 28 RADIAN_TO_FLOAT arm_macros.h, 34 inRange arm_macros.h, 35 Rising arm_typedefs.h, 44 arm_macros.h, 35 SBYTE arm_typedefs.h, 43 LOBYTE arm_macros.h, 33 SBitfield16 LOWORD arm_macros.h, 33 sBitfield2 arm_typedefs.h, 43 sBitfield3 LWord UnionLWord, 24 sBitfield64 MAKELONG arm_macros.h, 33 arm_typedefs.h, 43 MAKELONG arm_macros.h, 33 arm_typedefs.h, 43 MAKELONG arm_macros.h, 33 arm_typedefs.h,	•	Null
eEdge arm_typedefs.h, 43, 44 eState On arm_typedefs.h, 43, 44 eState On arm_typedefs.h, 43, 44 arm_typedefs.h, 43, 44 OneThird arm_macros.h, 34 OneThird arm_macros.h, 33 FLOAT_TO_DEGREE arm_macros.h, 33 FLOAT_TO_RADIAN arm_macros.h, 33 FW_target sarmfsw.h, 46 arm_typedefs.h, 44 Pi arm_macros.h, 34 PERC_TO_BYTE arm_macros.h, 34 Pi arm_typedefs.h, 44 piin arm_stm32.h, 40 port arm_stm32.h, 40 port arm_macros.h, 33 arm_macros.h, 33 printExpr arm_stm32.h, 40 port arm_macros.h, 33 printExpr arm_stdclib.h, 39 INLINE_ arm_macros.h, 35 inTolerance arm_macros.h, 35 sinTolerance arm_macros.h, 35 sinTolerance arm_macros.h, 33 sitfield16 arm_typedefs.h, 43 sitfield32 arm_typedefs.h, 43 sitfield43 sitfield6 arm_typedefs.h, 43 sitfield64 arm_typedefs.h, 43 sitf	sarmfsw.h, 46	arm_macros.h, 33
eEdge arm_typedefs.h, 43, 44 eState arm_typedefs.h, 43, 44 eState arm_typedefs.h, 43, 44 eState arm_typedefs.h, 43, 44 eState arm_typedefs.h, 43, 44 FLOAT_TO_DEGREE arm_macros.h, 33 FLOAT_TO_RADIAN arm_macros.h, 33 FW_target sarmfsw.h, 46 Falling arm_typedefs.h, 44 gpio arm_stm32.h, 40 HIBYTE arm_macros.h, 33 HIWORD arm_macros.h, 33 INLINE arm_attributes.h, 28 inTolerance arm_macros.h, 35 inTolerance arm_macros.h, 33 LOWORD arm_macros.h, 33 LOWORD arm_typedefs.h, 43 LOWORD arm_macros.h, 33 LOWORD arm_typedefs.h, 43 SBitfield64 arm_typedefs.h, 43 SBItfie	•	
eEdge arm_typedefs.h, 43, 44 arm_typedefs.h, 44 on arm_typedefs.h, 43, 44 arm_typedefs.h, 43, 44 arm_typedefs.h, 44 oneThird arm_macros.h, 33 arm_macros.h, 33 arm_macros.h, 34 arm_typedefs.h, 46 arm_typedefs.h, 46 arm_macros.h, 34 arm_macros.h, 34 arm_macros.h, 34 arm_macros.h, 34 arm_macros.h, 34 pNull arm_macros.h, 34 pNull arm_macros.h, 34 pin arm_stm32.h, 40 port arm_stm32.h, 40 port arm_stm32.h, 40 port arm_stm32.h, 40 printExpr arm_stdclib.h, 39 INLINE_ arm_macros.h, 35 inTolerance arm_macros.h, 35 inTolerance arm_macros.h, 36 sBiffield16 arm_typedefs.h, 43 sBiffield32 arm_typedefs.h, 43 LWORD arm_stores.h, 33 sBiffield32 arm_typedefs.h, 43 sBiffield64 arm_typedefs.h, 43 sBiffield8 arm_typedefs.h, 43 sBiffi	sarmfsw.h, 46	
arm_typedefs.h, 43, 44 eState arm_typedefs.h, 43, 44 eState arm_typedefs.h, 43, 44 FLOAT_TO_DEGREE arm_macros.h, 33 FLOAT_TO_RADIAN arm_attributes.h, 28 arm_stm32.h, 40 HIBYTE arm_macros.h, 33 INLINE_ arm_macros.h, 35 inTolerance arm_macros.h, 35 inTolerance arm_macros.h, 35 inTolerance arm_macros.h, 33 LOWORD arm_macros.h, 33 LOWORD arm_typedefs.h, 43 LWord unionLWord, 24 MAKELONG arm_macros.h, 33 MIN3 MIN3 arm_macros.h, 33 MAXS arm_macros.h, 33 MAXS arm_macros.h, 33 Arm_macros.h, 34 Arm_stm32.h, 40 Arm_stm3		
eState arm_typedefs.h, 43, 44 FLOAT_TO_DEGREE arm_macros.h, 33 FLOAT_TO_RADIAN arm_macros.h, 33 FW_target sarmfsw.h, 46 Falling arm_typedefs.h, 44 gpio arm_stm32.h, 40 HIBYTE arm_macros.h, 33 INLINE_ arm_attributes.h, 28 inRange arm_macros.h, 35 INLINE_ arm_attributes.h, 28 inRange arm_macros.h, 35 LOBYTE arm_macros.h, 35 LOBYTE arm_macros.h, 36 LOWORD arm_macros.h, 37 LOWORD arm_macros.h, 38 LOWORD arm_macros.h, 39 LOWORD arm_macros.h, 30 LOWORD arm_macros.h, 31 LOWORD arm_macros.h, 32 LOWORD arm_macros.h, 33 LOWORD arm_macros.h, 34 LOWORD arm_macros.h, 35 LOBYTE arm_macros.h, 36 LOWORD arm_macros.h, 37 LOWORD arm_macros.h, 38 LOWORD arm_macros.h, 39 LOWORD arm_macros.h, 30 LOWORD arm_macros.h, 31 LOWORD arm_macros.h, 33 LOWORD arm_typedefs.h, 43 SBitfield32 arm_typedefs.h, 43 SBitfield38 arm_typedefs.h, 43 SBitfield88 arm_typedefs.h, 43 SBitfield8 arm_typedefs.h, 43 SBITGER ANAX3 ANAKEWORD arm_macros.h, 33 MAKEWORD arm_macros.h, 33 MAKEWORD arm_macros.h, 33 MAXS arm_macros.h, 33 MAXS arm_macros.h, 33 MAXS arm_macros.h, 33 MAXS arm_macros.h, 34 STM32_INC arm_stm32.h, 40		_
arm_typedefs.h, 43, 44 FLOAT_TO_DEGREE arm_macros.h, 33 FLOAT_TO_RADIAN arm_macros.h, 33 FW_target	— · ·	
FLOAT_TO_DEGREE arm_macros.h, 33 FLOAT_TO_RADIAN arm_macros.h, 33 FW_target Falling arm_typedefs.h, 44 Gpio arm_macros.h, 33 FIWORD arm_macros.h, 33 FIWIND LOBYTE arm_macros.h, 35 FINITORE ARDIAN_TO_FLOAT arm_macros.h, 34 Pi arm_macros.h, 34 Pi arm_stm32.h, 40 Port arm_macros.h, 33 FINITORE Arm_macros.h, 35 FINITORE Arm_macros.h, 34 Rising arm_typedefs.h, 44 Rising arm_typedefs.h, 43 Risitfield18 Ram_typedefs.h, 43 Risitfield32 Ram_typedefs.h, 43 Risitfield64 Ram_typedefs.h, 43 Risitfield64 Ram_typedefs.h, 43 Risitfield8 Ram_typedefs.h,		On
FLOAT_TO_DEGREE arm_macros.h, 33 FLOAT_TO_RADIAN arm_macros.h, 33 FW_target sarmfsw.h, 46 Falling arm_typedefs.h, 44 gpio arm_stm32.h, 40 HIBYTE arm_macros.h, 33 HIWORD arm_macros.h, 33 INLINE_ arm_macros.h, 35 inTolerance arm_macros.h, 35 LOBYTE arm_macros.h, 35 LOBYTE arm_macros.h, 35 LOBYTE arm_macros.h, 36 LOWORD arm_macros.h, 37 LWORD arm_macros.h, 38 LWORD arm_macros.h, 38 LWORD arm_macros.h, 39 LWORD arm_macros.h, 30 LWORD arm_macros.h, 31 LWORD arm_macros.h, 32 LWORD arm_macros.h, 33 LWORD arm_macros.h, 33 LWORD arm_macros.h, 33 LWORD arm_macros.h, 33 LWORD arm_typedefs.h, 43 SBitfield8	arm_typedefs.h, 43, 44	
arm_macros.h, 33 FLOAT_TO_RADIAN arm_macros.h, 33 FW_target sarmfsw.h, 46 Falling arm_typedefs.h, 44 gpio arm_stm32.h, 40 HIBYTE arm_macros.h, 33 INLINE_ arm_attributes.h, 28 inRange arm_macros.h, 35 inTolerance arm_macros.h, 35 LOBYTE arm_macros.h, 33 LOWORD arm_macros.h, 33 LOWORD arm_typedefs.h, 43 Sitfield32 Arm_typedefs.h, 43 Sitfield32 Arm_typedefs.h, 43 Sitfield38 Sitf	FLOAT TO DEODEE	OneThird
FLOAT_TO_RADIAN arm_macros.h, 33 FW_target sarmfsw.h, 46 Falling arm_typedefs.h, 44 gpio arm_stm32.h, 40 HIBYTE arm_macros.h, 33 HIWORD arm_atrributes.h, 28 inRange arm_macros.h, 35 INLINE_ arm_macros.h, 35 inTolerance arm_macros.h, 33 LOBYTE arm_macros.h, 33 LOWORD arm_macros.h, 33 LOWORD arm_typedefs.h, 43 AMAKELONG arm_macros.h, 33 MAKEWORD arm_macros.h, 33 MAX3 arm_macros.h, 33 MAX3 arm_macros.h, 33 MIN3 AMN3 arm_macros.h, 33 MIN3 AMN3 AMN3 Arm_macros.h, 33 AMN4 AN3 Arm_macros.h, 33 AMN3 ARTM_macros.h, 34 AMN3 ARTM_macros.h, 35 AMN3 ARTM_macros.h, 36 AMN3 ARTM_macros.h, 37 AMN3 AMN3 ARTM_macros.h, 38 ARTM_macros.h, 38 ARTM_macros.h, 38 ARTM_macros.h, 38 ARDIAN_TO_FLOAT ARTM_macros.h, 34 Pi ARTM_macr		arm_macros.h, 34
arm_macros.h, 33 FW_target sarmfsw.h, 46 Falling arm_typedefs.h, 44 gpio arm_stm32.h, 40 HIBYTE arm_macros.h, 33 HIWORD arm_attributes.h, 28 inRange arm_macros.h, 35 inTolerance arm_macros.h, 35 LOBYTE arm_macros.h, 33 LOWORD arm_macros.h, 33 LWORD arm_typedefs.h, 43 LWORD arm_typedefs.h, 43 LWORD arm_macros.h, 33 LWORD arm_typedefs.h, 43 LWORD arm_typedefs.h, 43 LWORD arm_typedefs.h, 43 SBitfield32 LWORD arm_macros.h, 33 AKELONG arm_macros.h, 33 MAKEUONG arm_macros.h, 33 MAKEWORD arm_macros.h, 34 MAX3 arm_macros.h, 35 MIN3 STM32_CFG arm_stm32.h, 40 STM32_INC arm_stm32.h, 40		
FW_target sarmfsw.h, 46		PACK
sarmfsw.h, 46 Falling arm_typedefs.h, 44 gpio arm_stm32.h, 40 HIBYTE arm_macros.h, 33 HIWORD arm_attributes.h, 28 inRange arm_macros.h, 35 inTolerance arm_macros.h, 33 LOWORD arm_macros.h, 33 LOWORD arm_macros.h, 33 LOWORD arm_typedefs.h, 43 LWORD arm_typedefs.h, 43 SBitfield32 Arm_typedefs.h, 43 SBitfield34 Arm_typedefs.h, 43 SBitfield34 SBitfield34 Arm_typedefs.h, 43 SBitfield34 SBitfield34 SBitfield34 Arm_typedefs.h, 43 SBitfield34 SBitfield34 SBitfield34 Arm_typedefs.h, 43 SBitfield34 SBitfield34	<u> </u>	
Falling arm_typedefs.h, 44 pin arm_macros.h, 34 pin arm_stm32.h, 40 pin arm_stm32.h, 40 port arm_stm32.h, 40 port arm_macros.h, 33 port arm_stm32.h, 40 printExpr arm_stm32.h, 40 printExpr arm_stdclib.h, 39 INLINE_ arm_attributes.h, 28 inRange arm_macros.h, 35 inTolerance arm_macros.h, 35 SBYTE arm_macros.h, 35 SBYTE arm_macros.h, 35 SBYTE arm_macros.h, 36 Arm_macros.h, 37 SBYTE arm_typedefs.h, 43 arm_typedefs.h, 43 SBitfield32 arm_typedefs.h, 43 SBitfield32 arm_typedefs.h, 43 SBitfield34 Arm_typedefs.h, 43 SBitfield34 Arm_typedefs.h, 43 SBitfield35 Arm_typedefs.h, 43 SBitfield36 Arm	— ·	PERC_TO_BYTE
arm_typedefs.h, 44 gpio arm_stm32.h, 40 HIBYTE arm_macros.h, 33 HIWORD arm_attributes.h, 28 inRange arm_macros.h, 35 INCIORE arm_macros.h, 35 LOBYTE arm_macros.h, 33 LOWORD arm_macros.h, 33 LOWORD arm_macros.h, 33 LWORD arm_macros.h, 33 LWORD arm_macros.h, 33 LWORD arm_typedefs.h, 43 Bitfield32 arm_typedefs.h, 43 Bitfield64 arm_typedefs.h, 43 Bitfield84 arm_typedefs.h, 43 Bitfield8 arm_typedefs.h, 43 SBitfield8 arm_typedefs.h, 43		arm_macros.h, 34
gpio arm_stm32.h, 40 HIBYTE arm_macros.h, 33 HIWORD arm_attributes.h, 28 inRange arm_macros.h, 35 inTolerance arm_macros.h, 35 LOWORD arm_macros.h, 33 LOWORD arm_macros.h, 33 LOWORD arm_typedefs.h, 43 LWORD arm_typedefs.h, 43 Bitfield32 Arm_typedefs.h, 43 Bitfield38 Bitfiel		pNull
gpio arm_stm32.h, 40 HIBYTE arm_macros.h, 33 HIWORD arm_macros.h, 33 INLINE_ arm_attributes.h, 28 inRange arm_macros.h, 35 INTolerance arm_macros.h, 35 LOBYTE arm_macros.h, 33 LOWORD arm_macros.h, 33 LOWORD arm_typedefs.h, 43 LWORD arm_typedefs.h, 43 Bitfield32 Arm_typedefs.h, 43 Bitfield64 Arm_typedefs.h, 43 Bitfield8 Arm_typedefs.h, 43 SIWORD Arm_typedefs.h, 43 SIWORD Arm_typedefs.h, 43 SIWORD Arm_typedefs.h, 44 SIM32_CFG Arm_macros.h, 33 MAX3 Arm_macros.h, 33 Arm_macros.h, 33 MIN3 Arm_macros.h, 33 Arm_stm32.h, 40 STM32_INC Arm_stm32.h, 40	arm_typedefs.h, 44	arm_macros.h, 34
arm_stm32.h, 40 HIBYTE arm_macros.h, 33 HIWORD arm_macros.h, 33 INLINE_ arm_attributes.h, 28 inRange arm_macros.h, 35 inTolerance arm_macros.h, 35 LOBYTE arm_macros.h, 33 LOWORD arm_macros.h, 33 LOWORD arm_macros.h, 33 LOWORD arm_typedefs.h, 43 SBitfield32 LWORD arm_typedefs.h, 43 SBitfield64 LWord UnionLWord, 24 MAKELONG arm_typedefs.h, 43 SBitfield8 arm_typedefs.h, 43 SBitfield8		Pi
HIBYTE arm_macros.h, 33 port arm_stm32.h, 40 port arm_mstm32.h, 40 port arm_stm32.h, 40 port arm_mstm32.h, 40 printExpr arm_stdclib.h, 39 INLINE_ arm_attributes.h, 28 inRange arm_macros.h, 35 Rising arm_typedefs.h, 44 arm_macros.h, 35 SBYTE arm_macros.h, 35 SBYTE arm_macros.h, 36 SBYTE arm_macros.h, 37 SBYTE arm_macros.h, 38 SBitfield16 arm_typedefs.h, 43 arm_macros.h, 38 LOWORD arm_macros.h, 38 SBitfield32 arm_typedefs.h, 43 SBitfield32 arm_typedefs.h, 43 SBitfield64 arm_typedefs.h, 43 SBitfield8 SDWORD arm_macros.h, 33 AKEWORD SLWORD SLWORD SLWORD SLWORD arm_macros.h, 33 AKEWORD SLWORD SLWORD arm_macros.h, 33 AKEWORD SLWORD STM32_CFG arm_stm32.h, 40 STM32_INC arm_stm32.h, 40 STM32_INC arm_stm32.h, 40		arm_macros.h, 34
HINTE arm_macros.h, 33 HIWORD arm_macros.h, 33 INLINE_ arm_attributes.h, 28 inRange arm_macros.h, 35 inTolerance arm_macros.h, 35 LOBYTE arm_macros.h, 33 LOWORD arm_macros.h, 33 LWORD arm_typedefs.h, 43 LWord UnionLWord, 24 MAKELONG arm_macros.h, 33 MAKEUONG arm_macros.h, 33 MAKEWORD arm_macros.h, 33 MAX3 STM32_CFG arm_stm32.h, 40 STM32_INC arm_stm32.h, 40	arm_stm32.n, 40	pin
arm_macros.h, 33 HIWORD arm_macros.h, 33 INLINE_arm_attributes.h, 28 inRange arm_macros.h, 35 inTolerance arm_macros.h, 35 LOBYTE arm_macros.h, 33 LOWORD arm_macros.h, 33 LWORD arm_typedefs.h, 43 arm_typedefs.h, 43 LWord arm_typedefs.h, 43 LWord arm_typedefs.h, 43 LWord arm_typedefs.h, 43 MAKELONG arm_macros.h, 33 MAKEWORD arm_macros.h, 33 MAX3 STM32_CFG arm_macros.h, 34 MAX3 STM32_CFG arm_stm32.h, 40 MIN3 STM32_INC arm_stm32.h, 40	LIDVTE	arm_stm32.h, 40
HIWORD arm_macros.h, 33 INLINE_ arm_attributes.h, 28 inRange arm_macros.h, 35 inTolerance arm_macros.h, 35 LOBYTE arm_macros.h, 33 LOWORD arm_macros.h, 33 LWORD arm_typedefs.h, 43 LWord UnionLWord, 24 MAKELONG arm_macros.h, 33 MAKEWORD arm_macros.h, 33 MAKEWORD arm_macros.h, 33 MAX3 AMAX3 AMAX3 AMAX3 AMIN3 ARADIAN_TO_FLOAT arm_stm32.h, 40 PRADIAN_TO_FLOAT arm_macros.h, 34 RADIAN_TO_FLOAT arm_macros.h, 34 RADIAN_TO_FLOAT arm_mtypedefs.h, 44 RADIAN_TO_FLOAT arm_typedefs.h, 44 SBYTE arm_typedefs.h, 43 SBitfield16 arm_typedefs.h, 43 SBitfield32 arm_typedefs.h, 43 SBitfield64 arm_typedefs.h, 43 SBitfield8 arm_typedefs.h, 43 SBitfield8 arm_typedefs.h, 43 SDWORD arm_macros.h, 33 ARTM_2CFG arm_stm32.h, 40 STM32_INC arm_stm32.h, 40		port
arm_macros.h, 33 INLINE arm_attributes.h, 28 inRange arm_macros.h, 35 inTolerance arm_typedefs.h, 44 arm_macros.h, 35 LOBYTE arm_typedefs.h, 43 LOWORD arm_macros.h, 33 LWORD arm_typedefs.h, 43 MAKELONG arm_macros.h, 33 MAKELONG arm_macros.h, 33 MAKEUORD arm_macros.h, 34 MAKELONG arm_macros.h, 43 MAKEUORD arm_macros.h, 43 MAKEUORD arm_macros.h, 34 MAKEUORD arm_macros.h, 35 MAKEUORD arm_macros.h, 36 MAKEUORD arm_macros.h, 37 MAKEUORD arm_macros.h, 38 MAKEUORD arm_macros.h, 39 MAKEUORD arm_macros.h, 30 MAKEUORD arm_macros.h, 31 MAX3 arm_typedefs.h, 44 MAX3 arm_macros.h, 44 MIN3 arm_macros.h, 40 MIN3 STM32_INC arm_stm32.h, 40		arm_stm32.h, 40
INLINEarm_attributes.h, 28 inRange	_	printExpr
arm_attributes.h, 28 inRange arm_macros.h, 35 inTolerance arm_macros.h, 35 LOBYTE arm_macros.h, 33 LOWORD arm_macros.h, 33 LWORD arm_typedefs.h, 43 LWord UnionLWord, 24 MAKELONG arm_macros.h, 33 MAKEUONG arm_macros.h, 33 MAKEWORD arm_macros.h, 33 MAKEWORD arm_macros.h, 33 MAX3 arm_macros.h, 33 MAX3 AMAX3 AMAX3 AMAX3 AMIN3 ARDIAN_TO_FLOAT arm_macros.h, 34 Rising arm_typedefs.h, 43 SBYTE arm_typedefs.h, 43 SBitfield16 arm_typedefs.h, 43 SBitfield32 arm_typedefs.h, 43 SBitfield64 arm_typedefs.h, 43 SBitfield8 arm_typedefs.h, 43 SDWORD arm_typedefs.h, 43 SDWORD arm_typedefs.h, 43 STM32_CFG arm_stm32.h, 40 MIN3 ARMIN3 ARM_stm32_lNC arm_stm32.h, 40	am_maoros.n, 00	arm_stdclib.h, 39
arm_attributes.h, 28 inRange arm_macros.h, 35 inTolerance arm_macros.h, 35 LOBYTE arm_macros.h, 33 LOWORD arm_macros.h, 33 LWORD arm_typedefs.h, 43 LWord UnionLWord, 24 MAKELONG arm_macros.h, 33 MAKEUONG arm_macros.h, 33 MAKEWORD arm_macros.h, 33 MAKEWORD arm_macros.h, 33 MAX3 arm_macros.h, 33 MAX3 AMAX3 AMAX3 AMAX3 AMIN3 ARDIAN_TO_FLOAT arm_macros.h, 34 Rising arm_typedefs.h, 43 SBYTE arm_typedefs.h, 43 SBitfield16 arm_typedefs.h, 43 SBitfield32 arm_typedefs.h, 43 SBitfield64 arm_typedefs.h, 43 SBitfield8 arm_typedefs.h, 43 SDWORD arm_typedefs.h, 43 SDWORD arm_typedefs.h, 43 STM32_CFG arm_stm32.h, 40 MIN3 ARMIN3 ARM_stm32_lNC arm_stm32.h, 40	INLINE	
inRange arm_macros.h, 35 inTolerance arm_typedefs.h, 44 arm_macros.h, 35 LOBYTE arm_typedefs.h, 43 arm_macros.h, 33 LOWORD arm_typedefs.h, 43 LWORD arm_typedefs.h, 43 LWORD arm_typedefs.h, 43 LWORD arm_typedefs.h, 43 LWORD arm_typedefs.h, 43 SBitfield32 arm_typedefs.h, 43 SBitfield64 arm_typedefs.h, 43 SBitfield8 arm_typedefs.h, 43 SBitfield8 arm_typedefs.h, 43 SDWORD arm_macros.h, 33 MAKELONG SDWORD arm_macros.h, 33 MAKEWORD SLWORD arm_typedefs.h, 43 MAX3 STM32_CFG arm_macros.h, 33 MIN3 STM32_INC arm_stm32.h, 40 STM32_INC arm_stm32.h, 40		RADIAN_TO_FLOAT
arm_macros.h, 35 inTolerance arm_macros.h, 35 LOBYTE arm_macros.h, 33 LOWORD arm_macros.h, 33 LWORD arm_typedefs.h, 43 EWORD arm_typedefs.h, 43 Biffield32 arm_typedefs.h, 43 Biffield32 arm_typedefs.h, 43 Biffield64 LWord arm_typedefs.h, 43 Biffield8 arm_typedefs.h, 43 SBitfield8 arm_typedefs.h, 43 SBitfield8 Biffield8 arm_typedefs.h, 43 SDWORD arm_macros.h, 33 MAKELONG arm_macros.h, 33 MAKEWORD arm_macros.h, 33 MAX3 STM32_CFG arm_macros.h, 34 MIN3 arm_stm32.h, 40 STM32_INC arm_stm32.h, 40		arm_macros.h, 34
inTolerance arm_typedefs.h, 44 arm_macros.h, 35 LOBYTE arm_typedefs.h, 43 sBitfield16 arm_typedefs.h, 43 sBitfield32 arm_typedefs.h, 43 sBitfield32 arm_typedefs.h, 43 sBitfield64 LWord arm_typedefs.h, 43 LWord arm_typedefs.h, 43 sBitfield8 arm_typedefs.h, 43 sSTM32_CFG arm_macros.h, 33 sTM32_CFG arm_stm32.h, 40 sTM32_INC arm_stm32.h, 40		Rising
arm_macros.h, 35 LOBYTE arm_typedefs.h, 43 sBitfield16 arm_typedefs.h, 43 sBitfield32 arm_typedefs.h, 43 sBitfield32 arm_typedefs.h, 43 sBitfield64 LWord arm_typedefs.h, 43 UnionLWord, 24 SBitfield8 arm_typedefs.h, 43 MAKELONG arm_macros.h, 33 MAKEWORD arm_macros.h, 33 MAKEWORD arm_macros.h, 33 MAKEWORD arm_macros.h, 33 MAX3 STM32_CFG arm_macros.h, 33 MIN3 STM32_INC arm_stm32.h, 40		arm_typedefs.h, 44
LOBYTE arm_macros.h, 33 LOWORD arm_macros.h, 33 LWORD arm_typedefs.h, 43 sBitfield32 arm_typedefs.h, 43 sBitfield64 arm_typedefs.h, 43 sBitfield64 arm_typedefs.h, 43 sBitfield8 arm_typedefs.h, 43 sBitfield8 arm_typedefs.h, 43 SBitfield8 arm_typedefs.h, 43 SBitfield8 arm_typedefs.h, 43 SBWORD arm_macros.h, 33 MAKELONG arm_macros.h, 33 MAKEWORD arm_macros.h, 33 MAX3 STM32_CFG arm_stm32.h, 40 MIN3 arm_stm32.h, 40 STM32_INC arm_stm32.h, 40		
arm_macros.h, 33 LOWORD arm_macros.h, 33 LWORD arm_typedefs.h, 43 SBitfield32 LWORD arm_typedefs.h, 43 SBitfield64 LWord UnionLWord, 24 SBitfield8 arm_typedefs.h, 43 SBitfield8 arm_typedefs.h, 43 SBitfield8 ARKELONG Arm_macros.h, 33 MAKEWORD arm_macros.h, 33 MAKEWORD arm_macros.h, 33 MAX3 ARMAX3 ARMAX4	u	_
LOWORD arm_macros.h, 33 LWORD arm_typedefs.h, 43 sBitfield32 LWORD arm_typedefs.h, 43 sBitfield64 LWord UnionLWord, 24 sBitfield8 arm_typedefs.h, 43 sBitfield8 arm_typedefs.h, 43 sBitfield8 arm_typedefs.h, 43 sBitfield8 arm_typedefs.h, 43 SDWORD arm_macros.h, 33 MAKEUONG arm_macros.h, 33 MAKEWORD arm_macros.h, 33 MAX3 STM32_CFG arm_stm32.h, 40 MIN3 arm_stm32.h, 40 STM32_INC arm_stm32.h, 40	LOBYTE	
arm_macros.h, 33 LWORD arm_typedefs.h, 43 SBitfield32 arm_typedefs.h, 43 SBitfield64 LWord arm_typedefs.h, 43 UnionLWord, 24 SBitfield8 arm_typedefs.h, 43 MAKELONG SDWORD arm_macros.h, 33 MAKEWORD SLWORD arm_macros.h, 33 MAX3 STM32_CFG arm_macros.h, 33 MIN3 STM32_INC arm_stm32.h, 40	arm_macros.h, 33	
LWORD arm_typedefs.h, 43 LWord arm_typedefs.h, 43 UnionLWord, 24 MAKELONG SDWORD arm_macros.h, 33 MAKEWORD SLWORD arm_macros.h, 33 MAX3 STM32_CFG arm_macros.h, 33 MIN3 STM32_INC arm_stm32.h, 40 Arm_stm32.h, 40 Arm_stm32.h, 40	LOWORD	
arm_typedefs.h, 43 LWord	arm_macros.h, 33	
LWord arm_typedefs.h, 43 UnionLWord, 24 sBitfield8 arm_typedefs.h, 43 MAKELONG SDWORD arm_macros.h, 33 arm_typedefs.h, 43 MAKEWORD SLWORD arm_macros.h, 33 arm_typedefs.h, 44 MAX3 STM32_CFG arm_macros.h, 33 arm_stm32.h, 40 MIN3 STM32_INC arm_macros.h, 33 arm_stm32.h, 40	LWORD	
UnionLWord, 24 BBitfield8 arm_typedefs.h, 43 MAKELONG arm_macros.h, 33 MAKEWORD arm_macros.h, 33 MAX3 arm_typedefs.h, 43 SLWORD arm_typedefs.h, 44 MAX3 STM32_CFG arm_macros.h, 33 MIN3 arm_stm32.h, 40 STM32_INC arm_macros.h, 33 arm_stm32.h, 40	arm_typedefs.h, 43	sBitfield64
marm_typedefs.h, 43 MAKELONG arm_macros.h, 33 MAKEWORD arm_macros.h, 33 MAX3 arm_typedefs.h, 43 SLWORD arm_typedefs.h, 44 MAX3 STM32_CFG arm_macros.h, 33 MIN3 arm_stm32.h, 40 MIN3 arm_macros.h, 33 arm_stm32.h, 40	LWord	
MAKELONG SDWORD arm_macros.h, 33 arm_typedefs.h, 43 MAKEWORD SLWORD arm_macros.h, 33 arm_typedefs.h, 44 MAX3 STM32_CFG arm_macros.h, 33 arm_stm32.h, 40 MIN3 STM32_INC arm_macros.h, 33 arm_stm32.h, 40	UnionLWord, 24	sBitfield8
arm_macros.h, 33 MAKEWORD arm_macros.h, 33 MAX3 MAX3 STM32_CFG arm_macros.h, 33 MIN3 Arm_stm32.h, 40 STM32_INC arm_macros.h, 33 arm_stm32.h, 40		
MAKEWORD SLWORD arm_macros.h, 33 arm_typedefs.h, 44 MAX3 STM32_CFG arm_macros.h, 33 arm_stm32.h, 40 MIN3 STM32_INC arm_macros.h, 33 arm_stm32.h, 40	MAKELONG	
arm_macros.h, 33 arm_typedefs.h, 44 MAX3 STM32_CFG arm_macros.h, 33 arm_stm32.h, 40 MIN3 STM32_INC arm_macros.h, 33 arm_stm32.h, 40	— · · · · · · · · · · · · · · · · · · ·	
MAX3 STM32_CFG arm_macros.h, 33 arm_stm32.h, 40 MIN3 STM32_INC arm_macros.h, 33 arm_stm32.h, 40		
arm_macros.h, 33 arm_stm32.h, 40 MIN3 STM32_INC arm_stm32.h, 40 arm_stm32.h, 40	-	
MIN3 STM32_INC arm_macros.h, 33 arm_stm32.h, 40	-	-
arm_macros.h, 33 arm_stm32.h, 40		
	-	-
max STM_CONF_HEADER	arm_macros.h, 33	
	max	STM_CONF_HEADER

arm_stm32.h, 40	b12, 7
STM_HEADER	b13, 7
arm_stm32.h, 40	b14, 7
STR	b15, 7
arm_macros.h, 34	b16, 7
SWAP_BYTE	b17, 7
arm_macros.h, 34	b18, 7
SWAP_DWORD	b19, 7
arm_macros.h, 34	b2, 7
SWAP_END16B_TAB	b20, 7
arm_macros.h, 36	b21, 7
SWAP_END16B	b22, 8
arm_macros.h, 35	b23, 8
SWAP_END32B_TAB	b24, 8
arm_macros.h, 37	b25, 8
SWAP_END32B	b26, 8
arm_macros.h, 36	b27, 8
SWAP_WORD	b28, 8
arm_macros.h, 34	b29, 8
SWORD	b3, 8
arm_typedefs.h, 44	b30, 8
sarmfsw.h, 45	b31, 8
DefDebugTarget, 46	b4, 8
DefFUBARTarget, 46	b5, 9
DefReleaseTarget, 46	b6, 9
DefSpecialTarget, 46	b7, 9
DefUnknownTarget, 46	b8, 9
FW_target, 46	b9, 9
str_add_cr	StructBitfield64, 9
arm_stdclib.h, 39	b0, 12
str_add_tab	b1, 12
arm_stdclib.h, 39	b10, 12
str_clr	b11, 12
arm_stdclib.h, 39	b12, 12
str_clr_safe	b13, 12
arm_stdclib.h, 39	b14, 12
StructBitfield16, 2	b15, 12
b0, 3	b16, 13
b1, 3	b17, 13
b10, 3	b18, 13
b11, 4	b19, 13
b12, 4	b2, 13
b13, 4	b20, 13
b14, 4	b21, 13
b15, 4	b22, 13
b2, 4	b23, 13
b3, 4	b24, 13
b4, 4	b25, 13
b5, 4	b26, 13
b6, 4	b27, 14
b7, 4	b28, 14
b8, 4	b29, 14
b9, 5	b3, 14
StructBitfield32, 5	b30, 14
b0, 6	b31, 14
b1, 6	b32, 14
b10, 6	b33, 14
b11, 7	b34, 14

h05 14	ave two adata b. 44
b35, 14 b36, 14	arm_typedefs.h, 44 uWord
b37, 14	arm_typedefs.h, 44
b38, 15	Undefined
b39, 15	arm_macros.h, 35
b4, 15	UnionByte, 19
b40, 15	Bits, 19
b41, 15	Byte, 19
b42, 15	UnionDWord, 20
b43, 15	B0, 21
b44, 15	B1, 21
b45, 15	B2, 21
b46, 15	B3, 21
b47, 15	Bits, 21
b48, 15	Byte, 21
b49, 16	Bytes, 21
b5, 16	DWord, 21
b50, 16	W0, 21
b51, 16	W1, 21
b52, 16	Word, 21
b53, 16	Words, 21
b54, 16	UnionLWord, 22
b55, 16	B0, 23
b56, 16	B1, 23
b57, 16	B2, 23
b58, 16	B3, 23
b59, 16	B4, 24
b6, 17	B5, 24
b60, 17	B6, 24
b61, 17	B7, 24
b62, 17	Bits, 24
b63, 17	Byte, 24
b7, 17 b8, 17	Bytes, 24 D0, 24
b9, 17	D1, 24
StructBitfield8, 17	DWord, 24
b0, 18	DWords, 24
b1, 18	LWord, 24
b2, 18	W0, 24
b3, 18	W1, 25
b4, 18	W2, 25
b5, 18	W3, 25
b6, 18	Word, 25
b7, 19	Words, 25
	UnionWord, 25
TPSINF_MS	B0, 26
arm_macros.h, 34	B1, 26
TPSSUP_MS	Bits, 26
arm_macros.h, 34	Byte, 26
TestMalloc	Bytes, 26
arm_stdclib.h, 39	Word, 26
TwoThird	e en els les estes
arm_macros.h, 34	verblnstr
uByte	arm_stdclib.h, 39
arm_typedefs.h, 44	VerboseInc
uDWord	arm_stdclib.h, 39
arm_typedefs.h, 44	W0
uLWord	UnionDWord, 21
	5.11.5.1.5.1.5.1.5.1.5.1.5.1.5.1.5.1.5.

```
UnionLWord, 24
W1
    UnionDWord, 21
    UnionLWord, 25
W2
    UnionLWord, 25
W3
    UnionLWord, 25
WEAK__
    arm_attributes.h, 28
WORD
    arm_typedefs.h, 44
Word
    UnionDWord, 21
    UnionLWord, 25
    UnionWord, 26
Words
    UnionDWord, 21
    UnionLWord, 25
XCAT
    arm_macros.h, 35
```