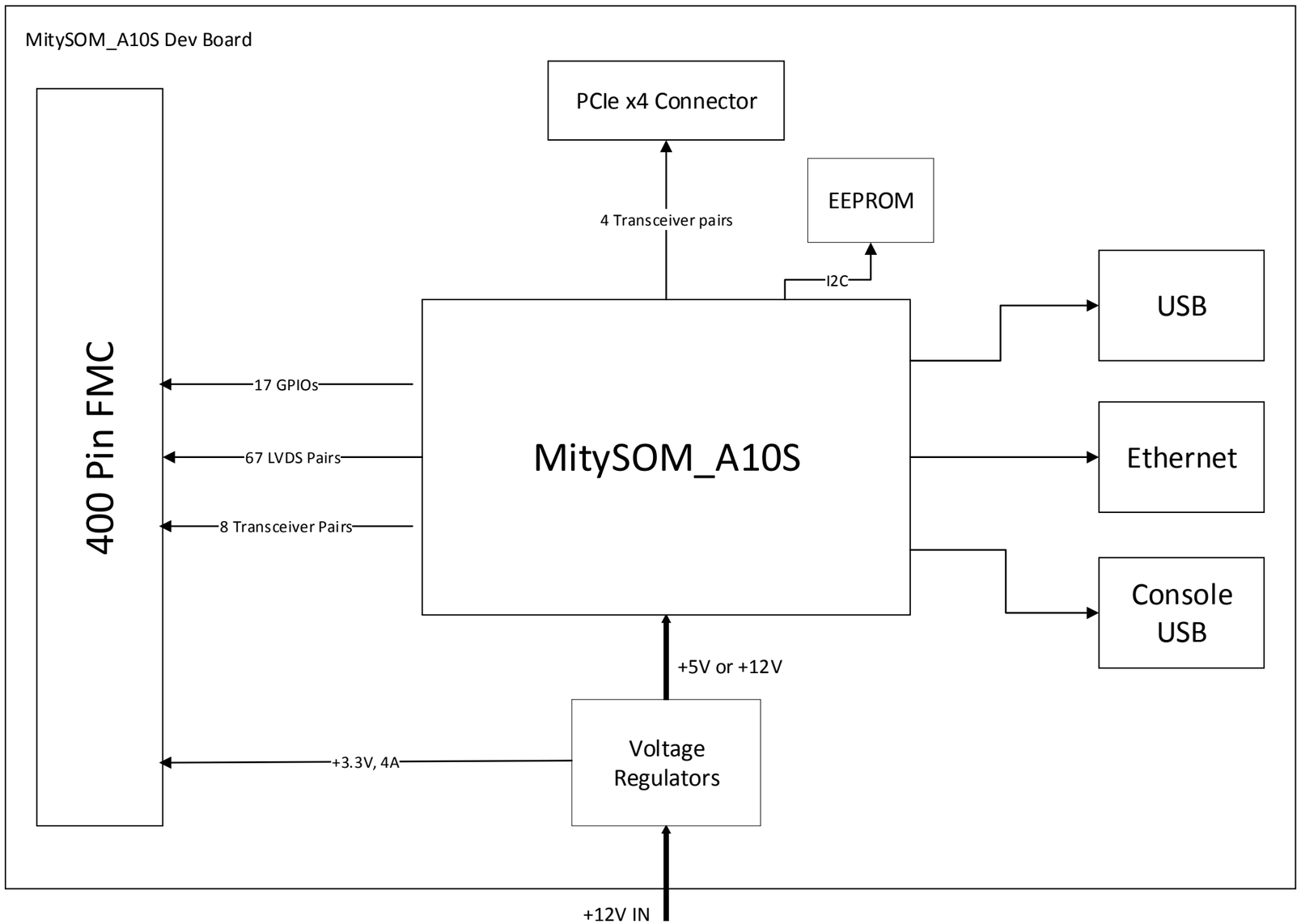
REV	DESCRIPTION	ECR No	INITIALS	DATE
-1A	Initial release	1558	KC	05/07/2018



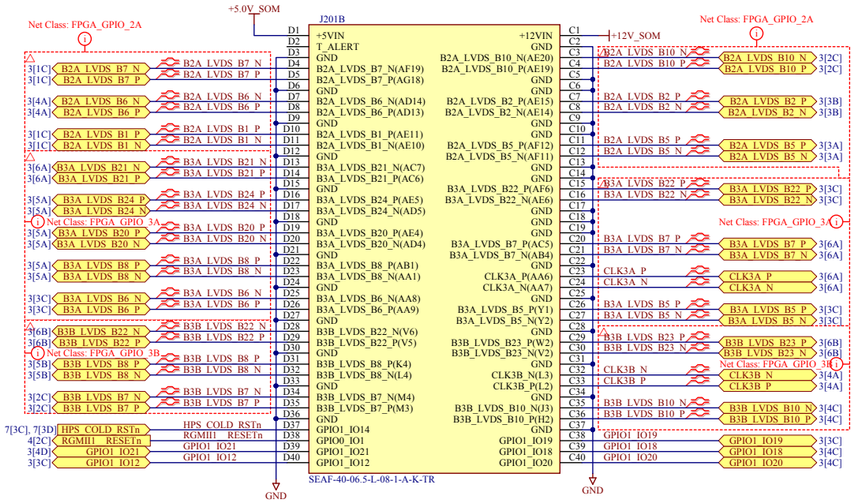
LBL100

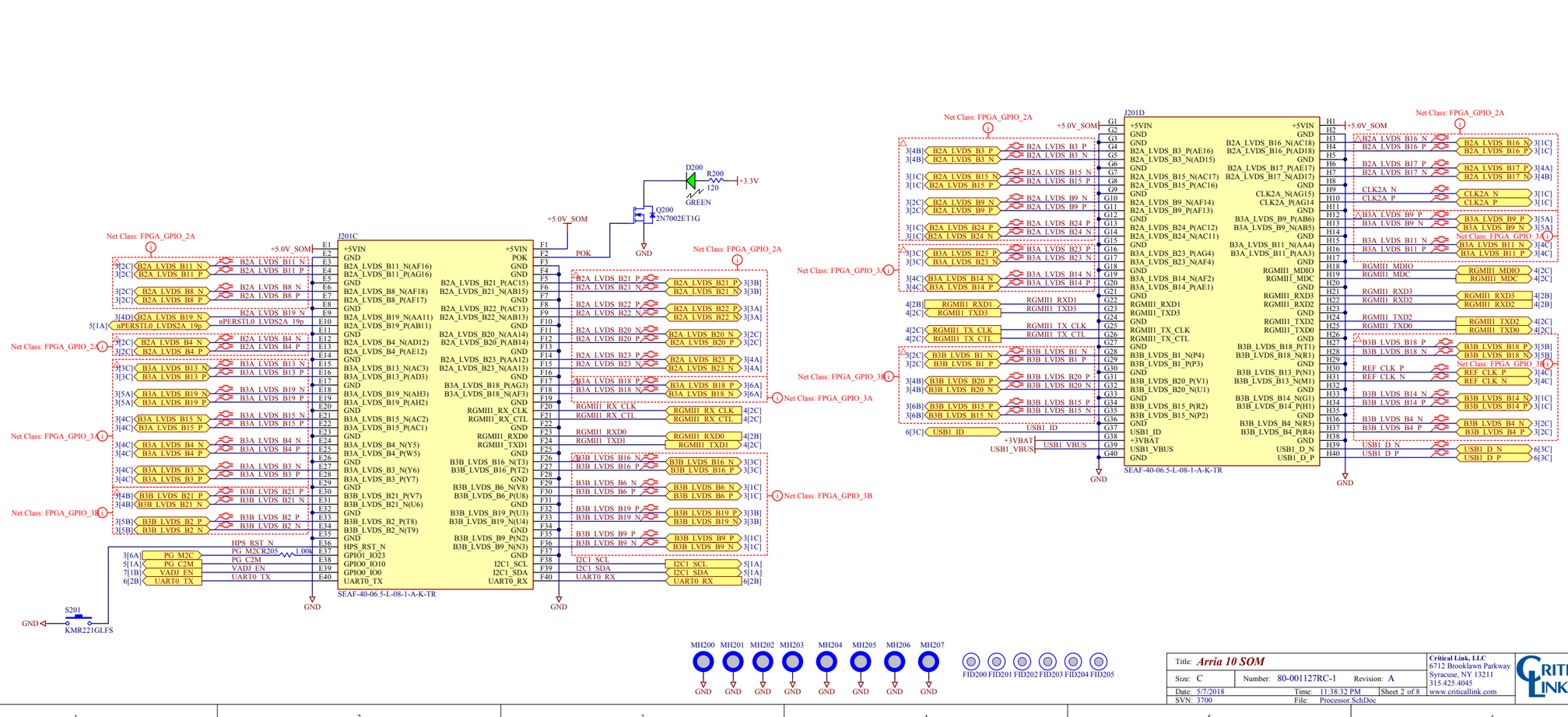
PCA LABEL

PCA Label
80-001127RC-1_RevA

PCB # 90-000365R-1_RevA
PN-PCB100

Title: *PCA, MitySOM_A10S Dev Board*			Critical Link, LLC 6712 Brooklawn Parkway Syracuse, NY 13211 315.425.4045 www.criticallink.com
Size: Tabloid	Number: 80-001127RC-1	Revision: A	
Date: 5/7/2018	Time: 11:38:32 PM	Sheet 1 of 8	
SVN: 3696	File: block_diagram.SchDoc		

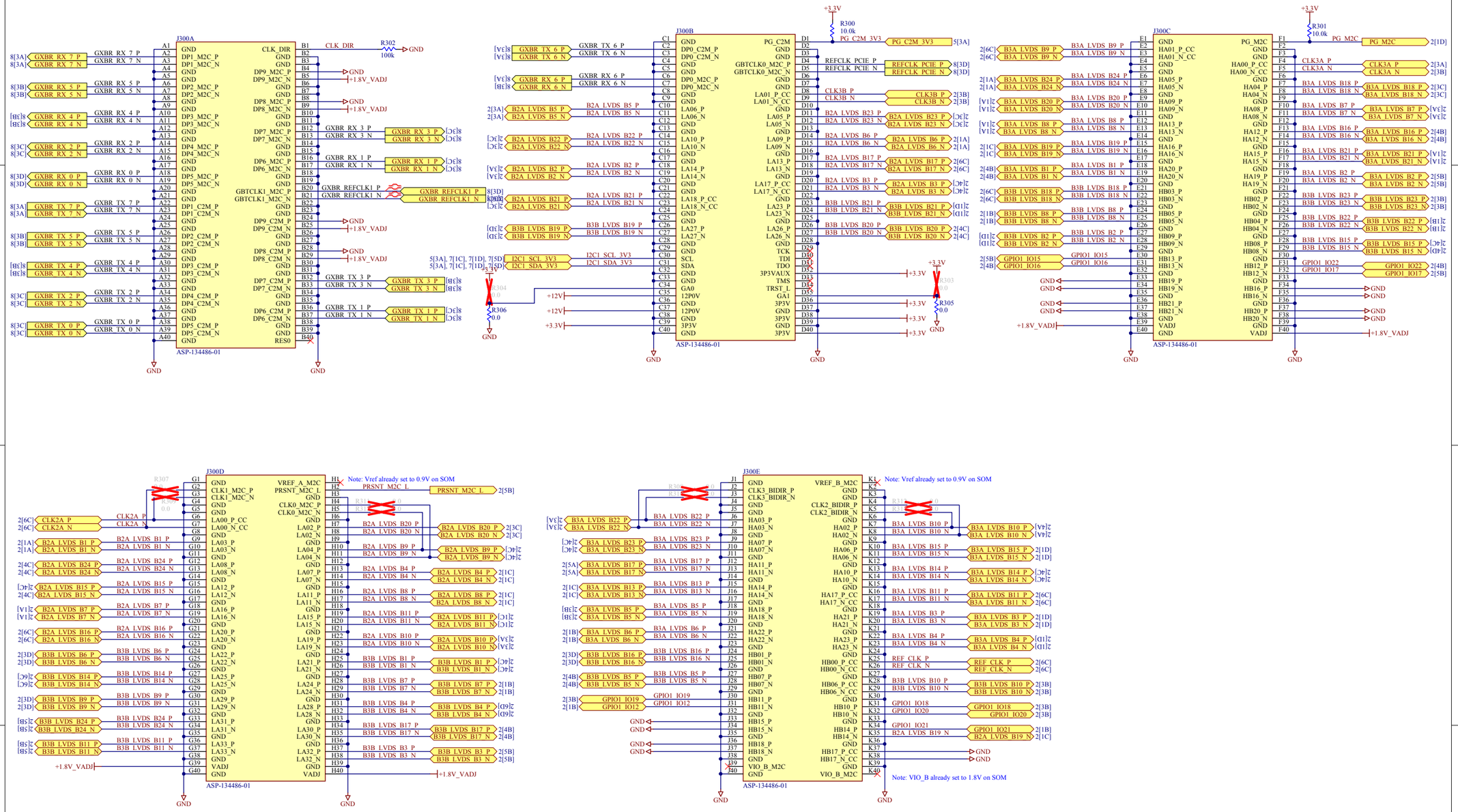




Title:	*Arria 10 SOM*
Size: C	Number: 80-001127RC-1 Revision: A
Date: 5/7/2018	Time: 11:38:32 PM Sheet 2 of 8
SVN: 3700	File: Processor.SchDoc

Critical Link, LLC
6712 Brooklawn Parkway
Syracuse, NY 13211
315.425.4045
www.criticallink.com

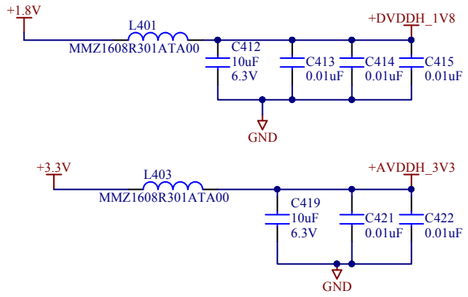
FMC Connector

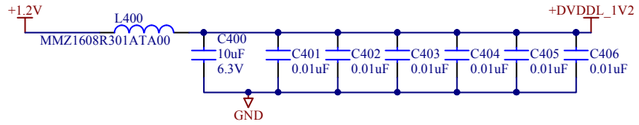


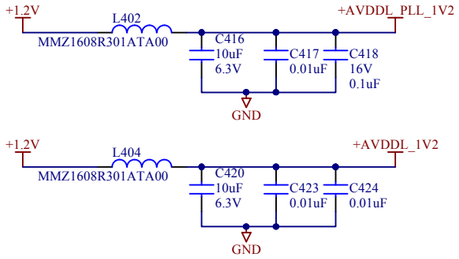
Title: *FMC Connector*			Critical Link, LLC 6712 Brooklawn Parkway Syracuse, NY 13211 315.425.4045 www.criticallink.com
Size: C	Number: 80-001127RC-1	Revision: A	
Date: 5/7/2018	Time: 11:38:33 PM	Sheet 3 of 8	
SVN: 3696	File: FMC.SchDoc		

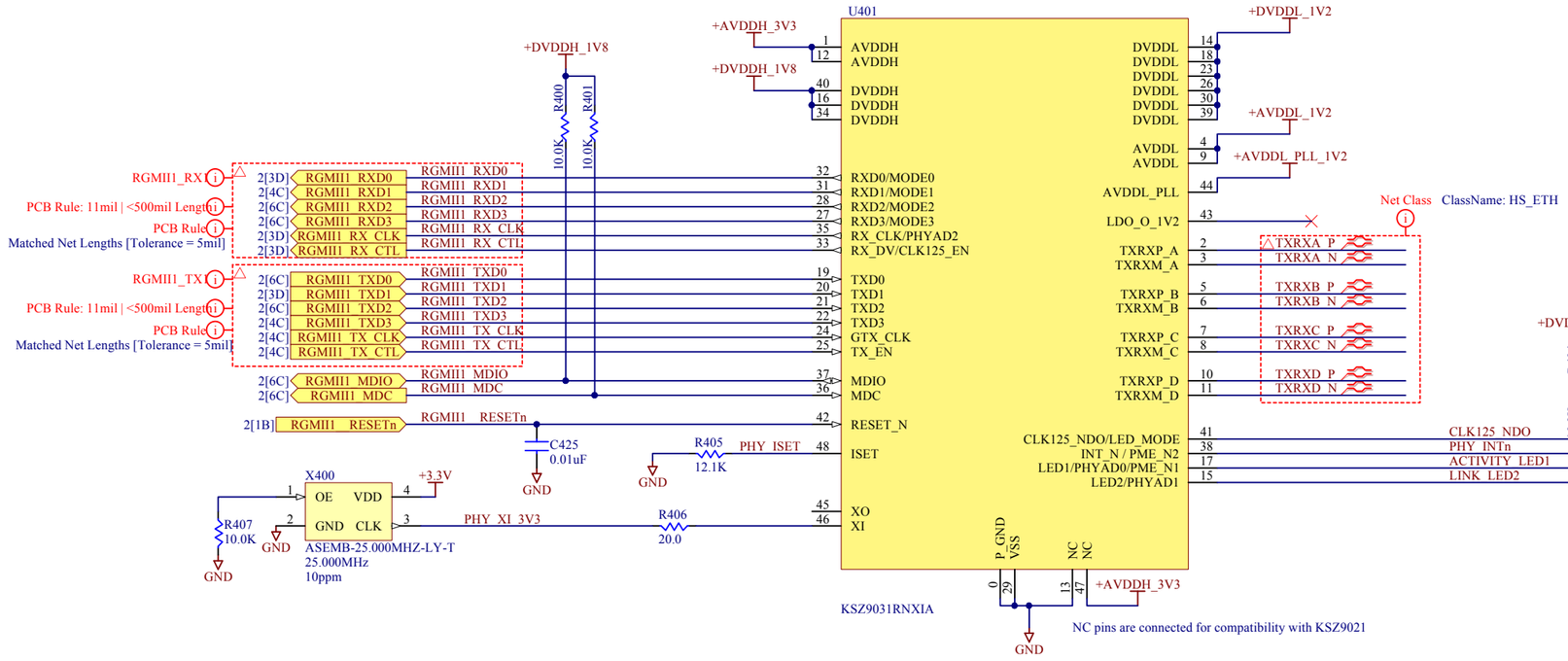
Ethernet

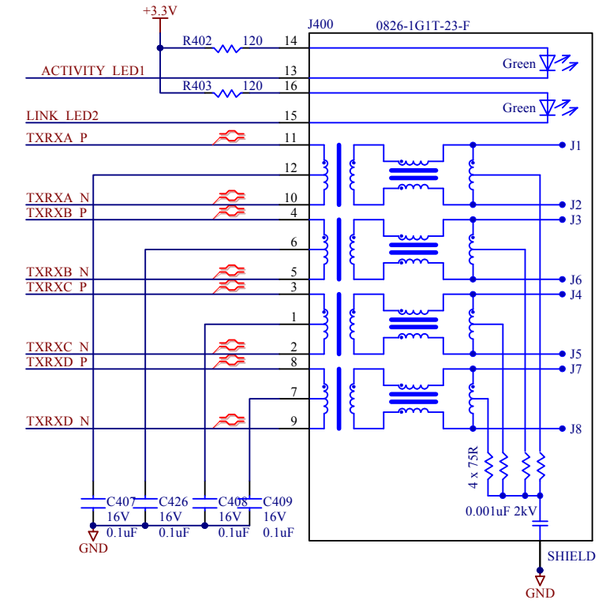
	1.2V Core (DVDDL, AVDDL, AVDDL_PLL) mA	2.5V Transceiver (AVDDH - commercial temp only) mA	3.3V Transceiver (AVDDH) mA	1.8V Digital I/Os (DVDDH) mA	Total Chip Power mW
1000Base-T link-up (no traffic)	210	58.8	67.8	11.2	419 / 494
1000Base-T full-duplex @ 100% utilization	221	57.9	66.3	23.6	452 / 526
100Base-TX link-up (no traffic)	63.6	24.9	28.7	8.4	154 / 186
100Base-TX full-duplex @ 100% utilization	63.8	24.9	28.6	9.8	156 / 189



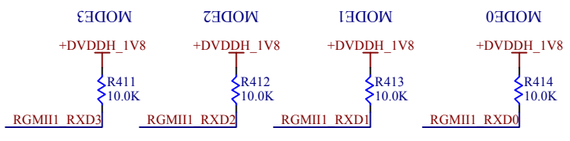




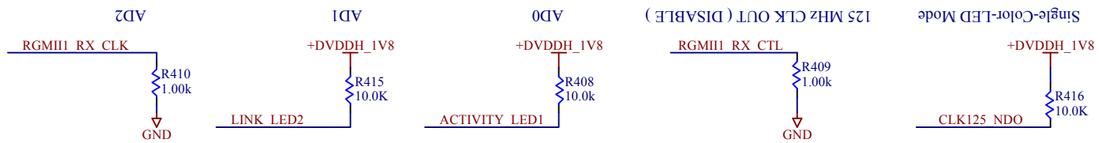


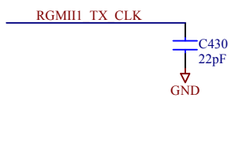


PHY Mode (Default: 1111): Advertise all capabilites

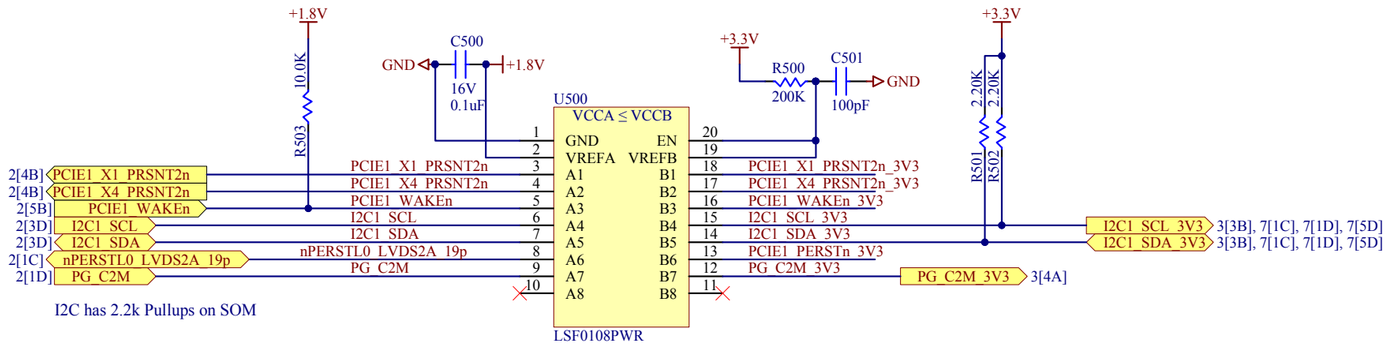


PHY Address (00XXX, Default: 00011)

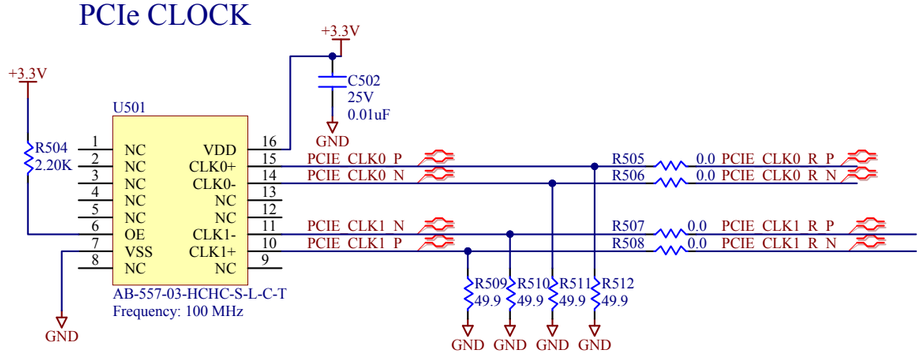




Title: *Ethernet*			Critical Link, LLC 6712 Brooklawn Parkway Syracuse, NY 13211 315.425.4045 www.criticallink.com
Size: Tabloid	Number: 80-001127RC-1	Revision: A	
Date: 5/7/2018	Time: 11:38:33 PM	Sheet 4 of 8	
SVN: 3700	File: Ethernet.SchDoc		

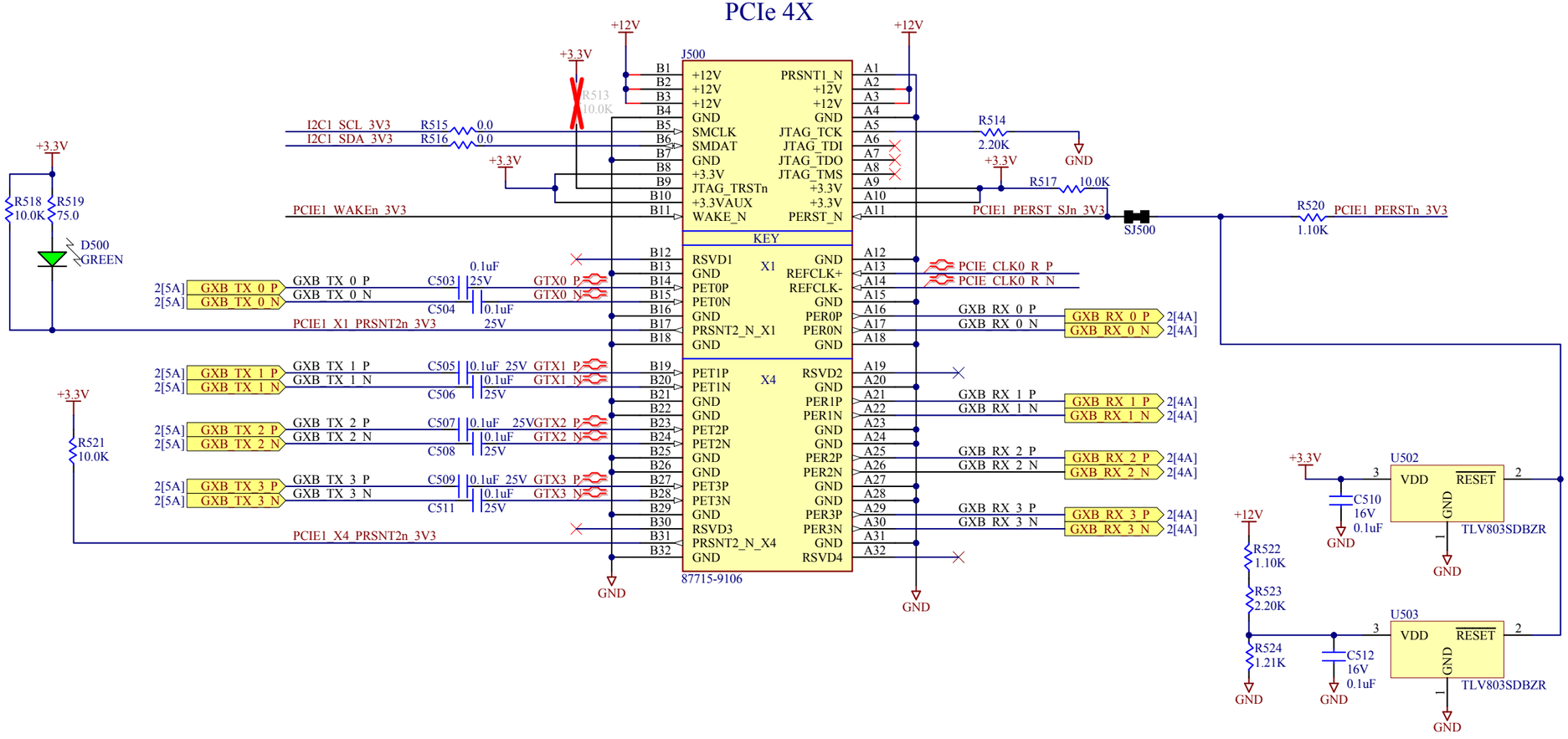


PCIe CLOCK



Place 49.9 ohm resistors near U200.

PCIe 4X



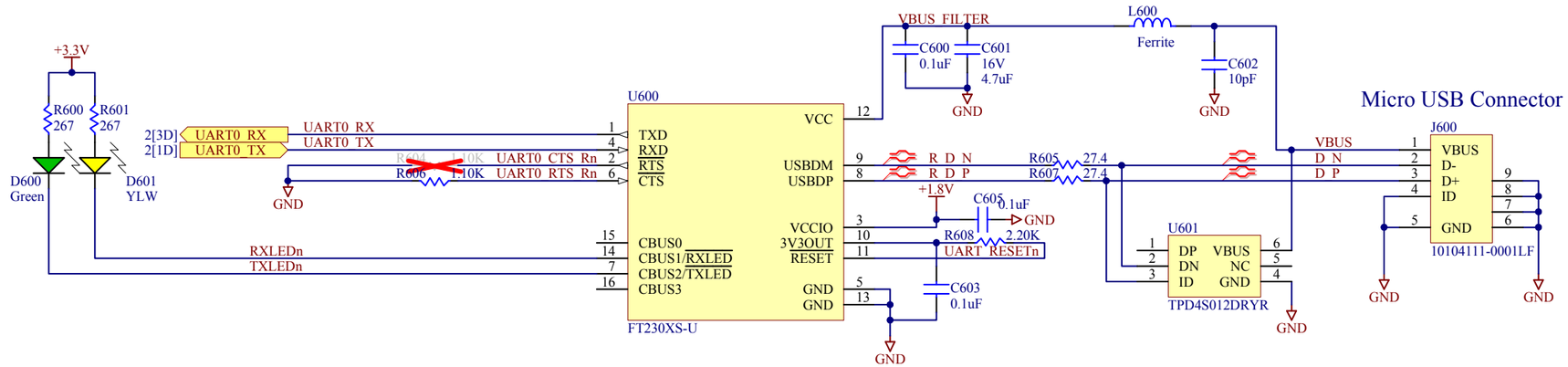
Remove R505,R506,R507,R508 and populate R525 and R526 to convert to endpoint mode from root port

PCIE_CLK0_R_P R525 0.0 PCIE_CLK1_R_P

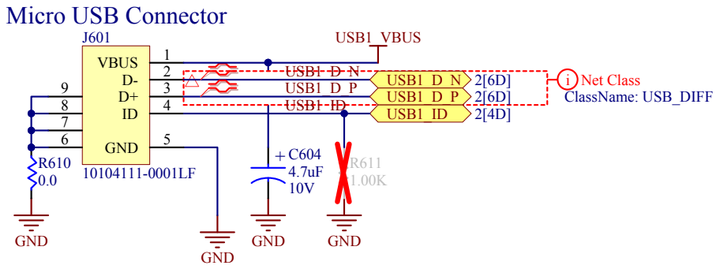
PCIE_CLK0_R_N R526 0.0 PCIE_CLK1_R_N

Title: *PCIe*			Critical Link, LLC 6712 Brooklawn Parkway Syracuse, NY 13211 315.425.4045 www.criticallink.com
Size: B	Number: 80-001127RC-1	Revision: A	
Date: 5/7/2018	Time: 11:38:34 PM	Sheet 5 of 8	
SVN: 3700	File: PCIe.SchDoc		

USB to Serial Interface



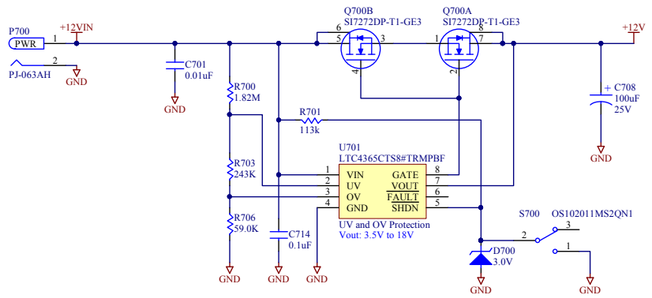
USB OTG from SOM

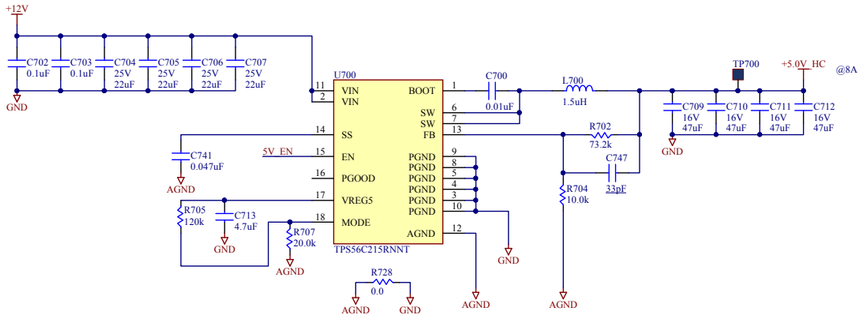


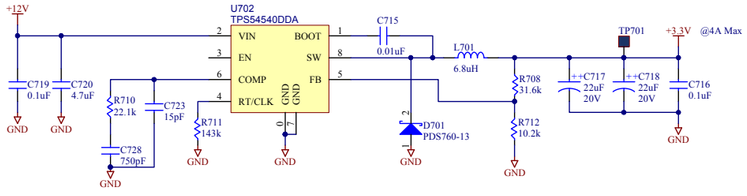
Note: Overcurrent protection provided on SOM

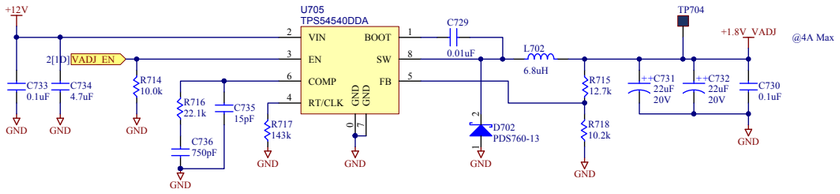
Title: *USB*			Critical Link, LLC 6712 Brooklawn Parkway Syracuse, NY 13211 315.425.4045 www.criticallink.com
Size: B	Number: 80-001127RC-1	Revision: A	
Date: 5/7/2018	Time: 11:38:34 PM	Sheet 6 of 8	
SVN: 3700	File: USB.SchDoc		

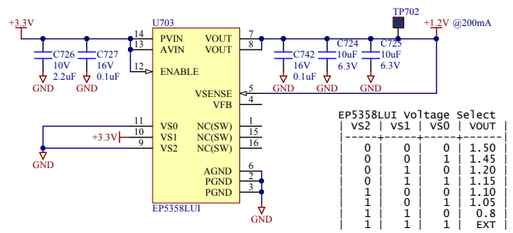
Power Supplies

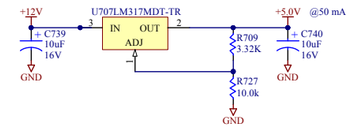


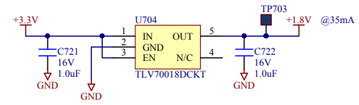




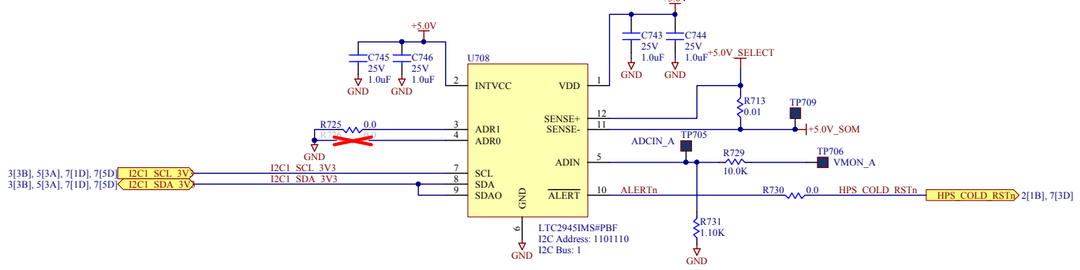


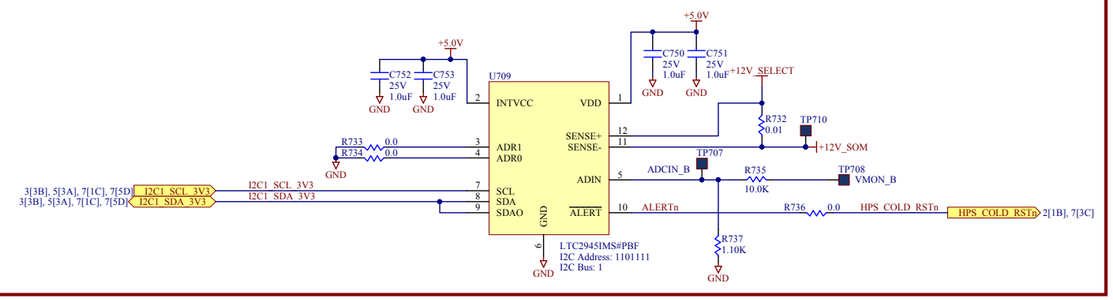




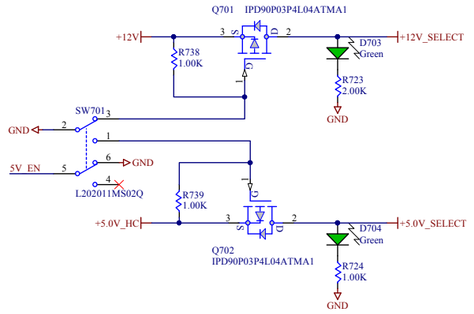


Power Monitors

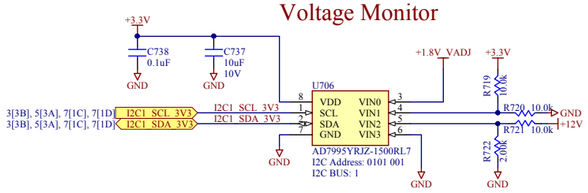




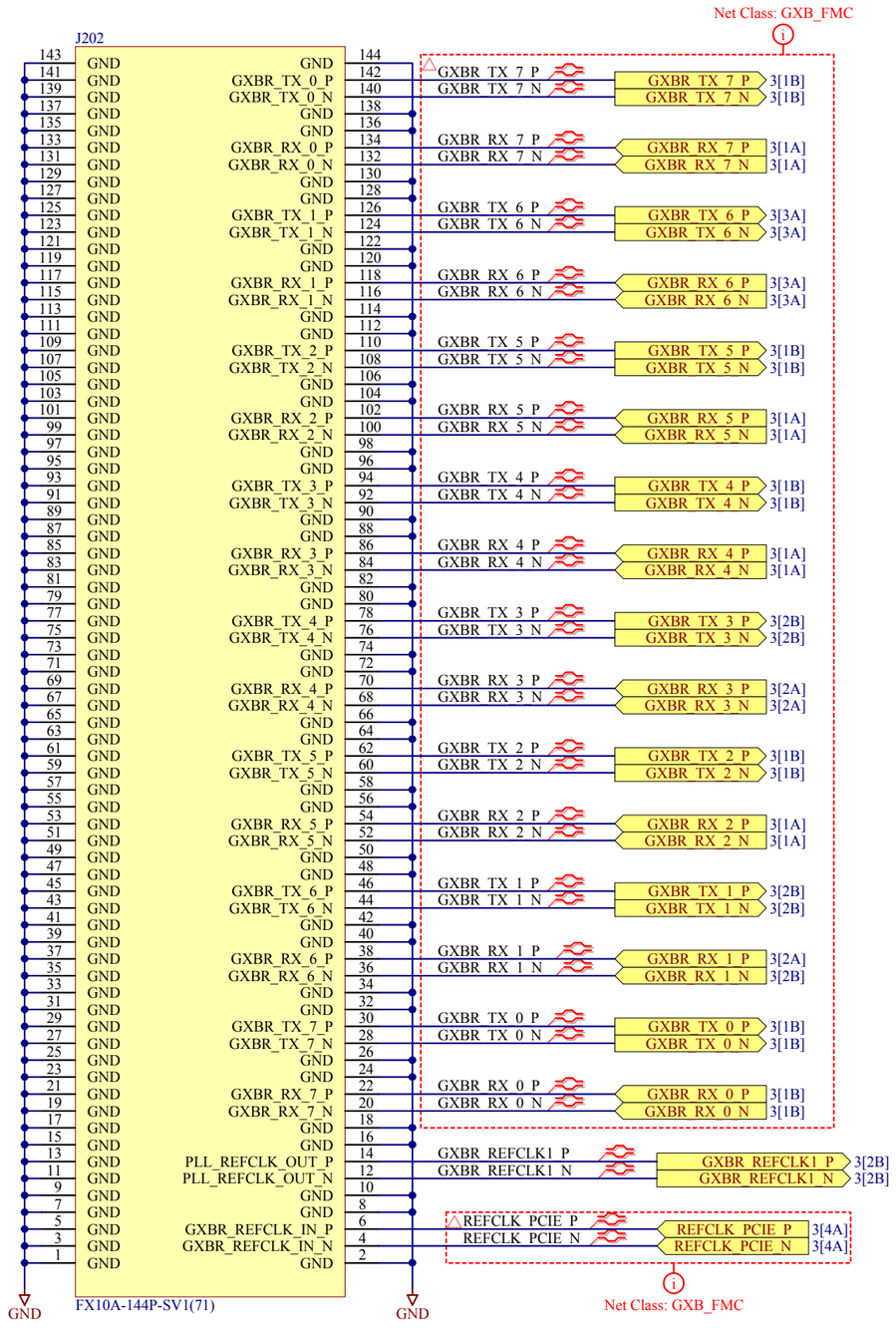
SOM Power Selection



Voltage Monitor



Title: **Power**			**Critical Link, LLC** 6712 Brooklawn Parkway Syracuse, NY 13211 315.425.4045 www.criticallink.com
Size: C	Number: 80-001127RC-1	Revision: A	
Date: 5/7/2018	Time: 11:38:34 PM	Sheet 7 of 8	
SVN: 3701	File: Power.SchDoc		



Title: *PCI-E x 8 IF*			**Critical Link, LLC** 6712 Brooklawn Parkway Syracuse, NY 13211 315.425.4045 www.criticallink.com
Size: B	Number: 80-001127RC-1	Revision: A	
Date: 5/7/2018	Time: 11:38:34 PM	Sheet 8 of 8	
SVN: 3698	File: PCIex8toFMC_IF.SchDoc		