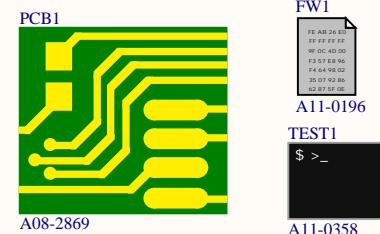
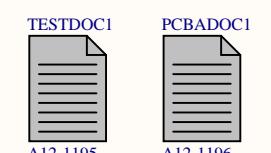
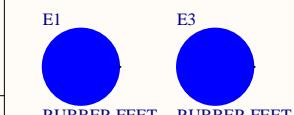
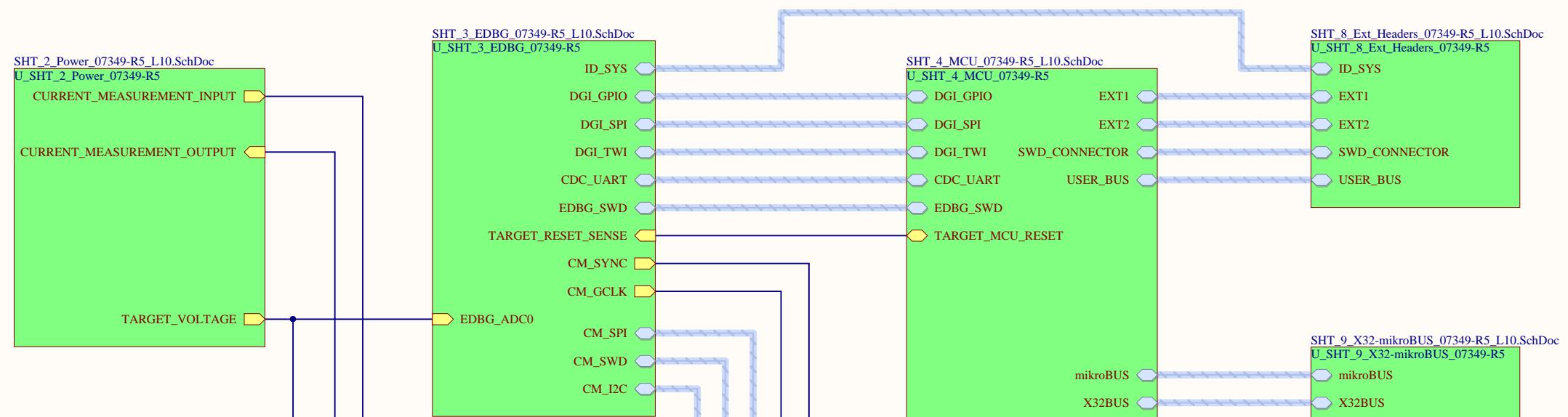


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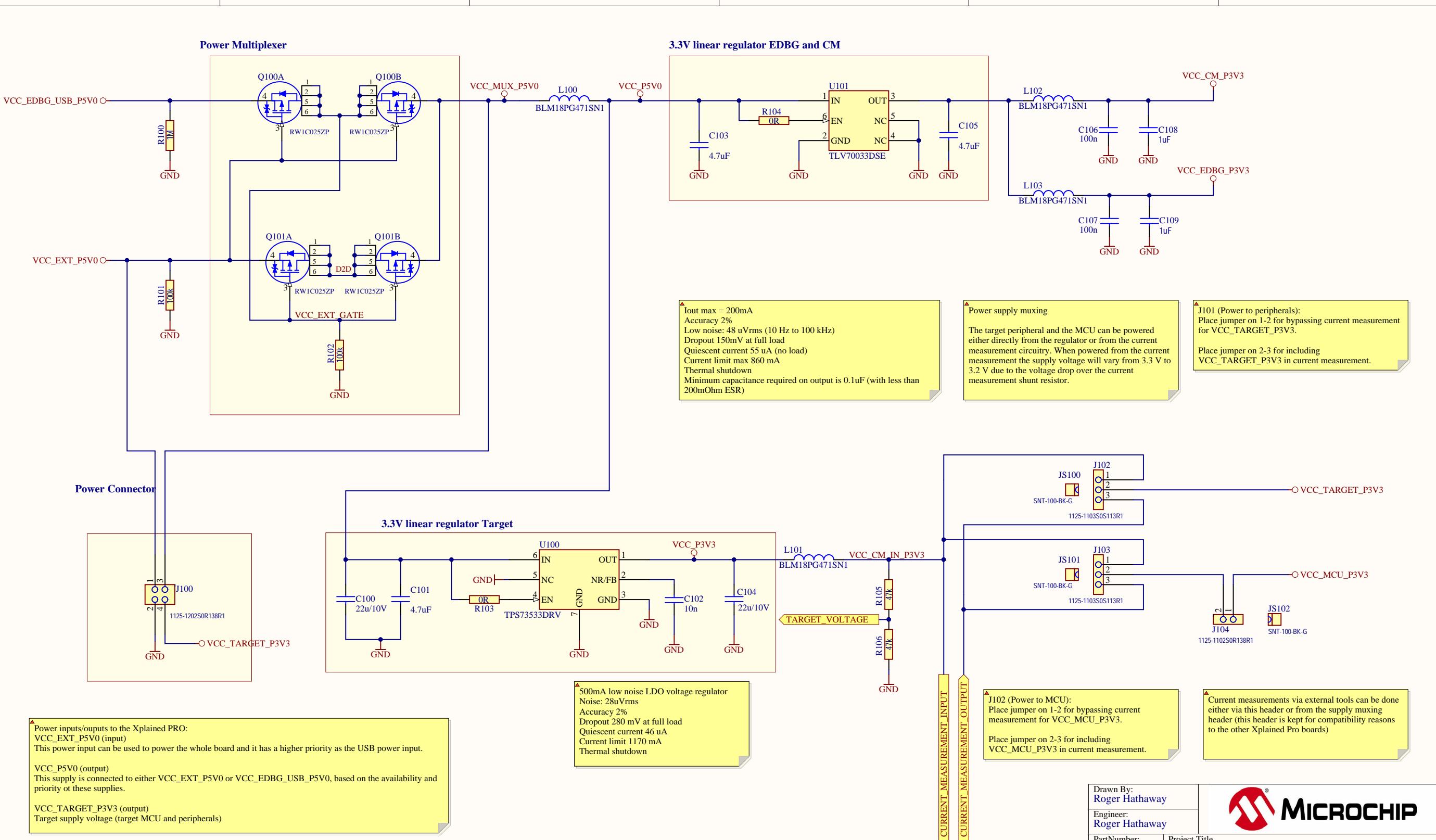
Drawn By:  
Roger Hathaway  
Engineer:  
Roger Hathaway



PartNumber: 07-07349\_L10 Project Title: SAM L10 Xplained Pro

Sheet Title	Top Level Block Diagram		
Size	Sch #	Date:	
B	07-07349_L10	7/6/2018 2:30:59 PM	
	Revision:5		Sheet 1 of 9
			File: SHT_1_Top_Level_07349-R5_L10.SchDoc

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Power inputs/outputs to the Xplained PRO:  
VCC, EXT, P5V0 (input)

**VCC\_EX1\_P5V0** (input)  
This power input can be used to power the whole board and it has a higher priority as the USB power input.

### VCC\_P5V0 (output)

This supply is connected to either VCC\_EXT\_P5V0 or VCC\_EDBG\_USB\_P5V0, based on the availability and priority of these supplies.

VCC\_TARGET\_P3V3 (output)  
Target supply voltage (target MCU and peripherals)

- ▲ 500mA low noise LDO voltage regulator
- Noise: 28uVrms
- Accuracy 2%
- Dropout 280 mV at full load
- Quiescent current 46 uA
- Current limit 1170 mA
- Thermal shutdown

- ▶ J102 (Power to MCU):  
Place jumper on 1-2 for bypassing current measurement for VCC\_MCU\_P3V3.
- Place jumper on 2-3 for including VCC\_MCU\_P3V3 in current measurement.

Current measurements via external tools can be done either via this header or from the supply muxing header (this header is kept for compatibility reasons to the other Xplained Pro boards).

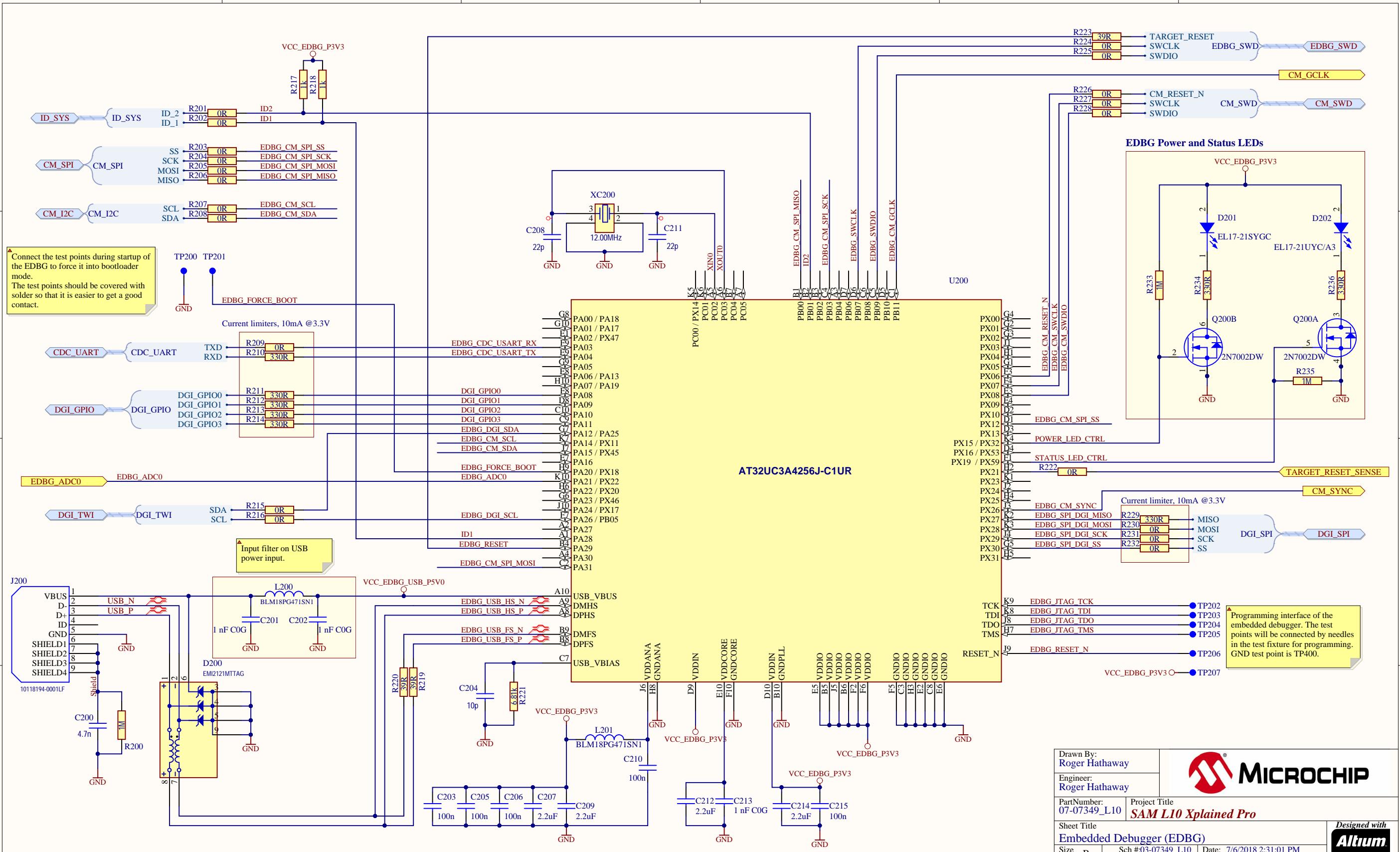
Drawn By:  
Roger Hathaway

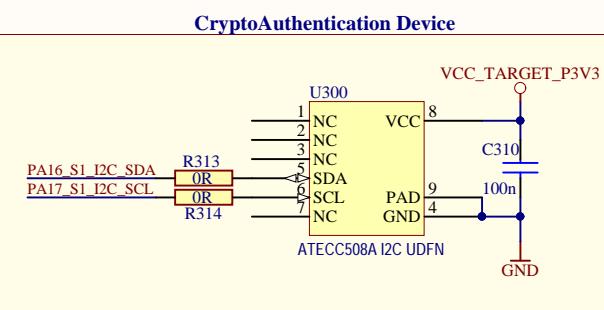
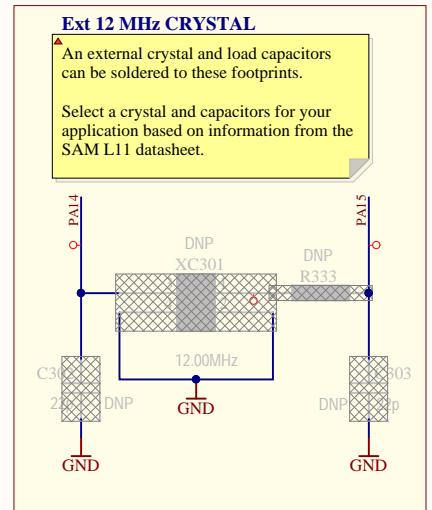
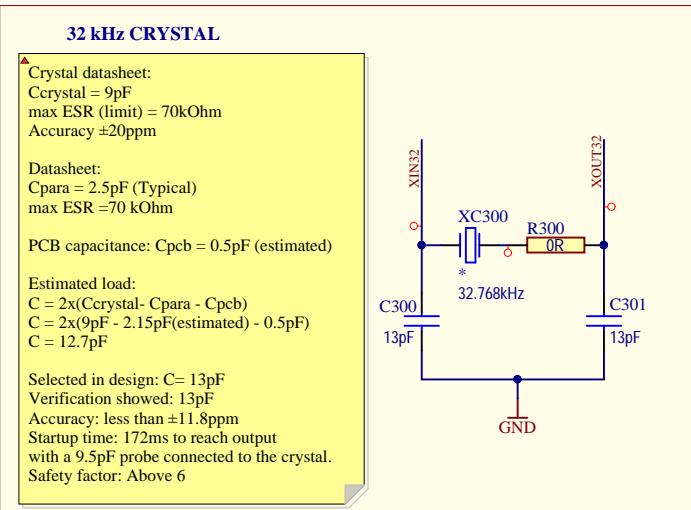
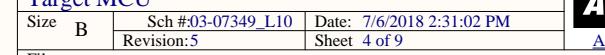
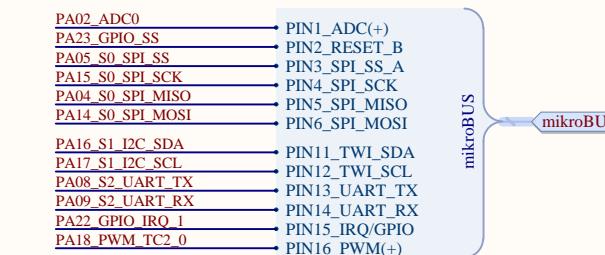
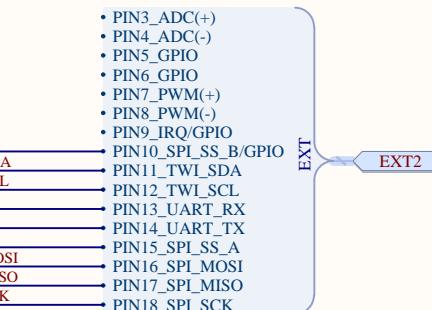
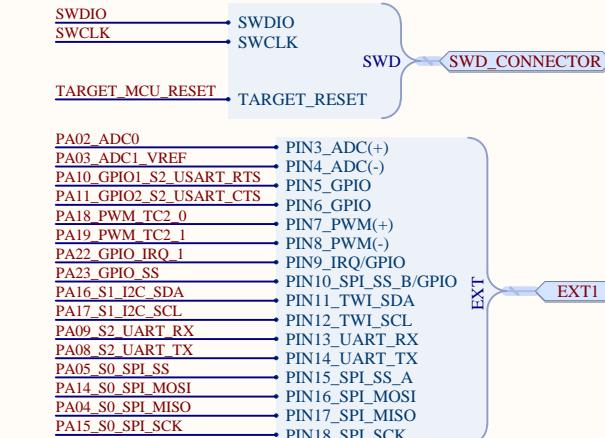
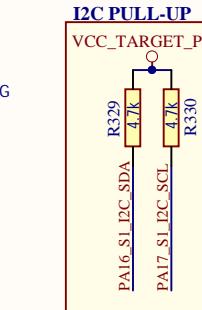
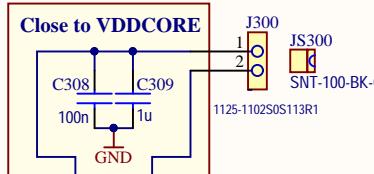
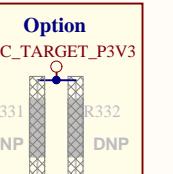
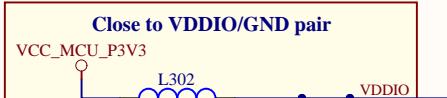
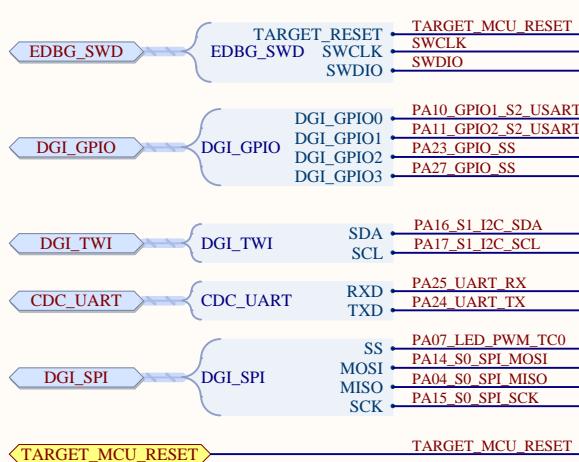
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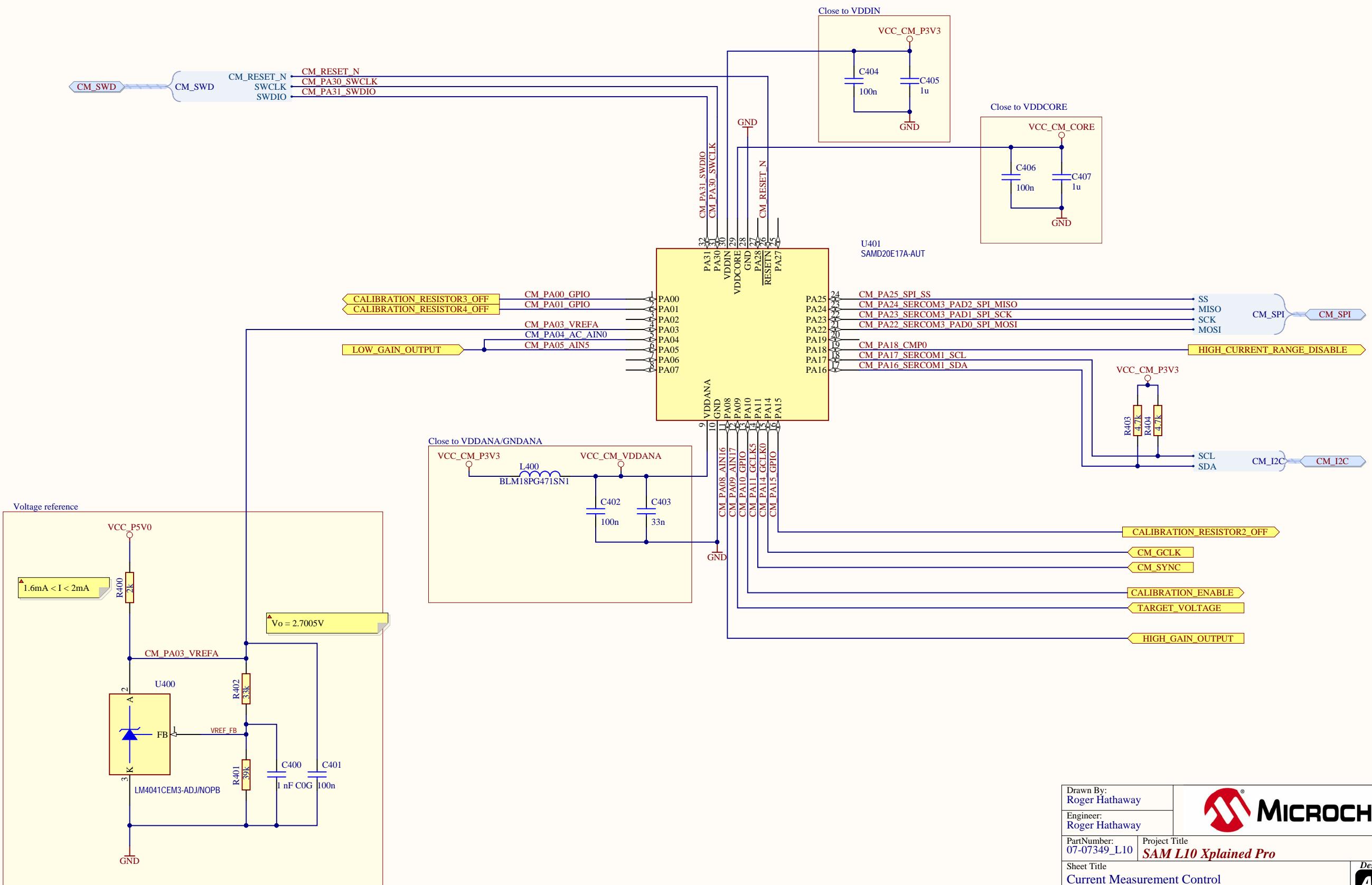
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Sheet Title	
<b>Input Source Select and Power Supplies</b>	
Size B	Sch #03-07349_L10
	Revision:5
File: SHT 2 Power 07349-R5_L10.SchDoc	

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A

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B

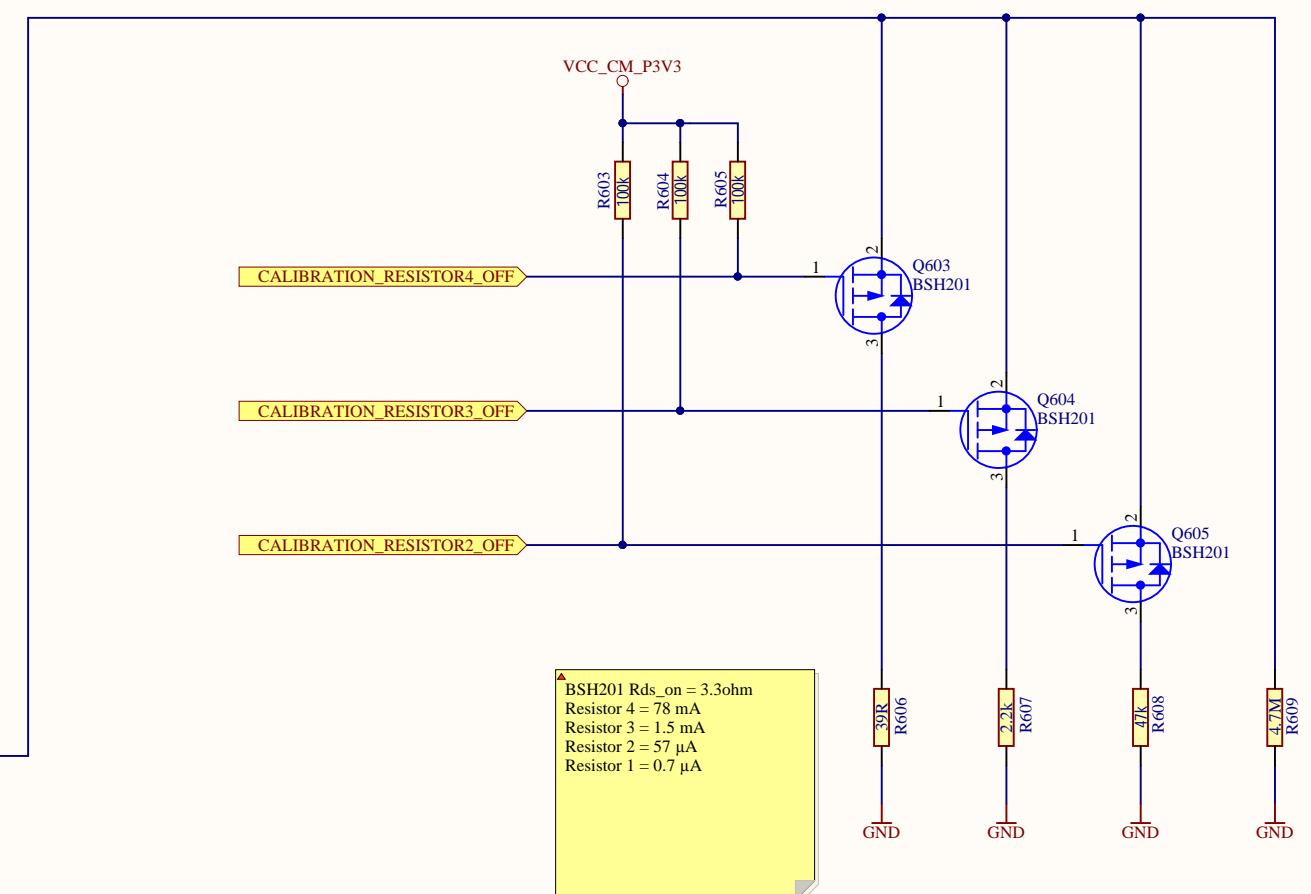
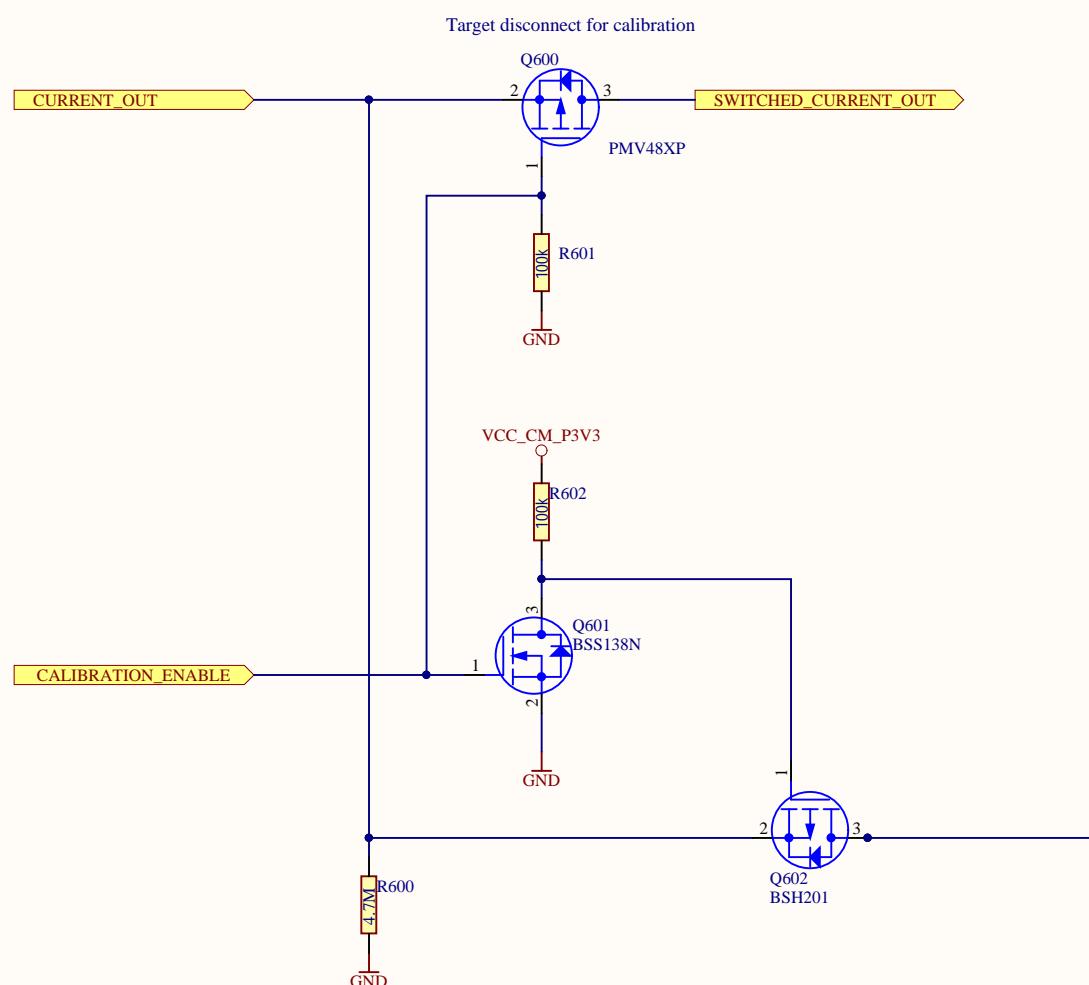
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C

C

D

D



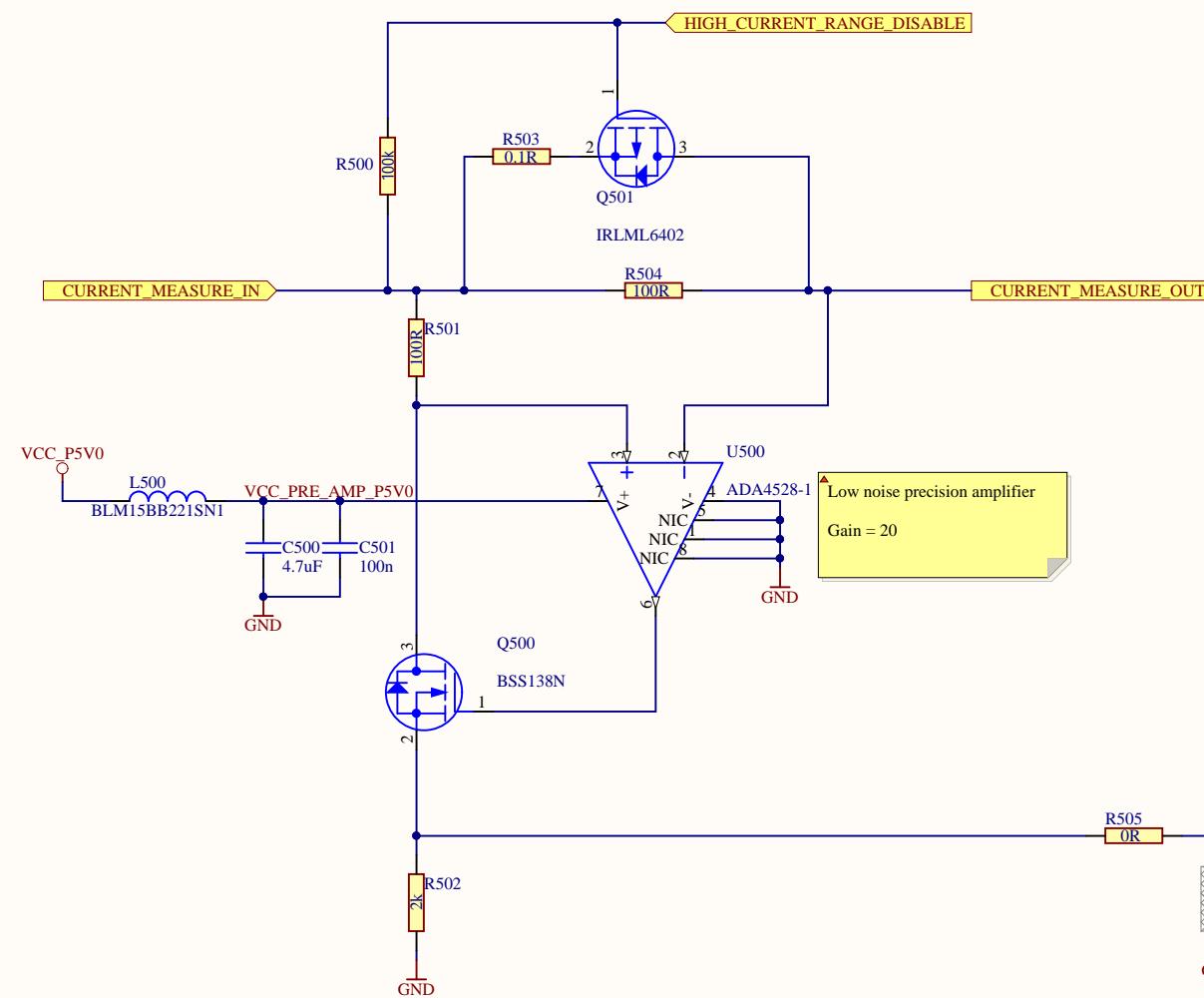
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 Resistor 4 = 78 mA  
 Resistor 3 = 1.5 mA  
 Resistor 2 = 57  $\mu\text{A}$   
 Resistor 1 = 0.7  $\mu\text{A}$

Drawn By:  
 Roger Hathaway  
 Engineer:  
 Roger Hathaway

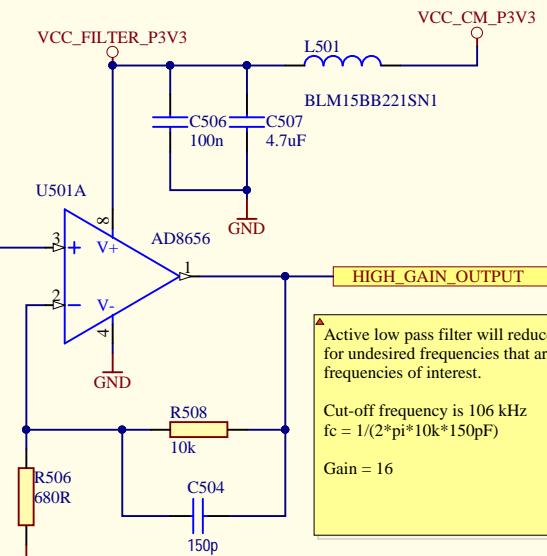
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Part Number: 07-07349\_L10 Project Title: SAM L10 Xplained Pro

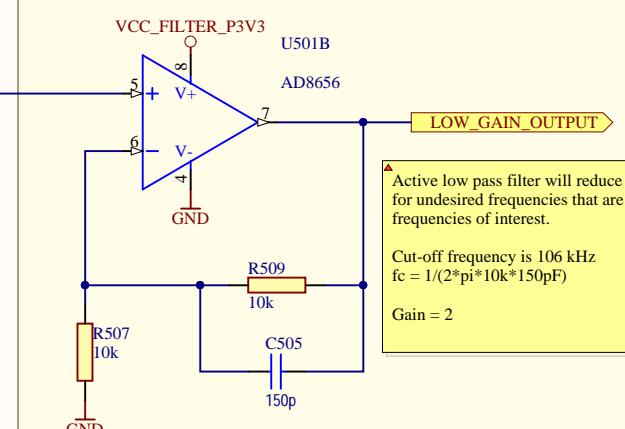
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Size: B Sch #: 03-07349_L10 Date: 7/6/2018 2:31:03 PM	Altium.com
Revision: 5	Sheet 6 of 9
File: SHT_7_1_Calibration_07349-R5_L10.SchDoc	



### Active low pass filter with gain



### Active low pass filter with gain



Drawn By:  
Roger Hathaway



Engineer:  
Roger Hathaway

Part Number: 07-07349\_L10 Project Title: SAM L10 Xplained Pro

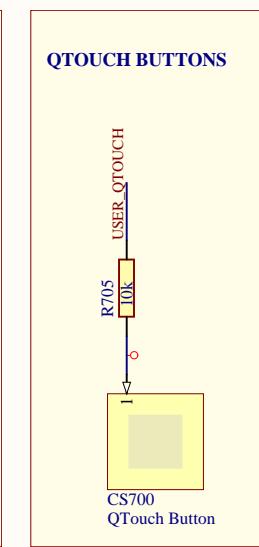
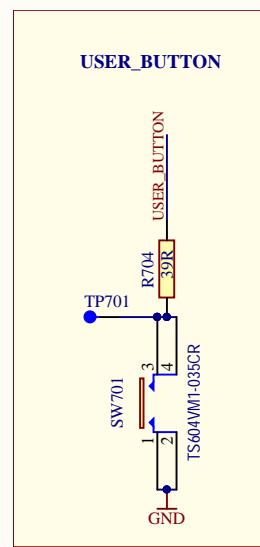
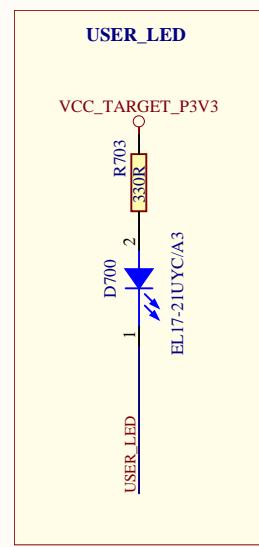
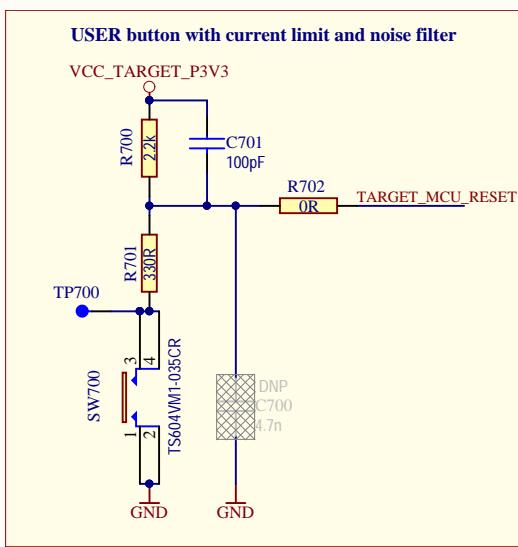
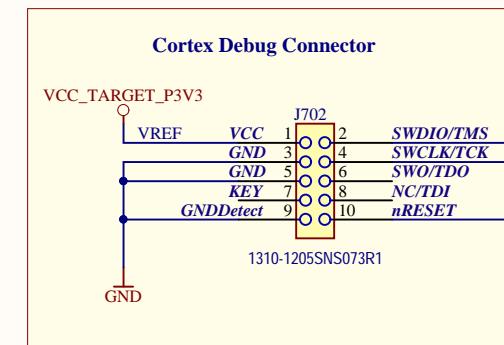
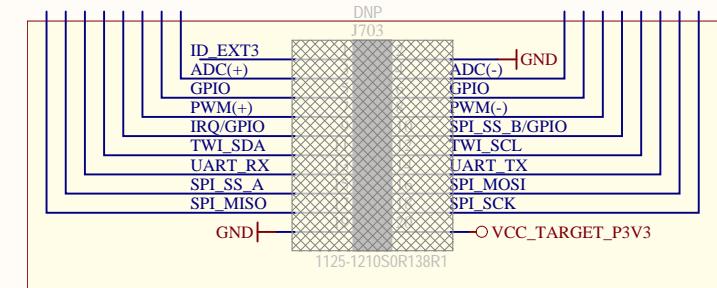
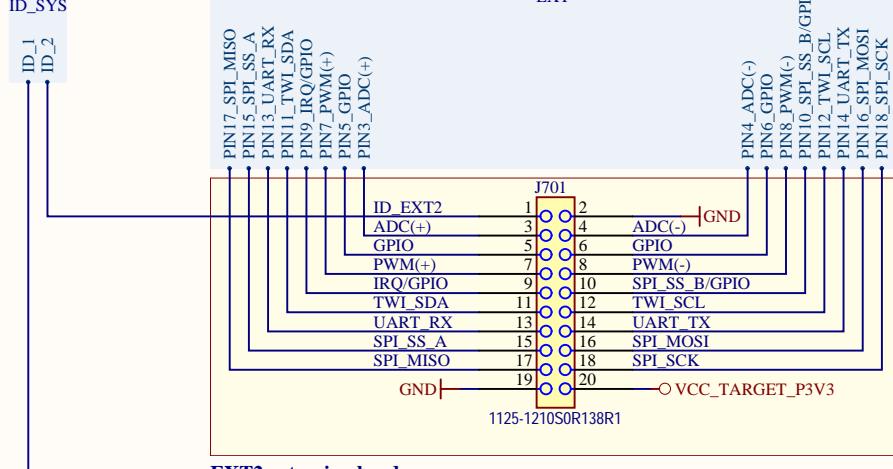
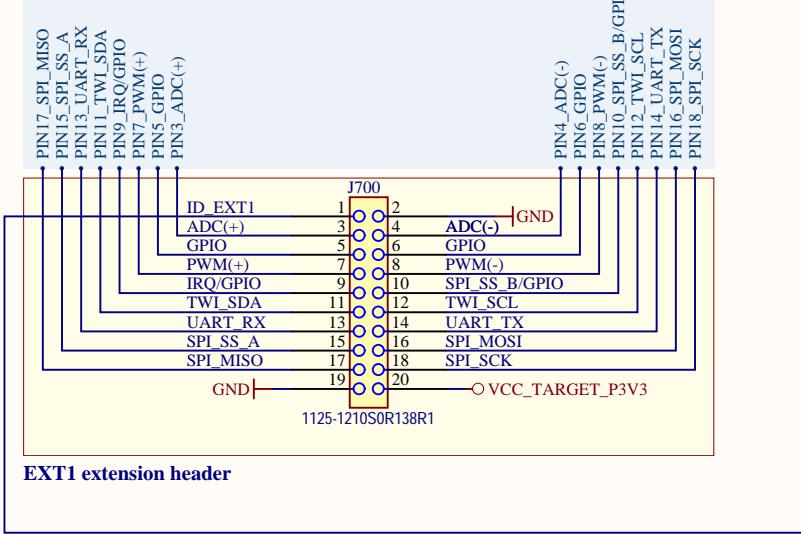
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Revision: 5 Sheet: 7 of 9

File: SHT\_6\_1 Measure\_07349\_L10.SchDoc

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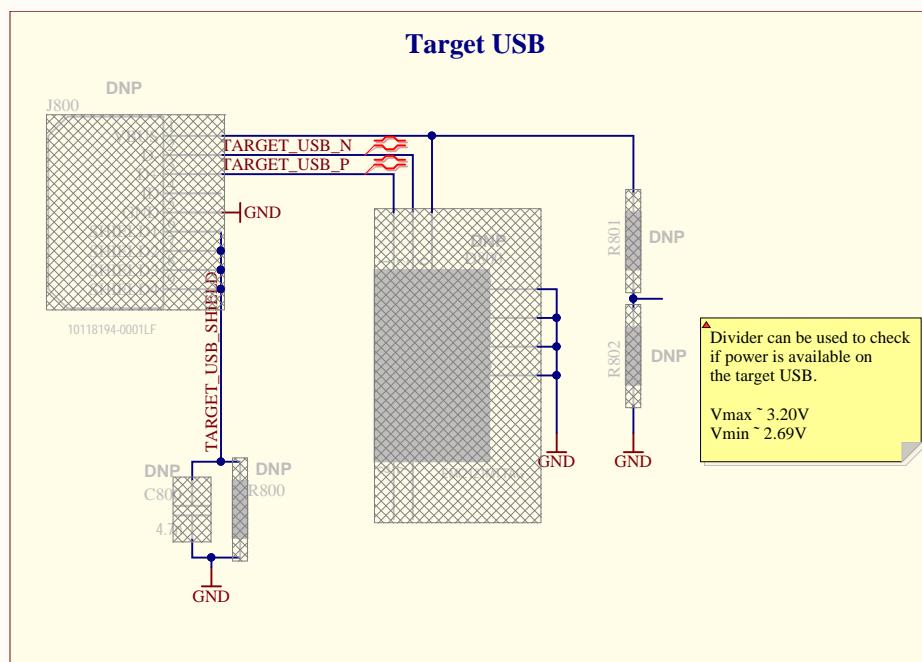
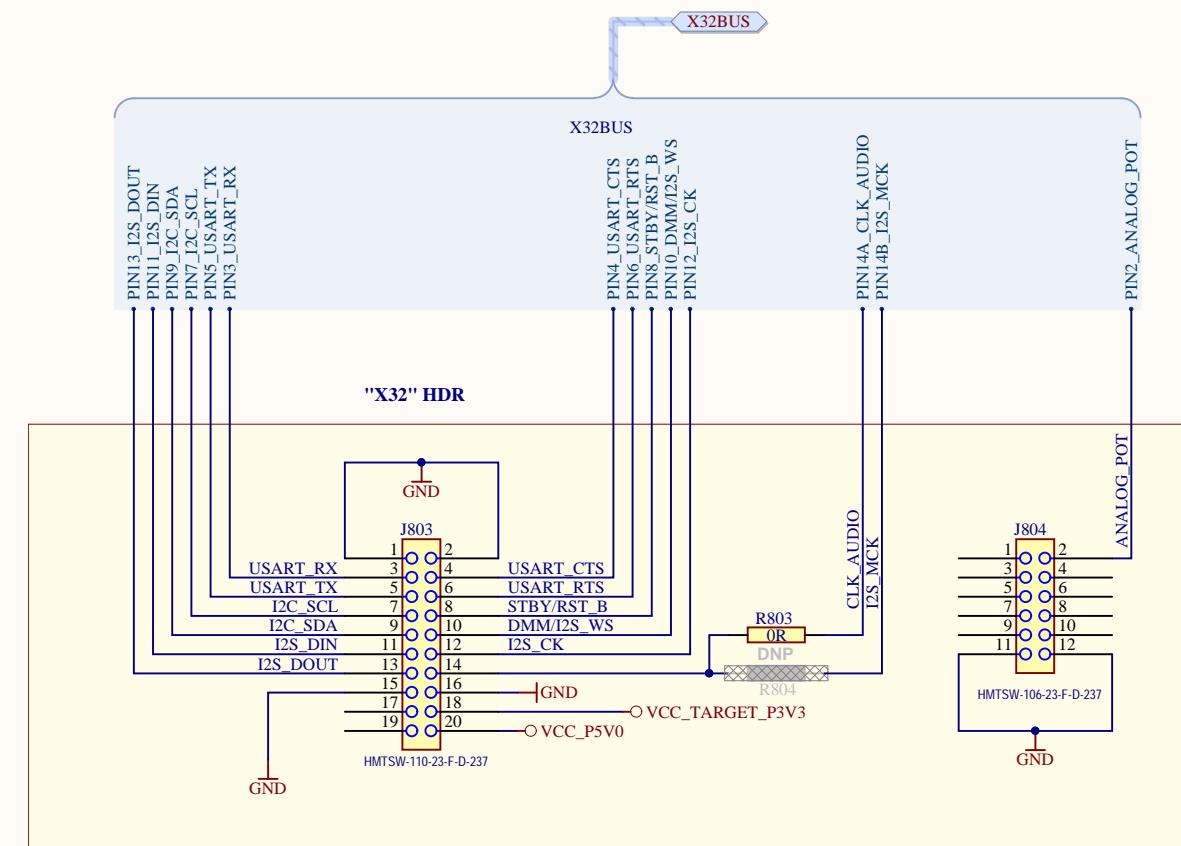
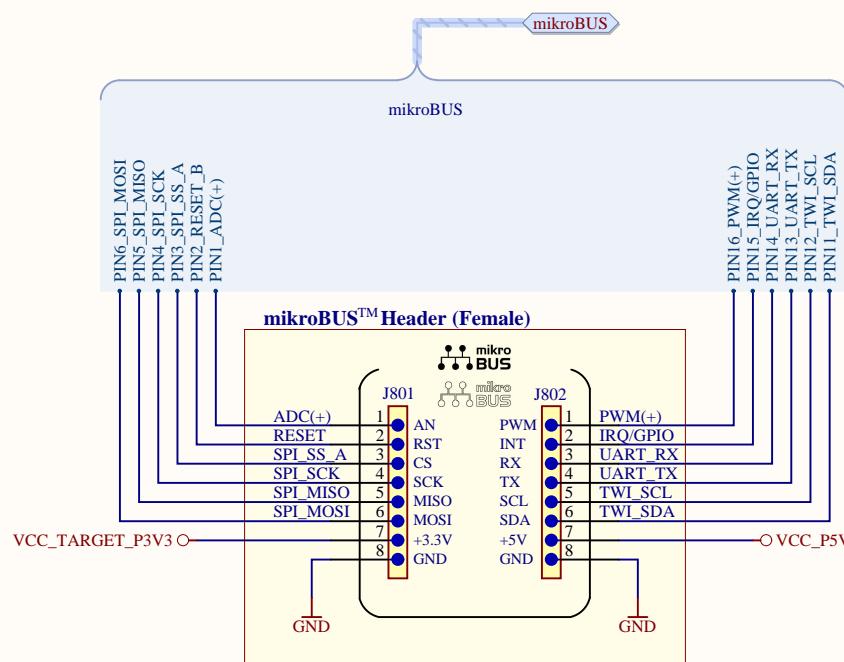
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Drawn By: Roger Hathaway	Engineer: Roger Hathaway
PartNumber: 07-07349_L10	Project Title <b>SAM L10 Xplained Pro</b>



A



Drawn By:  
Roger Hathaway  
Engineer:  
Roger Hathaway



Part Number: 07-07349\_L10 Project Title: SAM L10 Xplained Pro

Sheet Title: X32 and mikroBUS Connectors

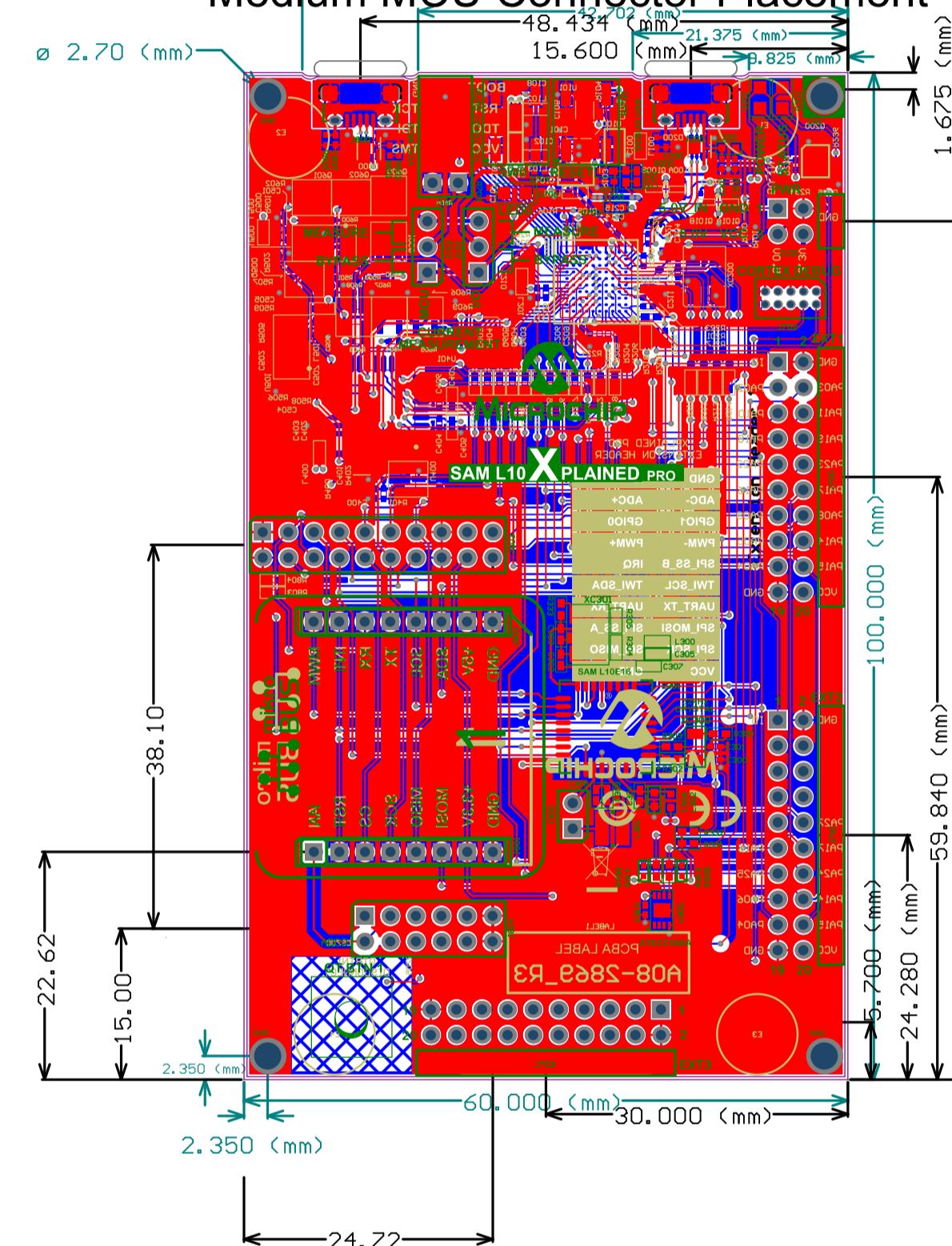
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Revision: 5 Sheet: 9 of 9

File: SH9\_X32-mikroBUS\_07349\_R5\_L10.SchDoc

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# Medium MCU Mechanical Dimensions

## Medium MCU Connector Placement



ATMEL NORWAY  
Vestre Rosten 79  
N-7075 Tiller

 <b>ATMEL NORWAY</b> Vestre Rosten 79 N-7075 Tiller	ENGINEER:	TITLE:	
	PCB DESIGNER:		
	DATE:	PART NO.:	REV.:
	7/6/2018		
FILE NAME:	DWG NO.:	SCALE:	
04-07349-R5_L10.PcbDoc			

