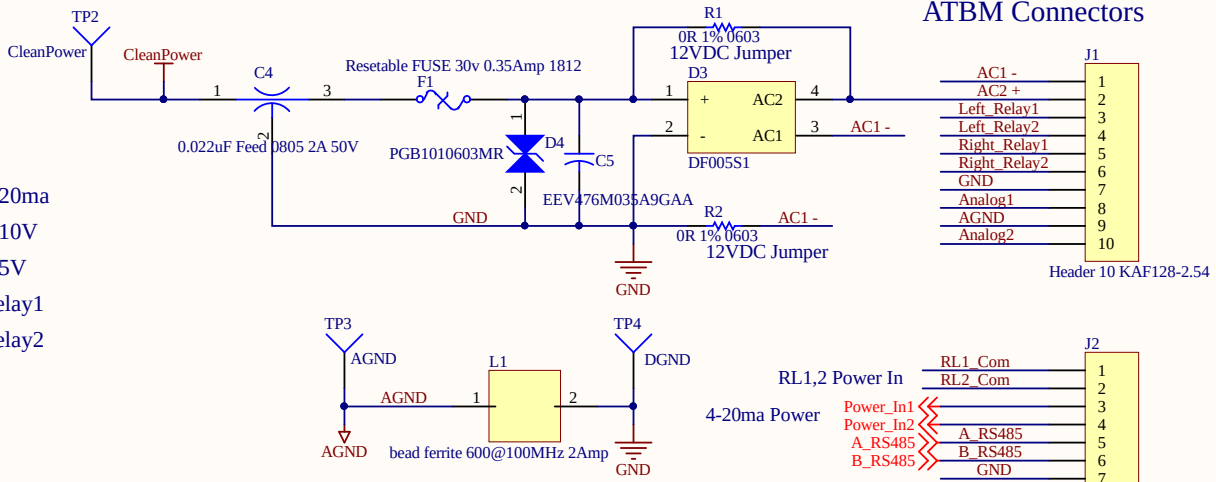
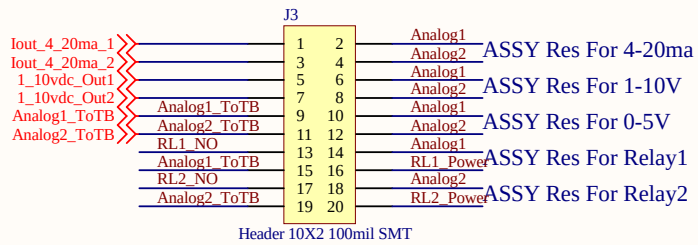
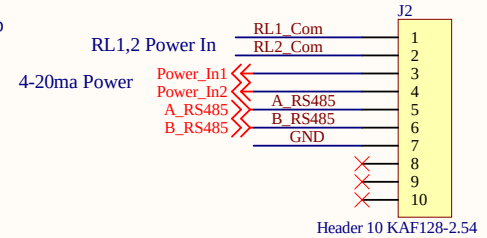
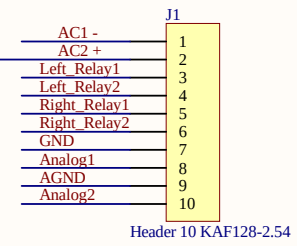


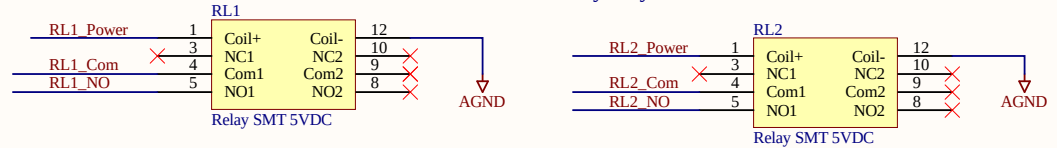
Analog Configuration Header



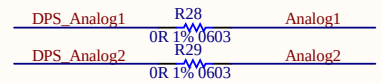
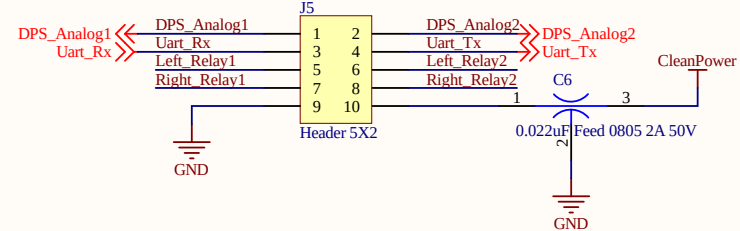
ATBM Connectors



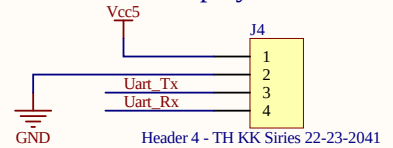
ASSY Res For Relay dry Con.



DPS Connector



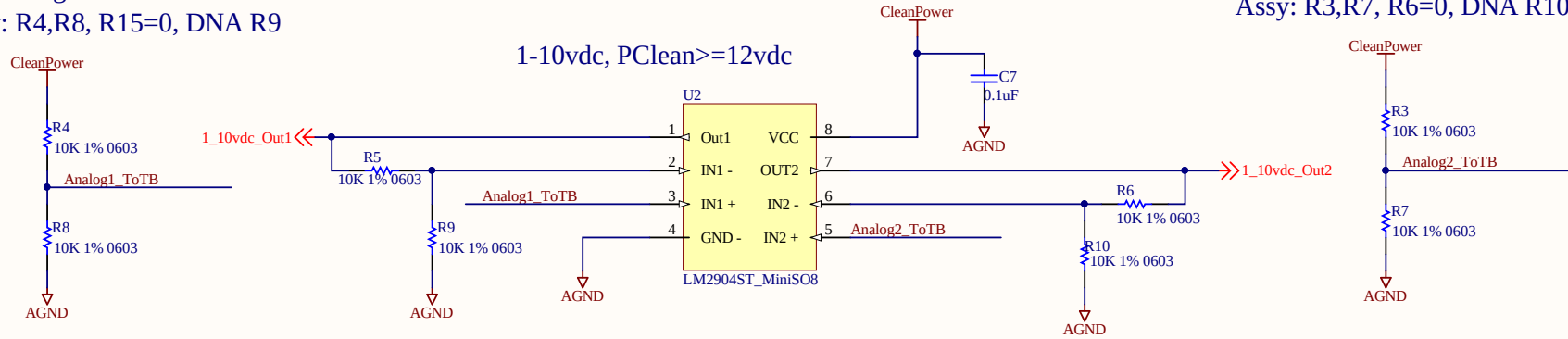
Display Connector



Title * DPS Terminal Block & Power Supply			
Size: A4	Number:*	Revision:*	
Date: 3/28/2018	Time: 11:06:27 AM Sheet * of *		
File: C:\Users\User\Documents\Altium\ATBM\ATBM Sheet1.SchDoc			

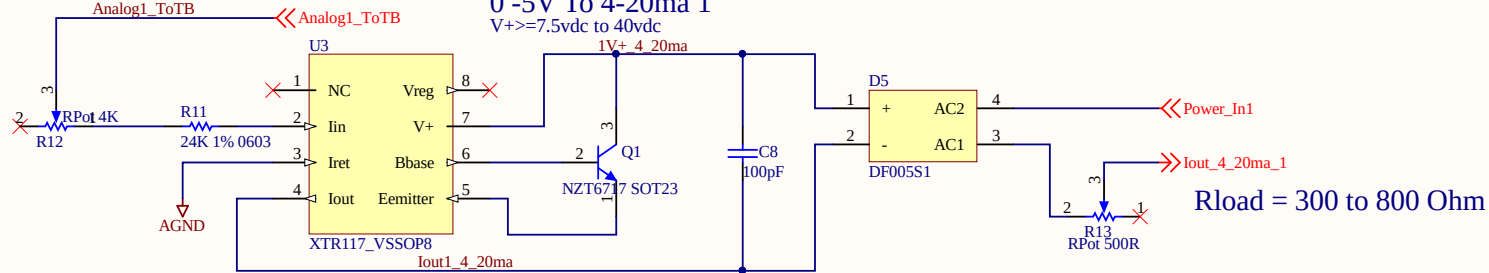
If Analog1 not use
Assy: R4,R8, R15=0, DNA R9

If Analog2 not use
Assy: R3,R7, R6=0, DNA R10



$$I_{out} = 100V_{in} / (25000 + R_{Pot})$$

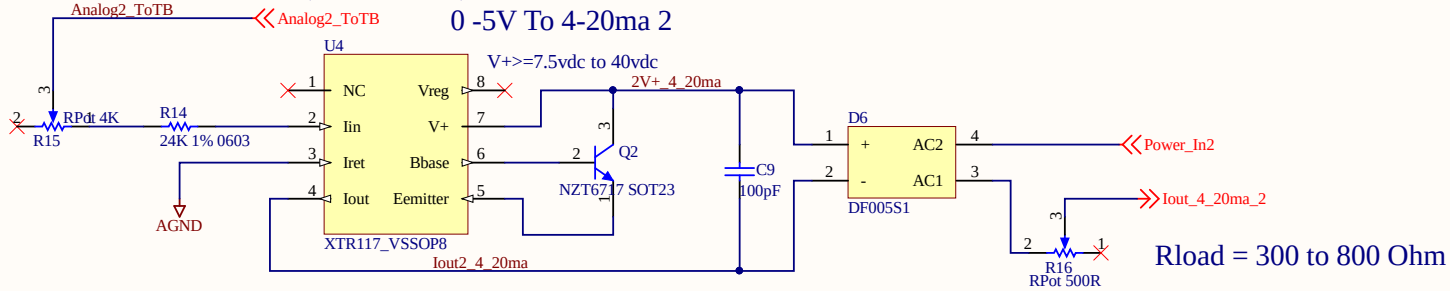
0 -5V To 4-20ma 1
V+>=7.5vdc to 40vdc



Rload = 300 to 800 Ohm

$$I_{out} = 100V_{in} / (25000 + R_{Pot})$$

0 -5V To 4-20ma 2
V+>=7.5vdc to 40vdc



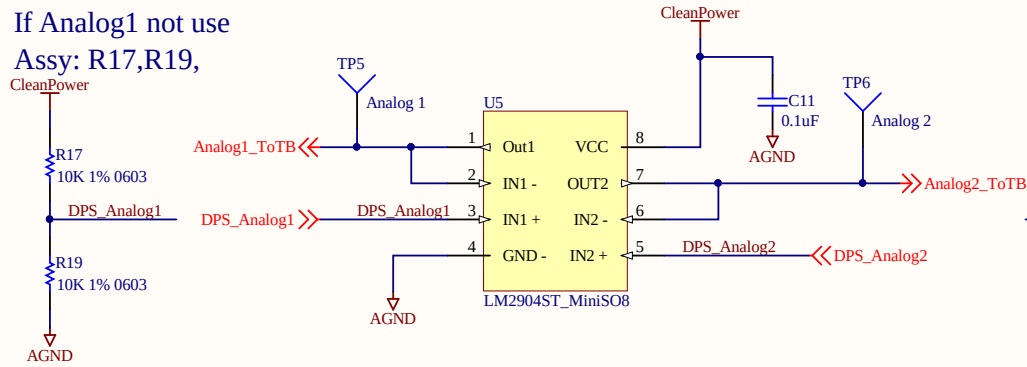
Rload = 300 to 800 Ohm

Title	* Two 4-20ma Transmitter, Two 1-10V Analog		
Size:	A4	Number:*	Revision:*
Date:	3/28/2018	Time:	11:06:27 AM Sheet * of *
File:	C:\Users\User\Documents\Altium\ATBM\ATBM Sheet2.SchDoc		

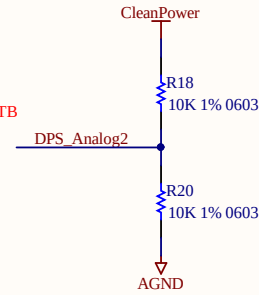


0-5V Analog1 One Stage Buffer

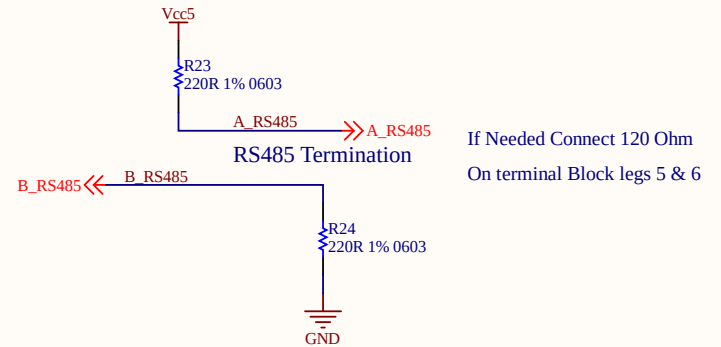
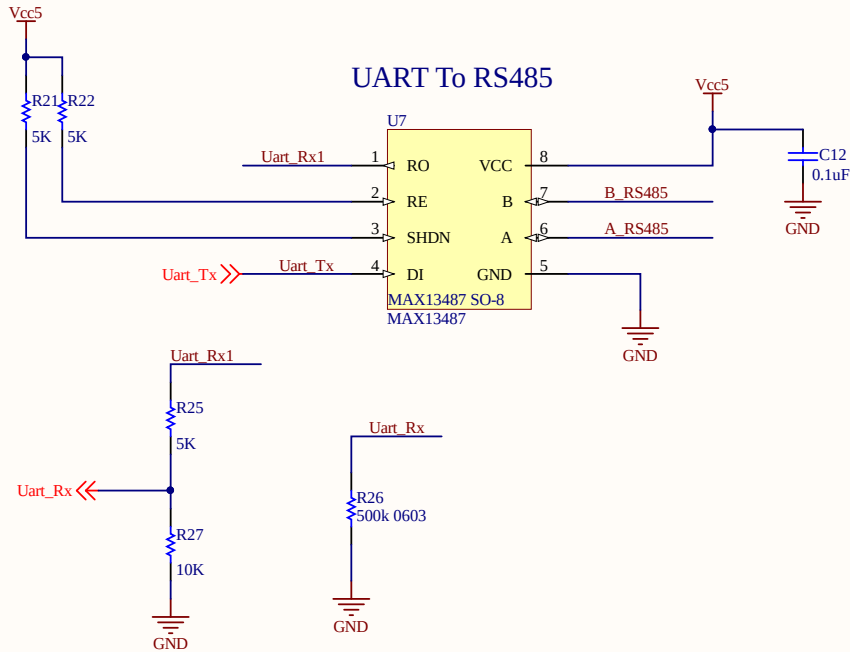
If Analog1 not use
Assy: R17,R19,



If Analog2 not use
Assy: R18,R20,



UART To RS485



Title	* UART To RS485, Analog One Stage Buffer			*
Size:	A4	Number:*	Revision:*	*
Date:	3/28/2018	Time:	11:06:27 AM	Sheet * of *
File:	C:\Users\User\Documents\Altium\ATBM\ATBM Sheet3.SchDoc			*



Component list

Bill of Materials For Project [PCB_Project.PrjPcb] (No PCB Document Selected)

Source Data From:

Project:

Variant:

PCB_Project.PrjPcb

PCB_Project.PrjPcb

None



Report Date: 3/28/2018 11:06:31 AM

Print Date: 28-Mar-18 11:06:46 AM

#	LibRef	#Column Name Error:Manufacturer	lumn Name Error:Manufacture	Column Name Error:PartTyp	Description	Footprint	#Column Name Error:Package Reference	Quantity
1	Cap				Capacitor	1608[0603]		1
2	Cap				Capacitor	1608[0603]		1
3	Cap				Capacitor	1608[0603]		1
4	CMP-2000-06846-1				EMIFIL(R) (Capacitor type) Single Circuit Type for Large Current, 27 uF, +/- 20%, -40 to 85 degC, 3-Pin SMD, RoHS, Tape and Reel	MURA-NFM31PC276B03L_L		2
5	Cap2				Capacitor			1
6	Cap				Capacitor	0603		3
7	Cap				Capacitor	0603		2
8	CMP-1150-00026-1				Bi-directional Ultra Low Capacitance TVS Diode, -55 to 125 degC, TSLP-2, Reel, Green	INF-TSLP-2-20_V		3
9	DF005S1							3
10	Fuse Thermal				Thermal Fuse	1812		1
11	Header 10				Header, 10-Pin	HDR1X10		2
12	Header 10X2				Header, 10-Pin, Dual row			1
13	Header 4				Header, 4-Pin	HDR1X4		1
14	Header 5X2				Header, 5-Pin, Dual row	HDR2X5		1
15	bead ferrite					6-0805_N		1
16	2N3904				NPN General Purpose Amplifier	SOT-23_L		2
17	Res1				Resistor	1608[0603]		4
18	Res1				Resistor	1608[0603]		12
19	Res1				Resistor	1608[0603]		2
20	RPot				Potentiometer	VR5		2
21	RPot				Potentiometer	VR5		2
22	Res1				Resistor	1608[0603]		4
23	Res1				Resistor	1608[0603]		2
24	Res1				Resistor	1608[0603]		1
25	Relay							2
26	Socket				Socket			1
27	Socket				Socket			1
28	Socket				Socket			1
29	Socket				Socket			1
30	Socket				Socket			1
31	Socket				Socket			1
32	TPS70950DBVR							1
33	LM2904ST							2
34	XTR117							2
35	MAX13487					SO8_L		1

Approved	Notes	69