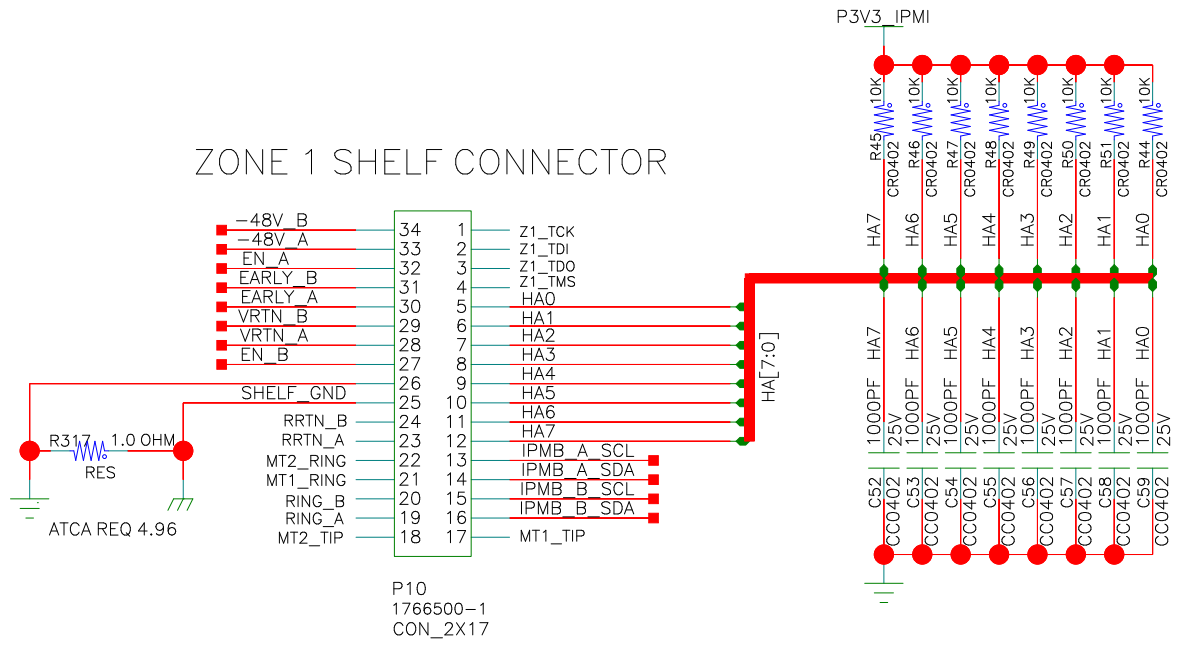
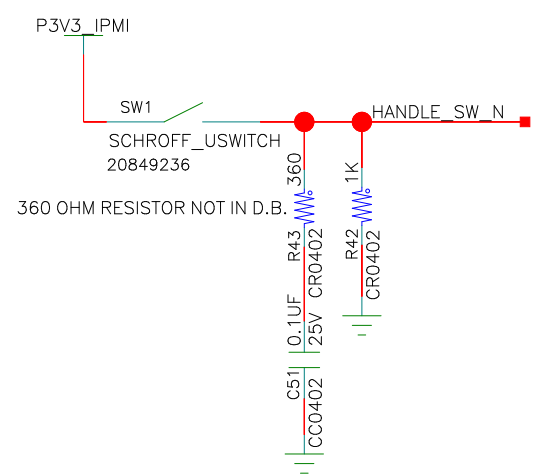


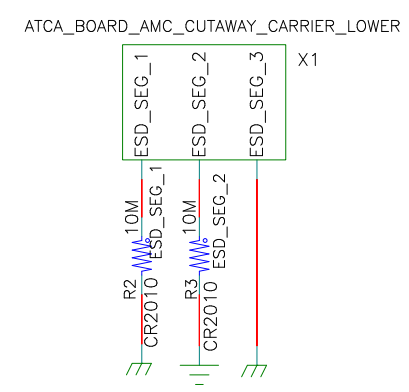
**HARDWARE ADDRESSING**



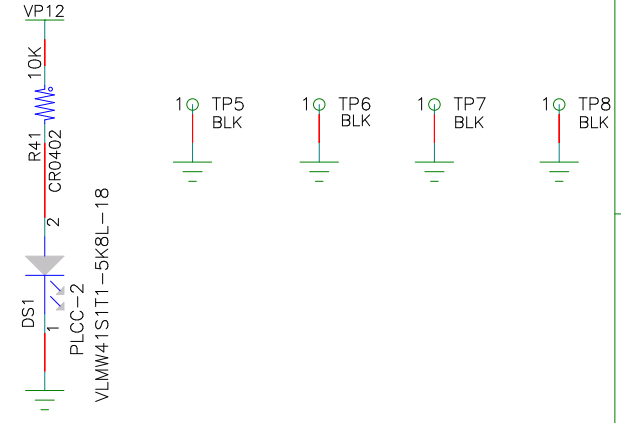
**FACE PLATE SWITCH**



**ESD PROTECTION**

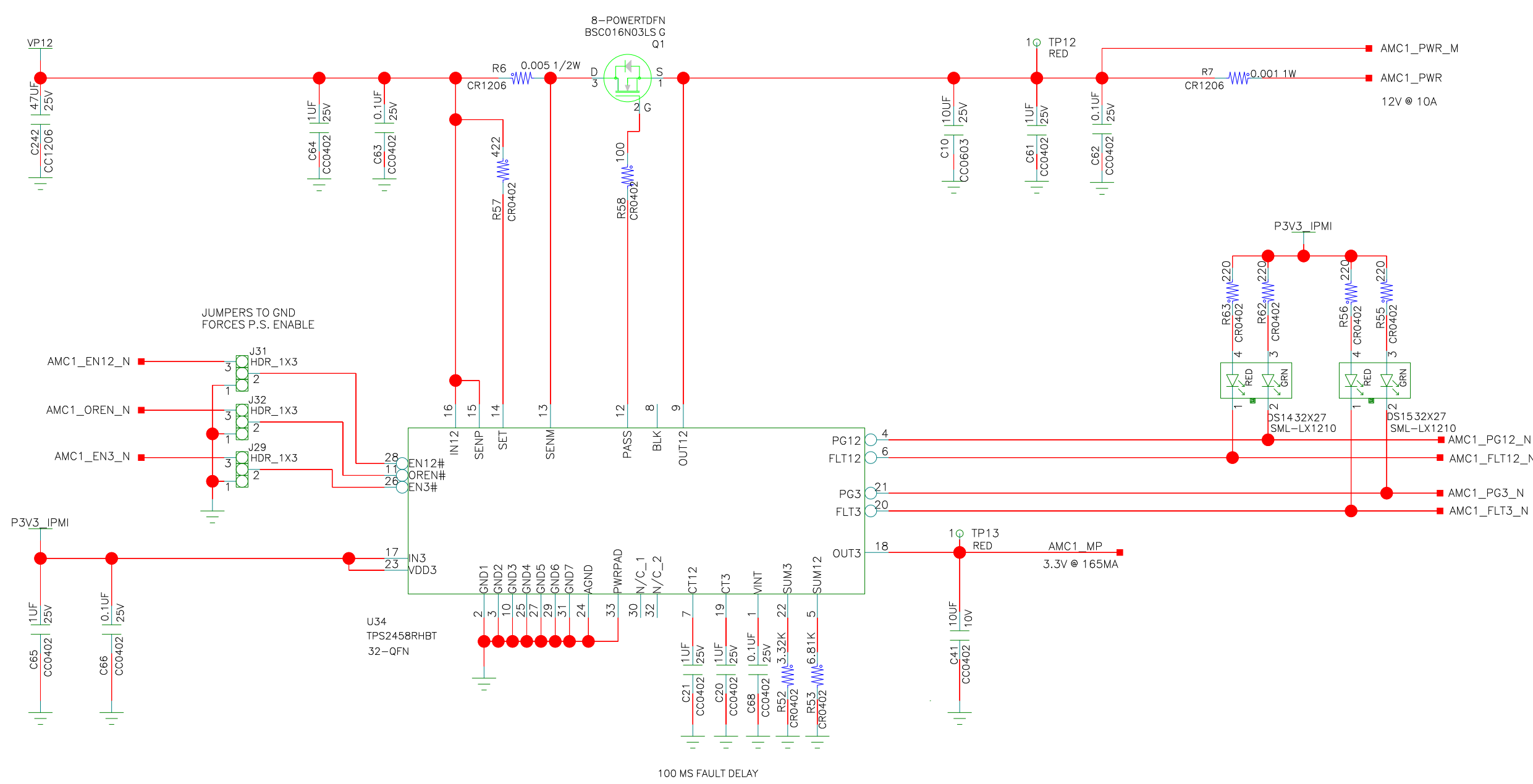


**TEST POINTS**



**ATCA HOT SWAP CONTROLLER**

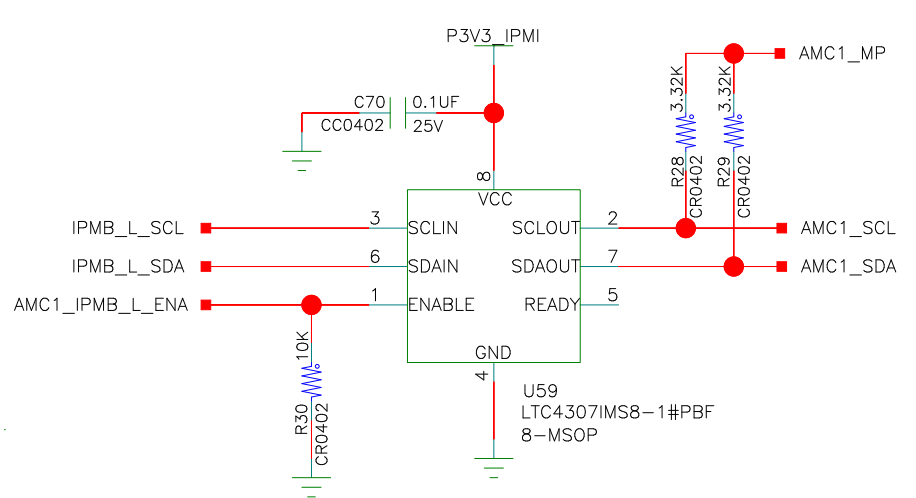
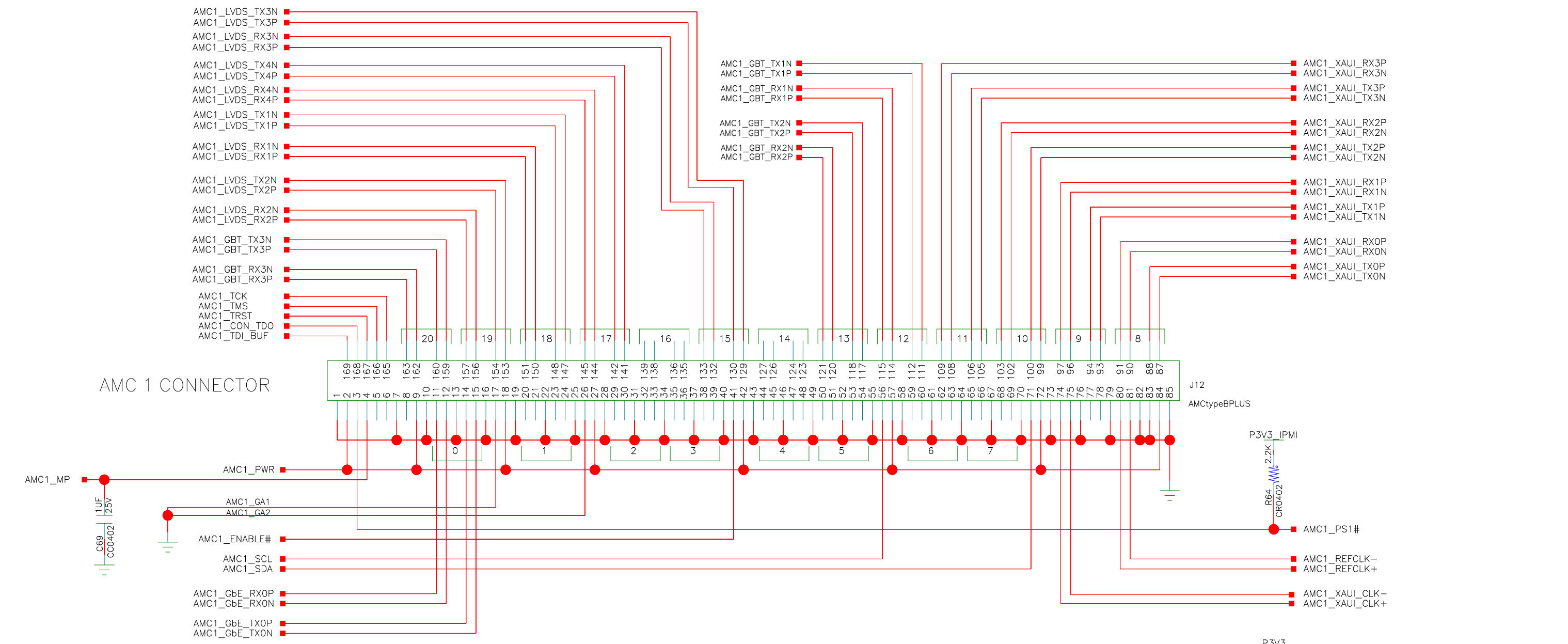
COMPANY	STONY BROOK UNIVERSITY		
TITLE	ATCA		
SIZE	B	REV	A
DRAWN	ES	DATE	26/02/2015:08:56
SHEET	1	OF	49



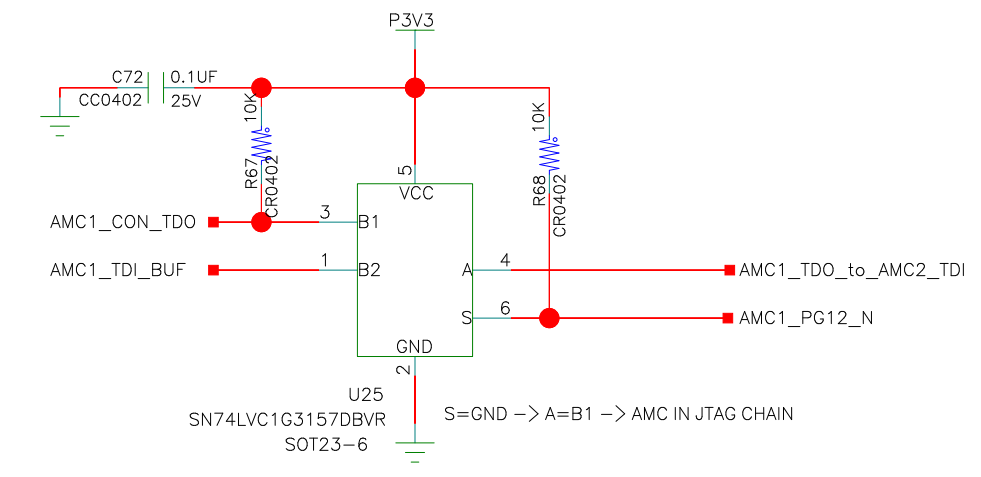
AMC HOT SWAP CONTROLLER

AMC 1 – 1 of 2

COMPANY	STONY BROOK UNIVERSITY		
TITLE	ATCA		
SIZE	B	REV	A
DRAWN	ES	DATE	10/03/2015:12:42
	SHEET	2	OF 49



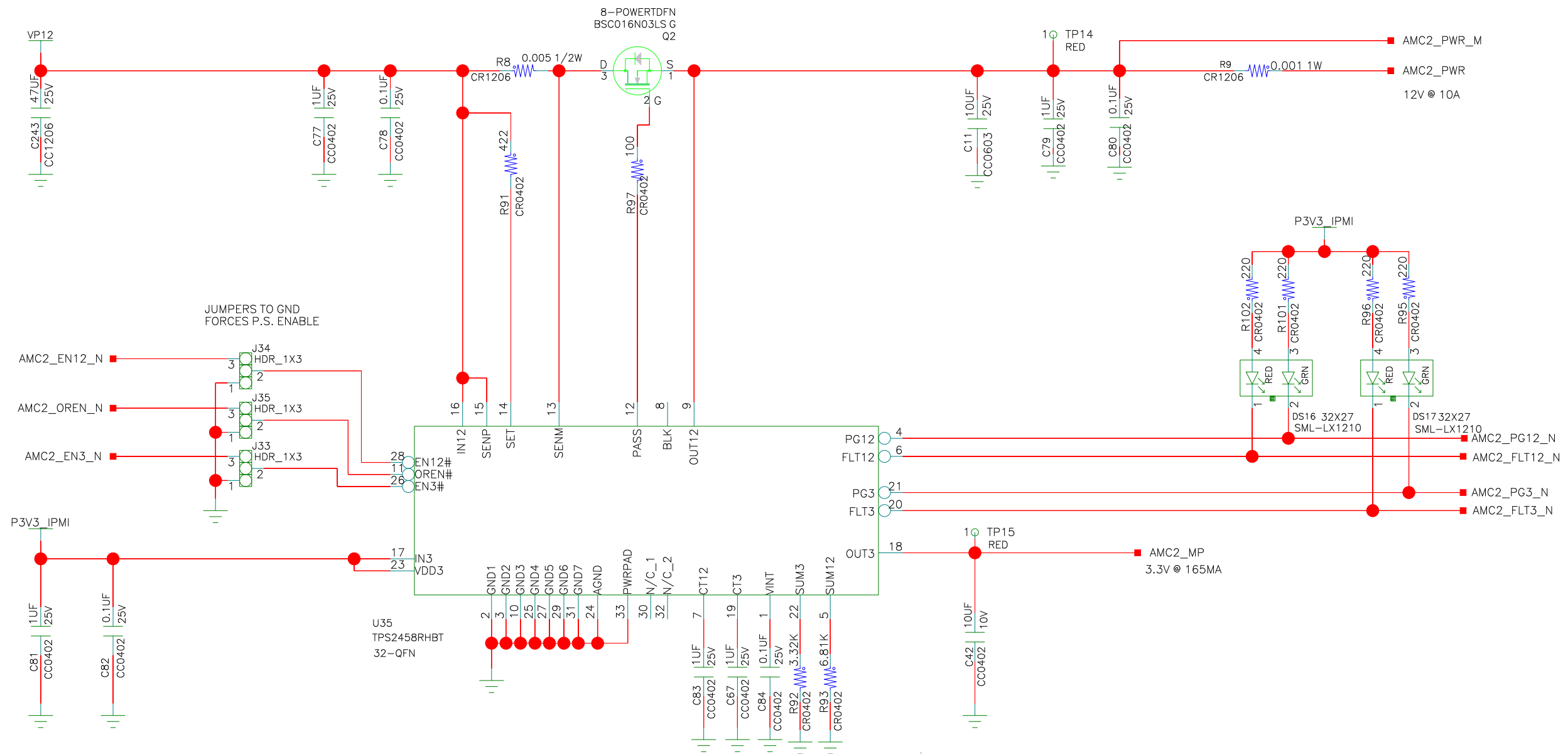
2-WIRE BUS BUFFER



ANALOG SWITCH

AMC 1 - 2 of 2

COMPANY	STONY BROOK UNIVERSITY			
TITLE	ATCA			
SIZE	B	REV	A	SHEET 3 OF 49
DRAWN	ES	DATE	22/01/2015:09:07	

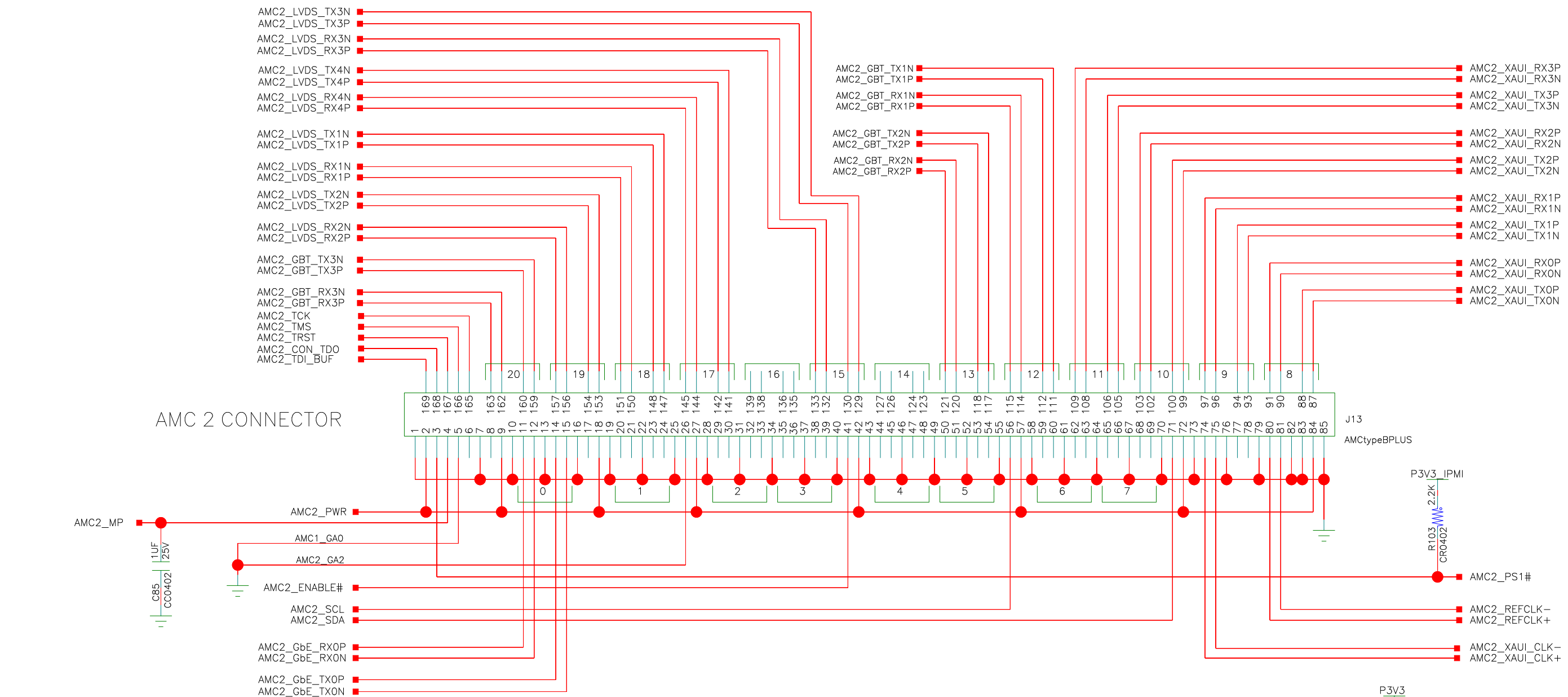


AMC HOT SWAP CONTROLLER

AMC 2 - 1 of 2

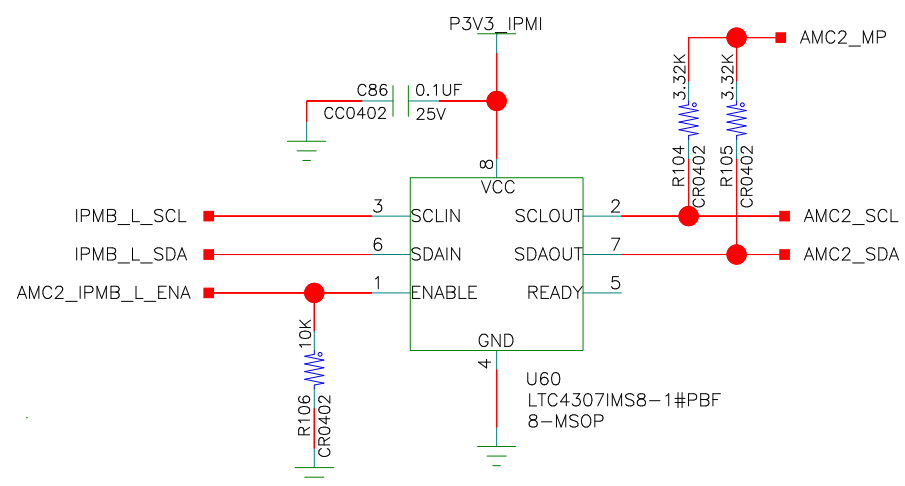
COMPANY	STONY BROOK UNIVERSITY		
TITLE	ATCA		
SIZE	B	REV A	SHEET 4 OF 49
DRAWN	ES	DATE	26/02/2015:08:54



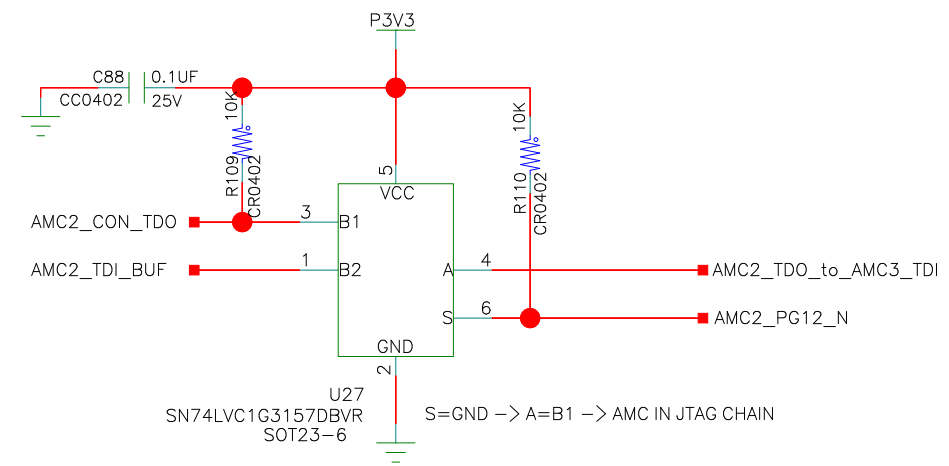


AMC 2 CONNECTOR

J13  
AMCtypeBPLUS



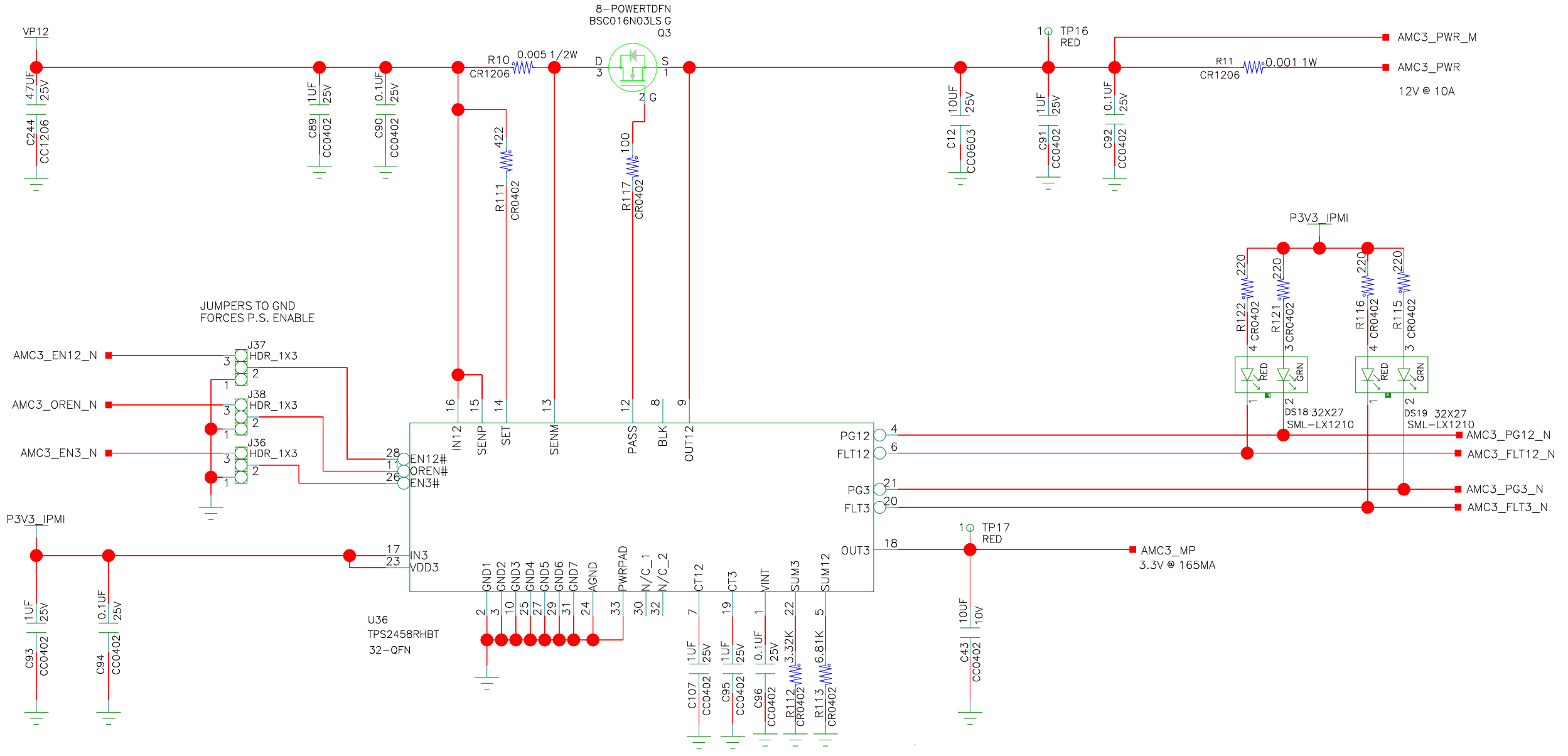
2-WIRE BUS BUFFER



ANALOG SWITCH

AMC 2 - 2 of 2

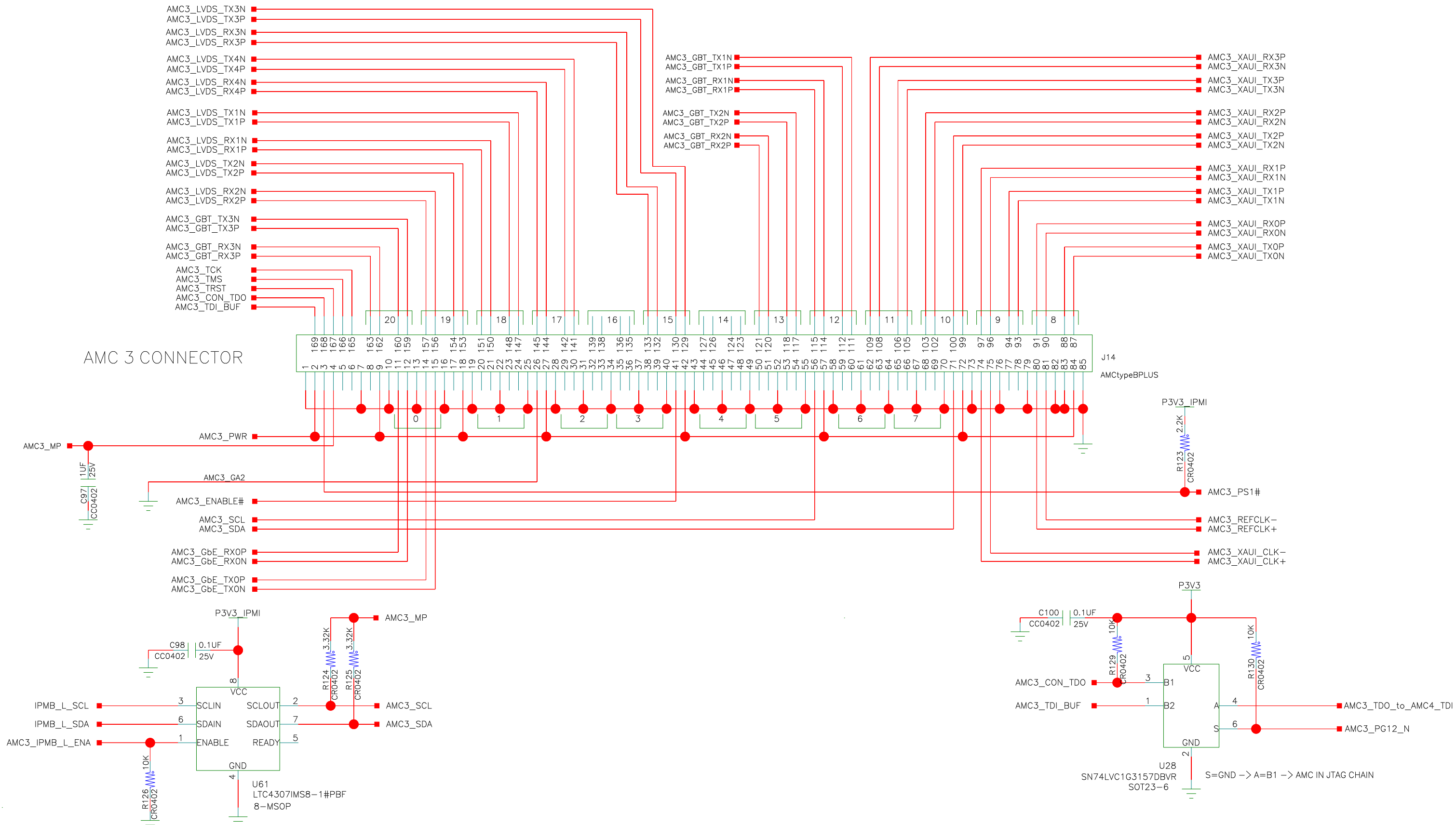
COMPANY	STONY BROOK UNIVERSITY			
TITLE	ATCA			
SIZE	B	REV	A	SHEET 5 OF 49
DRAWN	ES	DATE	22/01/2015:09:07	



AMC HOT SWAP CONTROLLER

AMC 3 - 1 of 2

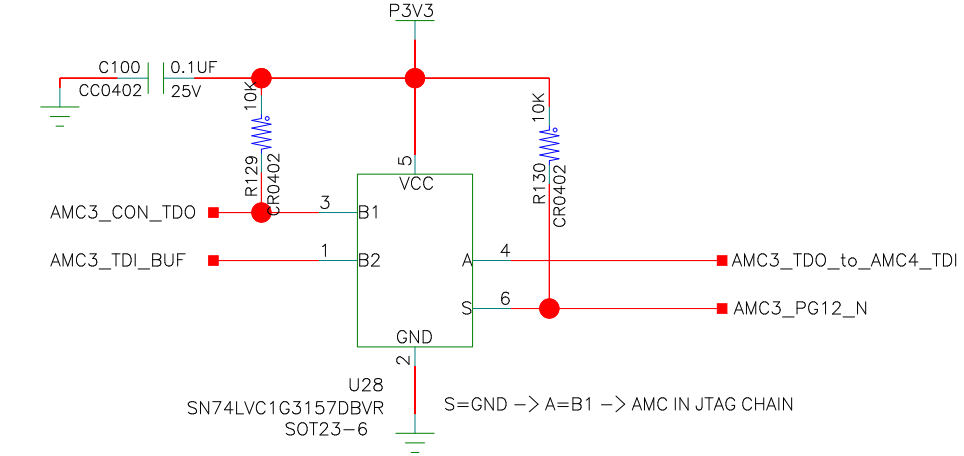
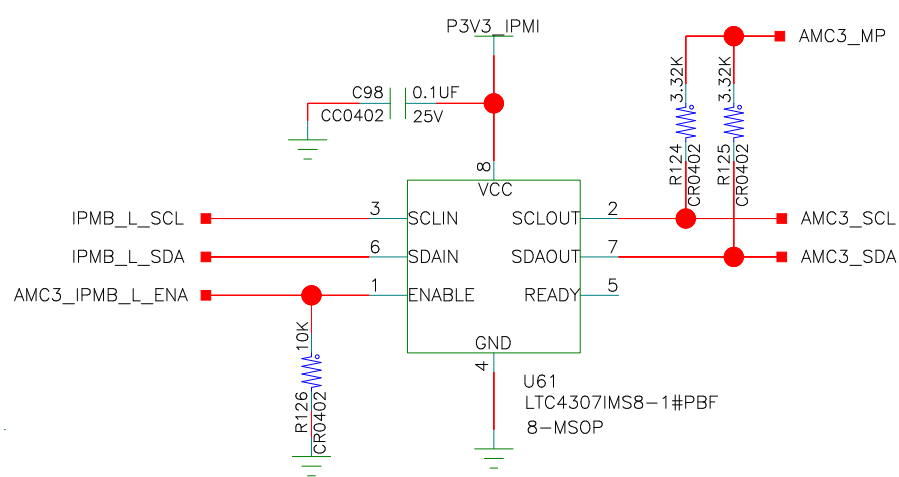
COMPANY	STONY BROOK UNIVERSITY			
TITLE	ATCA			
SIZE	B	REV	A	SHEET 6 OF 49
DRAWN	ES	DATE	26/02/2015:08:45	



AMC 3 CONNECTOR

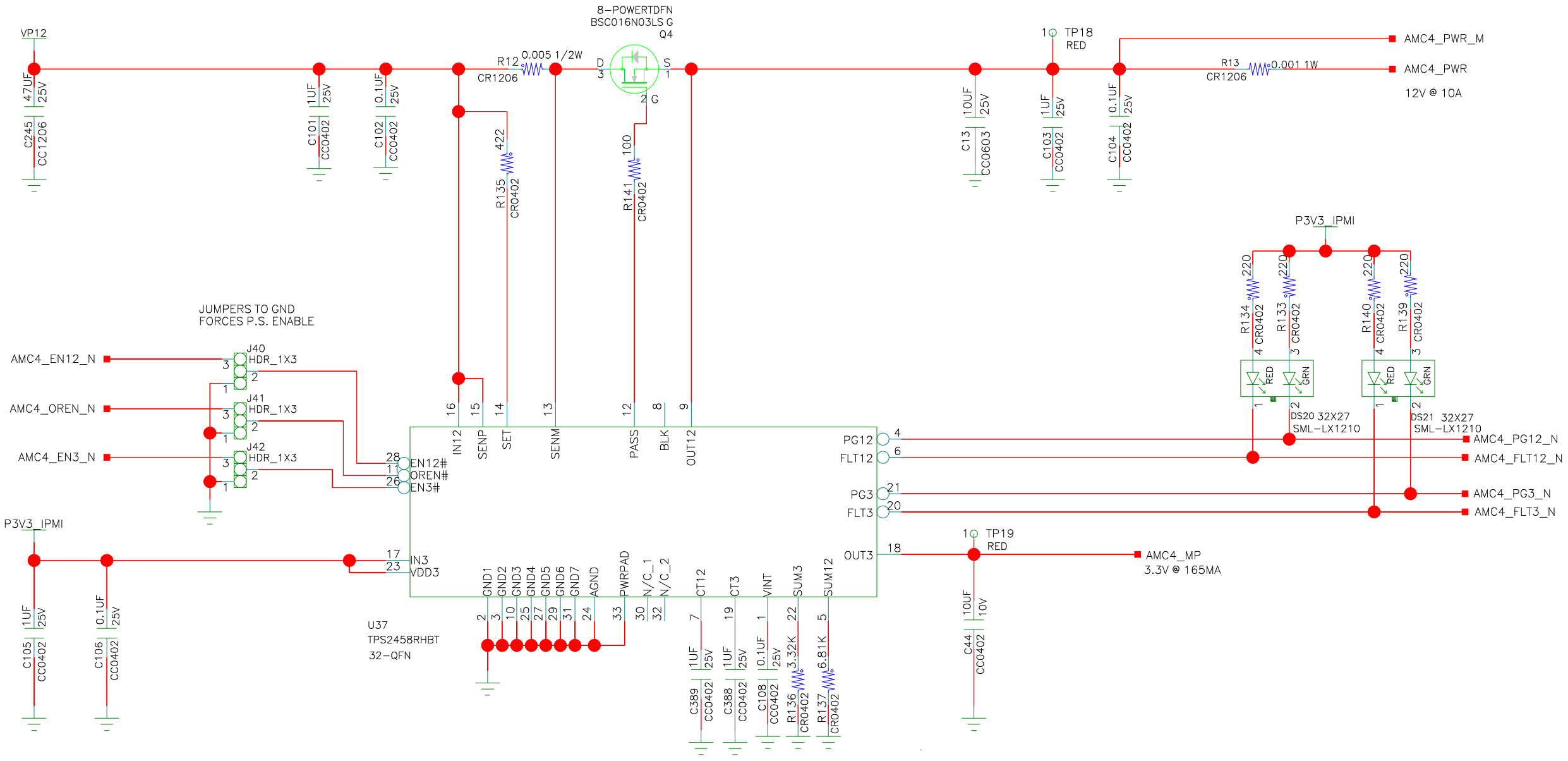
2-WIRE BUS BUFFER

ANALOG SWITCH



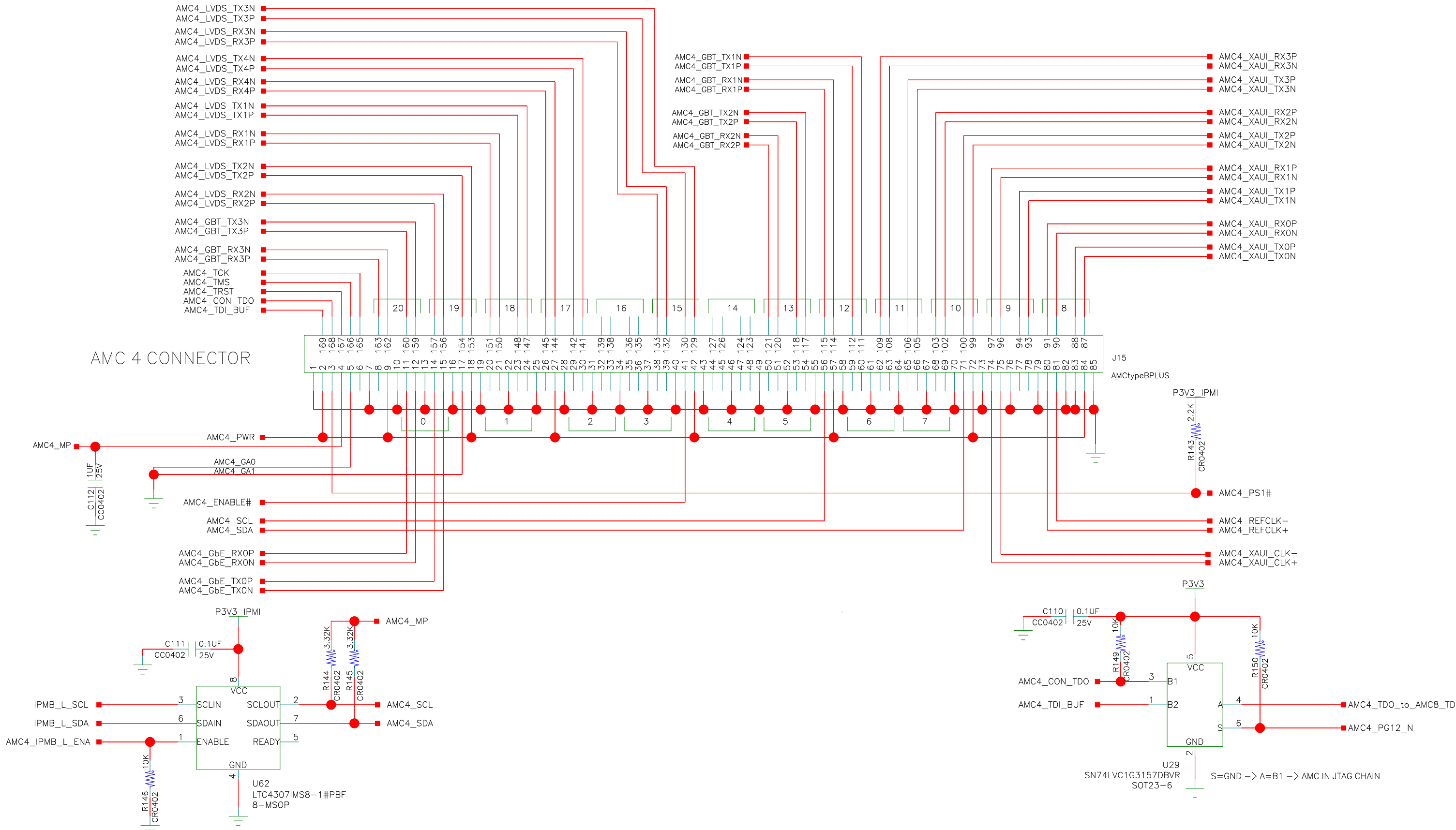
AMC 3 - 2 of 2

COMPANY	STONY BROOK UNIVERSITY		
TITLE	ATCA		
SIZE	B	REV	A
DRAWN	ES	DATE	22/01/2015:09:07
		SHEET	7 OF 49



AMC 4 – 1 of 2

COMPANY	STONY BROOK UNIVERSITY		
TITLE	ATCA		
SIZE	B	REV	A
DRAWN	ES	DATE	26/02/2015:08:44
		SHEET	8 OF 49



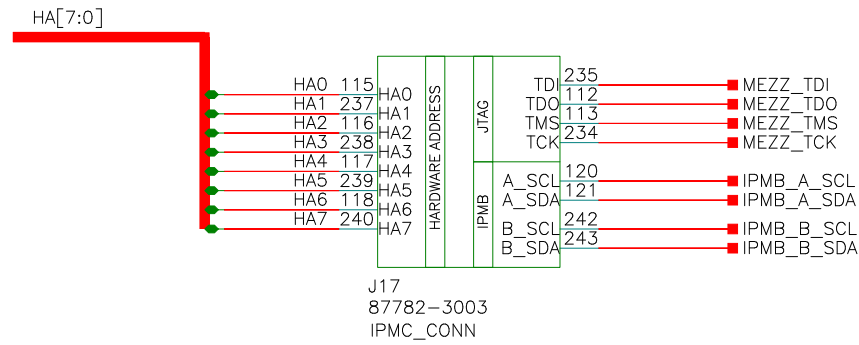
AMC 4 CONNECTOR

2-WIRE BUS BUFFER

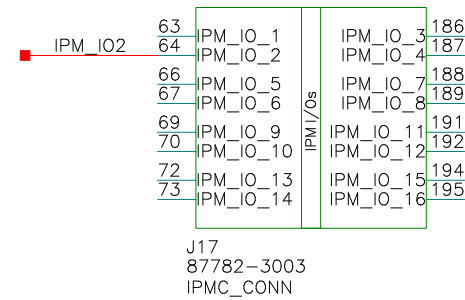
ANALOG SWITCH

AMC 4 - 2 of 2

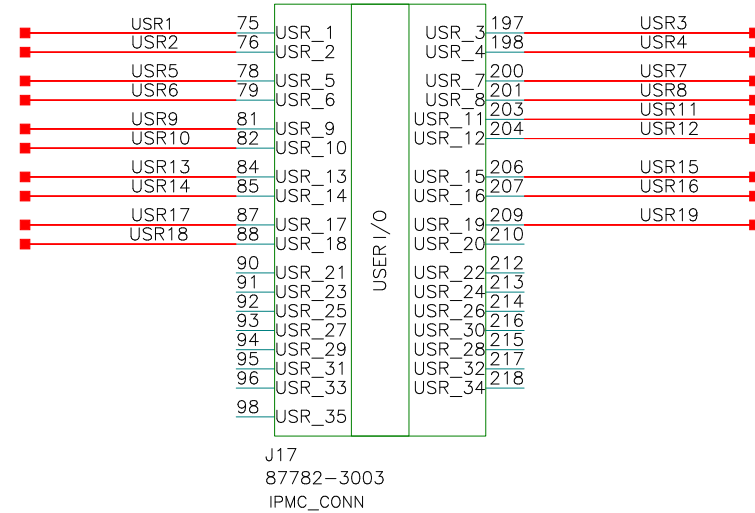
COMPANY	STONY BROOK UNIVERSITY			
TITLE	ATCA			
SIZE	B	REV	A	SHEET 9 OF 49
DRAWN	ES	DATE	22/01/2015:09:07	



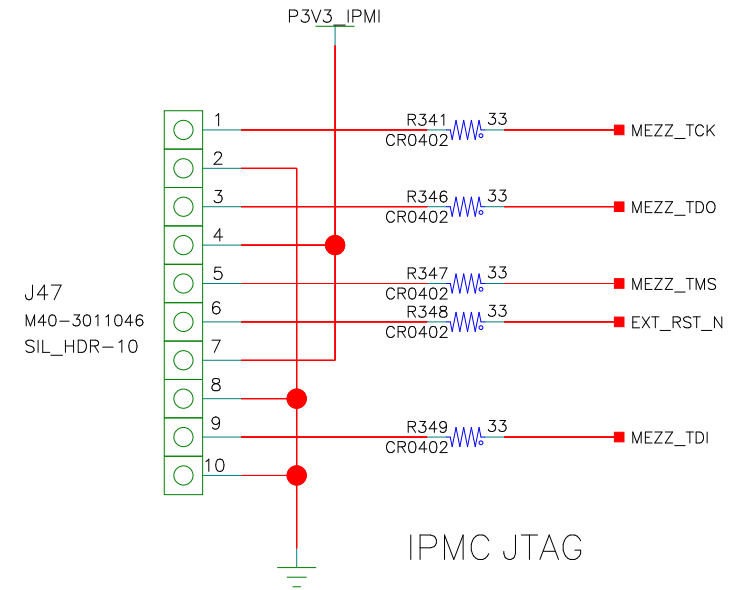
P/O IPMC CONNECTOR



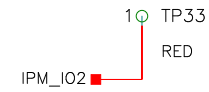
P/O IPMC CONNECTOR



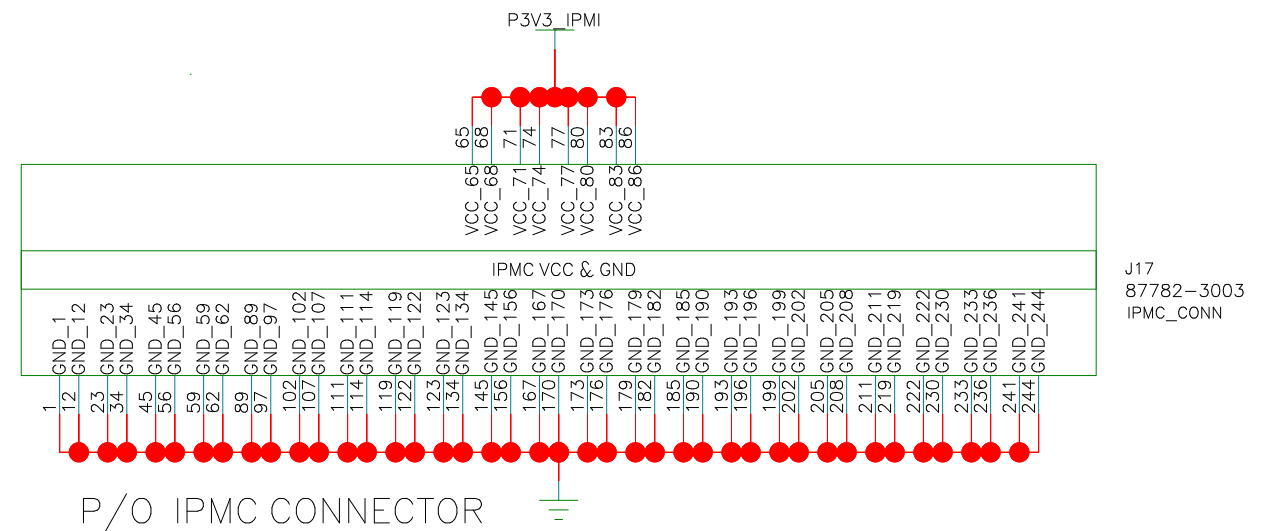
P/O IPMC CONNECTOR



IPMC JTAG



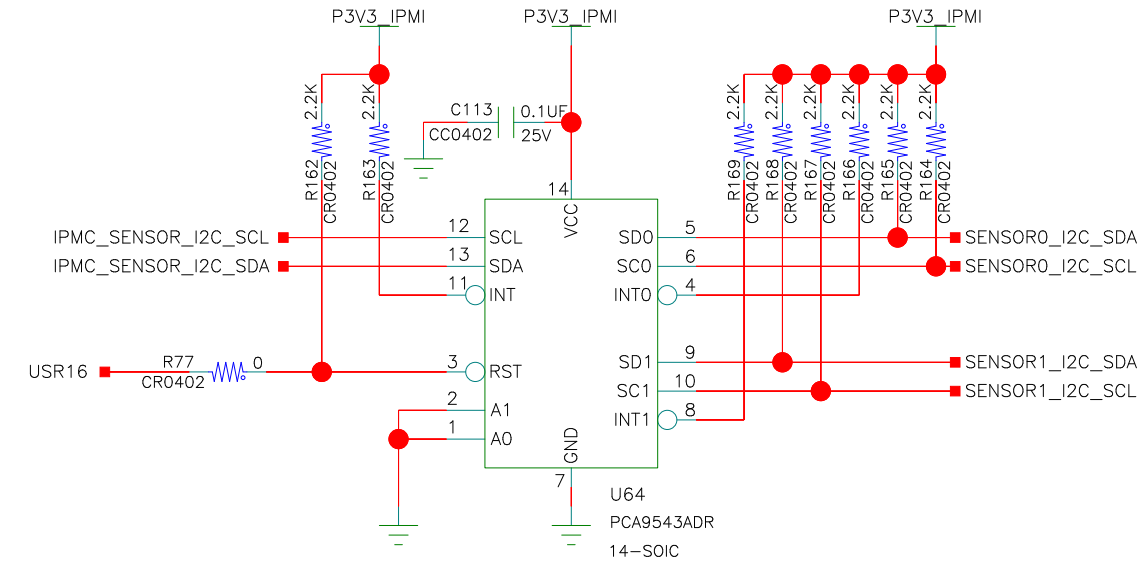
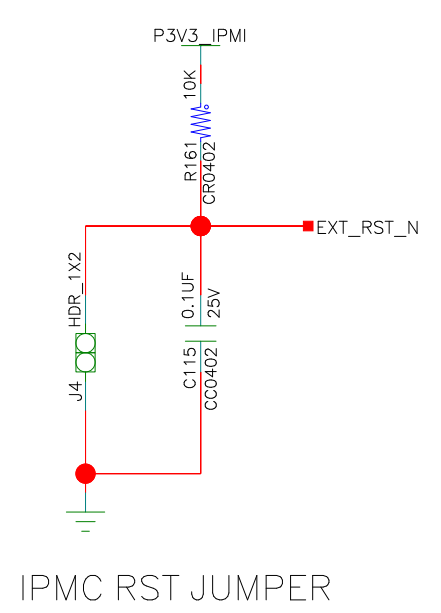
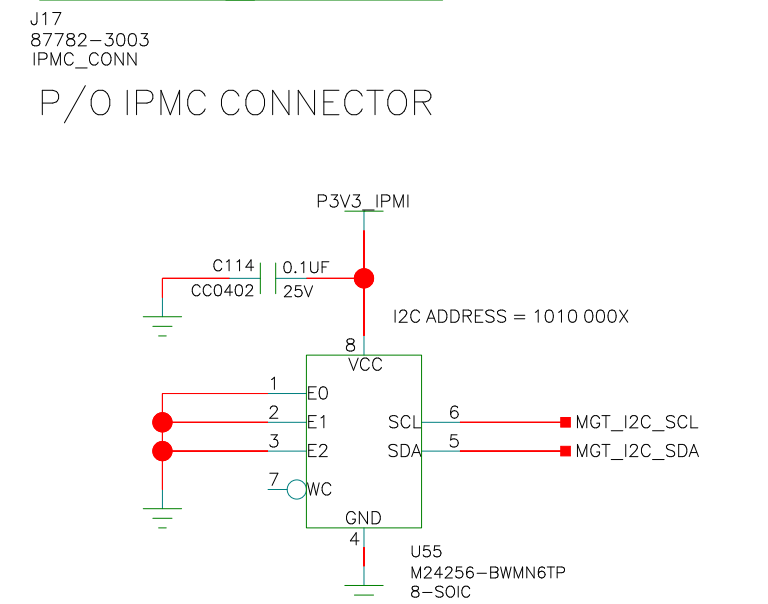
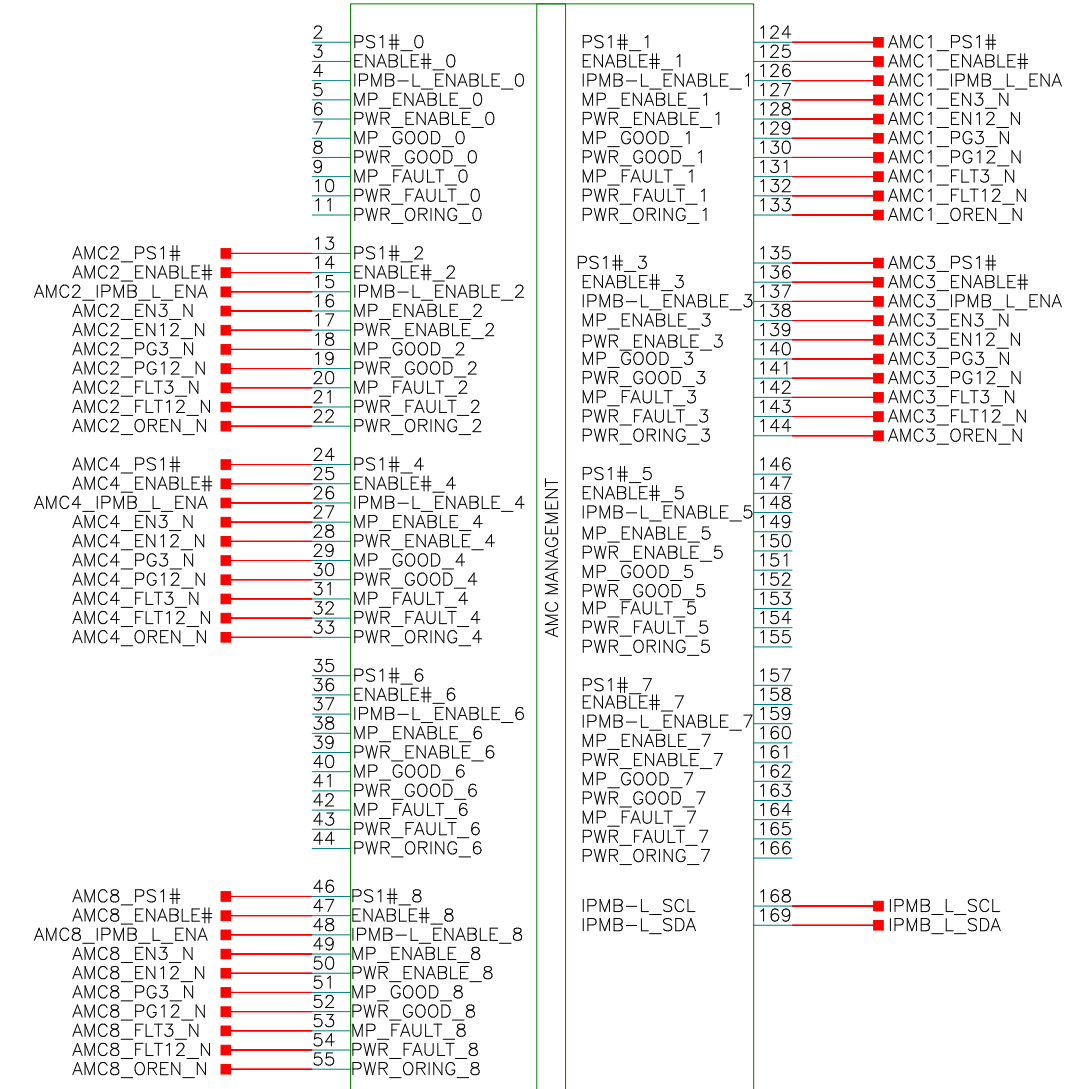
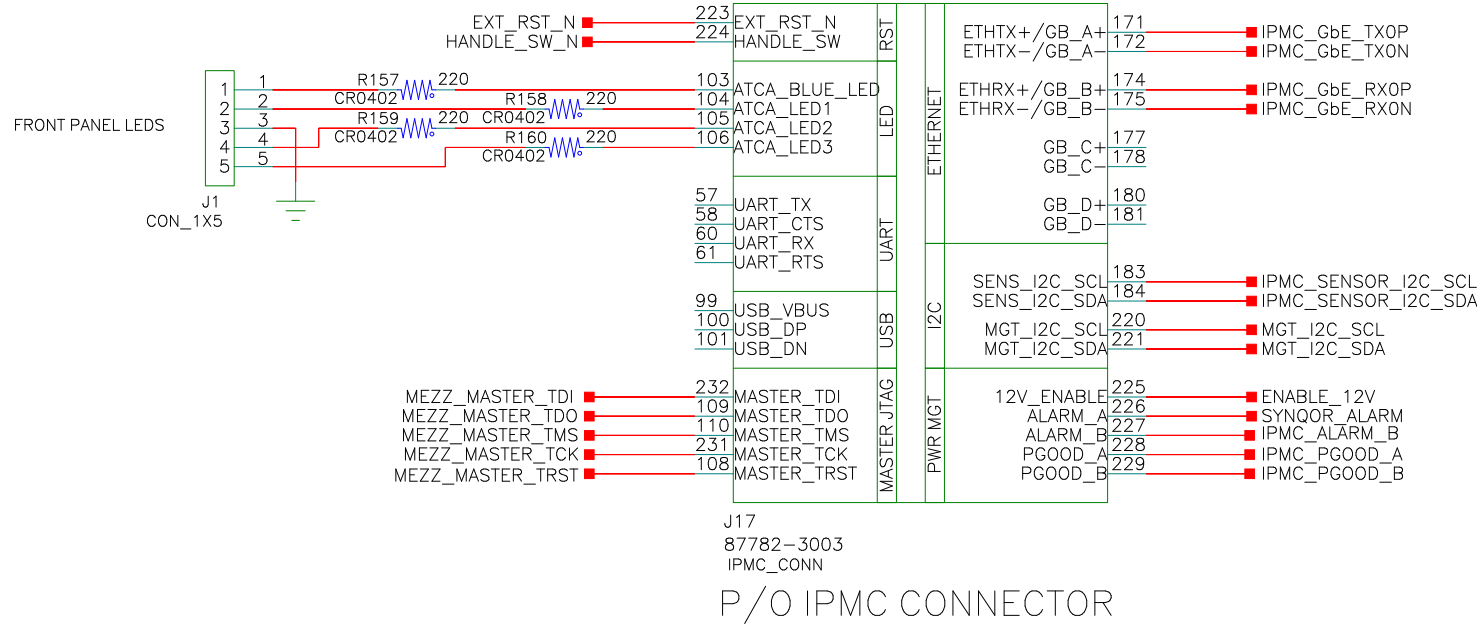
ANNEXY POWER GOOD LINE



P/O IPMC CONNECTOR

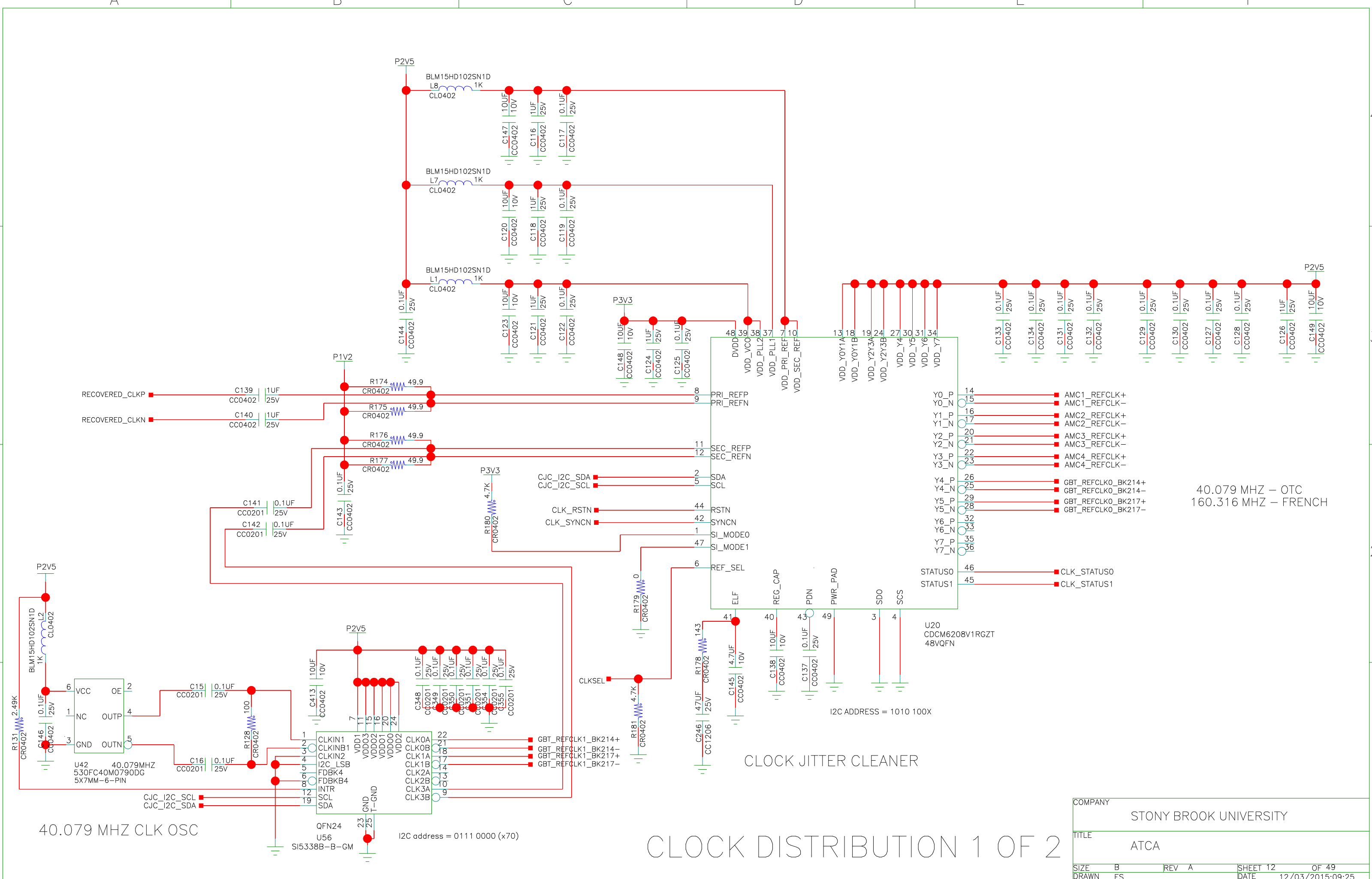
IPMC MEZZANINE - 1 of 2

COMPANY	STONY BROOK UNIVERSITY		
TITLE	ATCA		
SIZE	B	REV	A
DRAWN	ES	DATE	22/01/2015:09:07
		SHEET	10
		OF	49



# IPMC MEZZANINE – 2 of 2

COMPANY	STONY BROOK UNIVERSITY			
TITLE	ATCA			
SIZE	B	REV	A	SHEET 11 OF 49
DRAWN	ES	DATE	22/01/2015:09:07	



40.079 MHz CLK OSC

I2C address = 0111 0000 (x70)

CLOCK JITTER CLEANER

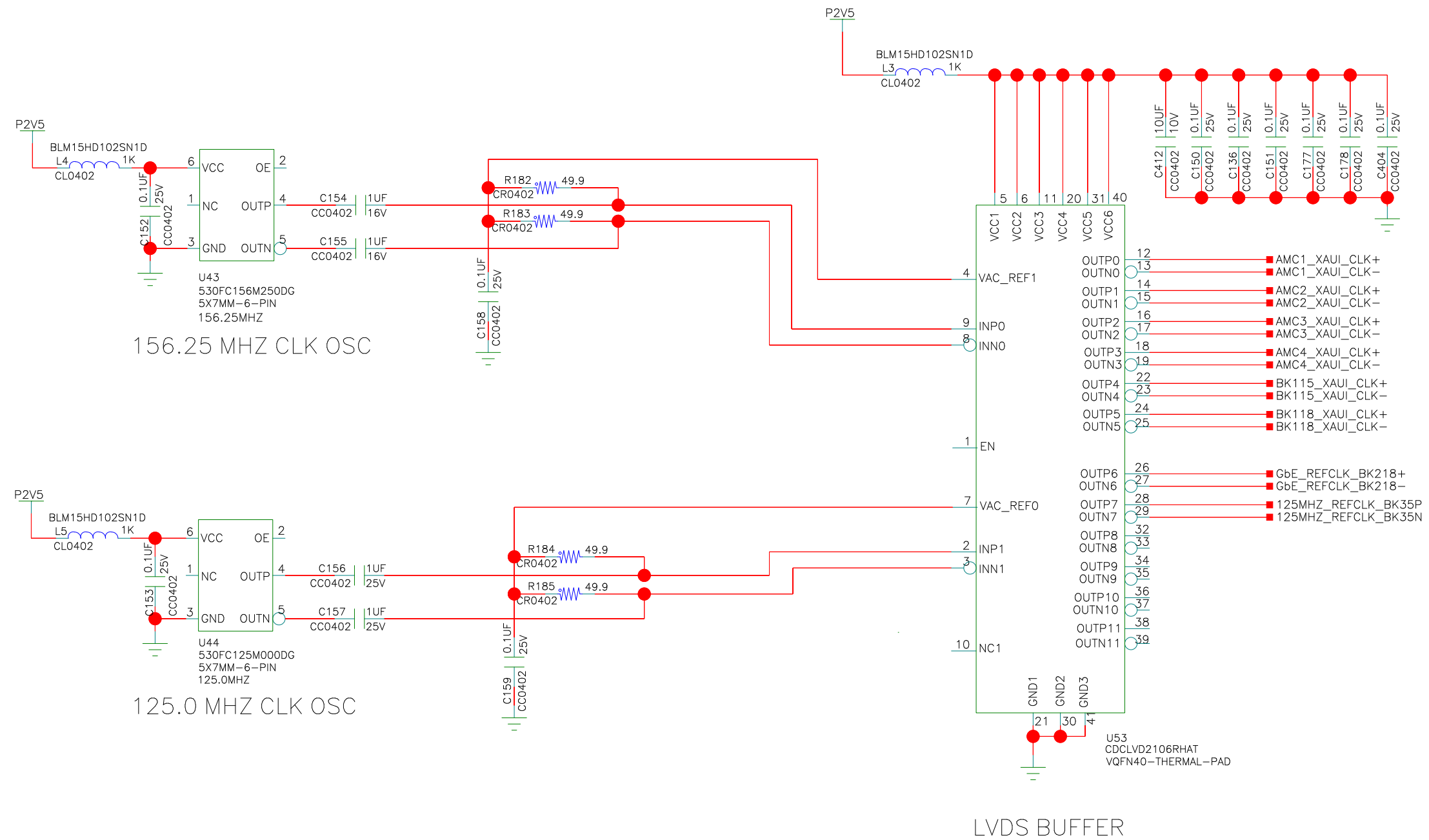
I2C ADDRESS = 1010 100X

40.079 MHz – OTC  
160.316 MHz – FRENCH

# CLOCK DISTRIBUTION 1 OF 2

COMPANY	STONY BROOK UNIVERSITY		
TITLE	ATCA		
SIZE	B	REV	A
DRAWN	ES	DATE	12/03/2015:09:25
SHEET	12	OF	49





156.25 MHz CLK OSC

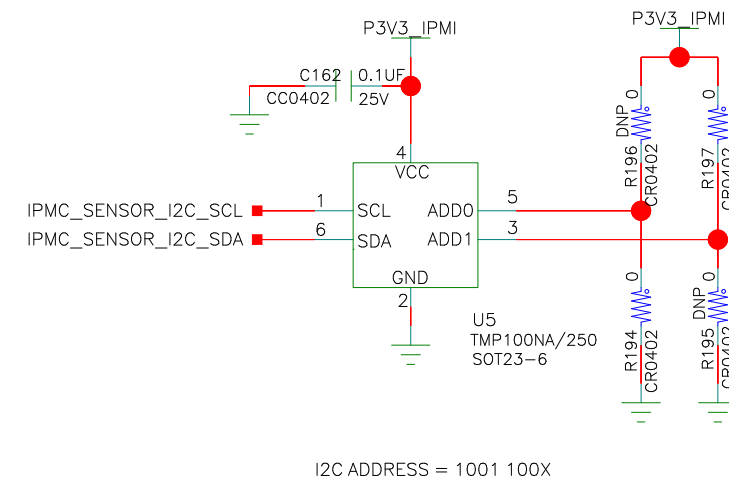
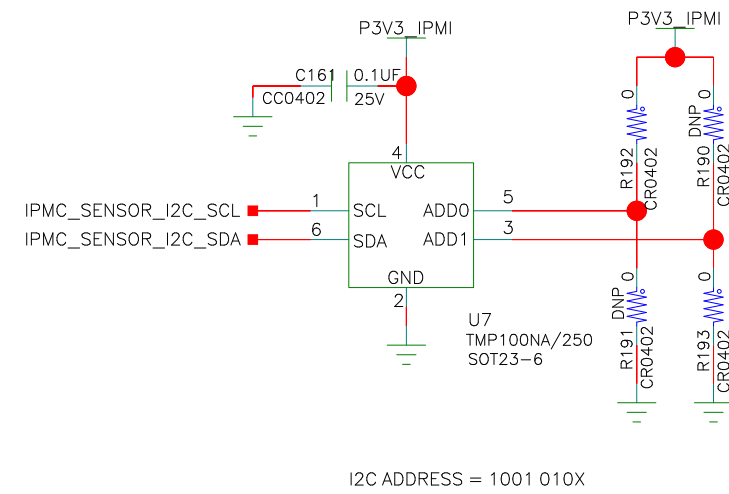
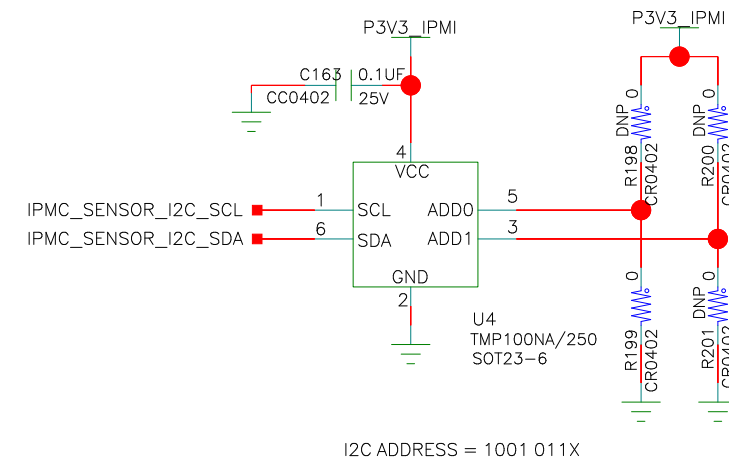
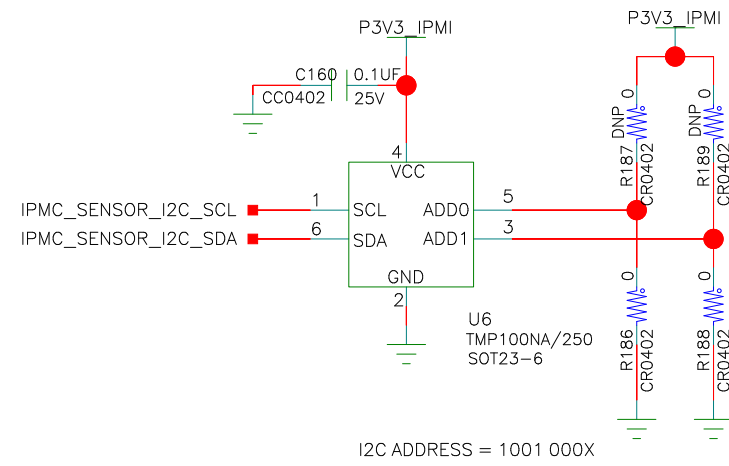
125.0 MHz CLK OSC

CLK FOR BASE GBE

LVDS BUFFER

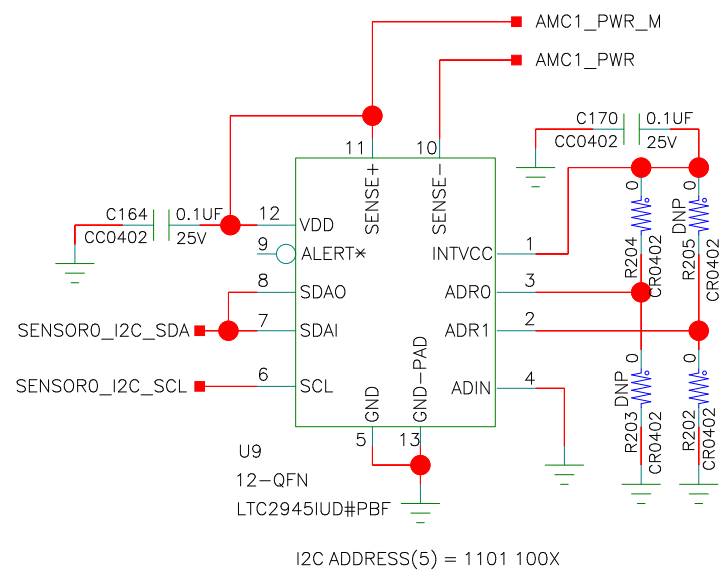
# CLOCK DISTRIBUTION 2 OF 2

COMPANY	STONY BROOK UNIVERSITY		
TITLE	ATCA		
SIZE	B	REV	A
DRAWN	ES	DATE	08/03/2015:14:27
		SHEET	13 OF 49

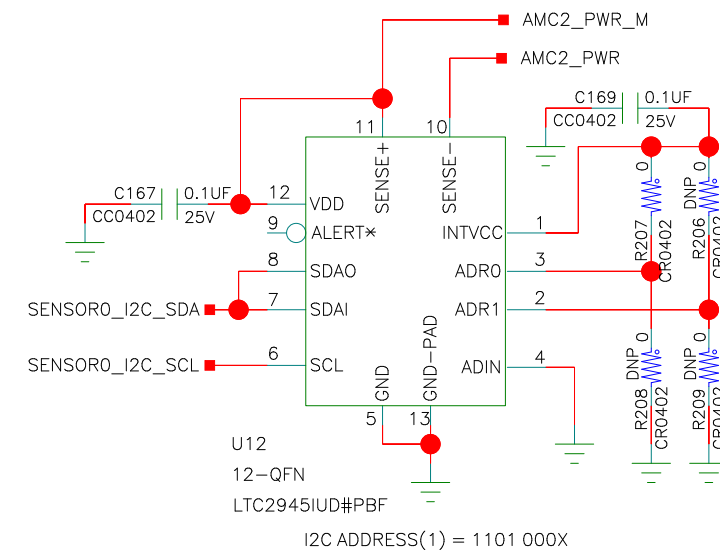


# TEMPERATURE SENSORS

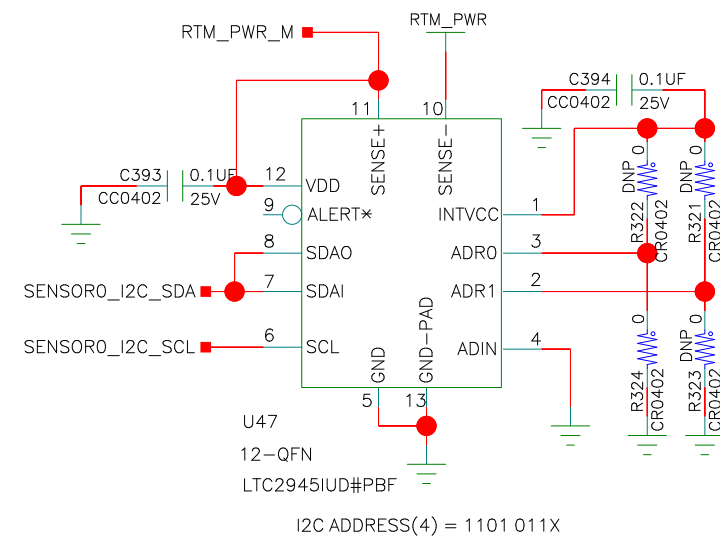
COMPANY	STONY BROOK UNIVERSITY		
TITLE	ATCA		
SIZE	B	REV	A
DRAWN	ES	DATE	22/01/2015:09:07
		SHEET	14 OF 49



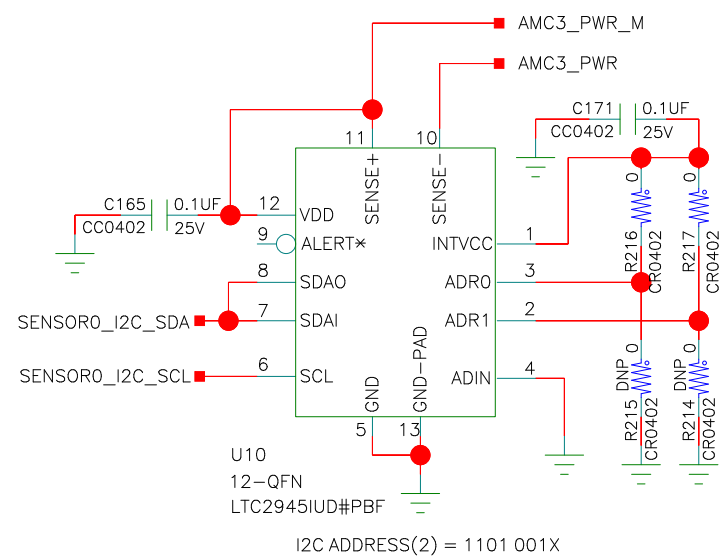
I2C ADDRESS(5) = 1101 100X



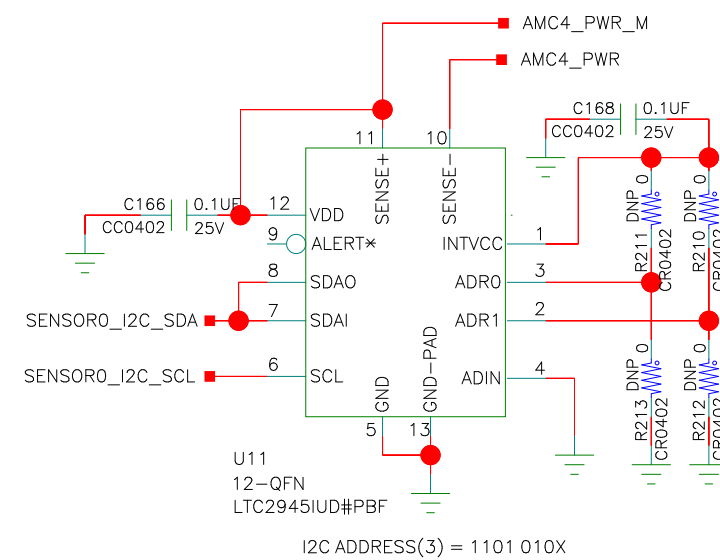
I2C ADDRESS(1) = 1101 000X



I2C ADDRESS(4) = 1101 011X



I2C ADDRESS(2) = 1101 001X

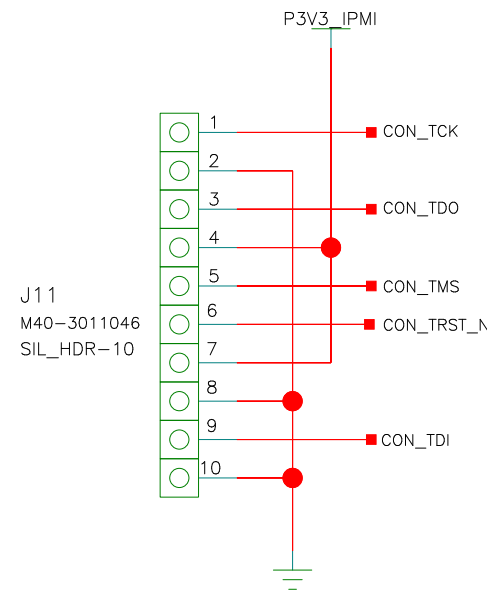


I2C ADDRESS(3) = 1101 010X

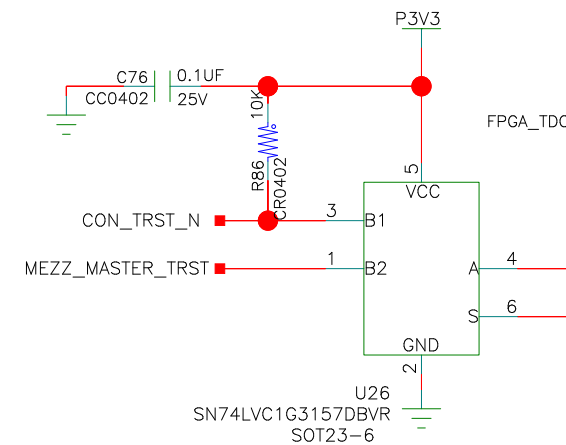
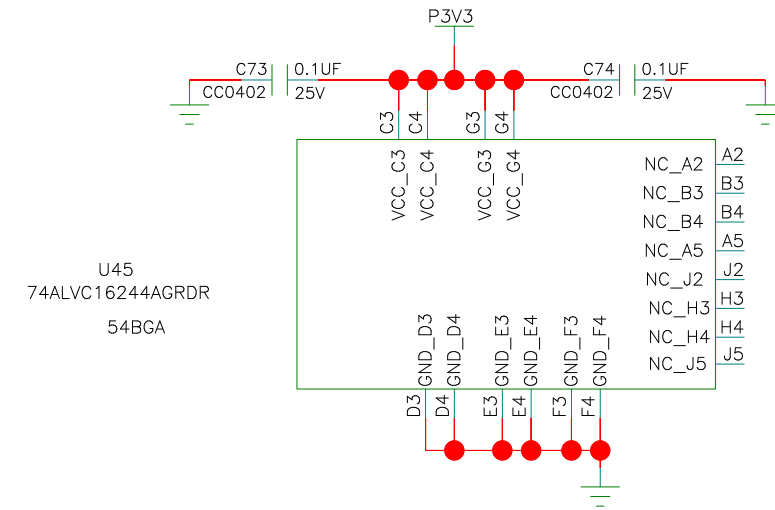
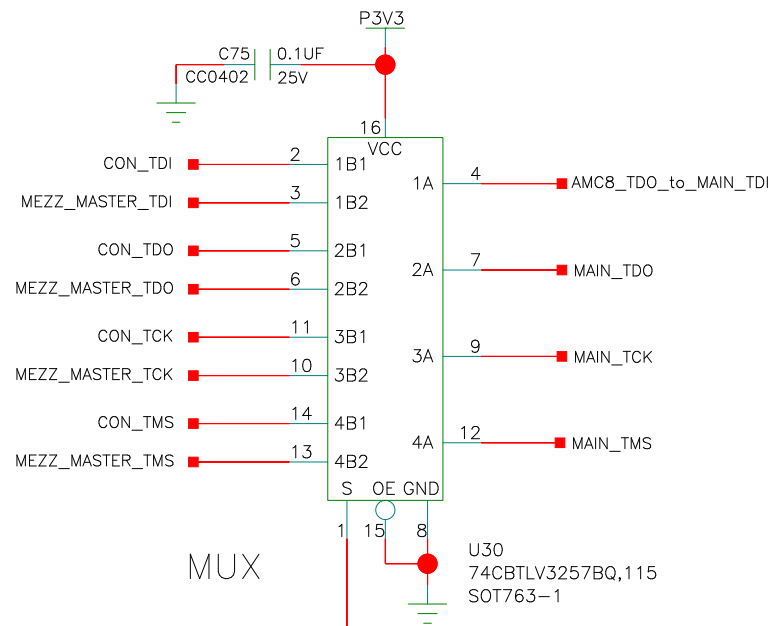
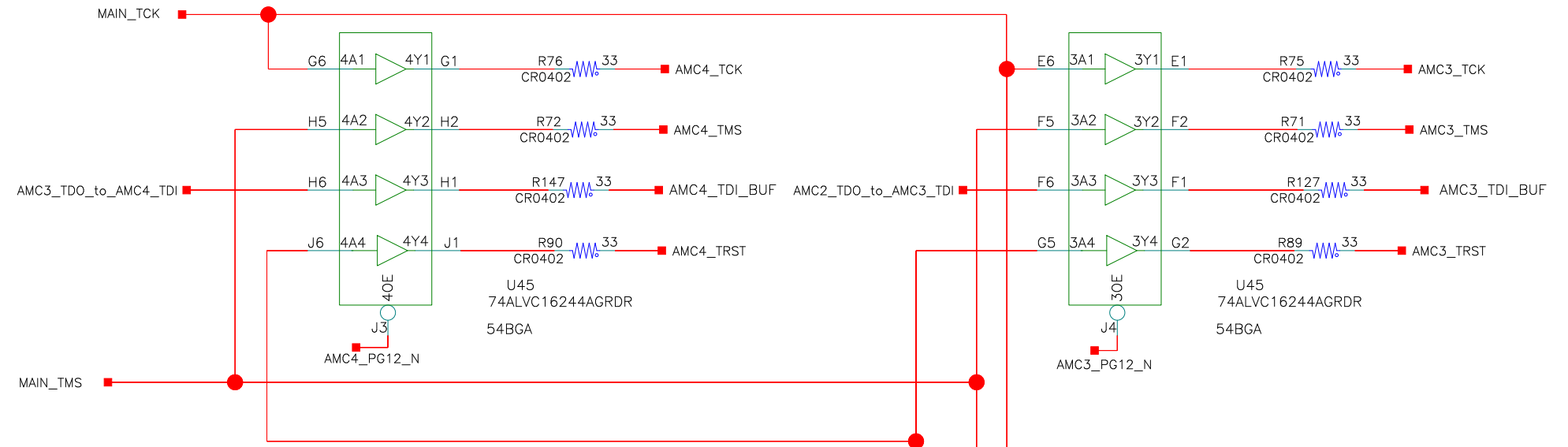
CURRENT MONITORS  
 102.4 MV MAX.  
 102.4 AMPS MAX  
 1 MV / AMP

# AMC / RTM CURRENT MONITORS

COMPANY	STONY BROOK UNIVERSITY		
TITLE	ATCA		
SIZE	B	REV	A
DRAWN	ES	DATE	22/01/2015:09:07
		SHEET	15 OF 49

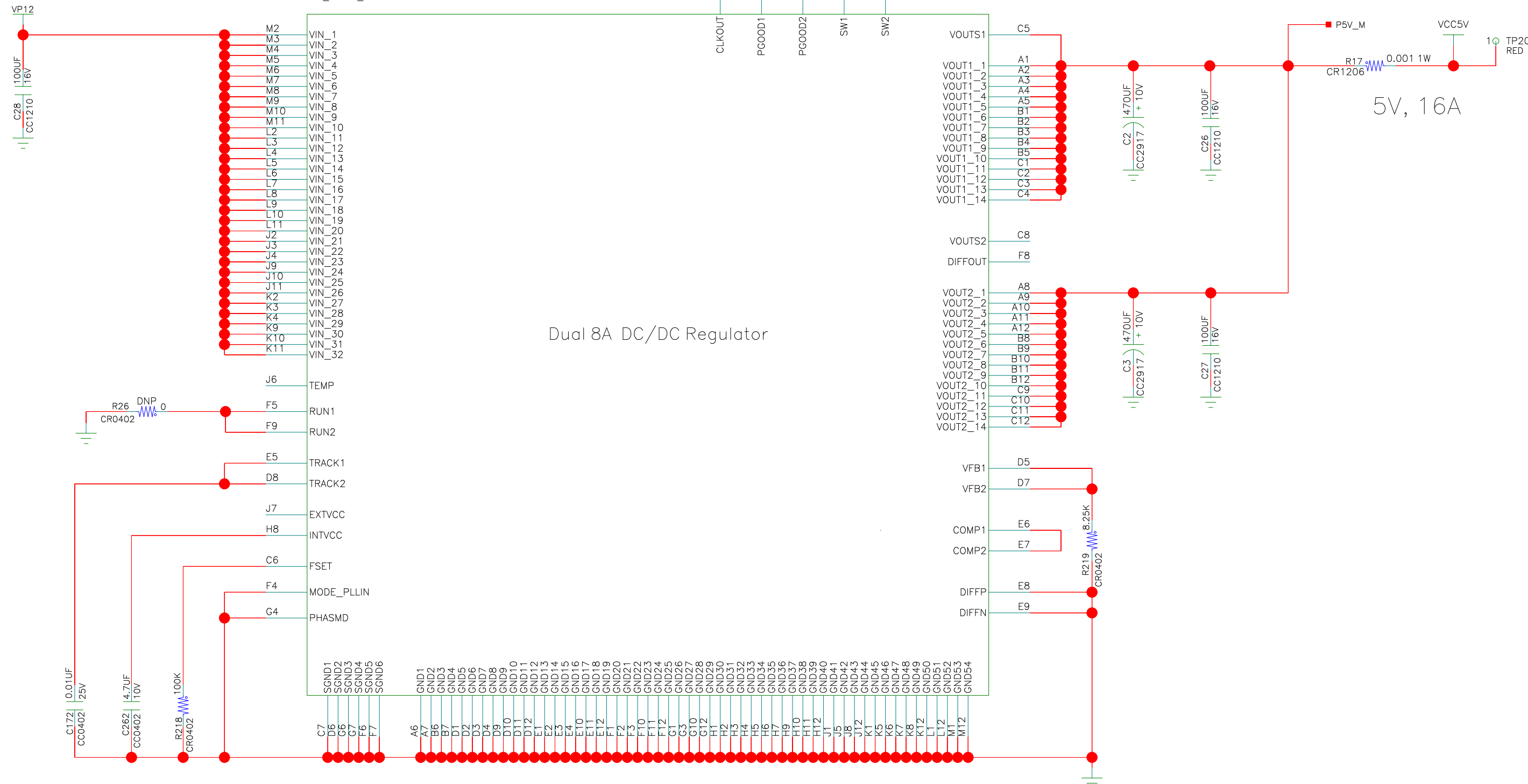


### ATCA JTAG CHAIN



### JTAG

COMPANY	STONY BROOK UNIVERSITY			
TITLE	ATCA			
SIZE	B	REV	A	SHEET 16 OF 49
DRAWN	ES	DATE	22/01/2015:09:07	



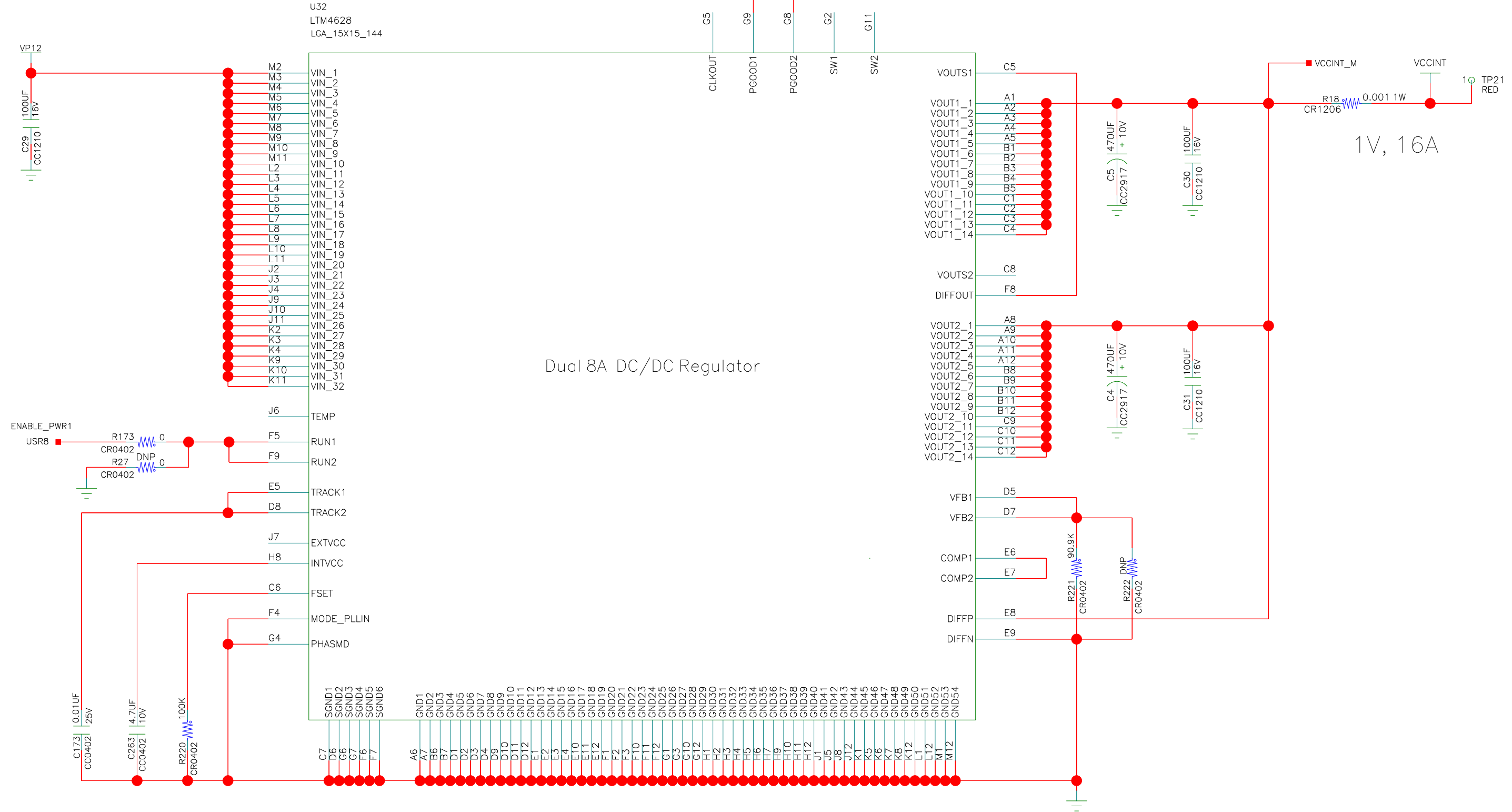
Dual 8A DC/DC Regulator

5V, 16A

VCC5V powers on with the system VCC12V  
 Internal pullups on RUN1, RUN2 insure that VCC5V is enabled with VCC12V

# 5V0 PREREGULATOR

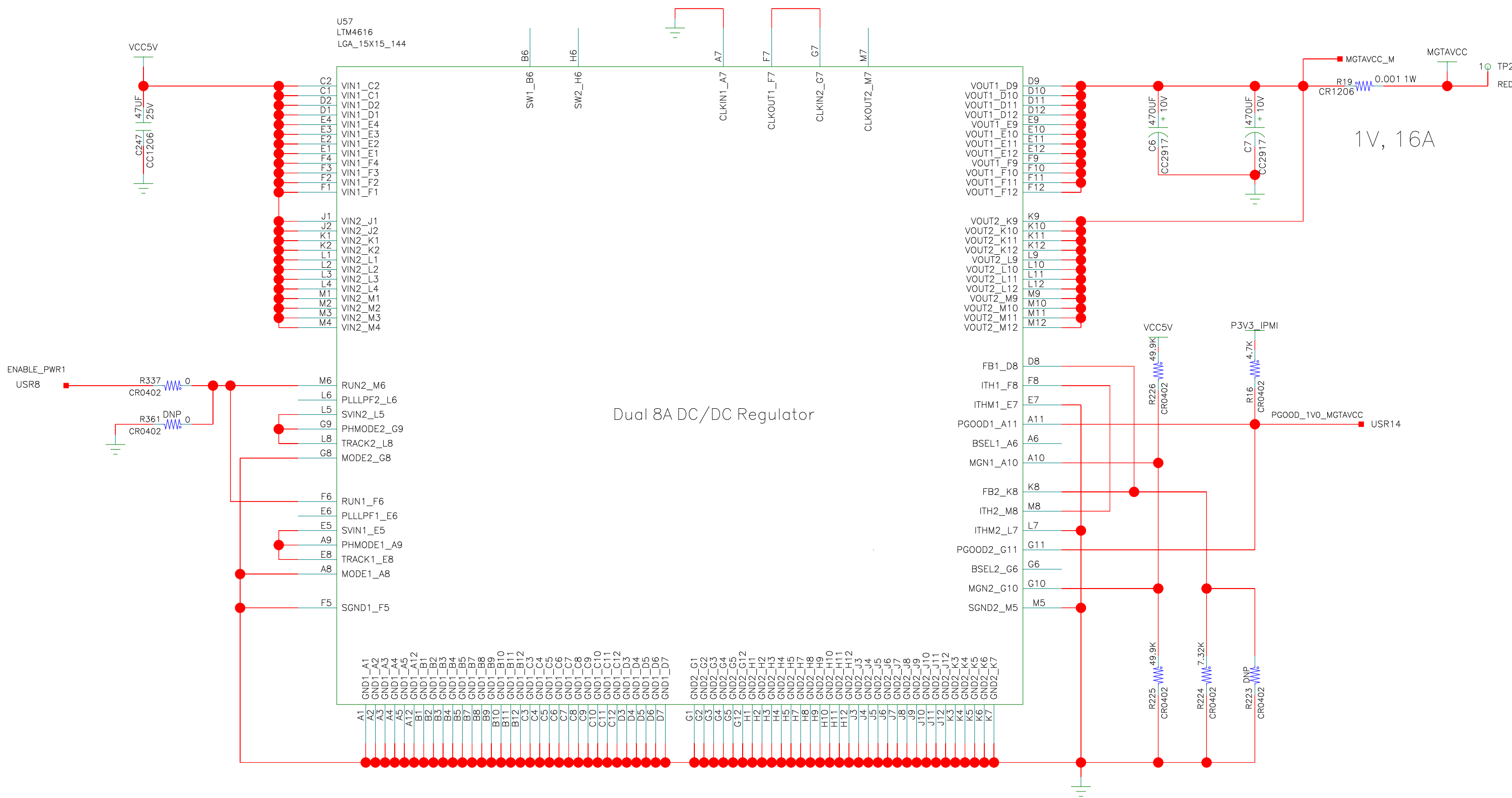
COMPANY	STONY BROOK UNIVERSITY		
TITLE	ATCA		
SIZE	B	REV	A
DRAWN	ES	DATE	22/01/2015:09:07
		SHEET	17 OF 49



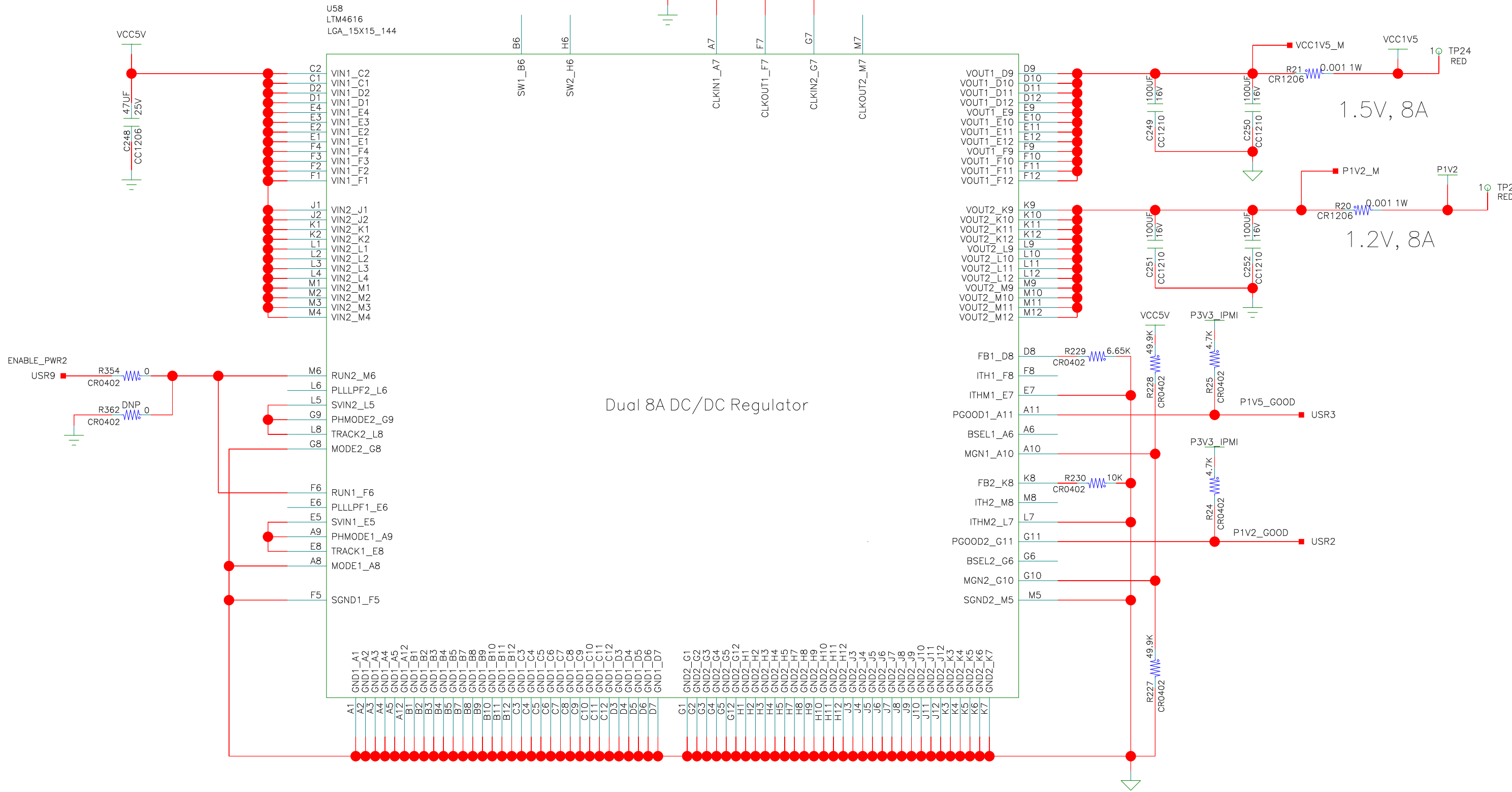
Dual 8A DC/DC Regulator

1V0 CORE VOLTAGE

COMPANY	STONY BROOK UNIVERSITY		
TITLE	ATCA		
SIZE	B	REV	A
DRAWN	ES	DATE	22/01/2015:09:07
		SHEET	18 OF 49



COMPANY	STONY BROOK UNIVERSITY			
TITLE	ATCA			
SIZE	B	REV	A	SHEET 19 OF 49
DRAWN	ES	DATE	22/01/2015:09:07	



Dual 8A DC/DC Regulator

1V5 1V2 REGULATOR

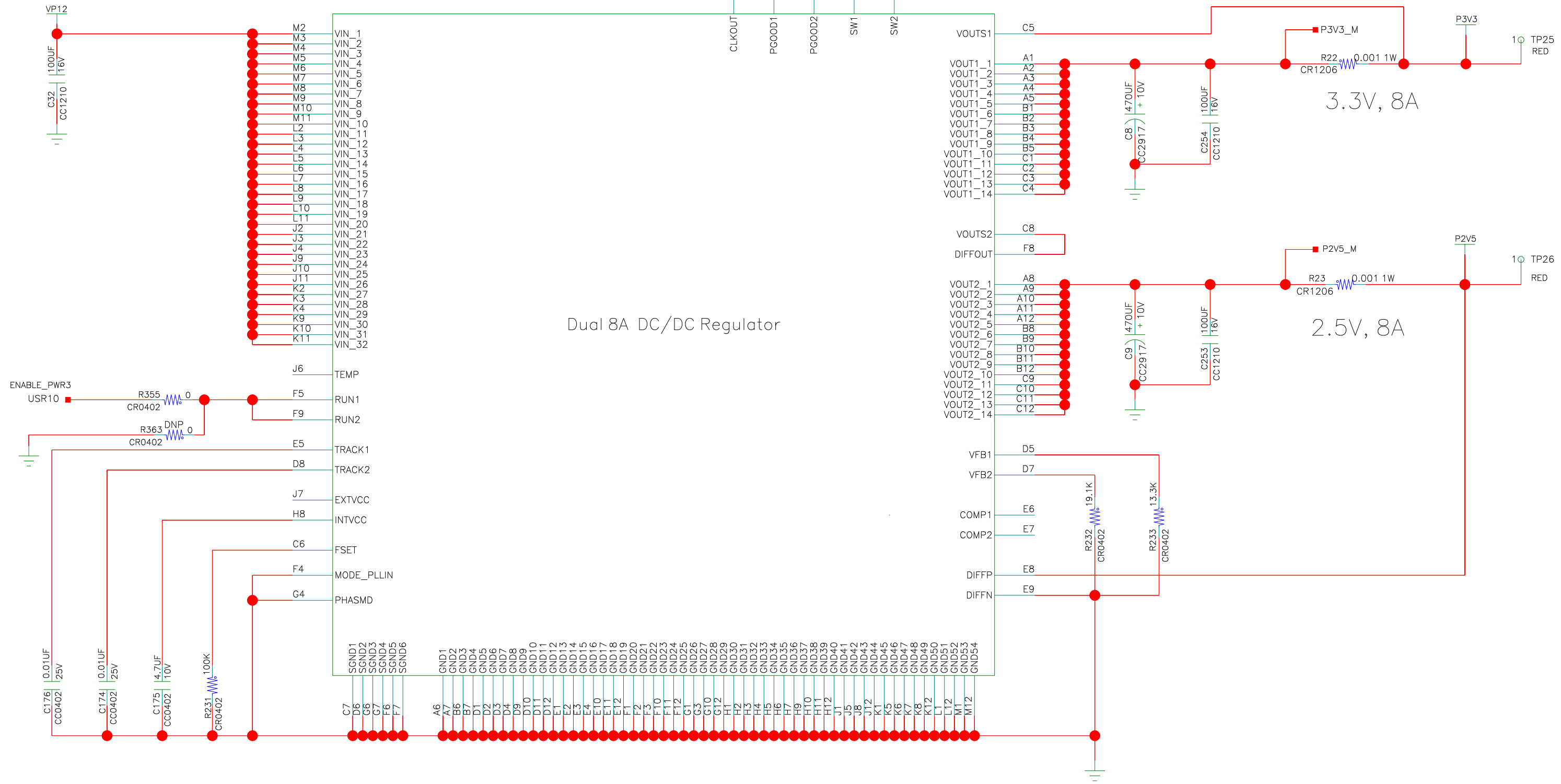
COMPANY	STONY BROOK UNIVERSITY		
TITLE	ATCA		
SIZE	B	REV	A
DRAWN	ES	DATE	22/01/2015:09:07
		SHEET	20 OF 49



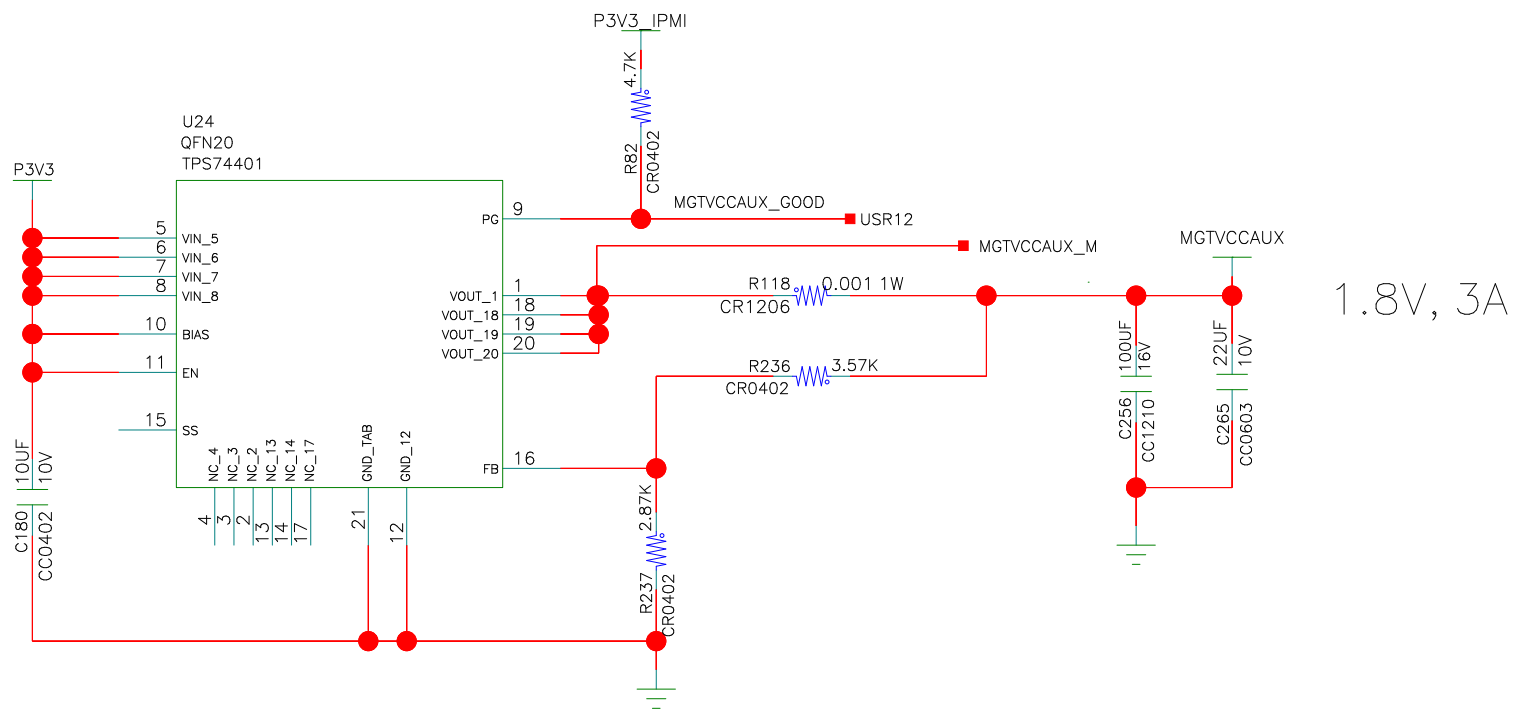
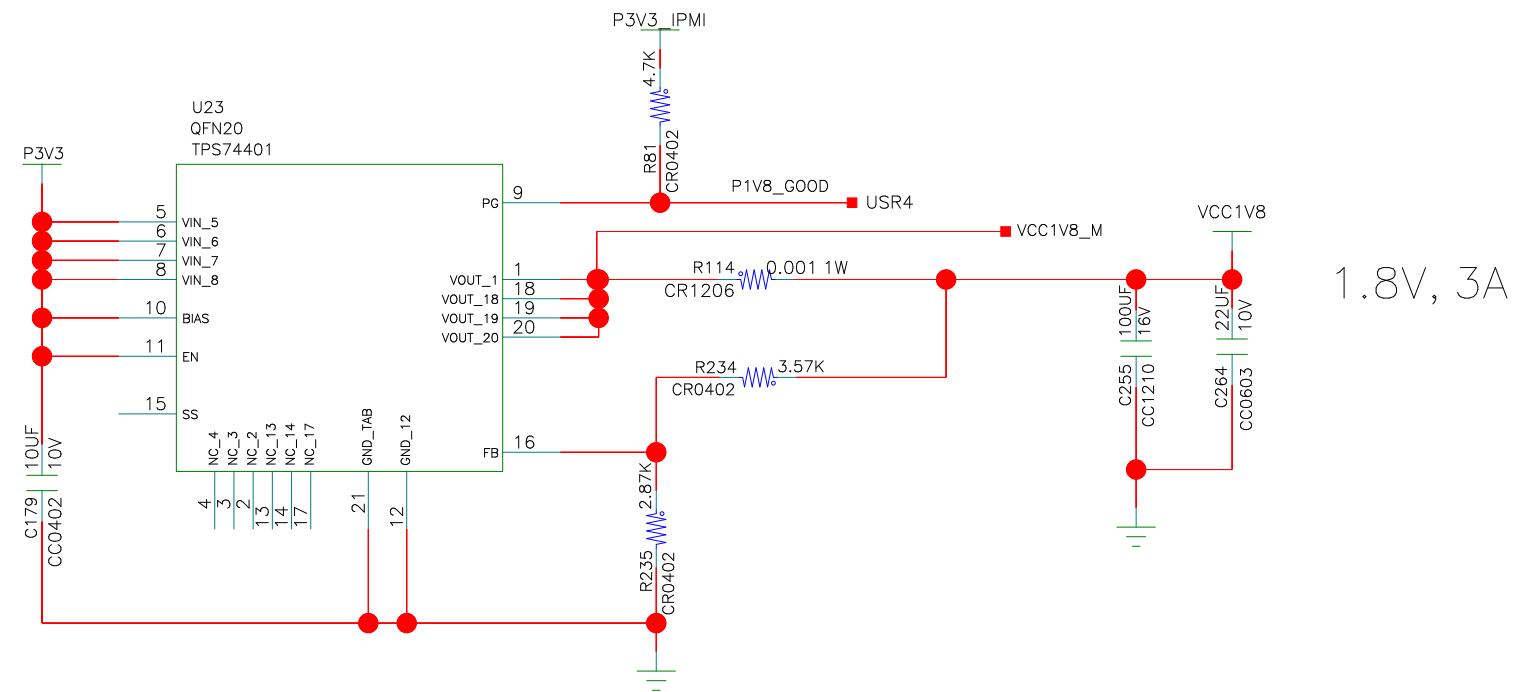
U33  
LTM4628  
LGA\_15x15\_144

Dual 8A DC/DC Regulator

3V3 2V5 REGULATOR

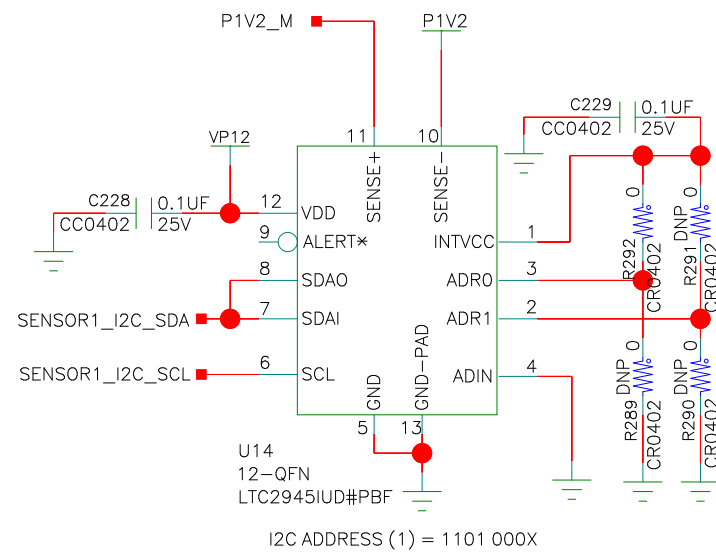


COMPANY	STONY BROOK UNIVERSITY			
TITLE	ATCA			
SIZE	B	REV	A	SHEET 21 OF 49
DRAWN	ES	DATE	22/01/2015:09:07	

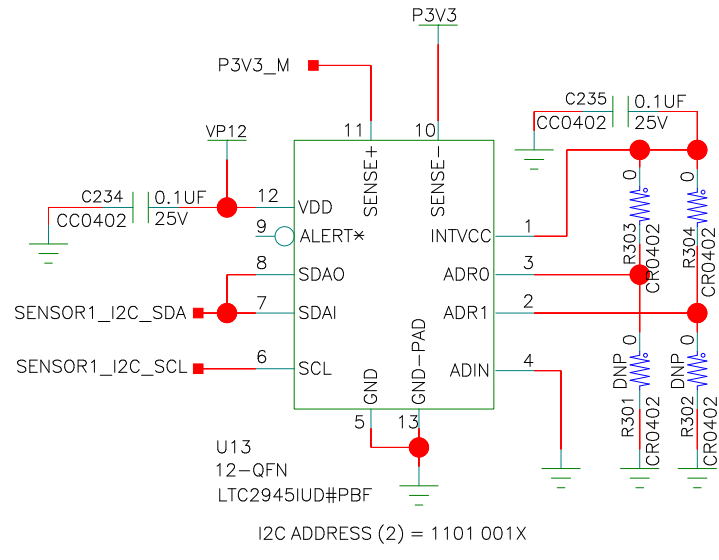


# LINEAR REGULATORS

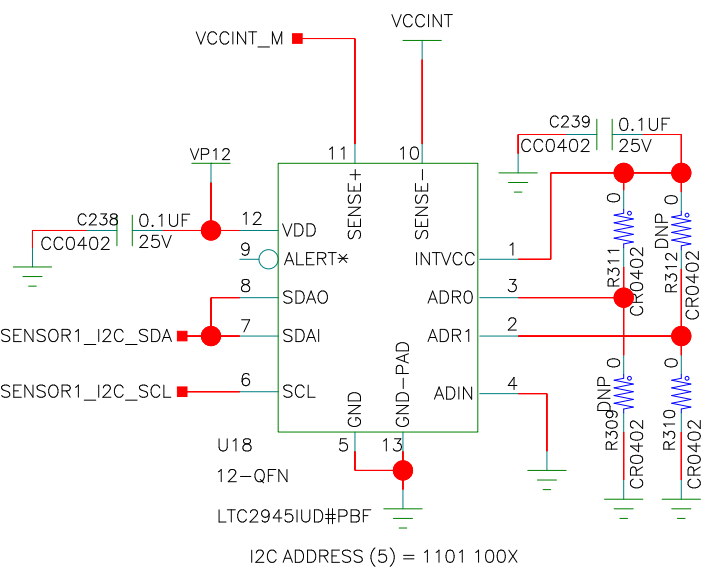
COMPANY	STONY BROOK UNIVERSITY		
TITLE	ATCA		
SIZE	B	REV	A
DRAWN	ES	DATE	22/01/2015:09:07
		SHEET	22 OF 49



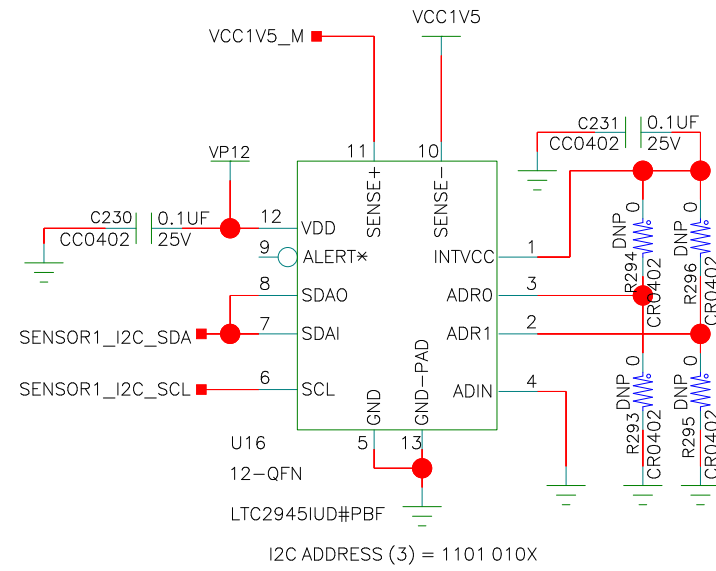
1.2V 8A  
CURRENT MONITOR  
102.4 MV MAX.  
102.4 AMPS MAX  
1 MV / AMP



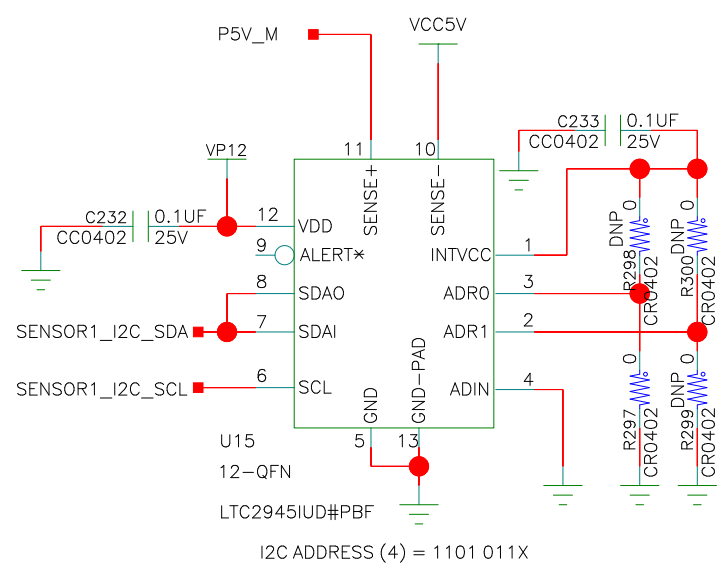
3.3V 8A  
CURRENT MONITOR  
102.4 MV MAX.  
102.4 AMPS MAX  
1 MV / AMP



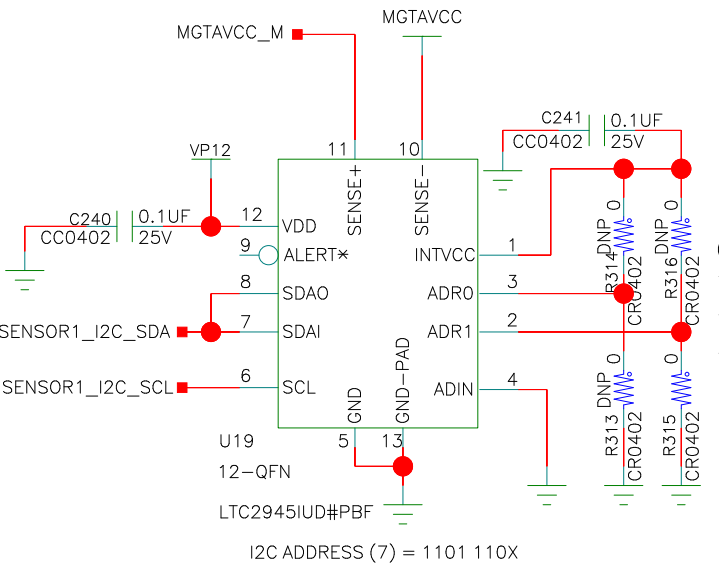
1.0V 16A  
CURRENT MONITOR  
102.4 MV MAX.  
102.4 AMPS MAX  
1 MV / AMP



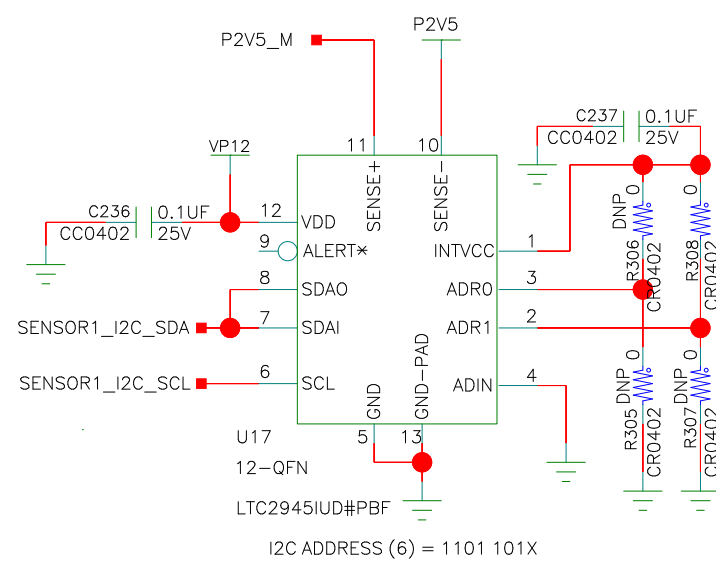
1.5V 8A  
CURRENT MONITOR  
102.4 MV MAX.  
102.4 AMPS MAX  
1 MV / AMP



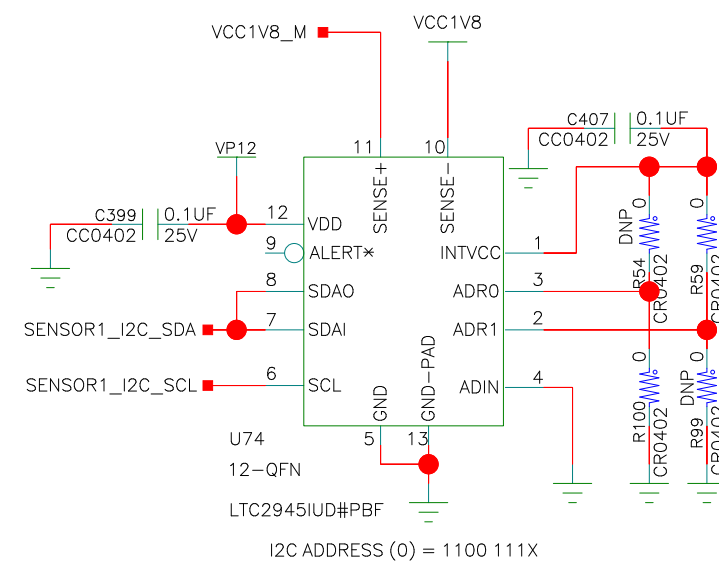
5.0V 16A  
CURRENT MONITOR  
102.4 MV MAX.  
102.4 AMPS MAX  
1 MV / AMP



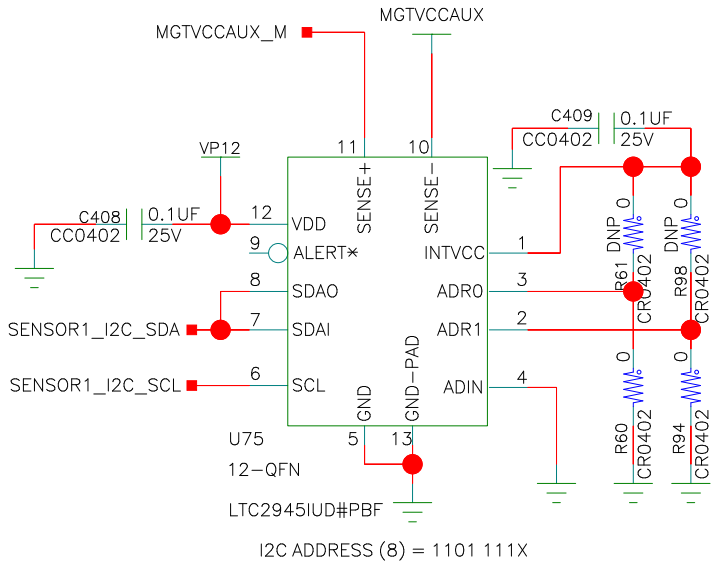
1.0V 16A  
CURRENT MONITOR  
102.4 MV MAX.  
102.4 AMPS MAX  
1 MV / AMP



2.5V 8A  
CURRENT MONITOR  
102.4 MV MAX.  
102.4 AMPS MAX  
1 MV / AMP



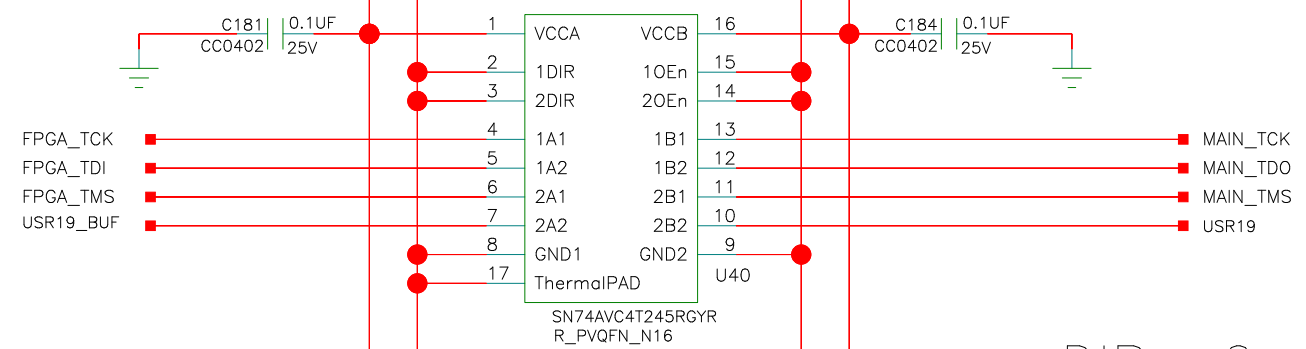
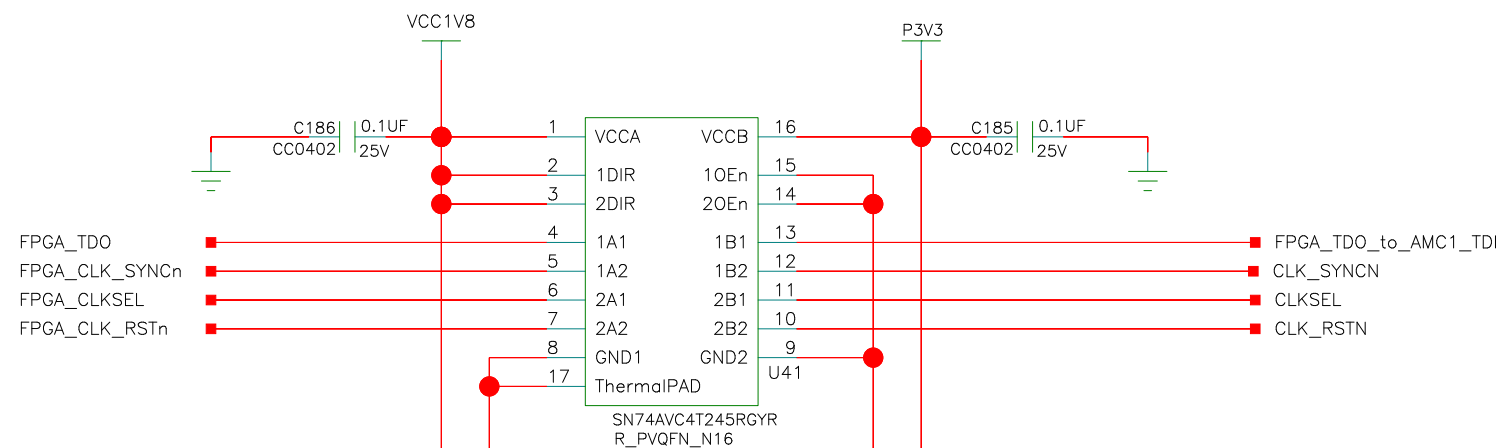
1.8V 3A  
CURRENT MONITOR  
102.4 MV MAX.  
102.4 AMPS MAX  
1 MV / AMP



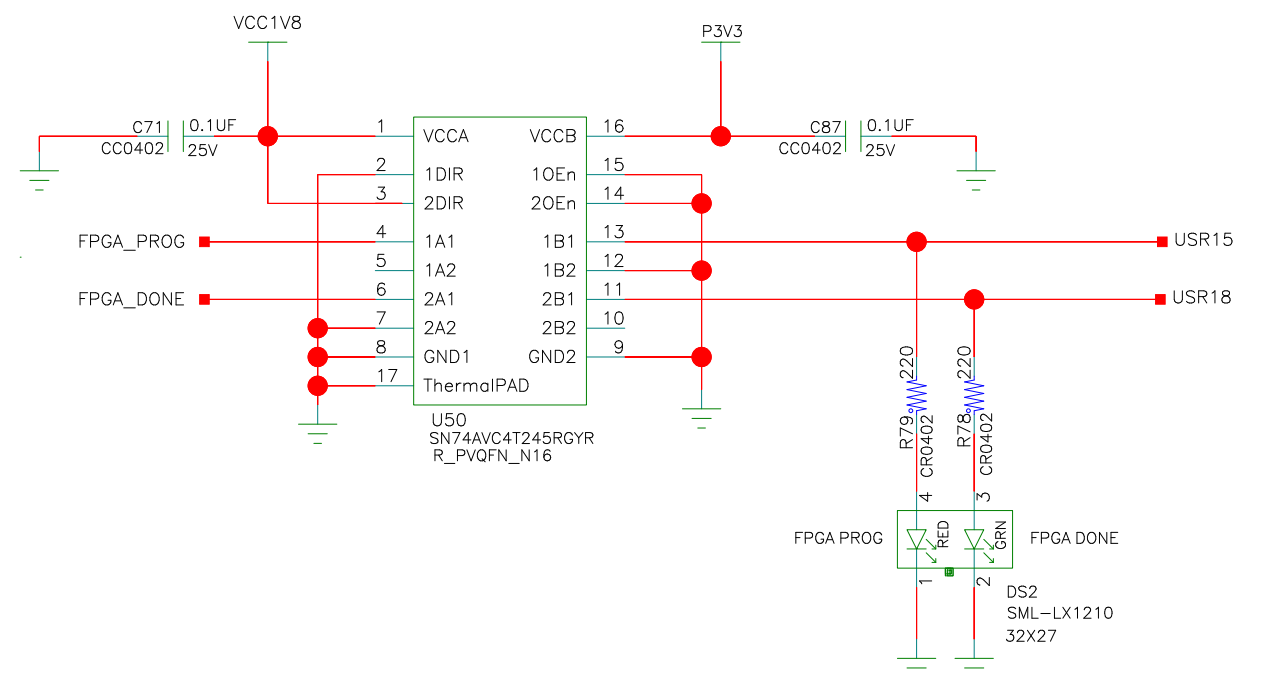
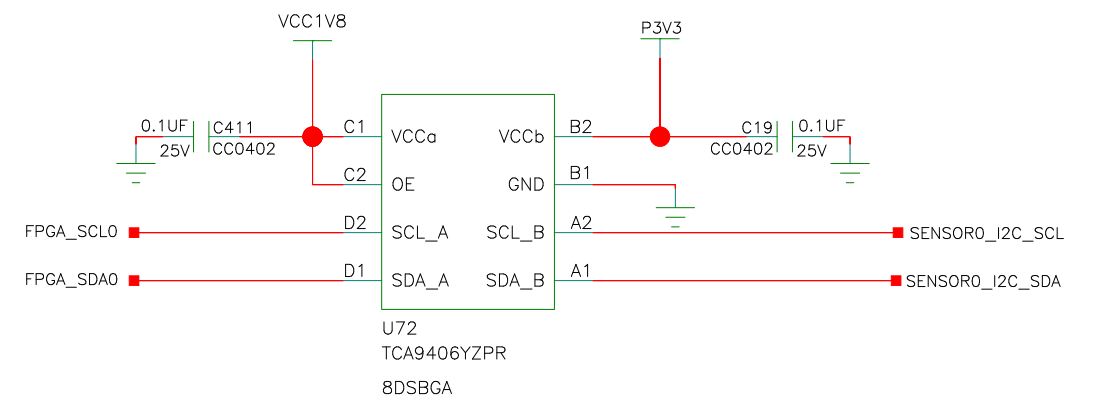
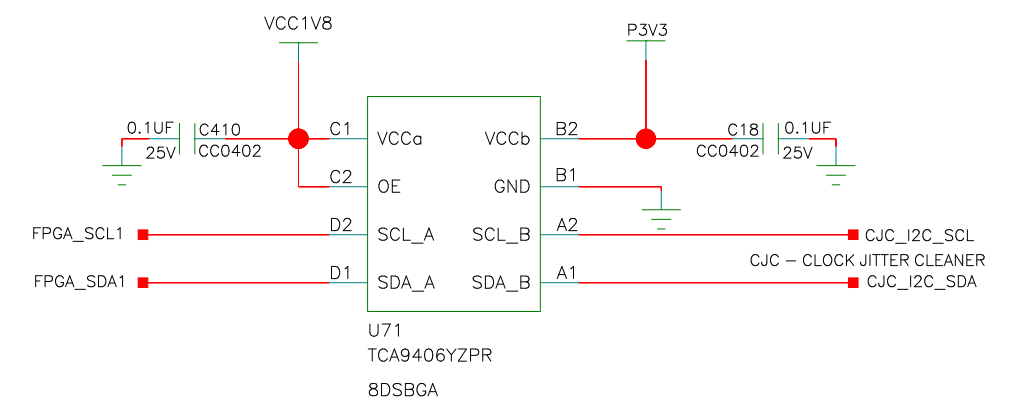
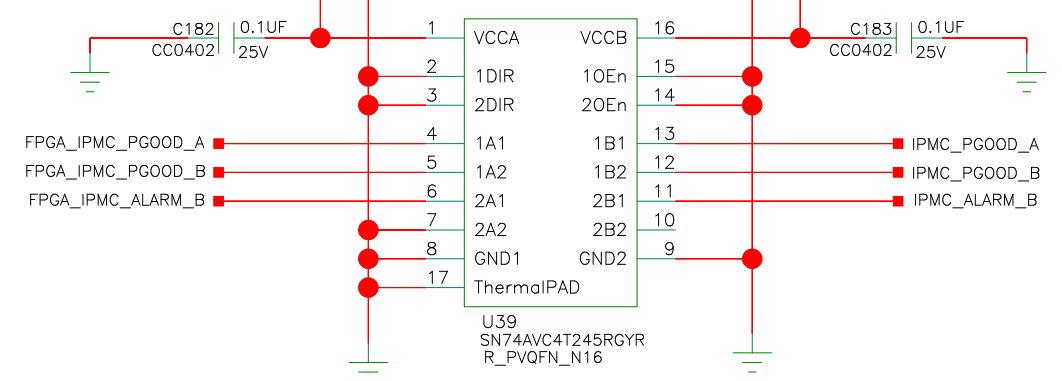
1.8V 3A  
CURRENT MONITOR  
102.4 MV MAX.  
102.4 AMPS MAX  
1 MV / AMP

# CURRENT MONITORS

COMPANY	STONY BROOK UNIVERSITY			
TITLE	ATCA			
SIZE	B	REV	A	SHEET 23 OF 49
DRAWN	ES	DATE	22/01/2015:09:07	

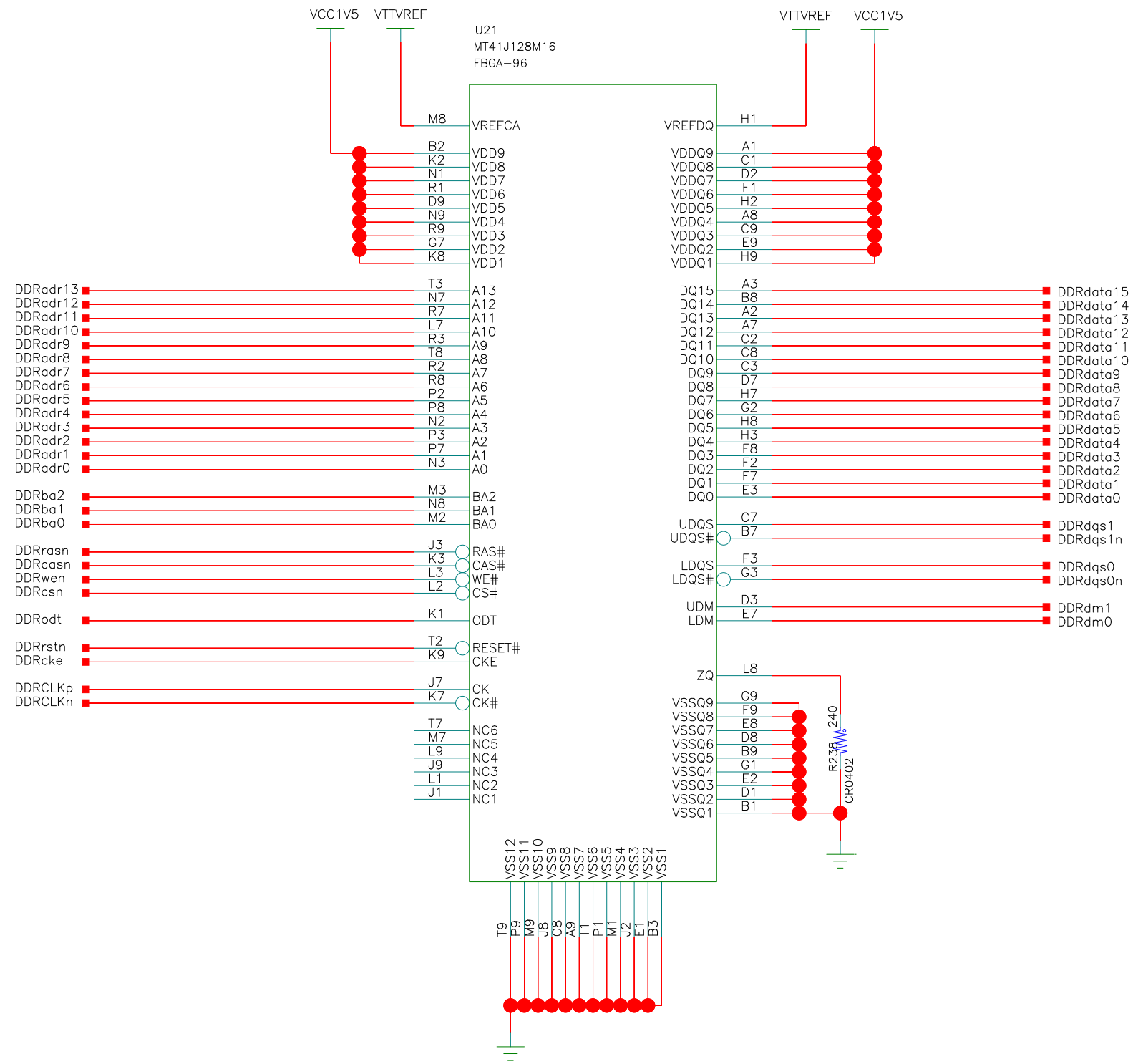


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 DIR = 1 => A -> B



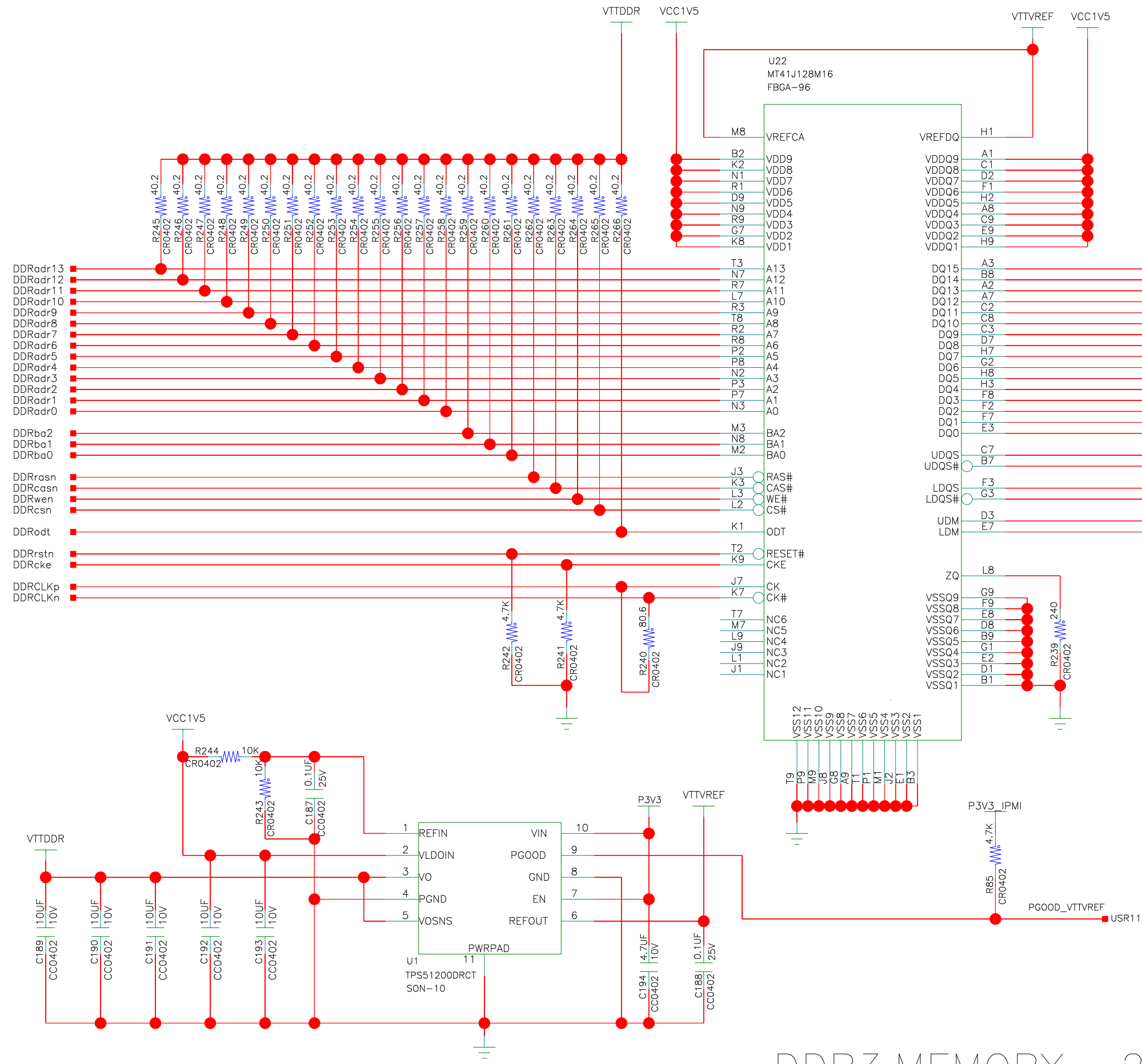
# LEVEL TRANSLATION

COMPANY	STONY BROOK UNIVERSITY			
TITLE	ATCA			
SIZE	B	REV	A	SHEET 24 OF 49
DRAWN	ES	DATE	26/02/2015:08:50	



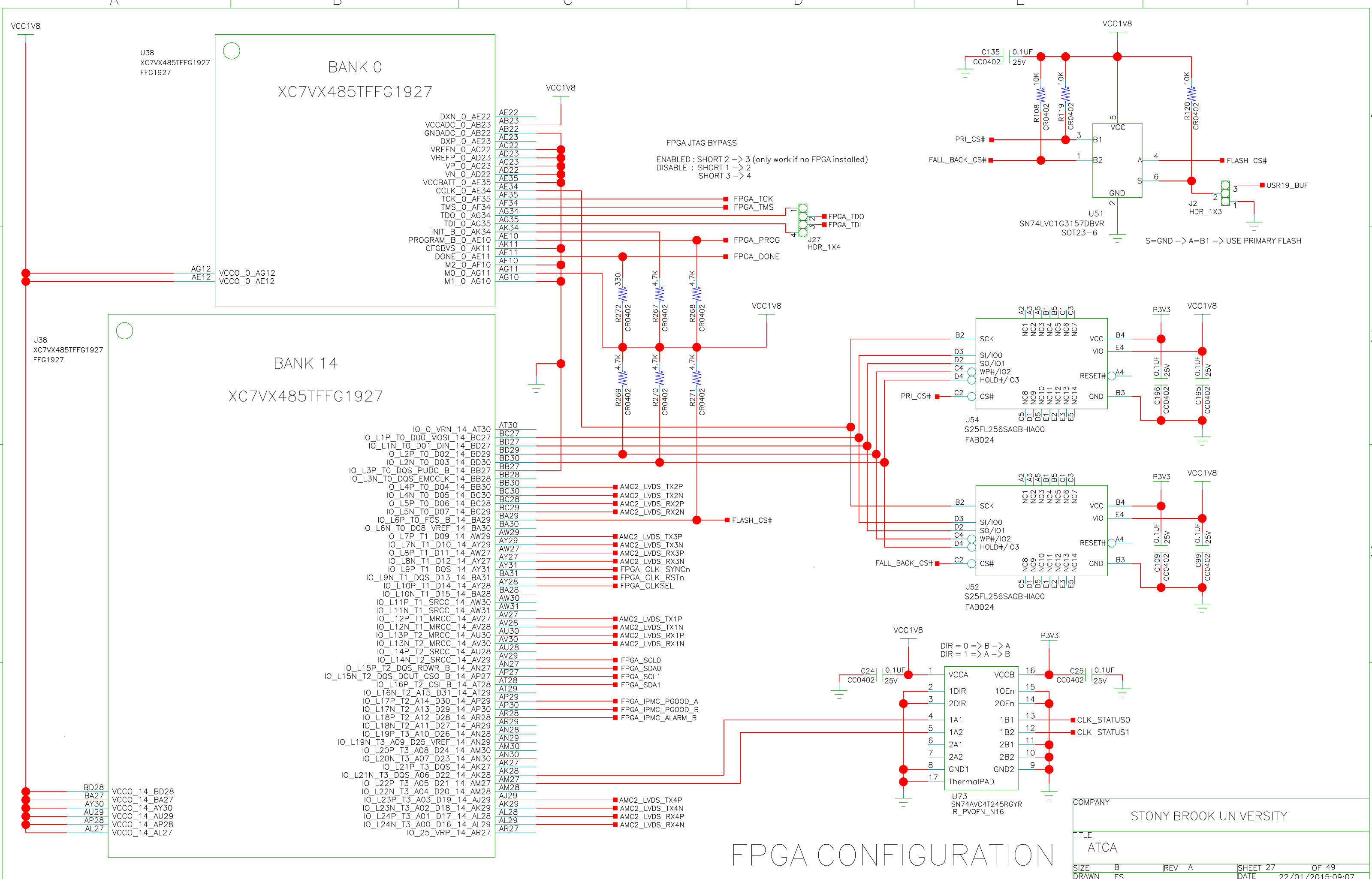
# DDR3 MEMORY - 1

COMPANY	STONY BROOK UNIVERSITY		
TITLE	ATCA		
SIZE	B	REV	A
DRAWN	ES	DATE	22/01/2015:09:07
		SHEET	25 OF 49



# DDR3 MEMORY - 2

COMPANY	STONY BROOK UNIVERSITY		
TITLE	ATCA		
SIZE	B	REV	A
DRAWN	ES	DATE	22/01/2015:09:07
SHEET	26	OF	49

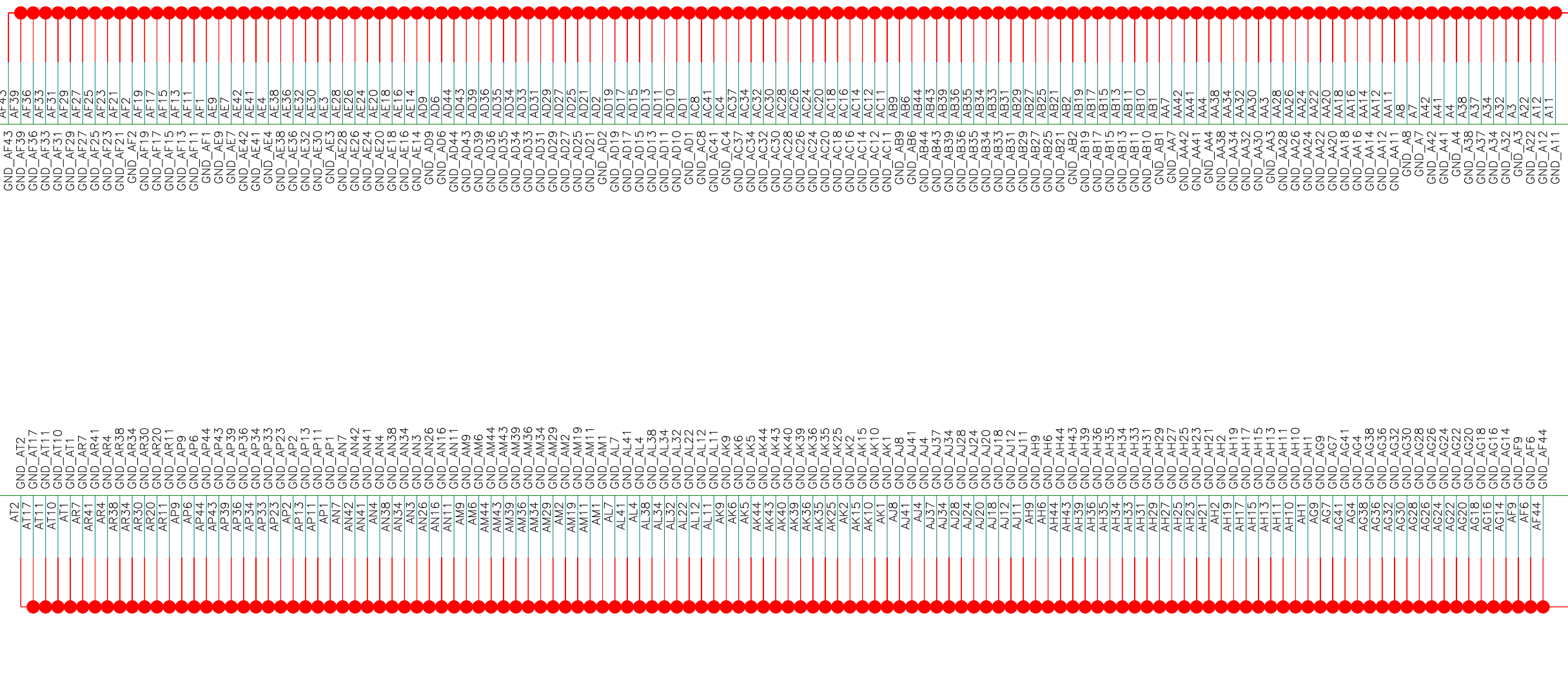


# FPGA CONFIGURATION

COMPANY			
STONY BROOK UNIVERSITY			
TITLE			
ATCA			
SIZE	B	REV	A
DRAWN	ES	DATE	22/01/2015:09:07
SHEET 27		OF 49	



BANK GND1  
XC7VX485TFFG1927

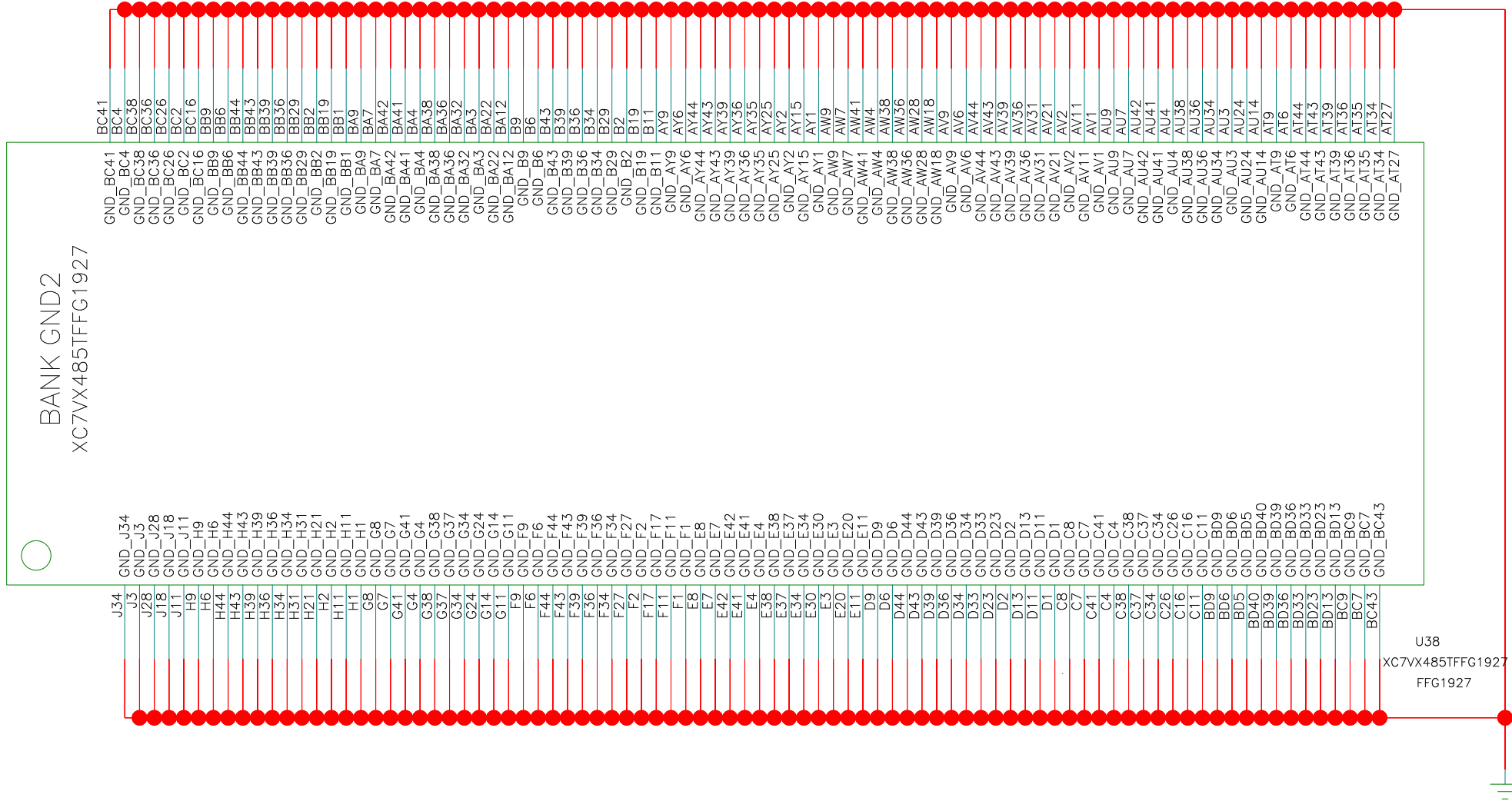


U38  
XC7VX485TFFG1927  
FFG1927

# FPGA GND - 1

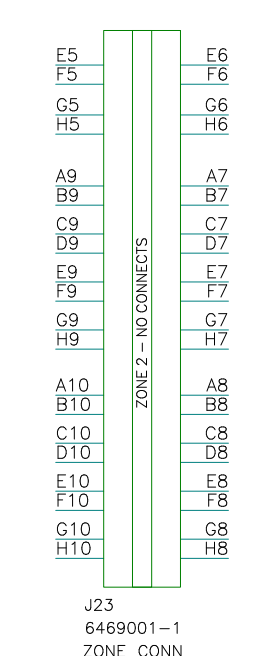
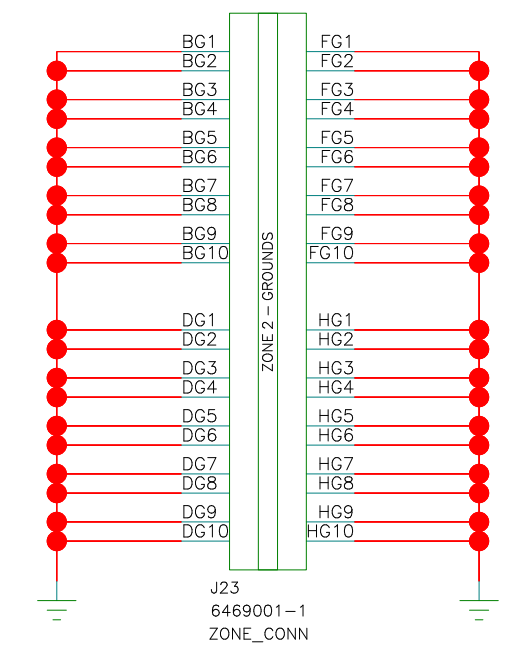
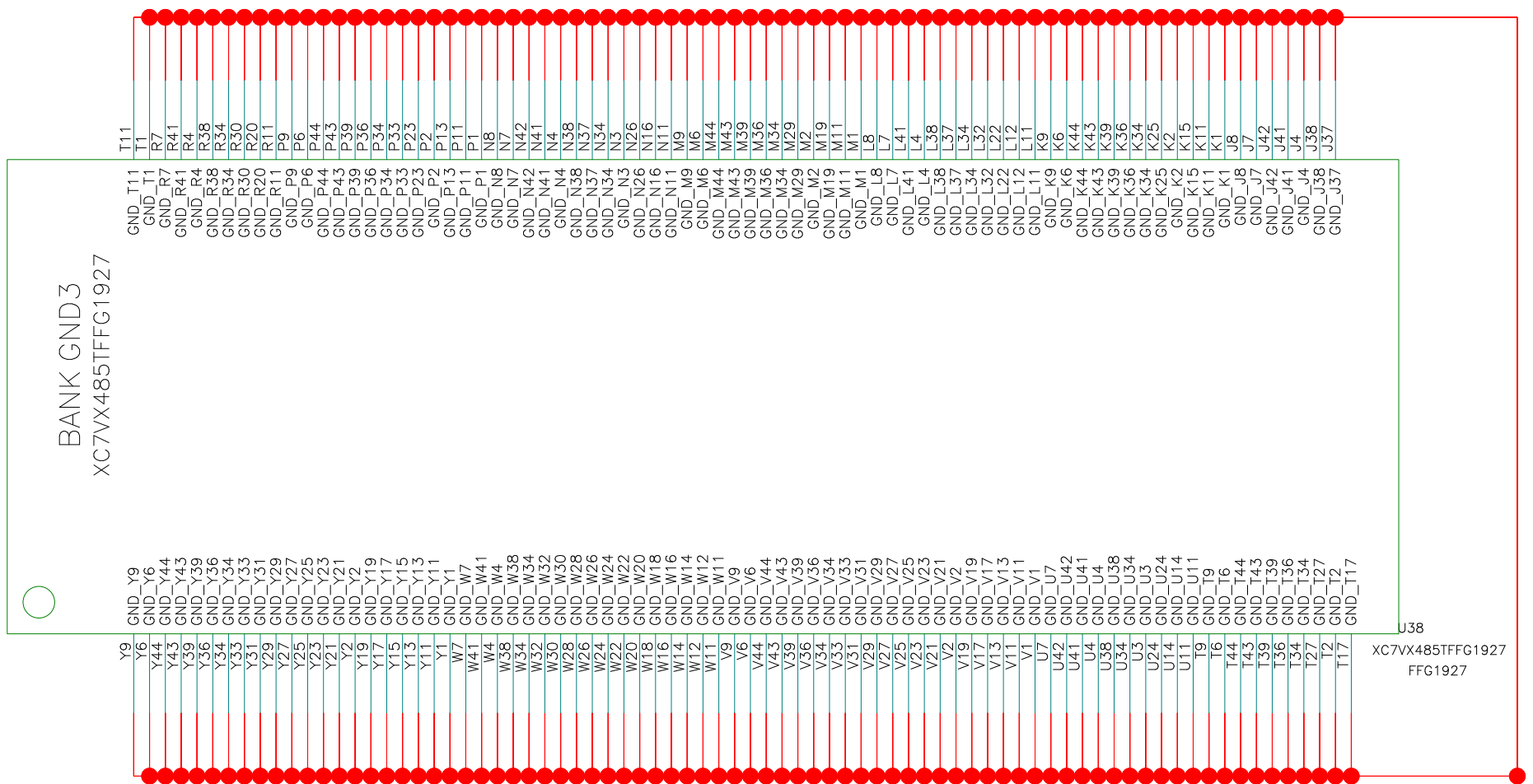
COMPANY	STONY BROOK UNIVERSITY		
TITLE	ATCA		
SIZE	B	REV	A
DRAWN	ES	DATE	22/01/2015:09:07
		SHEET	28
		OF	49





# FPGA GND - 2

COMPANY	STONY BROOK UNIVERSITY		
TITLE	ATCA		
SIZE	B	REV	A
DRAWN	ES	DATE	22/01/2015:09:07
SHEET	29	OF	49

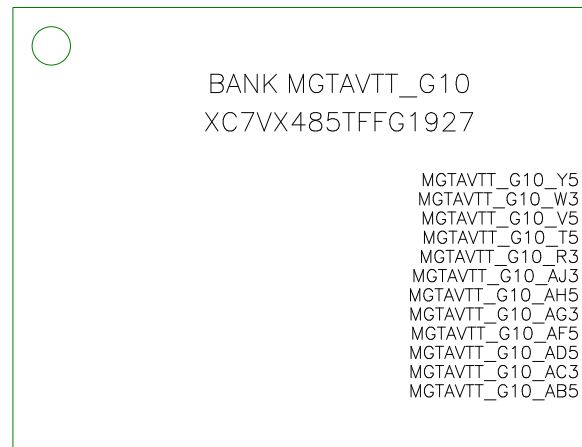


# FPGA, ZONE 2 GNDS & NC'S - 3

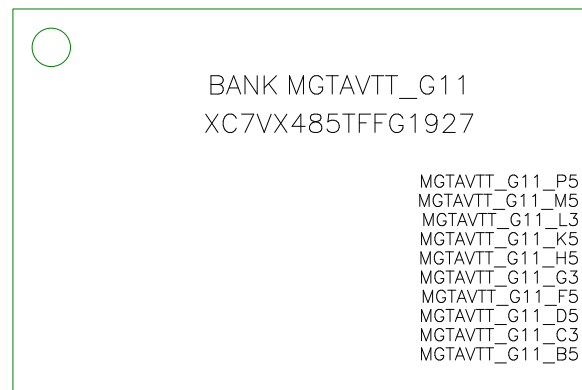
COMPANY	STONY BROOK UNIVERSITY		
TITLE	ATCA		
SIZE	B	REV	A
DRAWN	ES	DATE	22/01/2015:09:07
		SHEET	30 OF 49



U38  
XC7VX485TFFG1927  
FFG1927

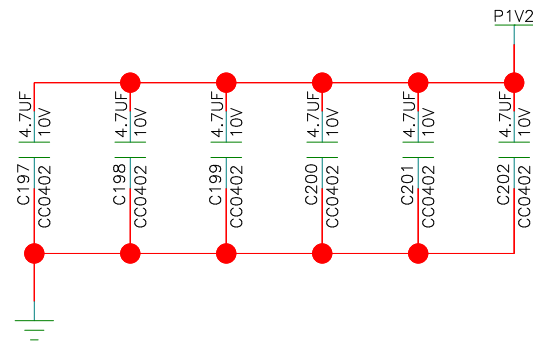


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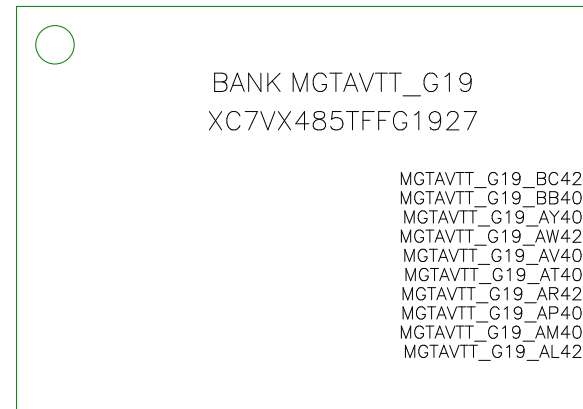


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XC7VX485TFFG1927

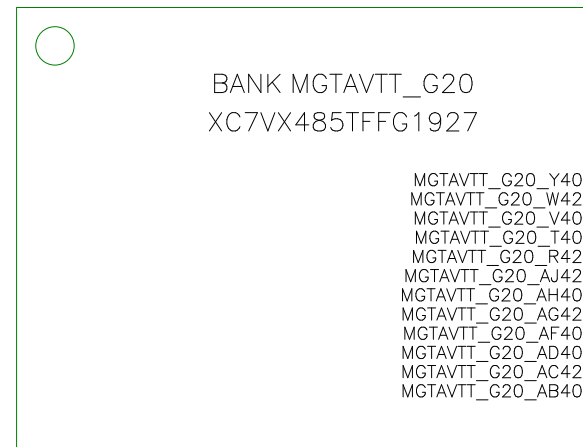
P1V2



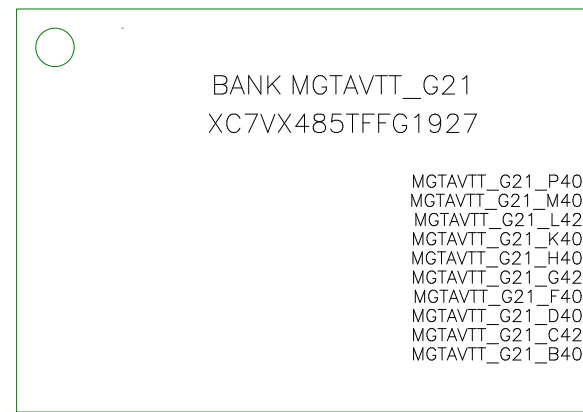
P1V2



U38  
XC7VX485TFFG1927  
FFG1927

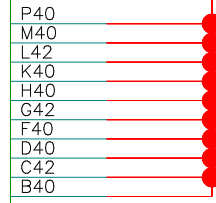
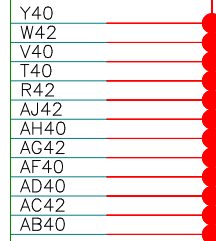
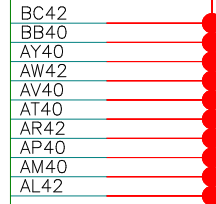


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XC7VX485TFFG1927  
FFG1927



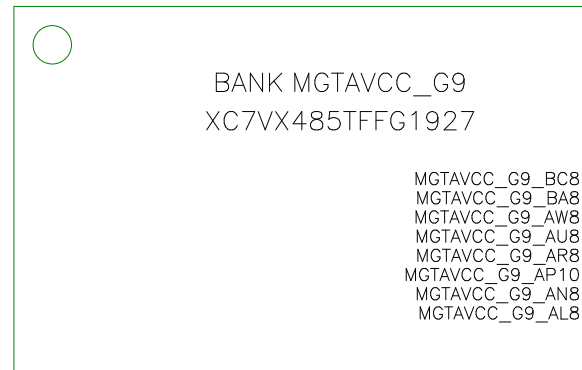
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P1V2

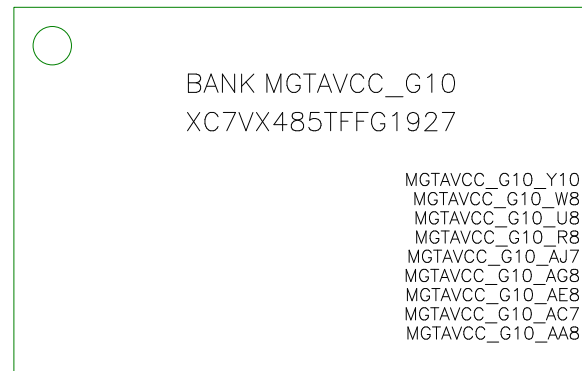


# FPGA PWR MGTAVTT

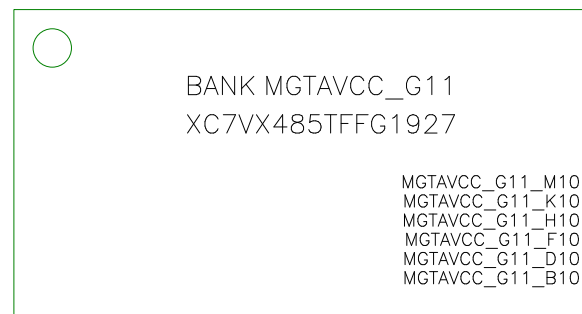
COMPANY	STONY BROOK UNIVERSITY		
TITLE	ATCA		
SIZE	B	REV	A
DRAWN	ES	DATE	22/01/2015:09:07
SHEET	31	OF	49



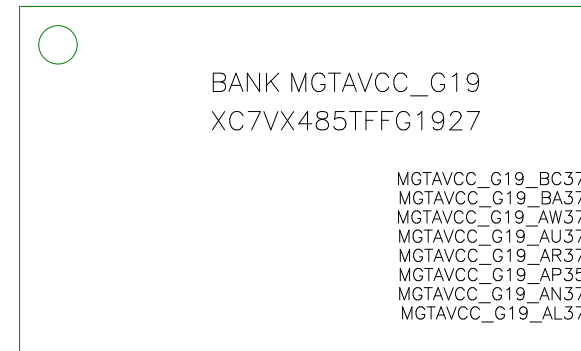
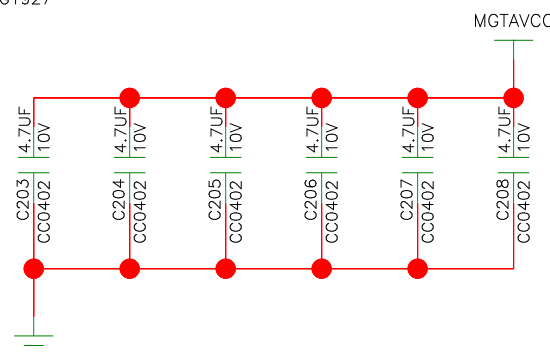
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FFG1927



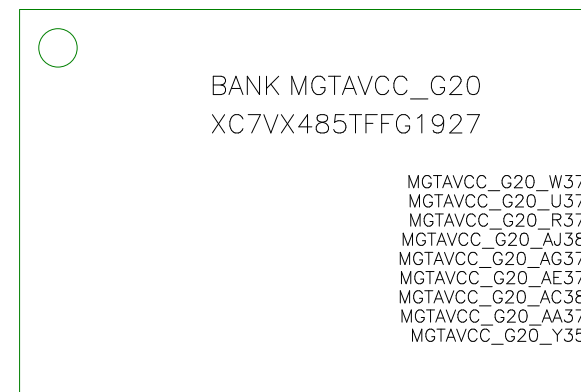
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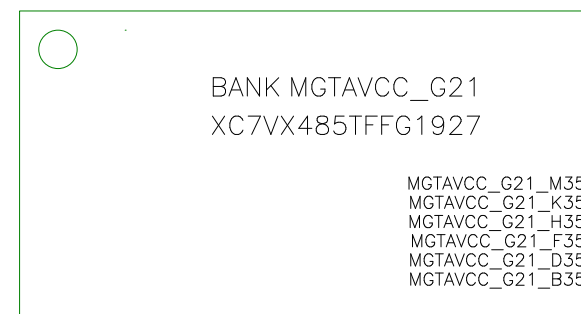
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XC7VX485TFFG1927  
FFG1927



U38  
XC7VX485TFFG1927  
FFG1927



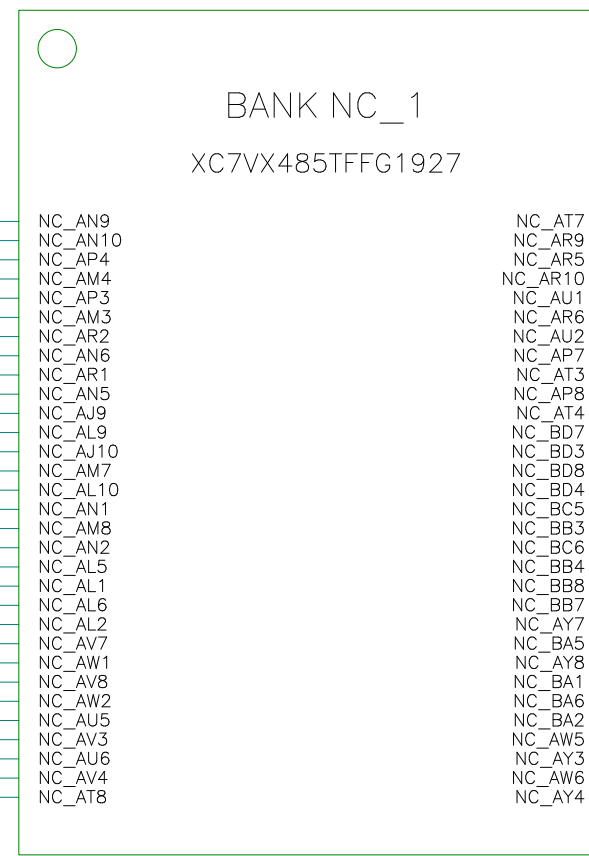
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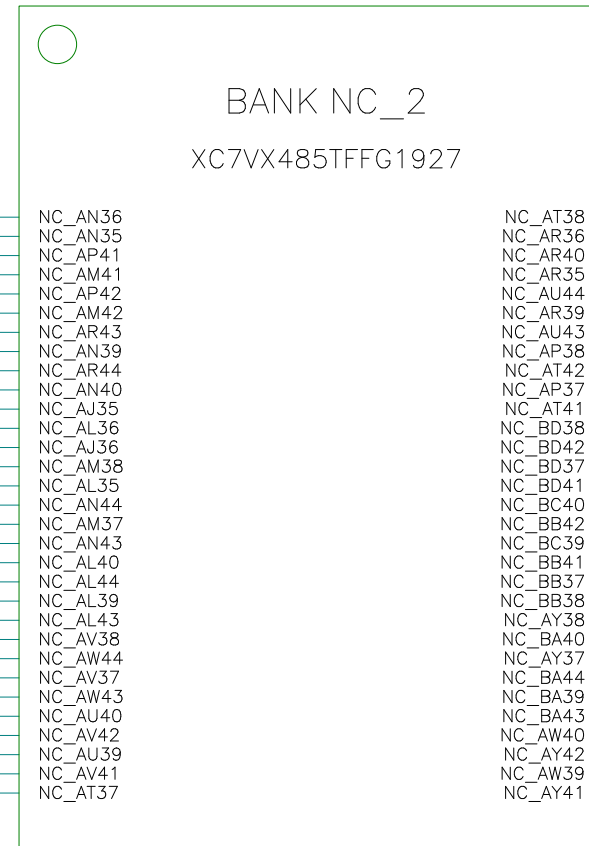
U38  
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# FPGA PWR MGTAVCC

COMPANY	STONY BROOK UNIVERSITY		
TITLE	ATCA		
SIZE	B	REV	A
DRAWN	ES	DATE	22/01/2015:09:07
SHEET	32	OF	49



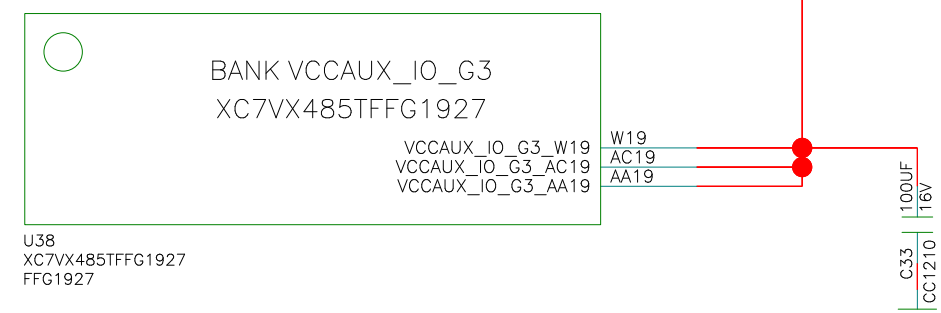
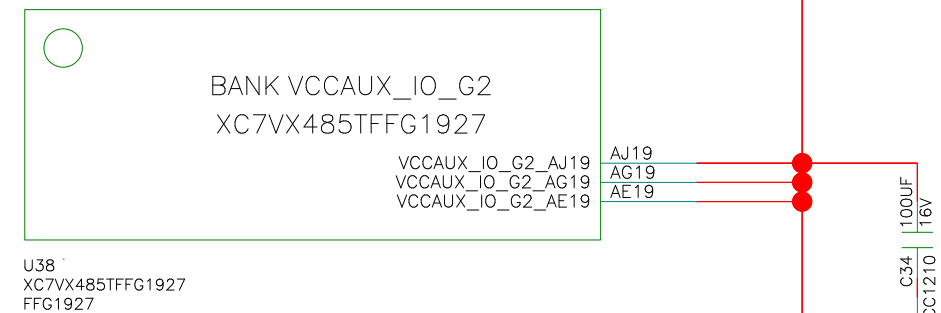
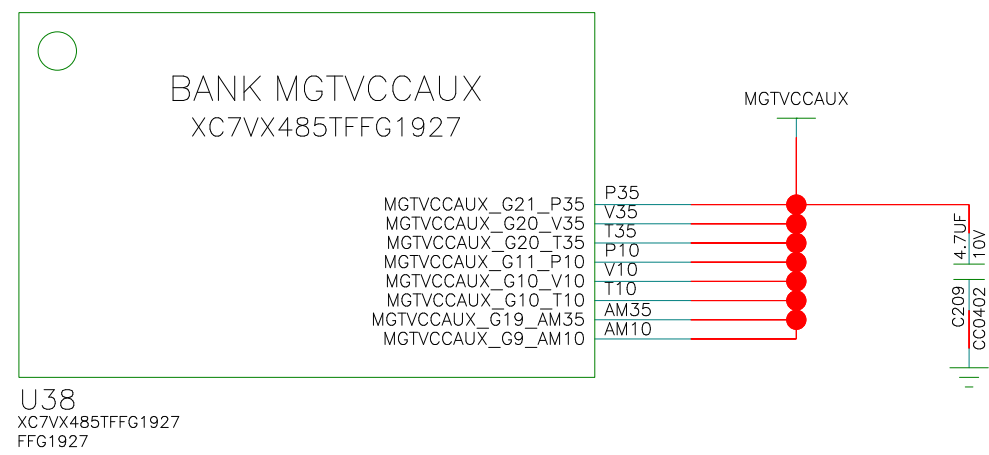
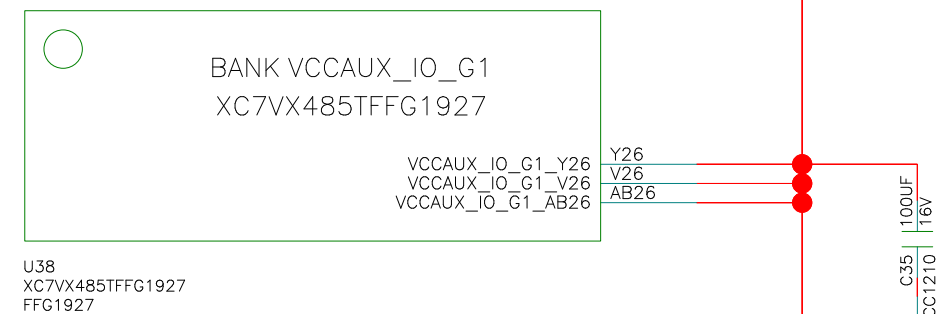
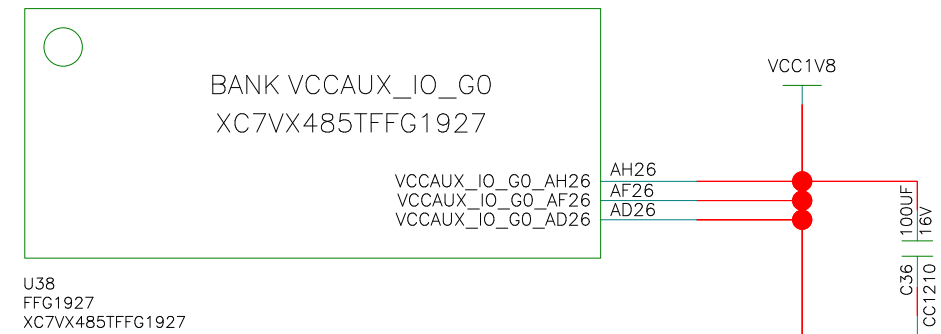
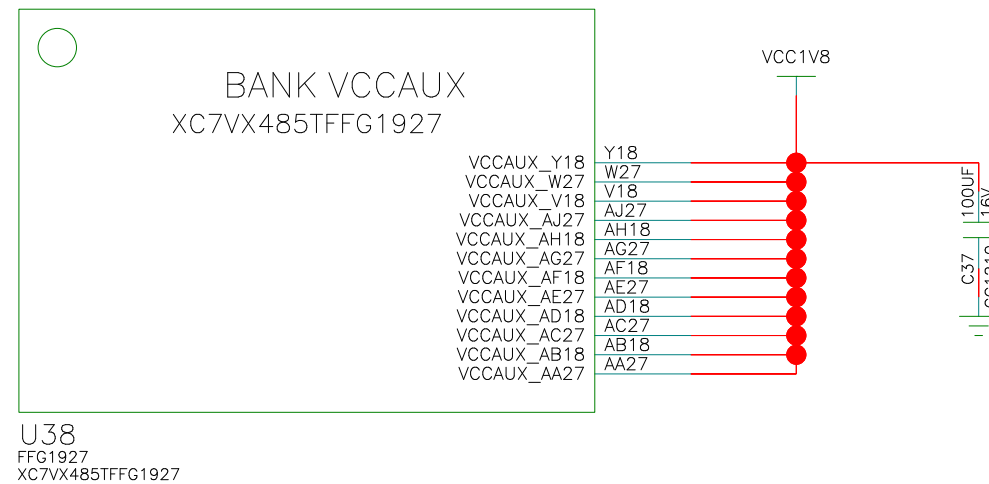
U38  
XC7VX485TFFG1927  
FFG1927



U38  
XC7VX485TFFG1927  
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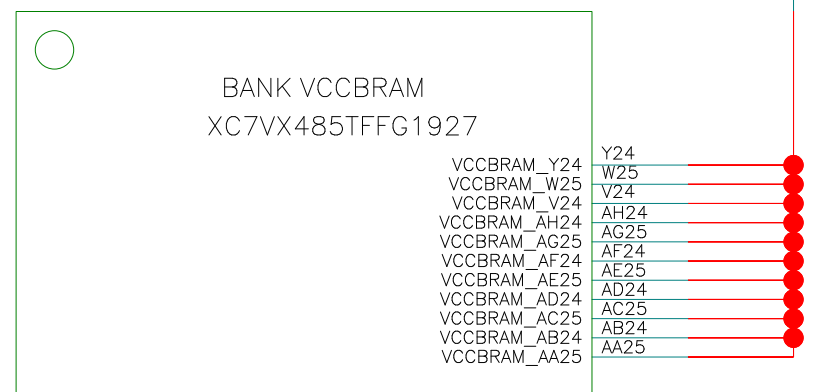
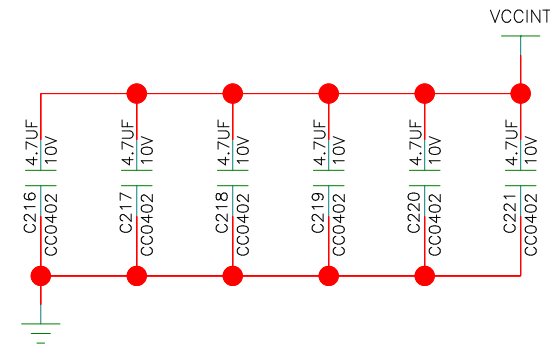
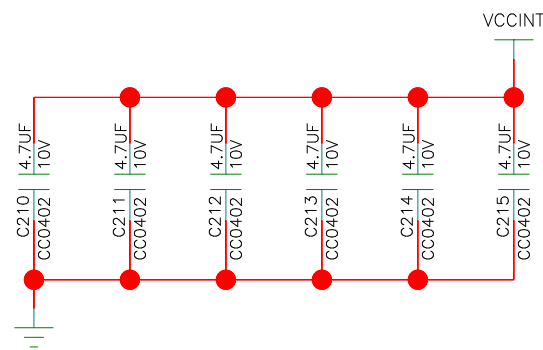
# FPGA NC

COMPANY	STONY BROOK UNIVERSITY		
TITLE	ATCA		
SIZE	B	REV	A
DRAWN	ES	DATE	22/01/2015:09:07
		SHEET	33 OF 49

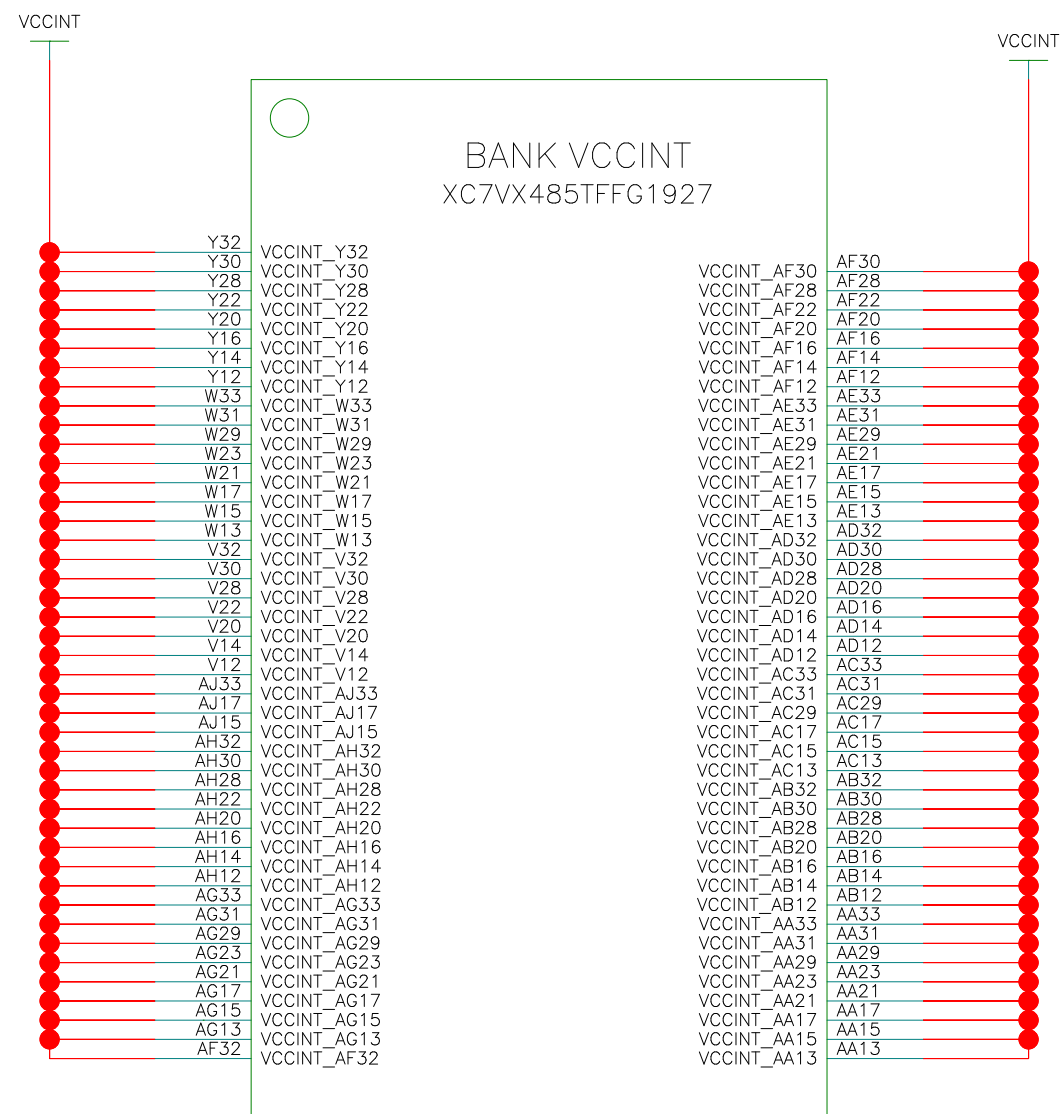
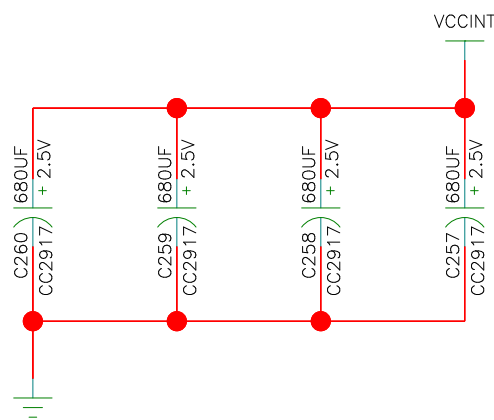


# FPGA PWR VCCAUX

COMPANY	STONY BROOK UNIVERSITY		
TITLE	ATCA		
SIZE	B	REV	A
DRAWN	ES	DATE	22/01/2015:09:07
		SHEET	34 OF 49



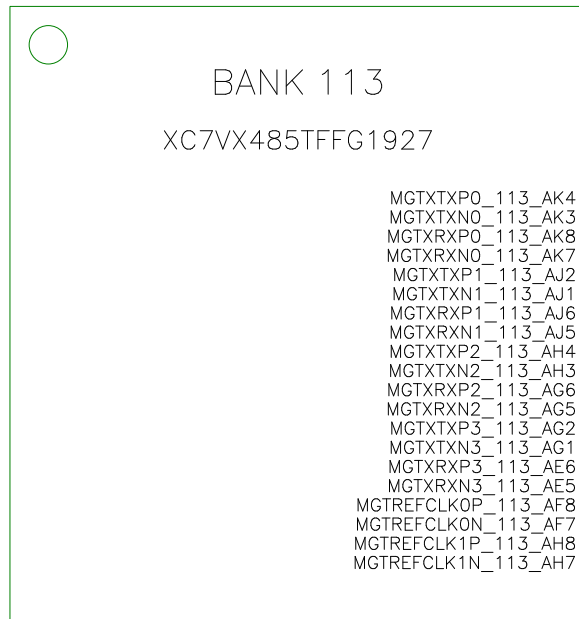
U38  
FFG1927  
XC7VX485TFFG1927



U38  
FFG1927  
XC7VX485TFFG1927

# FPGA PWR VCCINT

COMPANY	STONY BROOK UNIVERSITY		
TITLE	ATCA		
SIZE	B	REV	A
DRAWN	ES	DATE	22/01/2015:09:07
		SHEET	35 OF 49

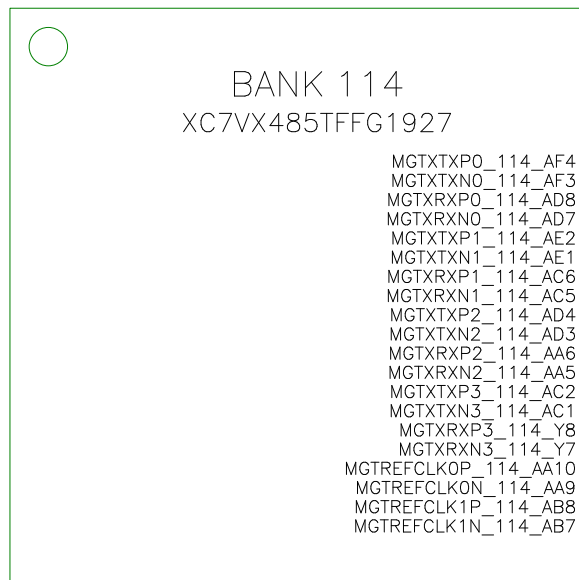
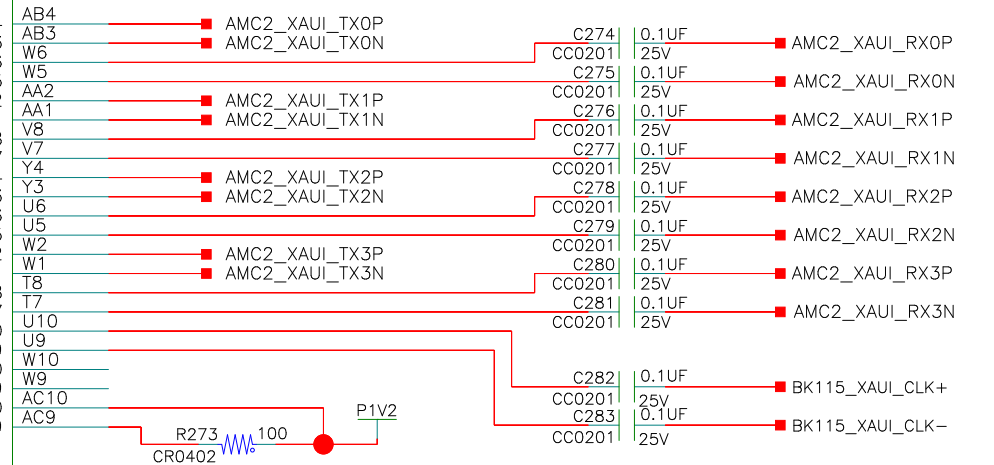


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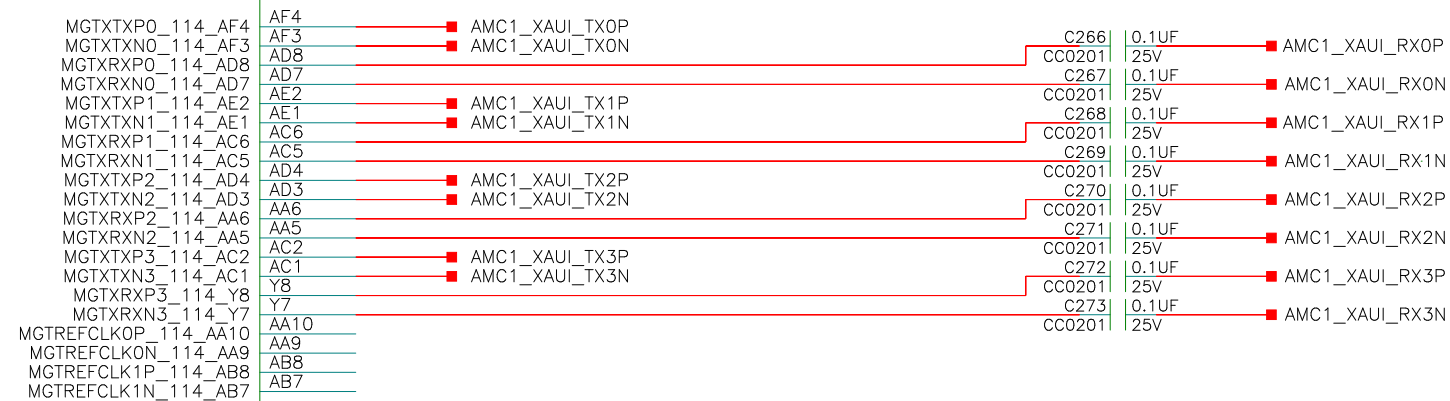
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**AMC2 XAUI PORT**



U38  
XC7VX485TFFG1927  
FFG1927

**AMC1 XAUI PORT**



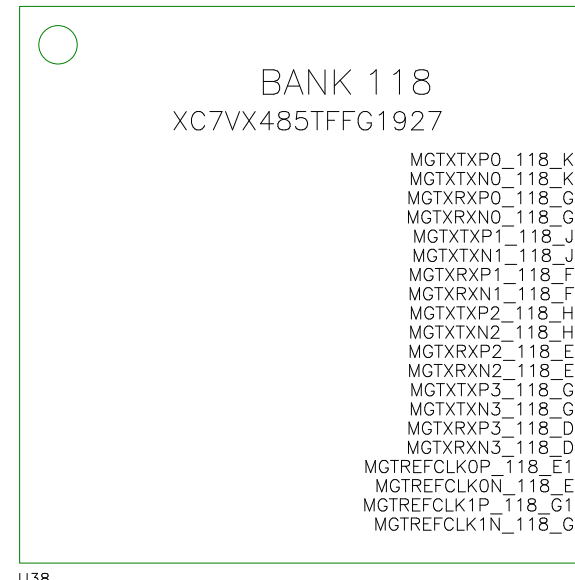
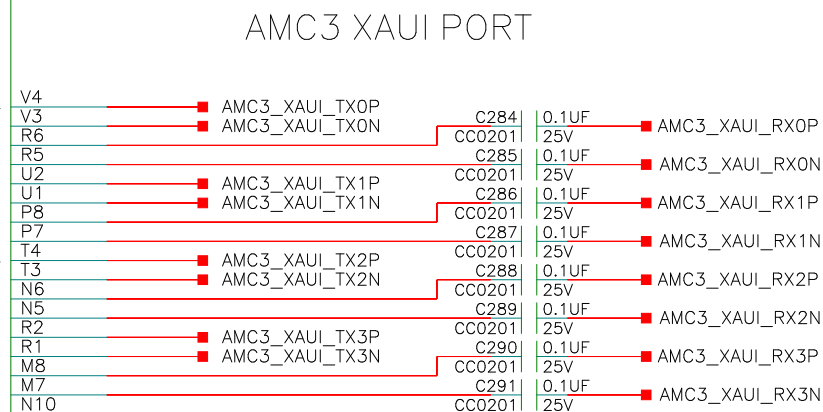
FPGA GTX 1

COMPANY	STONY BROOK UNIVERSITY			
TITLE	ATCA			
SIZE	B	REV	A	SHEET 36 OF 49
DRAWN	ES	DATE	22/01/2015:09:07	

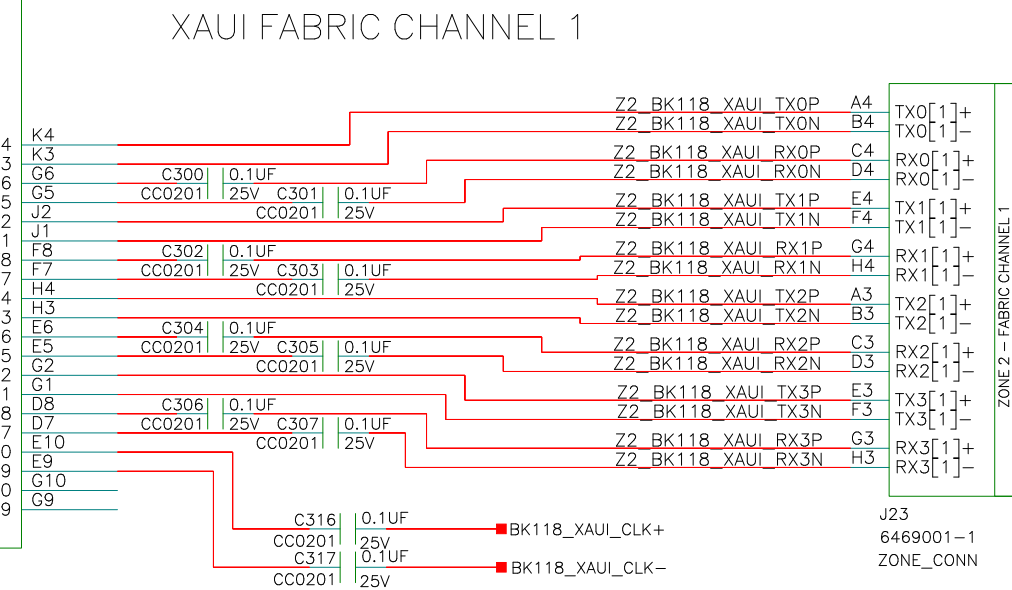




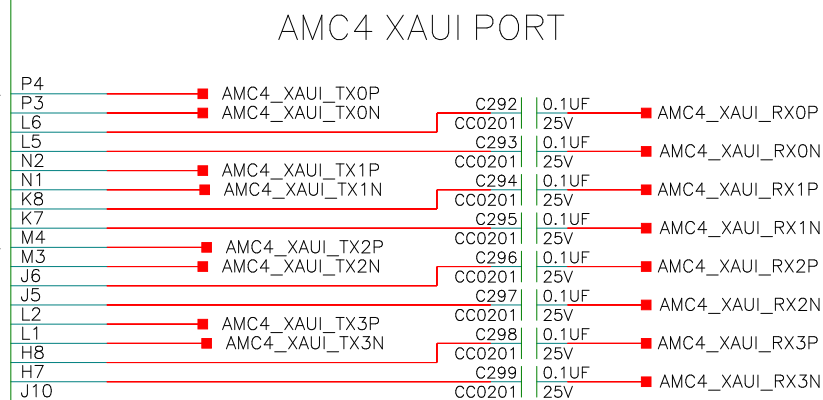
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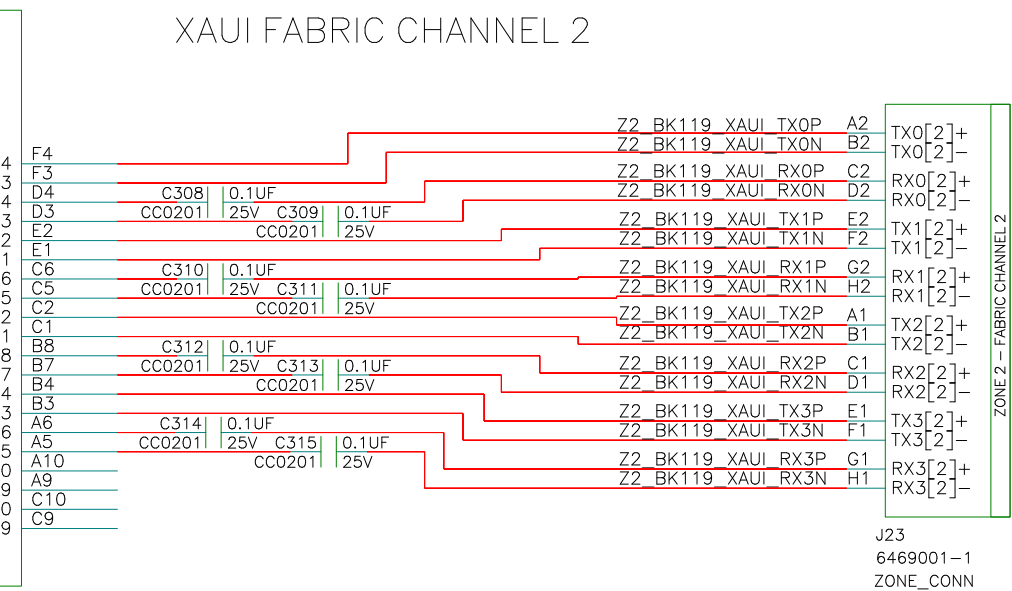
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U38  
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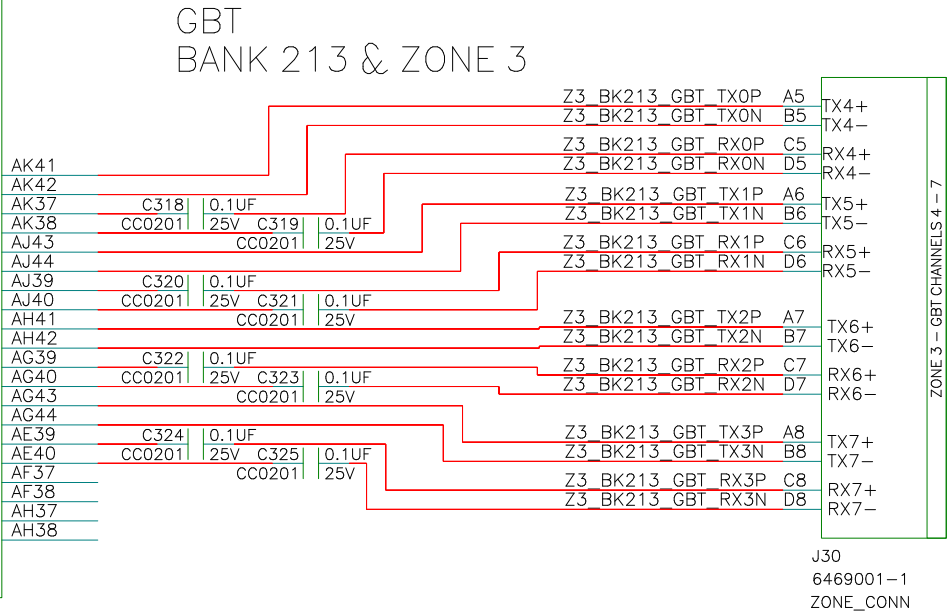
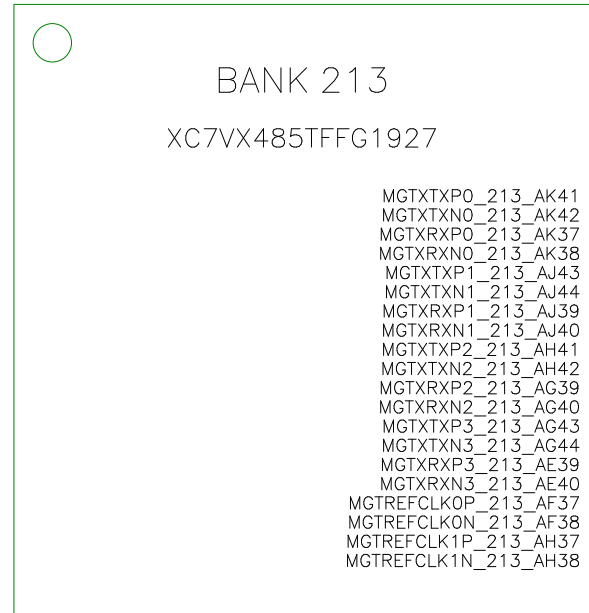


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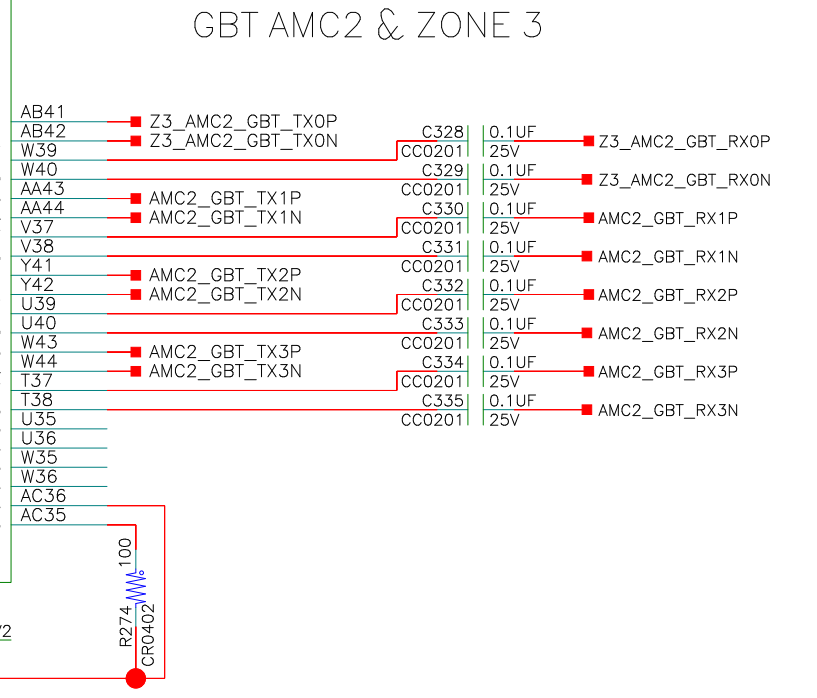
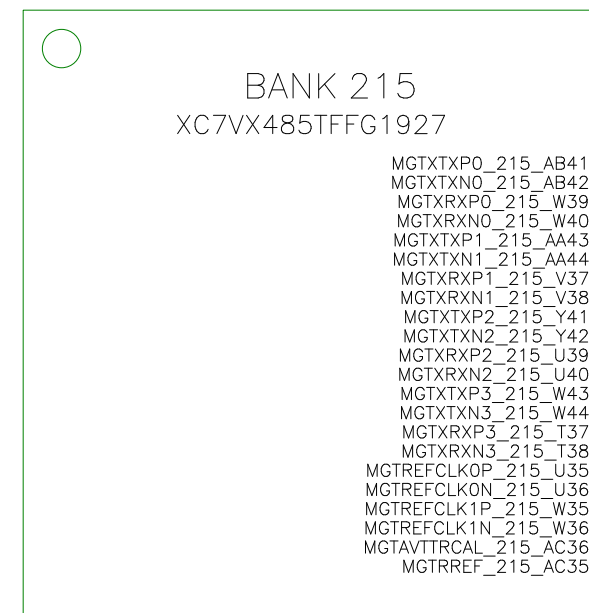


FPGA GTX 2

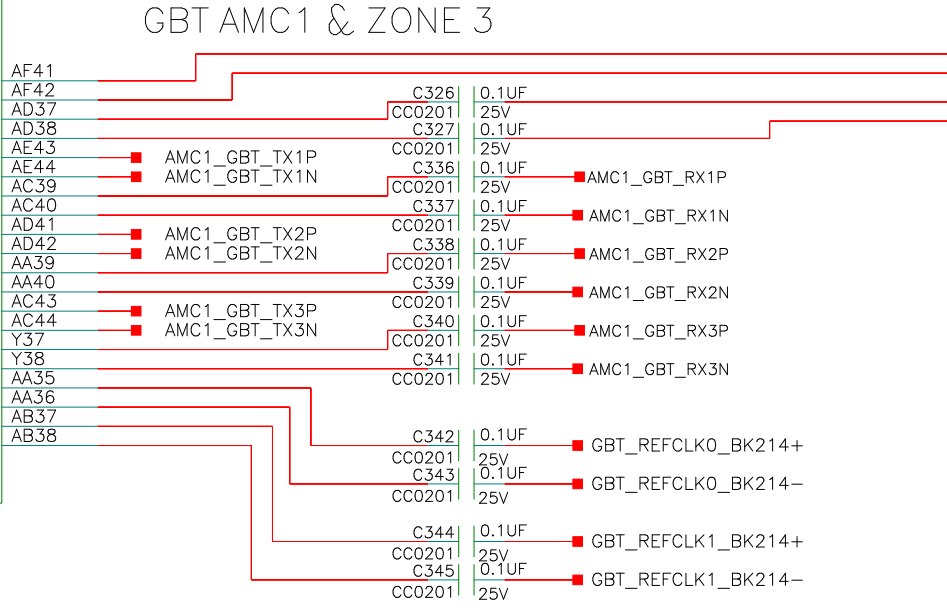
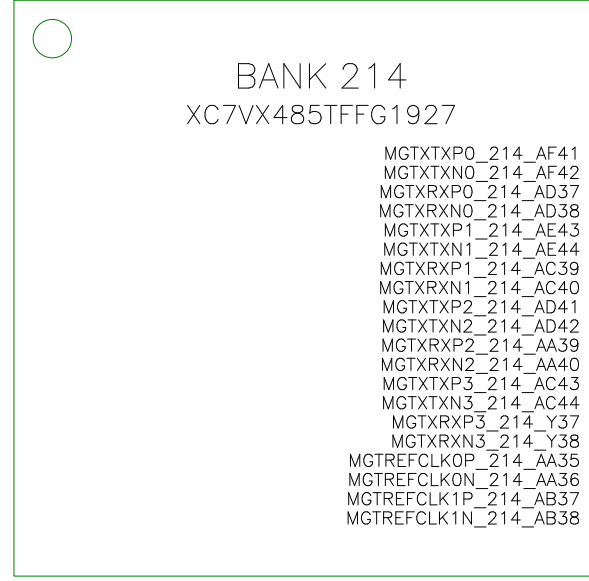
COMPANY	STONY BROOK UNIVERSITY			
TITLE	ATCA			
SIZE	B	REV	A	SHEET 37 OF 49
DRAWN	ES	DATE	22/01/2015:09:07	



U38  
XC7VX485TFFG1927  
FFG1927



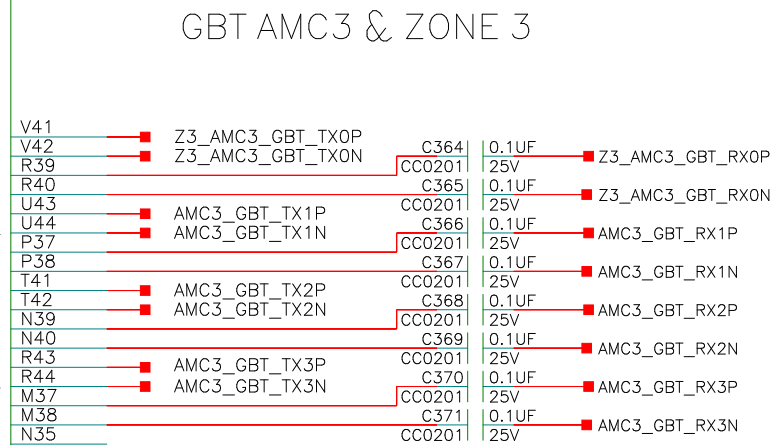
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FFG1927



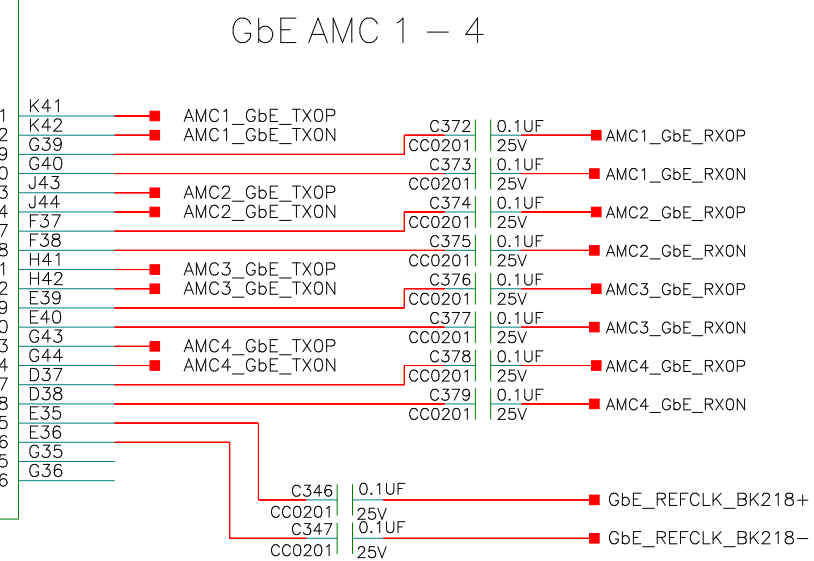
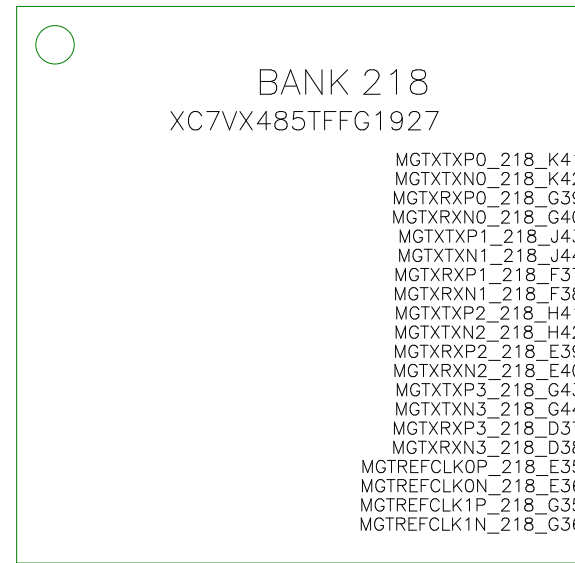
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FPGA GTX 3

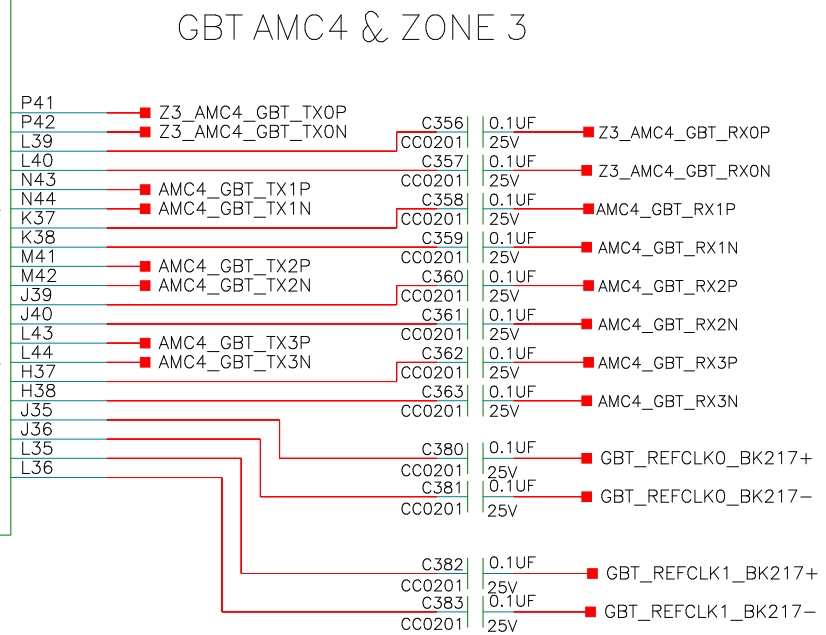
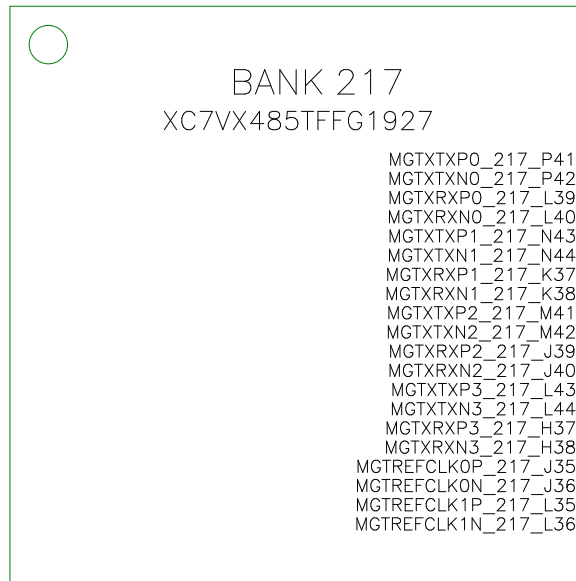
COMPANY	STONY BROOK UNIVERSITY		
TITLE	ATCA		
SIZE	B	REV	A
DRAWN	ES	DATE	10/03/2015:11:06
SHEET	38	OF	49



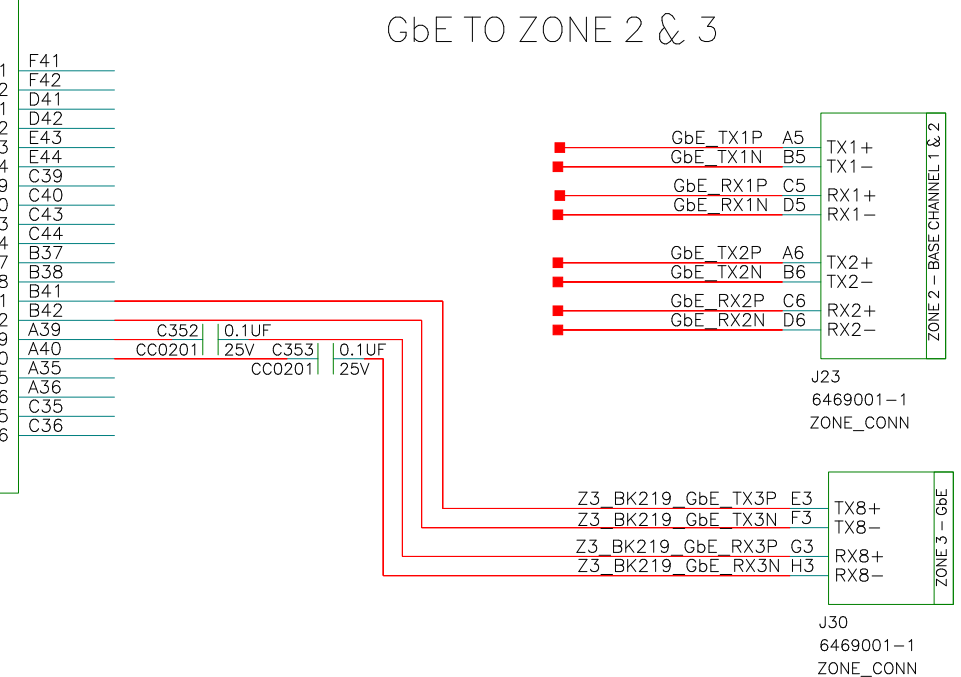
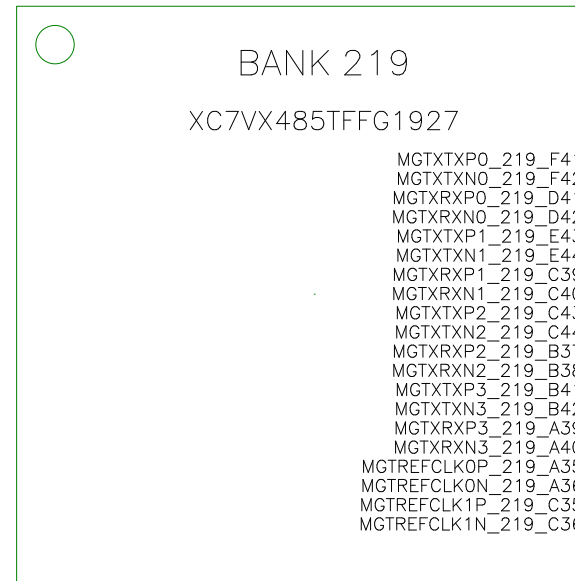
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FFG1927



U38  
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FFG1927

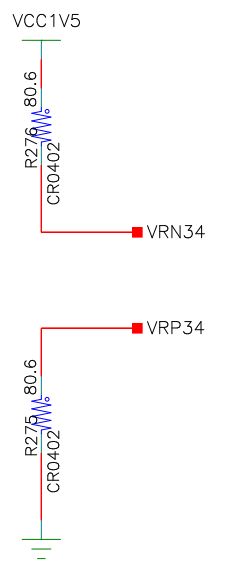
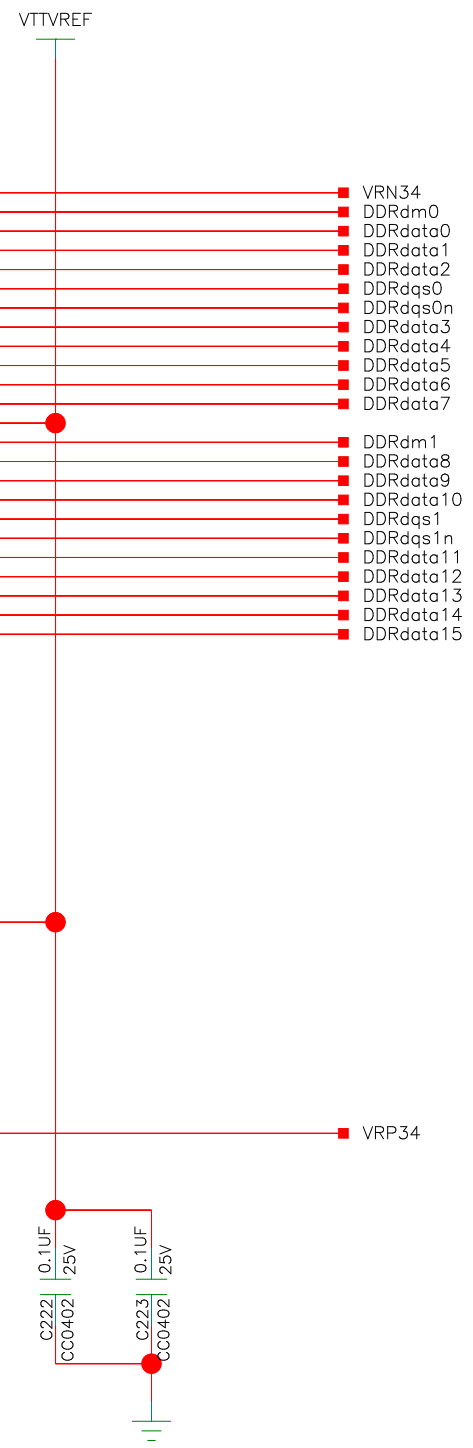
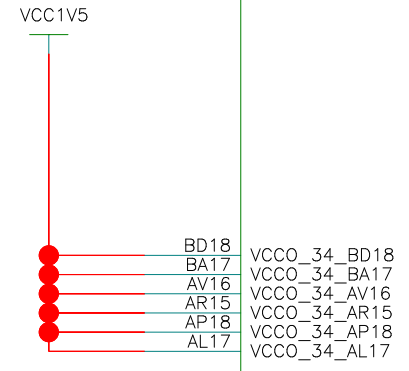
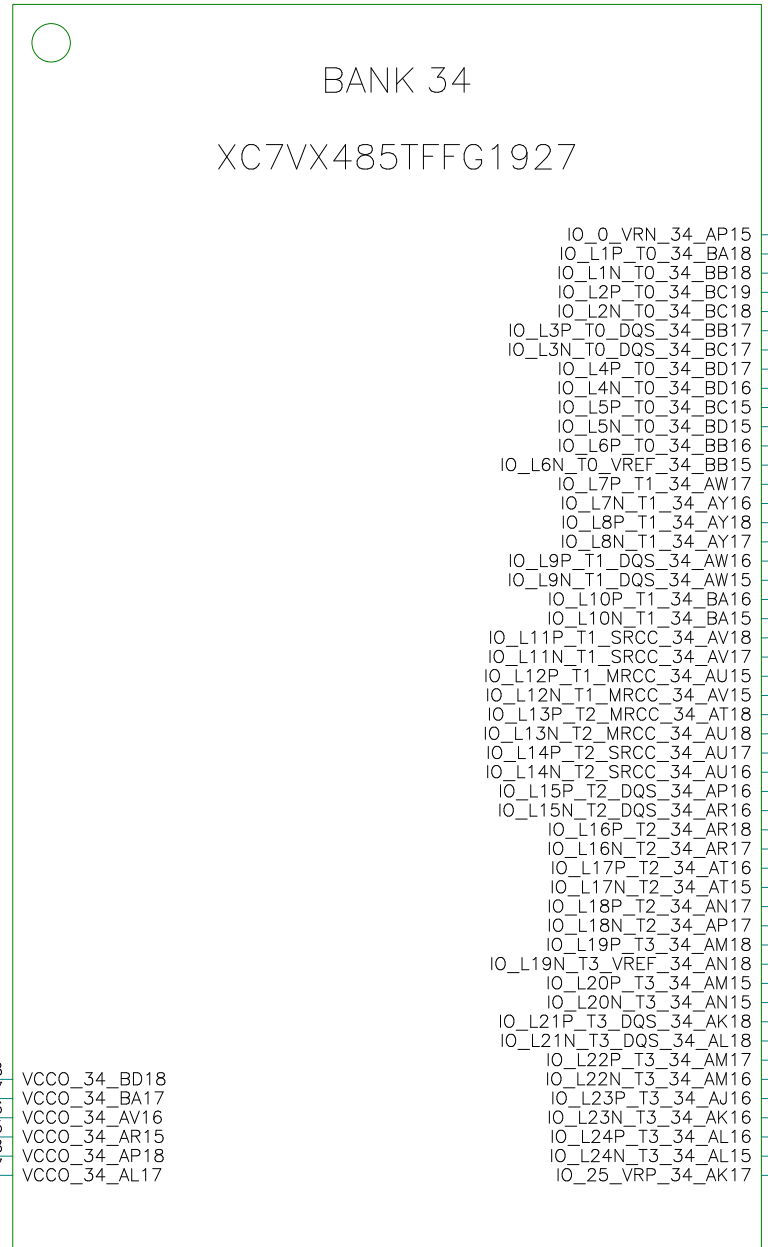


U38  
XC7VX485TFFG1927  
FFG1927



U38  
XC7VX485TFFG1927  
FFG1927

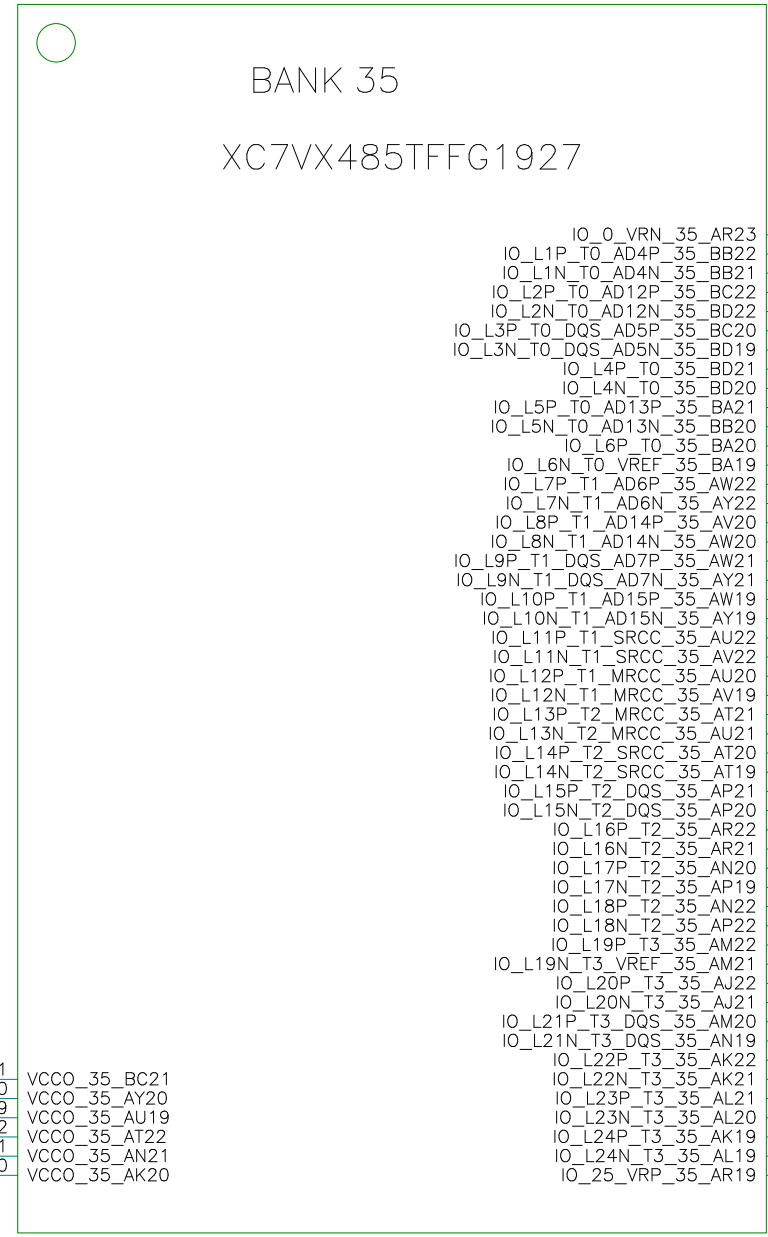
# FPGA GTX 4



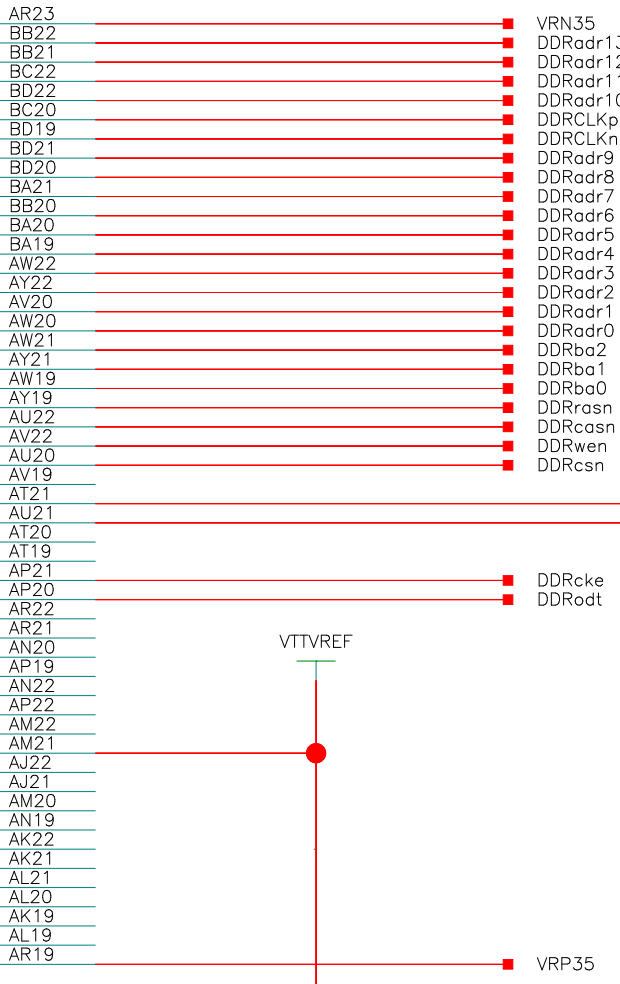
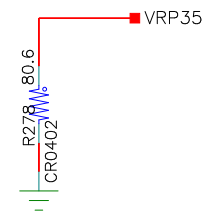
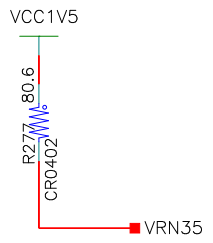
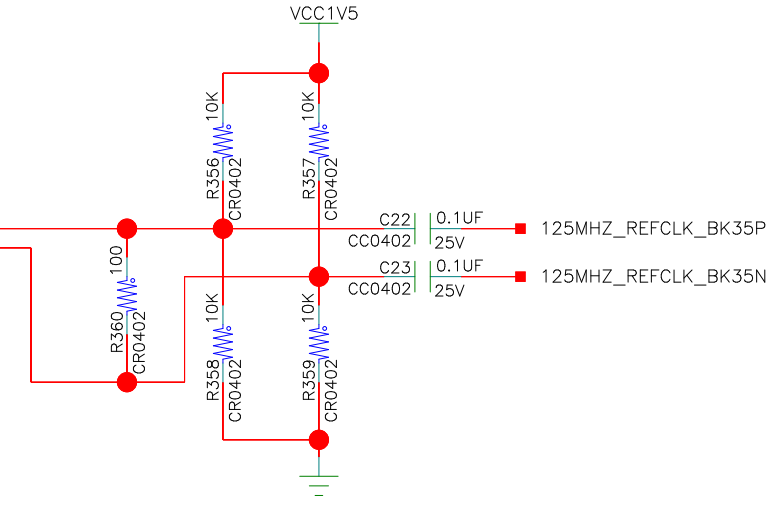
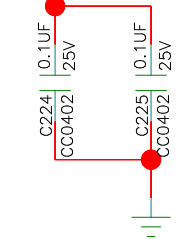
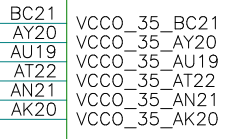
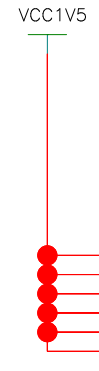
U38  
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FFG1927

FPGA – DDR3 1

COMPANY	STONY BROOK UNIVERSITY		
TITLE	ATCA		
SIZE	B	REV	A
DRAWN	ES	DATE	22/01/2015:09:07
		SHEET	40 OF 49

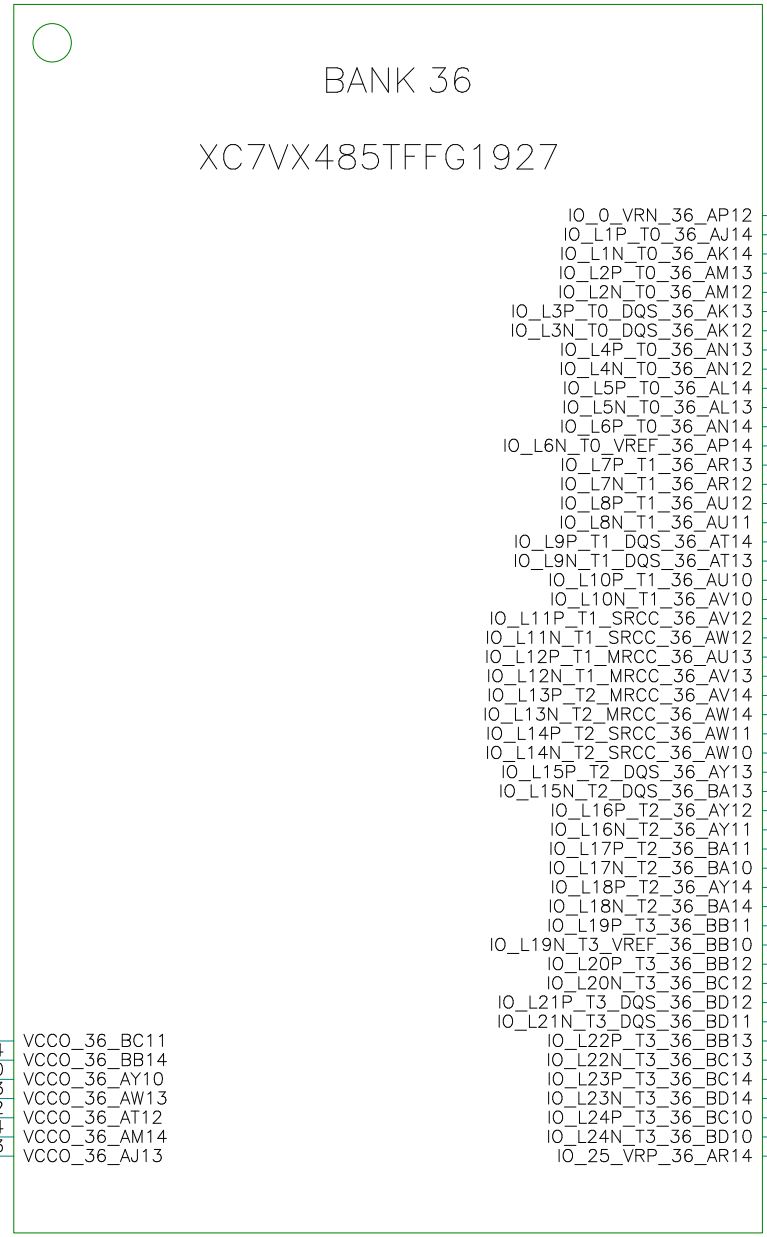


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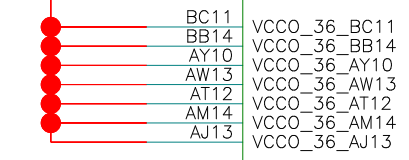
# FPGA - DDR3 2

COMPANY	STONY BROOK UNIVERSITY		
TITLE	ATCA		
SIZE	B	REV	A
DRAWN	ES	DATE	22/01/2015:09:07
SHEET	41	OF	49

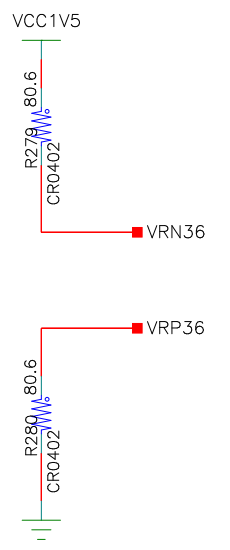
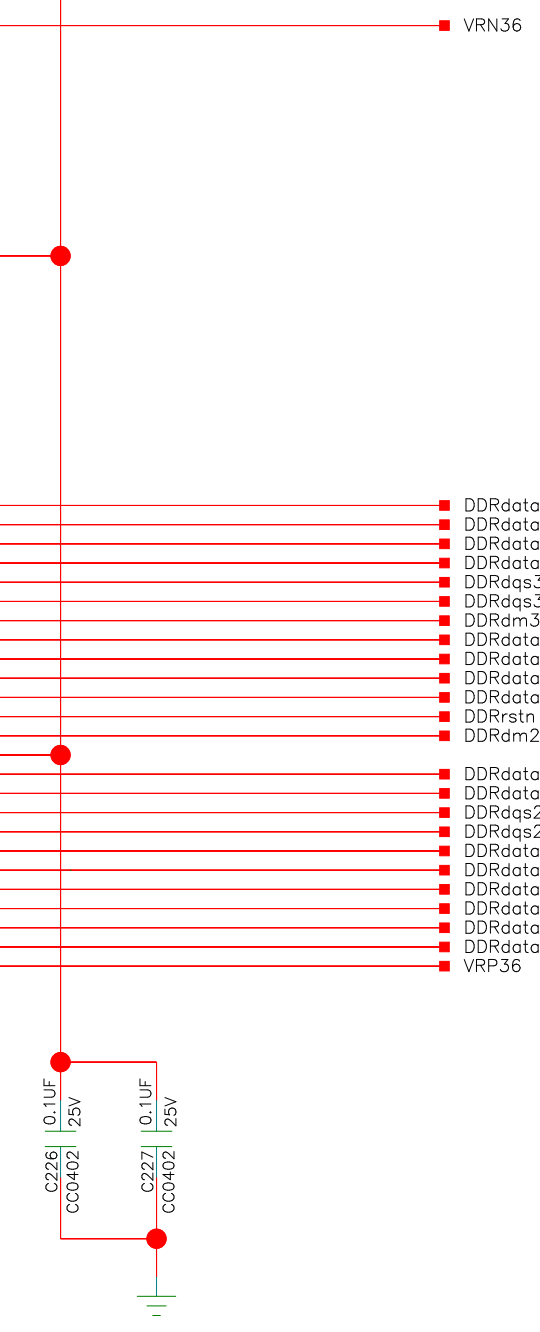


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VCC1V5



VTTVREF



# FPGA – DDR3 3

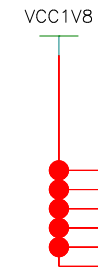
COMPANY	STONY BROOK UNIVERSITY		
TITLE	ATCA		
SIZE	B	REV	A
DRAWN	ES	DATE	22/01/2015:09:07
		SHEET	42 OF 49



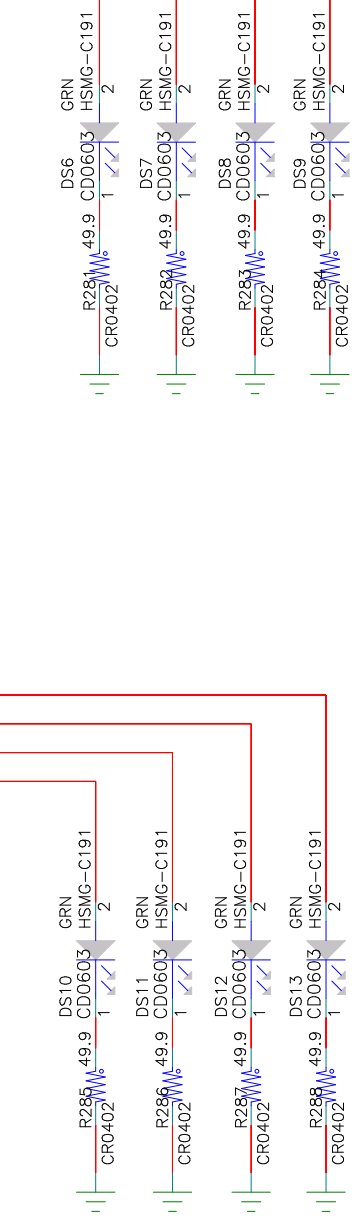
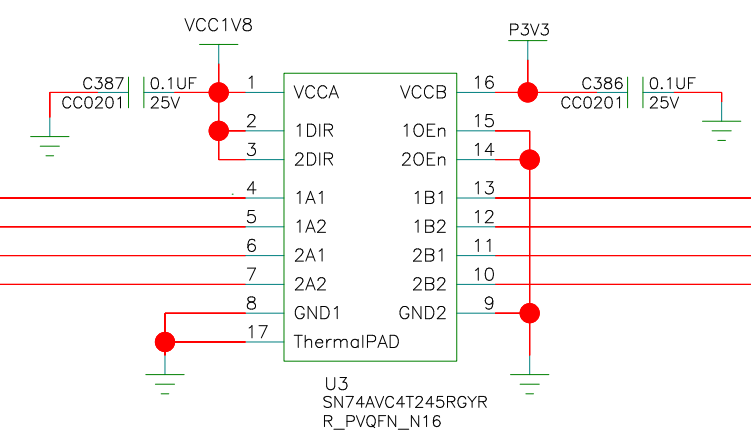
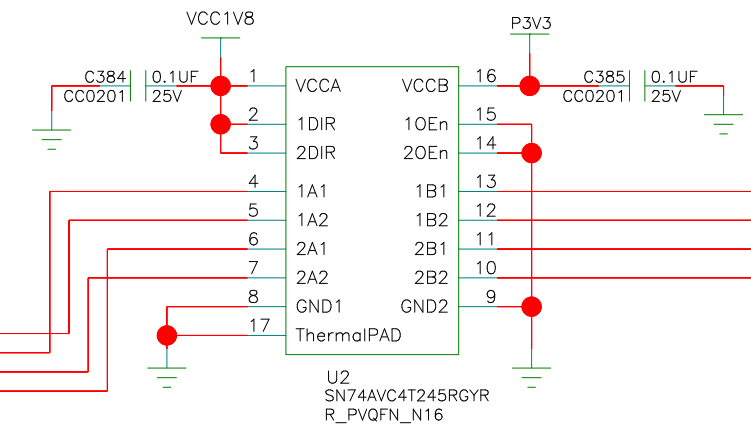
BANK 15  
XC7VX485TFFG1927

- IO\_0\_VRN\_15\_AR24 AR24
- IO\_L1P\_TO\_AD0P\_15\_BD25 BD25
- IO\_L1N\_TO\_AD0N\_15\_BD26 BD26
- IO\_L2P\_TO\_AD8P\_15\_BB23 BB23
- IO\_L2N\_TO\_AD8N\_15\_BC23 BC23
- IO\_L3P\_TO\_DQS\_AD1P\_15\_BB25 BB25
- IO\_L3N\_TO\_DQS\_AD1N\_15\_BC25 BC25
- IO\_L4P\_TO\_15\_BC24 BC24
- IO\_L4N\_TO\_15\_BD24 BD24
- IO\_L5P\_TO\_AD9P\_15\_BA26 BA26
- IO\_L5N\_TO\_AD9N\_15\_BB26 BB26
- IO\_L6P\_TO\_15\_BA24 BA24
- IO\_L6N\_TO\_VREF\_15\_BA25 BA25
- IO\_L7P\_T1\_AD2P\_15\_AW26 AW26
- IO\_L7N\_T1\_AD2N\_15\_AY26 AY26
- IO\_L8P\_T1\_AD10P\_15\_AY23 AY23
- IO\_L8N\_T1\_AD10N\_15\_BA23 BA23
- IO\_L9P\_T1\_DQS\_AD3P\_15\_AV25 AV25
- IO\_L9N\_T1\_DQS\_AD3N\_15\_AW25 AW25
- IO\_L10P\_T1\_AD11P\_15\_AW24 AW24
- IO\_L10N\_T1\_AD11N\_15\_AY24 AY24
- IO\_L11P\_T1\_SRCC\_15\_AV23 AV23
- IO\_L11N\_T1\_SRCC\_15\_AV24 AV24
- IO\_L12P\_T1\_MRCC\_15\_AU25 AU25
- IO\_L12N\_T1\_MRCC\_15\_AU26 AU26
- IO\_L13P\_T2\_MRCC\_15\_AT23 AT23
- IO\_L13N\_T2\_MRCC\_15\_AU23 AU23
- IO\_L14P\_T2\_SRCC\_15\_AT24 AT24
- IO\_L14N\_T2\_SRCC\_15\_AT25 AT25
- IO\_L15P\_T2\_DQS\_15\_AN23 AN23
- IO\_L15N\_T2\_DQS\_ADV\_B\_15\_AN24 AN24
- IO\_L16P\_T2\_A28\_15\_AT26 AT26
- IO\_L16N\_T2\_A27\_15\_AU27 AU27
- IO\_L17P\_T2\_A26\_15\_AP24 AP24
- IO\_L17N\_T2\_A25\_15\_AP25 AP25
- IO\_L18P\_T2\_A24\_15\_AN25 AN25
- IO\_L18N\_T2\_A23\_15\_AP26 AP26
- IO\_L19P\_T3\_A22\_15\_AL23 AL23
- IO\_L19N\_T3\_A21\_VREF\_15\_AM23 AM23
- IO\_L20P\_T3\_A20\_15\_AM25 AM25
- IO\_L20N\_T3\_A19\_15\_AM26 AM26
- IO\_L21P\_T3\_DQS\_15\_AK23 AK23
- IO\_L21N\_T3\_DQS\_A18\_15\_AK24 AK24
- IO\_L22P\_T3\_A17\_15\_AK26 AK26
- IO\_L22N\_T3\_A16\_15\_AL26 AL26
- IO\_L23P\_T3\_FOE\_B\_15\_AL24 AL24
- IO\_L23N\_T3\_FWE\_B\_15\_AL25 AL25
- IO\_L24P\_T3\_RS1\_15\_AJ25 AJ25
- IO\_L24N\_T3\_RS0\_15\_AJ26 AJ26
- IO\_25\_VRP\_15\_AR26 AR26

- GPIO\_LED\_4\_LS
- GPIO\_LED\_2\_LS
- GPIO\_LED\_3\_LS
- GPIO\_LED\_0\_LS
- GPIO\_LED\_1\_LS
- GPIO\_LED\_5\_LS
- GPIO\_LED\_6\_LS
- GPIO\_LED\_7\_LS
- RECOVERED\_CLKP
- RECOVERED\_CLKN



U38  
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FFG1927



FPGA – BANK 15

COMPANY	STONY BROOK UNIVERSITY		
TITLE	ATCA		
SIZE	B	REV	A
DRAWN	ES	DATE	22/01/2015:09:07
		SHEET	43 OF 49

BANK 16  
XC7VX485TFFG1927

VCC1V8

- BC31 VCCO\_16\_BC31
- BB34 VCCO\_16\_BB34
- AW33 VCCO\_16\_AW33
- AT32 VCCO\_16\_AT32
- AN31 VCCO\_16\_AN31
- AK30 VCCO\_16\_AK30

- IO\_0\_VRN\_16\_AU35 AU35
- IO\_L1P\_T0\_16\_AK33 AK33
- IO\_L1N\_T0\_16\_AL33 AL33
- IO\_L2P\_T0\_16\_AJ30 AJ30
- IO\_L2N\_T0\_16\_AJ31 AJ31
- IO\_L3P\_T0\_DQS\_16\_AK31 AK31
- IO\_L3N\_T0\_DQS\_16\_AL31 AL31
- IO\_L4P\_T0\_16\_AJ32 AJ32
- IO\_L4N\_T0\_16\_AK32 AK32
- IO\_L5P\_T0\_16\_AL30 AL30
- IO\_L5N\_T0\_16\_AM31 AM31
- IO\_L6P\_T0\_16\_AM32 AM32
- IO\_L6N\_T0\_VREF\_16\_AM33 AM33
- IO\_L7P\_T1\_16\_AN32 AN32
- IO\_L7N\_T1\_16\_AN33 AN33
- IO\_L8P\_T1\_16\_AR33 AR33
- IO\_L8N\_T1\_16\_AT33 AT33
- IO\_L9P\_T1\_DQS\_16\_AP31 AP31
- IO\_L9N\_T1\_DQS\_16\_AP32 AP32
- IO\_L10P\_T1\_16\_AR31 AR31
- IO\_L10N\_T1\_16\_AR32 AR32
- IO\_L11P\_T1\_SRCC\_16\_AU31 AU31
- IO\_L11N\_T1\_SRCC\_16\_AU32 AU32
- IO\_L12P\_T1\_MRCC\_16\_AU33 AU33
- IO\_L12N\_T1\_MRCC\_16\_AV33 AV33
- IO\_L13P\_T2\_MRCC\_16\_AV32 AV32
- IO\_L13N\_T2\_MRCC\_16\_AW32 AW32
- IO\_L14P\_T2\_SRCC\_16\_AV34 AV34
- IO\_L14N\_T2\_SRCC\_16\_AV35 AV35
- IO\_L15P\_T2\_DQS\_16\_AW34 AW34
- IO\_L15N\_T2\_DQS\_16\_AW35 AW35
- IO\_L16P\_T2\_16\_AY33 AY33
- IO\_L16N\_T2\_16\_AY34 AY34
- IO\_L17P\_T2\_16\_BA34 BA34
- IO\_L17N\_T2\_16\_BA35 BA35
- IO\_L18P\_T2\_16\_AY32 AY32
- IO\_L18N\_T2\_16\_BA33 BA33
- IO\_L19P\_T3\_16\_BB31 BB31
- IO\_L19N\_T3\_VREF\_16\_BB32 BB32
- IO\_L20P\_T3\_16\_BB35 BB35
- IO\_L20N\_T3\_16\_BC35 BC35
- IO\_L21P\_T3\_DQS\_16\_BC32 BC32
- IO\_L21N\_T3\_DQS\_16\_BC33 BC33
- IO\_L22P\_T3\_16\_BB33 BB33
- IO\_L22N\_T3\_16\_BC34 BC34
- IO\_L23P\_T3\_16\_BD31 BD31
- IO\_L23N\_T3\_16\_BD32 BD32
- IO\_L24P\_T3\_16\_BD34 BD34
- IO\_L24N\_T3\_16\_BD35 BD35
- IO\_25\_VRP\_16\_AT31 AT31

- AMC1\_LVDS\_TX2P
- AMC1\_LVDS\_TX2N
- AMC1\_LVDS\_RX2P
- AMC1\_LVDS\_RX2N
- AMC1\_LVDS\_TX3P
- AMC1\_LVDS\_TX3N
- AMC1\_LVDS\_RX3P
- AMC1\_LVDS\_RX3N
- AMC1\_LVDS\_TX1P
- AMC1\_LVDS\_TX1N
- AMC1\_LVDS\_RX1P
- AMC1\_LVDS\_RX1N
- AMC1\_LVDS\_TX4P
- AMC1\_LVDS\_TX4N
- AMC1\_LVDS\_RX4P
- AMC1\_LVDS\_RX4N

U38  
XC7VX485TFFG1927  
FFG1927

FPGA – BANK 16

COMPANY	STONY BROOK UNIVERSITY		
TITLE	ATCA		
SIZE	B	REV	A
DRAWN	ES	DATE	22/01/2015:09:07
		SHEET	44 OF 49



BANK 17  
XC7VX485TFFG1927

IO_0_VRN_17_M26	M26
IO_L1P_T0_17_B23	B23
IO_L1N_T0_17_A23	A23
IO_L2P_T0_17_C25	C25
IO_L2N_T0_17_B25	B25
IO_L3P_T0_DQS_17_C23	C23
IO_L3N_T0_DQS_17_C24	C24
IO_L4P_T0_17_A24	A24
IO_L4N_T0_17_A25	A25
IO_L5P_T0_17_D24	D24
IO_L5N_T0_17_D25	D25
IO_L6P_T0_17_E23	E23
IO_L6N_T0_VREF_17_E24	E24
IO_L7P_T1_17_G23	G23
IO_L7N_T1_17_F23	F23
IO_L8P_T1_17_F24	F24
IO_L8N_T1_17_F25	F25
IO_L9P_T1_DQS_17_H23	H23
IO_L9N_T1_DQS_17_H24	H24
IO_L10P_T1_17_G25	G25
IO_L10N_T1_17_G26	G26
IO_L11P_T1_SRCC_17_J24	J24
IO_L11N_T1_SRCC_17_H25	H25
IO_L12P_T1_MRCC_17_J25	J25
IO_L12N_T1_MRCC_17_J26	J26
IO_L13P_T2_MRCC_17_K23	K23
IO_L13N_T2_MRCC_17_K24	K24
IO_L14P_T2_SRCC_17_L24	L24
IO_L14N_T2_SRCC_17_L25	L25
IO_L15P_T2_DQS_17_L26	L26
IO_L15N_T2_DQS_17_K26	K26
IO_L16P_T2_17_N23	N23
IO_L16N_T2_17_N24	N24
IO_L17P_T2_17_N25	N25
IO_L17N_T2_17_M25	M25
IO_L18P_T2_17_M23	M23
IO_L18N_T2_17_L23	L23
IO_L19P_T3_17_T24	T24
IO_L19N_T3_VREF_17_T25	T25
IO_L20P_T3_17_P25	P25
IO_L20N_T3_17_P26	P26
IO_L21P_T3_DQS_17_U25	U25
IO_L21N_T3_DQS_17_U26	U26
IO_L22P_T3_17_T26	T26
IO_L22N_T3_17_R26	R26
IO_L23P_T3_17_U23	U23
IO_L23N_T3_17_T23	T23
IO_L24P_T3_17_R23	R23
IO_L24N_T3_17_R24	R24
IO_25_VRP_17_P24	P24

VCC1V8

R25	VCCO_17_R25
M24	VCCO_17_M24
J23	VCCO_17_J23
H26	VCCO_17_H26
E25	VCCO_17_E25
B24	VCCO_17_B24

U38  
XC7VX485TFFG1927  
FFG1927

BANK 18  
XC7VX485TFFG1927

IO_0_VRN_18_L30	L30
IO_L1P_T0_18_C30	C30
IO_L1N_T0_18_B30	B30
IO_L2P_T0_18_B33	B33
IO_L2N_T0_18_A33	A33
IO_L3P_T0_DQS_18_A30	A30
IO_L3N_T0_DQS_18_A31	A31
IO_L4P_T0_18_C32	C32
IO_L4N_T0_18_C33	C33
IO_L5P_T0_18_B31	B31
IO_L5N_T0_18_B32	B32
IO_L6P_T0_18_D30	D30
IO_L6N_T0_VREF_18_D31	D31
IO_L7P_T1_18_E31	E31
IO_L7N_T1_18_D32	D32
IO_L8P_T1_18_E32	E32
IO_L8N_T1_18_E33	E33
IO_L9P_T1_DQS_18_F30	F30
IO_L9N_T1_DQS_18_F31	F31
IO_L10P_T1_18_G33	G33
IO_L10N_T1_18_F33	F33
IO_L11P_T1_SRCC_18_G31	G31
IO_L11N_T1_SRCC_18_G32	G32
IO_L12P_T1_MRCC_18_H30	H30
IO_L12N_T1_MRCC_18_G30	G30
IO_L13P_T2_MRCC_18_H32	H32
IO_L13N_T2_MRCC_18_H33	H33
IO_L14P_T2_SRCC_18_J30	J30
IO_L14N_T2_SRCC_18_J31	J31
IO_L15P_T2_DQS_18_L31	L31
IO_L15N_T2_DQS_18_K31	K31
IO_L16P_T2_18_K32	K32
IO_L16N_T2_18_J32	J32
IO_L17P_T2_18_M31	M31
IO_L17N_T2_18_M32	M32
IO_L18P_T2_18_L33	L33
IO_L18N_T2_18_K33	K33
IO_L19P_T3_18_R32	R32
IO_L19N_T3_VREF_18_P32	P32
IO_L20P_T3_18_N33	N33
IO_L20N_T3_18_M33	M33
IO_L21P_T3_DQS_18_T31	T31
IO_L21N_T3_DQS_18_R31	R31
IO_L22P_T3_18_P31	P31
IO_L22N_T3_18_N32	N32
IO_L23P_T3_18_U32	U32
IO_L23N_T3_18_U33	U33
IO_L24P_T3_18_T33	T33
IO_L24N_T3_18_R33	R33
IO_25_VRP_18_U31	U31

VCC1V8

T32	VCCO_18_T32
N31	VCCO_18_N31
K30	VCCO_18_K30
J33	VCCO_18_J33
F32	VCCO_18_F32
C31	VCCO_18_C31

U38  
XC7VX485TFFG1927  
FFG1927

AMC4\_LVDS\_TX2P  
AMC4\_LVDS\_TX2N  
AMC4\_LVDS\_RX2P  
AMC4\_LVDS\_RX2N

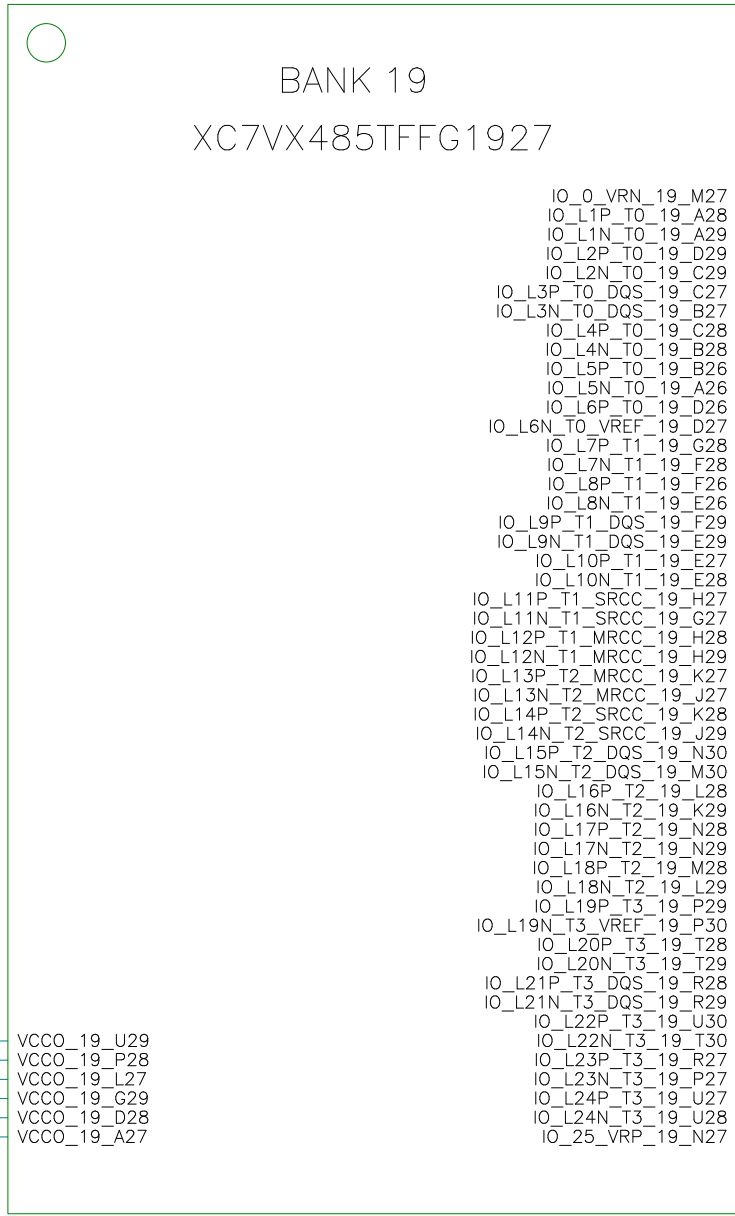
AMC4\_LVDS\_TX3P  
AMC4\_LVDS\_TX3N  
AMC4\_LVDS\_RX3P  
AMC4\_LVDS\_RX3N

AMC4\_LVDS\_TX1P  
AMC4\_LVDS\_TX1N  
AMC4\_LVDS\_RX1P  
AMC4\_LVDS\_RX1N

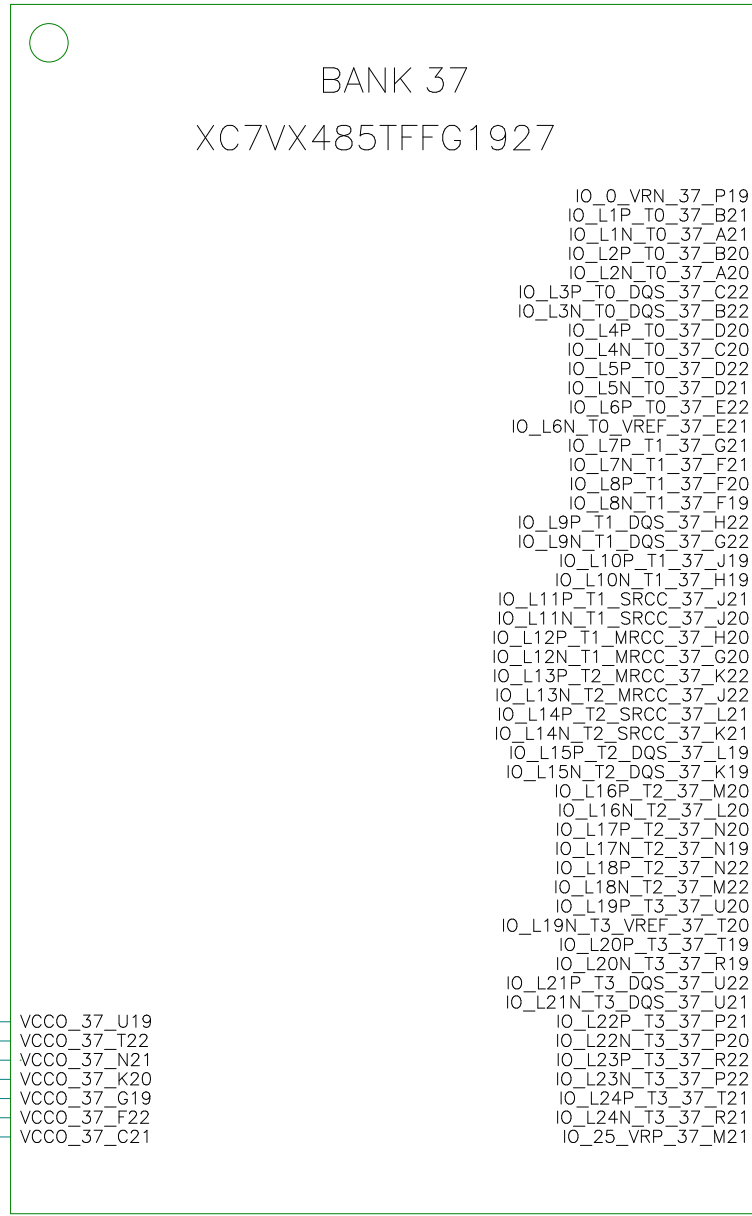
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AMC4\_LVDS\_TX4N  
AMC4\_LVDS\_RX4P  
AMC4\_LVDS\_RX4N

FPGA – BANKS 17 18

COMPANY	STONY BROOK UNIVERSITY		
TITLE	ATCA		
SIZE	B	REV	A
DRAWN	ES	DATE	22/01/2015:09:07
SHEET	45	OF	49



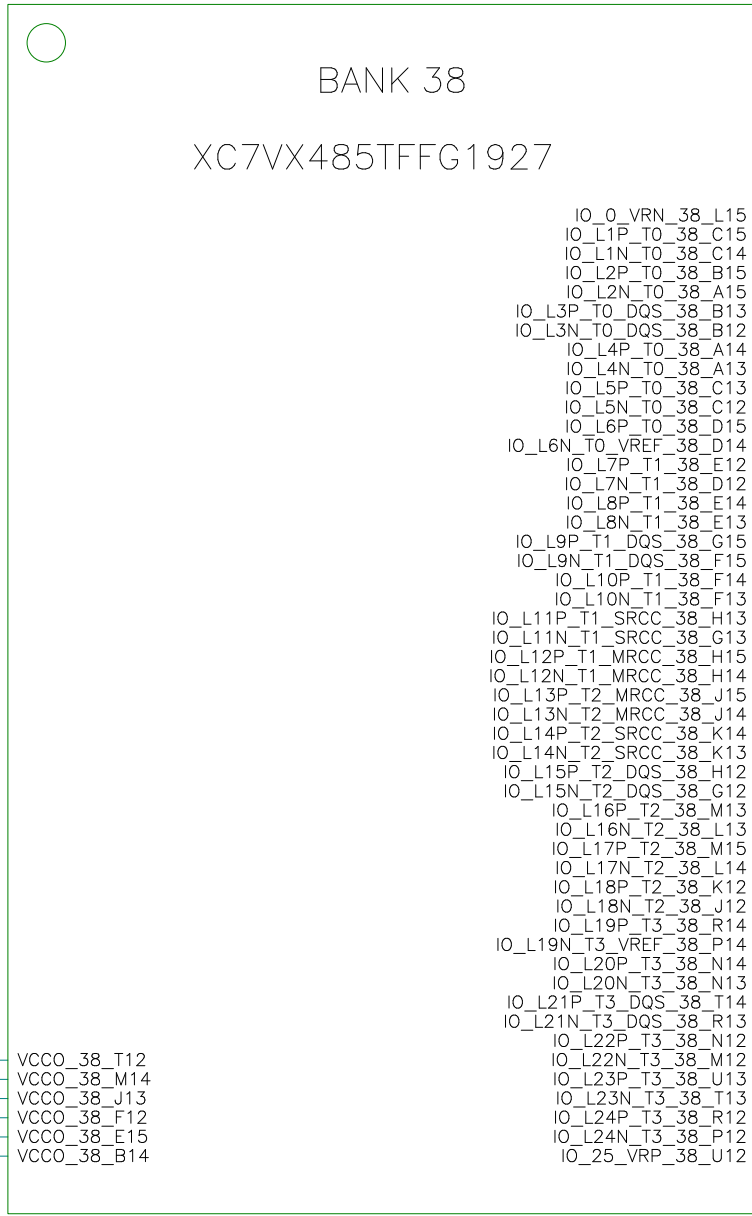
U38  
XC7VX485TFFG1927  
FFG1927



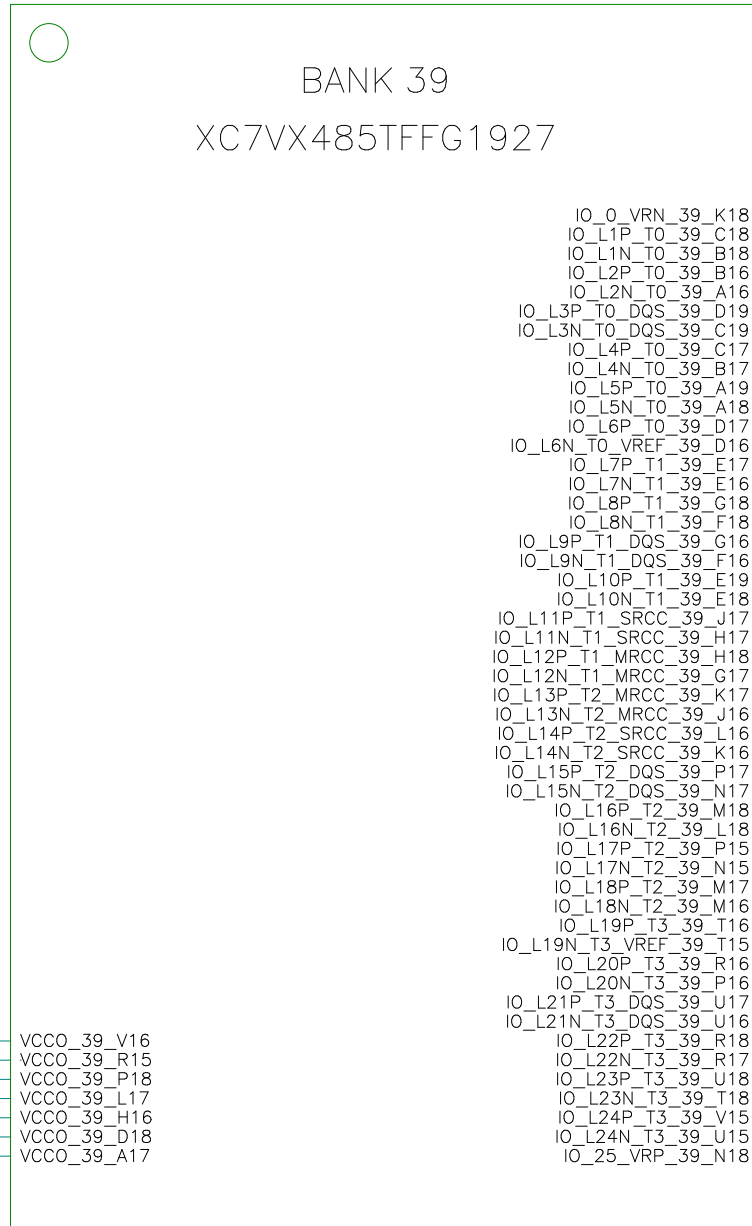
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XC7VX485TFFG1927  
FFG1927

# FPGA – BANKS 19 37

COMPANY	STONY BROOK UNIVERSITY		
TITLE	ATCA		
SIZE	B	REV	A
DRAWN	ES	DATE	22/01/2015:09:07
		SHEET	46 OF 49



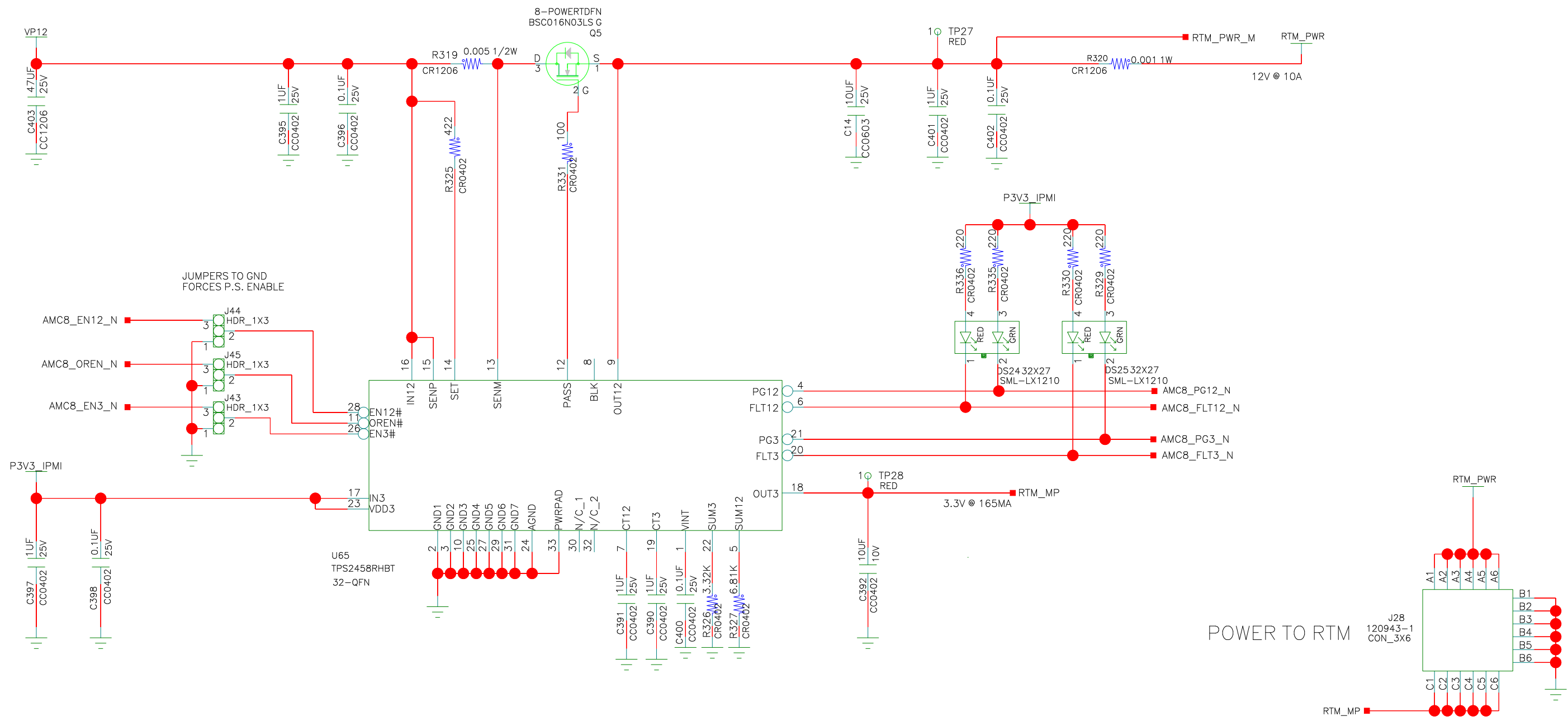
U38  
XC7VX485TFFG1927  
FFG1927



U38  
XC7VX485TFFG1927  
FFG1927

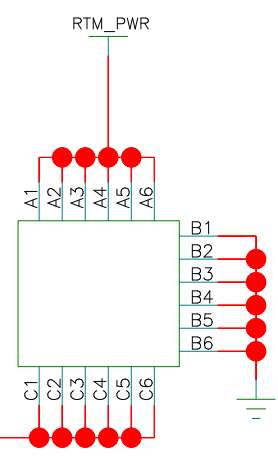
# FPGA – BANKS 38 39

COMPANY	STONY BROOK UNIVERSITY		
TITLE	ATCA		
SIZE	B	REV	A
DRAWN	ES	DATE	22/01/2015:09:07
		SHEET	47 OF 49



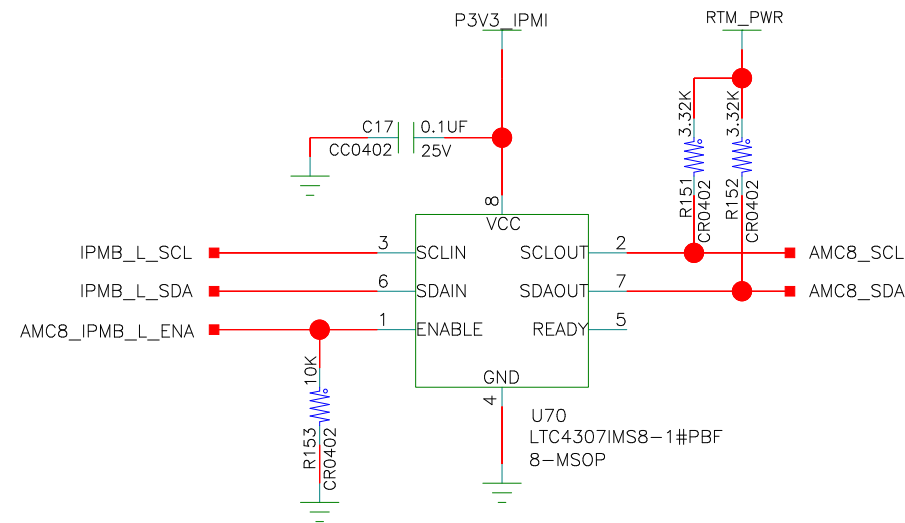
RTM HOT SWAP CONTROLLER

POWER TO RTM

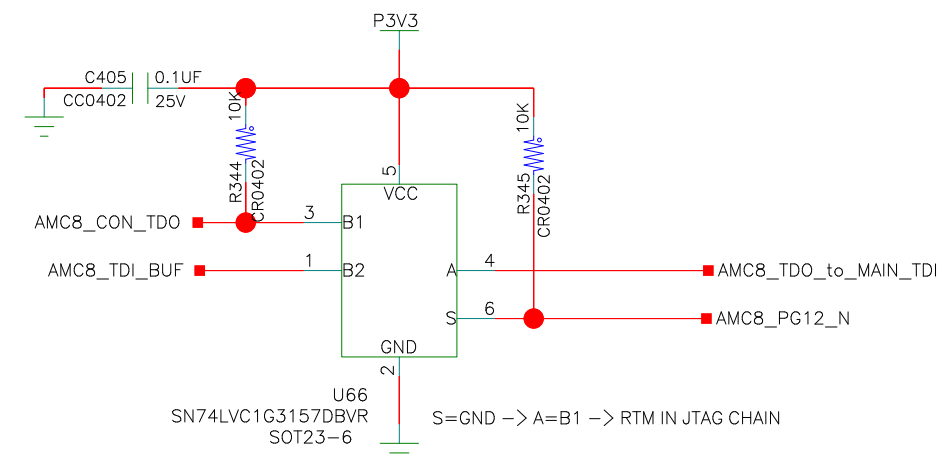


RTM 1 OF 2

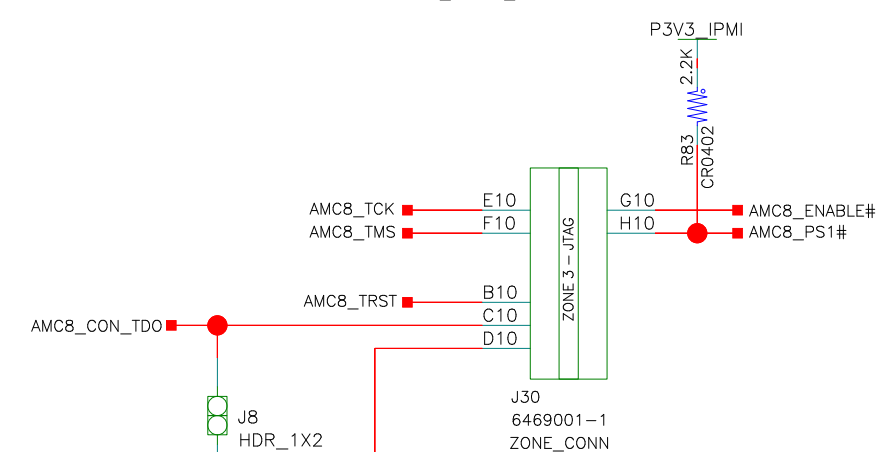
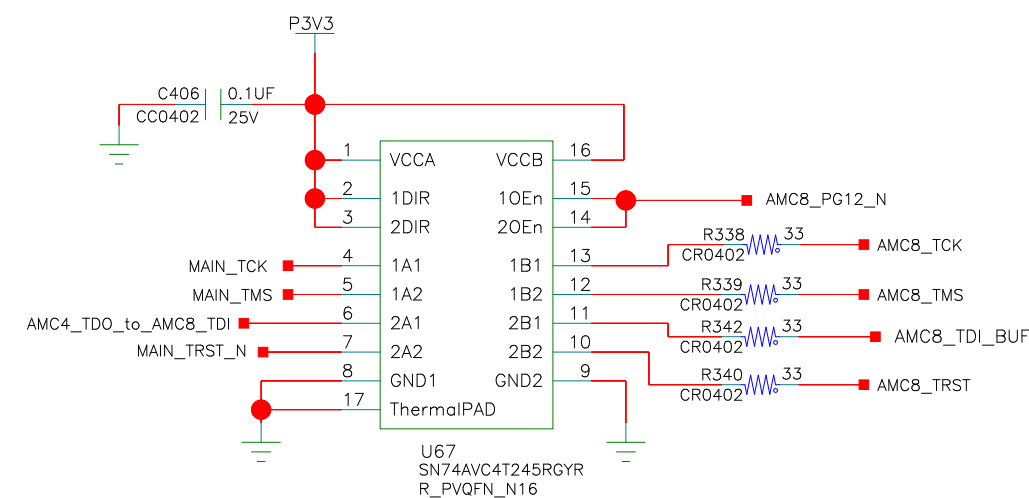
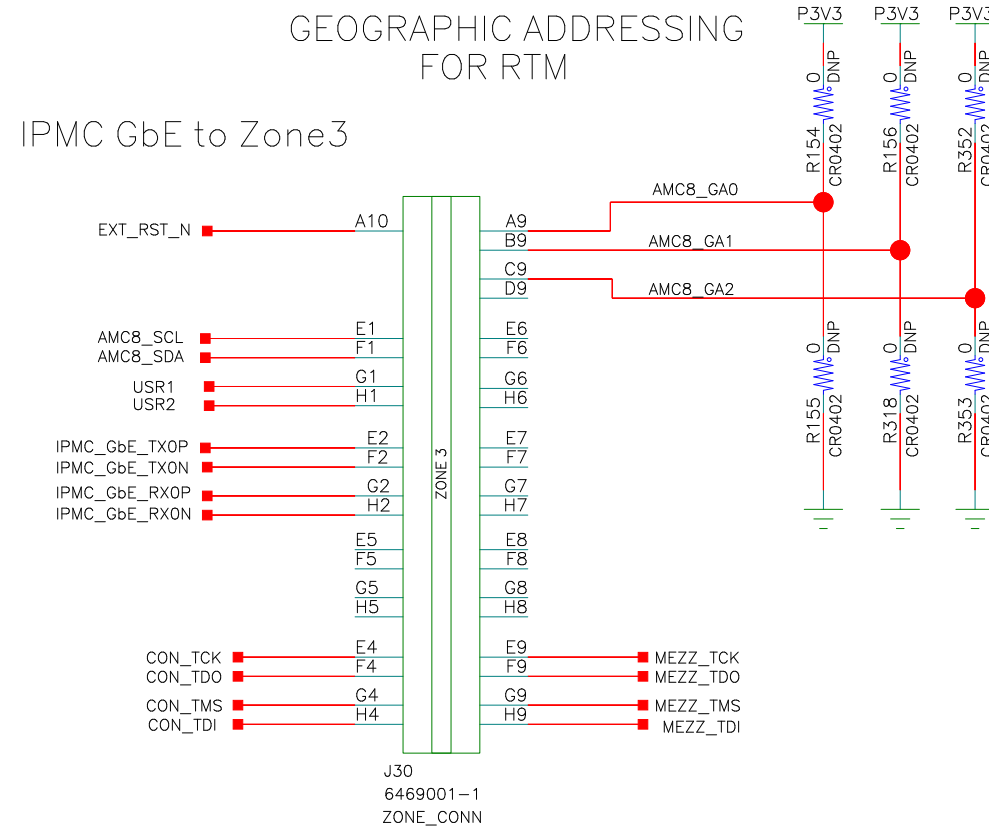
COMPANY	STONY BROOK UNIVERSITY			
TITLE	ATCA			
SIZE	B	REV	A	SHEET 48 OF 49
DRAWN	ES	DATE	26/02/2015:08:43	



2-WIRE BUS BUFFER



ANALOG SWITCH



RTM 2 OF 2

COMPANY	STONY BROOK UNIVERSITY		
TITLE	ATCA		
SIZE	B	REV	A
DRAWN	ES	DATE	22/01/2015:09:07
		SHEET	49 OF 49

A B C D E F

4

4

3

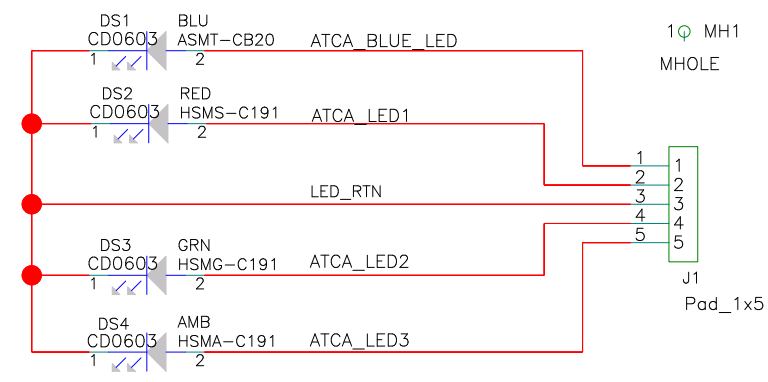
3

2

2

1

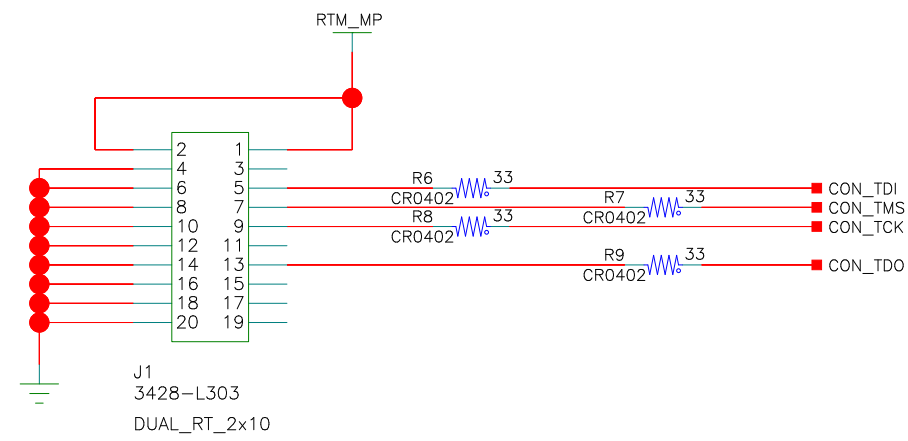
1



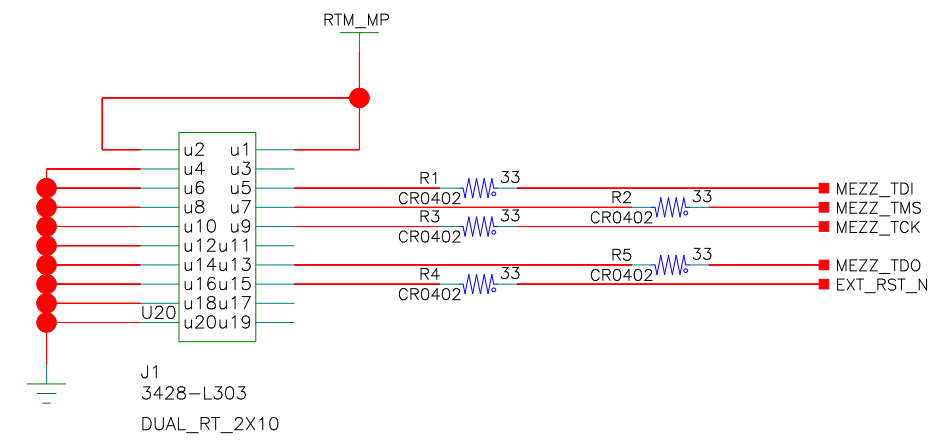
# FRONT PANEL LEDS

COMPANY	STONY BROOK UNIVERSITY		
TITLE	FRONT PANEL LEDS		
SIZE	B	REV	A
DRAWN	ES	DATE	22/01/2015:09:07
		SHEET	1 OF 1

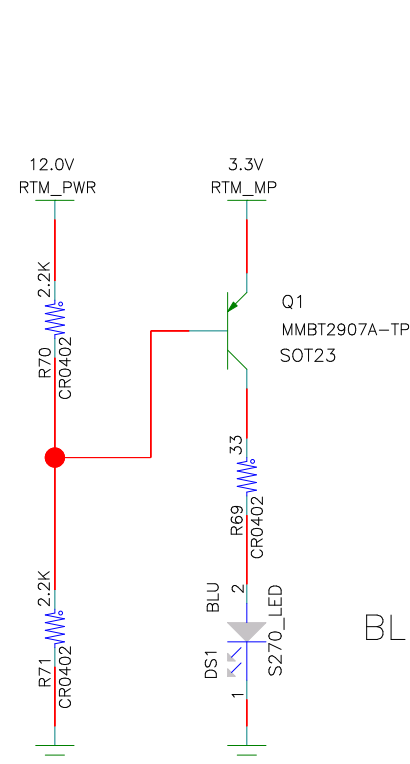
A B C D E F



ATCA JTAG CHAIN

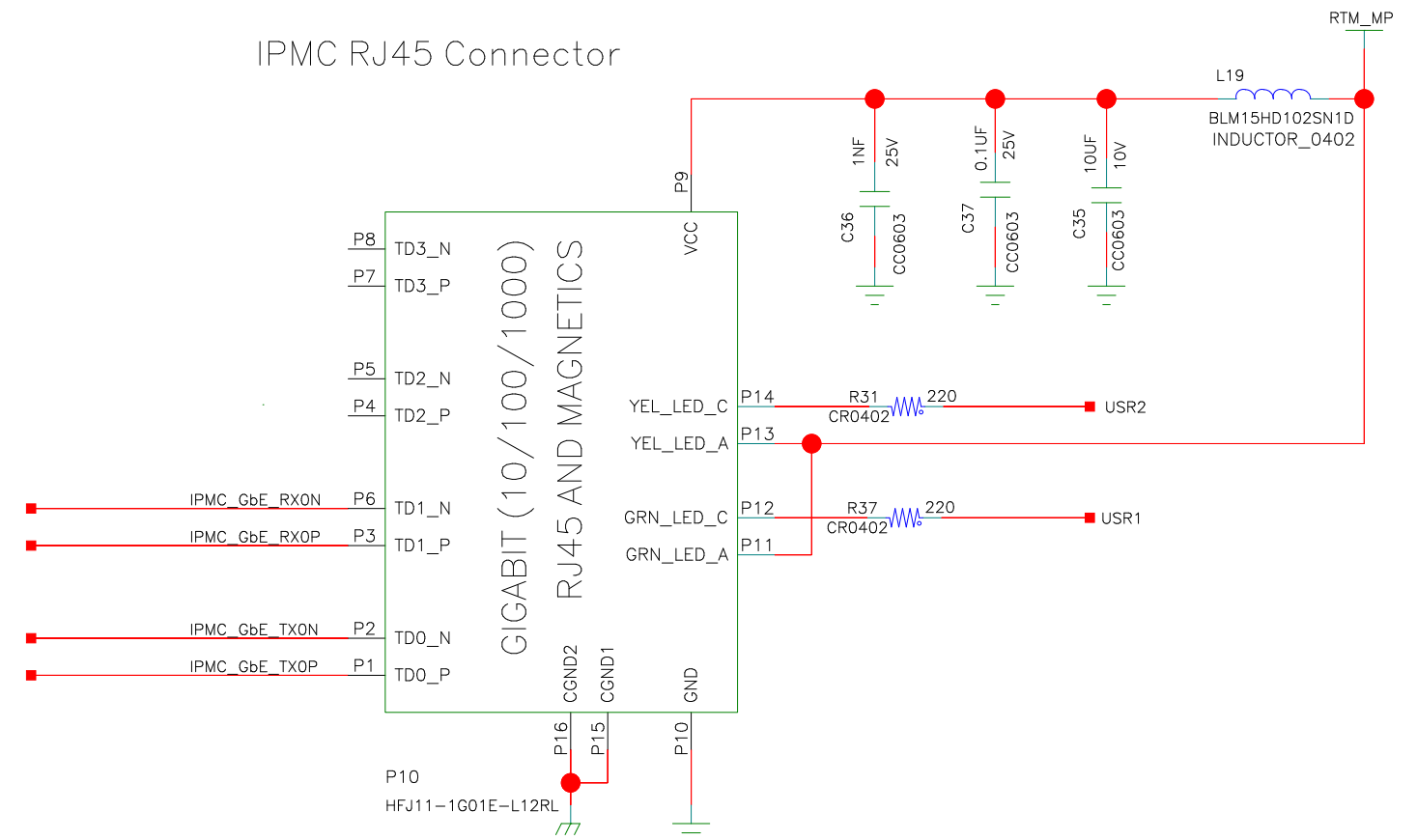
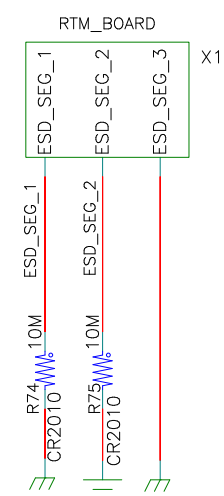


MEZZ JTAG CHAIN



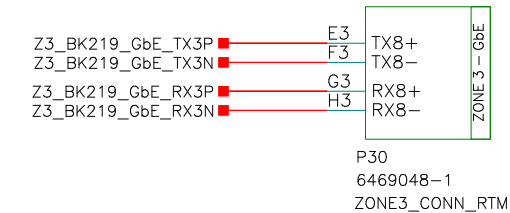
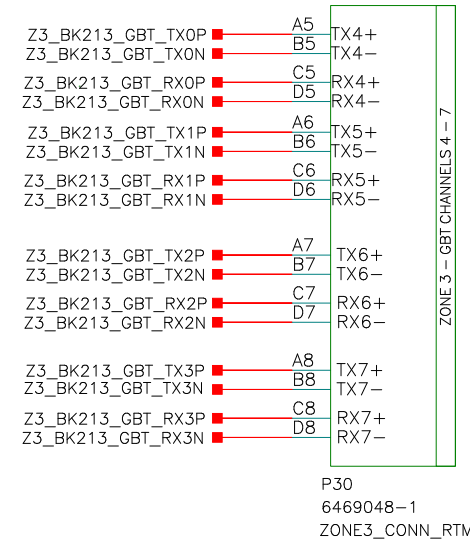
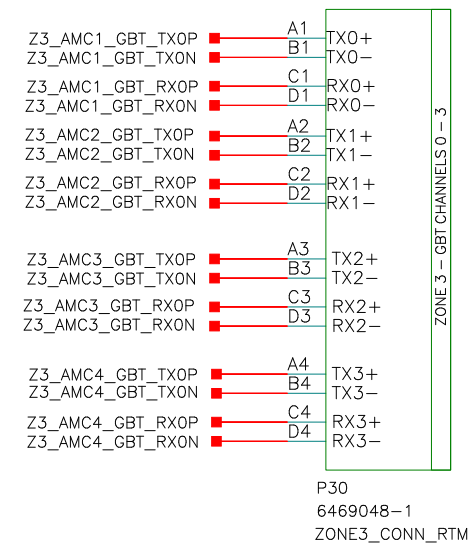
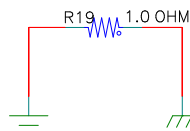
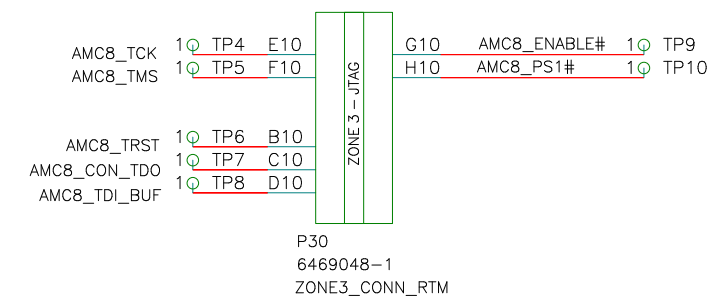
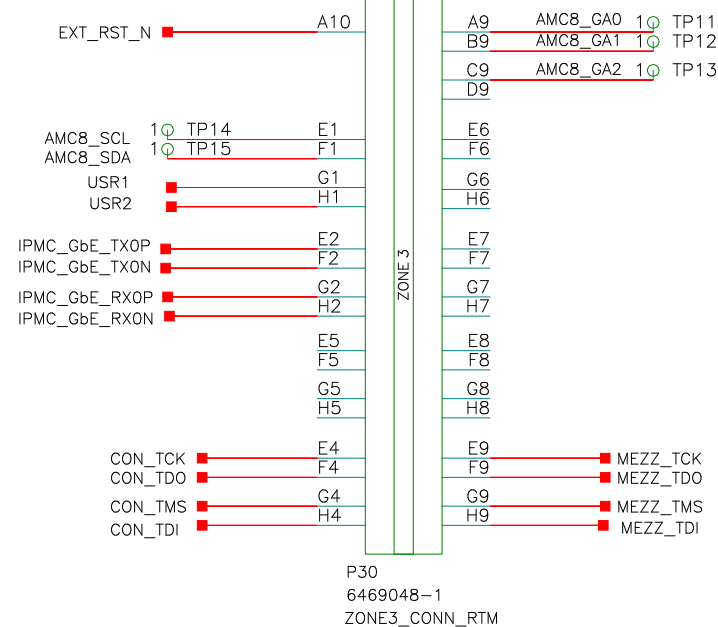
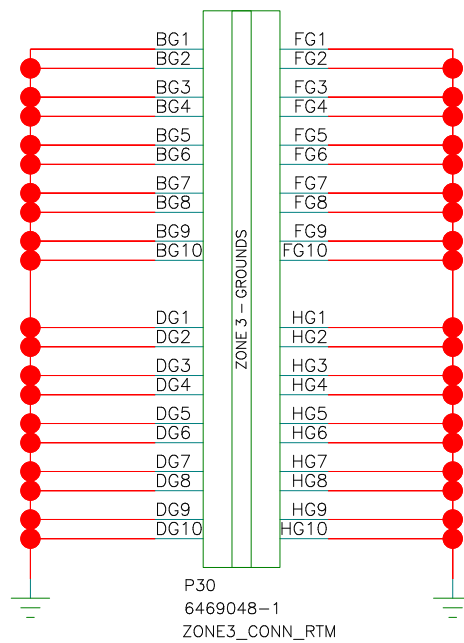
BLUE HOTSWAP LED

ESD PROTECTION



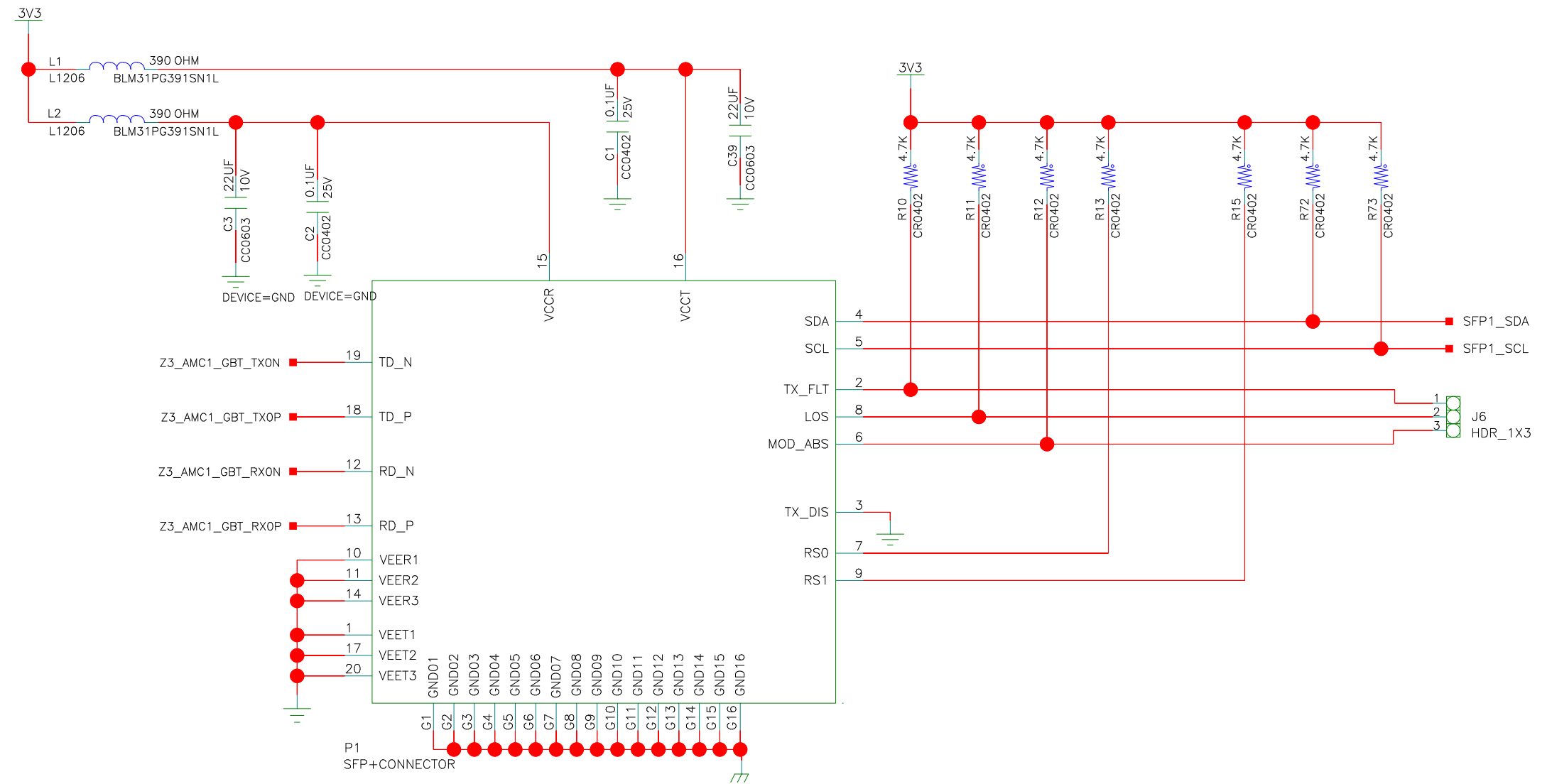
IPMC RJ45 Connector

COMPANY	STONY BROOK UNIVERSITY		
TITLE	RTM		
SIZE	B	REV	A
DRAWN	ES	DATE	30/01/2015:13:53
SHEET	1	OF	12



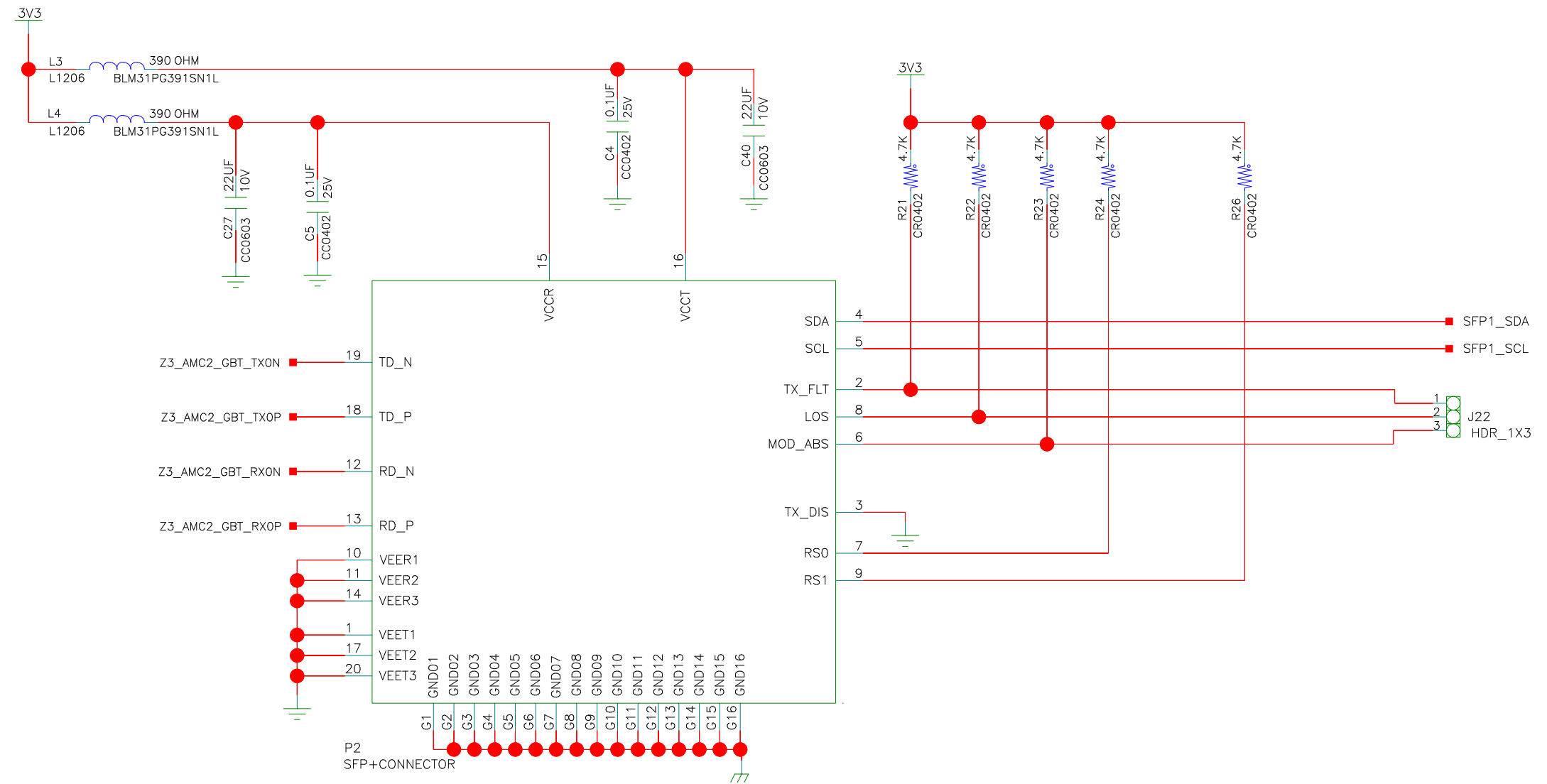
COMPANY	STONY BROOK UNIVERSITY			
TITLE	RTM			
SIZE	B	REV	A	SHEET 2 OF 12
DRAWN	ES	DATE	22/01/2015:09:18	





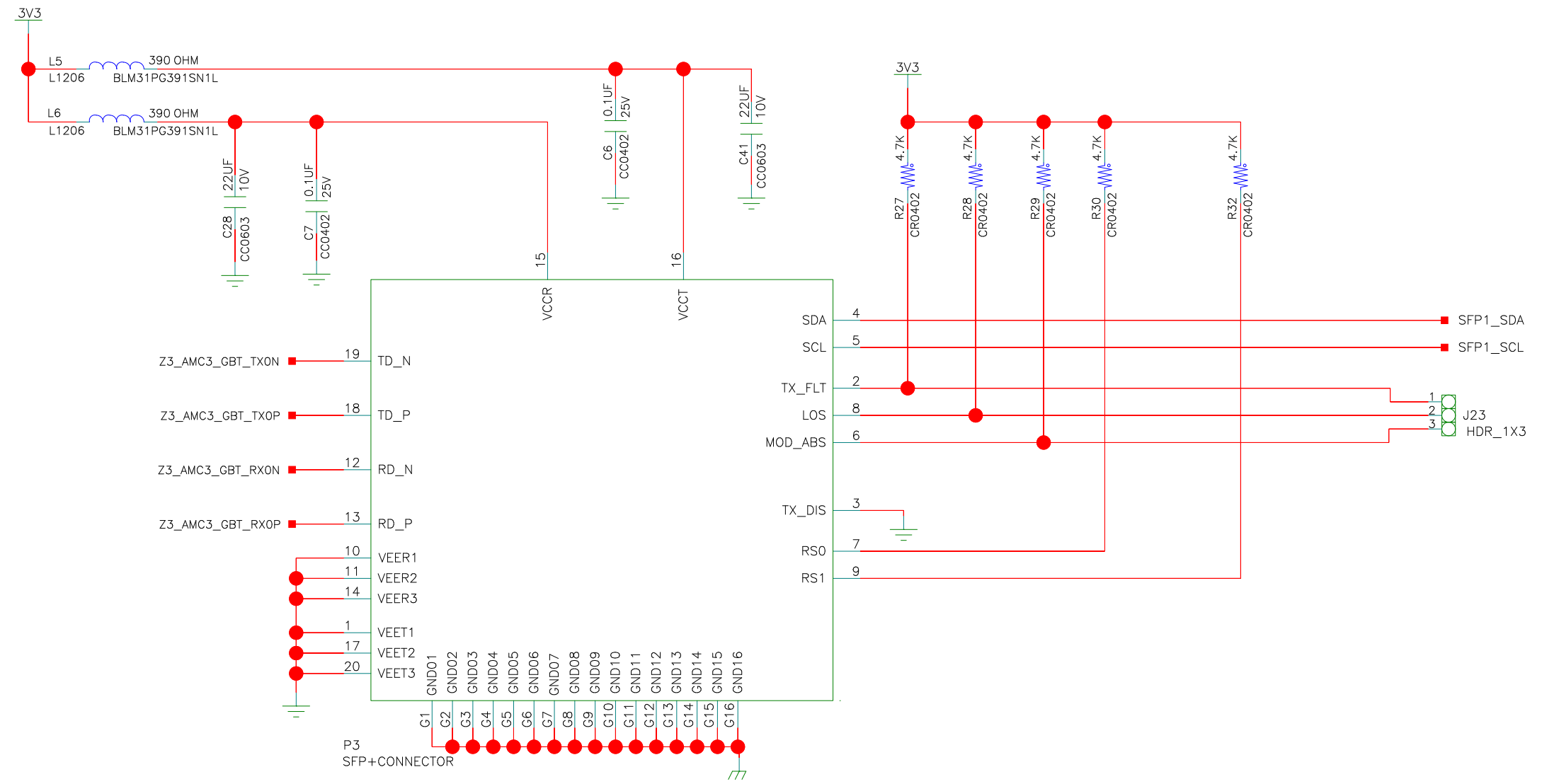
SFP+ CONNECTOR  
GBT CH 0

COMPANY	STONY BROOK UNIVERSITY		
TITLE	RTM		
SIZE	B	REV	A
DRAWN	ES	DATE	05/03/2015:07:27
		SHEET	3 OF 12



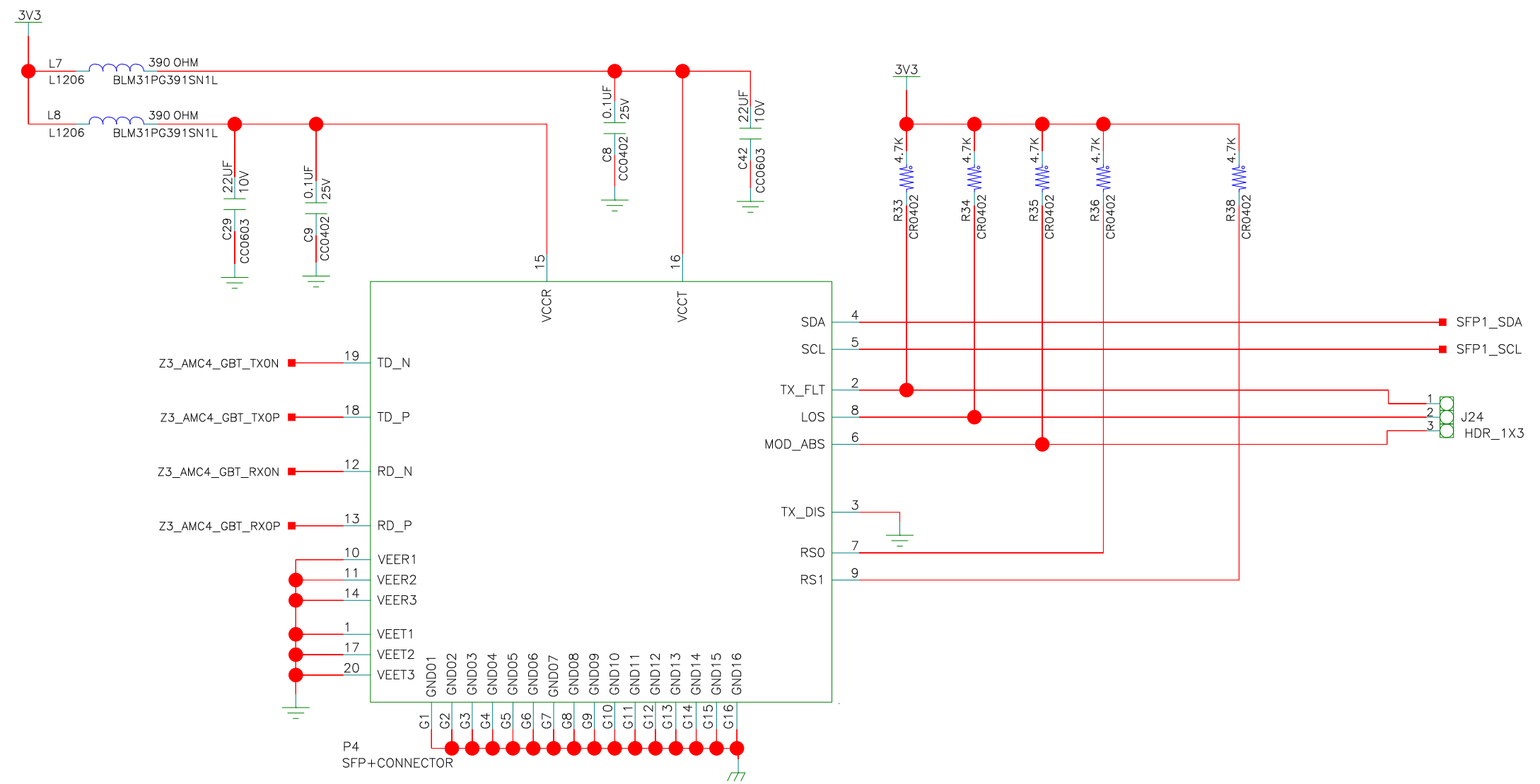
SFP+ CONNECTOR  
GBT CH 1

COMPANY	STONY BROOK UNIVERSITY		
TITLE	RTM		
SIZE	B	REV	A
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		SHEET	4 OF 12



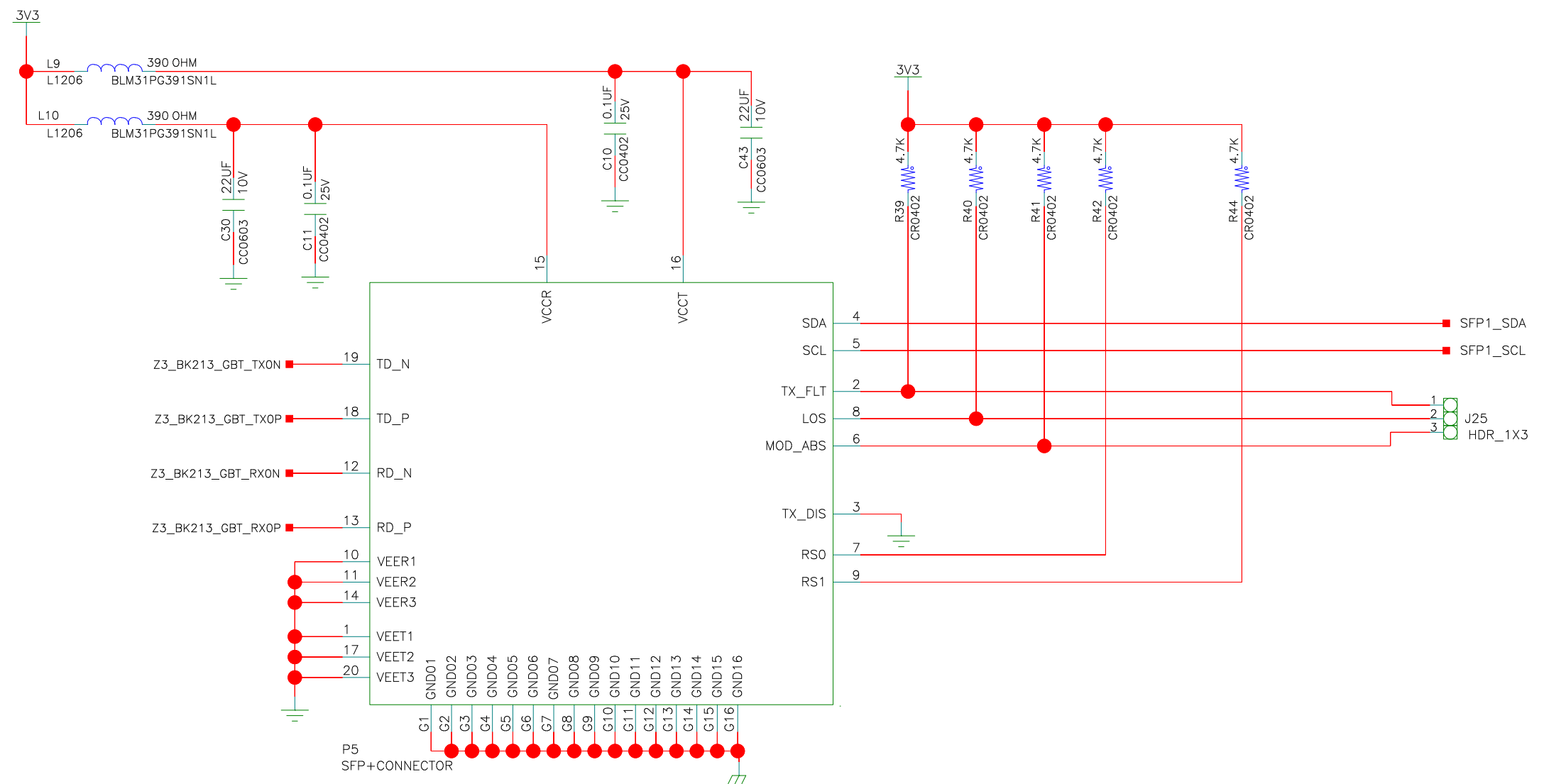
SFP+ CONNECTOR  
GBT CH 2

COMPANY	STONY BROOK UNIVERSITY		
TITLE	RTM		
SIZE	B	REV	A
DRAWN	ES	DATE	05/03/2015:07:27
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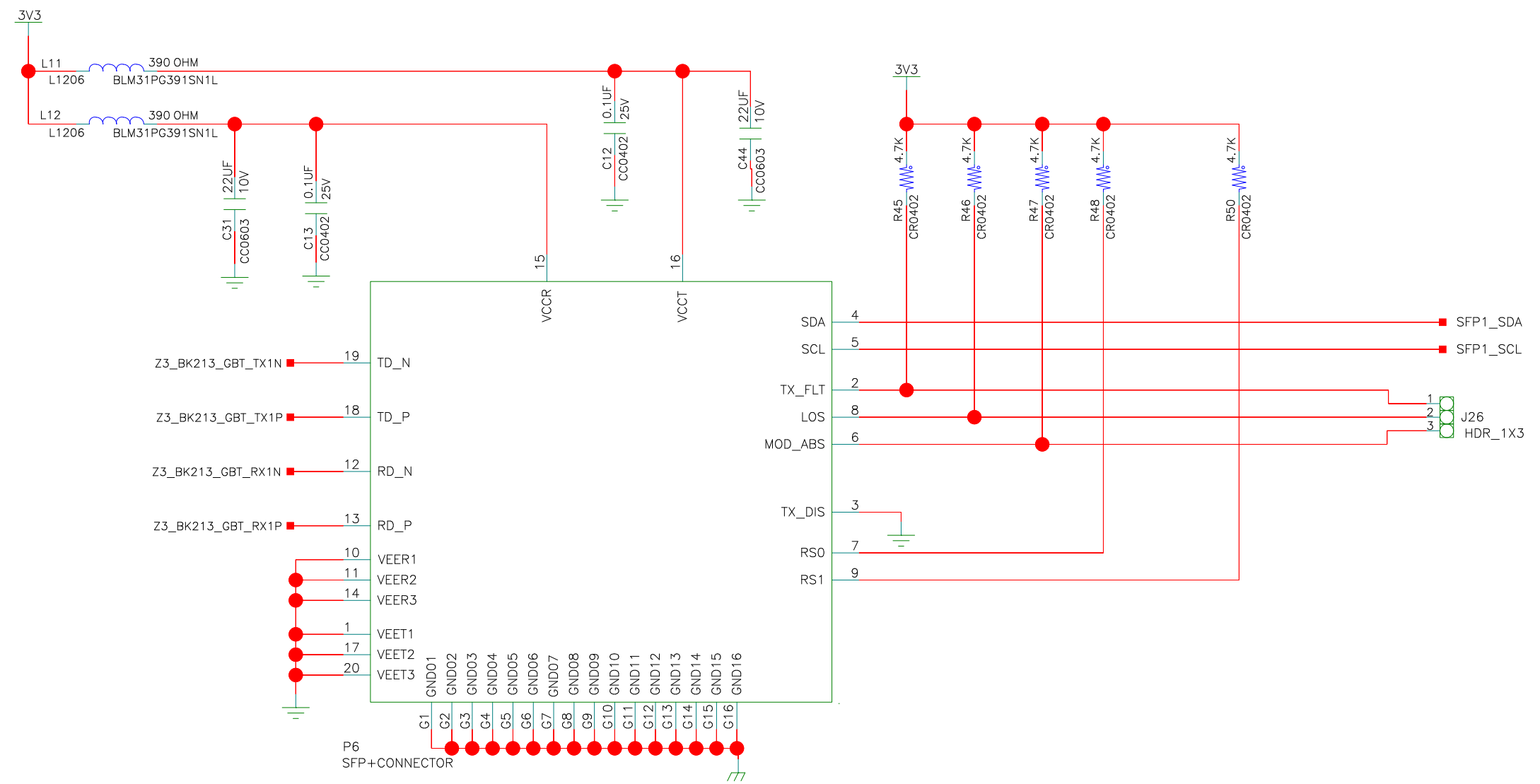
SFP+ CONNECTOR  
GBT CH 3

COMPANY	STONY BROOK UNIVERSITY		
TITLE	RTM		
SIZE	B	REV	A
DRAWN	ES	DATE	05/03/2015:07:27
		SHEET	6 OF 12



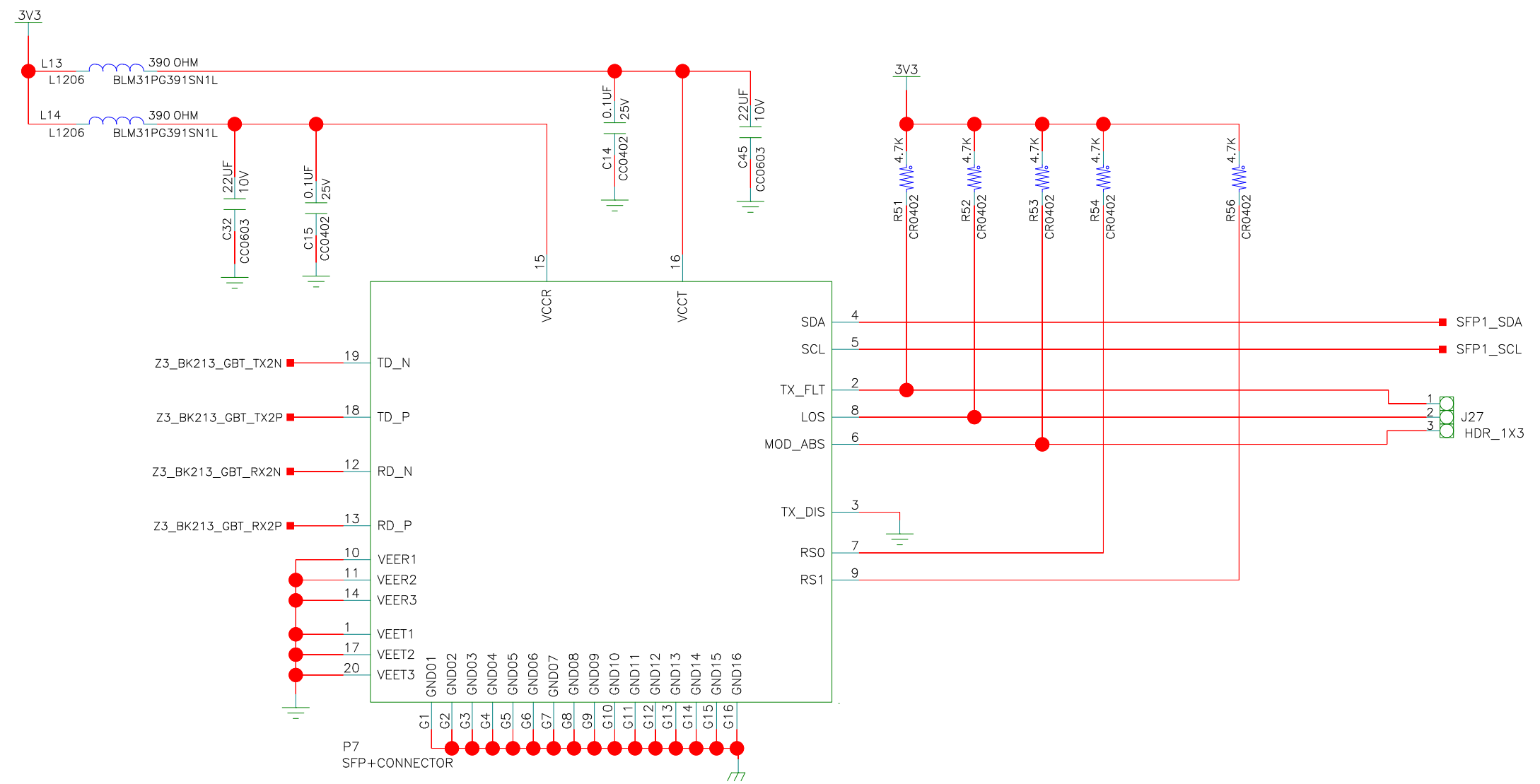
SFP+ CONNECTOR  
GBT CH 4

COMPANY	STONY BROOK UNIVERSITY		
TITLE	RTM		
SIZE	B	REV	A
DRAWN	ES	DATE	05/03/2015:07:27
		SHEET	7 OF 12



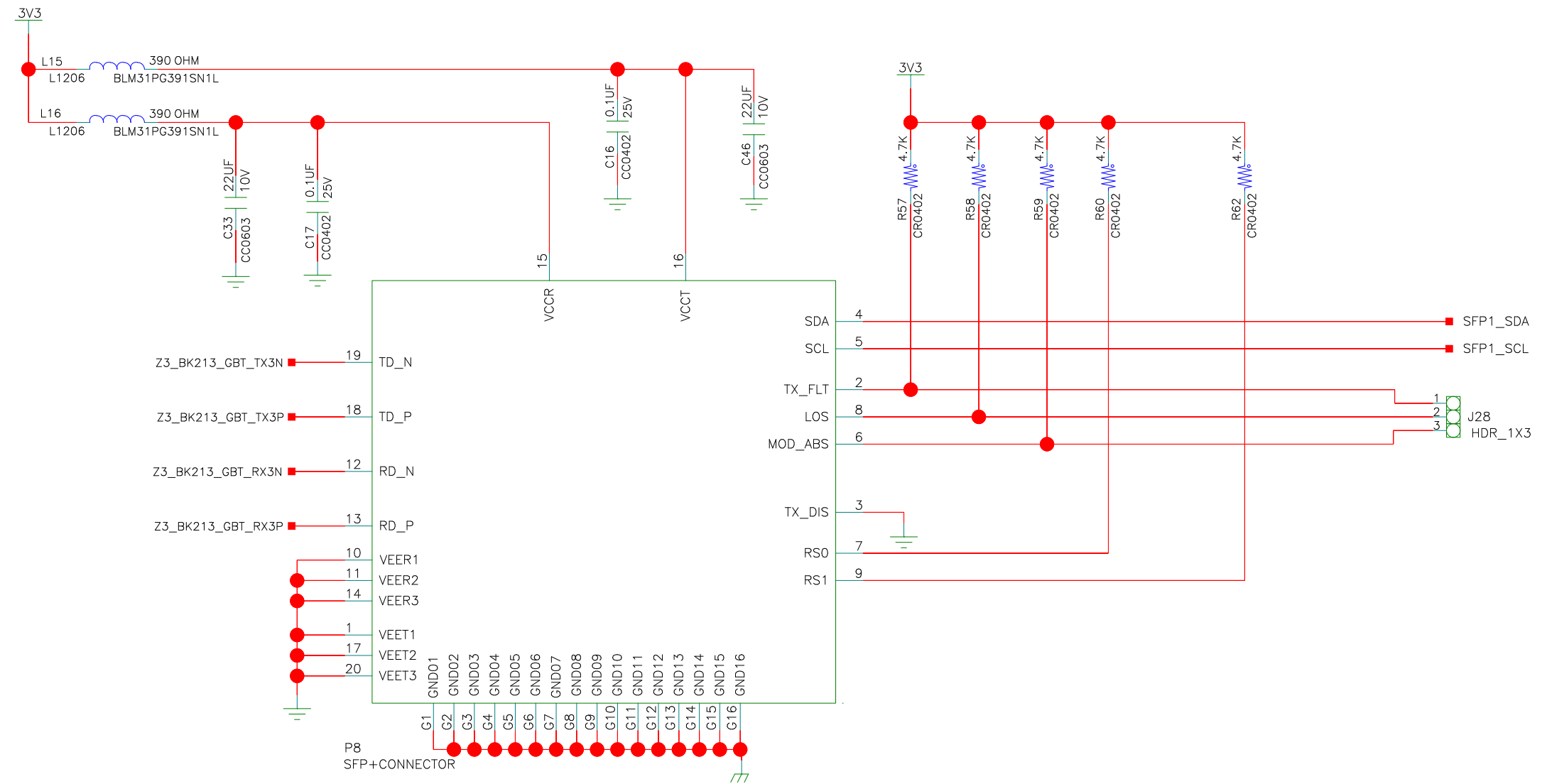
SFP+ CONNECTOR  
GBT CH 5

COMPANY	STONY BROOK UNIVERSITY		
TITLE	RTM		
SIZE	B	REV	A
DRAWN	ES	DATE	05/03/2015:07:27
		SHEET	8 OF 12



SFP+ CONNECTOR  
GBT CH 6

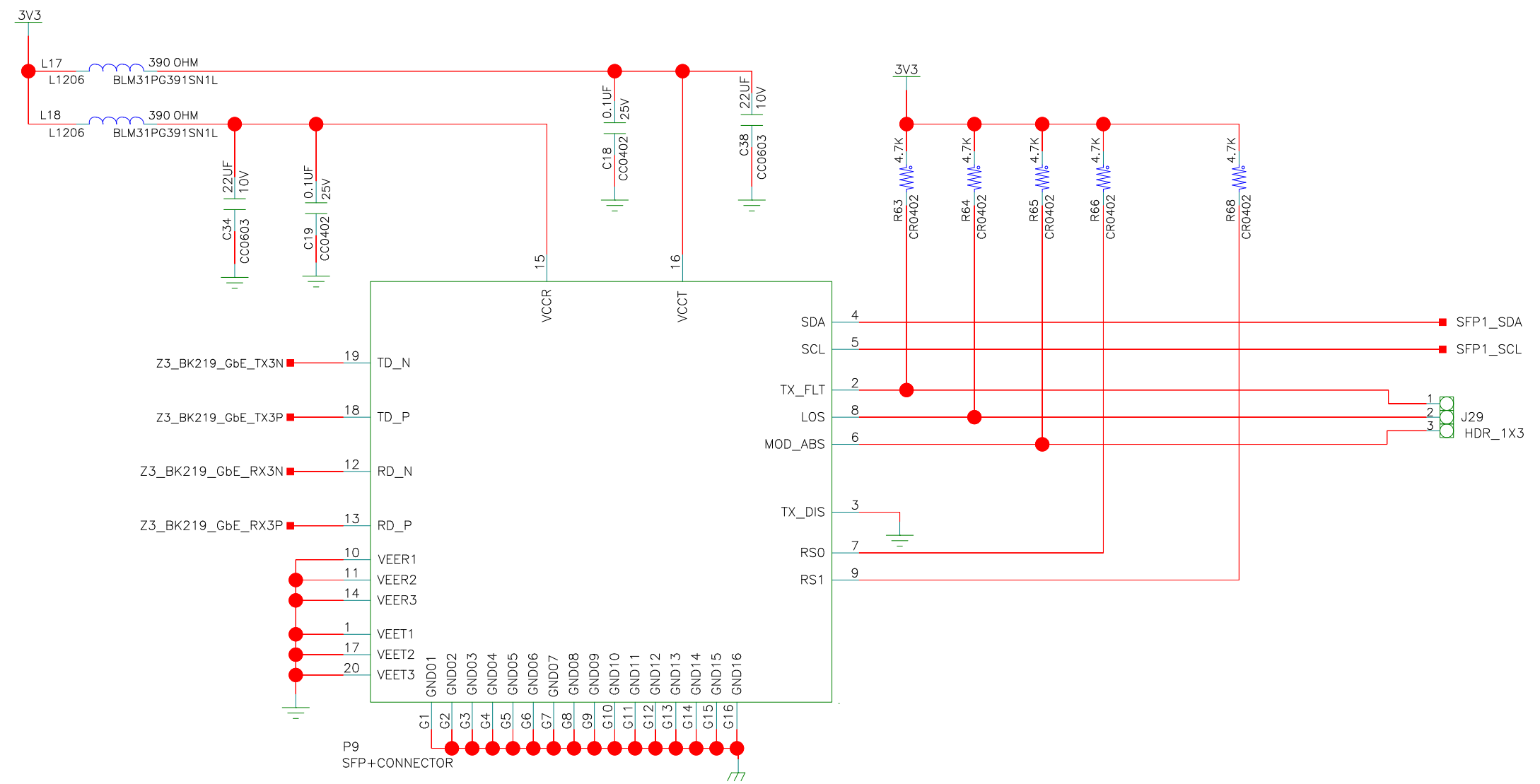
COMPANY	STONY BROOK UNIVERSITY		
TITLE	RTM		
SIZE	B	REV	A
DRAWN	ES	DATE	05/03/2015:07:27
		SHEET	9 OF 12



SFP+ CONNECTOR  
GBT CH 7

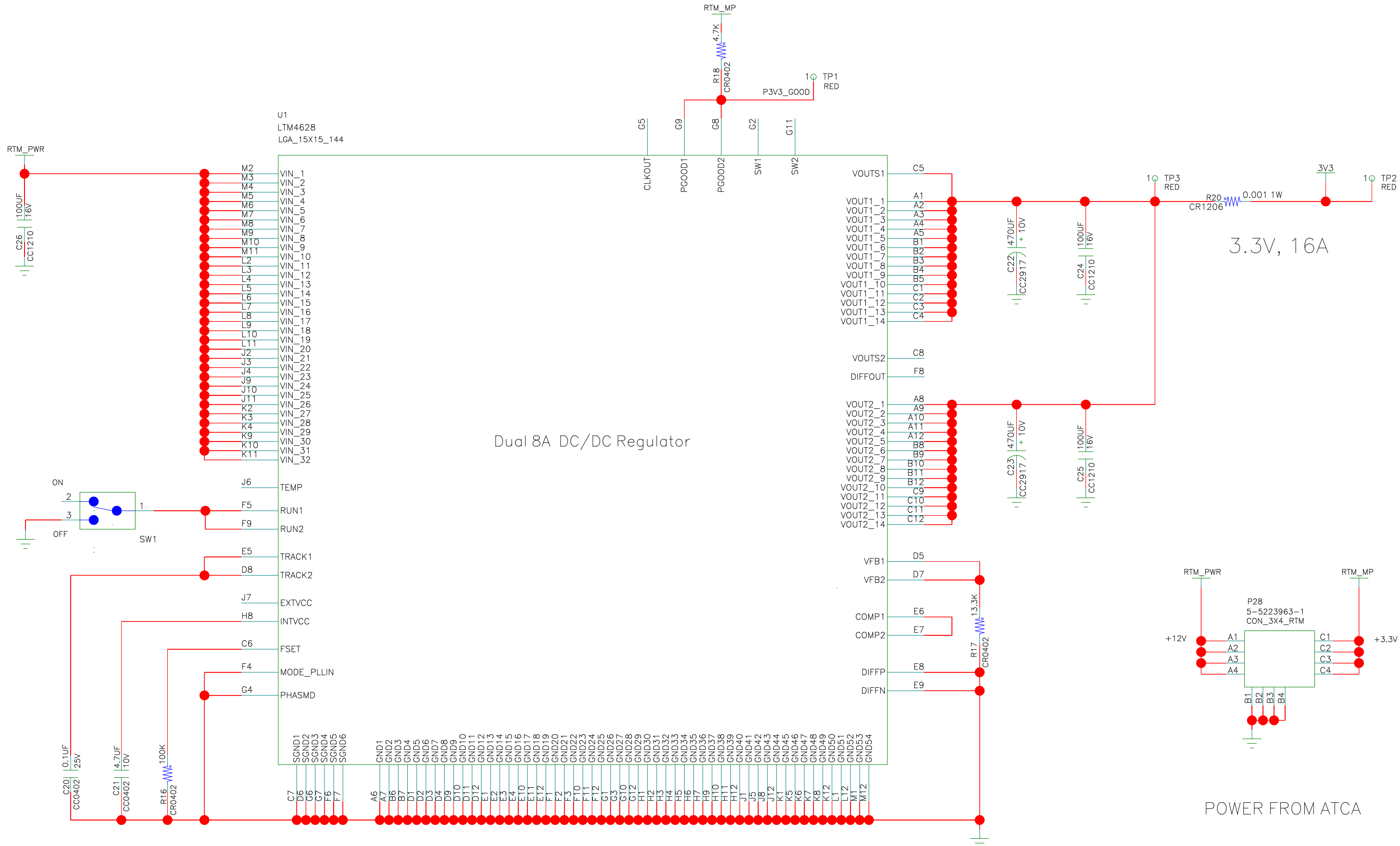
COMPANY	STONY BROOK UNIVERSITY		
TITLE	RTM		
SIZE	B	REV	A
DRAWN	ES	DATE	05/03/2015:07:27
		SHEET	10 OF 12





SFP+ CONNECTOR  
GBE CH 1

COMPANY	STONY BROOK UNIVERSITY		
TITLE	RTM		
SIZE	B	REV	A
DRAWN	ES	DATE	05/03/2015:07:31
		SHEET	11 OF 12



Dual 8A DC/DC Regulator

3.3V, 16A

POWER FROM ATCA

COMPANY	STONY BROOK UNIVERSITY			
TITLE	RTM			
SIZE	B	REV	A	SHEET 12 OF 12
DRAWN	ES	DATE	22/01/2015:09:16	