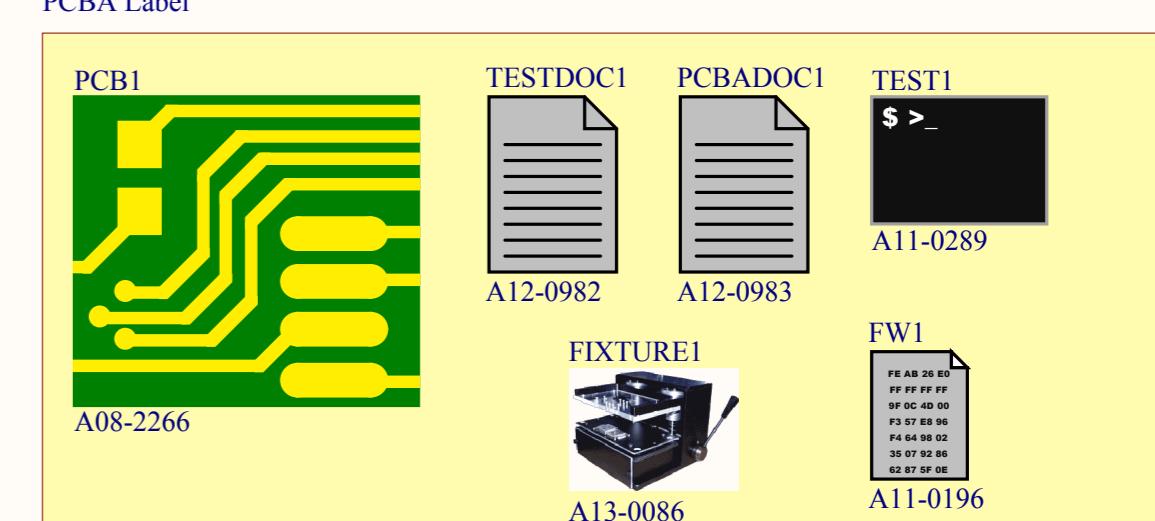


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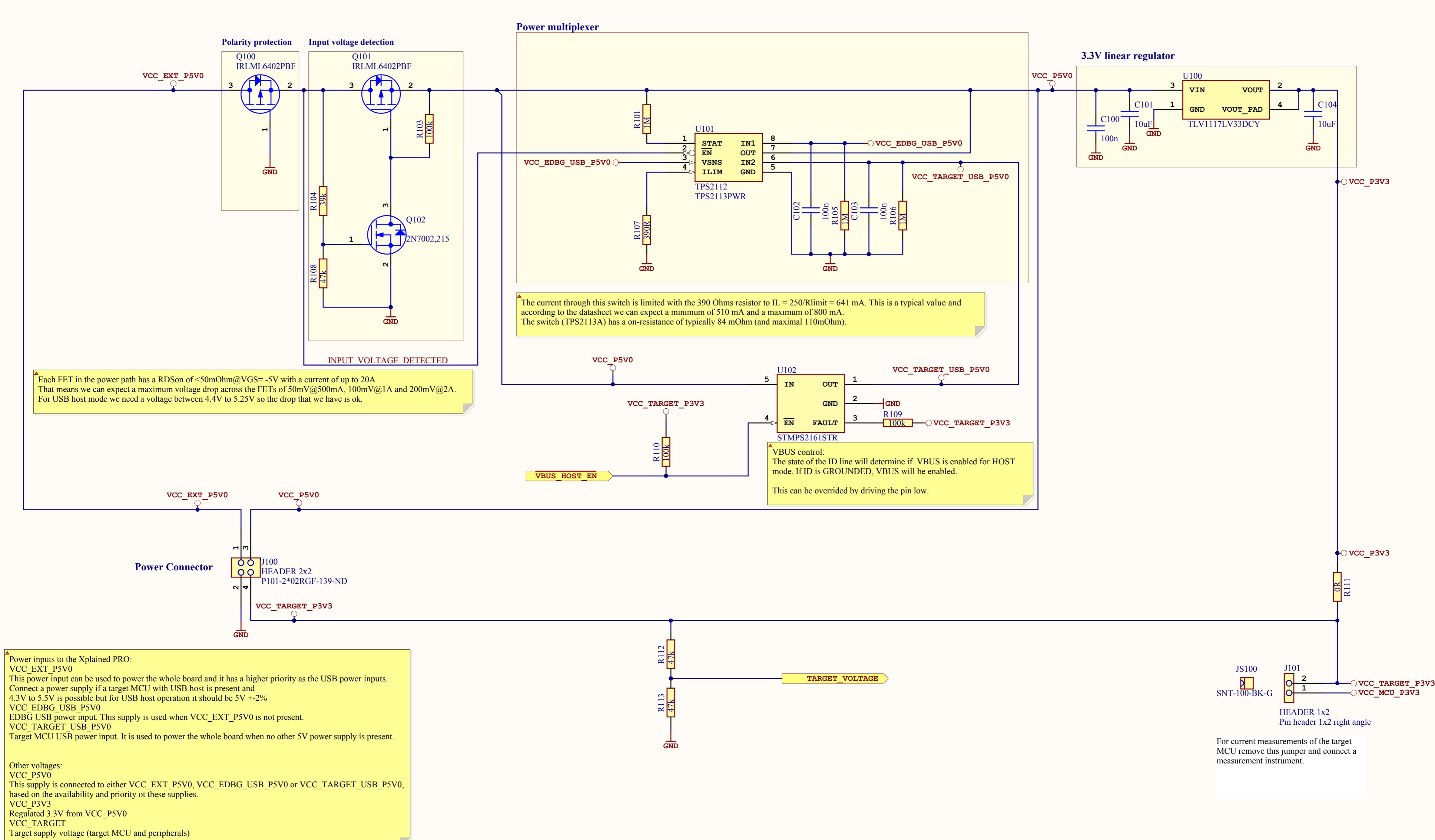
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 Product number/revision
 Serial number

PCBA Label

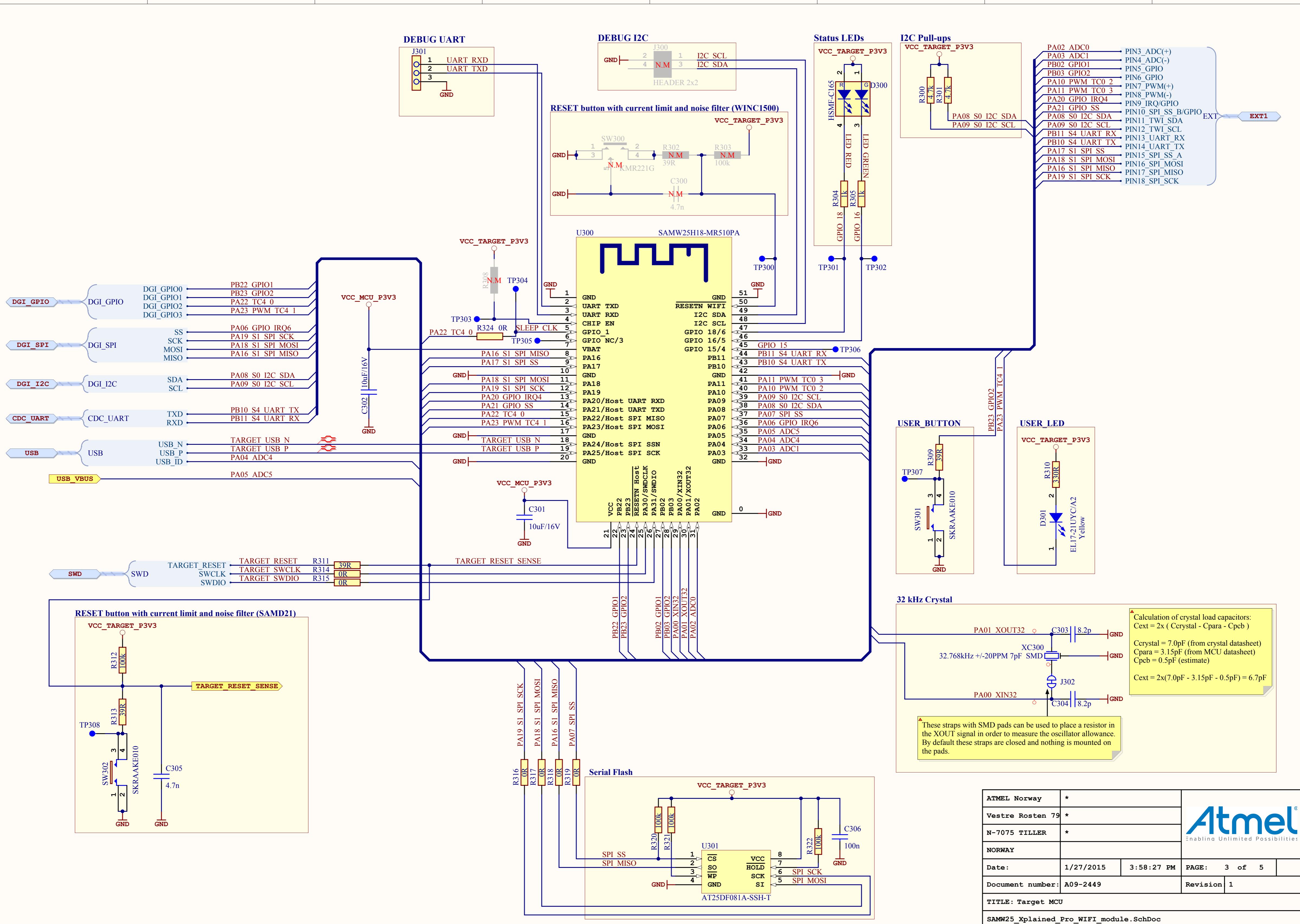


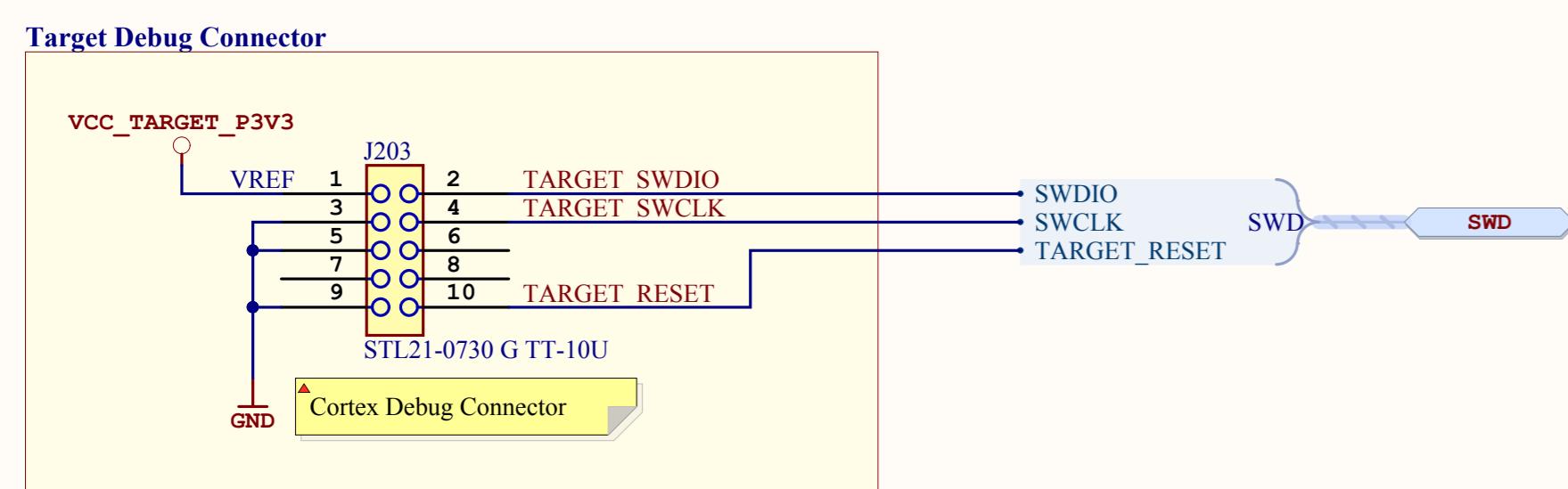
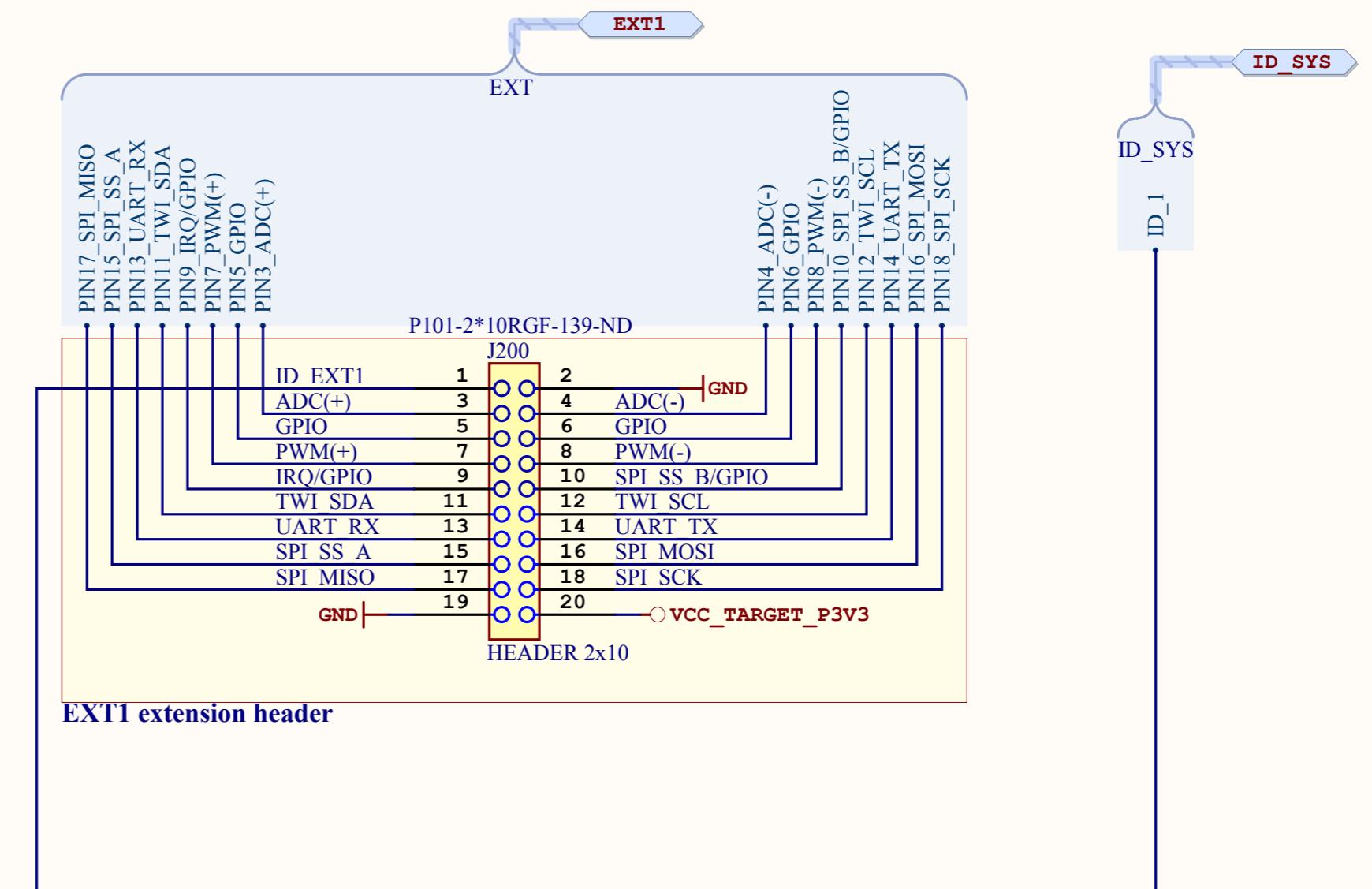
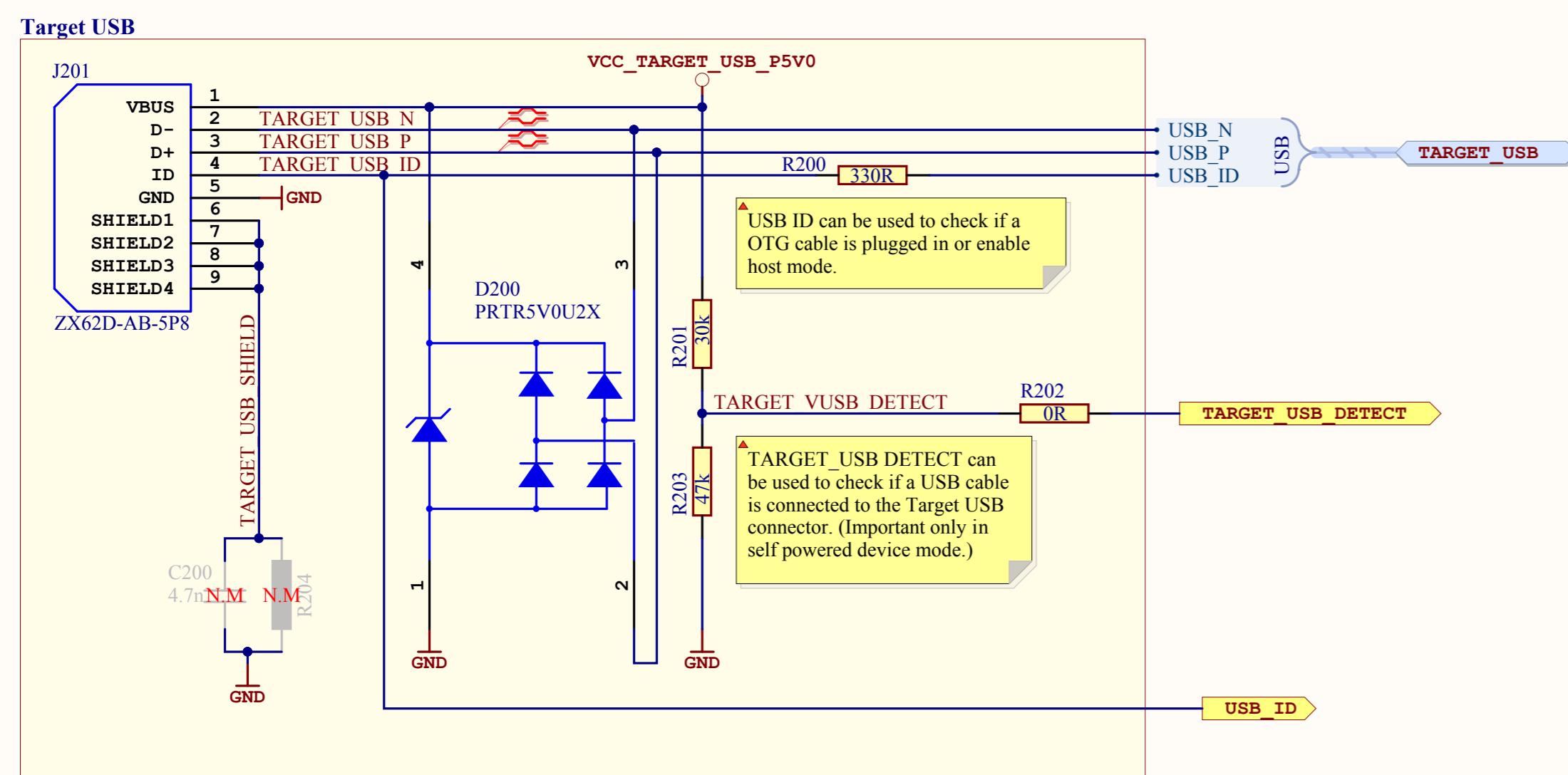
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Vestre Rosten 79	*	
N-7075 TILLER	*	
NORWAY		
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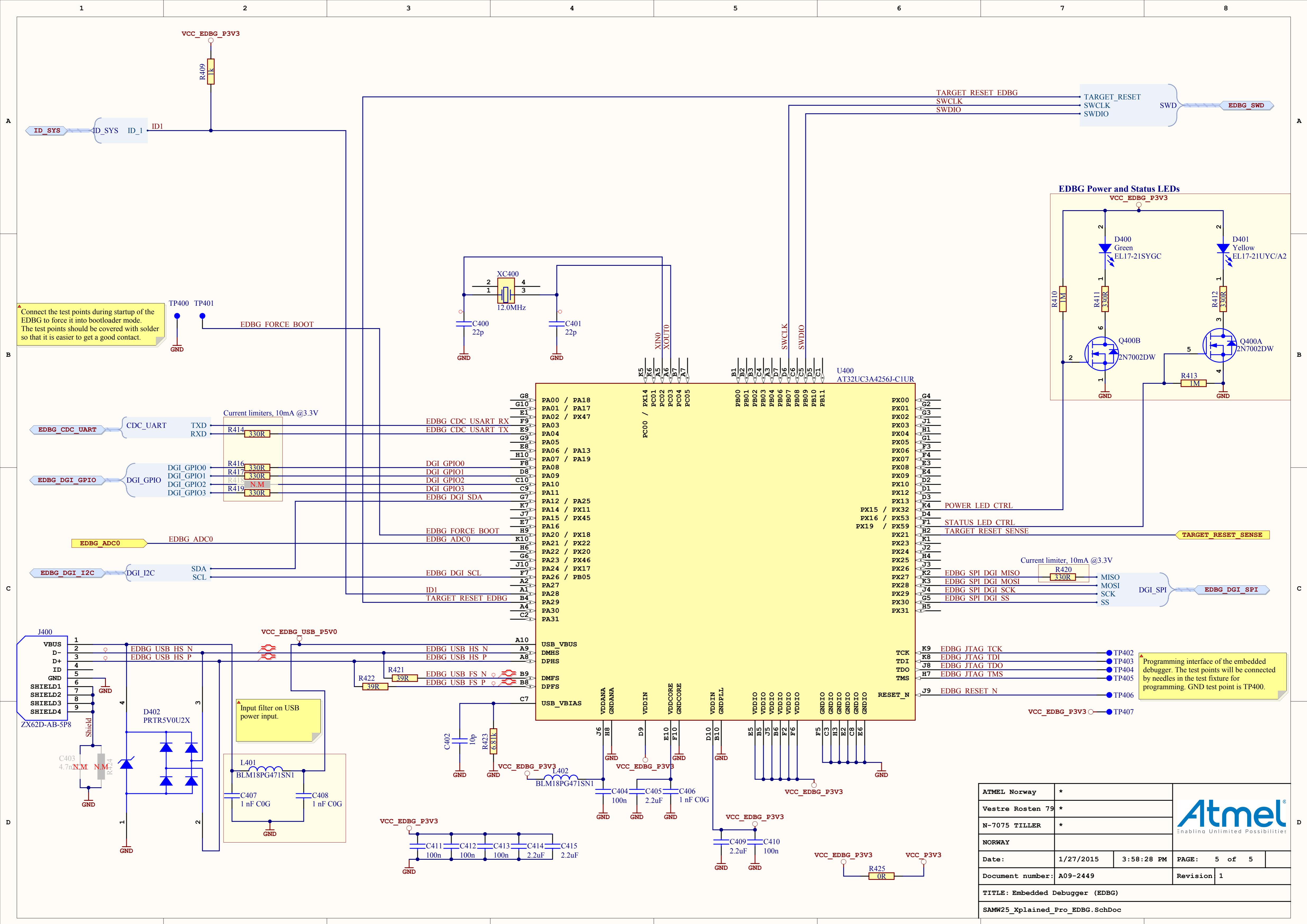


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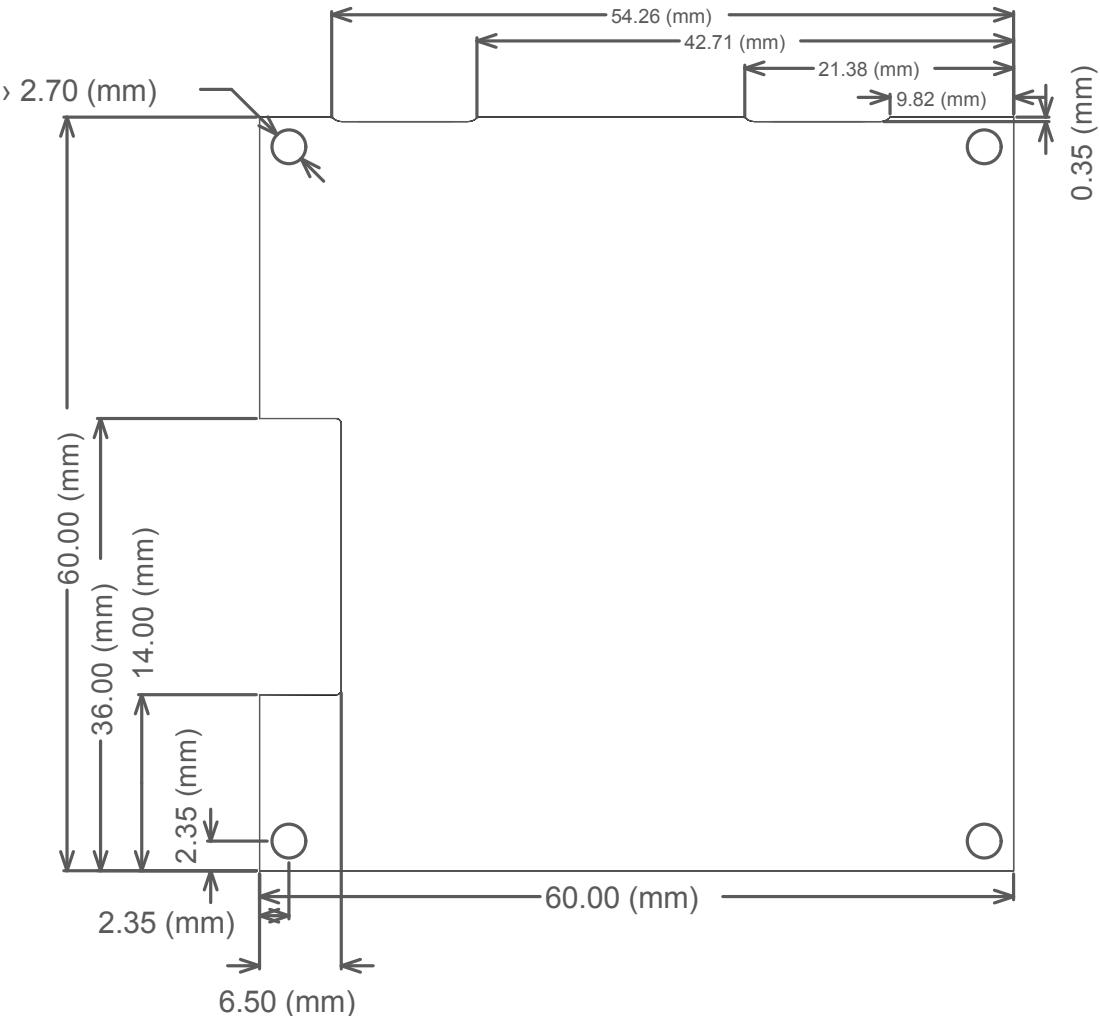




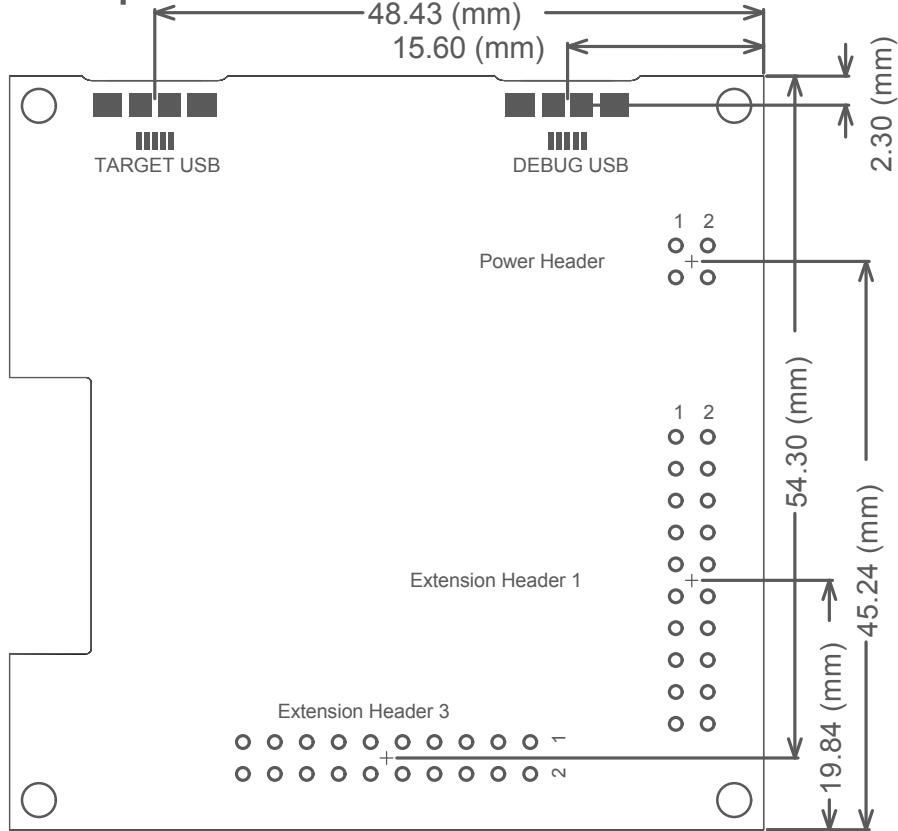
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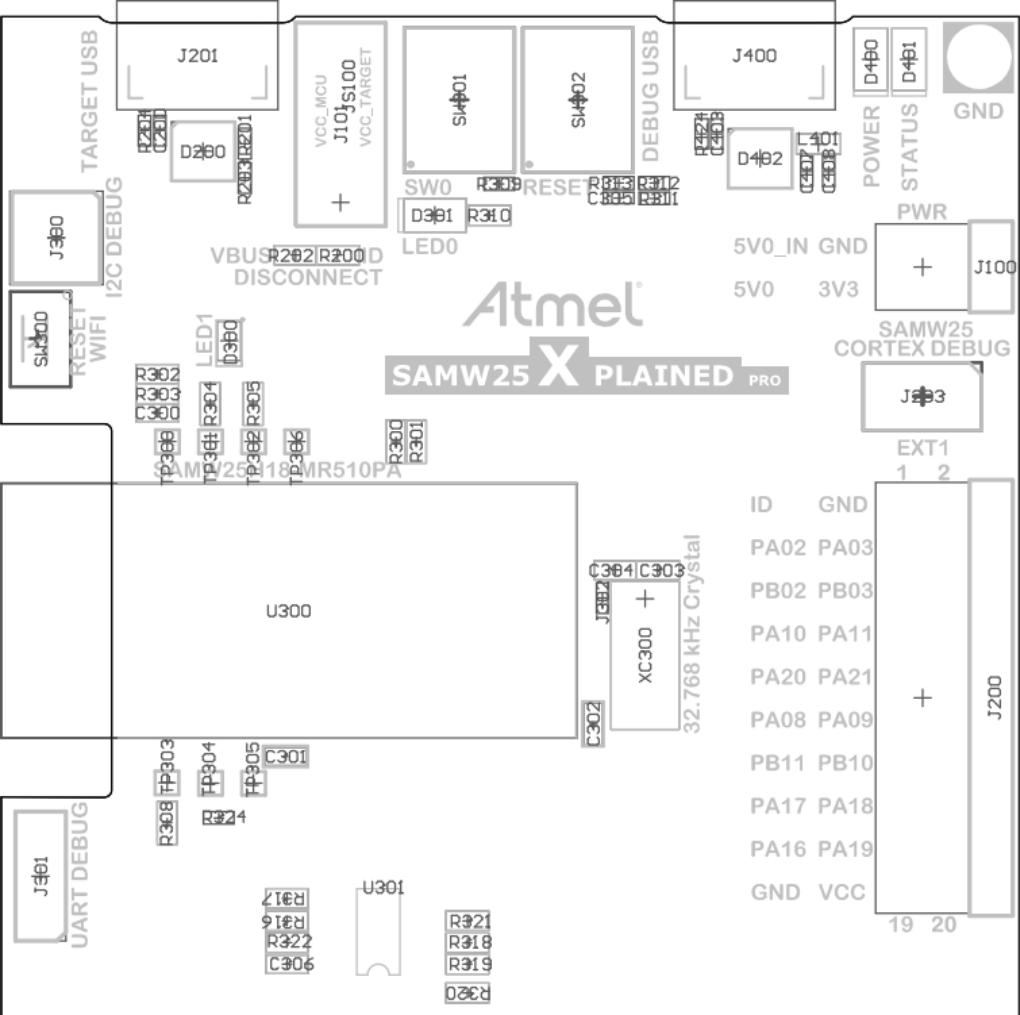


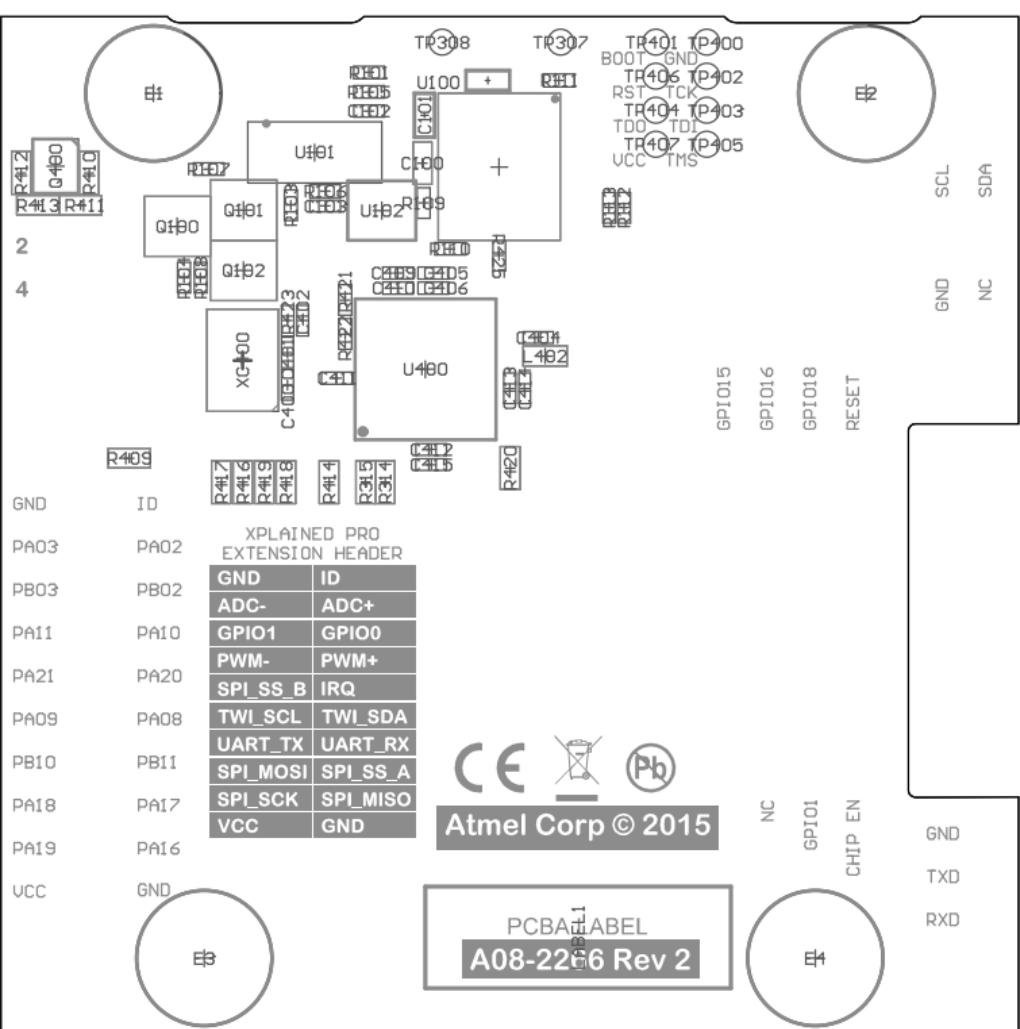
SAMW25 Xplained Pro Mechanical Dimensions

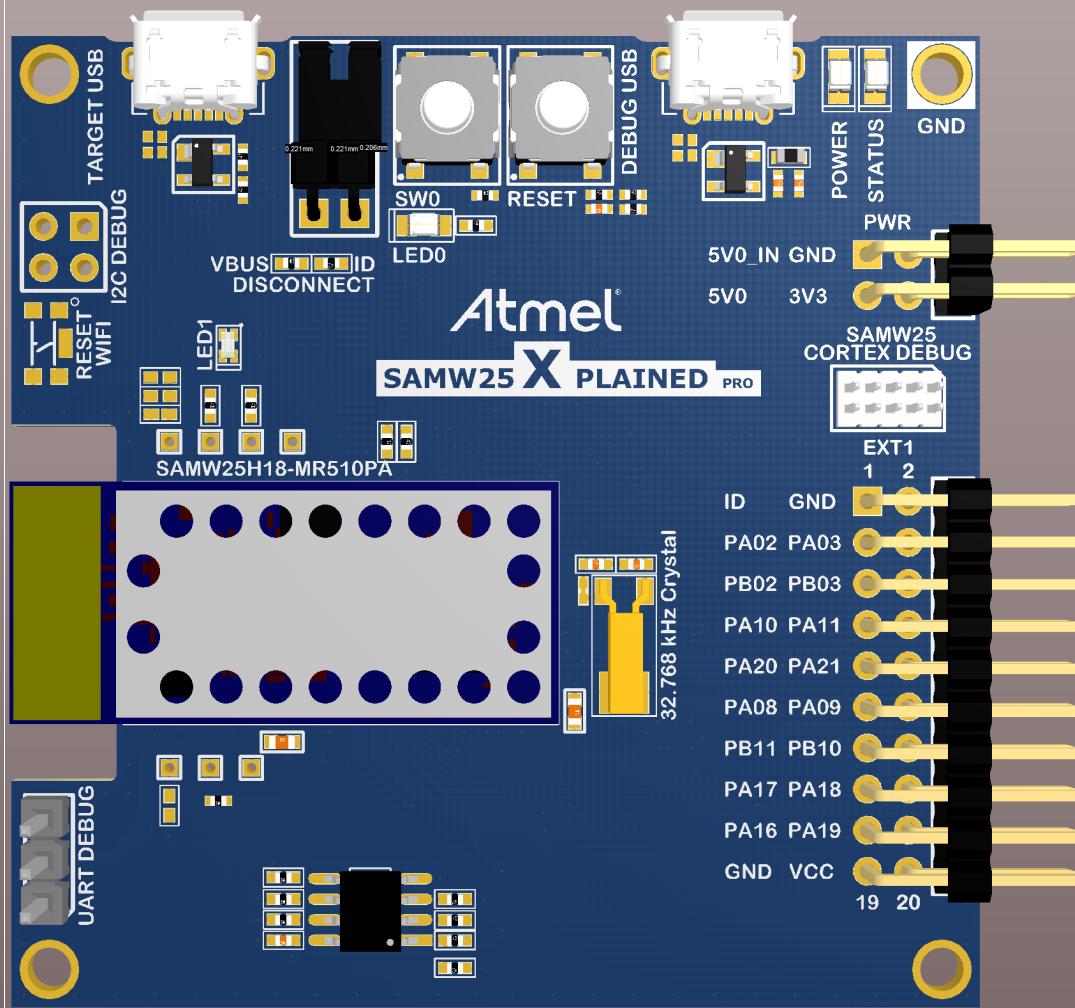


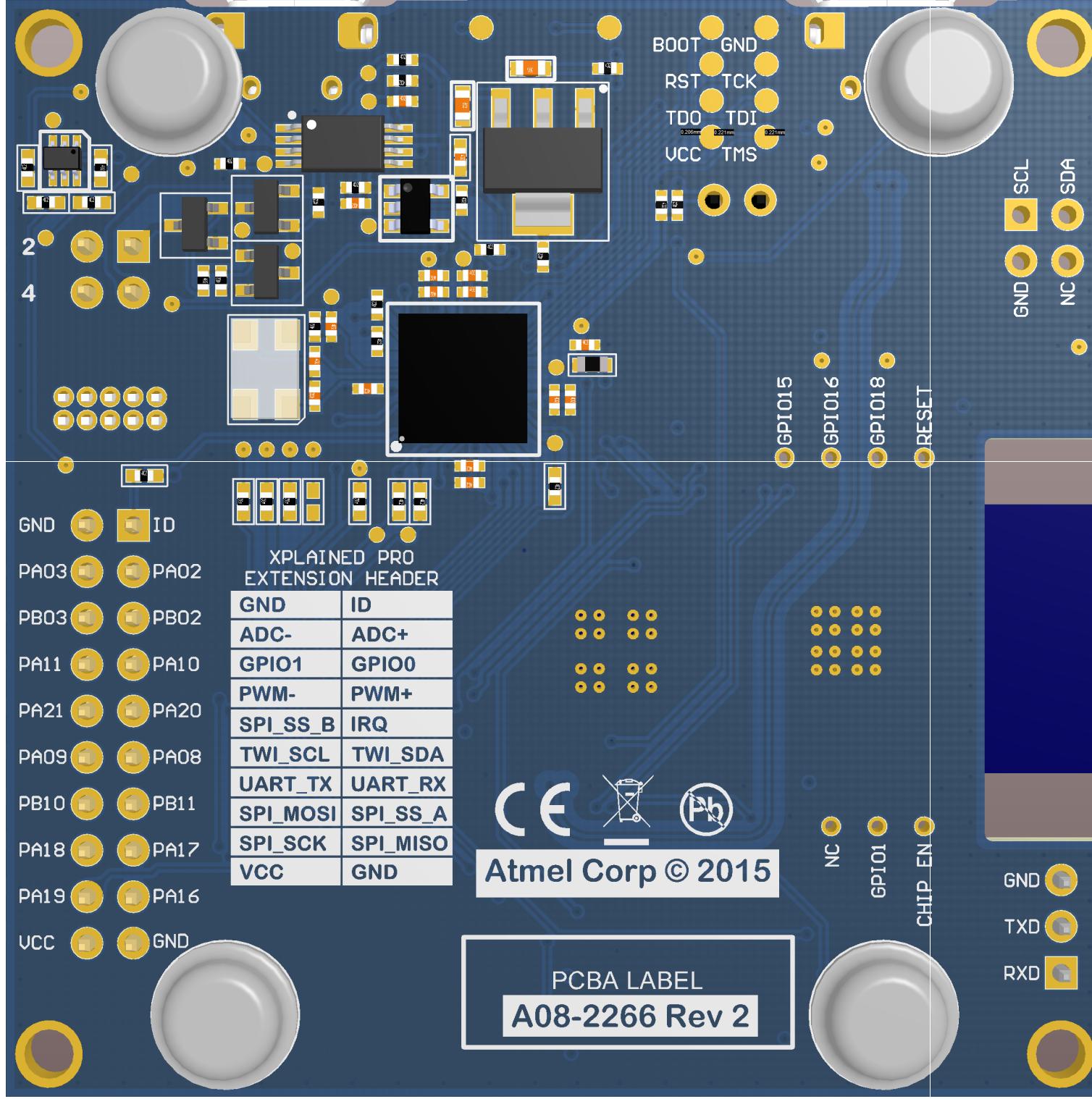
SAMW25 Xplained Pro Connector Placement

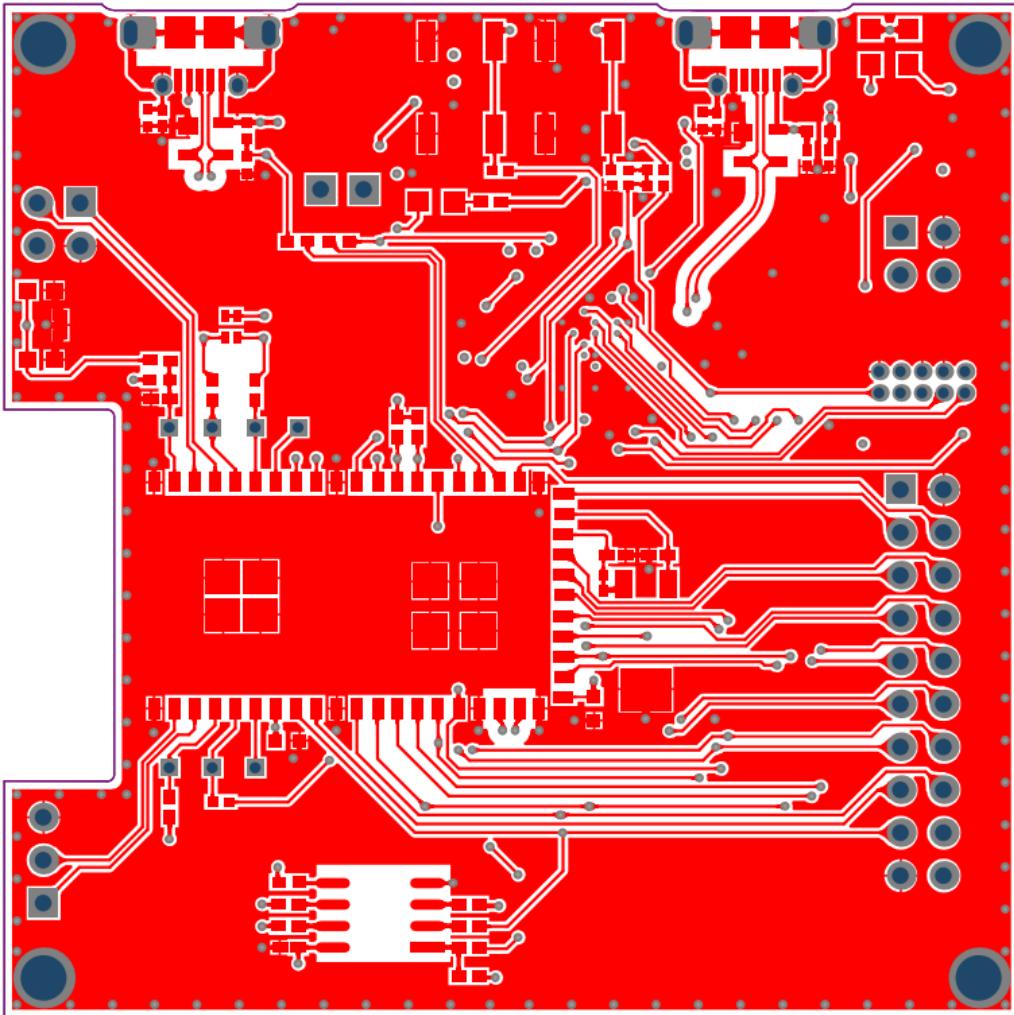


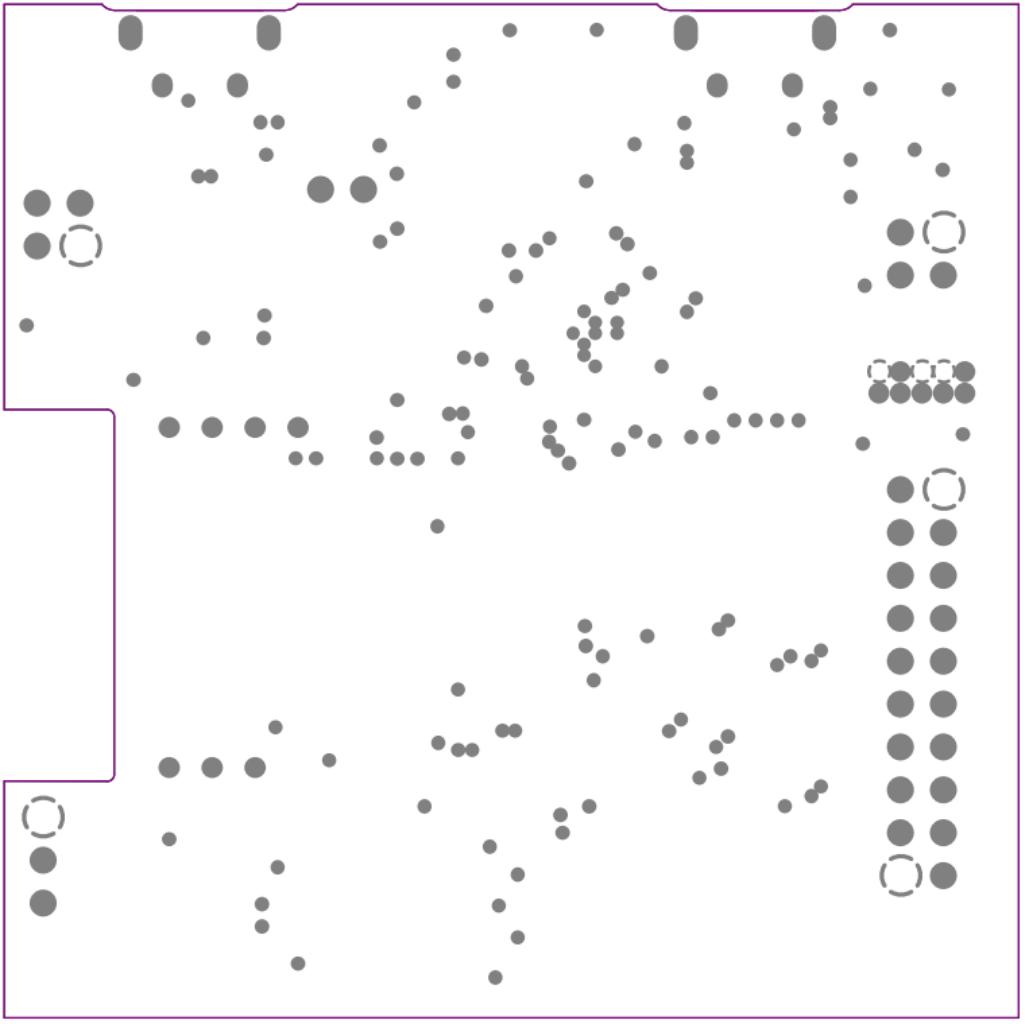


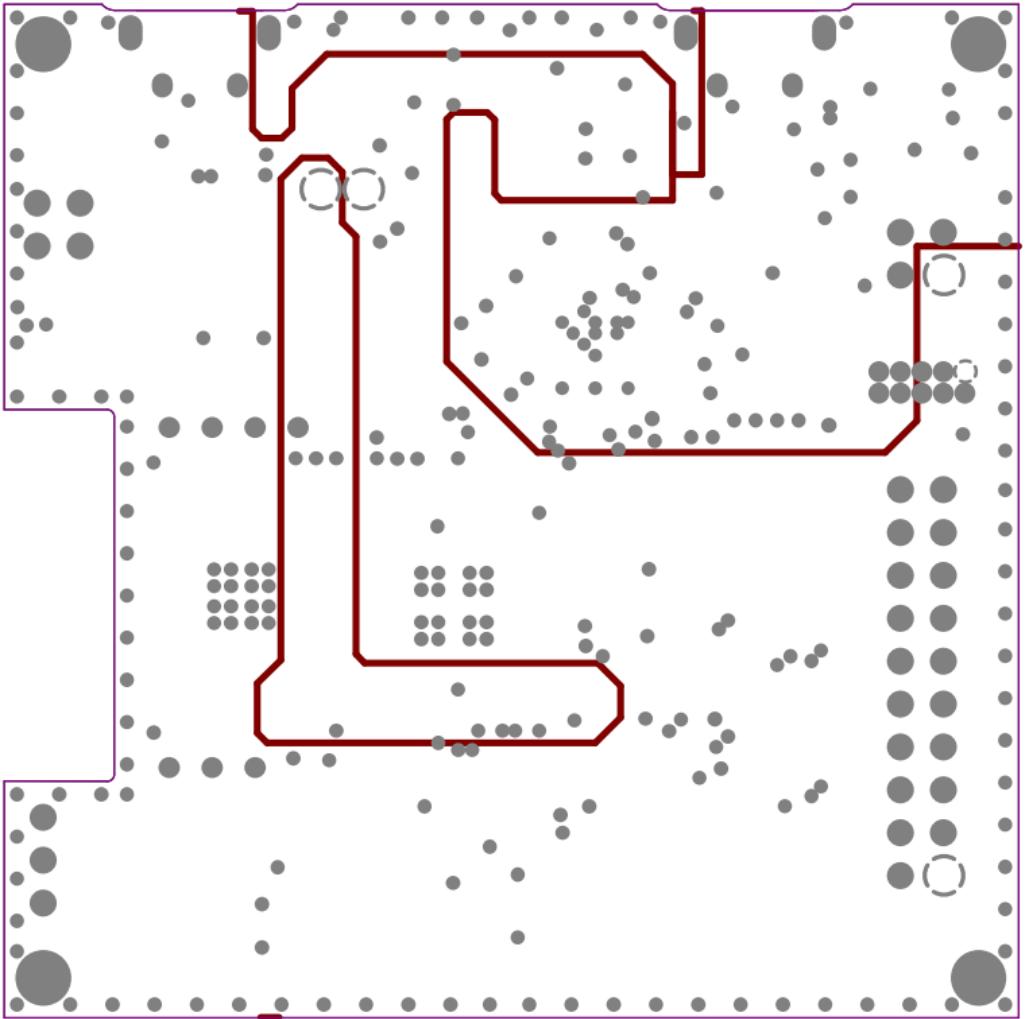


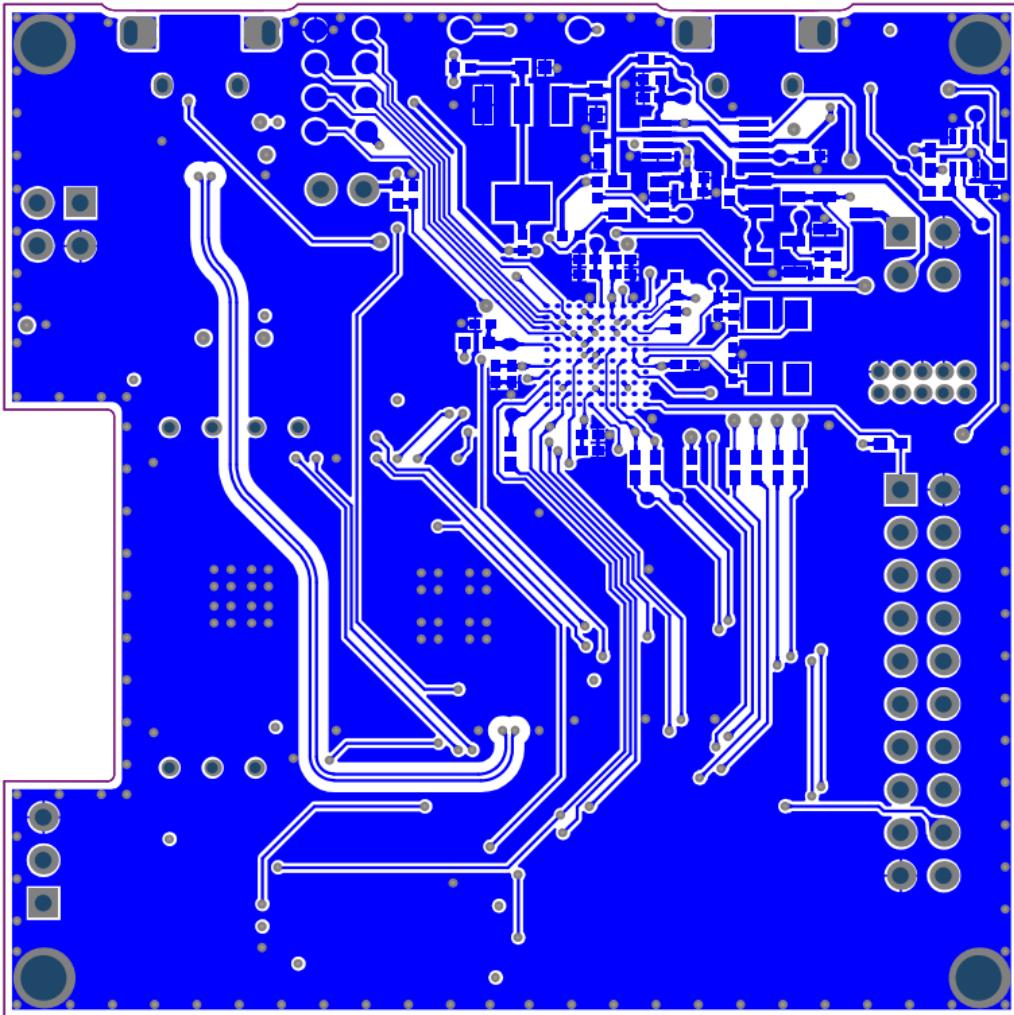












Component list

Top Level Schematics

Source Data From:
Project:
Variant:

SAMW25_Xplained_Pro.PjPCB
SAMW25_Xplained_Pro.PjPCB
Default_assembly



Report Date: 1/27/2015 3:58:44 PM
Print Date: 1/27/2015 3:58:42 PM

Fitted	Designator	Quantity	Value	Manufacturer	MPN	Description
Fitted	C100	1	100n	Kemet	C0402C104K4RACTU	Ceramic capacitor, SMD 0402, X7R, 16V, +/-10%
Fitted	C101, C104	2	10uF	Taiyo Yuden	EMK107BBJ106MA-T	Ceramic capacitor, SMD 0603, X5R, 16V, 10uF +/- 20% (High Density)
Fitted	C102, C103	2	100n	Kemet	C0402C104K4RACTU	Ceramic capacitor, SMD 0402, X7R, 16V, +/-10%
Fitted	C301, C302	2	10uF/16V	Taiyo Yuden	EMK107BBJ106MA-T	Ceramic capacitor, SMD 0603, X5R, 16V, 10uF +/- 20% (High Density)
Fitted	C303, C304	2	8.2p			Ceramic capacitor, SMD 0402, NP0, 50V, +/-5%
Fitted	C305	1	4.7n	NIC Components Corp.	NMC0402X7R472K25TRPF	Ceramic capacitor, SMD 0402, X7R, 16V, +/-10%
Fitted	C306	1	100n	Kemet	C0402C104K4RACTU	Ceramic capacitor, SMD 0402, X7R, 16V, +/-10%
Fitted	C400, C401	2	22p			Ceramic capacitor, SMD 0402, NP0, +/-5%
Fitted	C402	1	10p			Ceramic capacitor, SMD 0402, NP0, 50V, +/-5%
Fitted	C404, C410, C411, C412, C413	5	100n	Kemet	C0402C104K4RACTU	Ceramic capacitor, SMD 0402, X7R, 16V, +/-10%
Fitted	C405, C409, C414, C415	4	2.2uF	Kemet	C0402C225M9PAC	Ceramic capacitor, SMD 0402, X5R, 6.3V, +/-20%
Fitted	C406, C407, C408	3	1nF COG	Murata	GRM1555C1H102JA01D	Ceramic capacitor, SMD 0402, COG, 50V, +/-5%
Fitted	D200, D402	2	PRTR5V0U2X	Philips	PRTR5V0U2X	Double rail-to-rail USB ESD protection diode
Fitted	D300	1	HSMF-C165	Avago Technologies	HSMF-C165	LED, Bicolor, Red/Green, Diffused, 1.6 x 0.8 mm (0603)
Fitted	D301, D401	2	EL17-21UYC/A2	Everlight	17-21UYC/S530-A3/TR8	LED, Yellow, Wave length=591nm, SMD 0805, +/-70°
Fitted	D400	1	EL17-21SYGC	Everlight	EL17-21SYGC	LED, Green, Wave length=575nm, SMD 0805, +/-70°
Fitted	E1, E2, E3, E4	4	SJ-5076	3M	SJ-5076	2.8mm adhesive feet,diam 8.0mm
Fitted	Fixture1	1	Xplained PRO MCU board Jupiter Test Fixture	ESCATEC	Xplained PRO MCU board Jupiter Test Fixture	Xplained PRO MCU board Jupiter Test Fixture
Fitted	FW1	1	EDBG secured firmw are	ATMEL		EDBG secured firmw are
Fitted	J100	1	P101-2*02RGF-139-ND	Pro-data International Corp	P101-2*02RGF-139-ND	Pin header, 2x2, Right Angle, 2.54mm, THT, Pin In Paste
Fitted	J101	1	Pin header 1x2 right angle	Pro-data International Corp	2213R-2G	1x2 pin header, right angle, 2.54 mm pitch, through-hole
Fitted	J200	1	P101-2*10RGF-139-ND		P101-2*10RGF-139-ND	Pin header, 2x10, Right Angle, 2.54mm, THM, Pin In Paste
Fitted	J201, J400	2	ZX62D-AB-5P8			Micro USB AB Connector, Standard SMT + DIP
Fitted	J203	1	PIN HEADER 2x5	Garry	STL21-0730 G TT-10U	2x5 pin header, 1.27mm pitch, THM
Fitted	J301	1	HMTSW-103-23-F-S-237	SAMTEC	HMTSW-103-23-F-S-237	1x3 pin header, 2.54mm pitch, Pin-in-Paste THM, 1mm hole
Fitted	JS100	1	SNT-100-BK-G	SAMTEC	SNT-100-BK-G	Jumper cap for 2.54mm pinheader
Fitted	L401, L402	2	BLM18PG471SN1	Murata	BLM18PG471SN1	SMD RF inductor 0603, Z=470Ohm (@100MHz), Max R(dc)=0.650Ohm, Max current=1A
Fitted	LABEL_1	1	PCBA Label	ACT Logimark AS	505462	PCBA identification label PP Top White Gloss
Fitted	PCB1	1	SAMW25 Xplained Pro PCB documentation			SAM W25 Xplained Pro PCB documentation
Fitted	PCBADOC1	1	A09-2449 PCBA Files			SAM W25 Xplained Pro PCBA documentation
Fitted	Q100, Q101	2	IRLML6402PBF	International Rectifier	IRLML6402PBF	P-ch. MOSFET, -30V, -3.7A continuous,RDS(ON)=0.05Ohm@VGS=-4.5V, RDS(ON)=0.08Ohm@VGS=-2.5V
Fitted	Q102	1	2N7002,215	NXP	2N7002,215	N-Channel MOSFET, 60V, 0.300A continuous, 1.2A Peak, RDS(ON) = 3.8Ohm@VGS=4.5V, VGS(th)<2.5V
Fitted	Q400	1	2N7002DW	Fairchild	2N7002DW	Dual N-Channel MOSFET, 60V, 115mA cont,RDS(ON) < 7.5 Ohm @50mA@5V, SOT-363
Fitted	R101, R105, R106	3	1M			Thick film resistor, SMD 0402, 1/16W, 1%
Fitted	R103, R109, R110, R312	4	100k			Thick film resistor, SMD 0402, 1/16W, 1%
Fitted	R104	1	39k			Thick film resistor, SMD 0402, 1/16W, 1%
Fitted	R107	1	390R			Thick film resistor, SMD 0402, 1/16W, 1%
Fitted	R108, R112, R113, R203	4	47k			Thick film resistor, SMD 0402, 1/16W, 1%
Fitted	R111, R324, R425	3	0R			Thick film resistor, SMD 0402, 1/16W, 1%
Fitted	R200, R310, R411, R412, R414, R416, R417, R419, R420	9	330R			Thick film resistor, SMD 0402, 1/16W, 1%
Fitted	R201	1	30k			Thick film resistor, SMD 0402, 1/16W, 1%
Fitted	R202, R314, R315, R316, R317, R318, R319	7	0R		RMCF0402ZT0R00	RES 0.0 OHM 1/16W 0402 SMD
Fitted	R300, R301	2	4.7k			Thick film resistor, SMD 0402, 1/16W, 1%
Fitted	R304, R305, R409	3	1k			Thick film resistor, SMD 0402, 1/16W, 1%
Fitted	R309, R311, R313, R421, R422	5	39R			Thick film resistor, SMD 0402, 1/16W, 1%
Fitted	R320, R321, R322	3	100k			Thick film resistor, SMD 0402, 1/16W, 1%
Fitted	R410, R413	2	1M	KOA	RK73H1ETTP1004F	Thick film resistor, SMD 0402, 1/16W, 1%
Fitted	R423	1	6.81k			Thick film resistor, SMD 0402, 1/16W, 1%
Fitted	SW301, SW302	2	SKRAAKE010	ALPS	SKRAAKE010	6.2x6.2 mm SMD tact switch, same as A08-0091 but less force is needed
Fitted	TEST1	1	SAMW25 Xplained Pro test			Fixture test for SAM W25 Xplained Pro
Fitted	TESTDOC1	1	SAMW25 Xplained Pro test Instructions			SAM W25 Xplained Pro test Instructions
Fitted	U100	1	TLV1117LV33DCY	Texas Instruments	TLV1117LV33DCYR	1-A, LDO (0.455V @ 1A), 3.3V out, 1.5% accuracy, 6.0V Vin max.
Fitted	U101	1	TPS2113PWR	Texas Instruments	TPS2113PWR	Autoswitching 2:1 Power Mux
Fitted	U102	1	STMPS2161STR			Single channel power switch, 1A, reverse block, active low enabled.
Fitted	U300	1	SAMW25H18-MR510PA			IEEE 802.11 b/g module with onboard SAMD21G18A-MU and Crypto IC
Fitted	U301	1	AT25DF081A-SSH-T	Adesto Technologies	AT25DF081A-SSH-T	8Mbit SPI serial flash memory
Fitted	U400	1	AT32UC3A4256J-C1UR	ATMEL	AT32UC3A4256J-C1UR	AVR 32-bit RISC MCU
Fitted	XC300	1	32.768kHz +/-20PPM 7pF SMD	Micro Crystal	MS1V-T1K 32.768kHz 7pF +/-20PPM TA	32k768 crystal, +/-20ppm, CL=7pF, max ESR 60kOhm, SMD
Fitted	XC400	1	12.0MHz	Fox Electronics	FQ5032B-12-C-C-C-200-1	Fox FQ5032B 12.0MHz SMD crystal 738B-12
Not Fitted	C200, C403	0	4.7n			Ceramic capacitor, SMD 0402, X7R, 25V, +/-10%
Not Fitted	C300	0	4.7n	NIC Components Corp.	NMC0402X7R472K25TRPF	Ceramic capacitor, SMD 0402, X7R, 16V, +/-10 %
Not Fitted	J300	0	CD0750142X2	Freber	CD0750142X2	2x2 pin header, 2.54 mm pitch, Pin-in-Paste THM
Not Fitted	R204, R424	0	1M	KOA	RK73H1ETTP1004F	Thick film resistor, SMD 0402, 1/16W, 1%
Not Fitted	R302	0	39R			Thick film resistor, SMD 0402, 1/16W, 1%
Not Fitted	R303, R308	0	100k			Thick film resistor, SMD 0402, 1/16W, 1%
Not Fitted	R418	0	330R			Thick film resistor, SMD 0402, 1/16W, 1%
Not Fitted	SW300	0	KMR221G	ITT cannon	KMR221G	Microminiature Tact Switch for SMT

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Notes

Approved