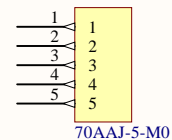
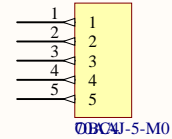
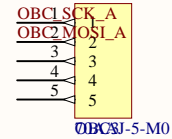
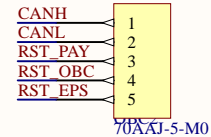
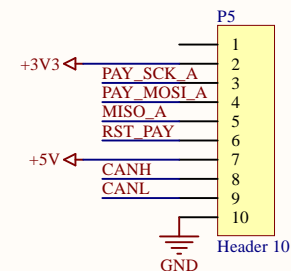
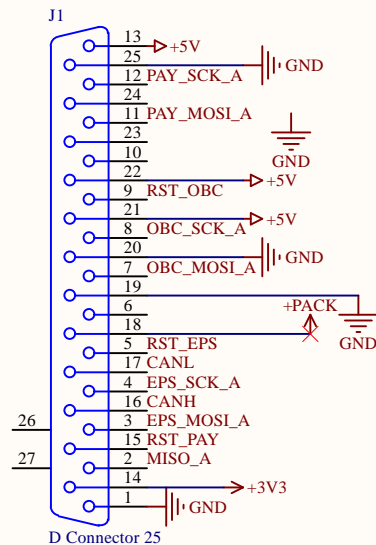
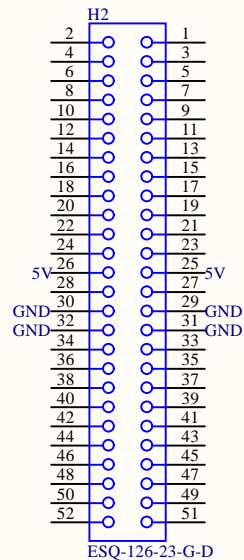
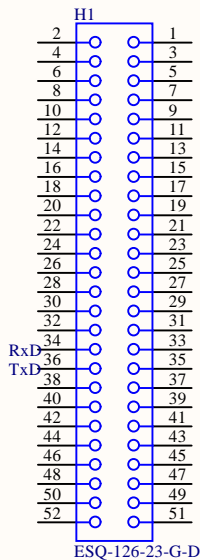
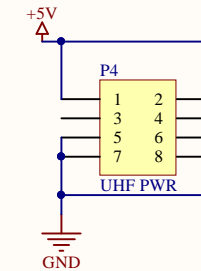


▲ ignore pgm\_rst lines since we give debugger full access to the reset line

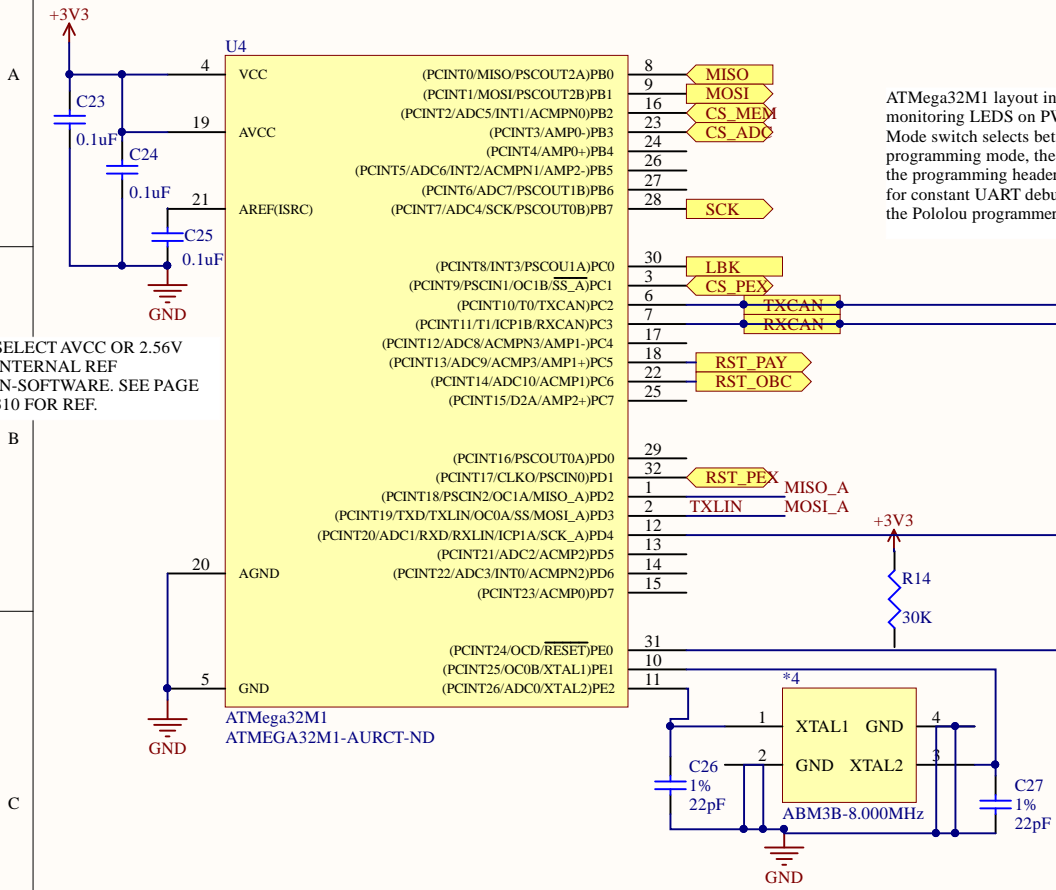


▲ Need to add PC104



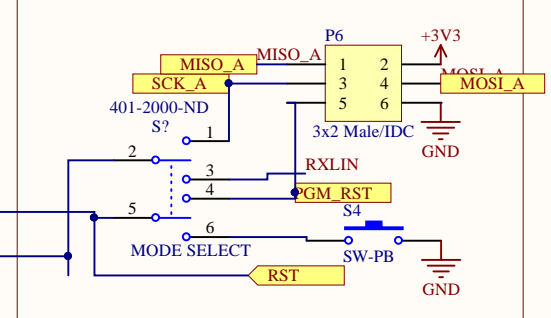
Title		
Size	Number	Revision
A4		
Date:	2018-09-22	Sheet of
File:	C:\Users\...\bus-main.SchDoc	Drawn By:

SELECT AVCC OR 2.56V  
INTERNAL REF  
IN-SOFTWARE. SEE PAGE  
310 FOR REF.

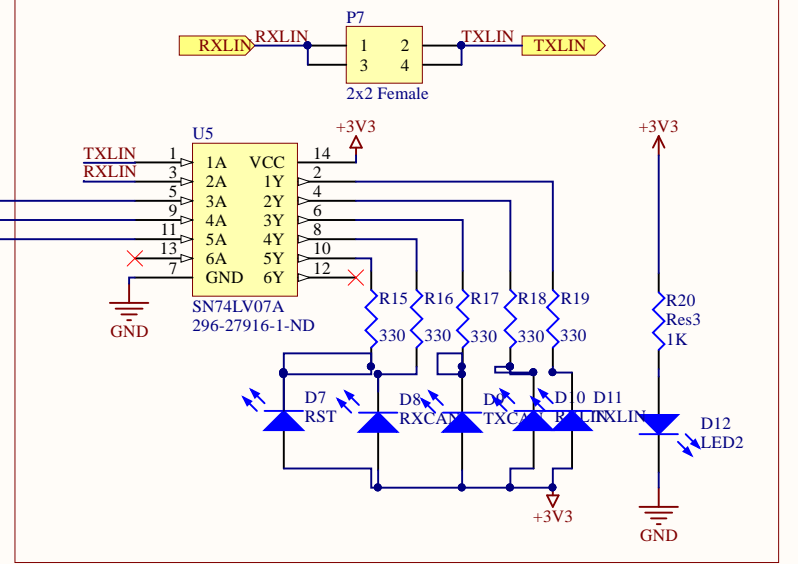


ATmega32M1 layout includes uController, 8MHz crystal, power connections, monitoring LEDs on PWR, TXCAN, RXCAN, RST, TXLIN and RXLIN. Mode switch selects between programming the board and "run mode". In programming mode, the RST and UART lines are disconnected and routed to the programming header. This allows for DebugWire to be used and allows for constant UART debugging without having to disconnect the RX pin from the Pololou programmer.

### PROGRAMMING & MODE SELECT



### UART HEADER & MONITORING



Title		
Size	Number	Revision
A4		
Date:	2018-09-22	Sheet of
File:	C:\Users\...\eps_32m1.SchDoc	Drawn By:

A

A

B

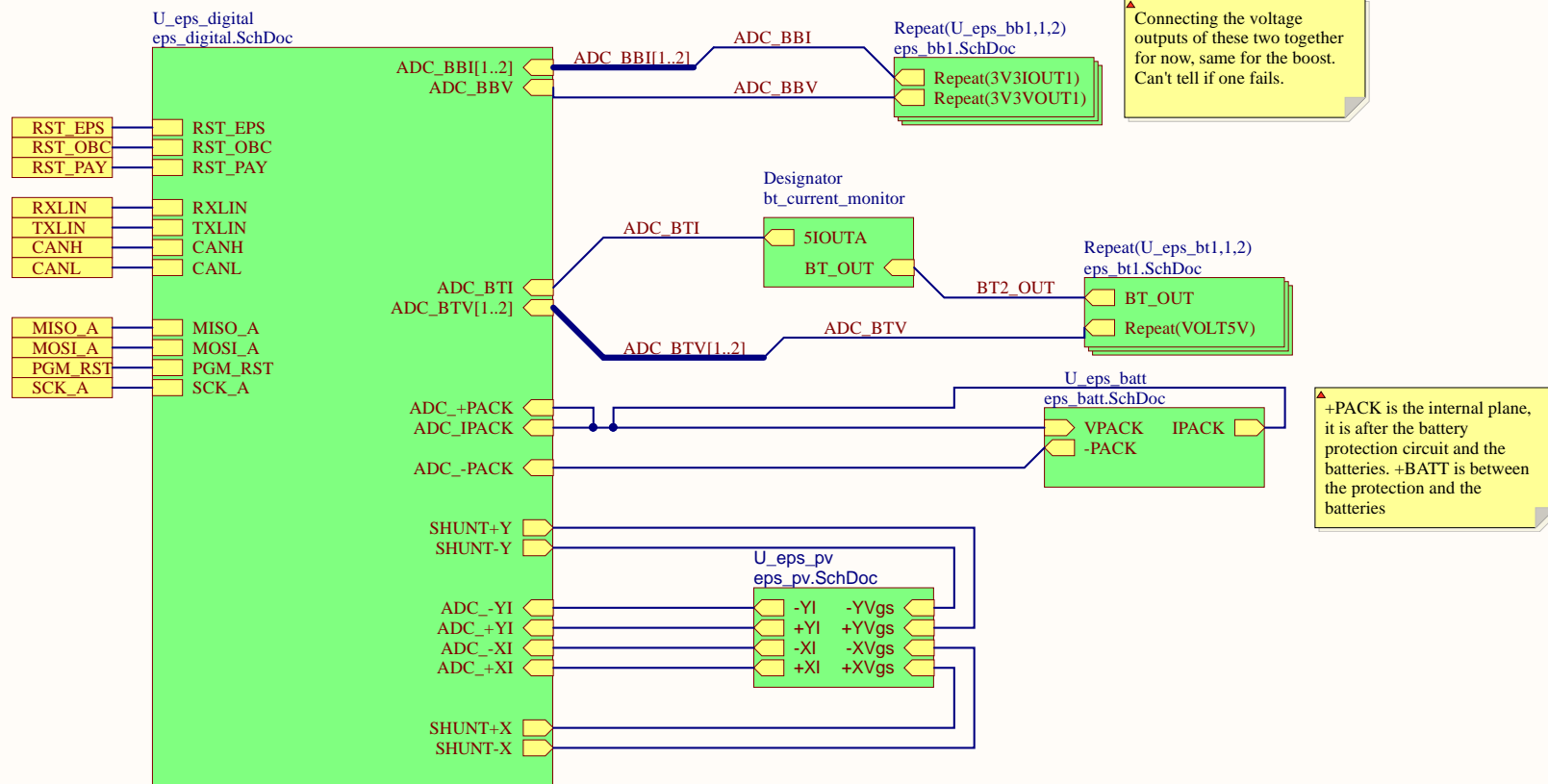
B

C

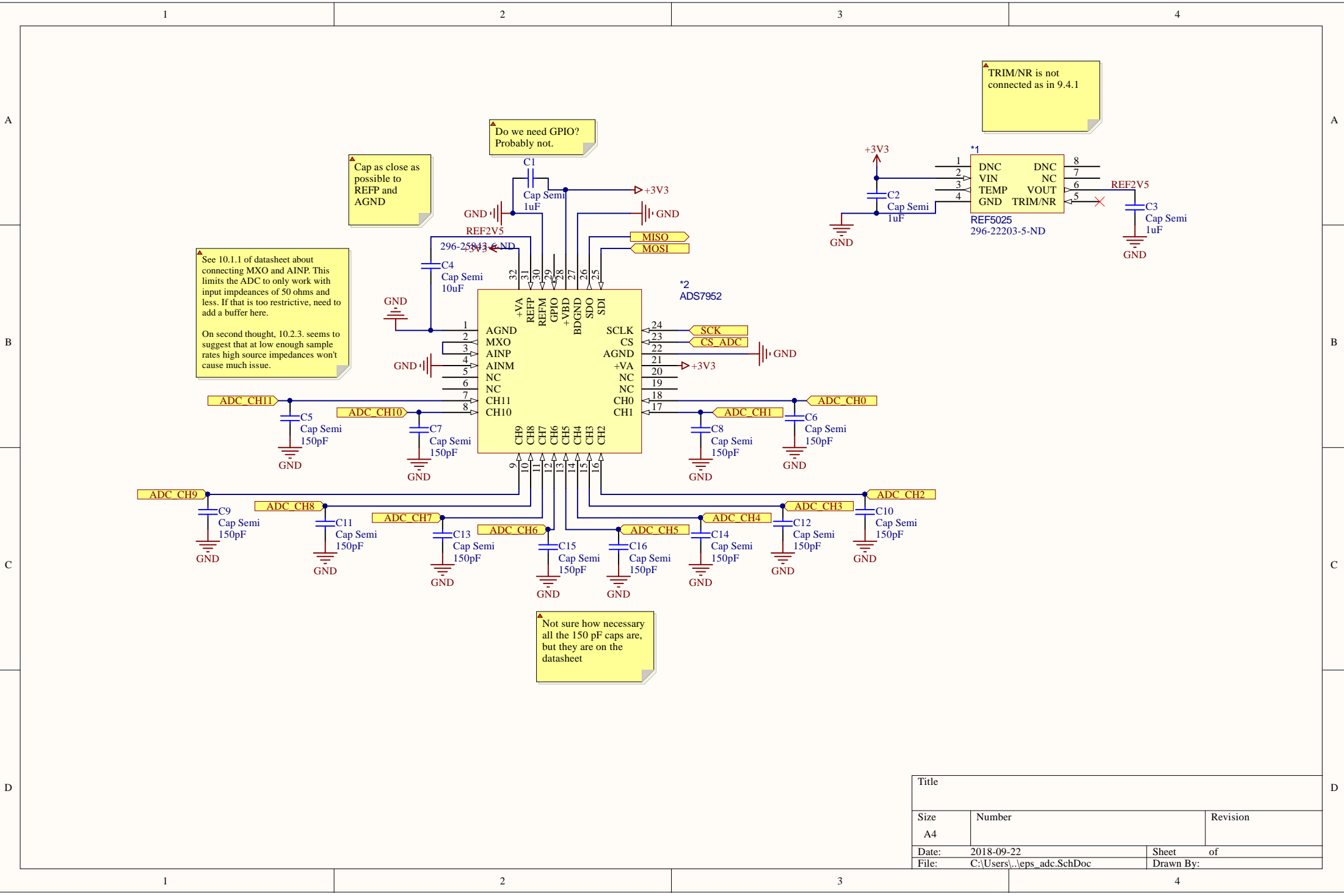
C

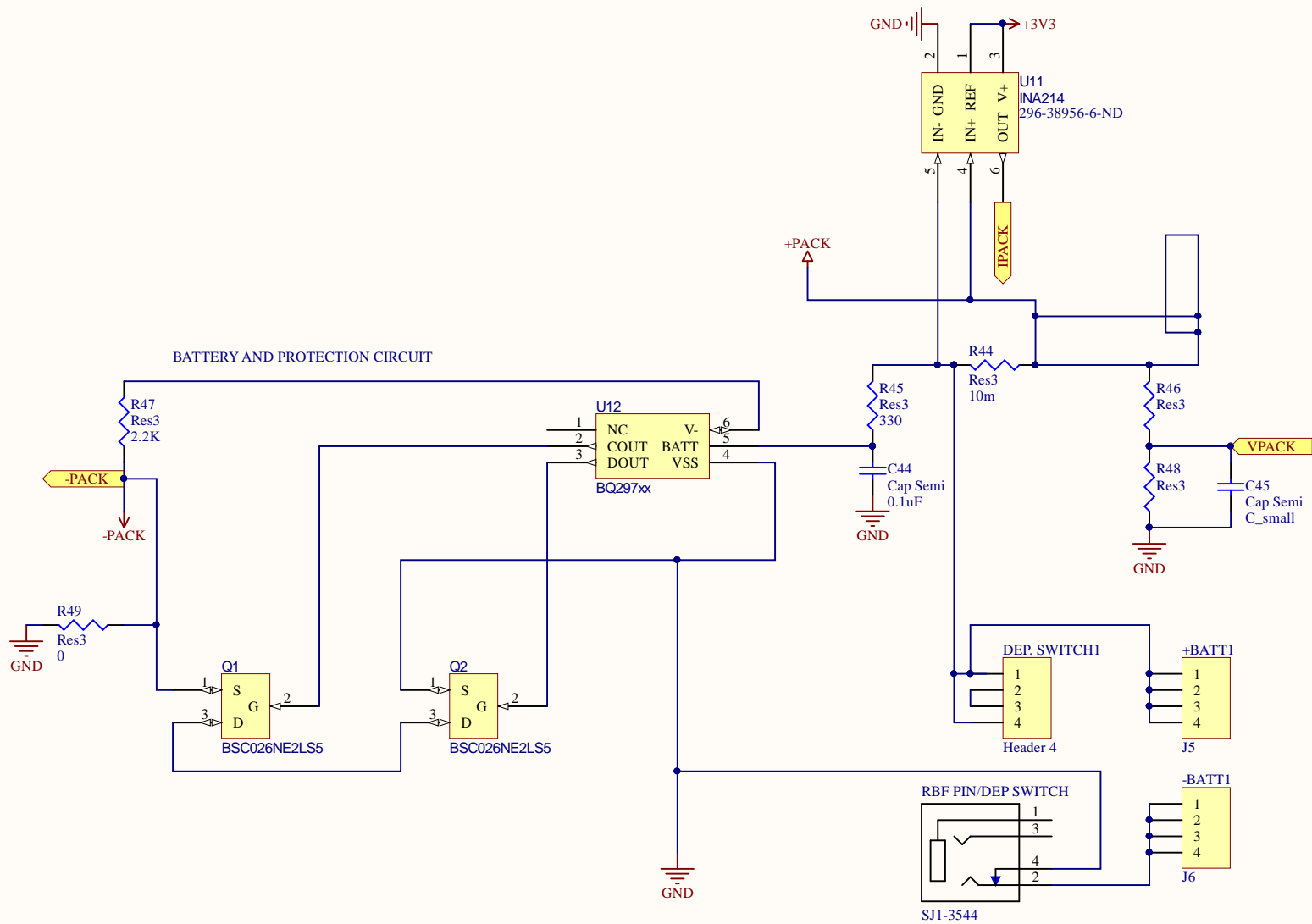
D

D



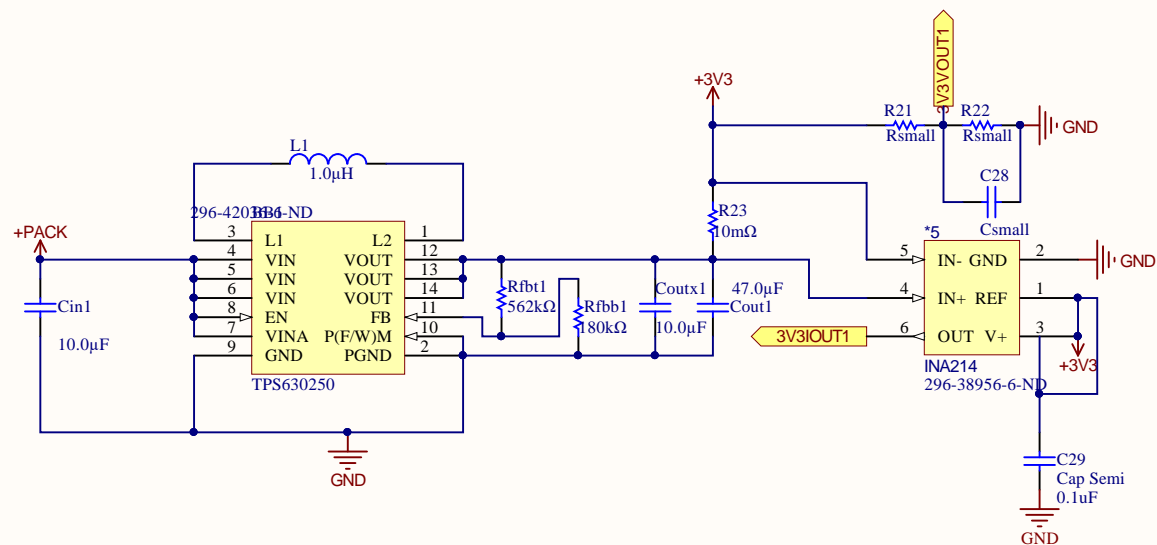
Title			
Size	Number		Revision
A			
Date:	2018-09-22	Sheet	of
File:	C:\Users\...\eps_6.0.SchDoc	Drawn By:	





DEP. SWITCH: PINS  
1,2  
RBF: PINS 3,4 (PIN 3  
HERE IS PIN 1 AND  
PIN 4 IS PIN 2 ON  
KICAD SCHEMATIC)

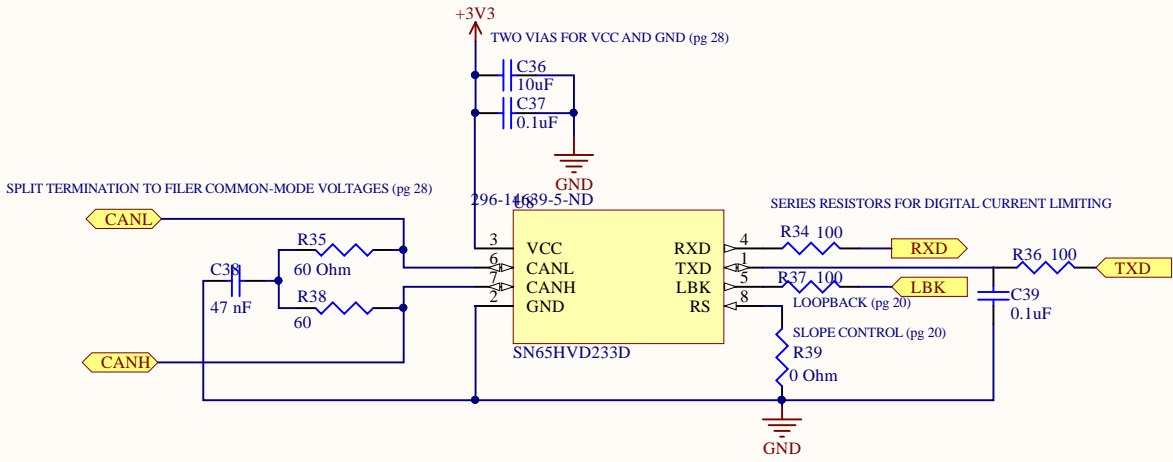
Title		
Size A4	Number	Revision
Date: 2018-09-22	Sheet of	
File: C:\Users\...\eps_batt.SchDoc	Drawn By:	



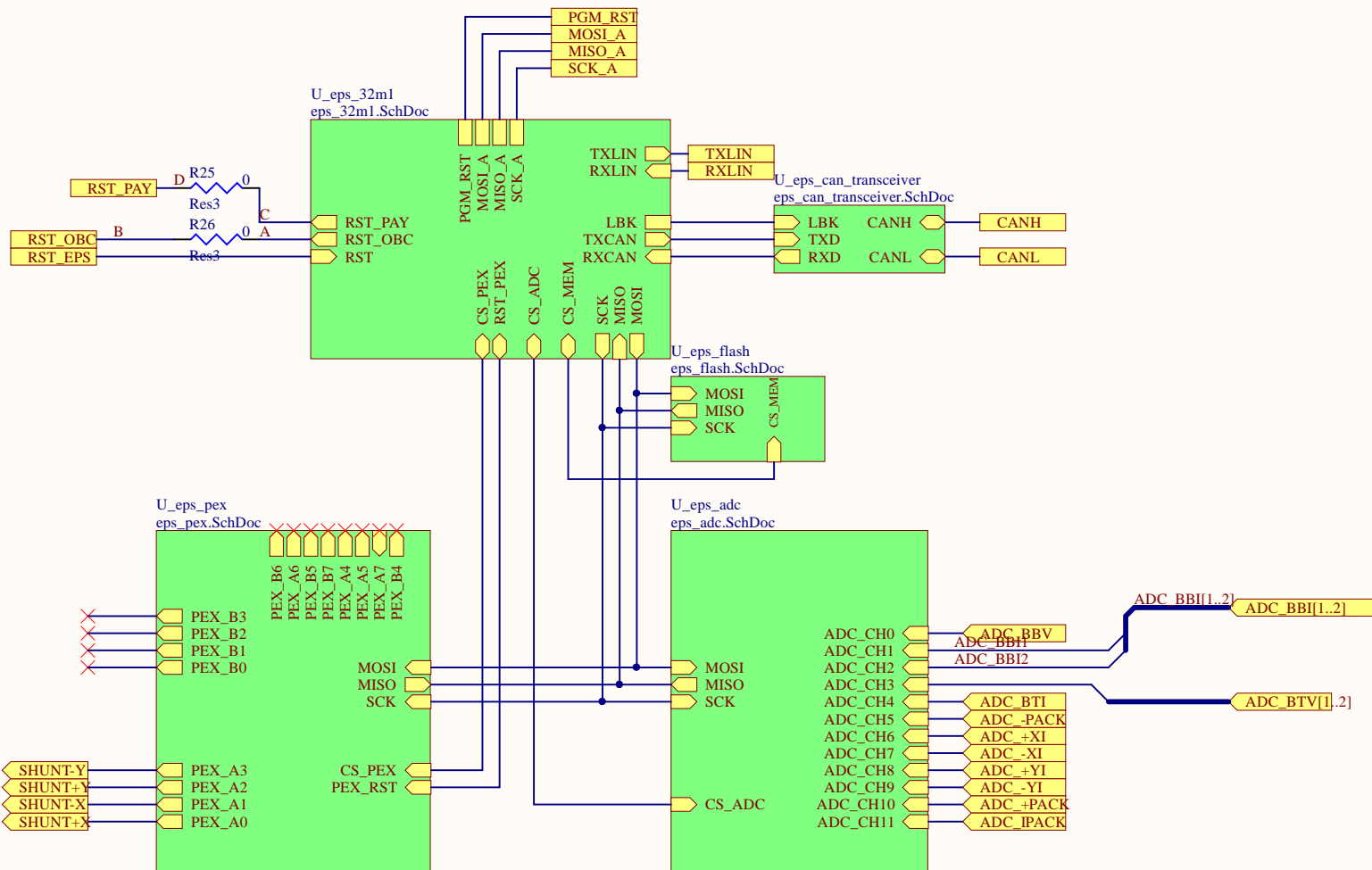
Title			
Size	Number		Revision
A4			
Date:	2018-09-22	Sheet	of
File:	C:\Users\...\eps_bb1.SchDoc	Drawn By:	







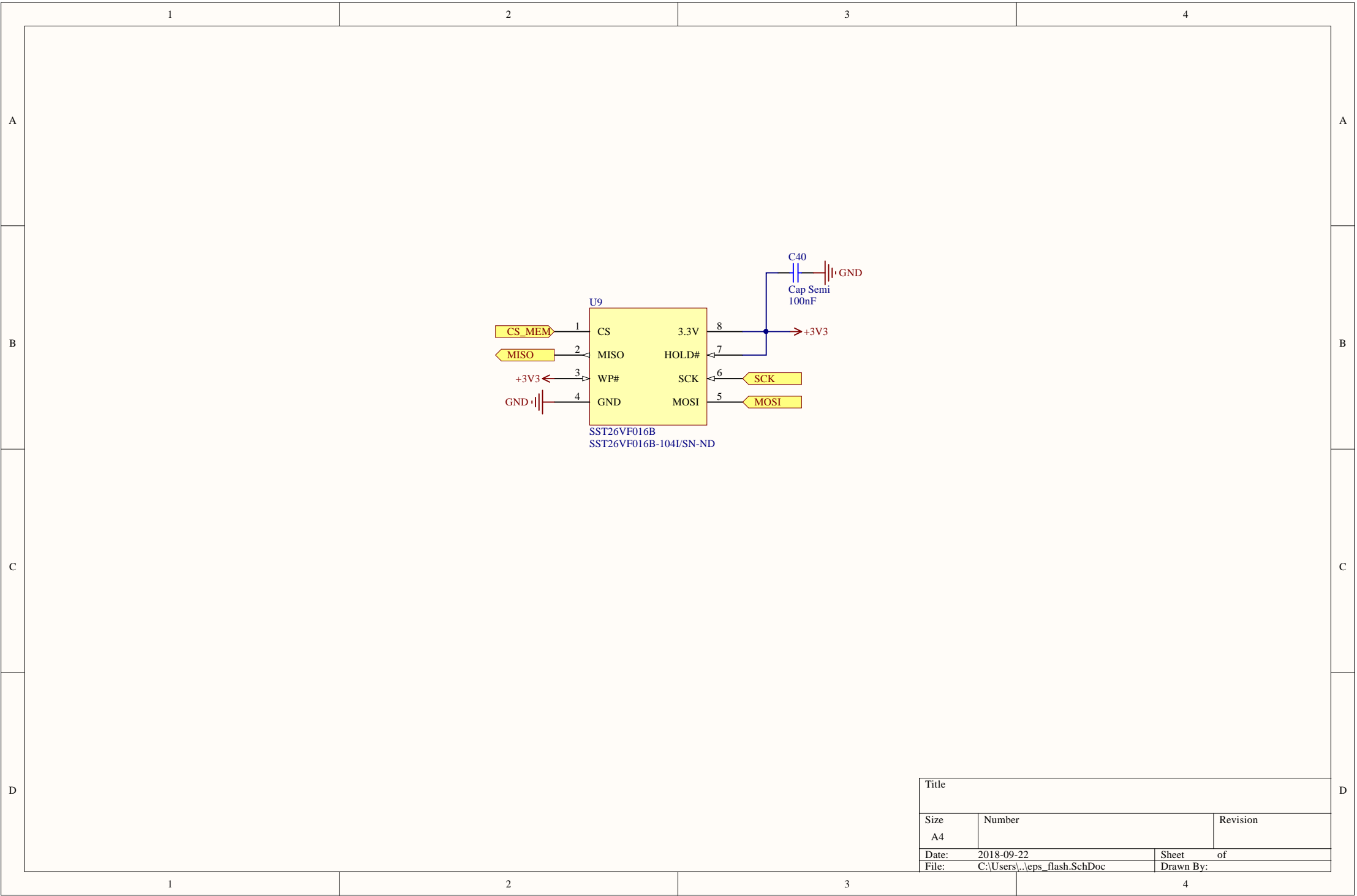
Title			
Size	Number		Revision
A4			
Date:	2018-09-22	Sheet	of
File:	C:\Users\...\eps_can_transceiver.SchDoc	Drawn By:	

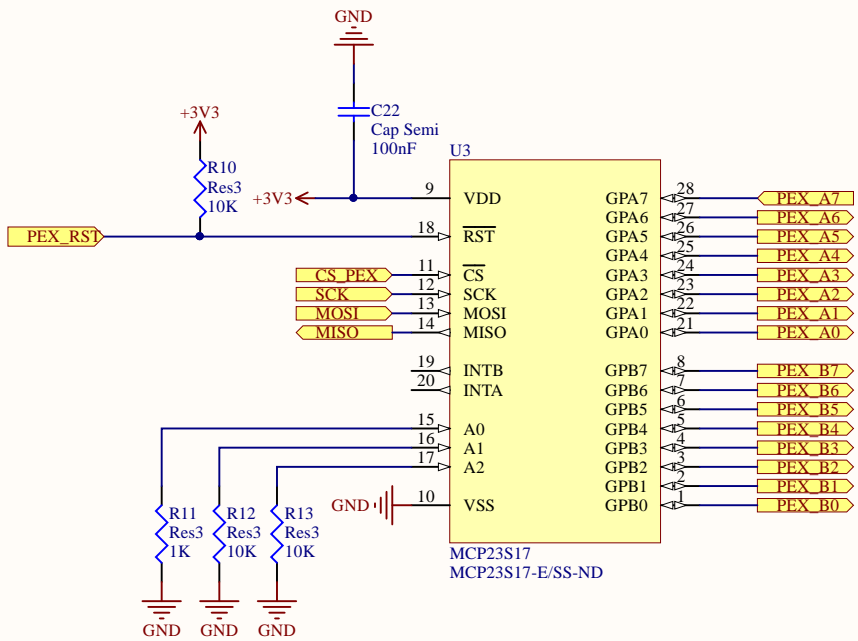


▲ For this to work, need the PEX to start in high impedance on startup to prevent a loop where the system cant start because the PEX isn't on  
UPDATE: PEX Defaults to input on startup, so should be fine

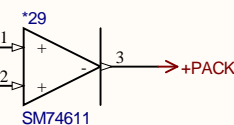
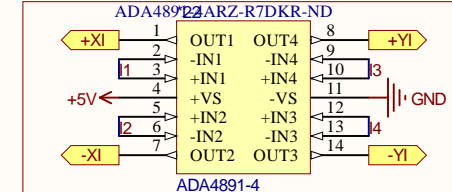
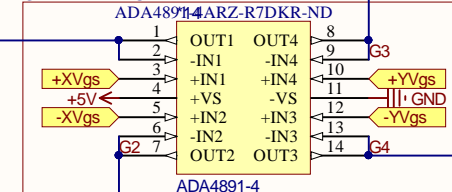
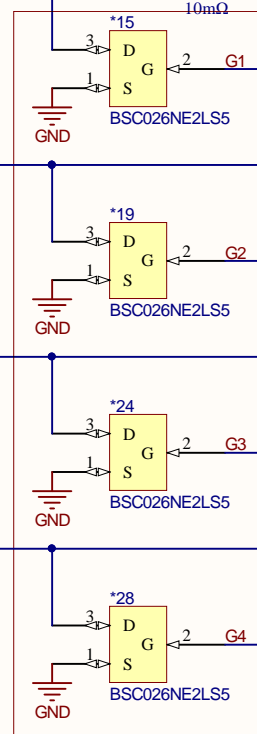
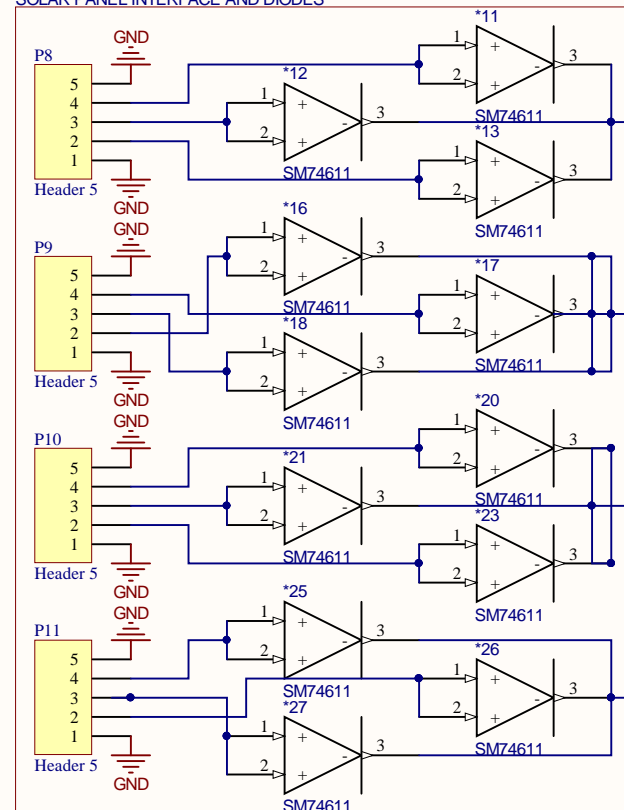
▲ TBH this is a software hazard. why do we need this? im gonna slap on the 0 ohm resistors here

Title			
Size	Number		Revision
A4			
Date:	2018-09-22	Sheet	of
File:	C:\Users\...\eps_digital.SchDoc	Drawn By:	





Title		
Size A4	Number	Revision
Date:	2018-09-22	Sheet of
File:	C:\Users\...\eps_pex.SchDoc	Drawn By:



Title			
Size A4	Number		Revision
Date:	2018-09-22	Sheet	of
File:	C:\Users\...\eps_pv.SchDoc	Drawn By:	

[illegible]