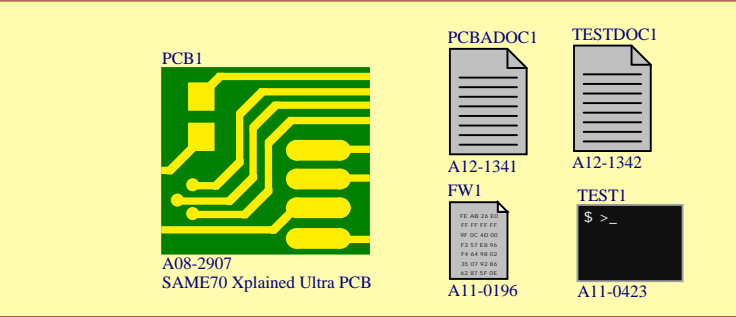
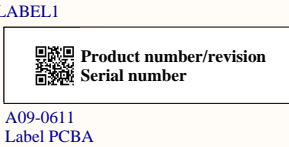
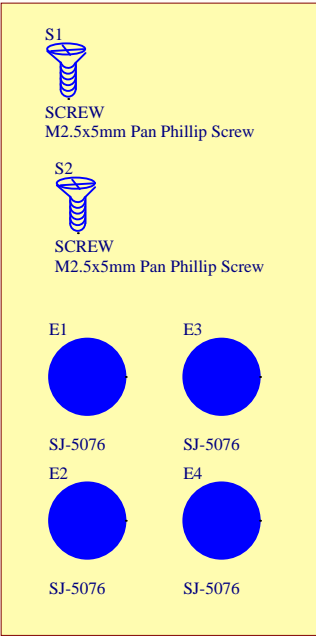
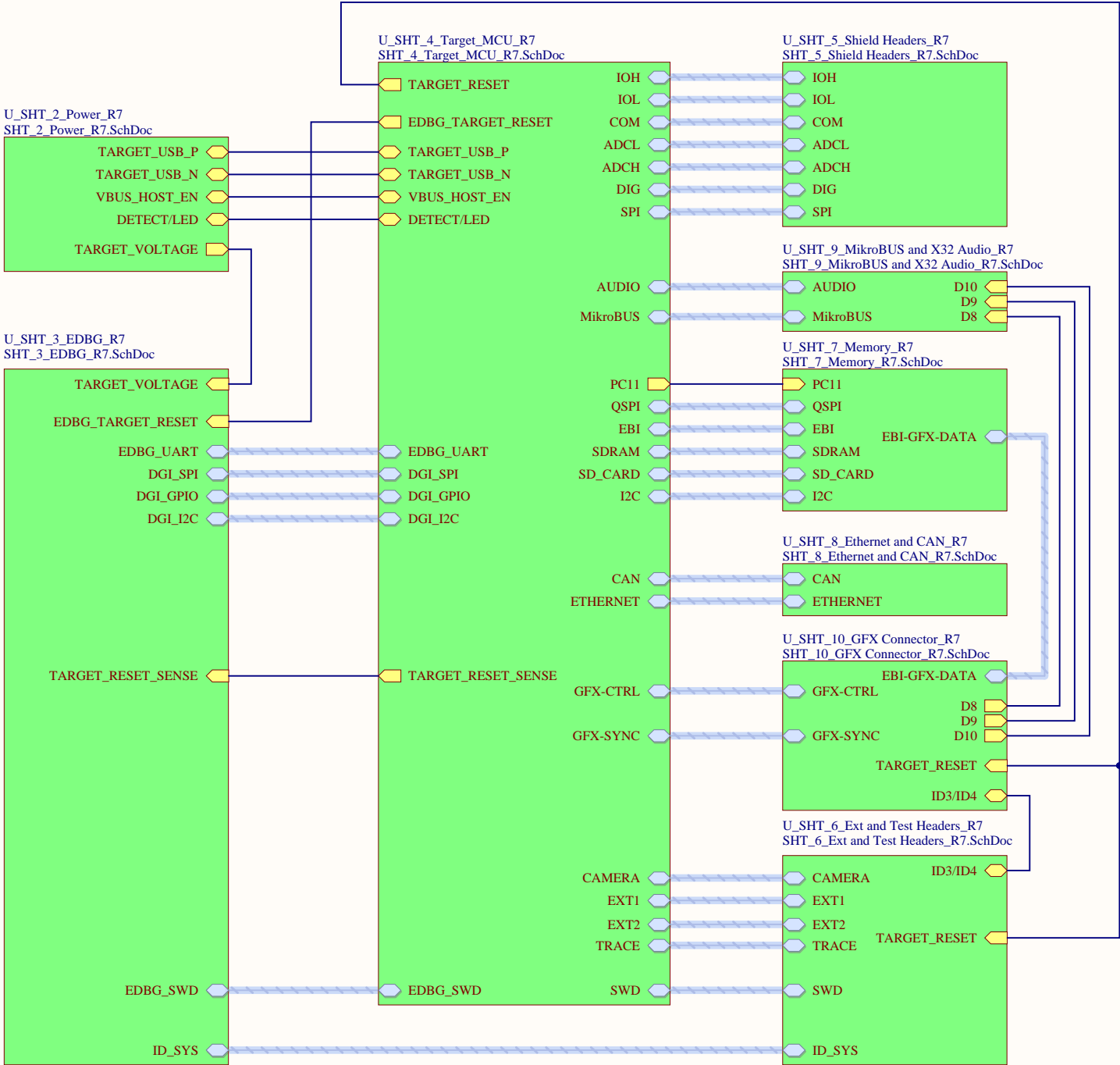
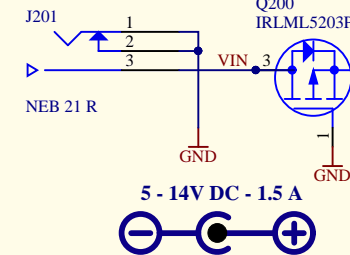


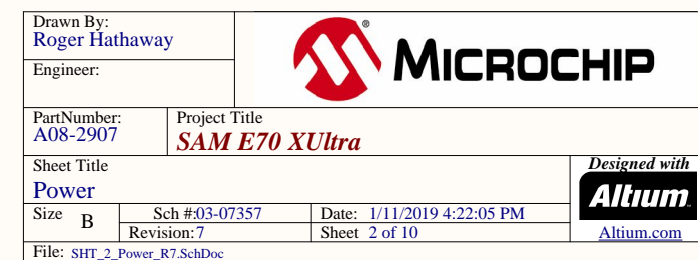
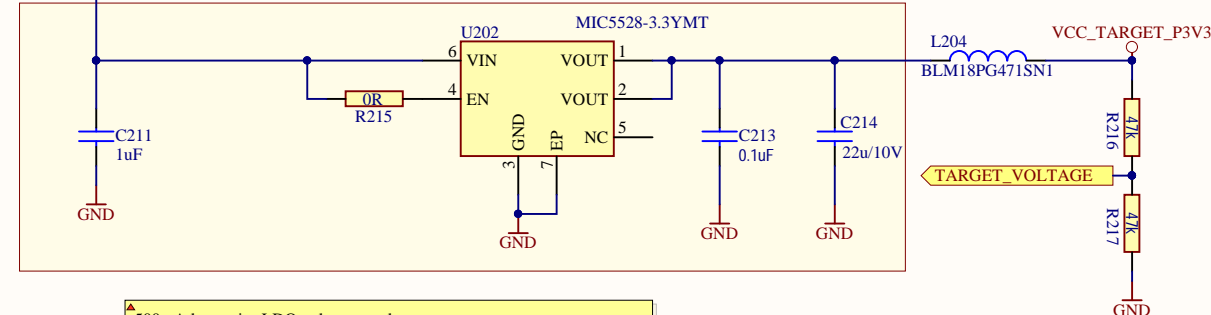
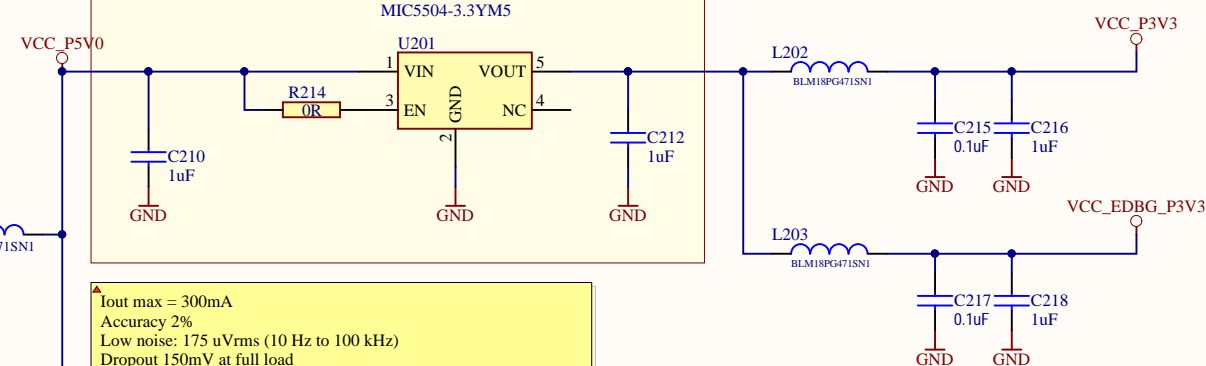
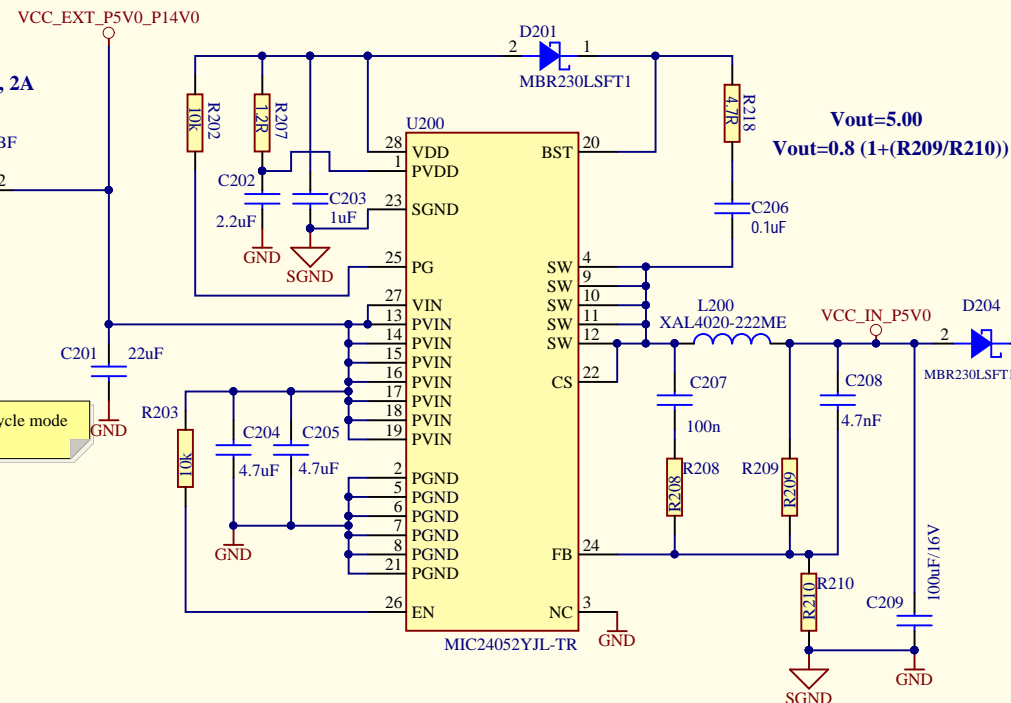
SAM E70 Xplained Ultra

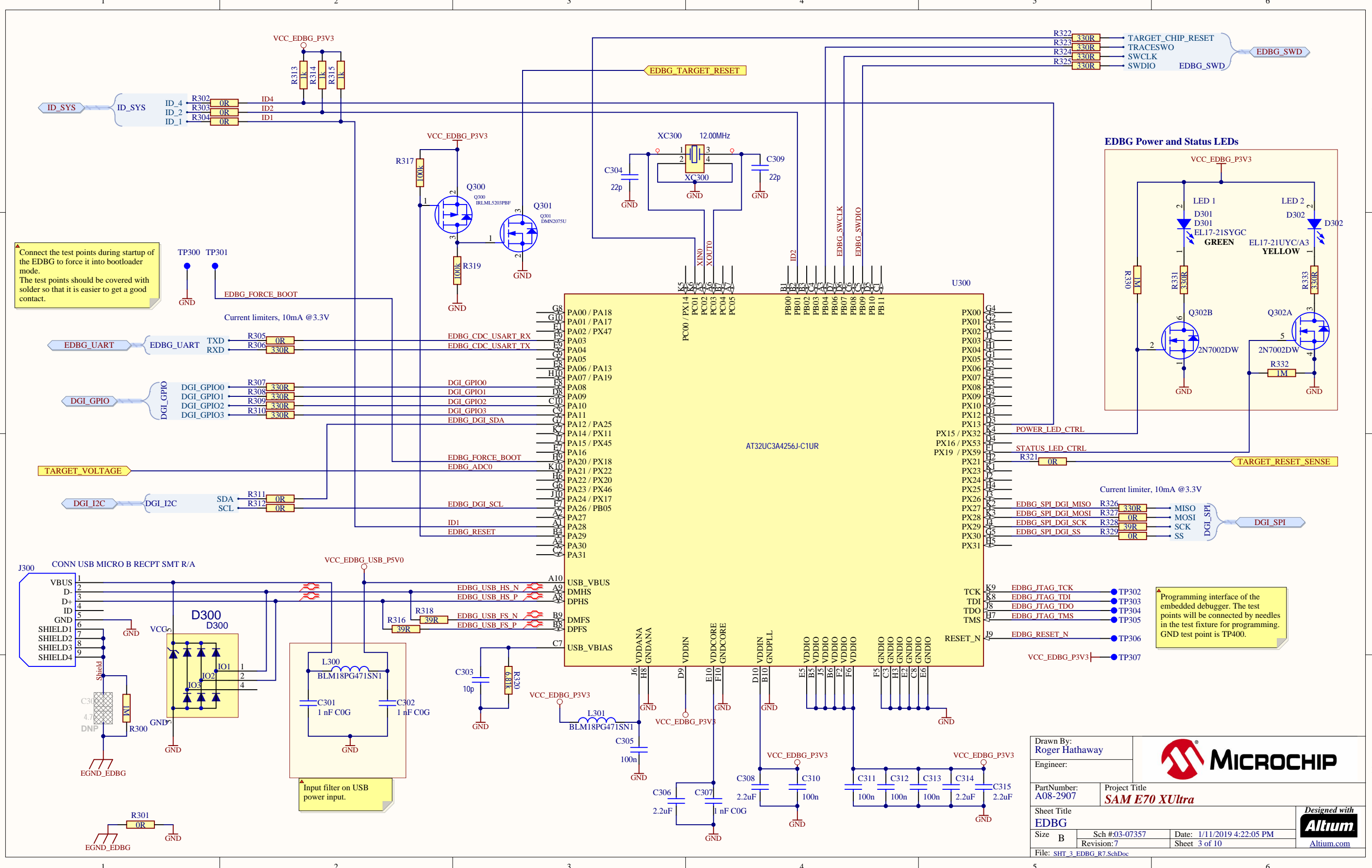


Drawn By: Roger Hathaway		MICROCHIP	
Engineer:			
PartNumber: A08-2907		Project Title SAM E70 XUltra	
Sheet Title Top Level			
Size B	Sch #03-07357	Date: 1/11/2019 4:22:05 PM	Designed with Altium Altium.com
Revision: 7	Sheet 1 of 10	File: SHT_1_TopLevel_R7.SchDoc	



When  $V_{in} = 5V$  the regulator uses a 100% duty-cycle mode (passthrough).









A

B

C

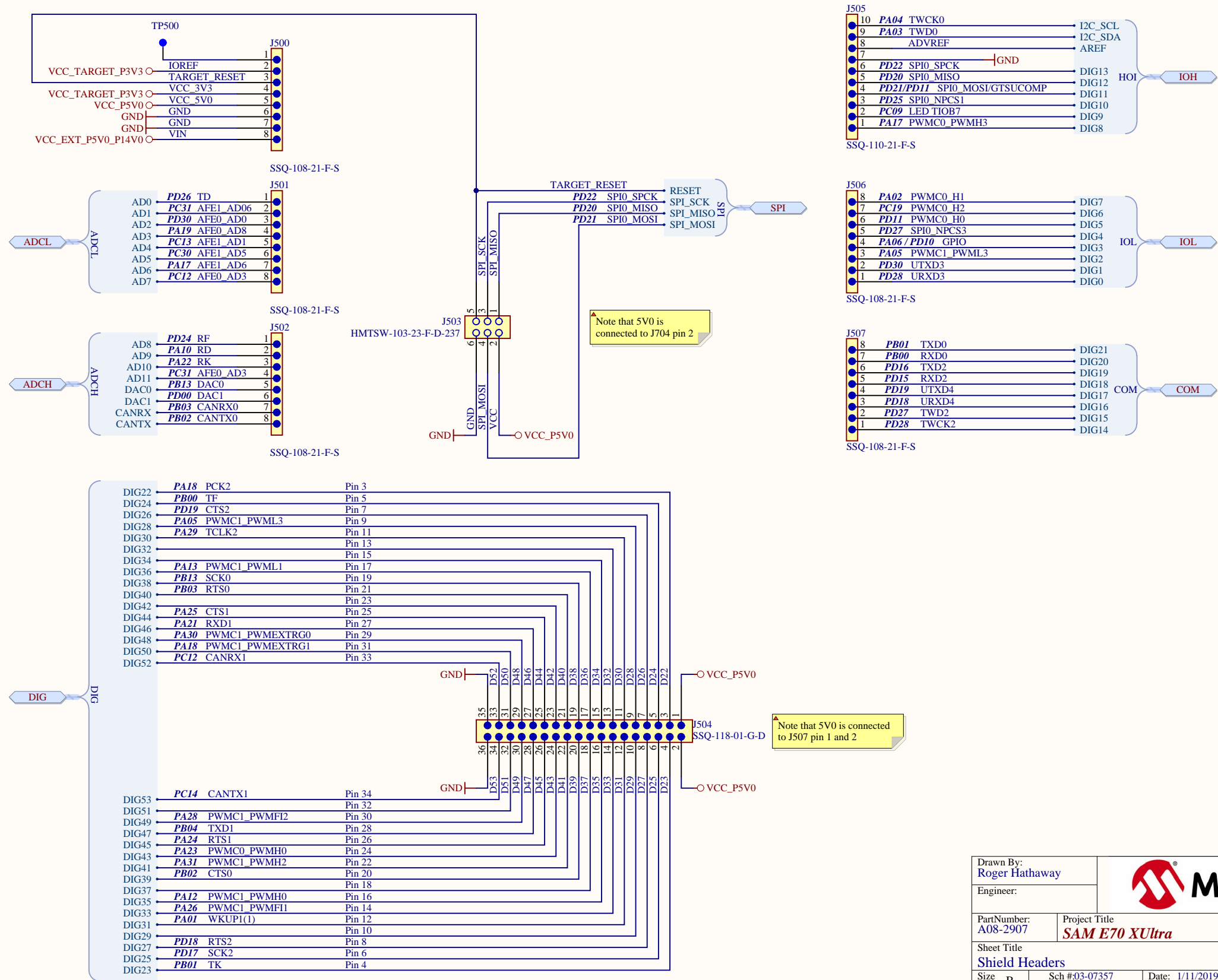
D



A

B

C

D



Drawn By: Roger Hathaway		 <b>MICROCHIP</b>	
Engineer:			
PartNumber: A08-2907		Project Title <b>SAM E70 XUltra</b>	
Sheet Title <b>Shield Headers</b>			
Size B	Sch #03-07357	Date: 1/11/2019 4:22:06 PM	<i>Designed with</i>  Altium.com
Revision: 7		Sheet 5 of 10	
File: SHT_5_Shield Headers_R7.SchDoc			

A

B

C

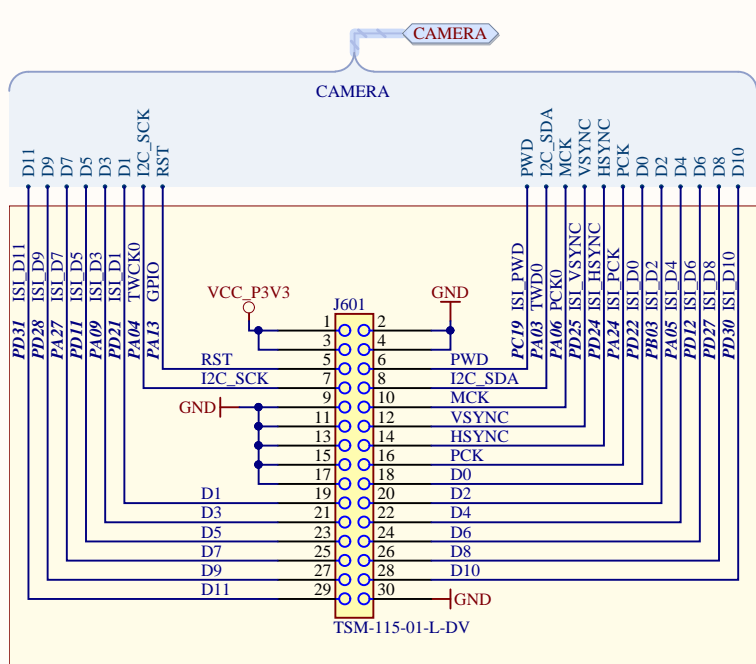
D

A

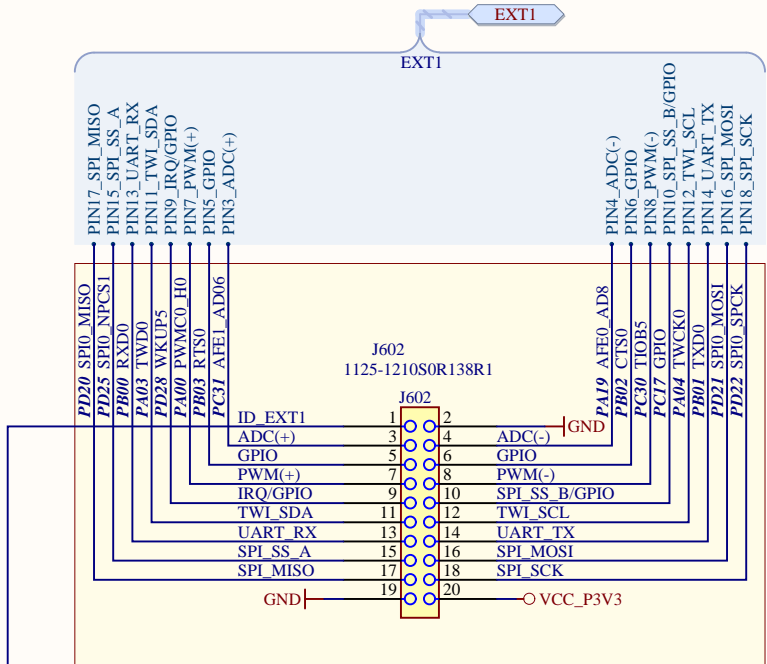
B

C

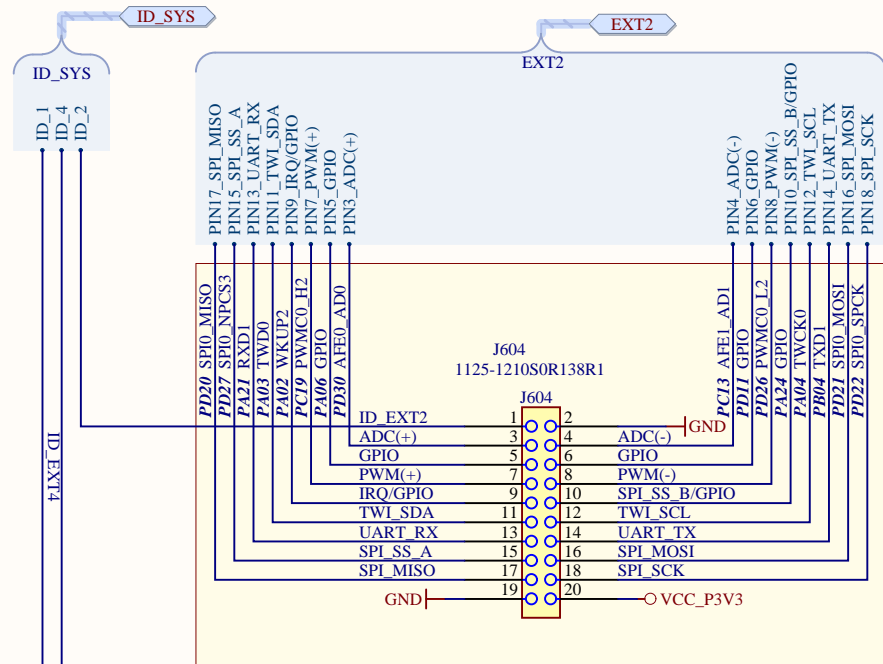
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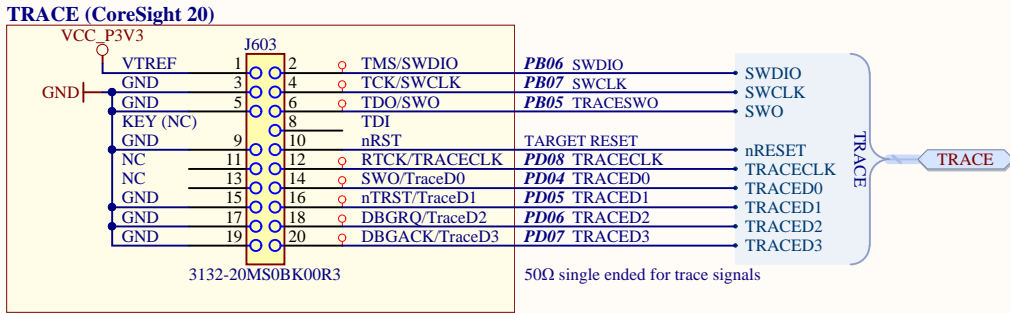
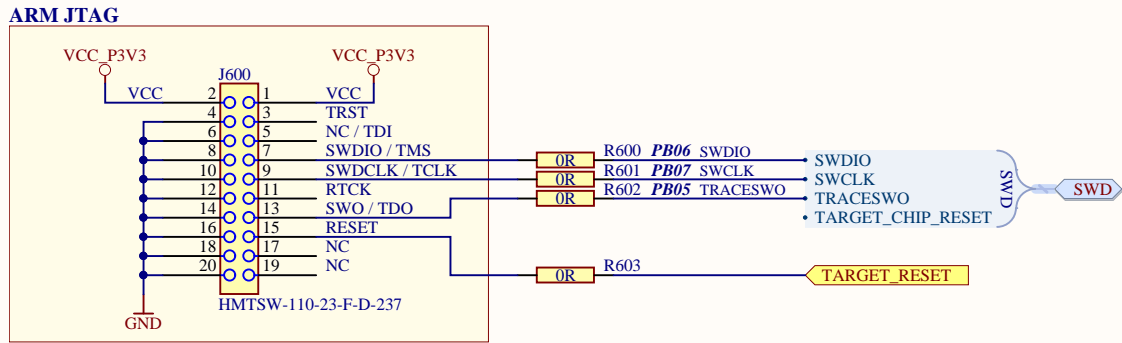
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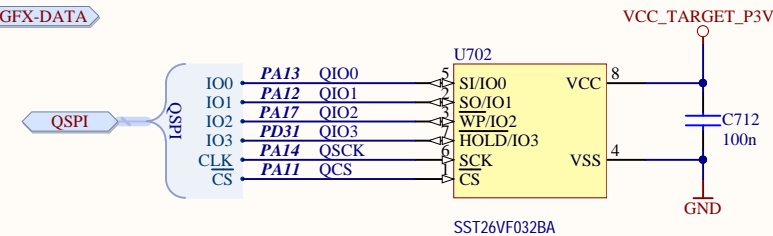
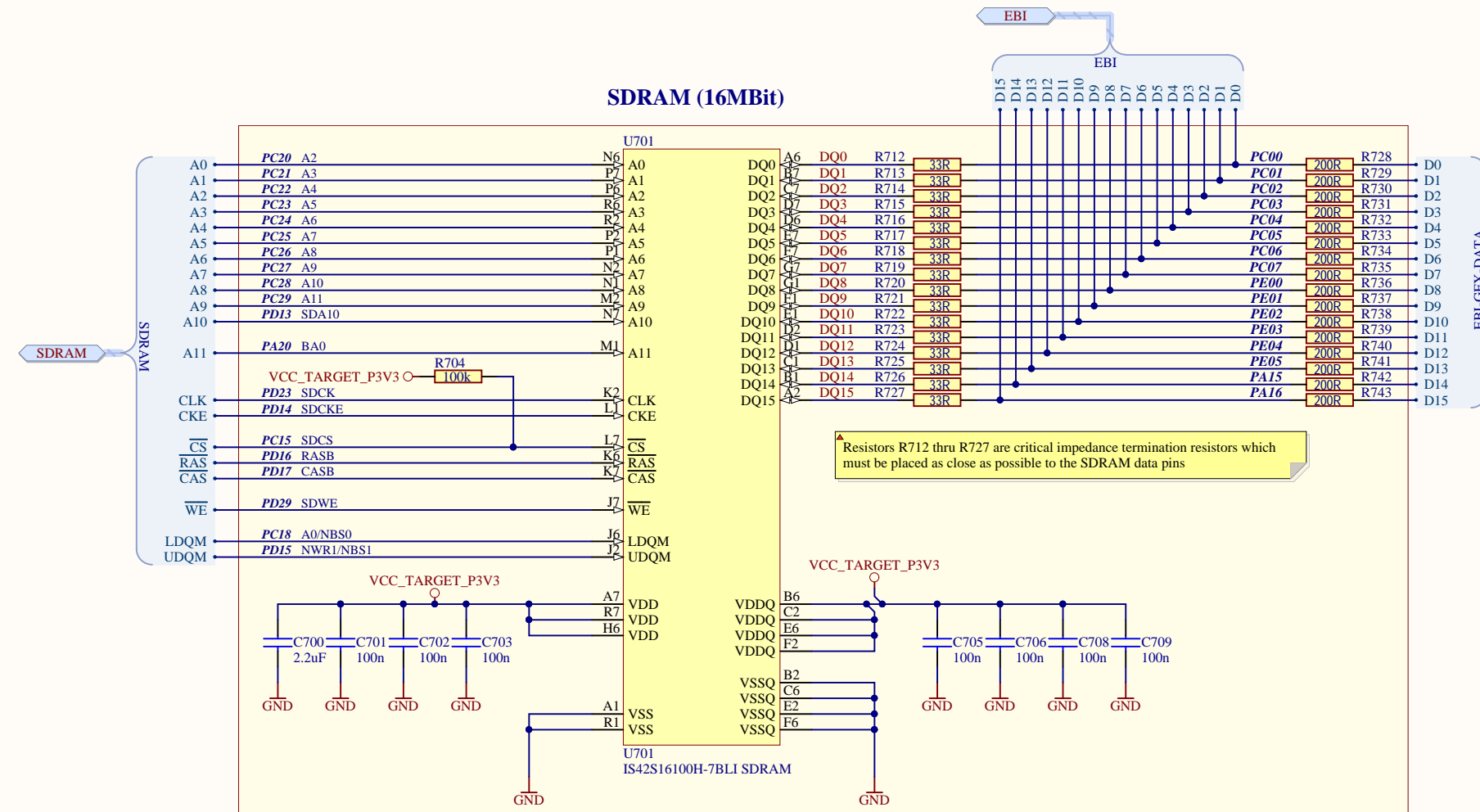
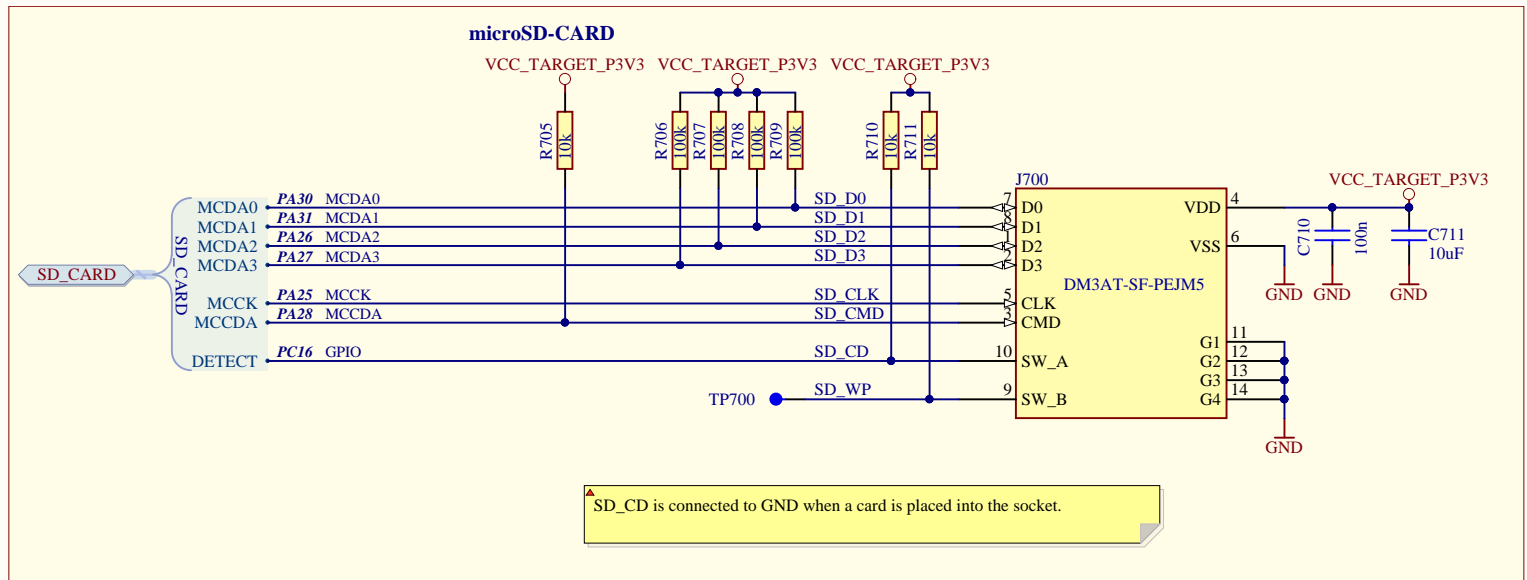
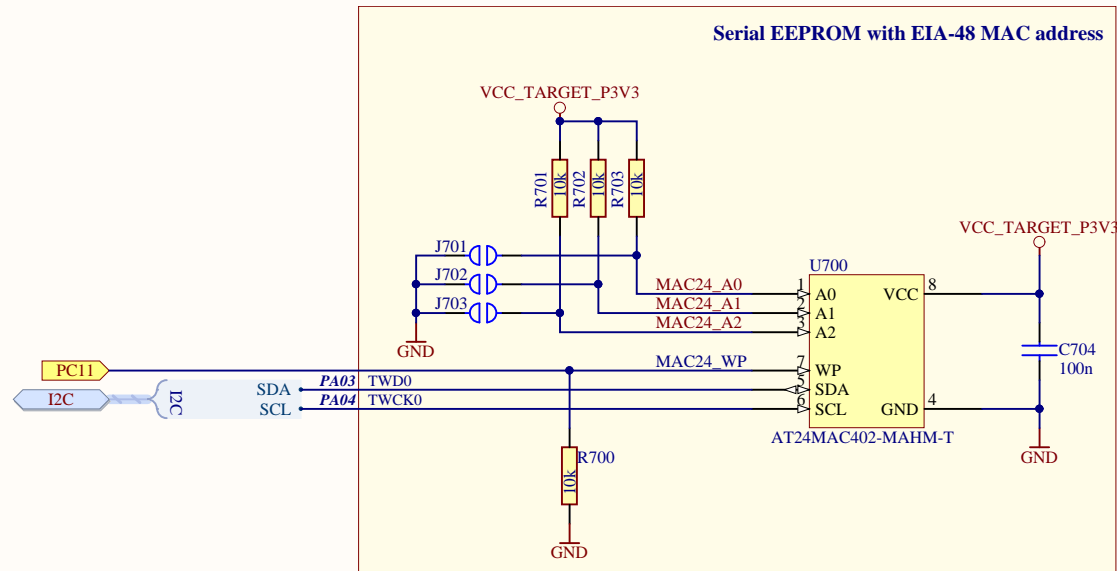
EXT1 extension header

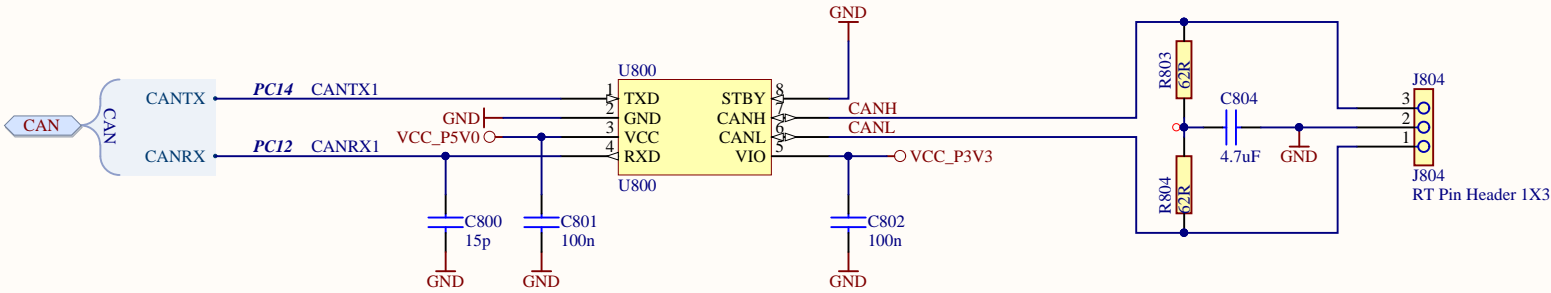
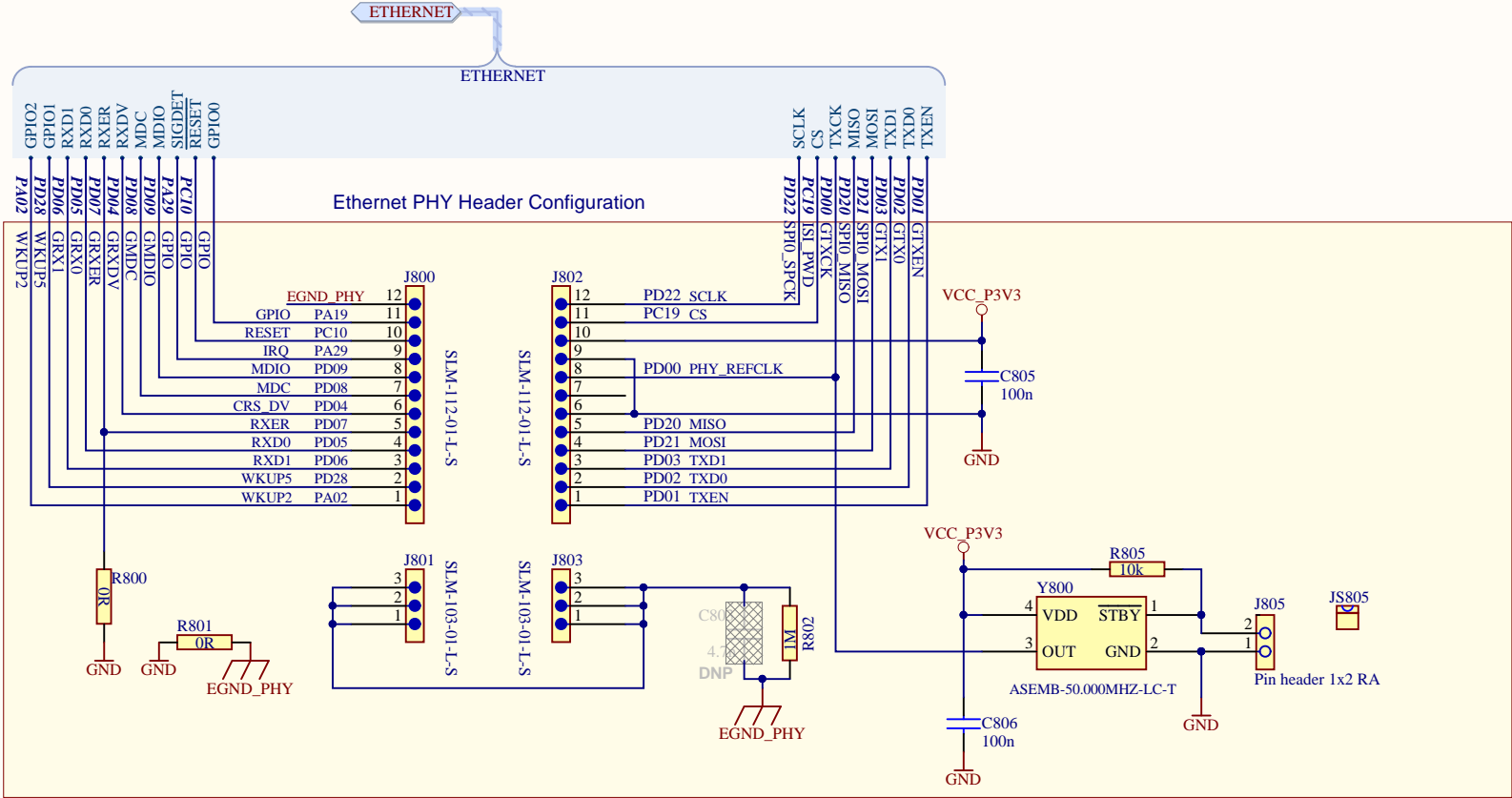


EXT2 extension header









Drawn By:  
Roger Hathaway

Engineer:



PartNumber:  
A08-2907

Project Title  
SAM E70 XUltra

Sheet Title  
Ethernet & CAN

Size  
B

Sch #03-07357

Date: 1/11/2019 4:22:06 PM

Revision: 7

Sheet 8 of 10

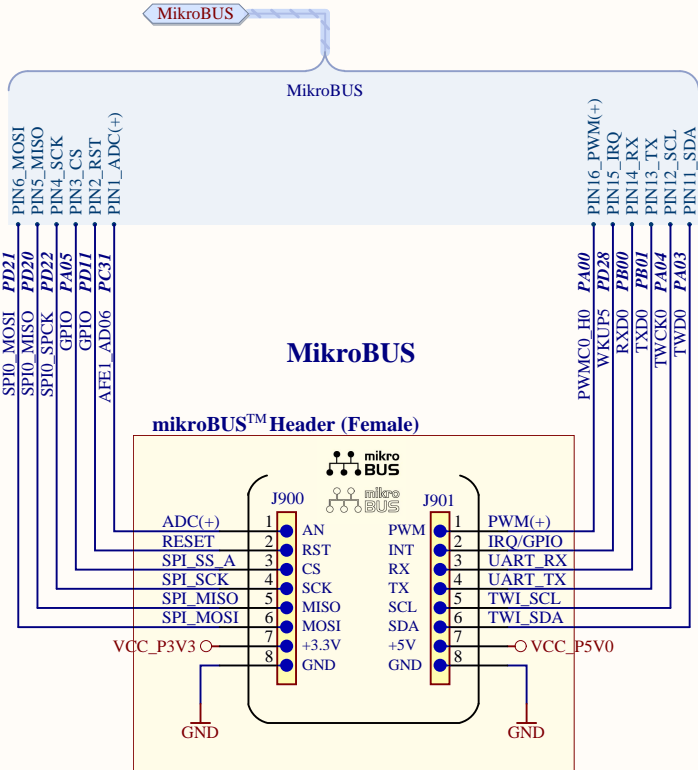
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Designed with

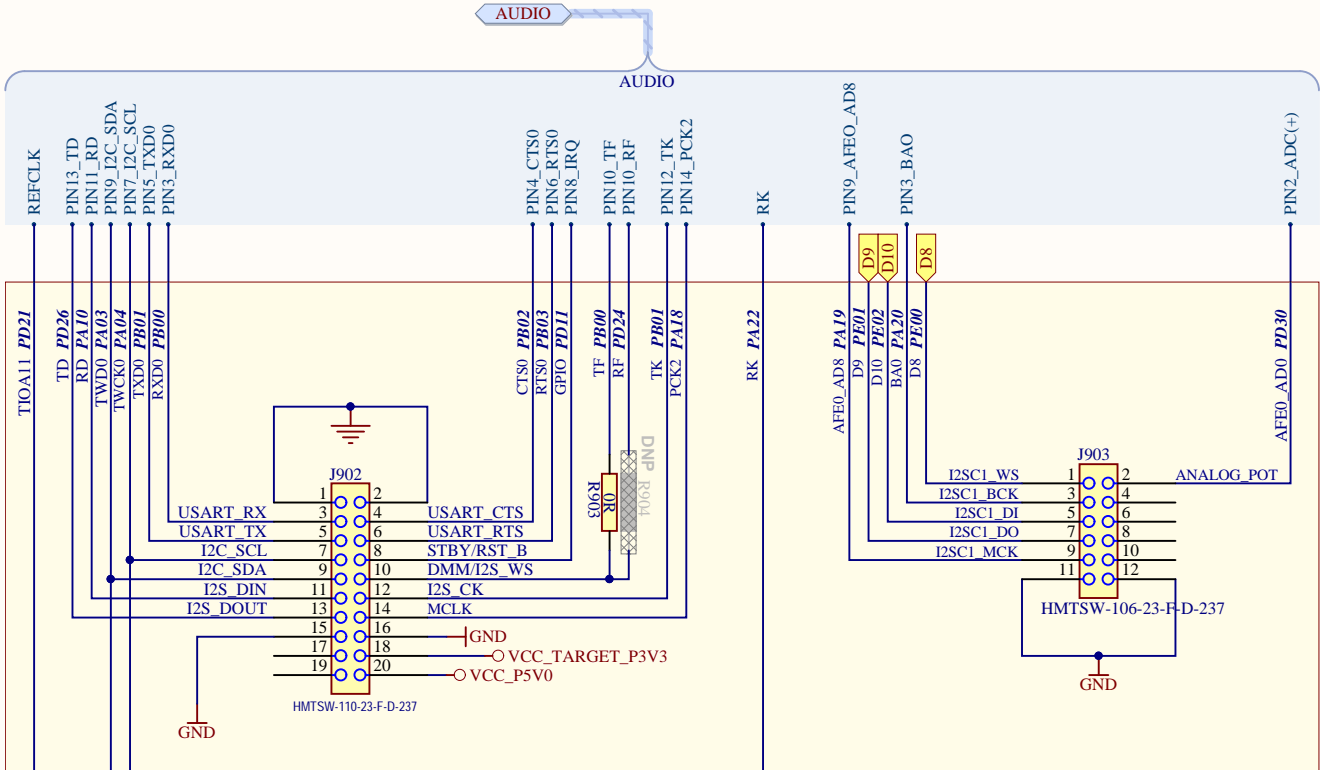
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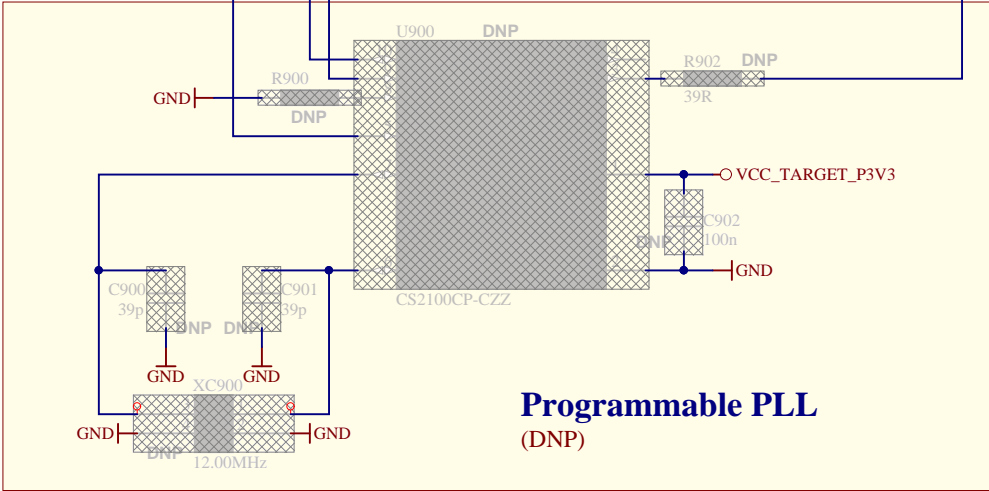





The external PLL is added specifically support Ethernet AVB applications. The timer output TIOA11 can be used to generate a reference clock which is connected to the PLL, the PLL can multiply this frequency to reconstruct a remote clock for the Audio system.



"X32" HEADER SIGNAL CONFIGURATION



Drawn By: Roger Hathaway			
Engineer:			
PartNumber: A08-2907	Project Title SAM E70 XUltra		
Sheet Title MikroBUS & X32 Audio			
Size B	Sch #03-07357	Date: 1/11/2019 4:22:06 PM	Designed with  Altium.com
Revision: 7	Sheet 9 of 10	File: SHT_9_MikroBUS and X32 Audio_R7.SchDoc	

