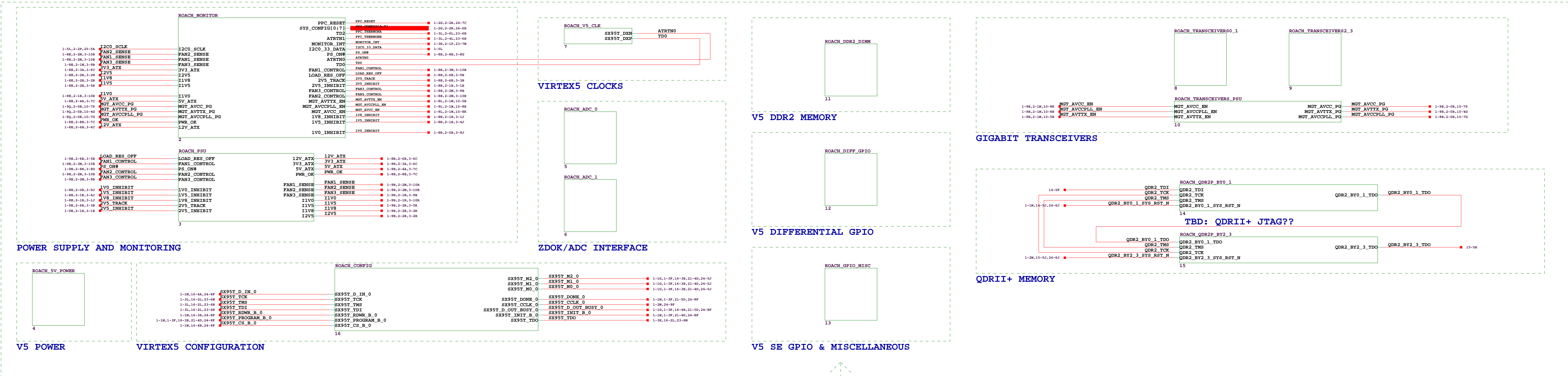
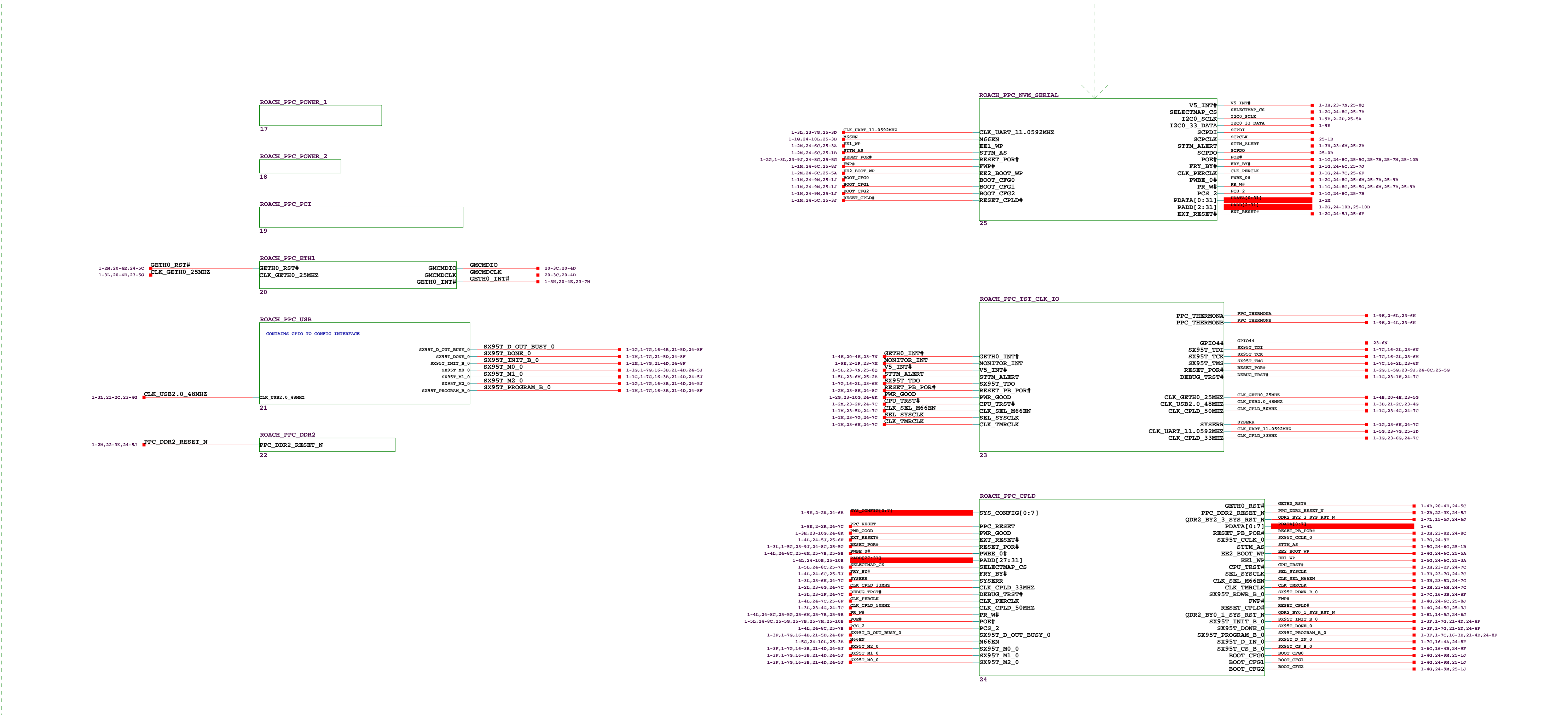


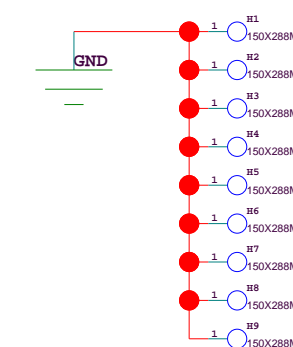
VIRTEX5



PPC



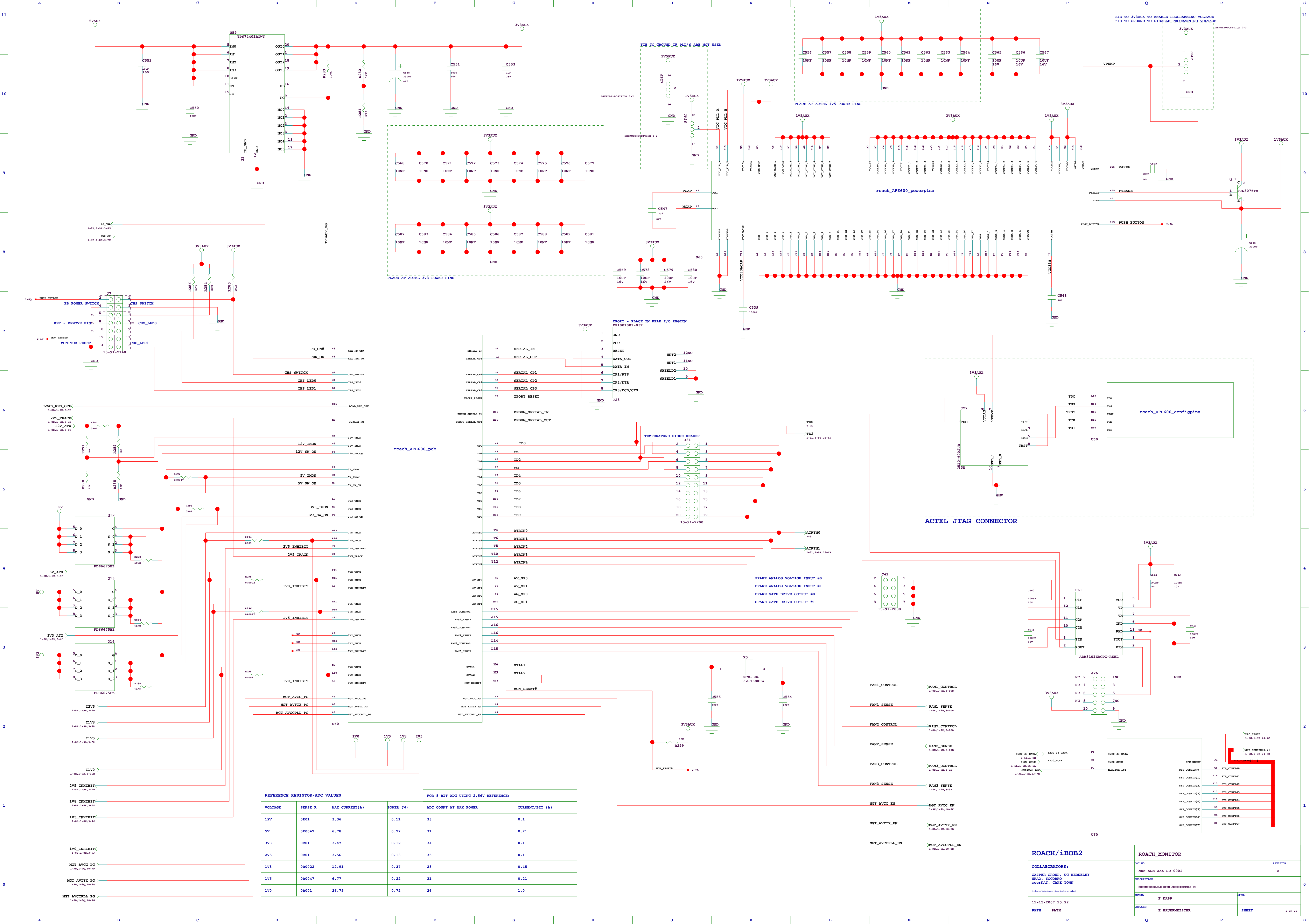
MECHANICAL

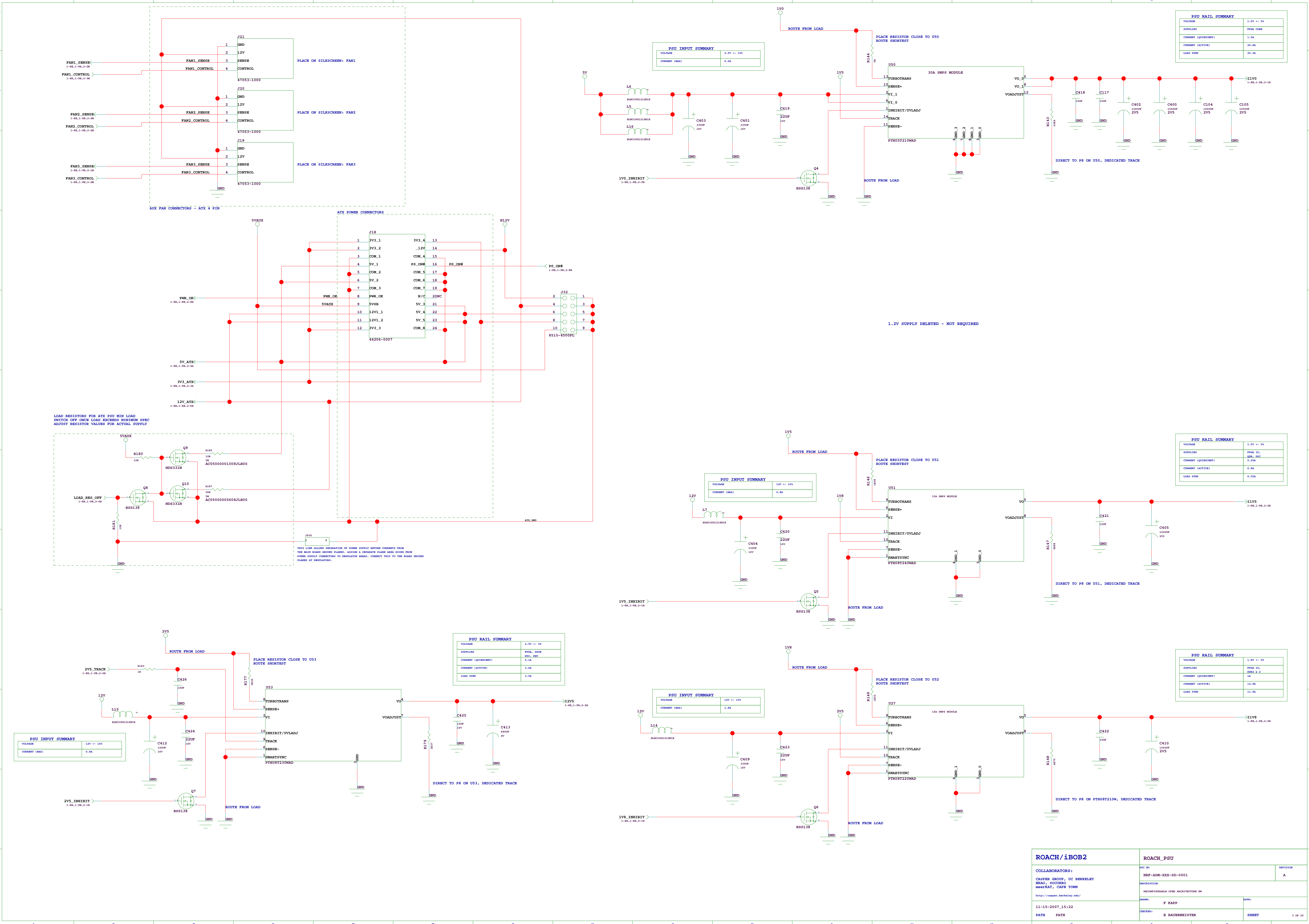


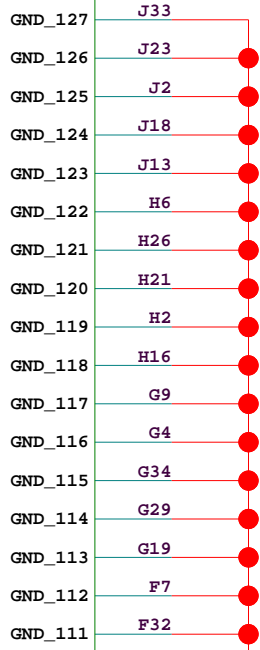
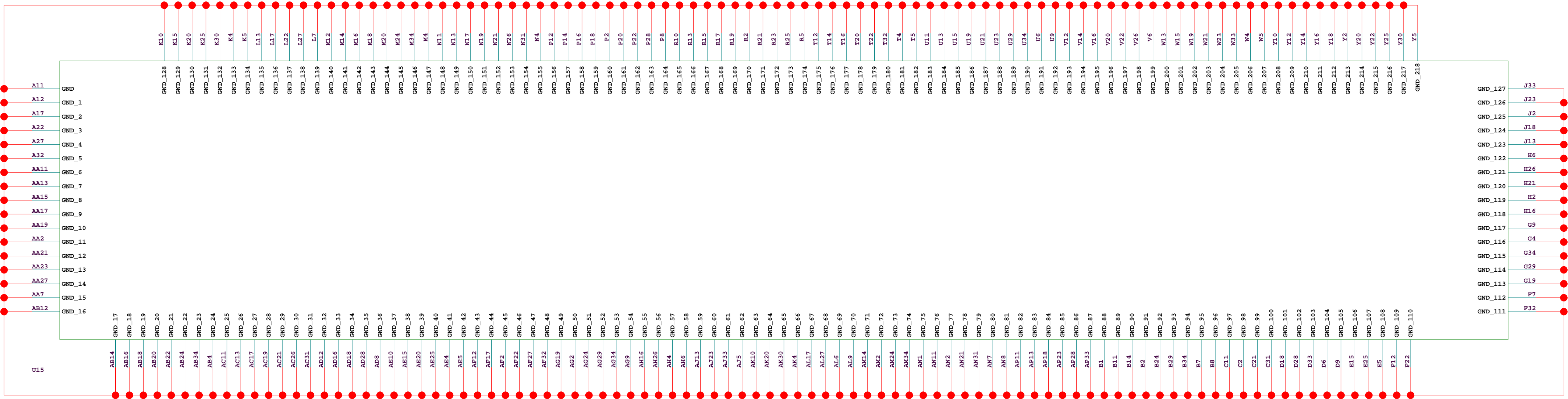
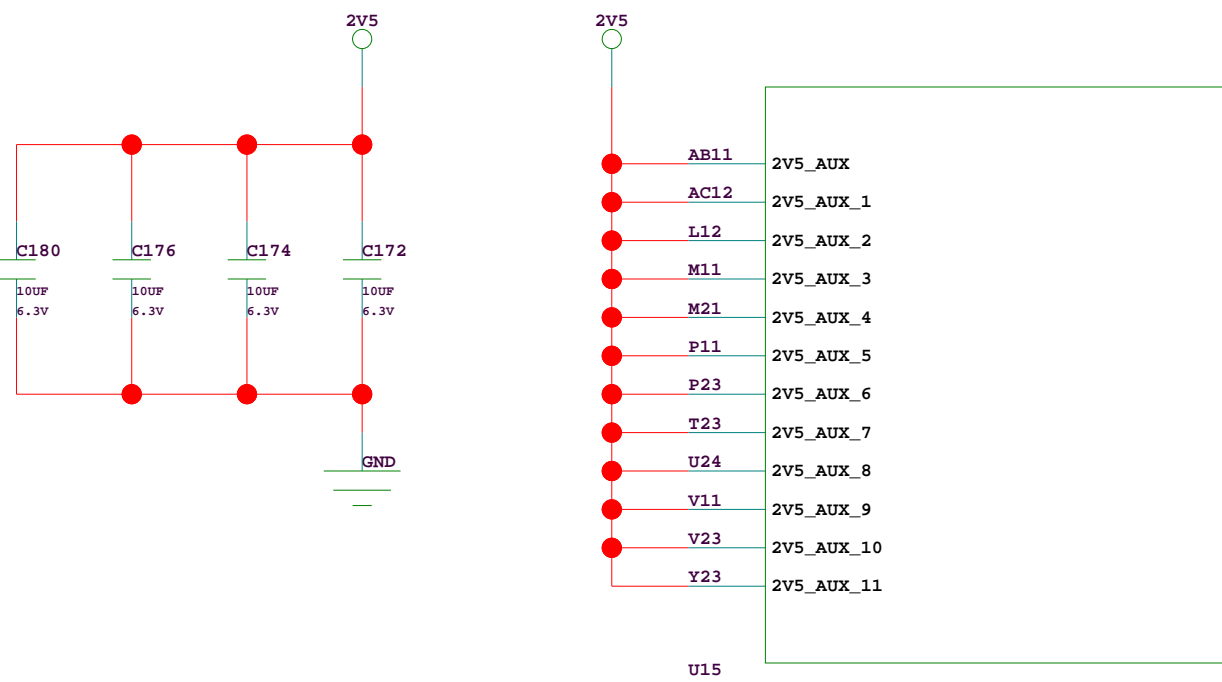
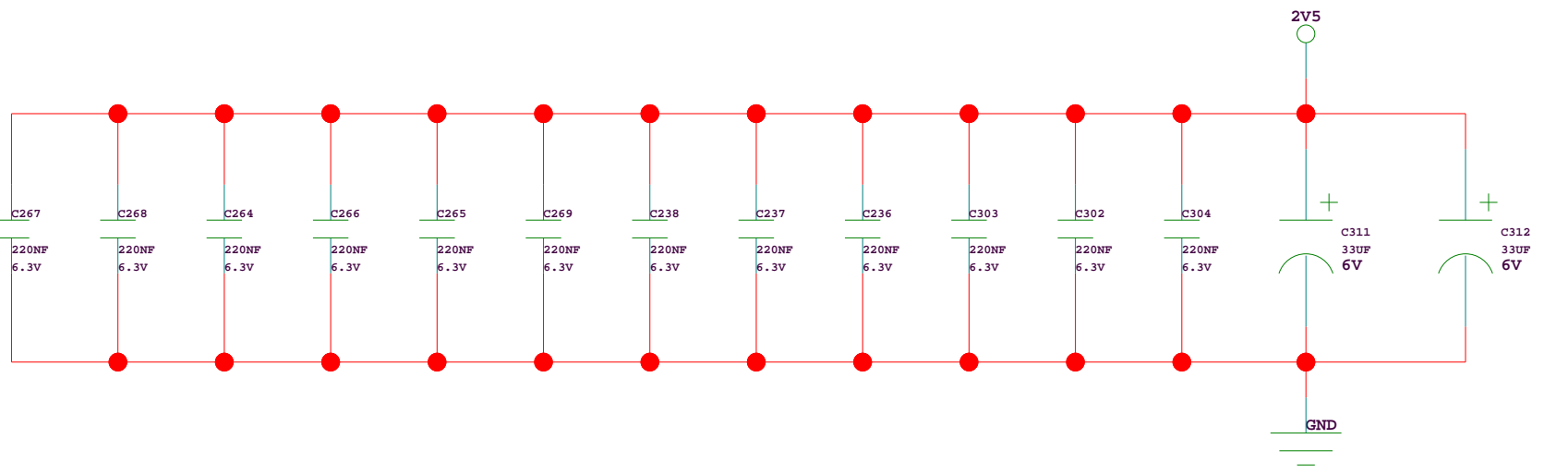
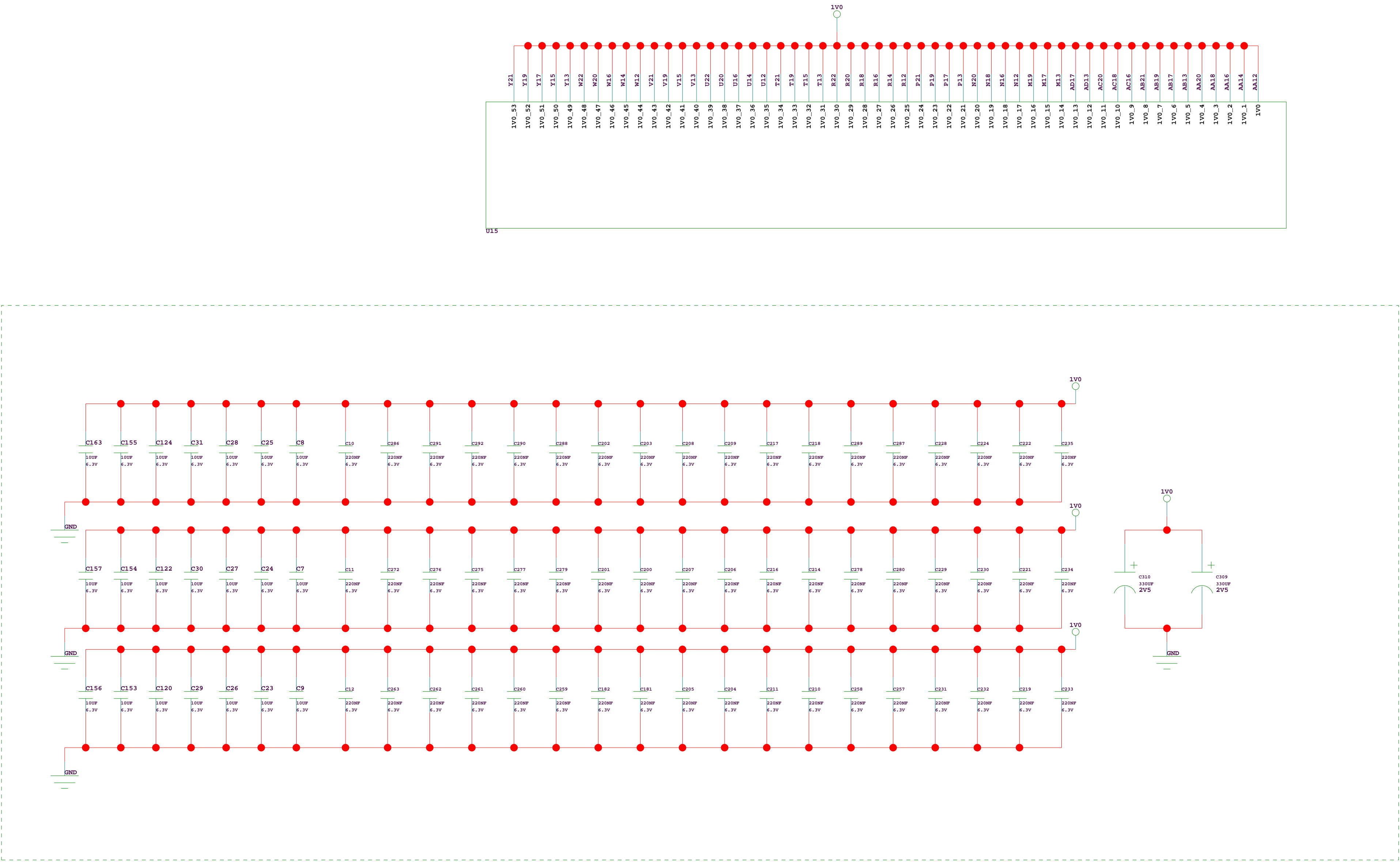
CONTRIBUTORS

STIERNE BAUERMEISTER
HENRY CHEN
STEVE DURAND
FRANCOIS KAPP
ALAN LANGMAN
GEORGE PECK
MIKE REYNELL
HAYDEN SO
DAN WERTHIMER

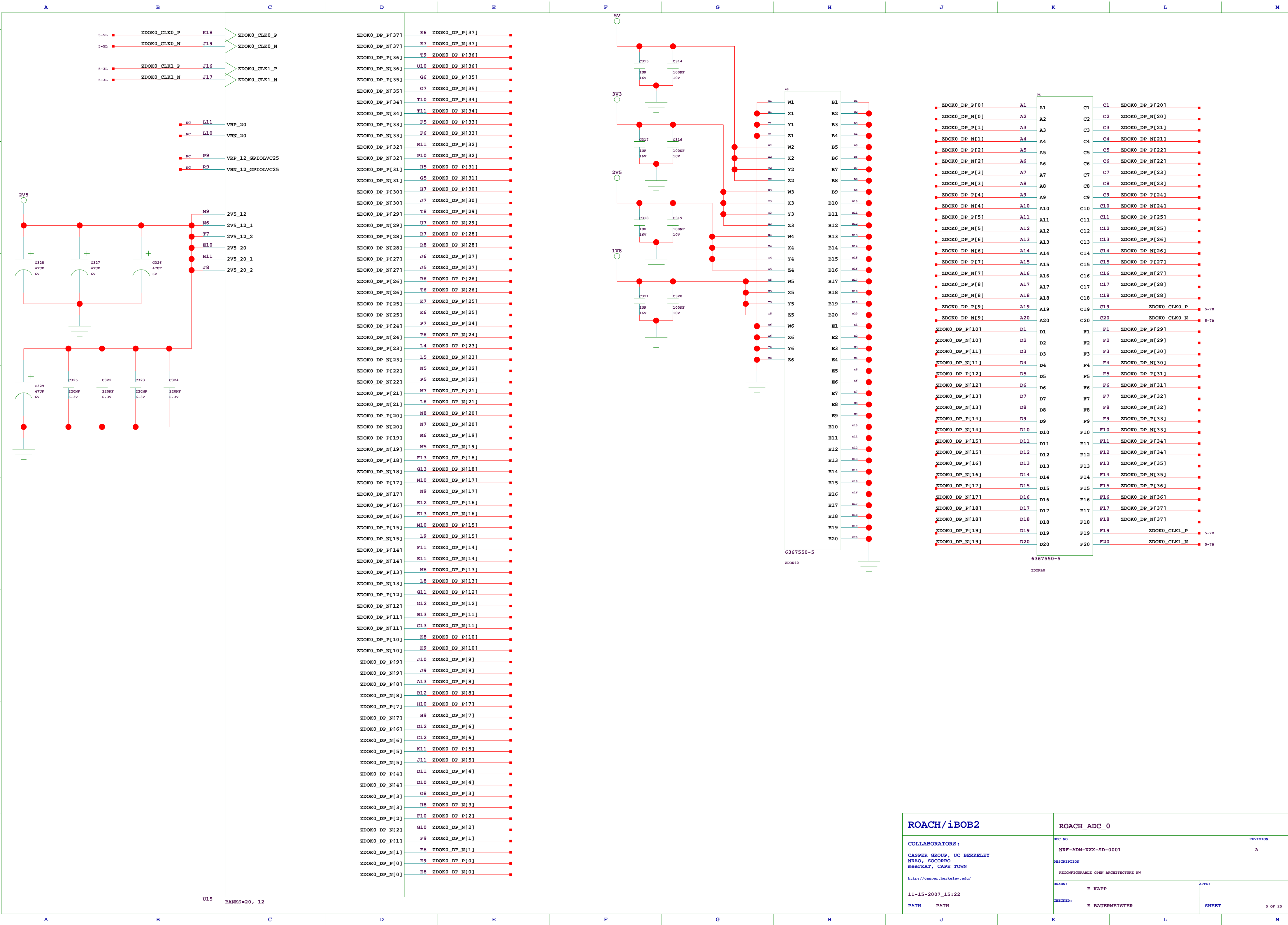
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COLLABORATORS:		DOC NO	
CAPSER GROUP, UC BERKELEY WRAG, SCOROBRO meerkat, CAPE TOWN		NRF-ADM-XXX-SD-0001	
http://capers.berkeley.edu/		REVISION	
		A	
		DESCRIPTION	
		RECONFIGURABLE OPEN ARCHITECTURE HW	
11-15-2007 15:22		NAME:	
PATH PATH		F KAPP	
		APPR:	
		DRAWN BY:	
		E BAUERMEISTER	
		SHEET	
		1 OF 2	

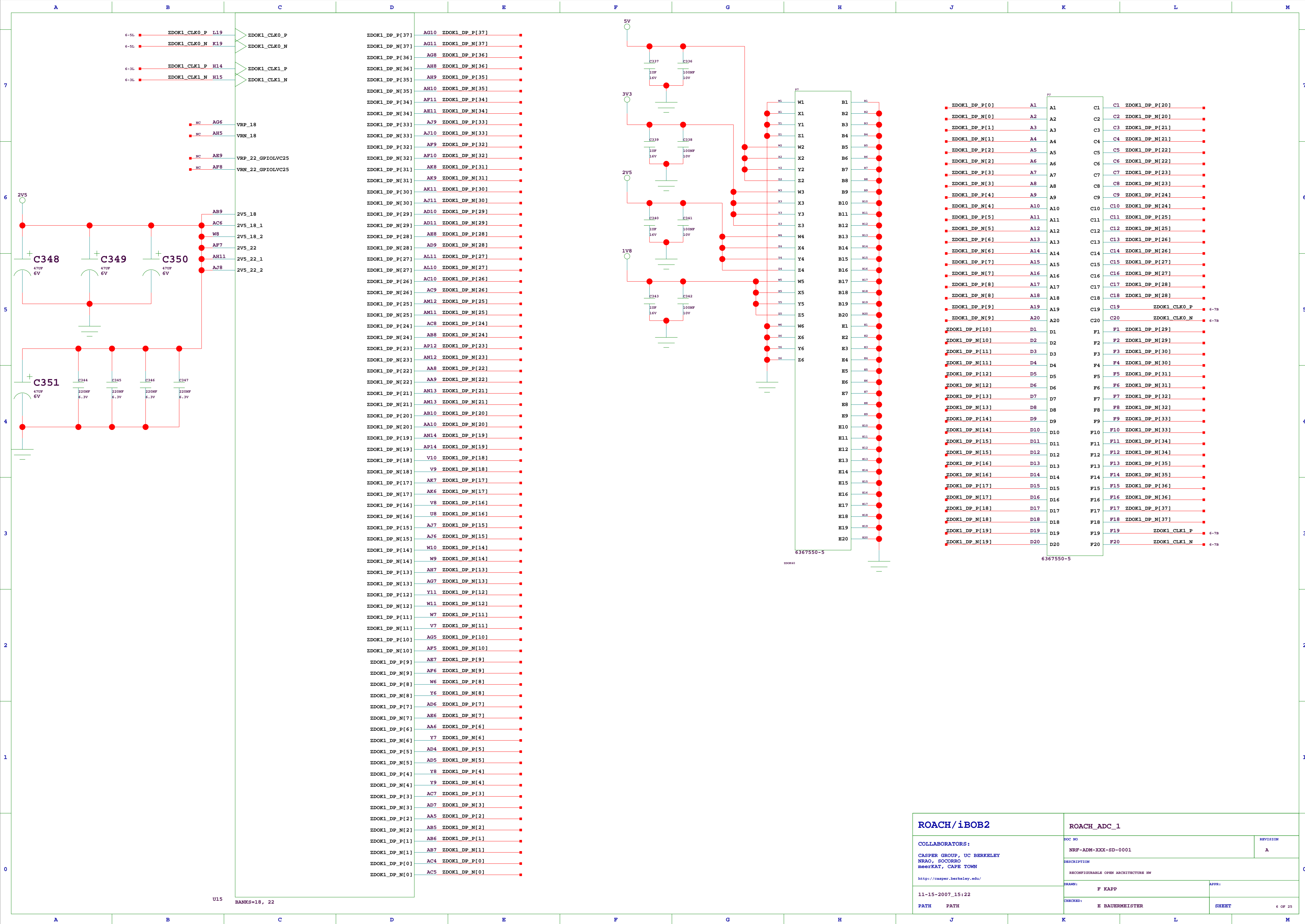


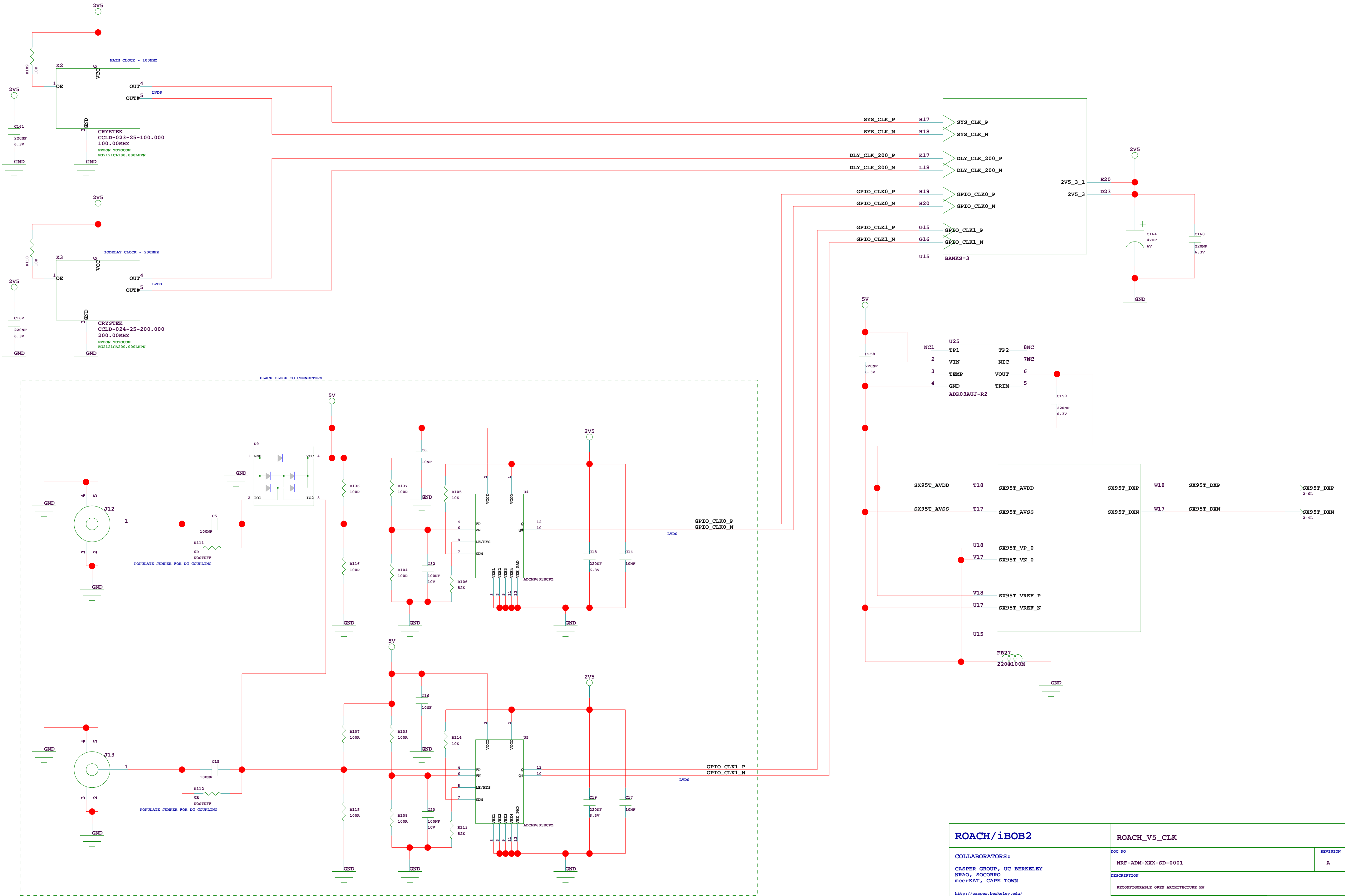




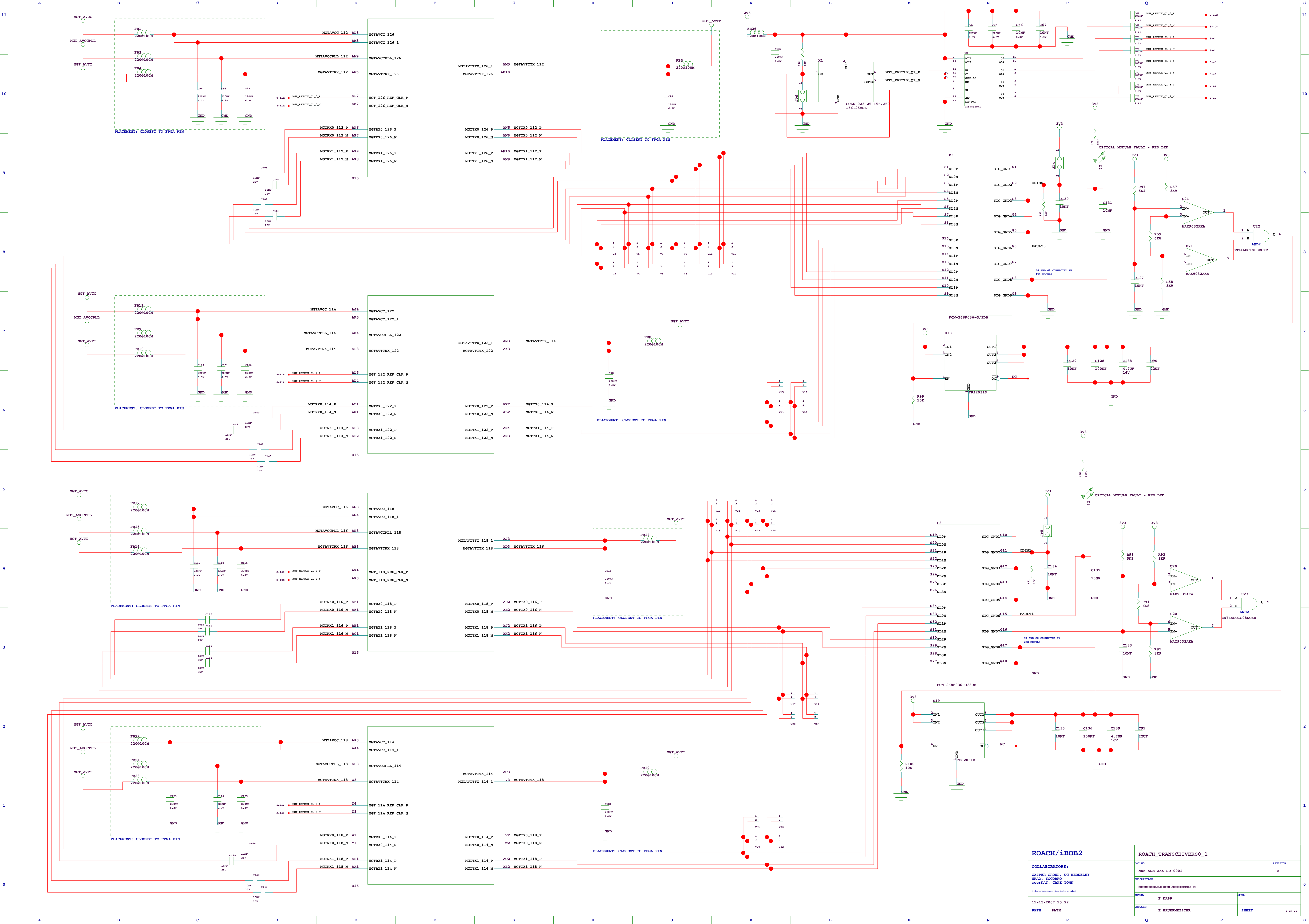
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DESCRIPTION		RECONFIGURABLE OPEN ARCHITECTURE HW	
http://casper.berkeley.edu/		BRAND	UPPER
11-15-2007_15:22		F KAPP	
PATH		R BAUERMBIESTER	SHEET

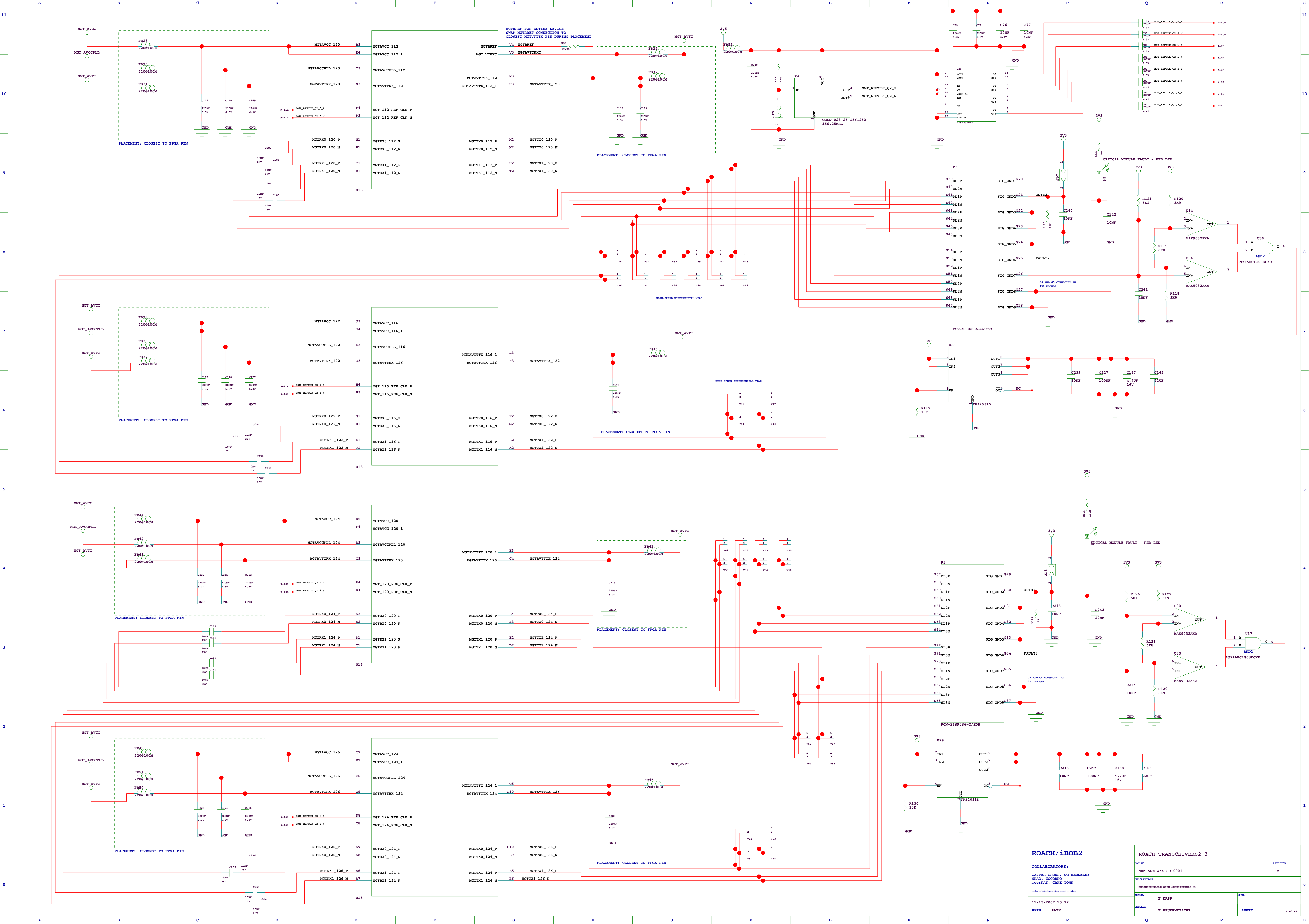


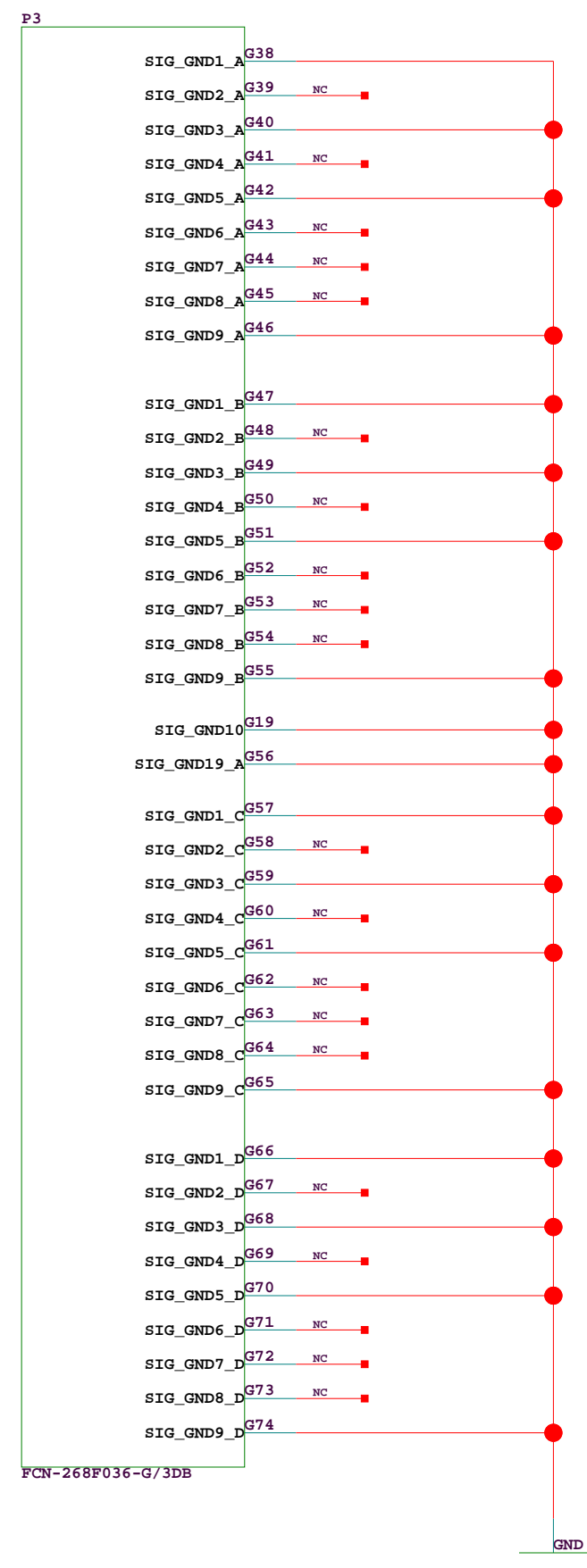
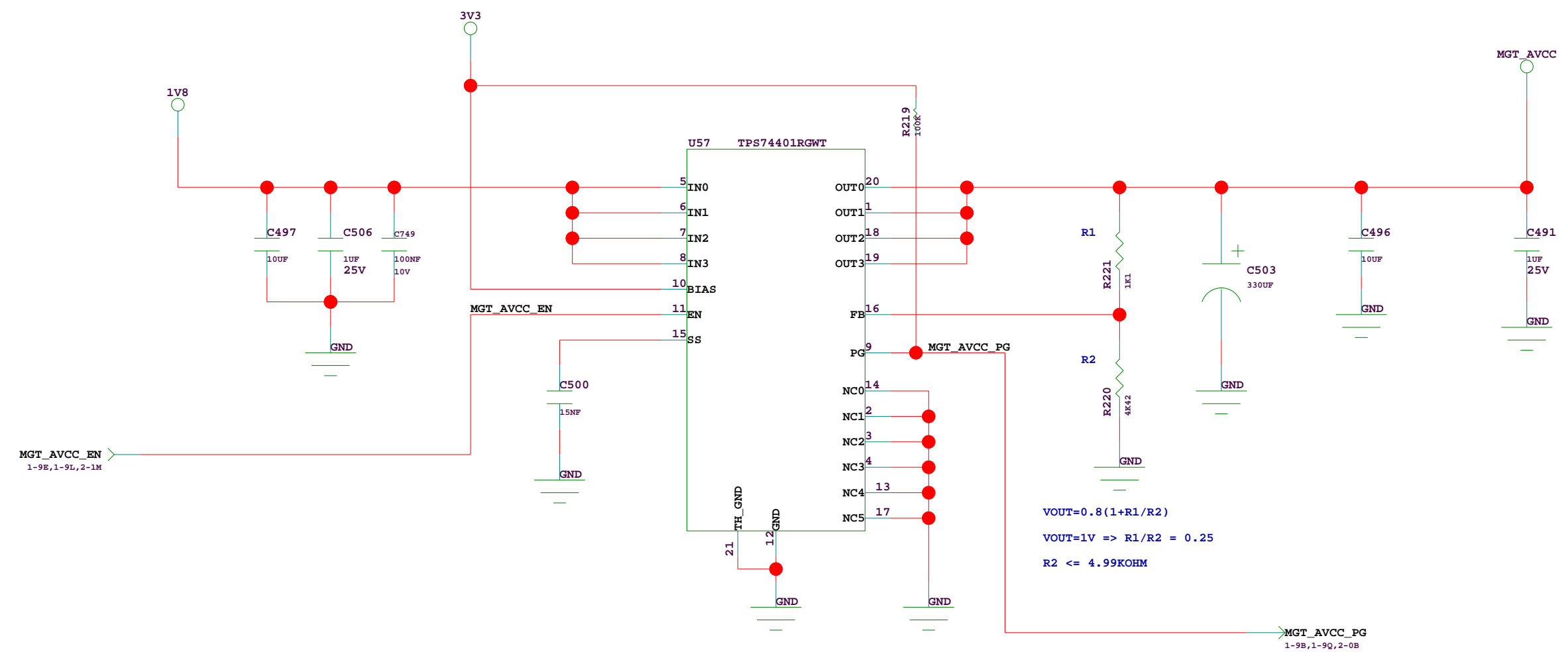
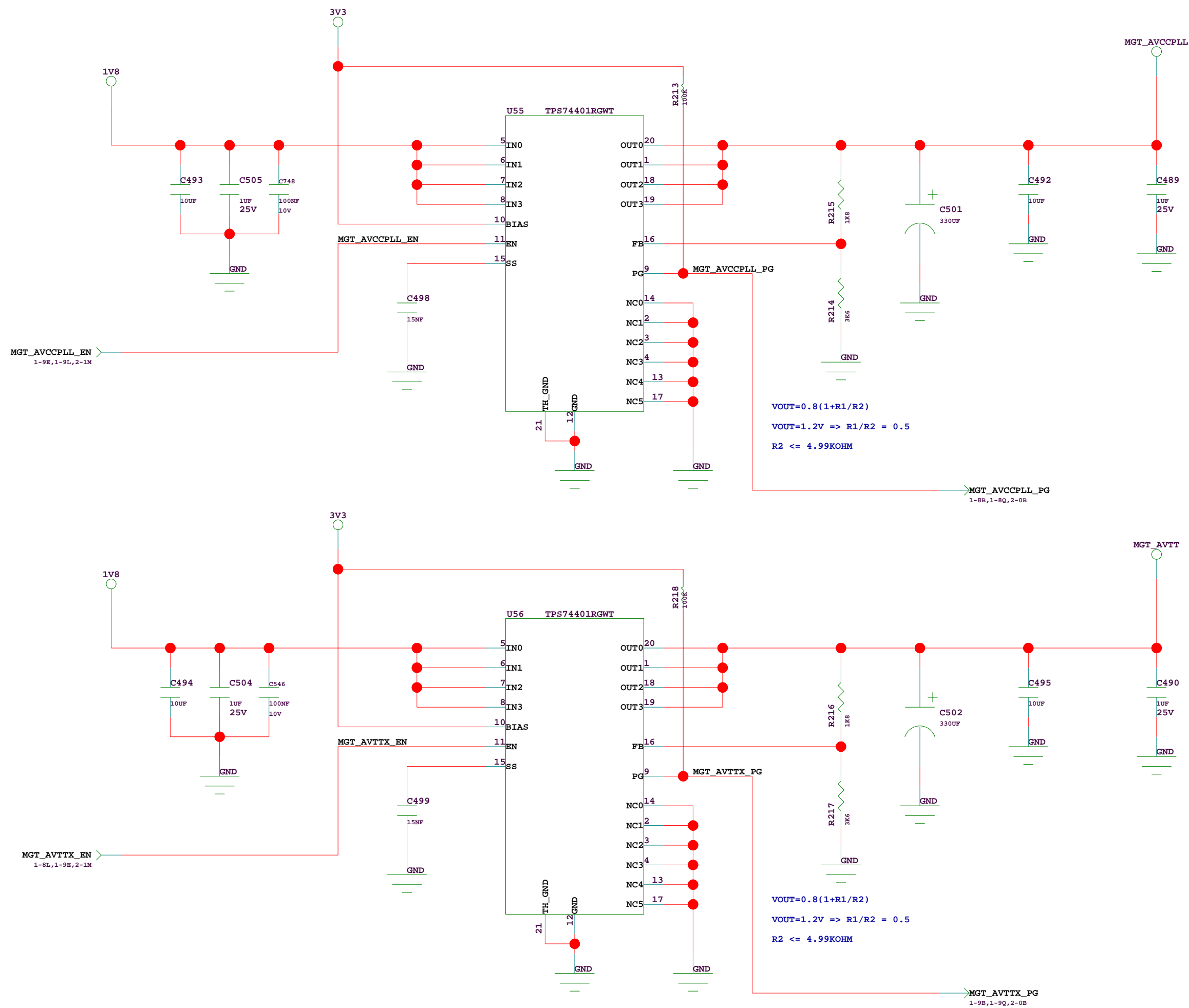




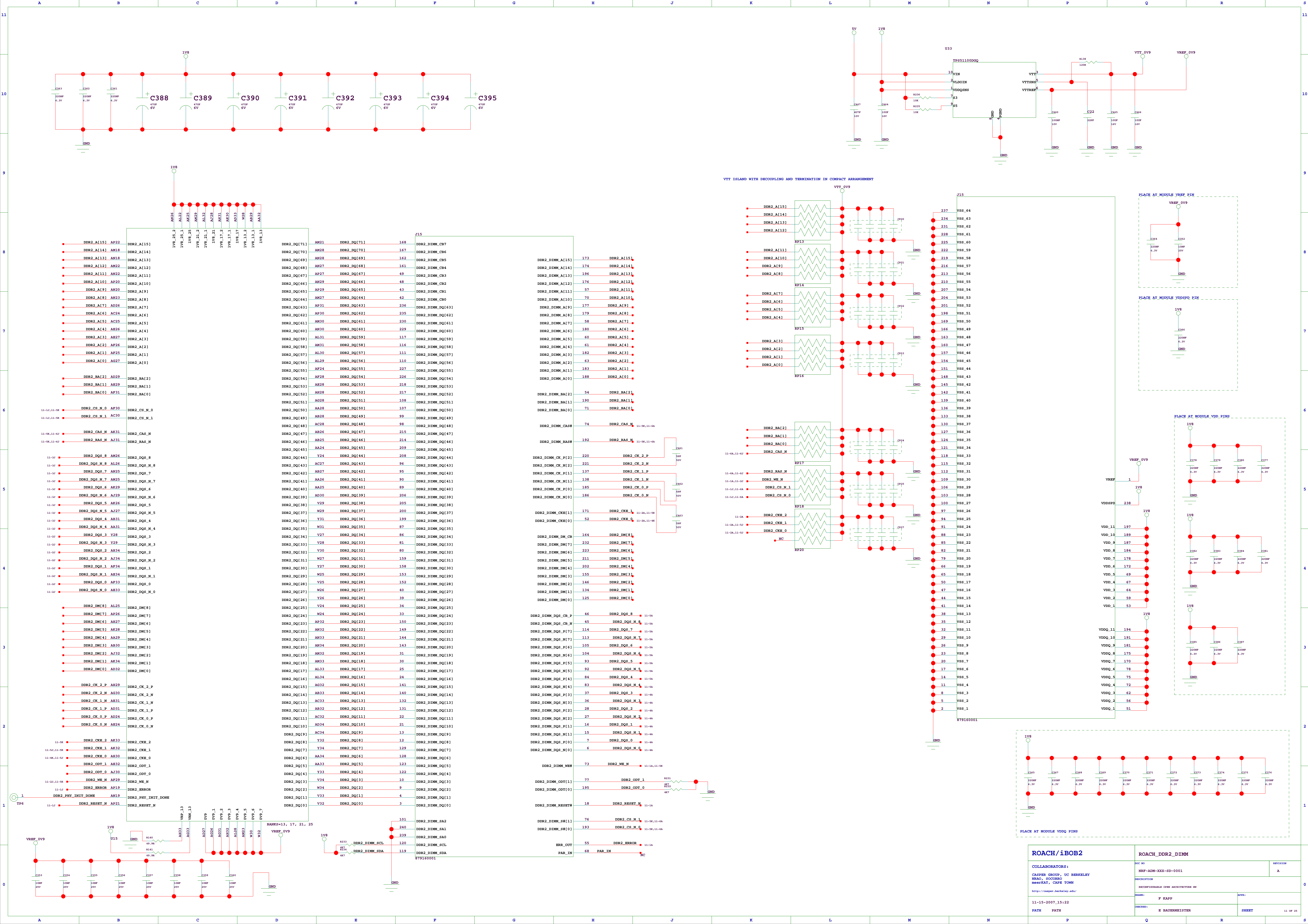
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COLLABORATORS: CASPER GROUP, UC BERKELEY NRAO, SOCORRO meerKAT, CAPE TOWN http://casper.berkeley.edu/		DOC NO	REVISION
		NRF-ADM-XXX-SD-0001	A
		DESCRIPTION RECONFIGURABLE OPEN ARCHITECTURE HW	
11-15-2007_15:22		DRAWN: F KAPP	APPR:
PATH PATH		CHECKED: E BAUERMEISTER	SHEET 7 OF 25

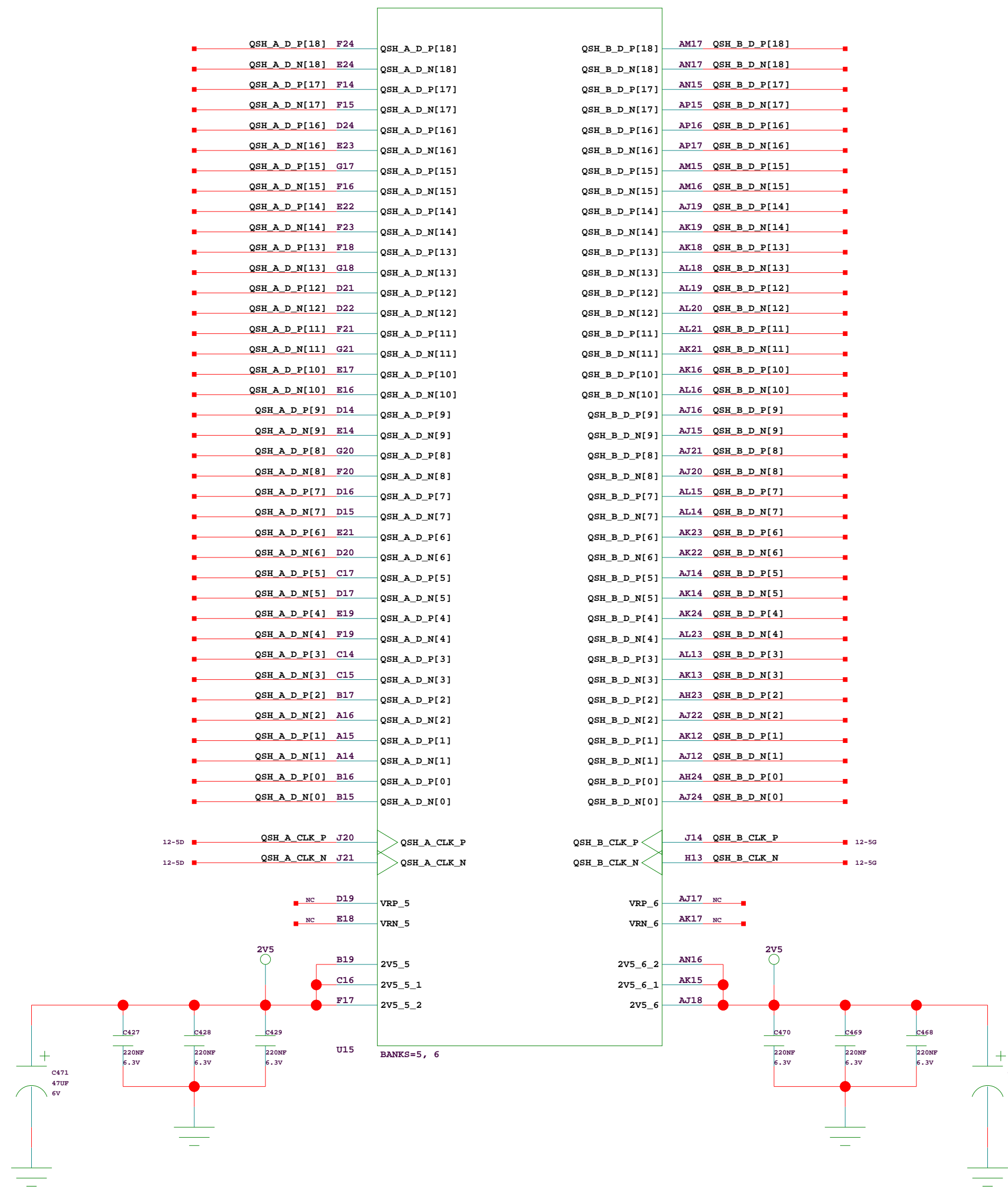




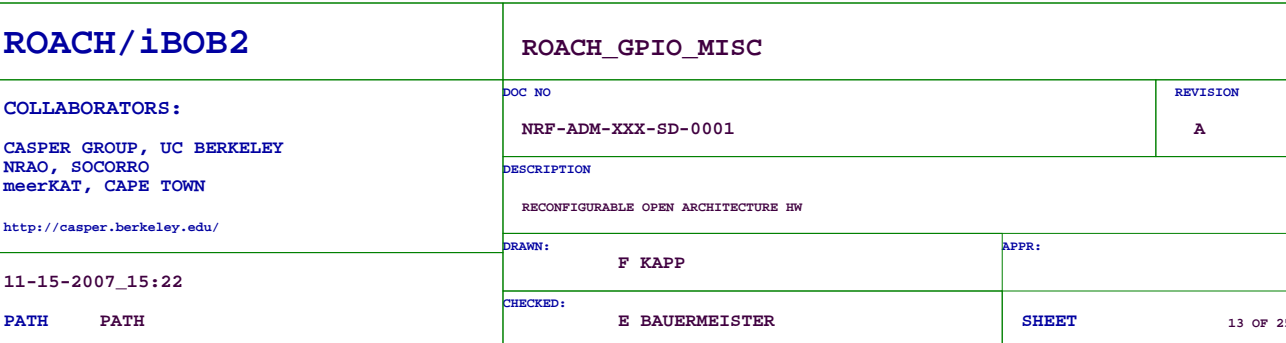


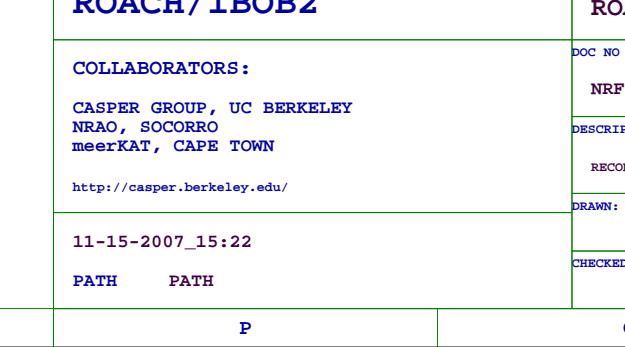
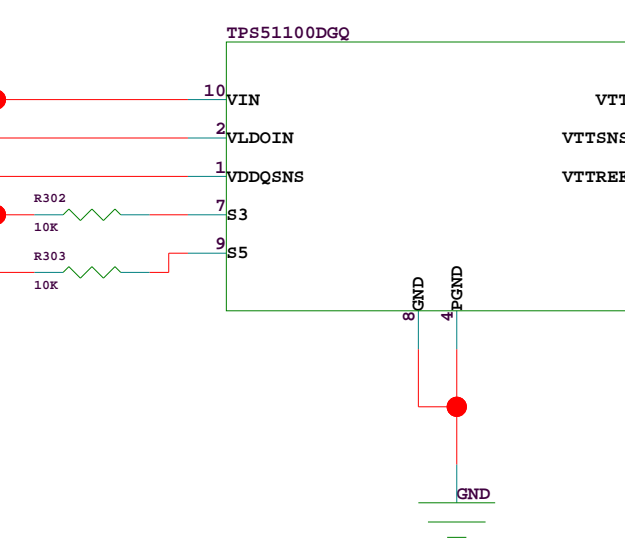
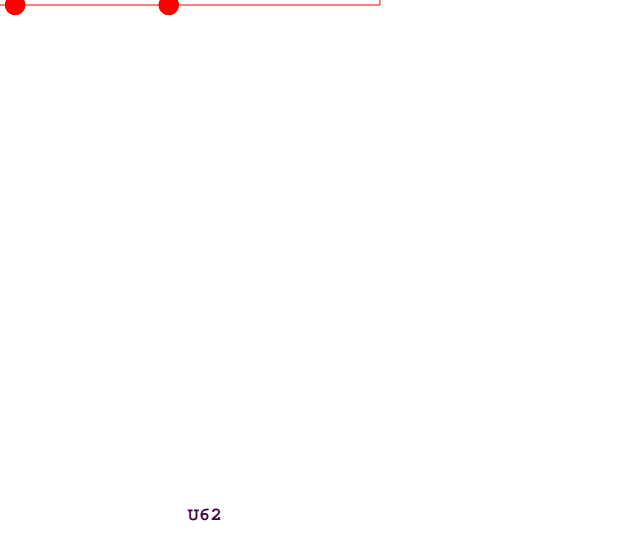
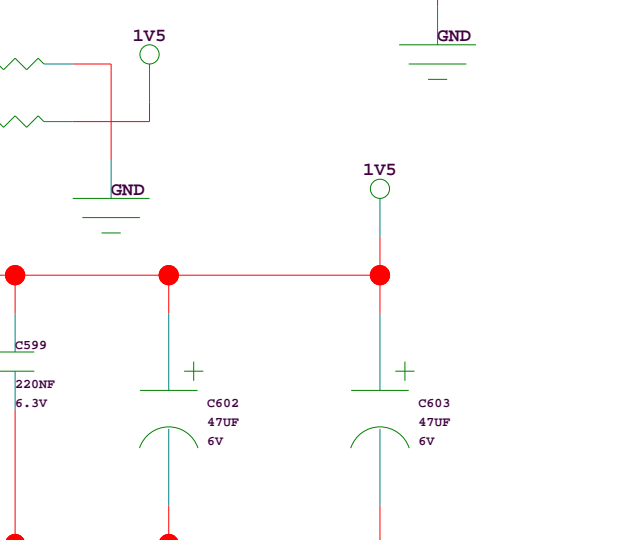
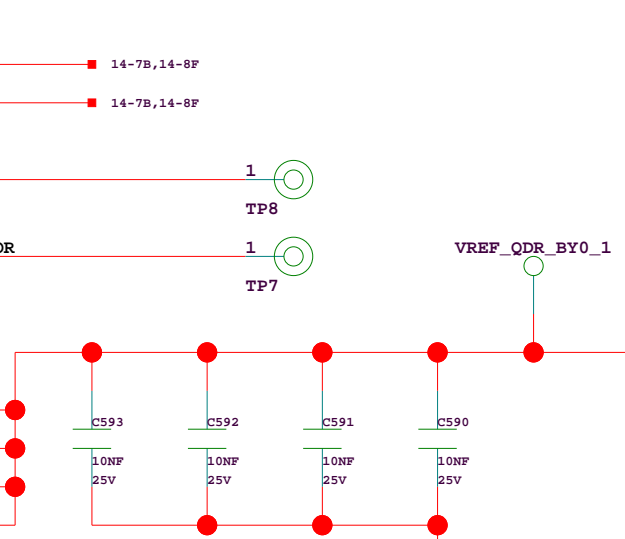
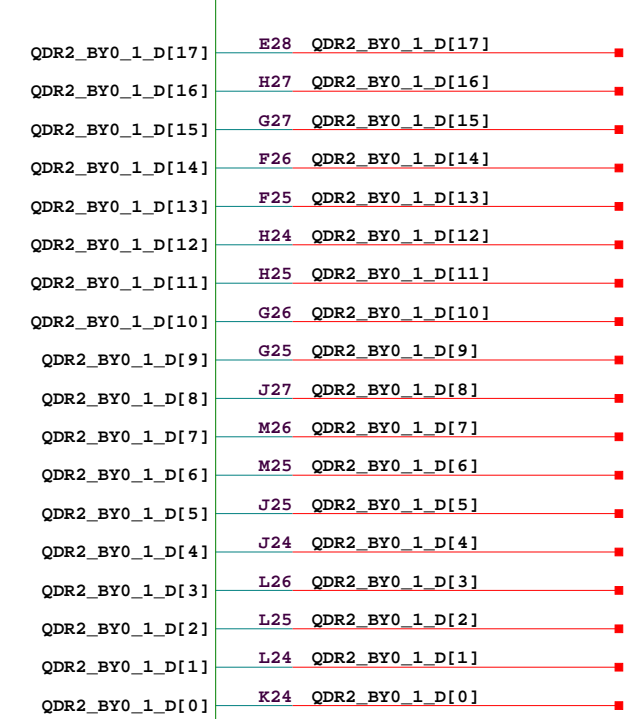
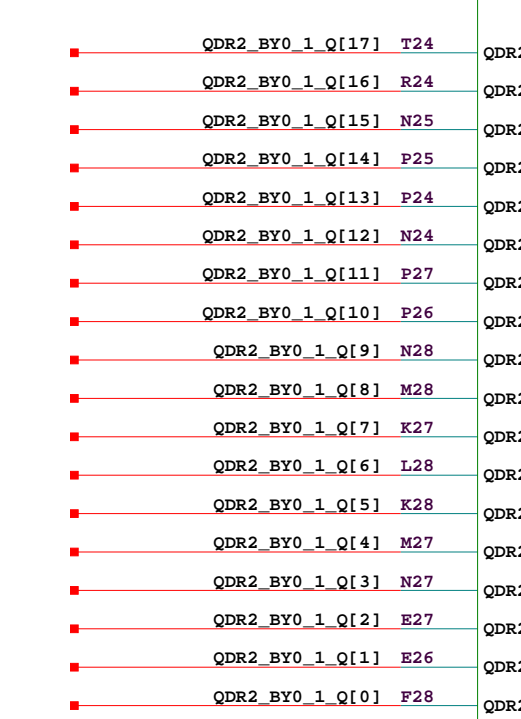
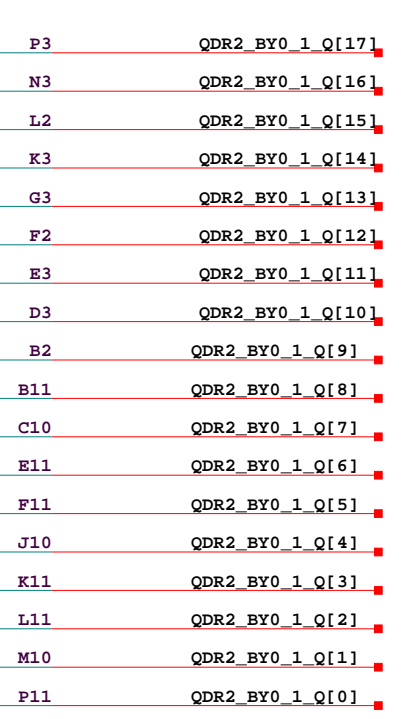
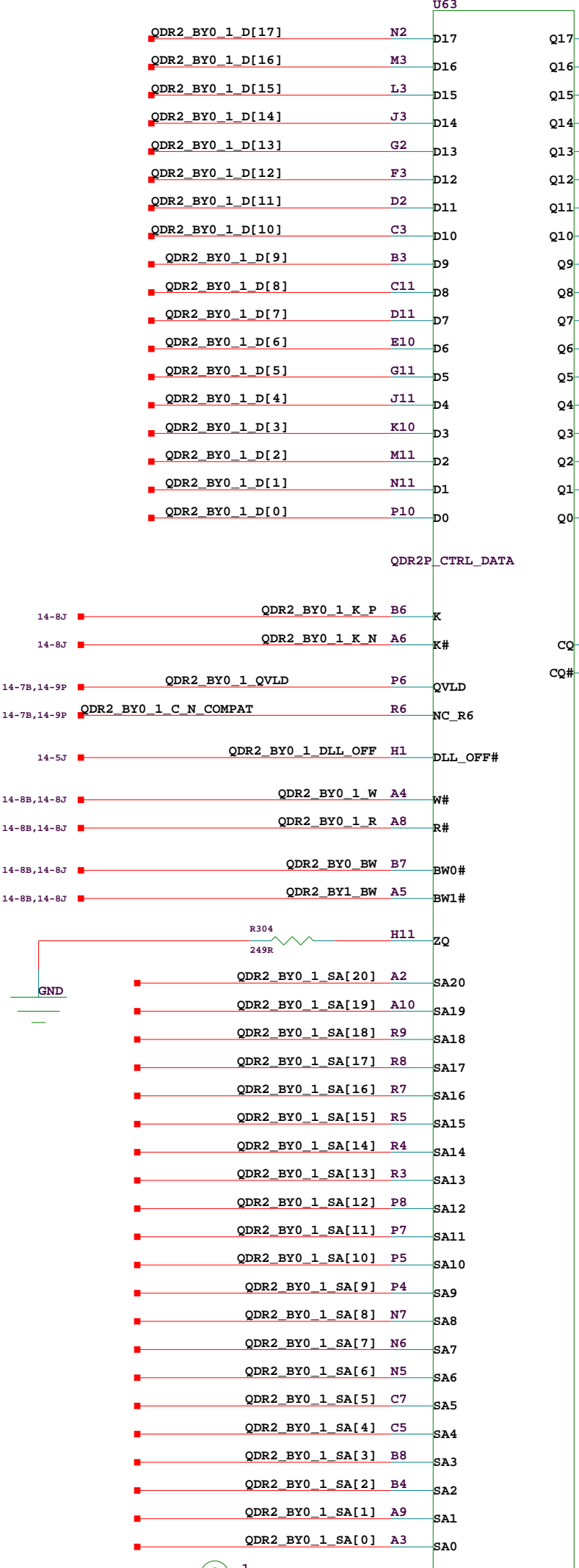
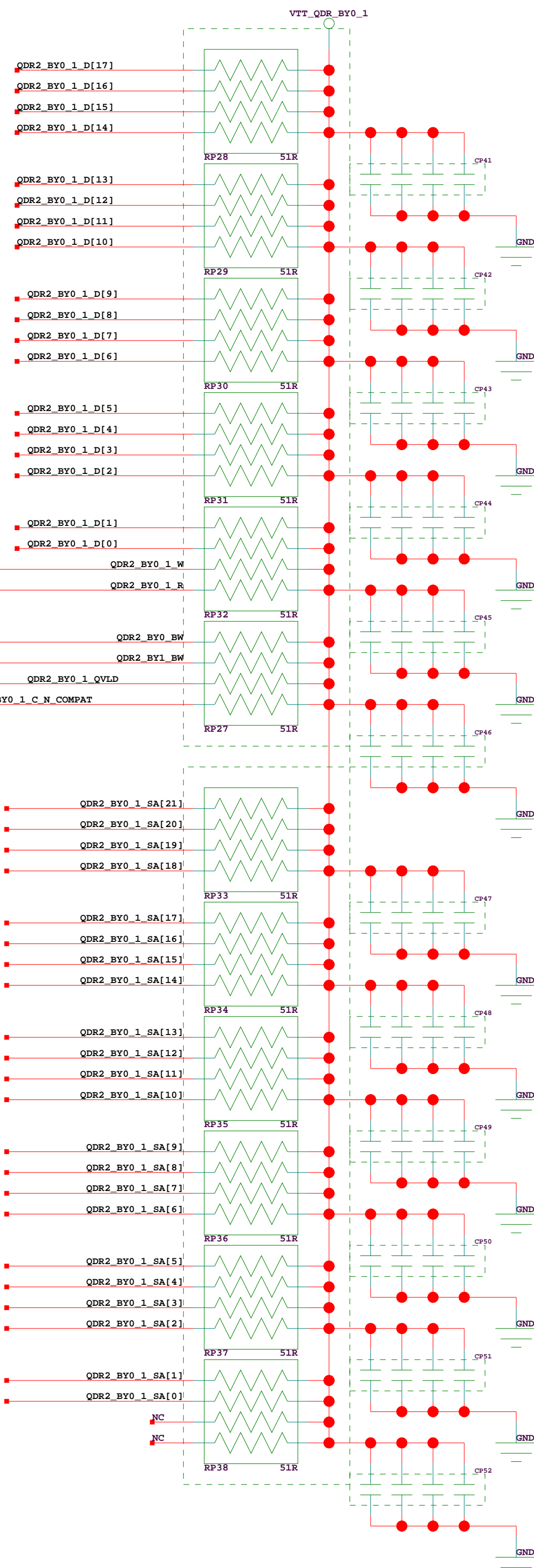
ROACH/iBOE2			ROACH_TRANSCEIVERS_PSU		
COLLABORATORS:			DOC NO	REVISION	
CASPER GROUP, UC BERKELEY			NRF-ADM-XXX-SD-0001	A	
NRAO, SOCORRO			DESCRIPTION		
BARRACAT, CAPE TOWN			RECONFIGURABLE OPEN ARCHITECTURE HW		
http://casper.berkeley.edu/			DRWN:	APP:	
11-15-2007_15:22			F KAPP		
PATH	PATH		CHECKED:	E BAUERMEISTER	SHEET
			10 OF 2		





ROACH/iBOB2		ROACH_DIFF_GPIO	
COLLABORATORS:		DOC NO	REVISION
CAPPER GROUP, UC BERKELEY		HRP-ADM-XXX-ED-0001	A
MEMO, SECURIO		DESCRIPTION	
HARVEST, CAPE TOWN		RECONFIGURABLE OPEN ARCHITECTURE HW	
http://capper.berkeley.edu/		ISSUE:	APPL:
11-15-2007-15:22		F KAPP	
PATH	PATH	CHECKIN:	12 OF 2
		E BAUMHEISTER	SHEET

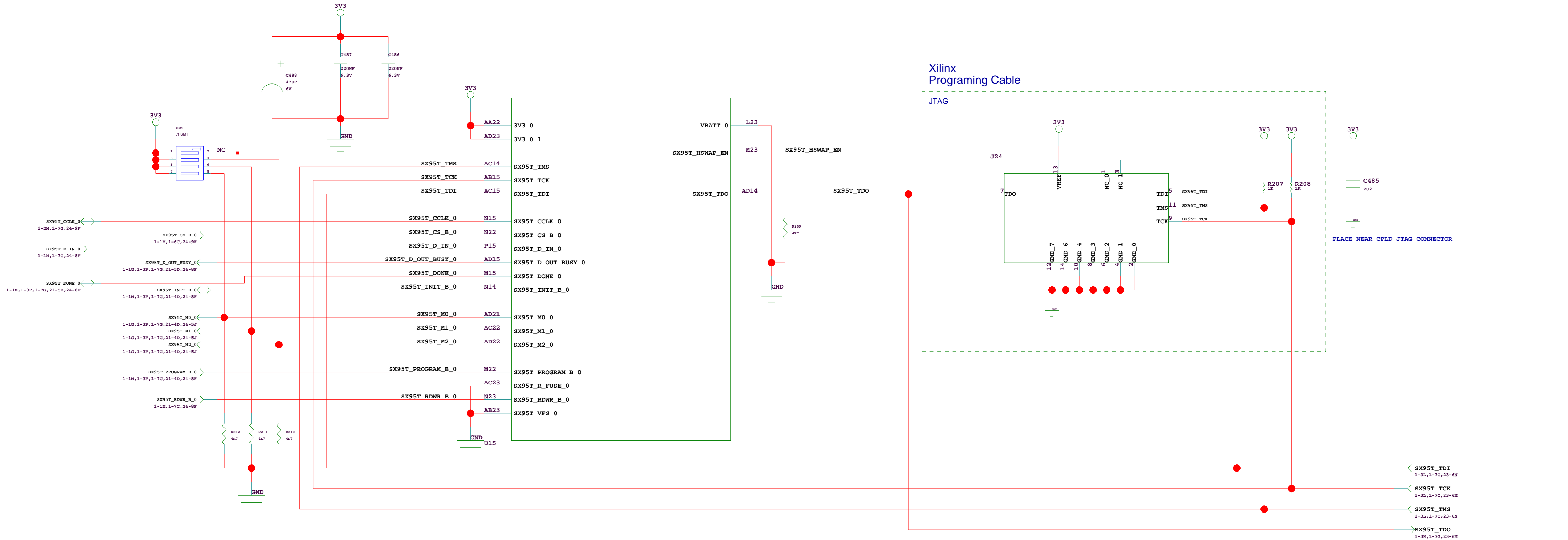




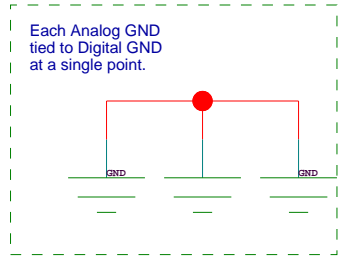
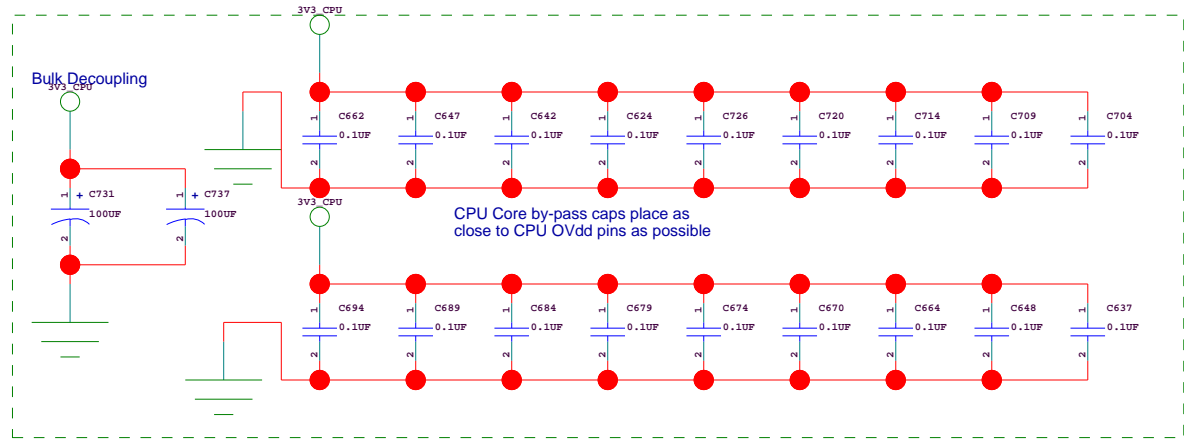
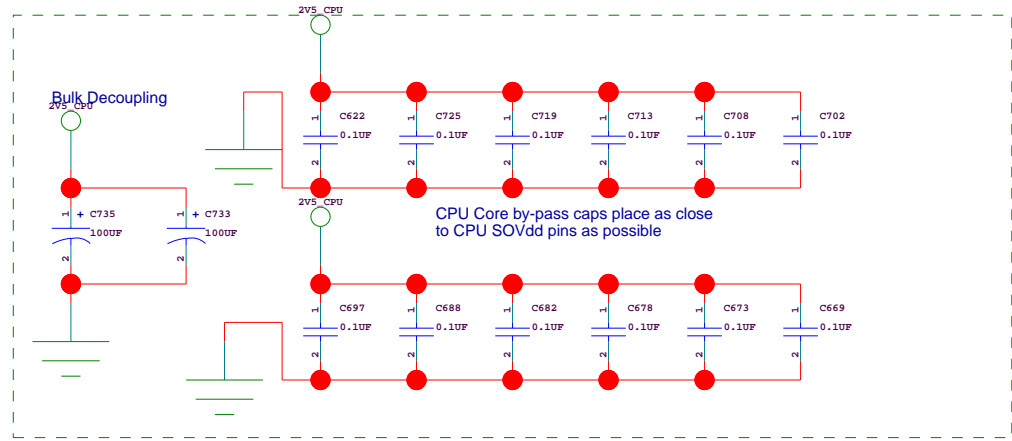
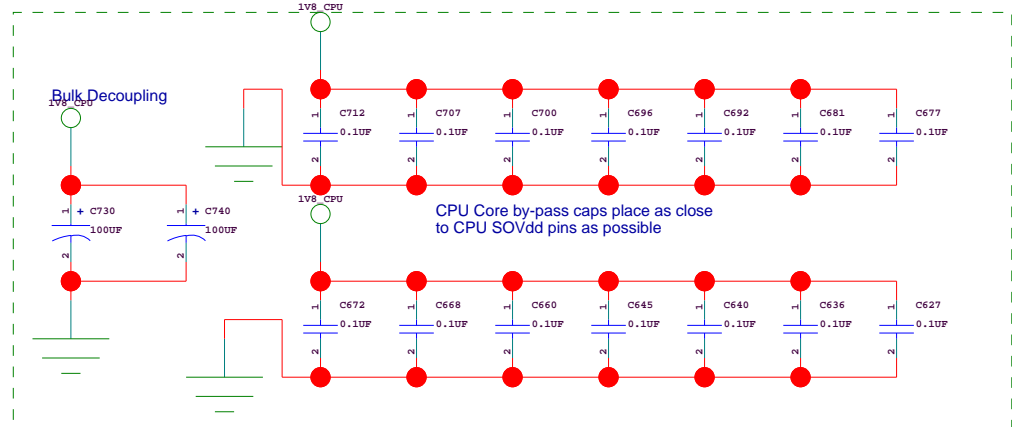
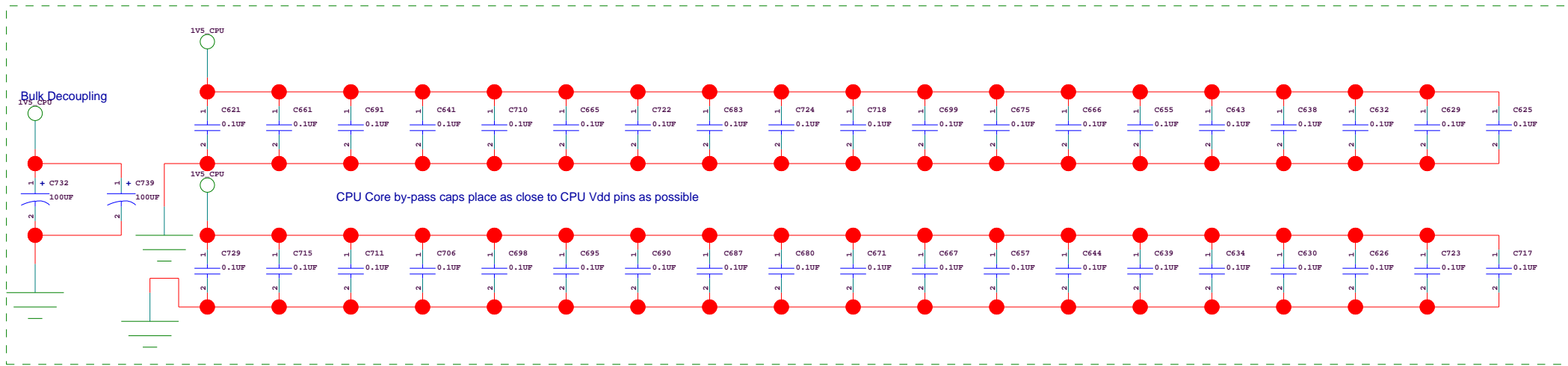
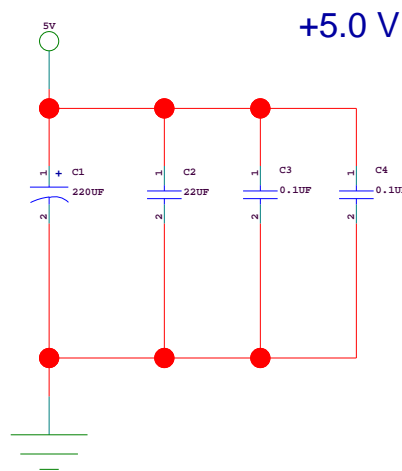
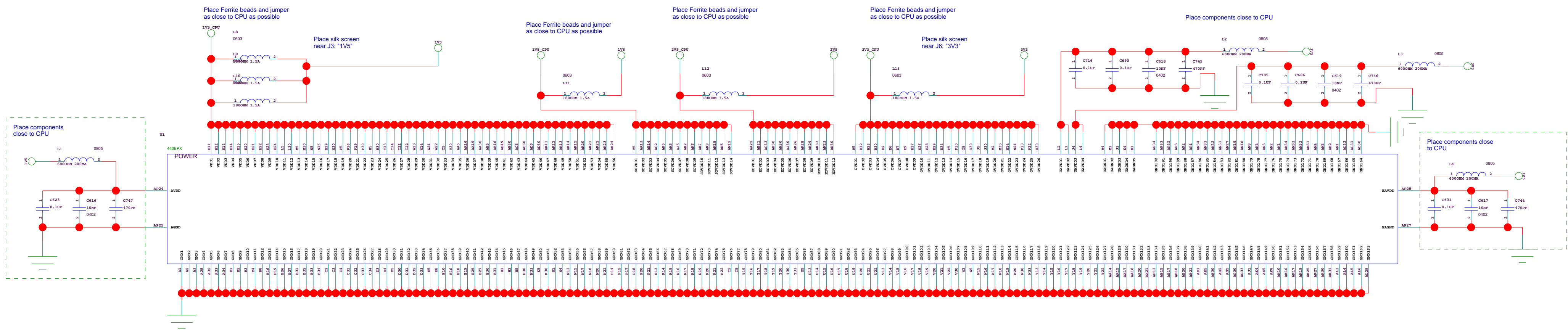
ROACH/iBOE2		ROACH_QDR2P_BY0_1	
COLLABORATORS:		DOC NO	REVISION
CASPER GROUP, UC BERKELEY		NRF-ADM-XXX-SD-0001	A
NRAO, SOONERO		DESCRIPTION	
MERCAT, CAPE TOWN		RECONFIGURABLE OPEN ARCHITECTURE HW	
http://casper.berkeley.edu/		ISSUE	ISSUE
11-15-2007_15:22		F KAPP	
PATH PATH		R BAUERNBIESTER	SHEET

TBD

VALID CONFIGURATION MODES			
Configuration Mode	M[2:0]	Bus Width	CCLK Direction
Master Serial	000	1	Output
Master SPI	001	1	Output
Master BPI-Up	010	8, 16	Output
Master BPI-Down	011	8, 16	Output
Master SelectMAP	100	8, 16	Output
JTAG	101	1	Input (TCK)
Slave SelectMAP	110	8, 16, 32	Input
Slave Serial	111	1	Input



ROACH/iBOB2		ROACH_CONFIG	
COLLABORATORS: CASPER GROUP, UC BERKELEY NRAO, SOCORRO meerKAT, CAPE TOWN http://casper.berkeley.edu/	DOC NO NRF-ADM-XXX-SD-0001		REVISION A
	DESCRIPTION RECONFIGURABLE OPEN ARCHITECTURE HW		
	11-15-2007_15:22	DRAWN: F KAPP	APPR:
PATH	PATH	CHECKED: E BAUERMEISTER	SHEET 16 OF 25

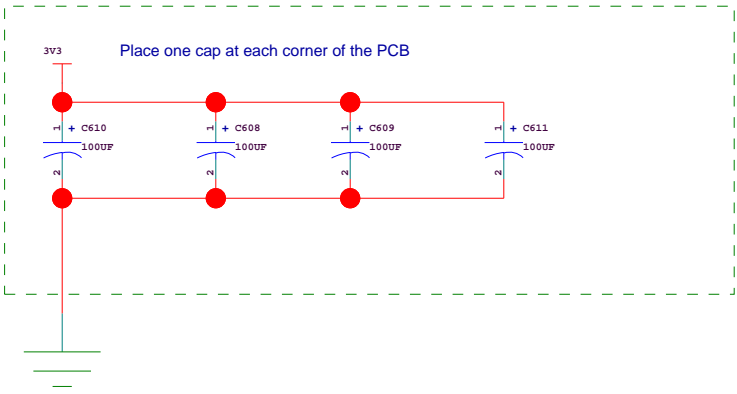


REMOVED 1.8V AND 1.5V REGULATORS, CONNECTED TO V5 RAILS

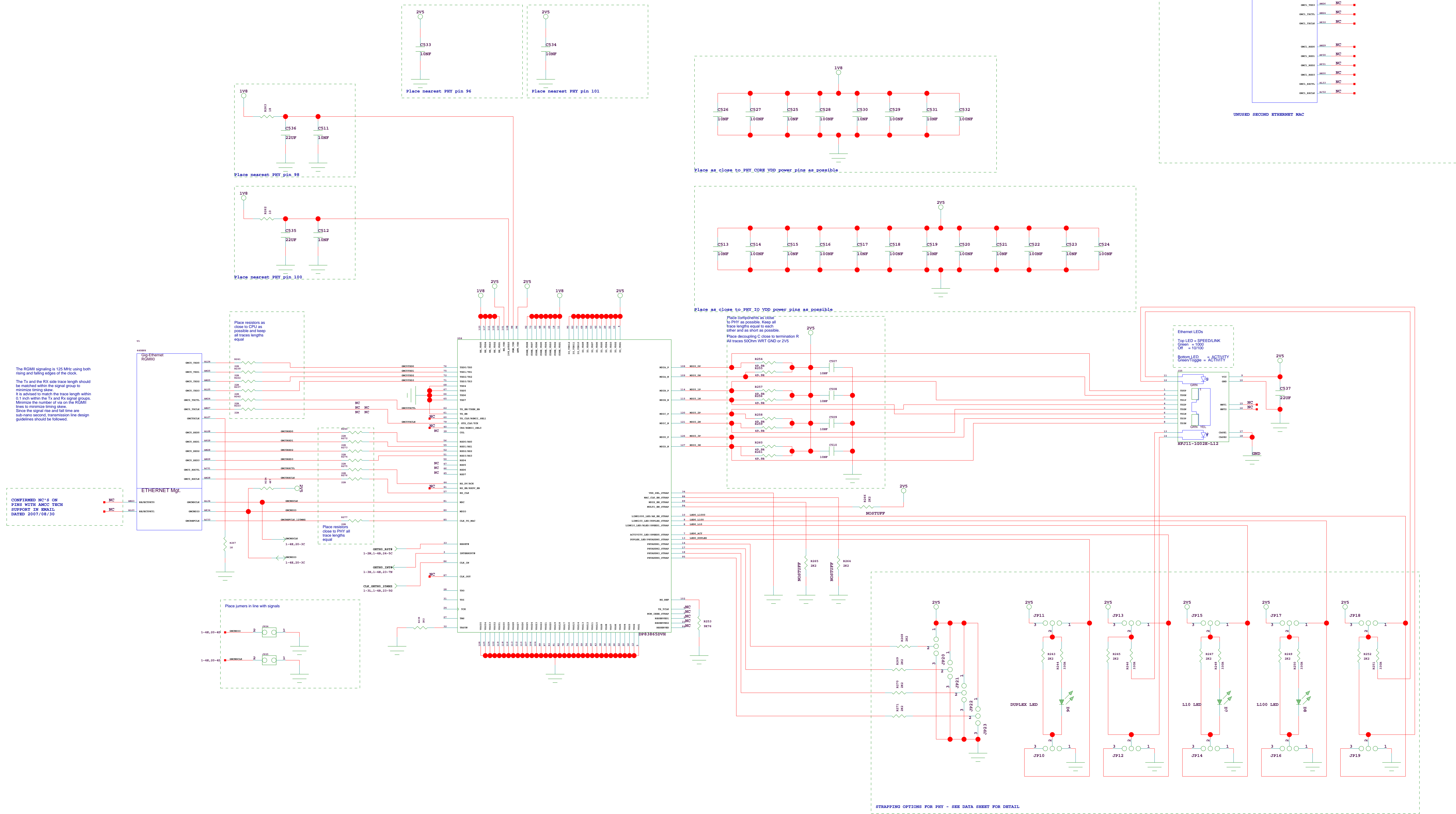
REMOVED VTT AND VREF - INCLUDED ON ROACH_PPC_DDR2

ROACH/iBOE2			ROACH_PPC_POWER_1		
COLLABORATORS: CASPER GROUP, UC BERKELEY NRAO, SOONERO BaeKAT, CAPE TOWN http://casper.berkeley.edu/ 11-15-2007_15:22 PATH PATH			DOC NO NRF-ADM-XXX-SD-0001		REVISION A
			DESCRIPTION RECONFIGURABLE OPEN ARCHITECTURE HW		
			DRAWN: F KAPP		APPD:
			CHECKED: R BAUERBLISTER		SHEET
					17 OF 25

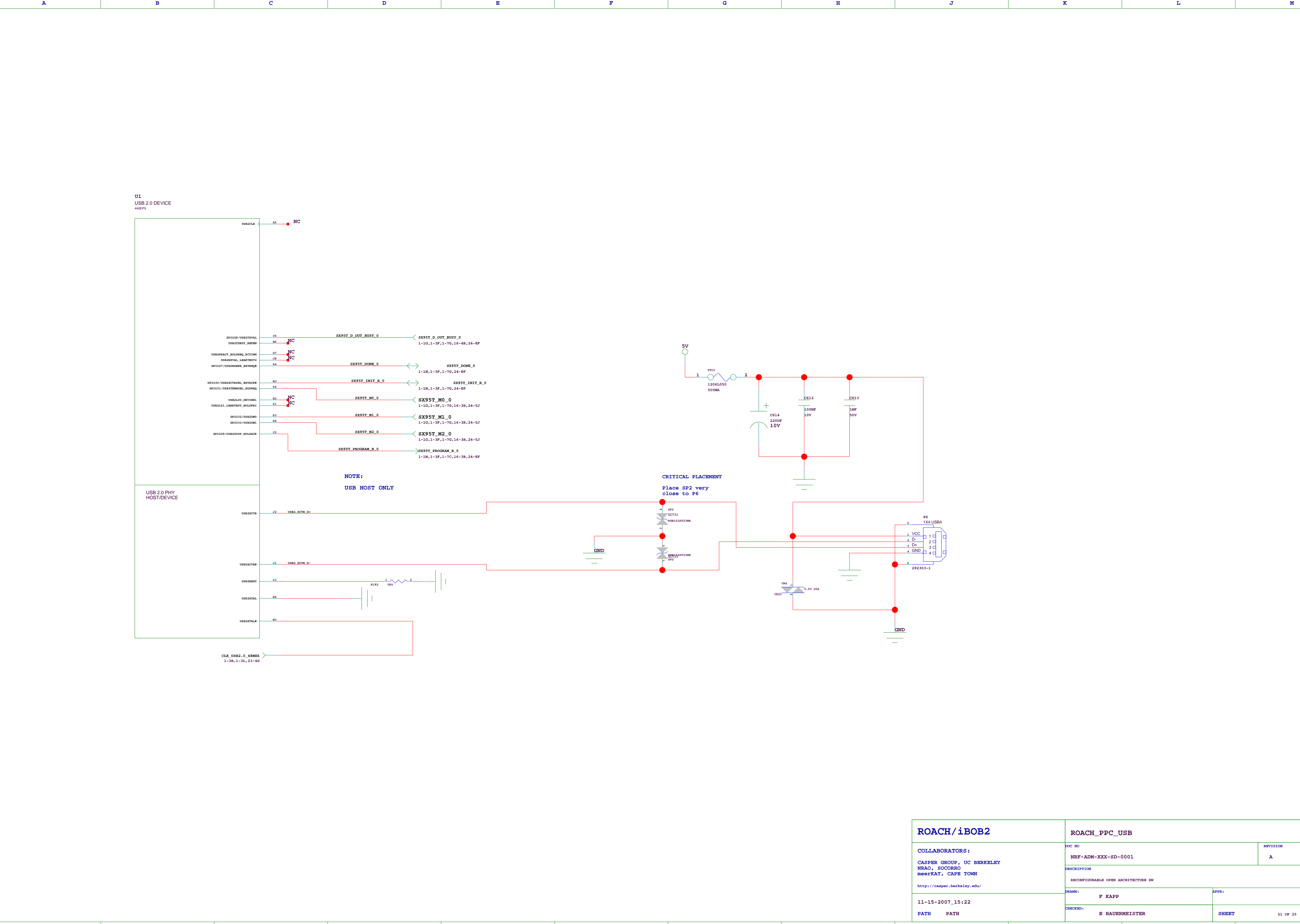
	A	B	C	D	E	F	G	H	J	K	L	M
7												
6			REMOVED 3V3 GENERATION									
5												
4		REMOVED +12V GENERATION			REMOVED -12V GENERATION							
3												
2												
1		REMOVED +1V GENERATION			REMOVED +2V5 GENERATION							
0												
	A	B	C	D	E	F	G	H	J	K	L	M



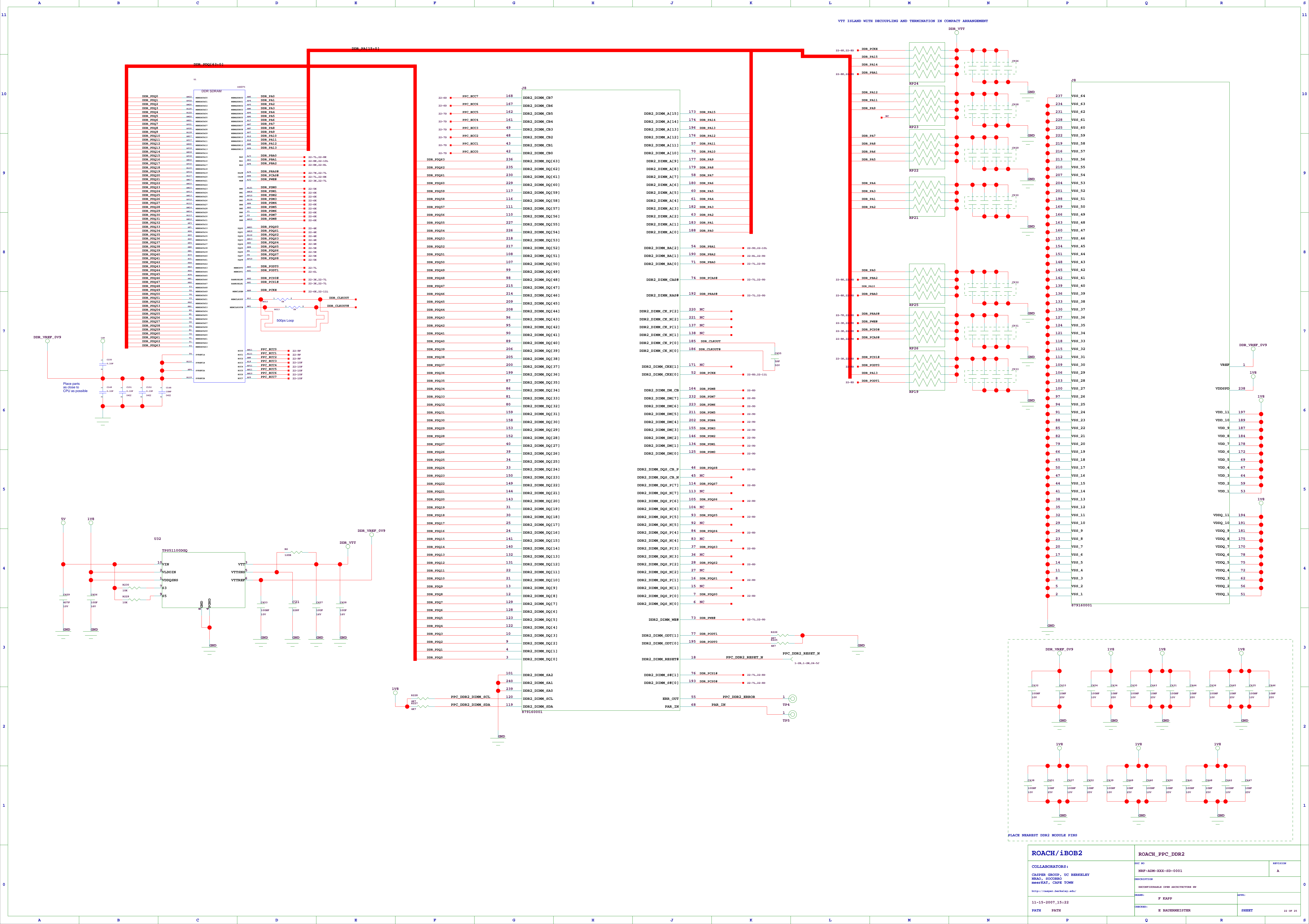
ROACH/iBOB2		ROACH_PPC_POWER_2	
COLLABORATORS: CASPER GROUP, UC BERKELEY NRAO, SOCORRO meerKAT, CAPE TOWN http://casper.berkeley.edu/	DOC NO NRF-ADM-XXX-SD-0001		REVISION A
	DESCRIPTION RECONFIGURABLE OPEN ARCHITECTURE HW		
	DRAWN: F KAPP		APPR:
11-15-2007_15:22	CHECKED: E BAUERMEISTER		SHEET 18 OF 25
PATH	PATH		



ROACH/iBOB2		ROACH_PPC_ETH1	
COLLABORATORS: CAEPER GROUP, UC BERKELEY HEAD, SCORODO BOMERAT, CAPE TOWN http://caeper.berkeley.edu/		DOC NO NRP-ADM-XXX-SD-0001 DESCRIPTION RECONFIGURABLE OPEN ARCHITECTURE SW	REVISION A
11-15-2007_15:22 PATH PATH		NAME: F KAPP	APPR:
		CHECKED: R BAUDENHEISTER	SHEET 20 OF 2



ROACH/iBOB2		ROACH_PPC_USB	
COLLABORATORS: CASPER GROUP, UC BERKELEY NRAO, SOCORRO meerKAT, CAPE TOWN http://casper.berkeley.edu/	DOC NO NRF-ADM-XXX-SD-0001		REVISION A
	DESCRIPTION RECONFIGURABLE OPEN ARCHITECTURE HW		
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	CHECKED: E BAUERMEISTER		SHEET 21 OF 25
11-15-2007_15:22			
PATH	PATH		

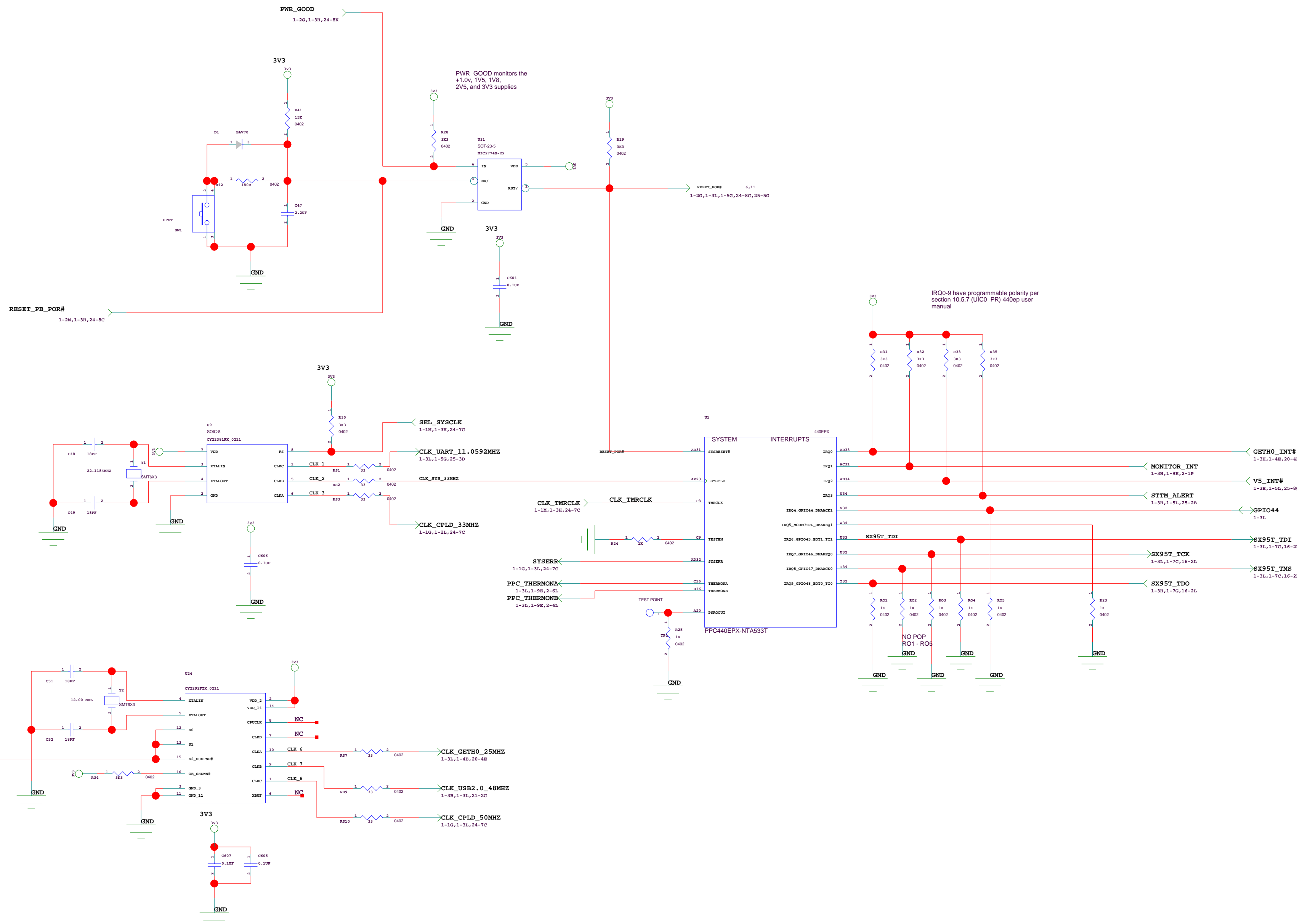


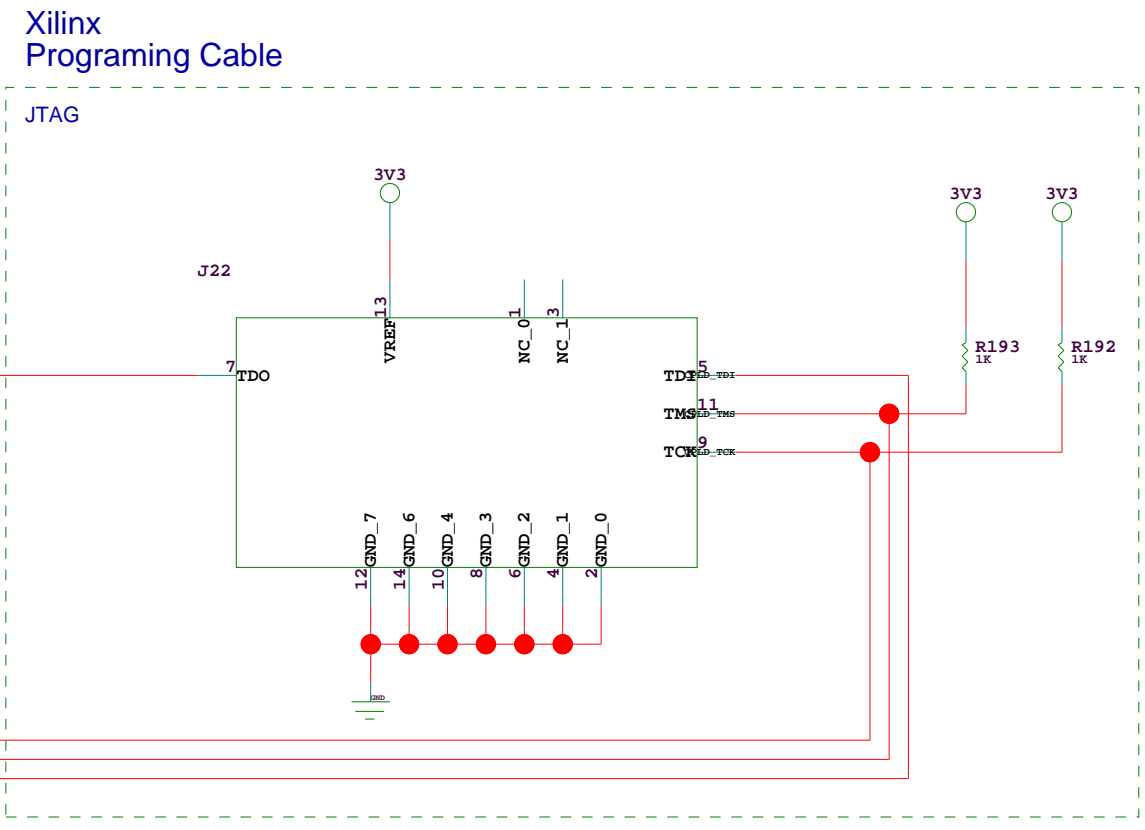
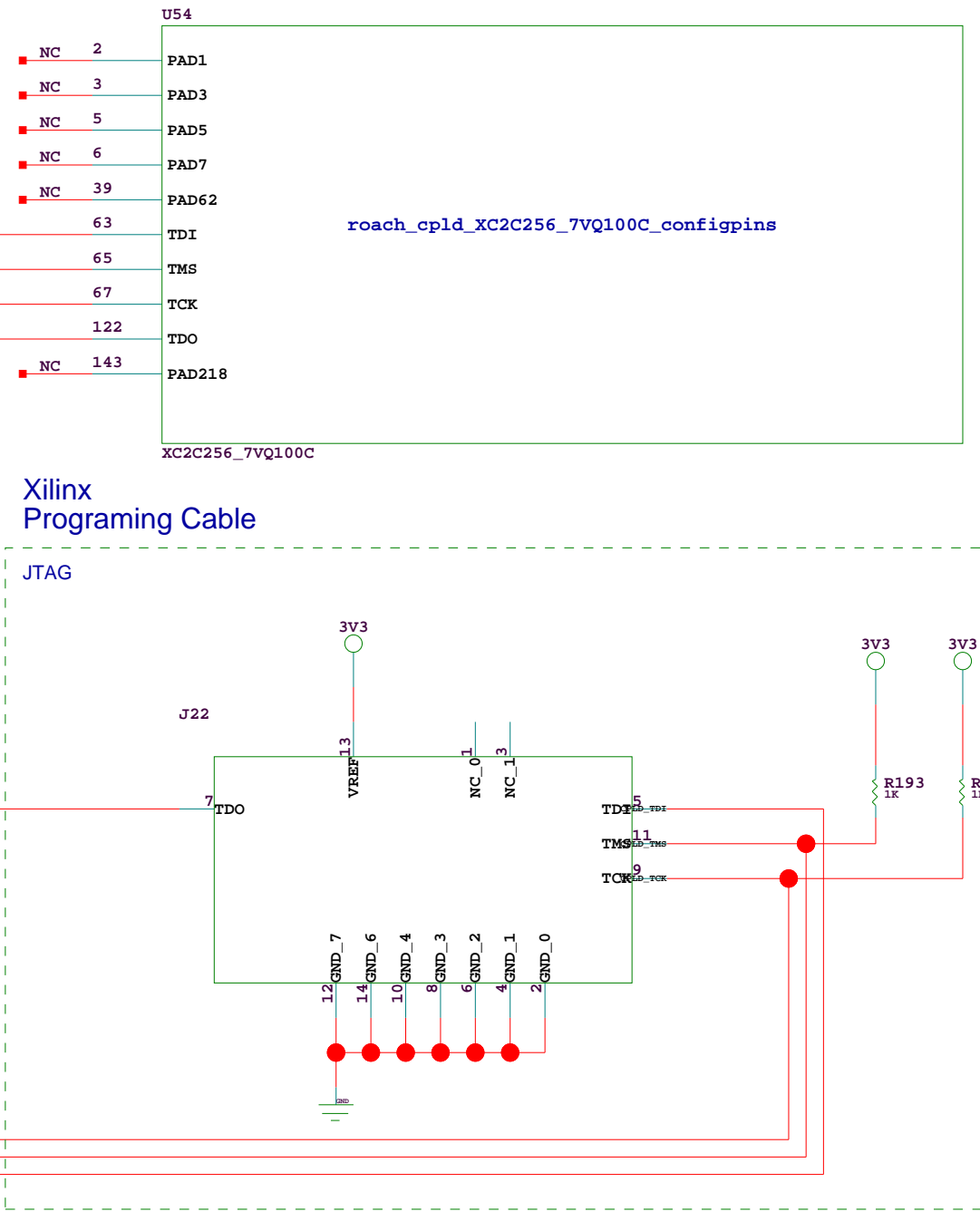
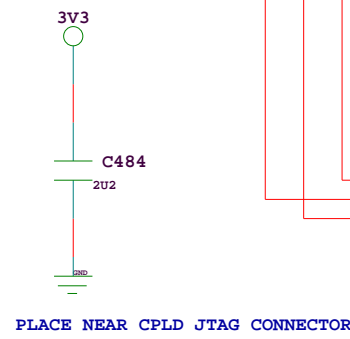
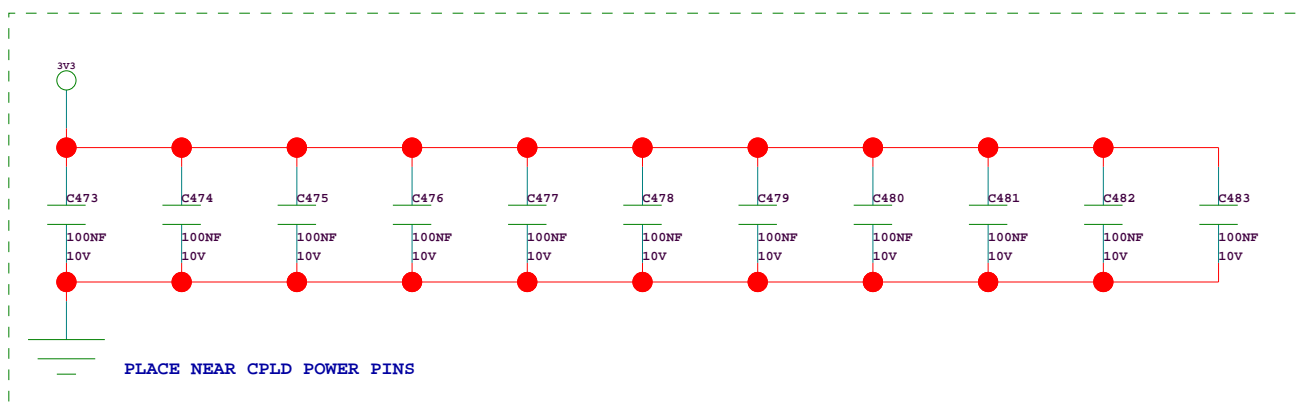
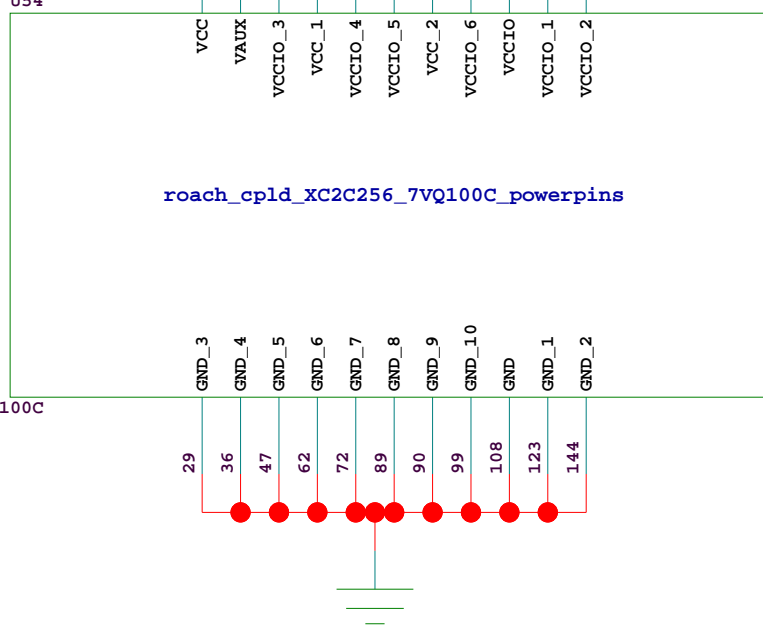
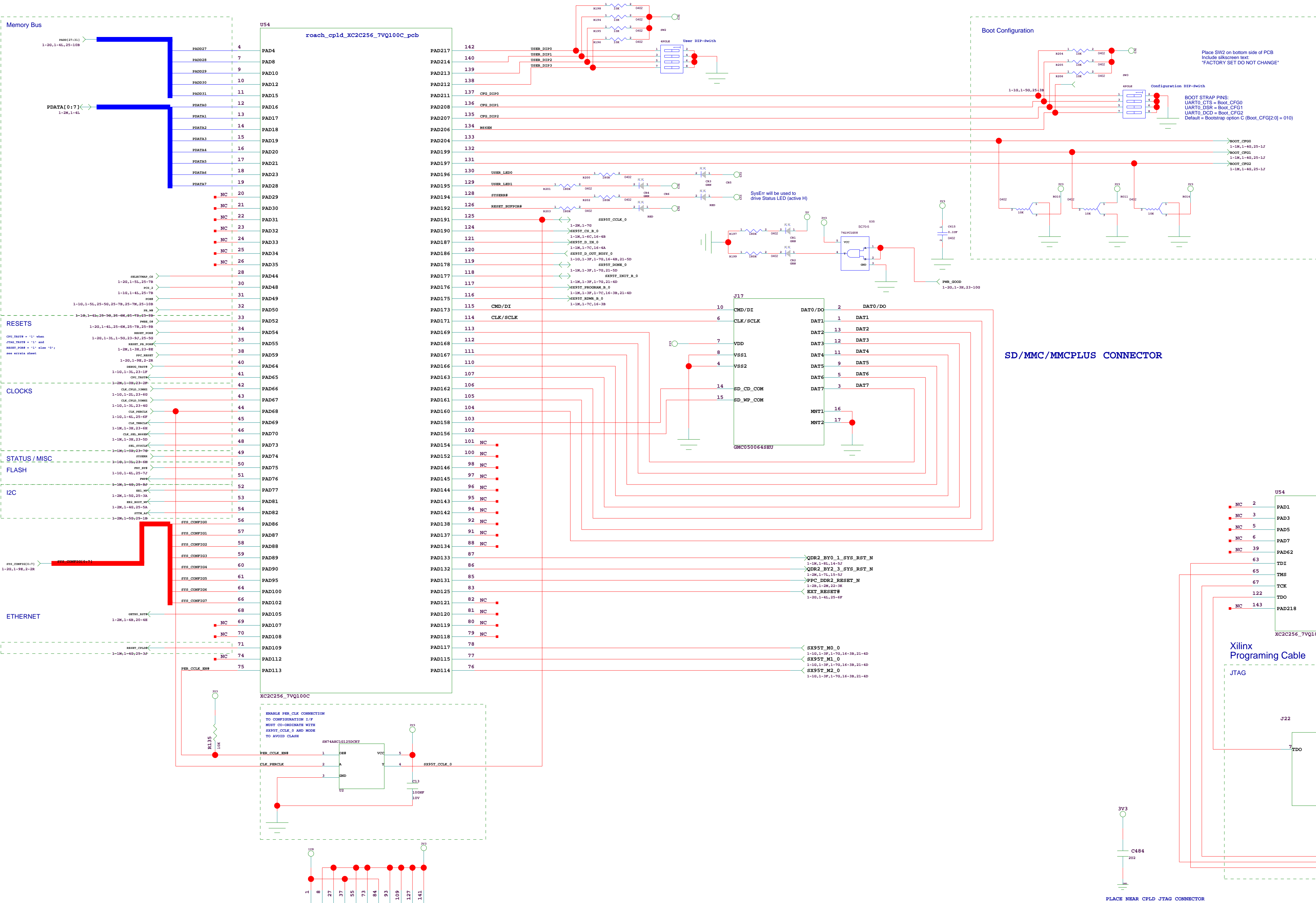
Critical Placement and Route
Clock Rules:

Clock Rules:
CLK_UART_11.0592MHz = as short as possible
CLK_SYS_33MHz = as short as possible
CLK_CPLD_33MHz = CLK_SYS_33MHz

Critical Placement and Route
Clock Rules:

Clock Rules:
CLK_PC13_6633MHz = as short as possible
CLK_PC12_6633MHz = CLK_PC13_6633MHz
CLK_PC11_6633MHz = CLK_PC12_6633MHz + 2.5°
CLK_GETH0_25MHz = as short as possible
CLK_GETH1_25MHz = CLK_GETH0_25MHz
CLK_CPLD_50MHz = as short as possible
CLK_USB2_0_48MHz = as short as possible
CLK_USB2_0_12MHz = as short as possible





ROACH/iBOB2		ROACH_PPC_CPLD	
COLLABORATORS:		DOC NO	REVISION
CASPER GROUP, UC BERKELEY NRAO, SOCCORO MesaCAT, CAPE TOWN		NRF-ADM-XXX-SD-0001	A
DESCRIPTION		RECONFIGURABLE OPEN ARCHITECTURE HW	
http://casper.berkeley.edu/		DRAWN:	APPD:
11-15-2007_15:22		F KAPP	
PATH	PATH	CHECKED:	SHEET
		R BAUERMEISTER	24 OF 25

