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D



AS3933 Demoboard

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AS3933 Demoboard



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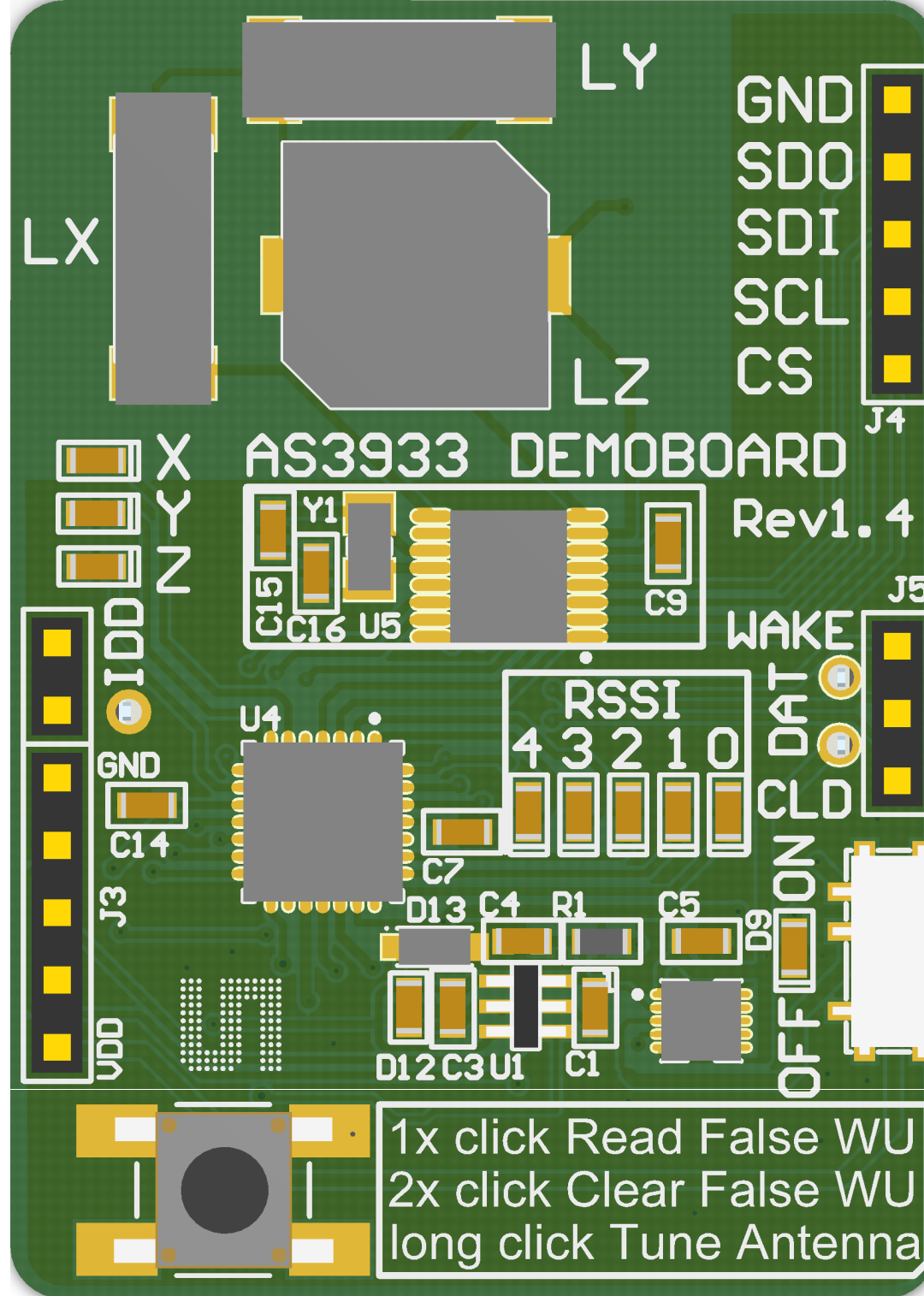
- Sheet 1: Title Page
- Sheet 2: Project Page (This page)
- Sheet 3:AS3933 Demoboard

Revision History

Revision 1.4: Update to corporate format; Correction of crystal load capacitance values; The load capacitance given in the crystal spec is 9pF; Corrected values of antenna matching components in schematic to the values placed on the hardware.

PCB Stackup



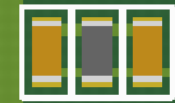


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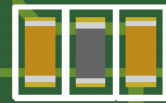
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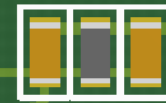
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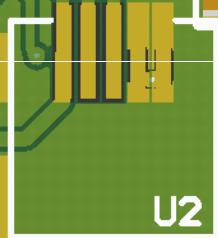
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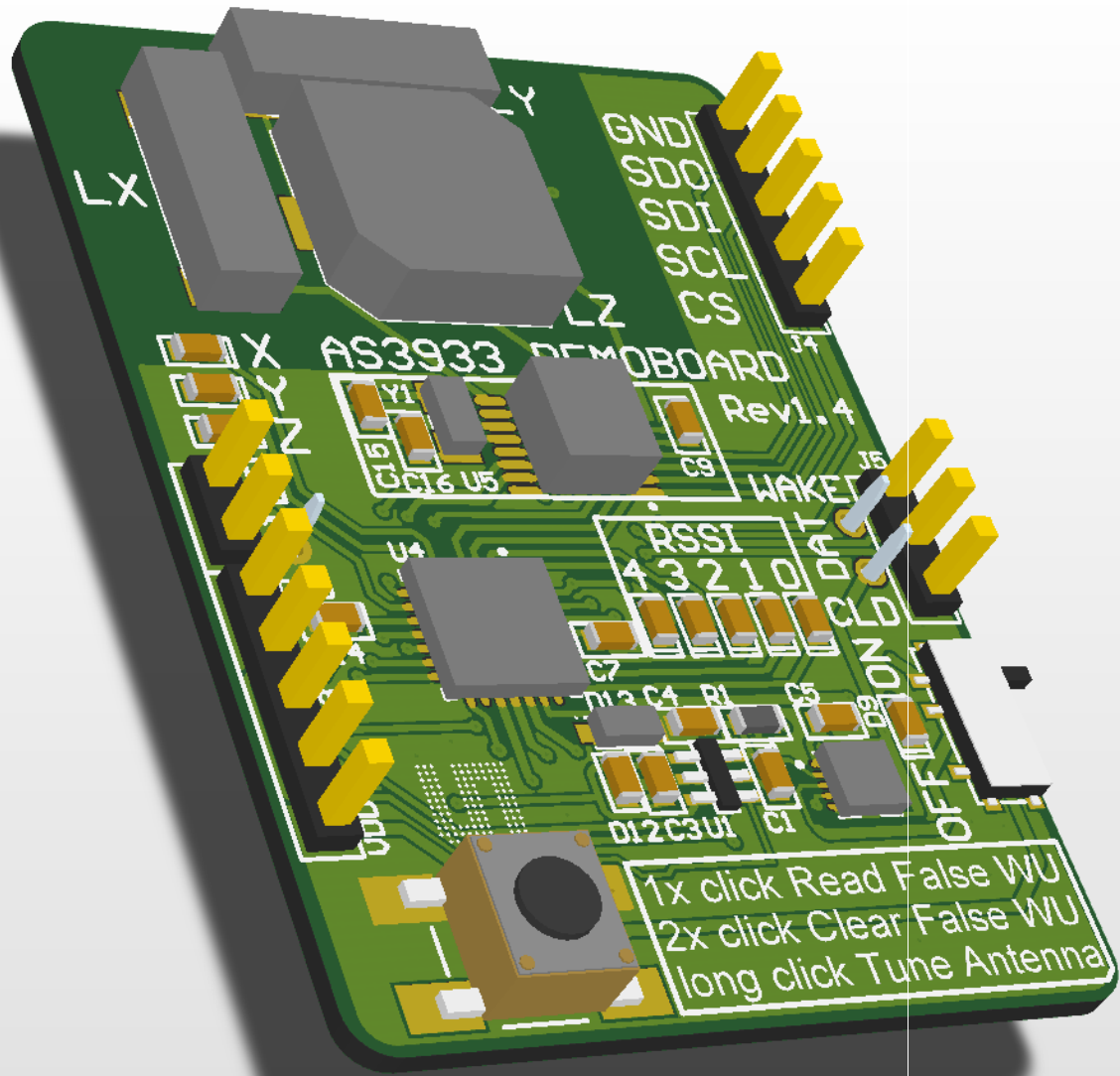


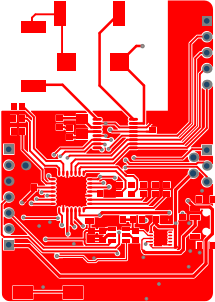
C12 R6 C17

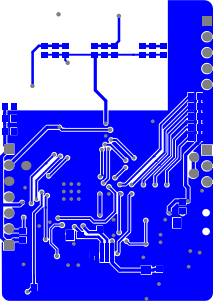


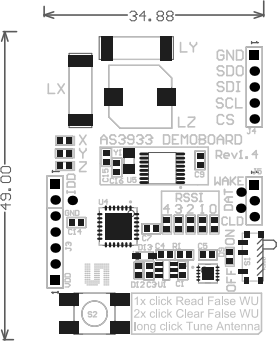
C13 R8 C19











Bill of Materials								
AS3933 Demoboard								
	Company:		ams AG					
	Originator:		JRY					
	PCB Name:		AS3933 Demoboard					
	PCB Version:		1.4					
	Report Date:		24.02.2013					
#	Designator	Comment	Component_Description	Manufacturer	Manufacturer Part Number	Supplier 1	Supplier Part Number 1	Quantity
1	C1, C6	10n	C0603/10V/X5R					2
2	C11	180p	C0603/50V/COG±2%	Murata	GRM1885C1H181GA01D	Mouser	81-GRM1885C1H181GA01D	1
3	C12, C13	150p	C0603/50V/COG±2%	Murata	GRM1885C1H151GA01D	Mouser	81-GRM1885C1H151GA	2
4	C15, C16	12p	TDK - C1608C0G1H120J080AA - CAPACITOR, 0603, COG, 50V, 12pF	TDK	C1608C0G1H120J080AA	Farnell	1907285RL	2
5	C17, C19	18p	Multilayer Ceramic Capacitors MLCC - SMD/SMT 0603 18pF 50volts COG 2%	Murata Electronics	GRM1885C1H180GA01D	Mouser	81-GRM1885C1H180GA	2
6	C18	3p	C0603/50V/COG±2%	Murata	GRM1885C1H3R0BZ01D	Mouser	81-GRM1885C1H3R0BZ01D	1
7	C2, C10	10u	C0805/6.3V/X5R					2
8	C20	4.7u	C0805/6.3V/X5R					1
9	C3, C4	1u	C0603/10V/X5R	Yageo	CO603KRXSR68B105	Farnell	9402080	2
10	C5, C7, C9, C14	100n	C0603/10V/X5R					4
11	D1	Z	SUPER Brightness Red	MULTICOMP	OVS-0608	Farnell	1716774	1
12	D10, D11, D12	24V	COOPER BUSSMANN - 0603ESDA-TR1 - DIODE, TVS, BL 24V, 0603	COOPER BUSSMANN	0603ESDA-TR1	Farnell	1470613	3
13	D13	Zener	ON SEMICONDUCTOR - MM6Z6V8T1G - DIODE, ZENER, 6.8V, 0.2W	ON SEMICONDUCTOR	MM6Z6V8T1G	Farnell	1431206	1
14	D2	RS0	SUPER Brightness Red	MULTICOMP	OVS-0608	Farnell	1716774	1
15	D3	RS1	SUPER Brightness Red	MULTICOMP	OVS-0608	Farnell	1716774	1
16	D4	RS2	SUPER Brightness Red	MULTICOMP	OVS-0608	Farnell	1716774	1
17	D6	X	SUPER Brightness Red	MULTICOMP	OVS-0608	Farnell	1716774	1
18	D6	Y	SUPER Brightness Red	MULTICOMP	OVS-0608	Farnell	1716774	1
19	D7	RS4	SUPER Brightness Red	MULTICOMP	OVS-0608	Farnell	1716774	1
20	D8	RS3	SUPER Brightness Red	MULTICOMP	OVS-0608	Farnell	1716774	1
21	D9, S1	ON	MULTICOMP - OVS-0608 - LED 0603 SUPER BRIGHT RED, C & K COMPONENTS - PCM12SMTR - SWITCH, SPDT, 0.3A, 6VDC, SMD	MULTICOMP, C & K COMPONENTS	OVS-0608, PCM12SMTR	Farnell	1716774, 9575146	2
22	J2	DD_AS	2 pole pin header					1
23	J3	ICP	not assembled					1
24	J4	SDI	5 pole pin header					1
25	J5	DAT	3 pole pin header					1
26	LX	X-axis 125kHz coil	7.2mH +/- 5% @ 125kHz	Premo	SDTR1103-0720J			1
27	LY	Y-axis 125kHz coil	7.2mH +/- 5% @ 125kHz	Premo	SDTR1103-0720J			1
28	R1, R17	100k	R0603/5%/0.1W					2
29	R20	3k9	R0603/5%/0.1W					1
30	R5	10k	R0603/5%/0.1W					1
31	R6, R7, R8	240k	R0603/5%/0.1W					3
32	R9, R10, R11, R12, R13, R14, R15, R16	680	R0603/5%/0.1W					8
33	S2	Mode	TE CONNECTIVITY / ALCO SWITCH - FSM2J5MA SWITCH, SPST, 0.05A, 24VDC, SMD	TE CONNECTIVITY / ALCO SWITCH	FSM2J5MA	Farnell	3801287	1
34	U3	Batterie	RENATA - HU2032-LF - HOLDER, BATTERY, THT, CR2032	RENATA	HU2032-LF	Farnell	1319749	1
35	Y1	CC7V-T1A	MICRO CRYSTAL - CC7V-T1A 32.768KHZ +/-20PPM 9PF - CRYSTAL, SMD CER 32.768KHZ 9.0	MICRO CRYSTAL	CC7V-T1A 32.768KHZ +/-20PPM 9PF	Farnell	1539382	1
36	U1	AS1746	Dual SPDT Analog Switch	ams	AS1746-BTDT	Digi-Key	AS1746-BTDT1R-ND	1
37	U1	AS1362	RF LDO, 3.0V/300mA	ams	AS1362-BT1T-30	Digi-Key	AS1362-BT1T-30CT-ND	1
38	U4	PIC27FJ64GB002	IC MCU 16BIT 64KB FLASH 28QFN	Microchip Technology	PIC24FJ64GB002-IML	Digi-Key	PIC24FJ64GB002-IML-ND	1
39	LZ	Zcoil	7.2mH +/-5% @ 125 kHz	Premo	ZC1003-0720J			1
40	U2	USB_MINI_B	CONN RECEPT MINI USB2.0 5POS	Hirose Electric Co Ltd	UX60A-MB-5ST	Digi-Key	H2961CT-ND	1
41	U5	AS3933	RFID PROG RX 15KHZ - 150KHZ	ams	AS3933-BTST	Digi-Key	AS3933-BTST1R-ND	1
Approved			Notes					63