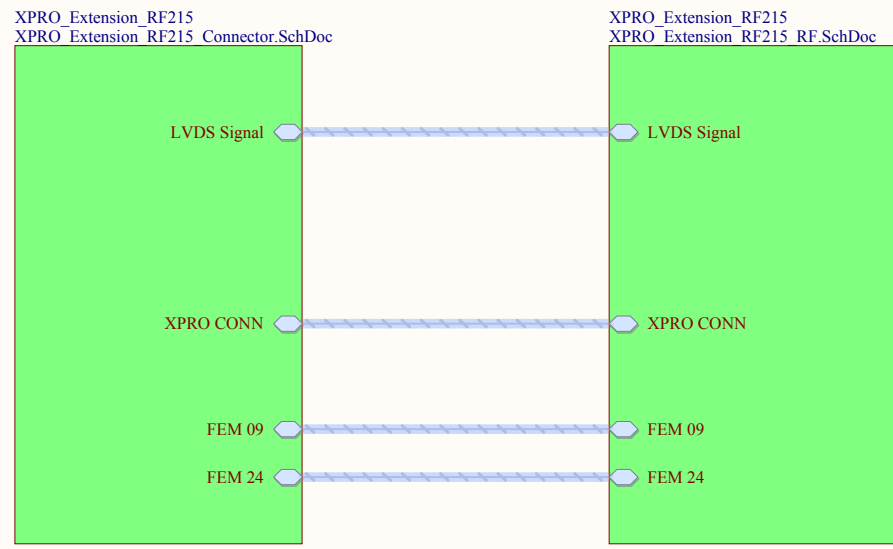
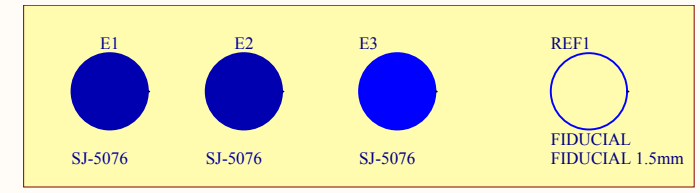


A



B



C

LABEL1

Product number/revision
Serial number

Label PCBA with FCC ID

TEST SW
\$ >_

A11-0210


PCB1

A08-1791
XPRO Extension PCB for RF215

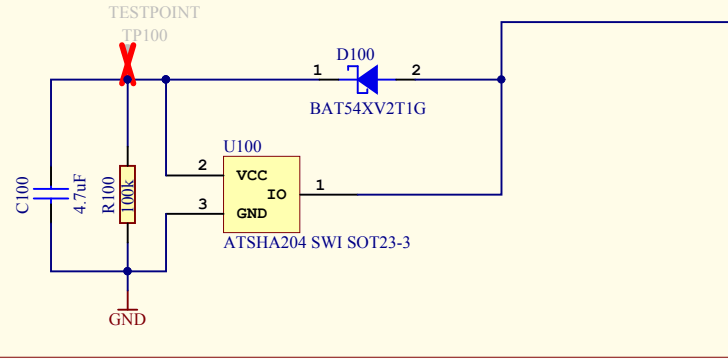
PCBA1 TEST PROCEDURE

A12-0702 A12-0703

D

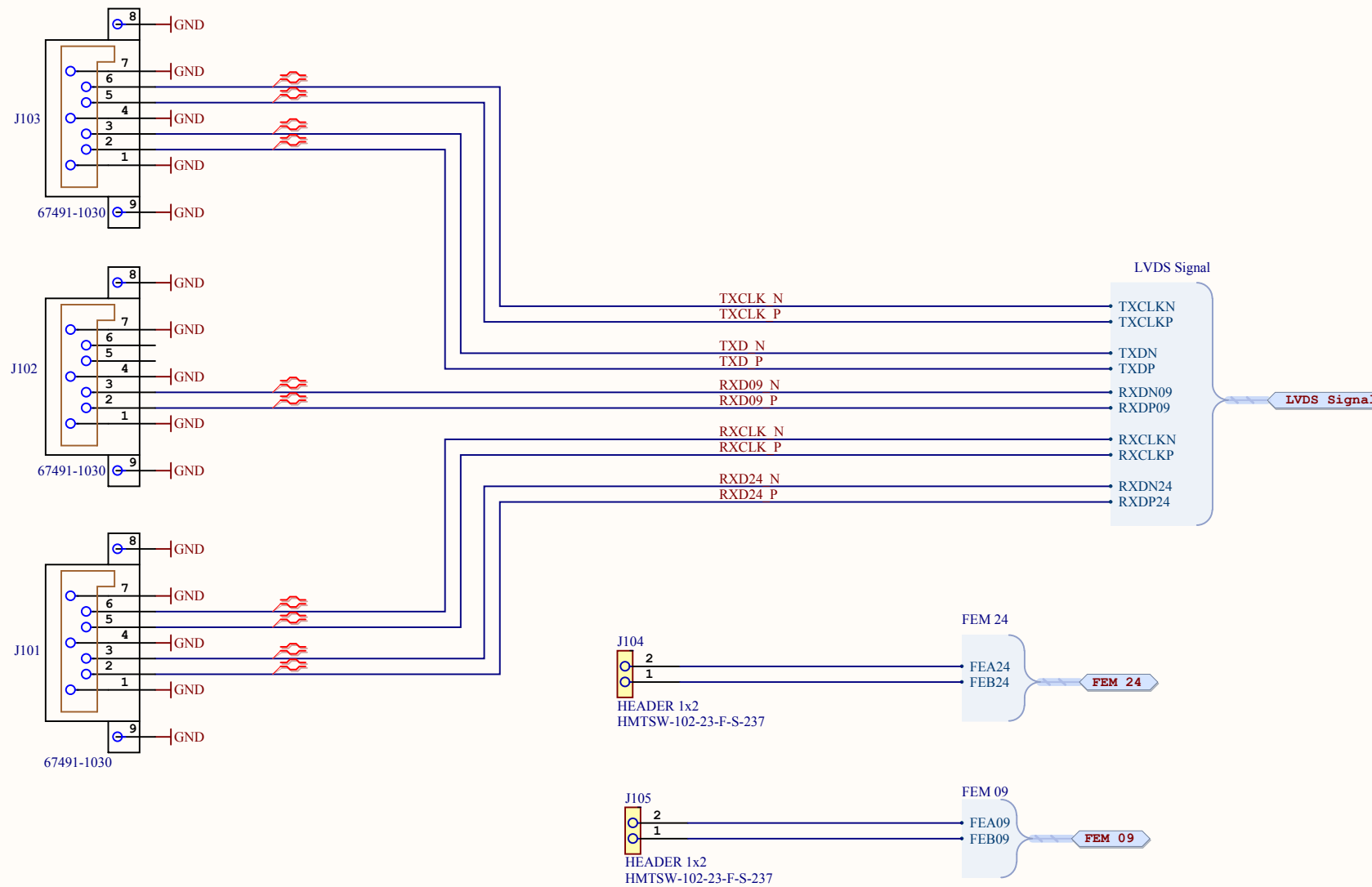
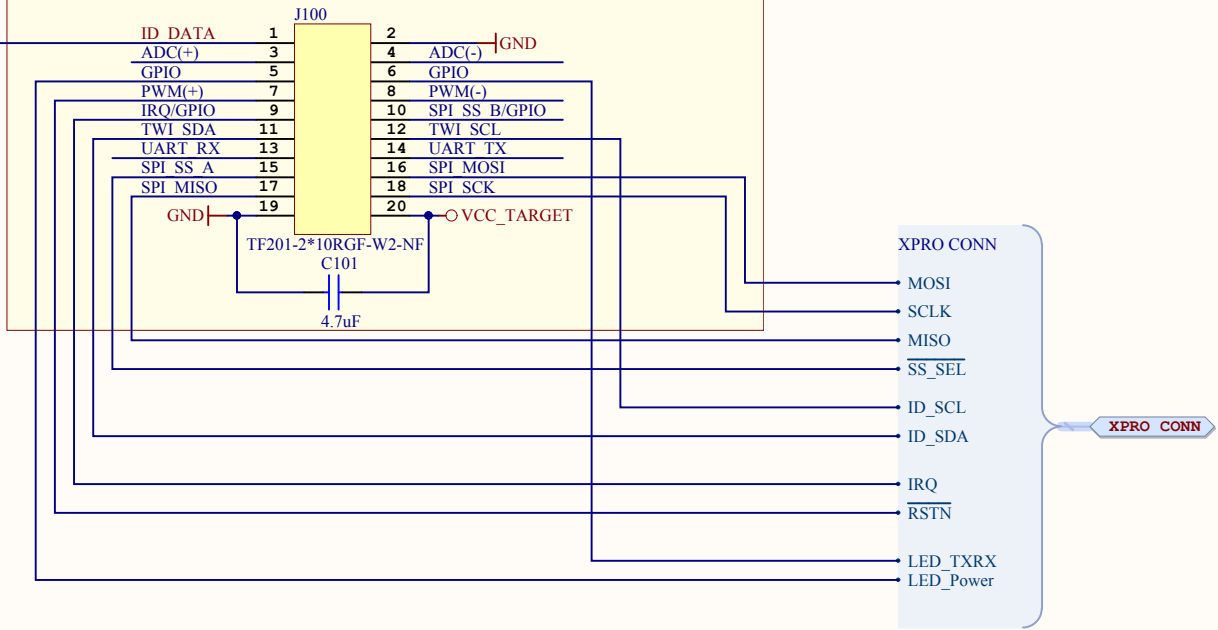
ATMEL R&D India	Sanjay Yadav		 <p>Enabling Unlimited Possibilities</p>
RMZ Millenia - 2	MSK		
143, Dr. MGR			
Chennai			
Date:	4/23/2015	2:15:12 PM	PAGE: 1 of 3
Document number:	*		Revision 4
TITLE: XPRO_Extension_RF215			
XPRO_Extension_RF215_TopLevel.SchDoc			

Extension Identification

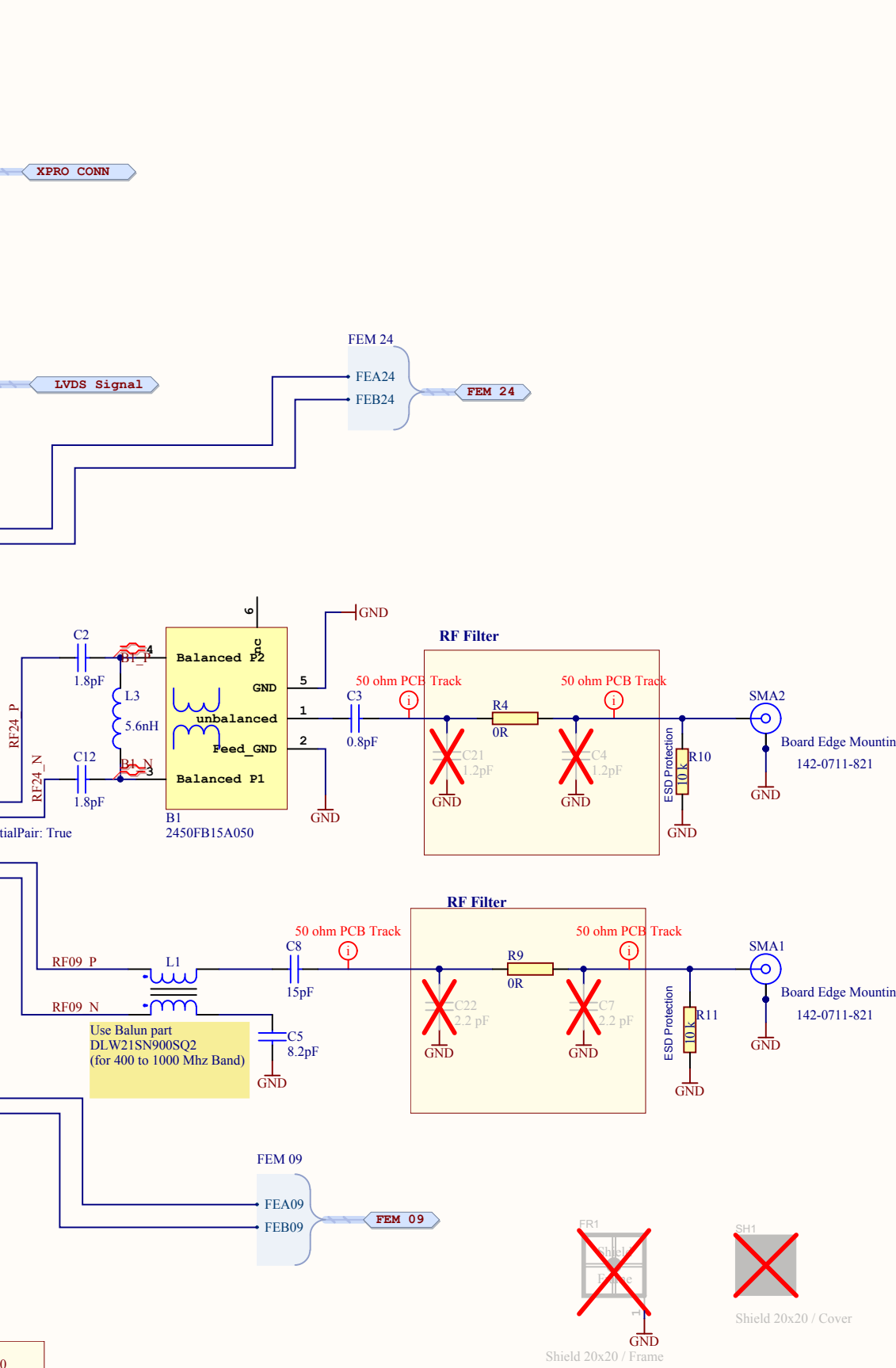
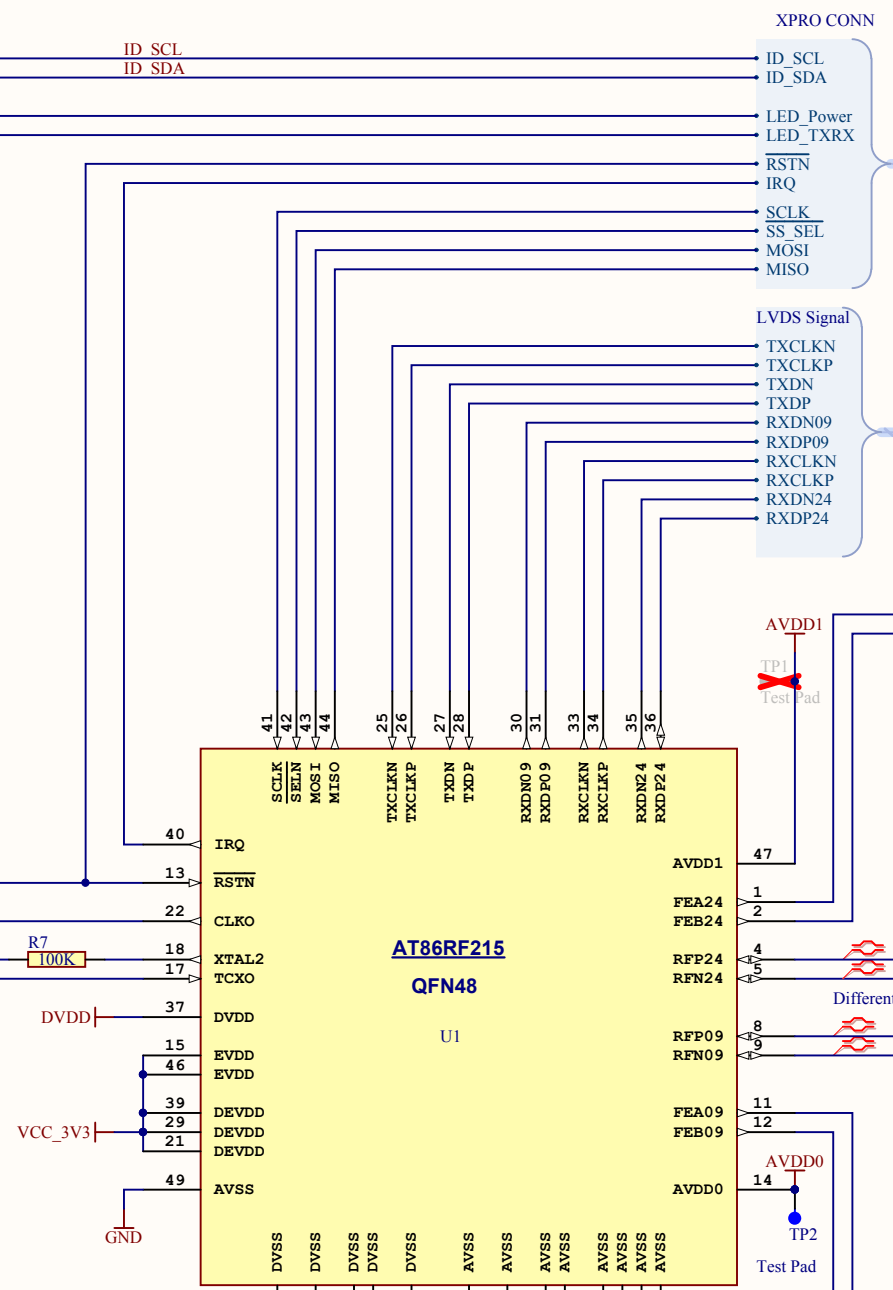
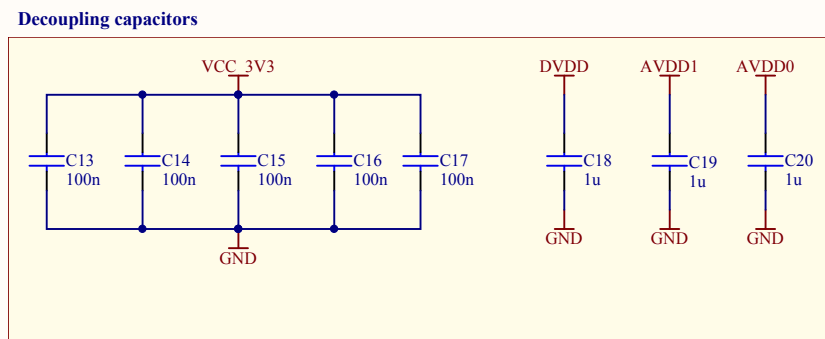
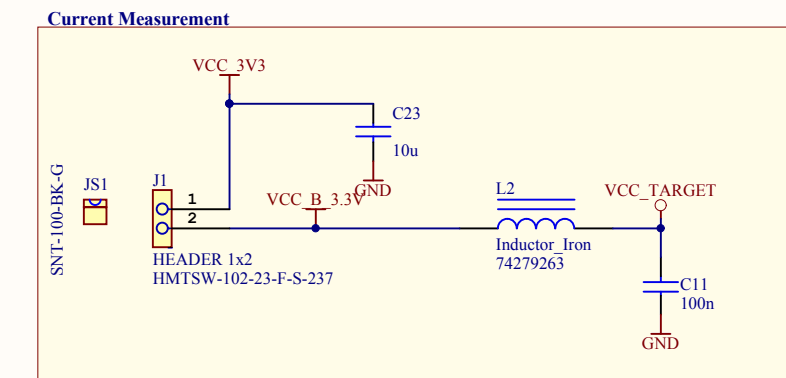
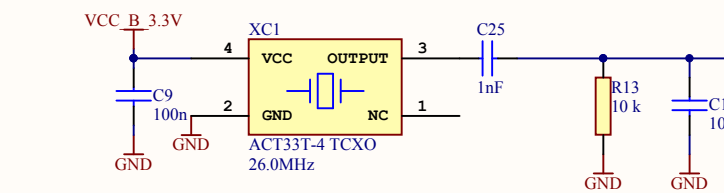
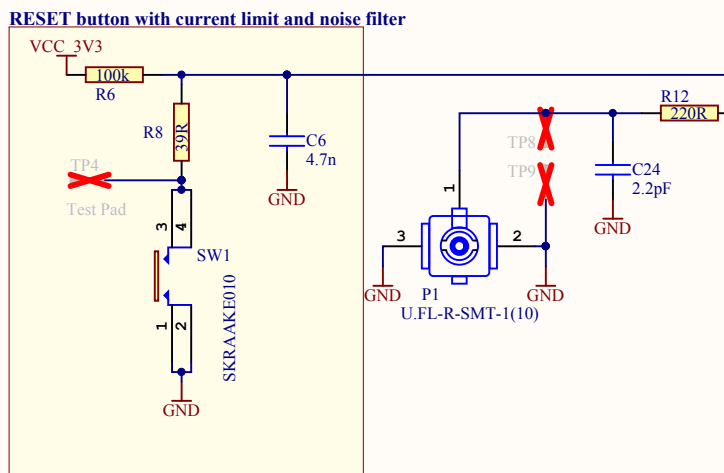
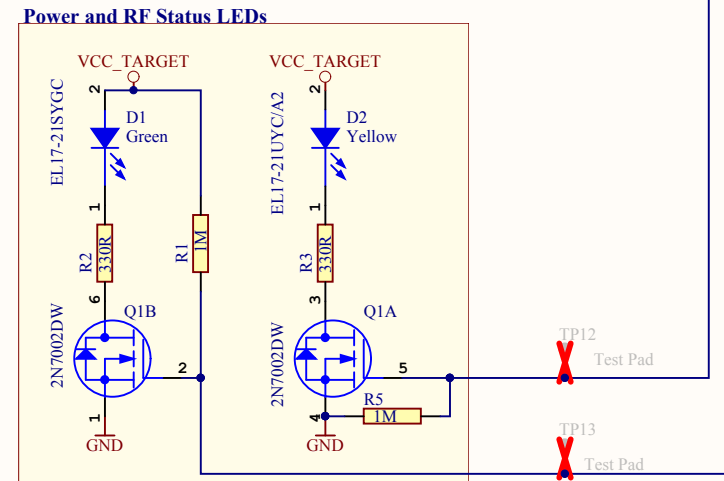
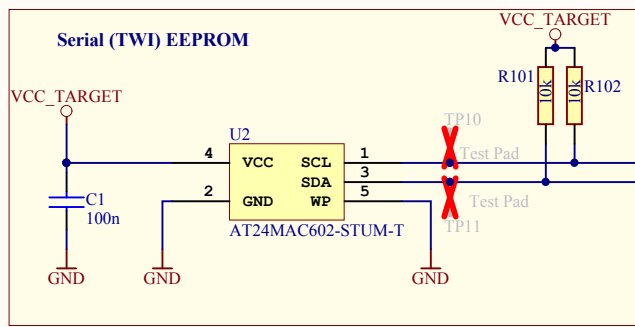


[DESIGN NOTE]
 The ATSHA204 is powered through an IO Pin from the EDBG on an MCU board. R100 is present to drain the capacitor C100 when power is removed from an MCU board.

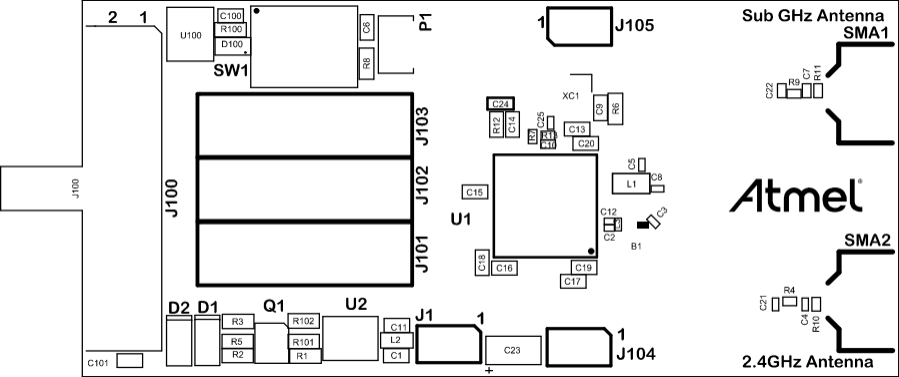
Standard Extension Header (Female)



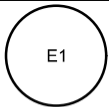
ATMEL R&D India	Sanjay Yadav		
RMZ Millenia - 2	MSK		
143, Dr. MGR			
Chennai			
Date:	4/23/2015	2:15:12 PM	PAGE: 2 of 3
Document number:	*		Revision 4
TITLE: XPRO_Extension_RF215_schematic			
XPRO_Extension_RF215_Connector.SchDoc			



ATMEL R&D India	Sanjay Yadav		
RMZ Millenia - 2	MSK		
143, Dr. MGR			
Chennai			
Date:	4/23/2015	2:15:13 PM	PAGE: 3 of 3
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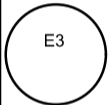
TP100



E1

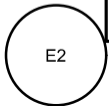
WIRELESS X PLAINED PRO
REB215-XPRO

TP2



E3

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E2

PCBA LABEL

A08-1791 Rev 5

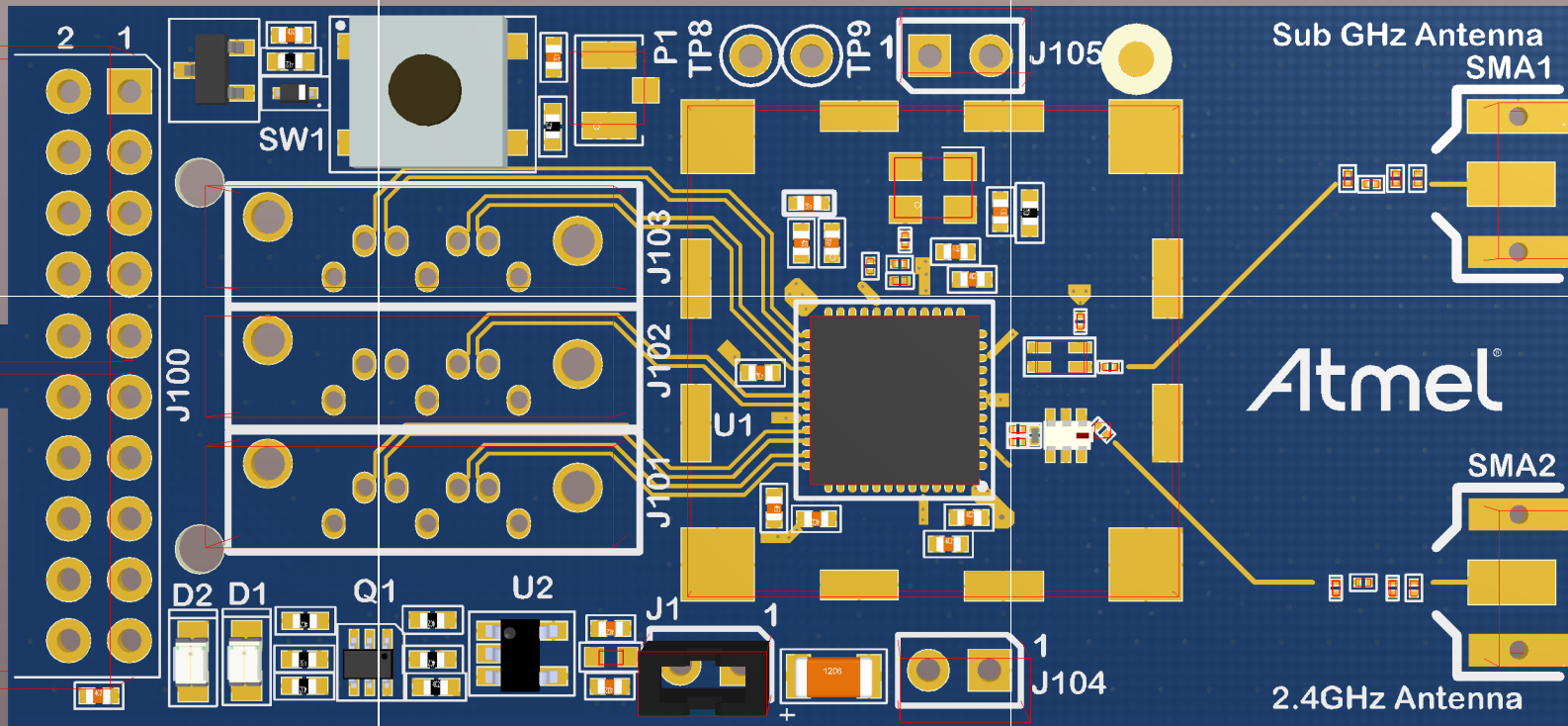
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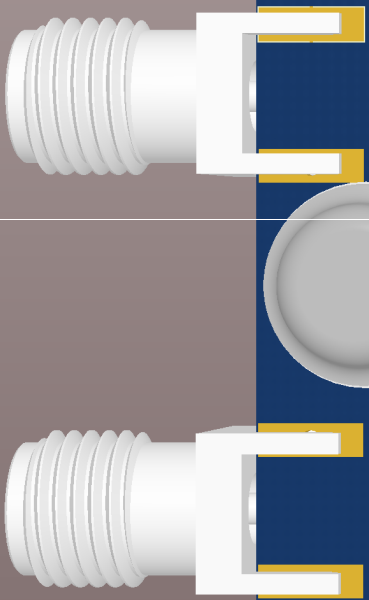
VCC_3V3

TP12

TP13







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WIRELESS X PLAINED PRO

REB215-XPRO

TP2

TP1 PCBA LABEL
A08-1791 Rev 5

VCC_MCU

VCC_3V3

TP100

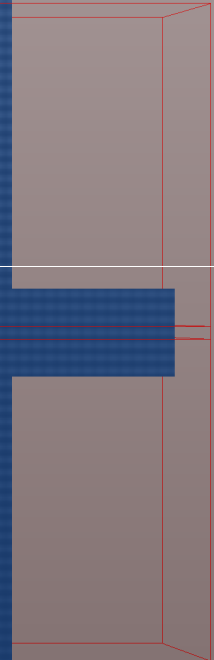
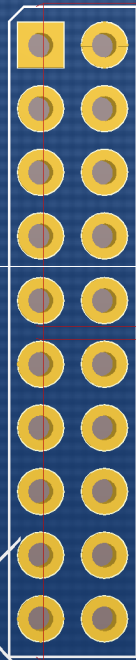
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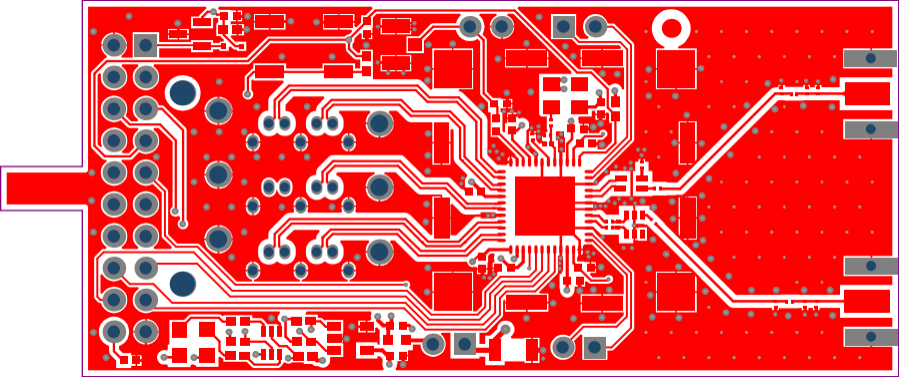
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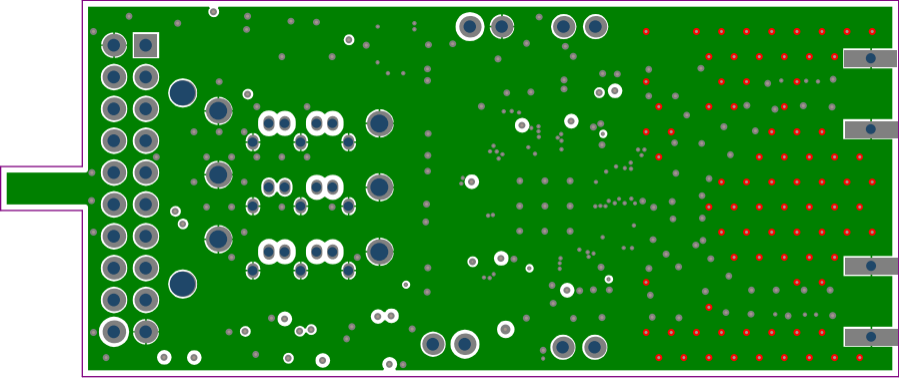
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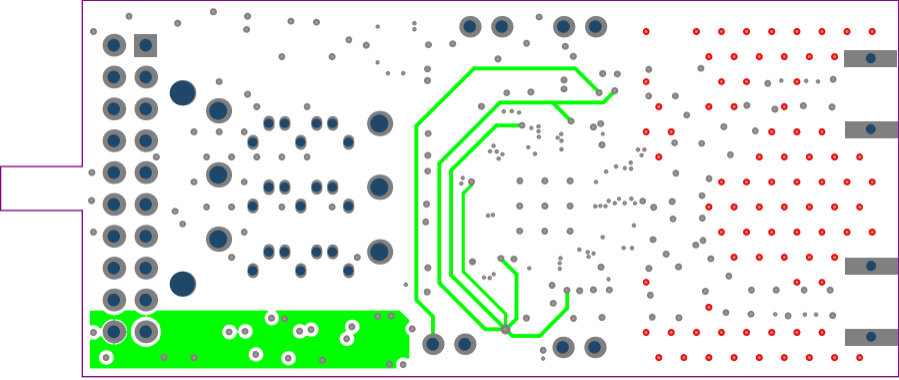
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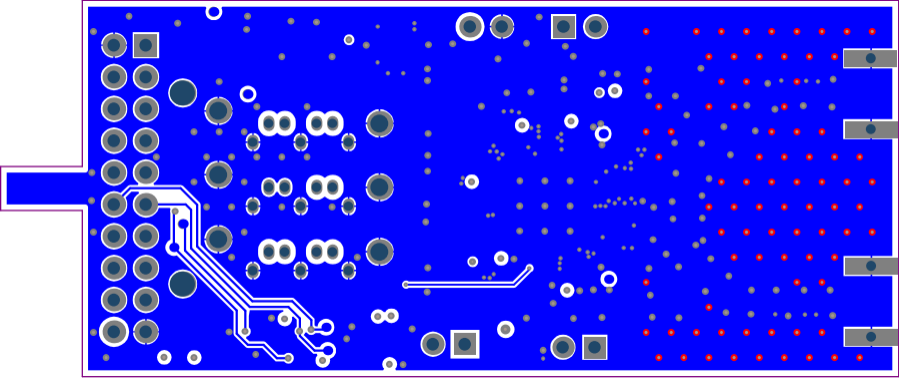
TP11











Component list

Bill of Materials Print For Variant [ID powered through VTG] of Project [XPRO_Extension_RF215.PrjPCB] (No PCB Document Selected)

Source Data From: XPRO_Extension_RF215.PrjPCB
 Project: XPRO_Extension_RF215.PrjPCB
 Variant: ID powered through VTG



Report Date: 4/23/2015 2:15:54 PM
 Print Date: <Parameter Curren <Parameter CurrentTime not found>

#	Designator	Quantity	Value	Manufacturer	MPN	Description
1	B1	1	2450FB15A050	Johanson Technology	2450FB15A050	2.4Ghz Balun for RF215
2	C1, C9, C11, C13, C14, C15, C16, C17	8	100n	Kemet	C0402C104K4RACTU	Ceramic capacitor, SMD 0402, X7R, 16V, +/-10%
3	C2, C12	2	1.8pF			CAP CER 1.8PF 25V NPO 0201
4	C3	1	0.8pF	Johanson Technology	250R05L0R8AV4T	CAP CER 0.8PF 25V NPO 0201
5	C5	1	8.2pF	Johanson Technology	250R05L8R2CV4T	CAP CER 8.2PF 25V NPO 0201
6	C6	1	4.7n			Ceramic capacitor, SMD 0402, X7R, 25V, +/-10% (de35287)
7	C8	1	15pF	Murata	GRM0335C1E150JA01D	15pF A±5% 0201, 25VDC
8	C10	1	10pF	tdk	C0603C0G1E100C	CAP CER 10PF 25V A± 25pf (and A±.30ppm/ degree C of temp variation) NPO 0201
9	C18, C19, C20	3	1u	Kemet	C0402C105K9PAC	Ceramic capacitor, SMD 0402, X5R, 6.3V, +/-10% (de26942)
10	C23	1	10u	Murata	GRM319R60J106KE19	Ceramic capacitor, SMD 1206, X5R, 6.3V, ±10%
11	C24	1	2.2pF	Murata	GRM1555C1H2R2CZ01D	Ceramic capacitor, SMD 0402, NPO, 50V, +/-0.25pF (de23847)
12	C25	1	1nF	Johanson Technology	100R05W102KV4	Ceramic capacitor, SMD 0201, X7R, 10V, +/-10%
13	C100, C101	2	4.7uF	Murata	GRM155R60J475ME87D	Ceramic capacitor, SMD 0402, X5R, 6.3V, +/-20% (de33687)
14	D1	1	EL17-21SYGC	Everlight	EL17-21SYGC	LED, Green, Wave length=575nm, SMD 0805, ±70°
15	D2	1	EL17-21UYC/A2	Everlight	EL17-21UYC/A2	LED, Yellow, Wave length=591nm, SMD 0805, ±70°
16	D100	1	BAT54XV2T1G	ON Semiconductor	BAT54XV2T1G	Schottky diode, If:200mA, Vf:0.35V, Vrrm:30V, SOD-523
17	E1, E2, E3	3	SJ-5076	3M	SJ-5076	2.8mm adhesive feet, diam 8.0mm
18	J1, J104, J105	3	HMTSW-102-23-F-S-237	SAMTEC	HMTSW-102-23-F-S-237	1x2 pin header, 2.54mm pitch, Pin-in-Paste THM
19	J100	1	TF201-2*10RGF-W2-NF	Pro-data International Corp	F201-2*10RGF-W2-NF	2x10, female pin header receptable, right-angled, 2.54mm pitch, THM, Pin In Paste
20	J101, J102, J103	3	67491-1030	Molex	67491-1030	1.27mm Pitch Serial ATA High Speed Header, Through Hole, Vertical, 7 Circuits
21	JS1	1	SNT-100-BK-G	SAMTEC	SNT-100-BK-G	Jumper cap for 2.54mm pinheader
22	L1	1	DLW21SN900SQ2	Murata	DLW21SN900SQ2	Sub-1GHz balun for RF215
23	L2	1	74279263	Würth Elektronik	74279263	SMD-Ferrite 220Ohm, 100MHz 0603 size, (de14411)
24	L3	1	5.6nH	Johanson Technology	L-05B5N6SV6T	ceramic chip inductor, 5.6nH, 0201
25	LABEL1	1	Label PCB A with FCC ID			Label for use on wireless PCBA that needs FCC ID
26	P1	1	UFL-R-SMT-1(10)	HIROSE	UFL-R-SMT-1(10)	UFL (Small Coax Connector)
27	PCB1	1	XPRO Extension PCB for RF215	NCAB		XPRO Extension PCB for RF215
28	PCBA1	1	XPRO Extension RF215 PCBA	ESCA TEC		XPRO Extension RF215 PCBA
29	Q1	1	2N7002DW	Fairchild	2N7002DW	Dual N-Channel MOSFET, 60V, 115mA cont.RDS(ON) < 7.5 Ohm @50mA@5V, SOT-363
30	R1, R5	2	1M	KOA	RK73H1ETTP1004F	Thick film resistor, SMD 0402, 1/16W, 1%
31	R2, R3	2	330R			Thick film resistor, SMD 0402, 1/16W, 1%
32	R4, R9	2	0R	ROHM	MCR006Y ZRJ000	Thick film resistor, SMD 0201, 1/20W, 5%
33	R6, R100	2	100k			Thick film resistor, SMD 0402, 1/16W, 1%
34	R7	1	100K	YAGEO CORP	RO2011JR-07100KL	RES 100K OHM 1/20W 5% 0201 SMD
35	R8	1	39R			Thick film resistor, SMD 0402, 1/16W, 1%
36	R10, R11, R13	3	10 k	ROHM	MCR006Y ZRJ103+	Thick film resistor, SMD 0201, 1/20W, 5%
37	R12	1	220R			Thick film resistor, SMD 0402, 1/16W, 1%
38	R101, R102	2	10k	vishay	CRCW040210K0FKED	Thick film resistor, SMD 0402, 1/16W, 1%
39	SMA1, SMA2	2	142-0711-821	EMERSON	142-0711-821	End Launch Jack Receptacle, Round Contact (de21535)
40	SW1	1	SKRAAKED10	ALPS	SKRAAKED10	6.2x6.2 mm SMD tact switch, same as A08-0091 but less force is needed
41	TEST PROCEDURE	1	XPRO Extension RF215 production Test Instructions	ATMEL		XPRO Extension RF215 production Test Instructions
42	TEST SW	1	XPRO Extension RF215 Board Fixture Test SW	ATMEL		Fixture test SW for XPRO Extension RF215 Board
43	U1	1	AT86RF215-LT	ATMEL	AT86RF215-LT	Sub-1GHz/2.4GHz Transceiver
44	U2	1	AT24MAC602-STUM-T	ATMEL	AT24MAC602-STUM-T	2kbit Serial (TWI) EEPROM, AT24C02B, 1.8-5V
45	U100	1	ATSHA204 SWI SOT23-3	ATMEL	ATSHA204-TSU-T	ATSHA204 with 1-wire interface and SOT23-3 package
46	XC1	1	26.0MHz	Advanced Crystal Technology	TO3E-2600C-C1787-PF	26MHz Crystal, 3.2 x 2.5 mm SMD, CL=9pF, 15PFM, ESR=80ohm(Max.)
47	C4, C21	0	1.2pF			Ceramic Capacitor, SMD 0201, 25V, NPO, 1.2pF
48	C7, C22	0	2.2 pF	Kemet	CBR02C229C9GAC	CAP CER 2.2PF 6.3V NPO 0201
49	FR1	0	Shield 20x20 / Frame	Laird Technologies	LT11BH2611F	SMT frame for metal shield 20x20 mm^2 (de34031)
50	SH1	0	Shield 20x20 / Cover	Laird Technologies	LT11BH2611C	Snap in cover for metal shield 20x20 mm^2 (de34032)
51	TP8, TP9	0	5012	Keystone Corp.	5012	THM Test Point, Without Base, 1.0mm Dia. Mounting Hole

Approved

Notes