

Programmer/Debug
ATSAMD10-XMINI_Programmer.SchDoc

Target device
ATSAMD10-XMINI_Target.SchDoc

EXT_CLK
EDBG_PROG
RESET_SENSE

UART

EXT_CLK
EDBG_PROG
RESET_SENSE

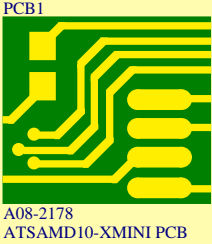
UART

LABEL1

Product number/revision
Serial number

Label PCBA

PCB



A08-2178
ATSAMD10-XMINI PCB

PCBA Documentation



A12-0924

FW1



A11-0252




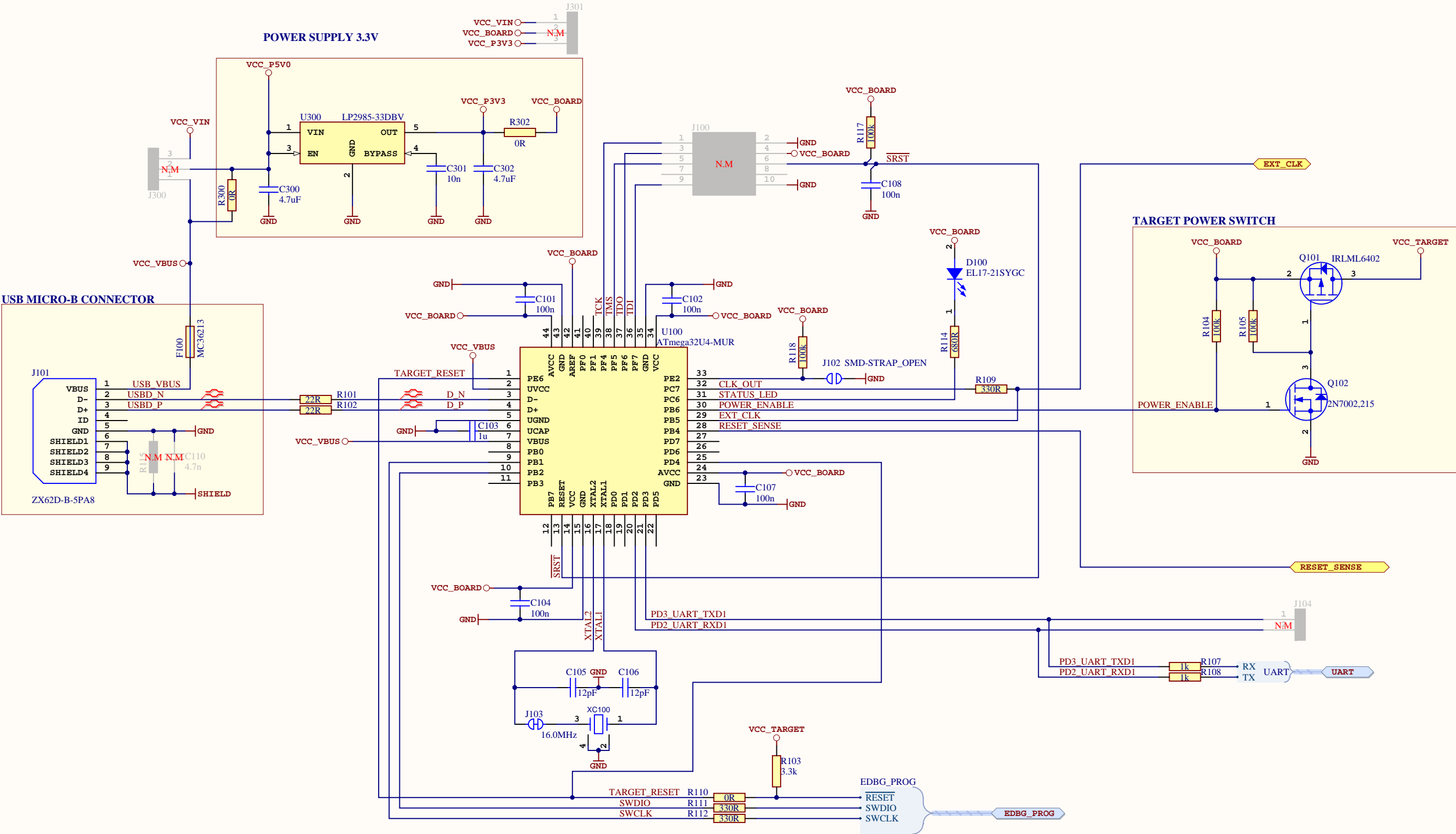
A12-0853


TEST2



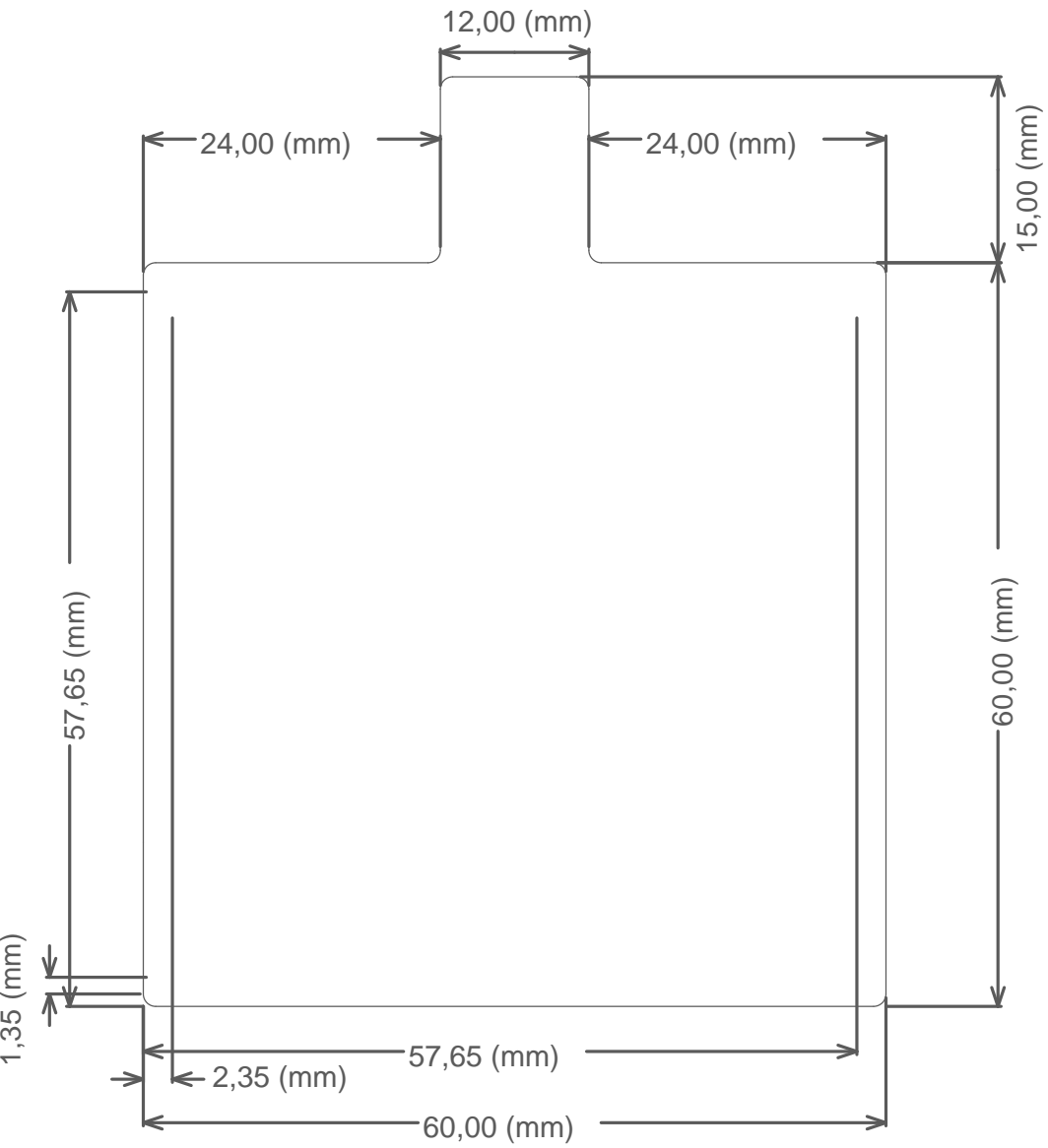
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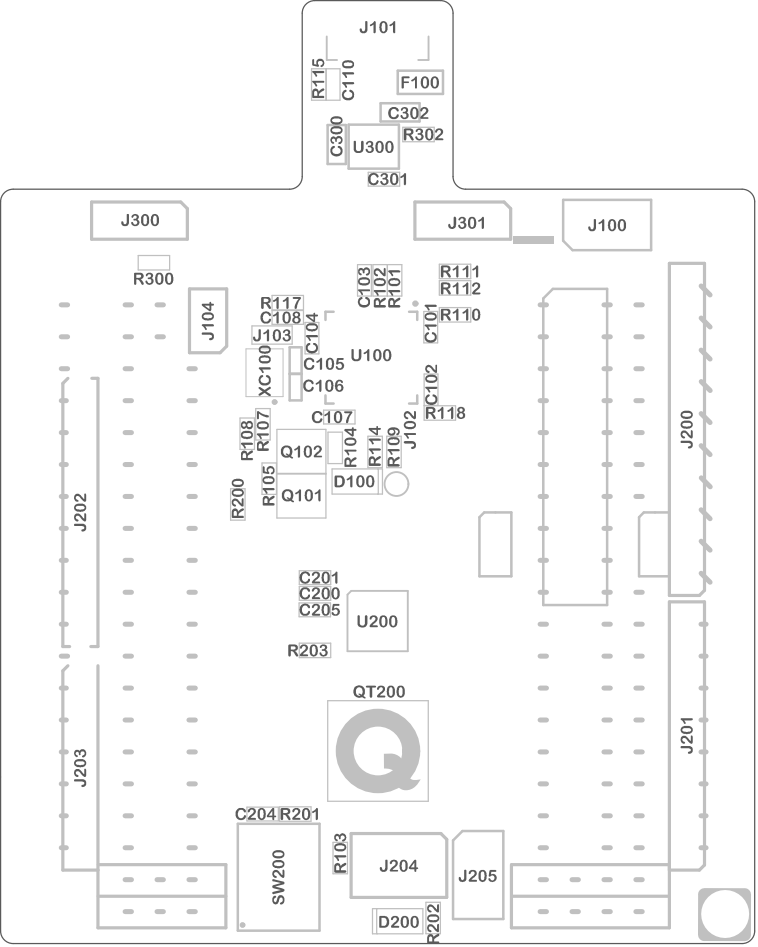
ATMEL Norway		*	 Enabling Unlimited Possibilities		
Vestre Rosten 79		*			
N-7075 TILLER		*			
NORWAY					
Date:	06.01.2017	14:09:30	PAGE:	1 of 3	
Document number:	A09-2378		Revision:	2	
TITLE: ATSAMD10-XMINI					
ATSAMD10-XMINI_TopLevel.SchDoc					

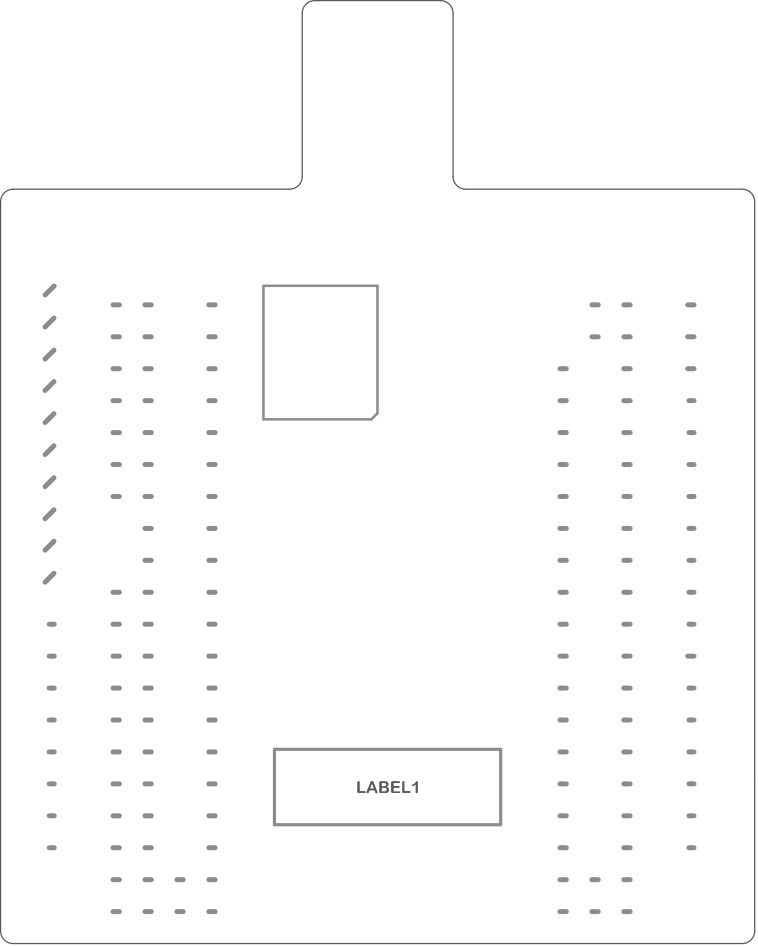


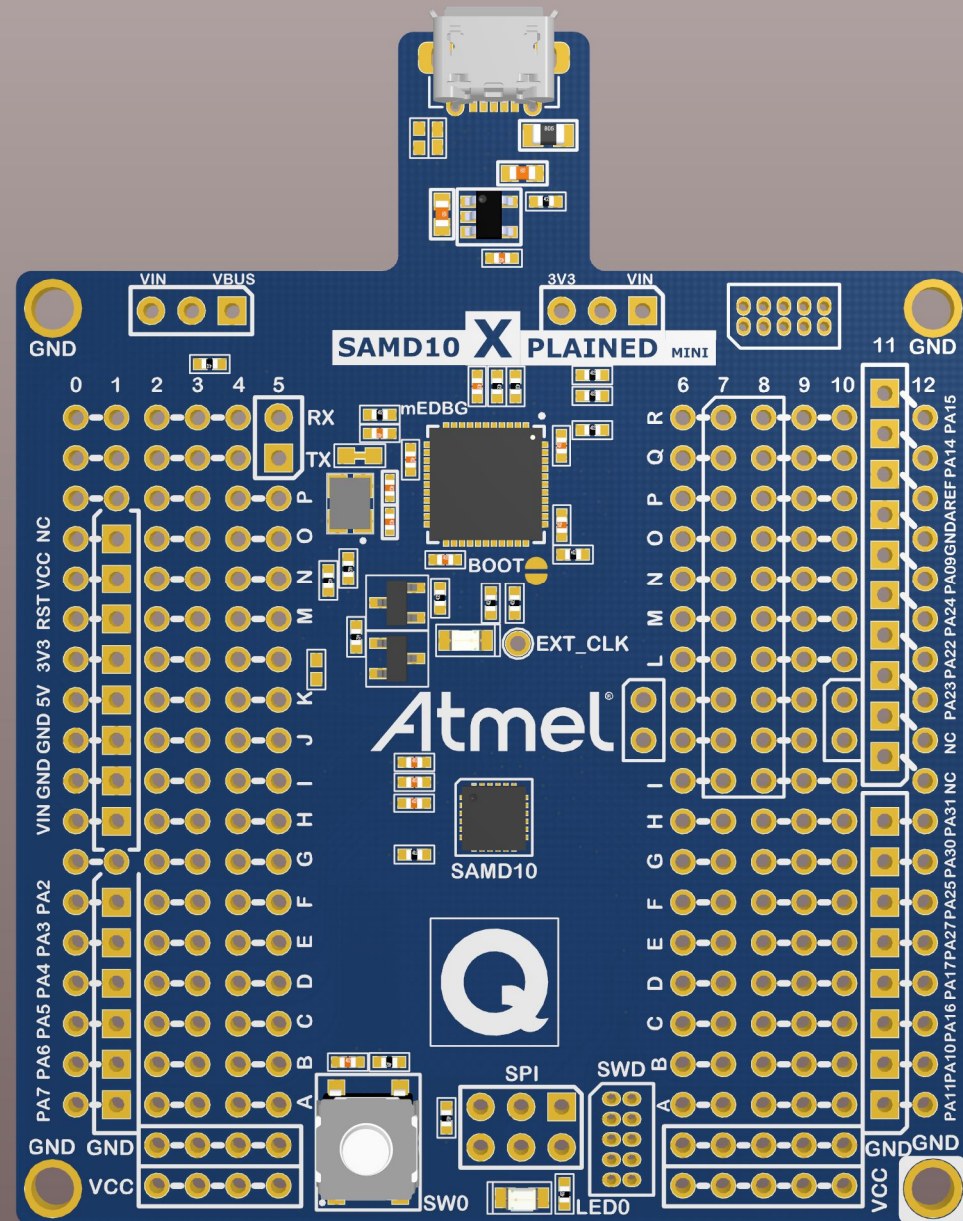
ATMEL Norway		*	 Enabling Unlimited Possibilities		
Vestre Rosten 79		*			
N-7075 TILLER		*			
NORWAY					
Date:	06.01.2017	14:09:30	PAGE:	3 of 3	
Document number:	A09-2378		Revision:	2	
TITLE: ATSAM10-XMINI					
ATSAMD10-XMINI_Programmer.SchDoc					

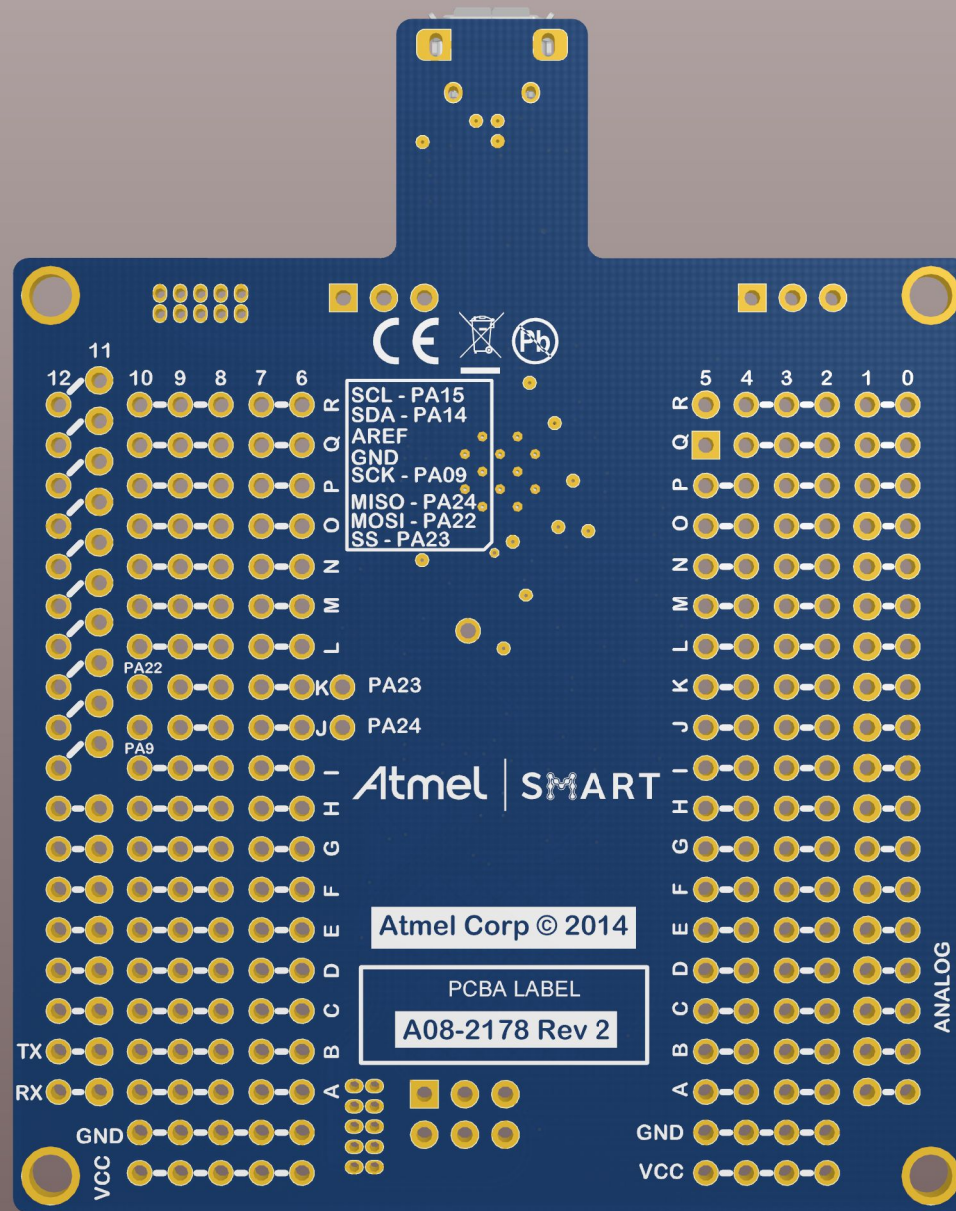
Mechanical Dimensions

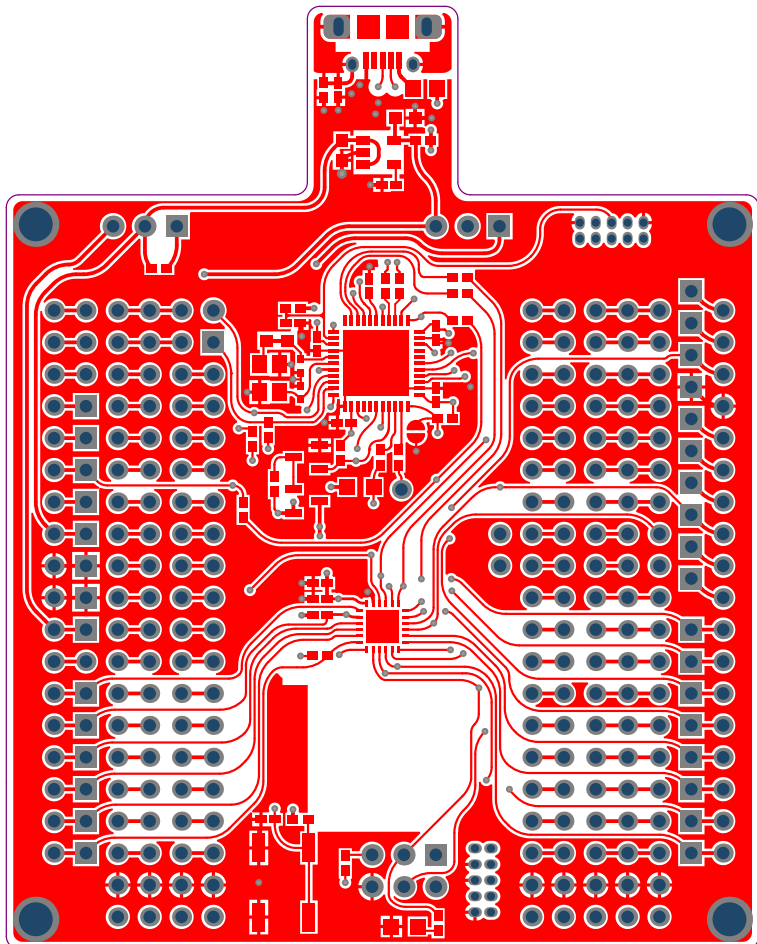


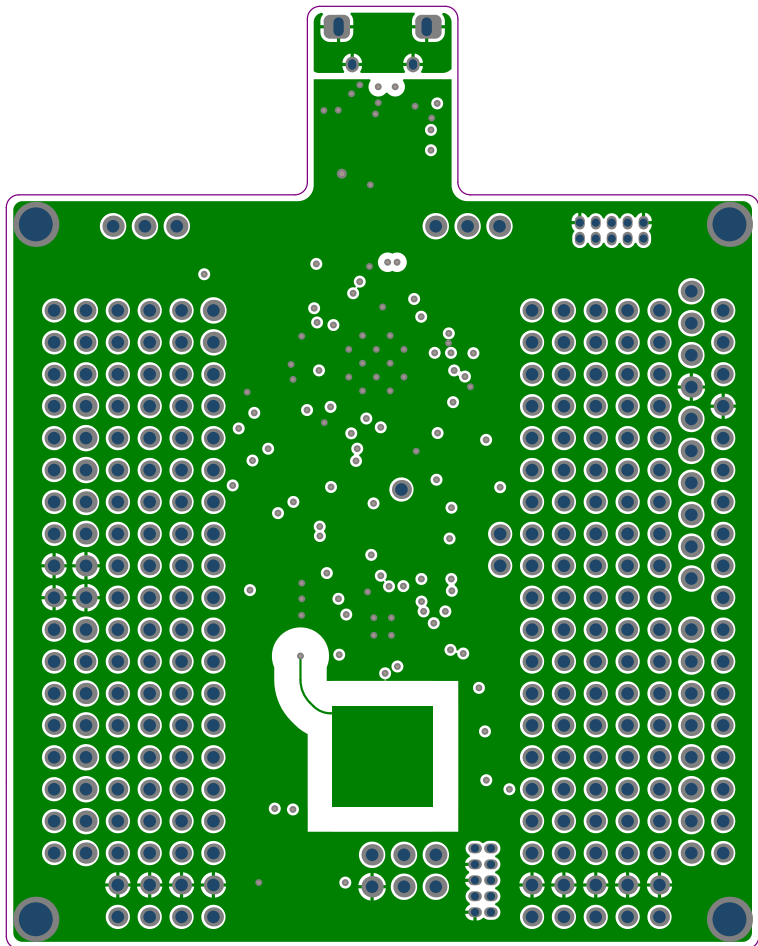


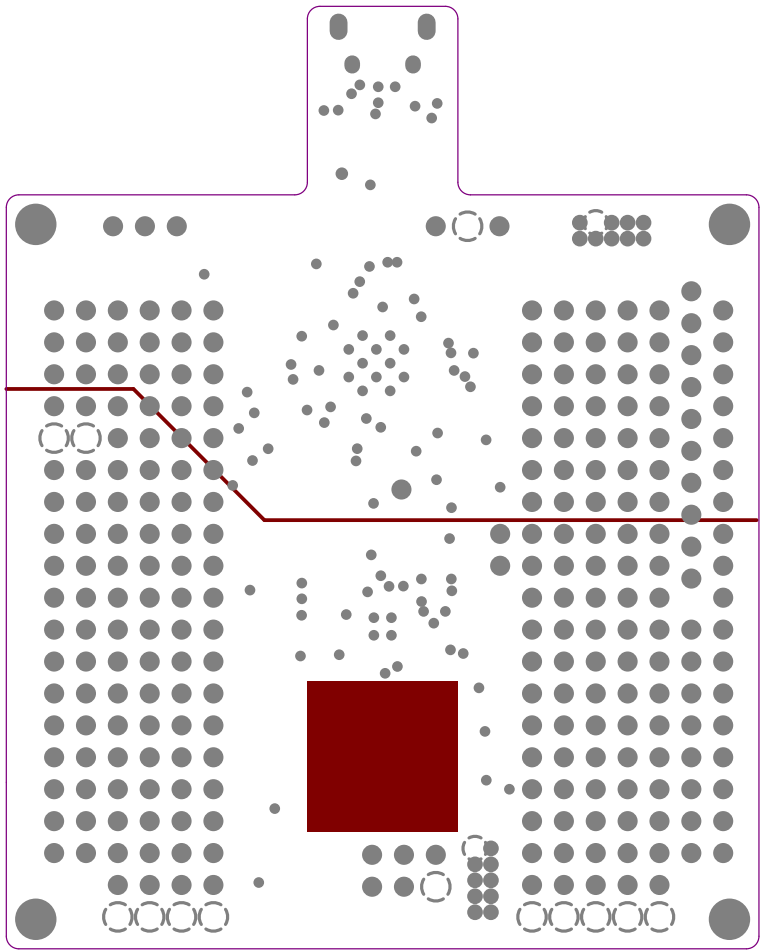


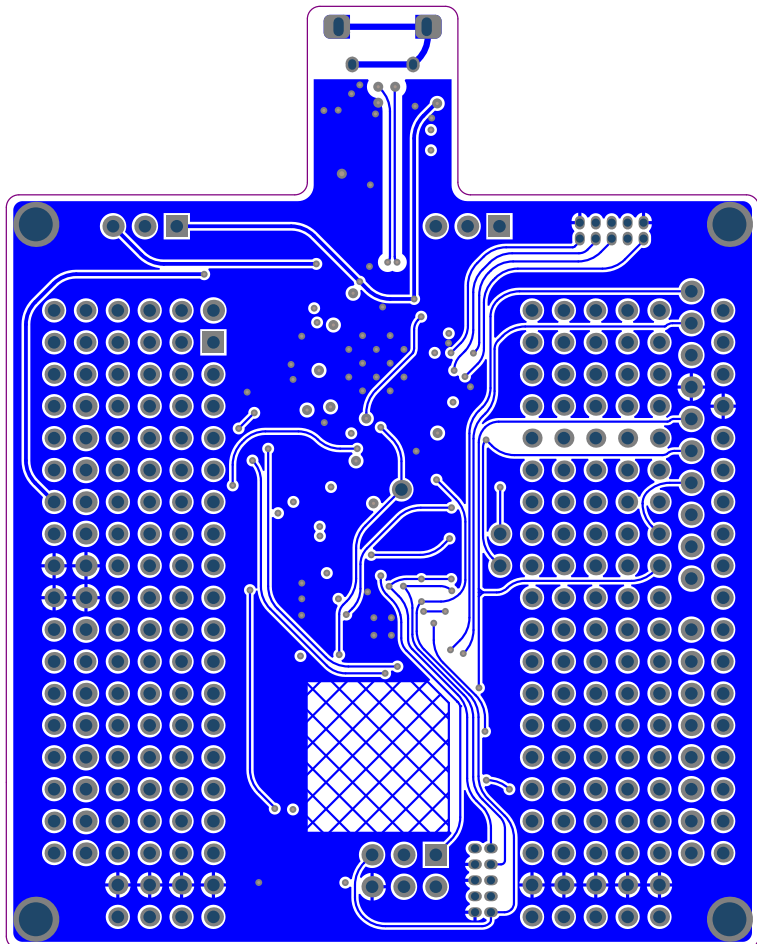












Component list

Bill of Materials Fitted For Variant [Default_assembly] of Project [ATSAMD10-XMINI.PrjPCB] (No PCB Document Selected)

Source Data From:
Project:
Variant:

ATSAMD10-XMINI.PrjPCB
ATSAMD10-XMINI.PrjPCB
Default_assembly



Report Date: 06.01.2017 14:10:11
Print Date: 06.01.2017 14:09:36

Fitted	Designator	Quantity	Value	Manufacturer	MPN	Description
Fitted	C101, C102, C104, C107, C108, C200, C201, C204, C205	9	100n	Kemet	C0402C104K4RACTU	Ceramic capacitor, SMD 0402, X7R, 16V, +/-10%
Fitted	C103	1	1u	Kemet	C0402C105K9PAC	Ceramic capacitor, SMD 0402, X5R, 6.3V, +/-10% (de26942)
Fitted	C105, C106	2	12pF	Kyocera-elco	CM05CG120J50AH	Ceramic capacitor, SMD 0402, NPO, 50V, +/-5% (de19819)
Fitted	C300, C302	2	4.7uF	AVX	0603ZD475KA T2A	Ceramic capacitor, SMD 0603, X5R, 10V, ±10 %
Fitted	C301	1	10n	YAGEO CORP	CO4020KRX7R8BB103	Ceramic capacitor, SMD 0402, X7R, 25V, +/-10%
Fitted	D100	1	EL17-21SYGC	Everlight	EL17-21SYGC	LED, Green, Wave length=575nm, SMD 0805, ±70°
Fitted	D200	1	EL17-21UYC/A3	Everlight	17-21UYC/S530-A3/TR8	LED, Yellow, Wave length=591nm, SMD 0805, ±70°
Fitted	F100	1	MC36213	Multicomp	MC36213	Resetable PTC fuse, Ih = 0.5A, It = 1.0A, 0805 package
Fitted	FW1	1	MEDBG firmw are			MEDBG firmw are
Fitted	J101	1	ZX62D-B-5PA8	HIROSE	ZX62D-B-5PA8(30)	Micro USB B Connector, Standard SMT + DIP
Fitted	LABEL1	1	Label PCBA	ACT Logmark AS	505462	PCBA identification label PP Top White Gloss
Fitted	PCB1	1	ATSAMD10-XMINI PCB			ATSAMD10-XMINI PCB documentation
Fitted	PCBADOC1	1	ATSAMD10-XMINI PCBA DCC			ATSAMD10-XMINI PCBA documentation
Fitted	Q101	1	IRLML6402	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	R101, R102	2	22R	Samsung	RC100SF22R0CS	Thick film resistor, SMD 0402, 1/16W, 1% (de23607)
Fitted	R103	1	3.3k	ASJ	CR10-3301-FK	Thick film resistor, SMD 0402, 1/16W, 1%
Fitted	R104, R105, R117, R118, R201, R203	6	100k	ASJ	CR10-1003-FK	Thick film resistor, SMD 0402, 1/16W, 1%
Fitted	R107, R108, R202	3	1k	ASJ	CR10-1001-FK	Thick film resistor, SMD 0402, 1/16W, 1%
Fitted	R109, R111, R112	3	330R	ASJ	CR10-3300-FK	Thick film resistor, SMD 0402, 1/16W, 1%
Fitted	R110, R300, R302	3	0R	(n/a)	RMCF0402ZT0R00	RES 0.0 OHM 1/16W 0402 SMD
Fitted	R114	1	680R	ASJ	CR10-6800-FK	Thick film resistor, SMD 0402, 1/16W, 1%
Fitted	SW200	1	SKRAAKE010	ALPS	SKRAAKE010	6.2x6.2 mm SMD tact sw ich, same as A08-0091 but less force is needed
Fitted	TEST2	1	Test SW for for A09-2378			Test SW for for A09-2376, ATSAMD10-XMINI
Fitted	TESTDOC1	1	Xplained Mini Test Instructions			Fixture Test Instructions for ATmega168-XMINI
Fitted	U100	1	ATmega32U4-MUR	ATMEL	ATmega32U4-MUR	ATmega32U4 QFN package
Fitted	U200	1	ATSAMD10D14A-MUT	ATMEL	ATSAMD10D14A-MUT	Atmel 32-bit RISC MCU
Fitted	U300	1	LP2985-33DBV	Texas Instruments	LP2985-33DBV	LDO 3.3V 150mA SOT23-5 1.5% (cer. cap)
Fitted	XC100	1	16.0MHz	Epson Toyocom	TSX-3225 16.000MF09Z-AC3	16MHz uXtal, 3.2 x 2.5 mm SMD, CL=9pF, 15PPM, ESR=80ohm(Max.)
Not Fitted	C110	0	4.7n	PHYCOMP	2238 587 15632	Ceramic capacitor, SMD 0402, X7R, 25V, +/-10% (de35287)
Not Fitted	J100, J205	0	PIN HEADER 2x5	Garry	176-2-010-0-T-XSO-0730	2x5 pin header, 1.27mm pitch, THM
Not Fitted	J104	0	HMTSW-102-23-F-S-237	SAMTEC	HMTSW-102-23-F-S-237	1x2 pin header, 2.54mm pitch, Pin-in-Paste THM
Not Fitted	J200	0	SSQ-110-21-F-S	SAMTEC	SSQ-110-21-F-S	1x10 receptacle pin header, low insertion force, 2.54mm pitch THM, Pin in Paste
Not Fitted	J201, J202	0	SSQ-108-21-F-S	SAMTEC	SSQ-108-21-F-S	1x8 receptacle pin header, low insertion force, 2.54mm pitch THM, Pin in Paste
Not Fitted	J203	0	SSQ-106-21-F-S	SAMTEC	SSQ-106-21-F-S	1x6 receptacle pin header, low insertion force, 2.54mm pitch THM
Not Fitted	J204	0	MTSW-103-08-L-D-276	SAMTEC	MTSW-103-08-L-D-276	2x3 pin header, 2.54 mm pitch, THM
Not Fitted	J300, J301	0	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
Not Fitted	R115	0	1M	ASJ	CR10-1004-FK	Thick film resistor, SMD 0402, 1/16W, 1%
Not Fitted	R200	0	0R	(n/a)	RMCF0402ZT0R00	RES 0.0 OHM 1/16W 0402 SMD

Approved	51	Notes