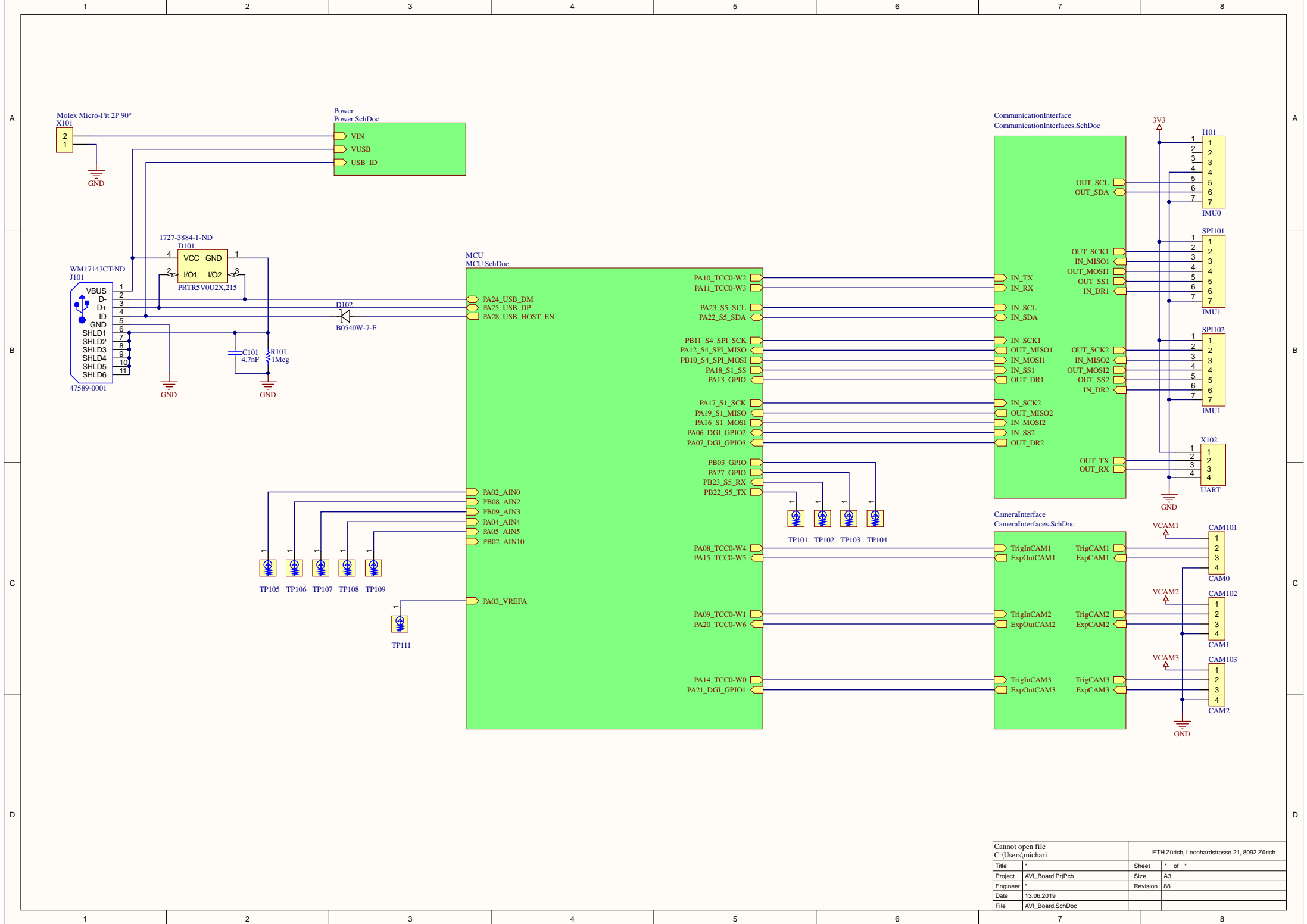
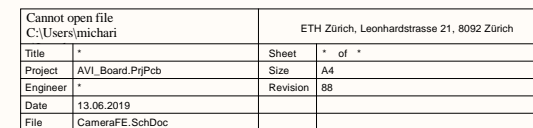
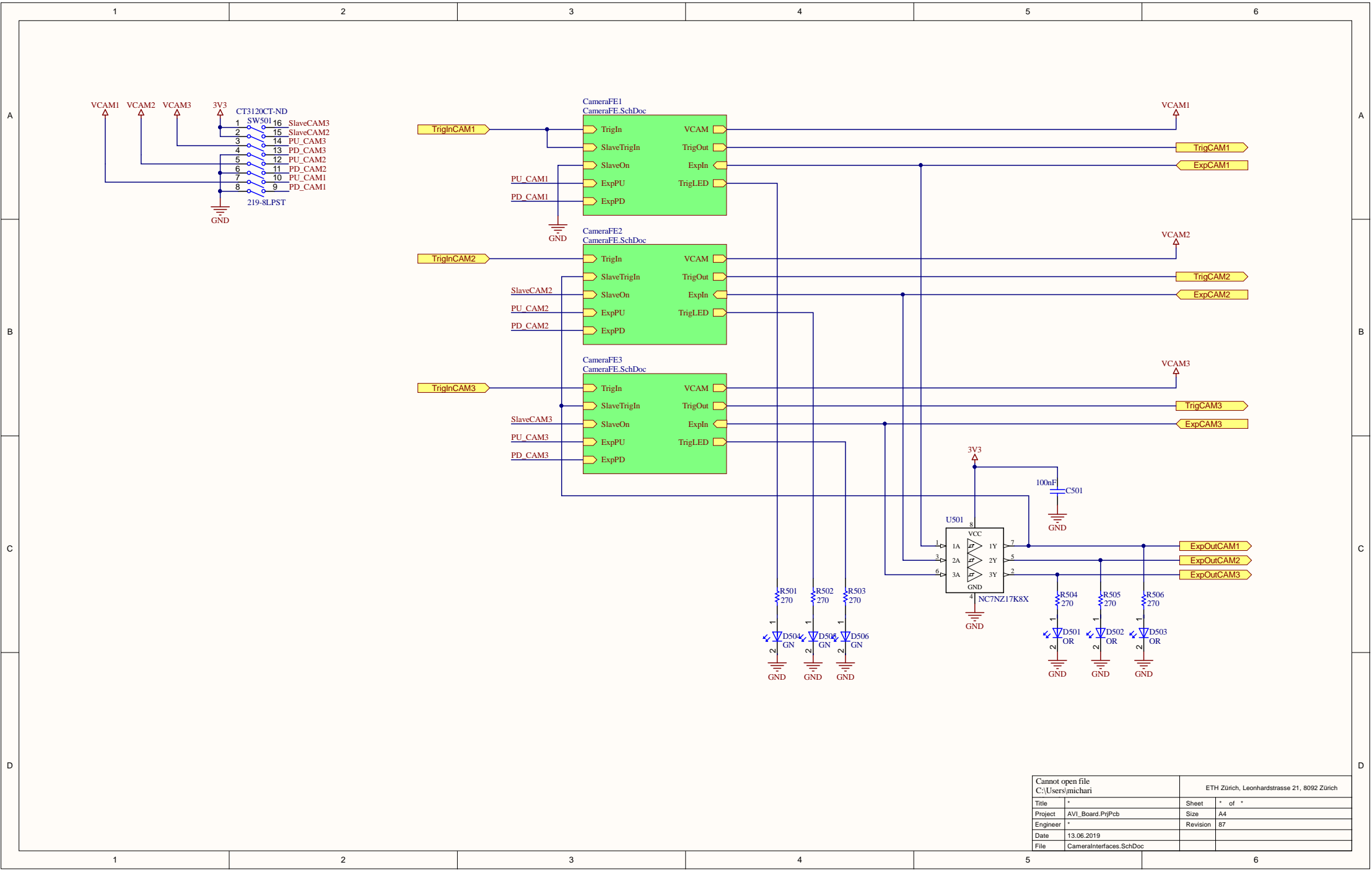


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Engineer	mattmue	Revision	88
Date	13.06.2019		
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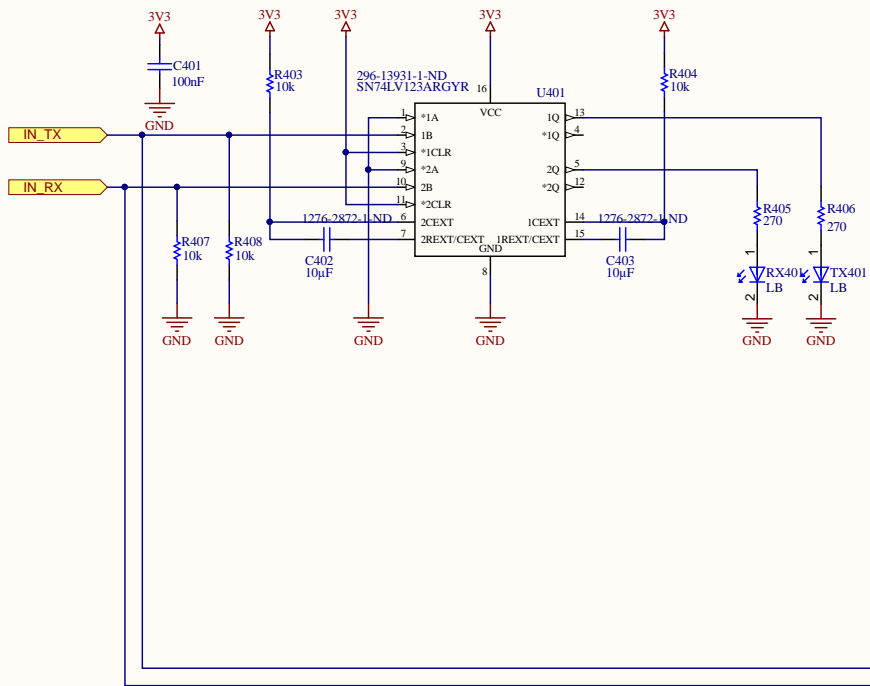




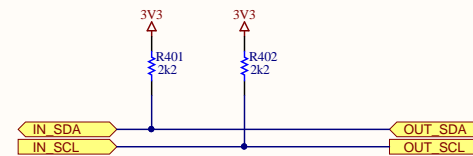


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Date	13.06.2019		
File	CameraInterfaces.SchDoc		

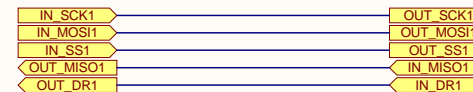
Puls extension for RX/TX



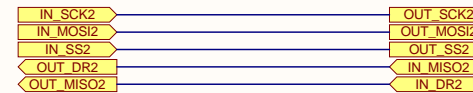
I2C Interface



Main SPI

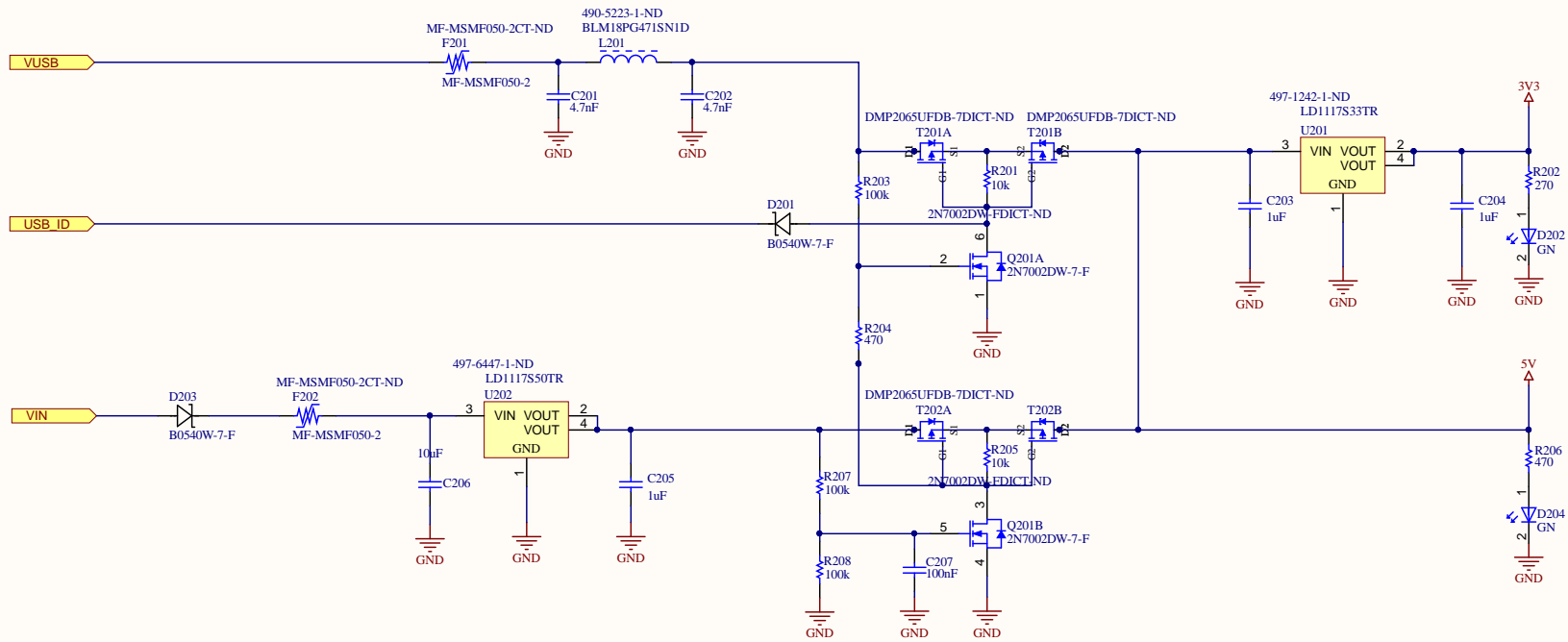


Slave SPI

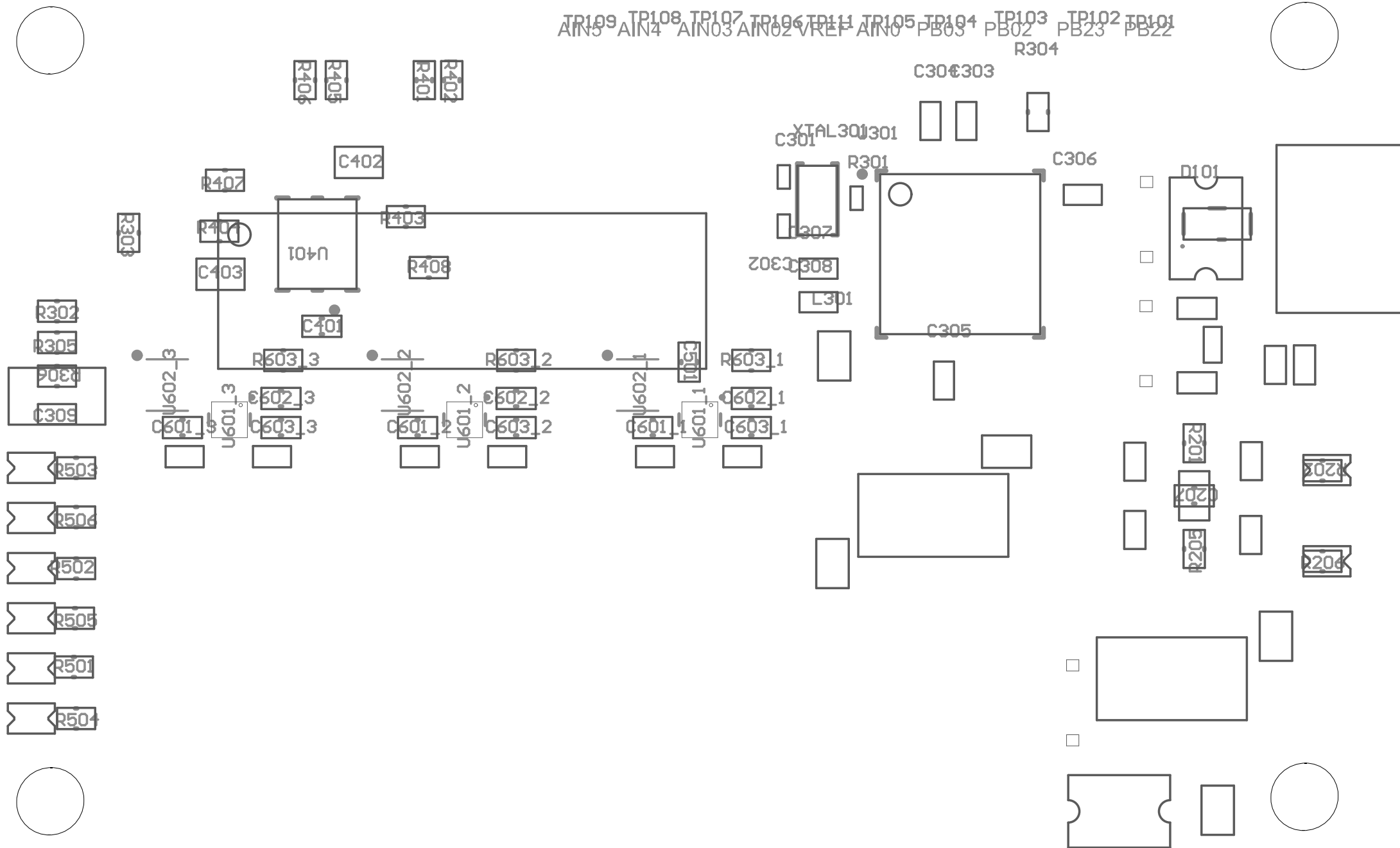


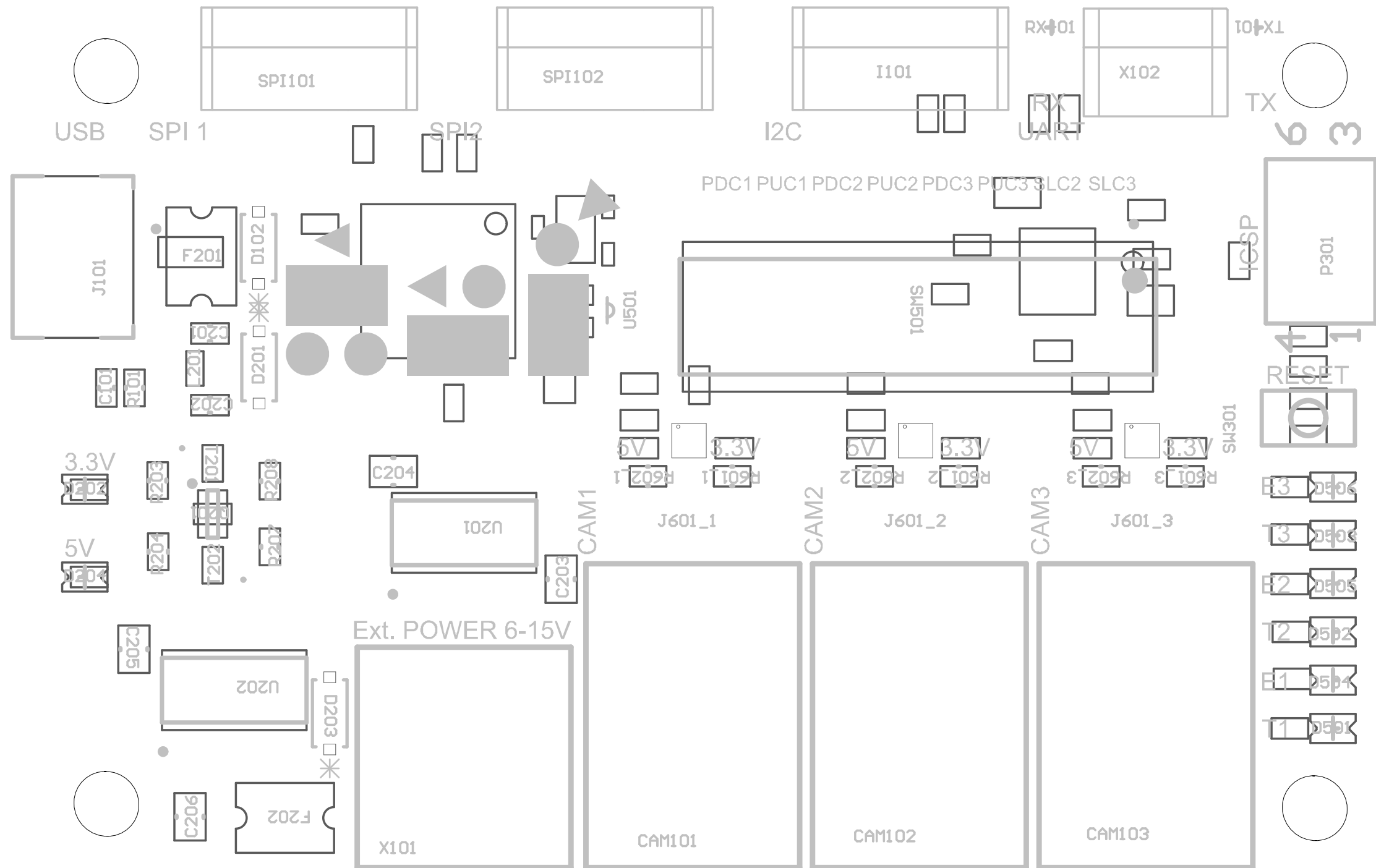
OUT_TX
OUT_RX

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Title	*	Sheet	* of *
Project	AVI_Board.PrjPcb	Size	A4
Engineer	*	Revision	88
Date	13.06.2019		
File	CommunicationInterfaces.SchDoc		



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Title	*	Sheet	* of *
Project	AVI_Board.PrjPcb	Size	A4
Engineer	*	Revision	88
Date	13.06.2019		
File	Power.SchDoc		





LibRef	Description	Designator	Quantity	Manufacturer 1	Supplier 1	Supplier Currency 1	Supplier Part Number 1	Supplier Price 1
ATSAM21G18A	MCU 32-bit SAM D21 ARM Cortex M0+ RISC 256KB Flash 3.3V 48-Pin TQFP T/R or 48QFN	U301	1		Digi-Key		ATSAMD21G18A-AUTCT-ND	
B0540W-7-F	Shottky Diode 60V500mA	D1102, D201, D203	3		Digi-Key		B0540W-FDICT-ND	
CERCAP 0603 4u7 X7R 10V 20%	Ceramic capacitor, 0603, 4u7, X7R, 10V, Ceramic capacitor, 0603, 100nF, X7R, 10V	C303, C304, C305, C306, C307, C308, C309	7		Digi-Key, [NoParam]		490-13362-1-ND, [NoParam]	
CERCAP 0402 10n X7R 25V 10%	Ceramic capacitor, 0402, 20p, X7R, 25V	C301, C302	2					
CMP-0028-00001-1	Switch, SPST, Surface Mount DIP, 8-way, 16-Pin DIP	SW501	1		Digi-Key		CT3120CT-ND	
CMP-0244-00310-1	Fixed Low Drop Positive Voltage Regulator, 3.3V, 4-Pin SOT-223, Tape and Reel	U201	1		Digi-Key		497-1242-1-ND	
CMP-0244-00312-1	Fixed Low Drop Positive Voltage Regulator, 5V, 4-Pin SOT-223, Tape and Reel	U202	1		Digi-Key		497-6447-1-ND	
CMP-0686-00587-1	Chip Ferrite Bead for Power Lines, 470 Ohm, 1000 mA, -55 to 125 degC, 1.6 x 0.8 x 0.95 mm SMD, Tape and Reel	L201	1		Digi-Key		490-5223-1-ND	
CMP-1012-00146-1	1M 0.1W 5% 0603 (1608 Metric) SMD	R101	1		Digi-Key		P1.0MGCT-ND	
CMP-1012-00350-1	39R 0.1W 1% 0603 (1608 Metric) SMD	R302	1					
CMP-1012-00444-1	270R 0.1W 1% 0603 (1608 Metric) SMD	R202, R405, R406, R501, R502, R503, R504, R505, R506	9		Digi-Key, [NoParam]		541-270HCT-ND, [NoParam]	
CMP-1012-00473-1	470R 0.1W 1% 0603 (1608 Metric) SMD	R204, R206, R304, R306, R601_1, R601_2, R601_3, R602_1, R602_2, R602_3	10					
CMP-1012-00546-1	2K2 0.1W 1% 0603 (1608 Metric) SMD	R401, R402	2		Digi-Key		541-4022-1-ND	
CMP-1012-00623-1	10K 0.1W 1% 0603 (1608 Metric) SMD	R201, R205, R303, R305, R403, R404, R407, R408, R603_1, R603_2, R603_3	11					
CMP-1012-00736-1	100K 0.1W 1% 0603 (1608 Metric) SMD	R203, R207, R208	3					
CMP-1035-02208-1	CAP 4.7nF 100V ±10% 0603 (1608 Metric) Thickness 1mm SMD	C101, C201, C202	3		Digi-Key		399-14206-1-ND	
CMP-1035-02583-1	CAP 100nF 16V ±5% 0603 (1608 Metric) Thickness 1mm SMD	C207, C401, C501, C601_1, C601_2, C601_3, C602_1, C602_2, C602_3, C603_1, C603_2, C603_3	12		Digi-Key		399-1097-1-ND	
CMP-1036-04753-1	CAP 1uF 25V ±10% 0805 (2012 Metric) Thickness 1.45mm SMD	C203, C204, C205	3					
CMP-1036-04932-1	CAP 10uF 25V ±10% 0805 (2012 Metric) Thickness 1.45mm SMD	C206	1		Digi-Key		490-10496-1-ND	
CMP-2000-05285-1	Ultra Low Capacitance Double Rail-to-Rail ESD Protection Diode, 5.5 V, 1 pF, -40 to 85 degC, 4-Pin SOT143B, RoHS, Tape and Reel	D101	1		Digi-Key		1727-3884-1-ND	
CMP-2000-05563-1	Dual N-Channel Enhancement Mode MOSFET, 60 V (VDS), 0.23 A (ID), -55 to 150 degC, 6-Pin SO1363, RoHS, Tape and Reel	Q201	1		Digi-Key		2N7002DW-FDICT-ND	
CMP-2000-05610-1	Right Angle Female Type AB Micro USB Connector, 30 V, 1.8 A, -30 to 85 degC, RoHS, Tape and Reel	J101	1		Digi-Key		WM17143CT-ND	
CMP-2000-06106-1	Chip Capacitor, 10 uF, +/- 10%, 16 V, -55 to 125 degC, 0805 (2012 Metric), RoHS, Tape and Reel	C402, C403	2		Digi-Key		1276-2872-1-ND	
CMP-2100-03653-1	PTC Resettable Fuse, 15 V, 500 mA, -40 to 85 degC, 2-Pin SMD, RoHS, Tape and Reel	F201, F202	2		Digi-Key		MF-MSMF050-2CT-ND	
DF13_CONNN_4P_90_SMD	Single Row Pin Header (SMD)	X102	1		Digi-Key		H3382-ND	
DF13_CONNN_7P_90_SMD	Single Row Pin Header (SMD)	I101	1		Digi-Key		H3385-ND	
DF13_CONNN_7P_90_SMD	Single Row Pin Header (SMD)	SP101, SP102	2		Digi-Key		H3385-ND	
Header 3X2A	Header, 3-Pin, Dual row	P301	1					
Jumper 3	Jumper 3	J601_1, J601_2, J601_3	3		Digi-Key		S1012E-03-ND	
L-BEAD-0805	Ferrite Bead - 0805 - 1k5 - 100mA	L301	1		Mouser		70-ILB80805ER152V	
LED 0603 LB Q39G	CHIPLED 0603 Blue	RX401, TX401	2		Digi-Key		475-2816-1-ND	
LED 0805 GN LG R971	CHIPLED 0805 Green	D202, D204, D504, D505, D506	5		Digi-Key		475-1410-1-ND	
LED 0805 OR LO R976-PS-1	CHIPLED 0805 Orange	D501, D502, D503	3		Digi-Key		475-2488-2-ND	
Molex Micro-Fit 2P 90°	Molex Micro-Fit 2P 0436500201	X101	1		Digi-Key		WM1865-ND	
Molex Micro-Fit 4P 90°	Molex Micro-Fit 4P 90°	CAM101	1		Digi-Key		WM1814-ND	
Molex Micro-Fit 4P 90°	Molex Micro-Fit 4P 90°	CAM102	1		Digi-Key		WM1814-ND	
Molex Micro-Fit 4P 90°	Molex Micro-Fit 4P 90°	CAM103	1		Digi-Key		WM1814-ND	
MOSFET 2 P-CH 20V 4.5A DMP2065UFDB		T201, T202	2		Digi-Key		DMP2065UFDB-7DICT-ND	
NC7NZ17K8X	NC7NZ17 Series 5.5 V UHS Triple Buffer with Schmitt Trigger Inputs - US-8	U501	1		Digi-Key		NC7NZ17K8XCT-ND	
NC7SZ157P6X	NC7SZ157 Series 5.5 V Tinny Logic UHS 2-Input Non-Inverting Multiplexer -SC-70-6	U602_1, U602_2, U602_3	3		Digi-Key		NC7SZ157P6XCT-ND	
PushBTN-reset	PushBTN - subminiature - 32V - 10mA - 1.2N	SW301	1		Digi-Key		CKN10685CT-ND	
SN74LV123ARGVR	SN74LV123ARGVR	U401	1		Digi-Key		296-13931-1-ND	
SN74LVC1T45DPKR	No Description Available	U601_1, U601_2, U601_3	3		Digi-Key		296-30277-1-ND	
Testpoint - ICT	testpoint	TP101, TP102, TP103, TP104, TP105, TP106, TP107, TP108, TP109, TP111	10					
WID 0402 1k 1% 1/16W	RES, 0402, 1k, 1/16W	R301	1					
XTAL 32768Hz 20PPM 12.5pF FX135	Quarz cristal - SMD - 3.35x1.5x0.9mm	XTAL301	1		Digi-Key		631-1002-1-ND	