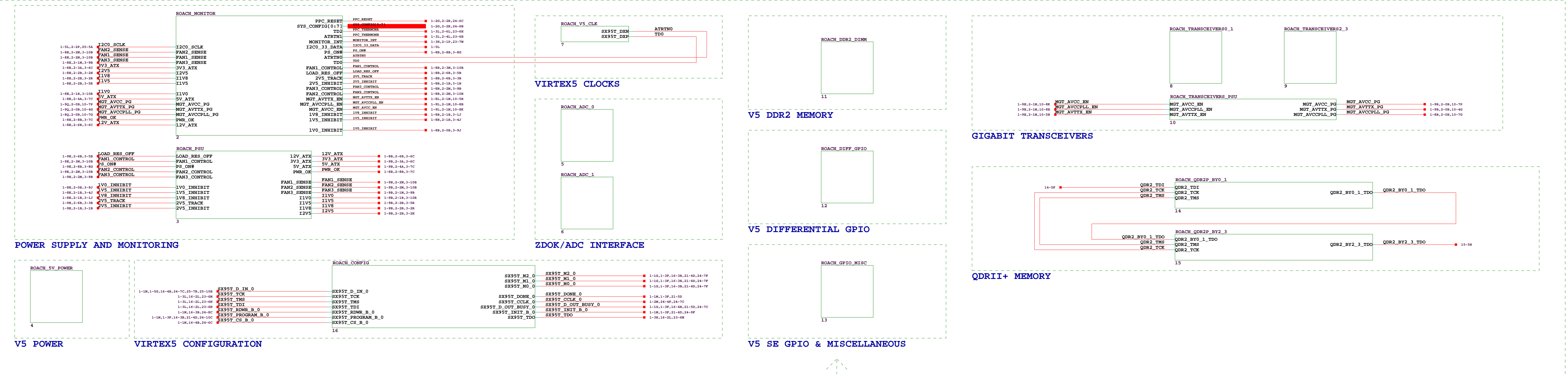
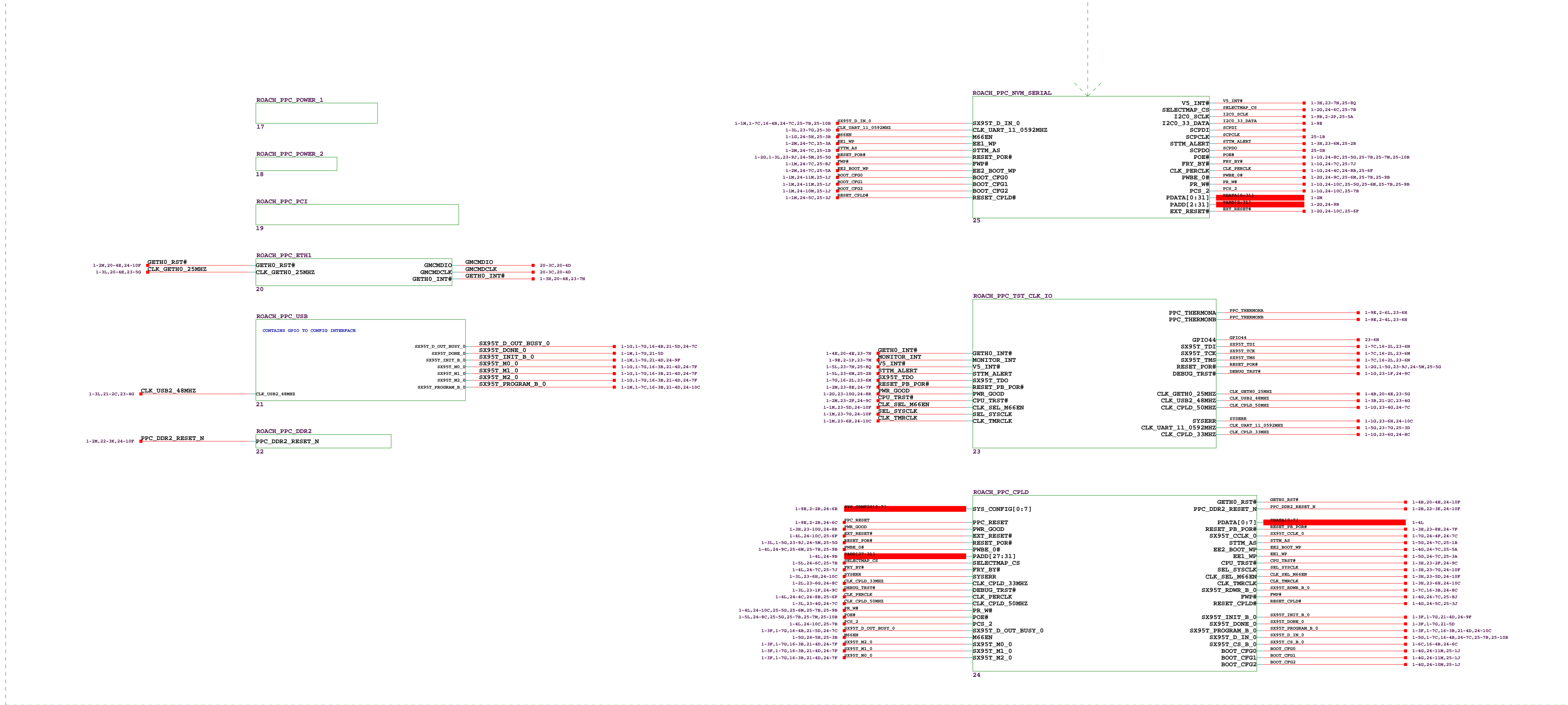


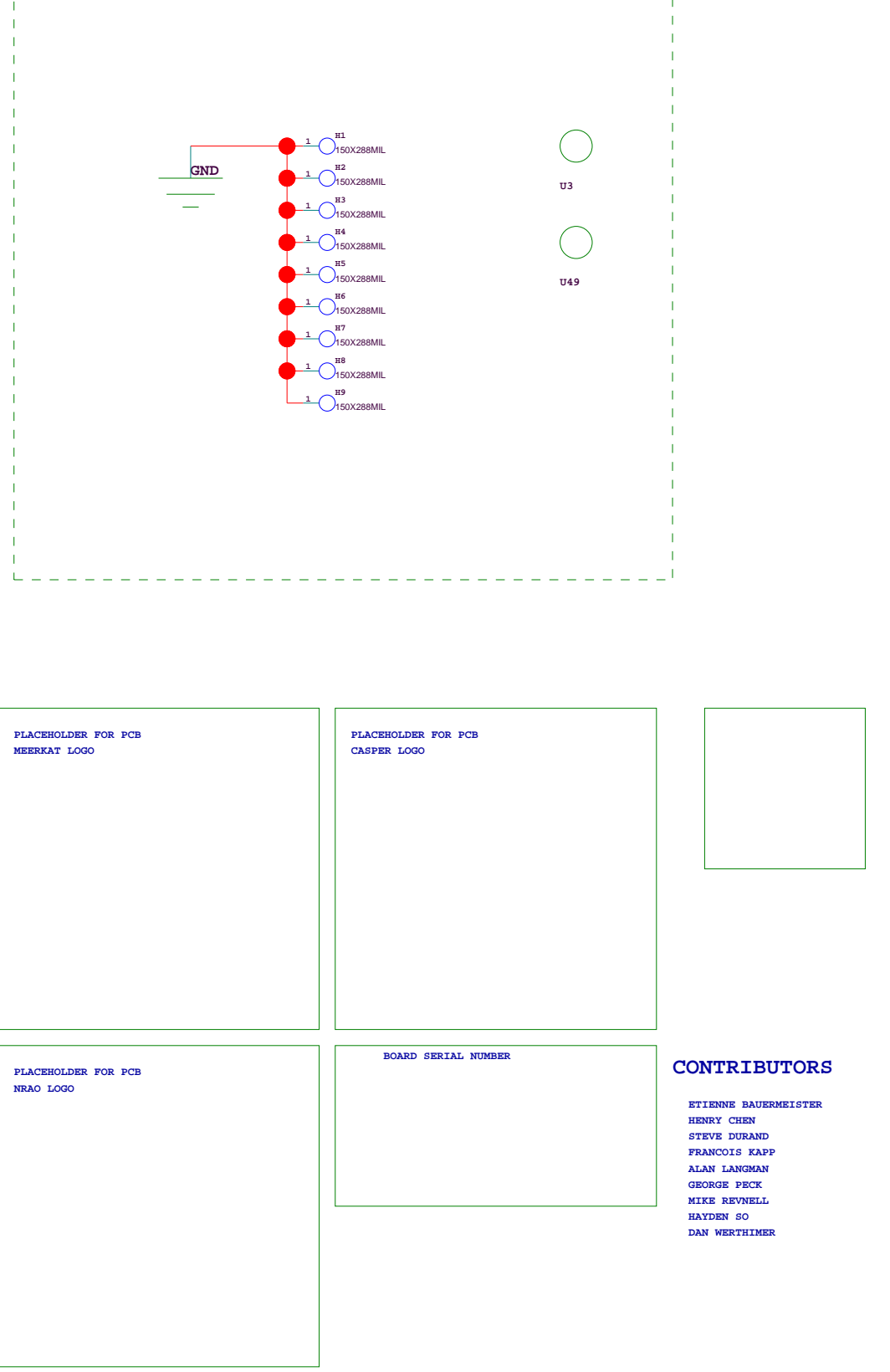
VIRTEX5



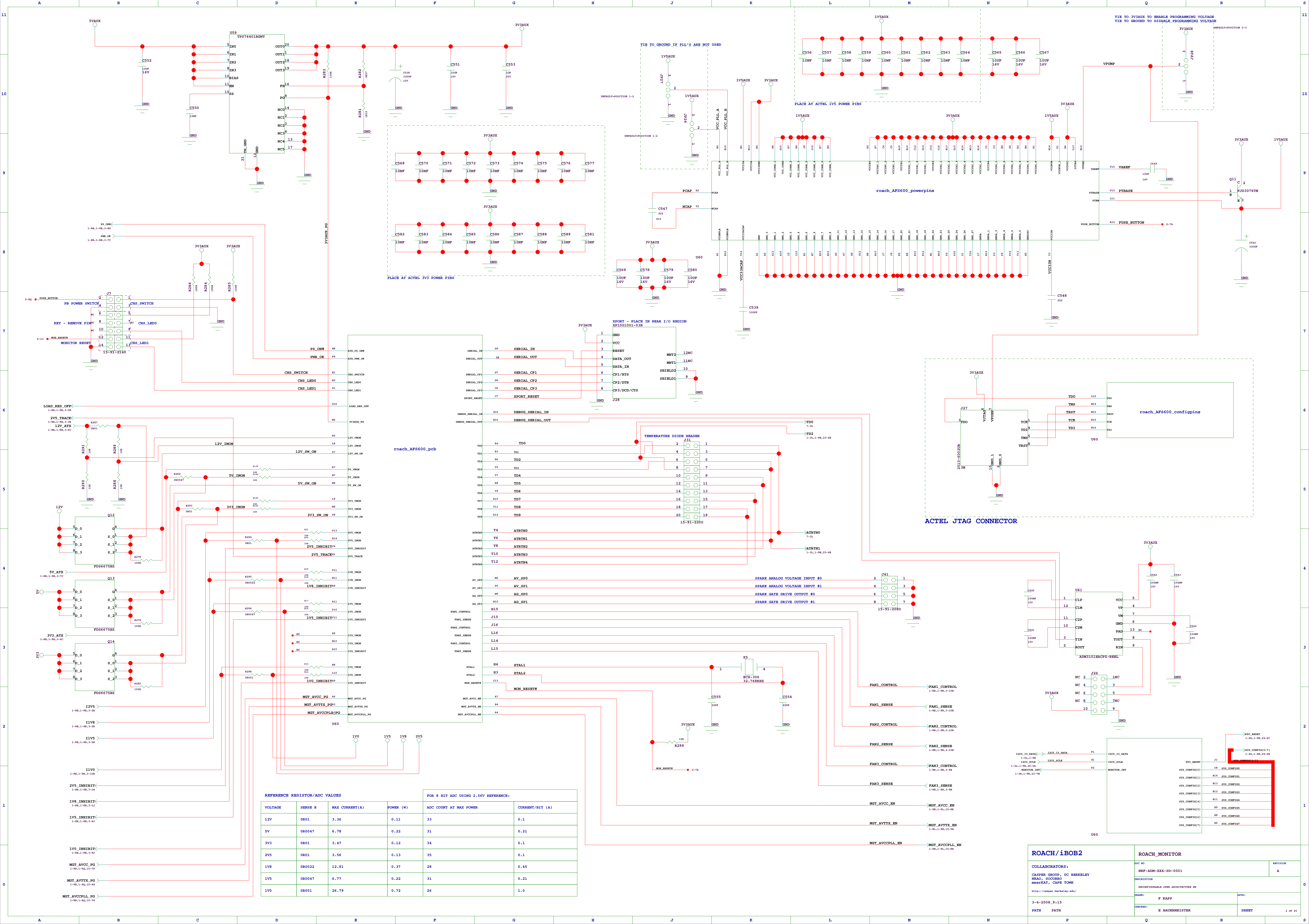
PPC

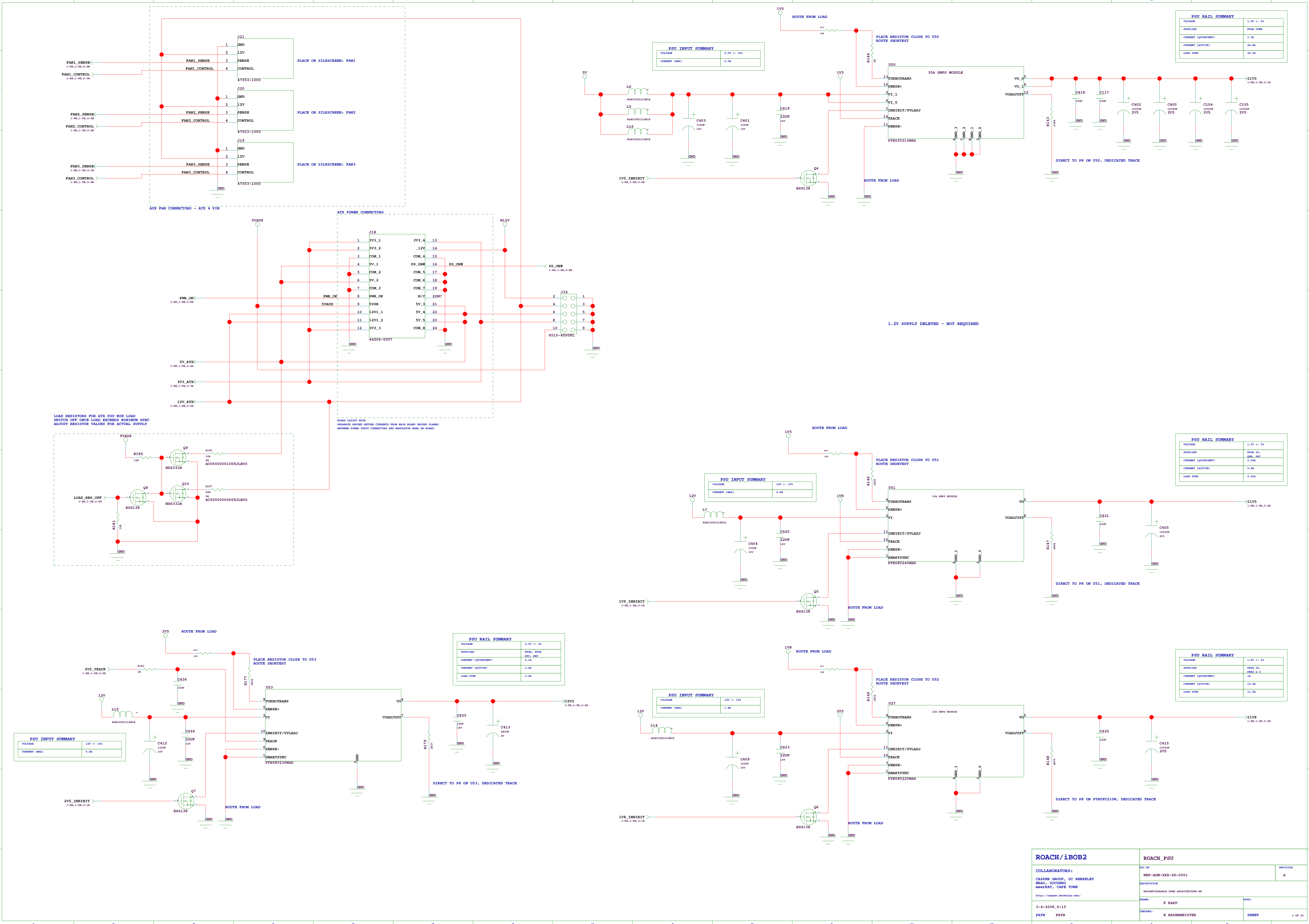


MECHANICAL



ROACH/iBOB2		ROACH_TOP	
COLLABORATORS:		DOC NO	REVISION
CASPER GROUP, UC BERKELEY		MRP-ADM-XXX-SD-0001	A
DESCRIPTION		RECONFIGURABLE OPEN ARCHITECTURE HW	
http://casper.berkeley.edu/		DRWN:	UPDN:
3-4-2008 9:15		F KAPP	
PATH		R BAUERMBISTER	
CHECKED:		SHEET	





PSU RAIL SUMMARY	
VOLTAGE	1.0V +- 5%
SUPPLIES	PPDA CORR
CURRENT (QUIESCENT)	1.5A
CURRENT (ACTIVE)	26.8A
LOAD STEP	25.3A

PSU INPUT SUMMARY	
VOLTAGE	5.0V +- 10%
CURRENT (MAX)	4.0A

PSU RAIL SUMMARY	
VOLTAGE	1.5V +- 5%
SUPPLIES	PPDA 10V, 20%_PSC
CURRENT (QUIESCENT)	0.25A
CURRENT (ACTIVE)	4.8A
LOAD STEP	4.55A

PSU INPUT SUMMARY	
VOLTAGE	12V +- 10%
CURRENT (MAX)	0.8A

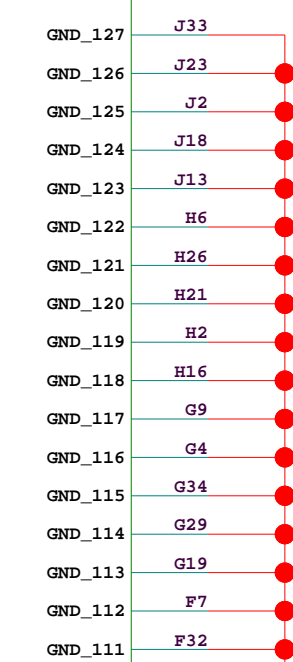
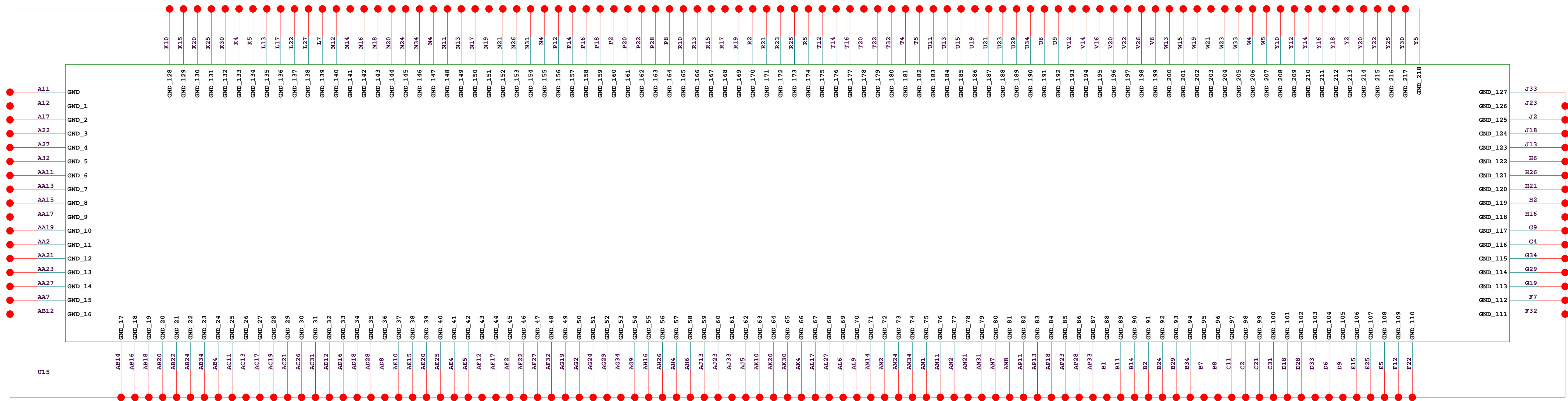
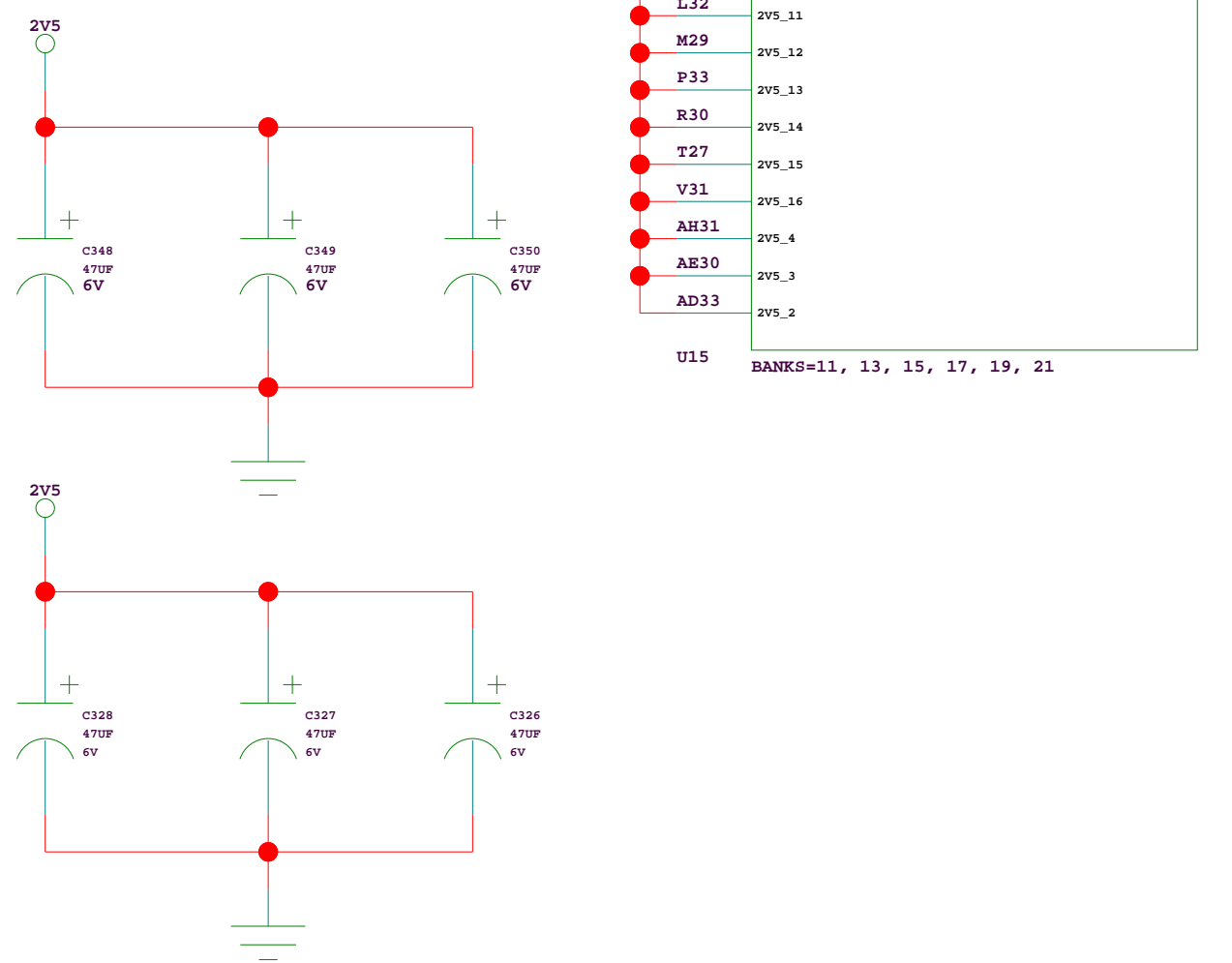
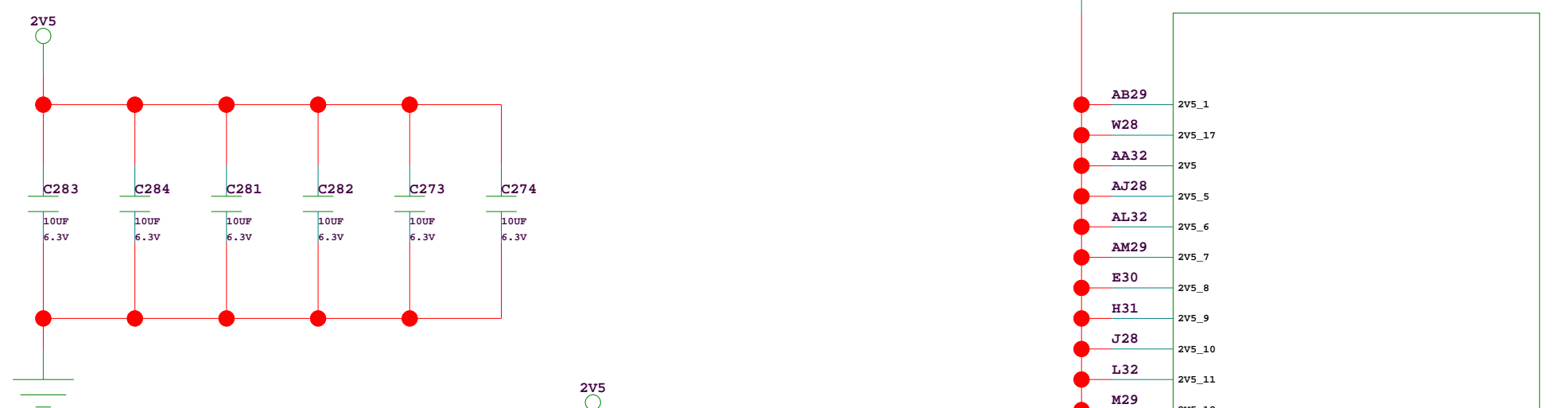
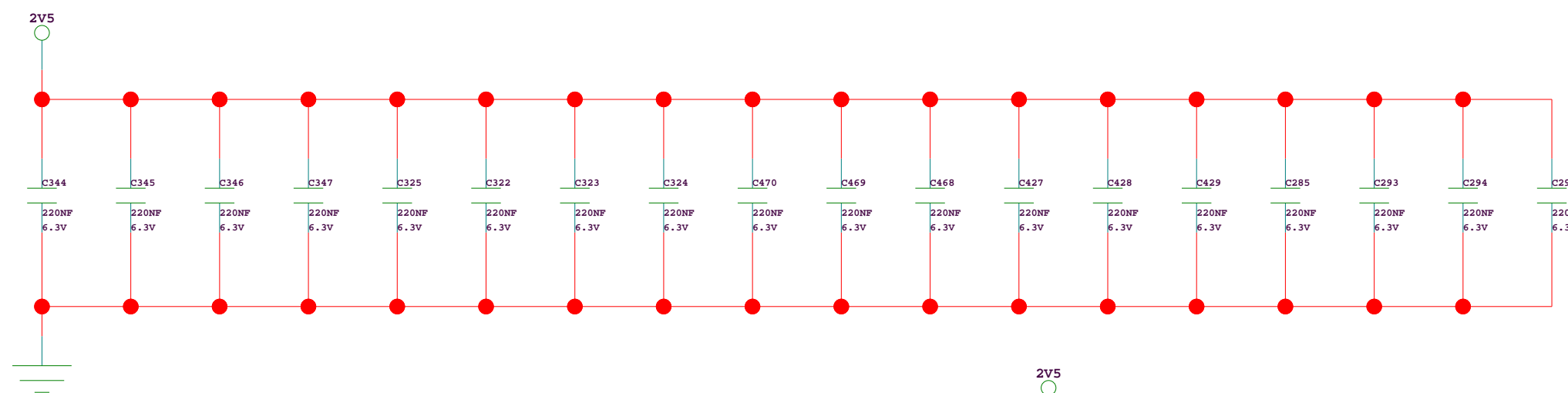
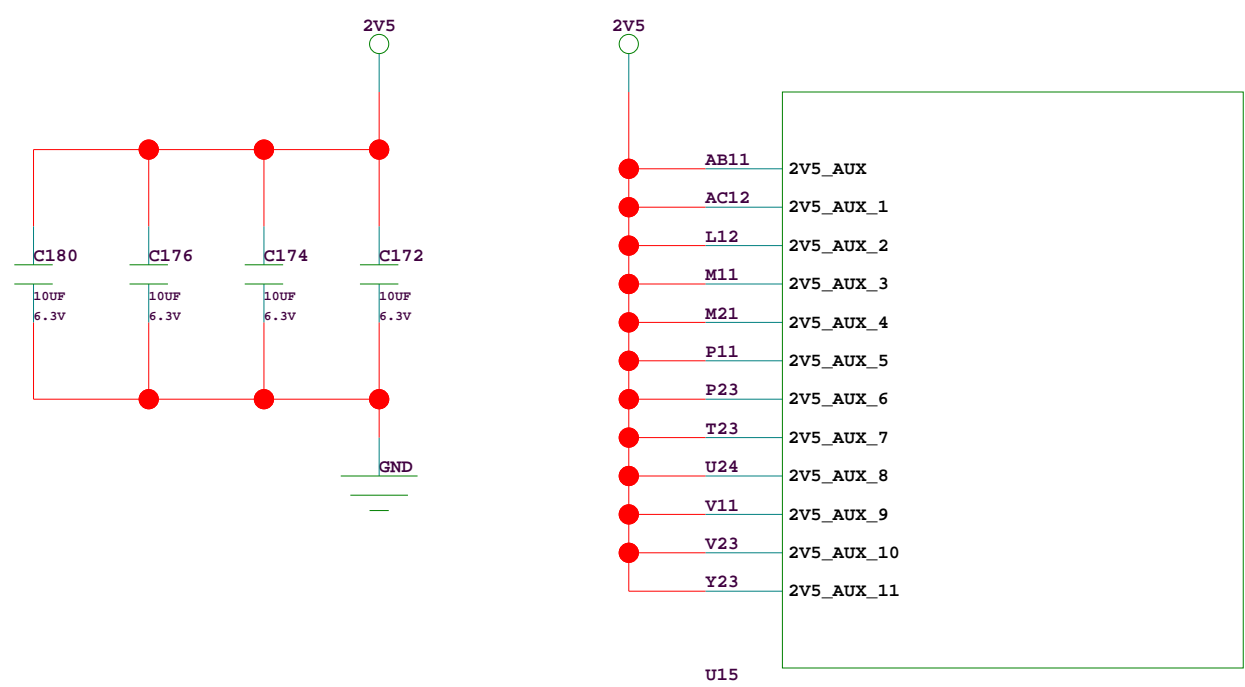
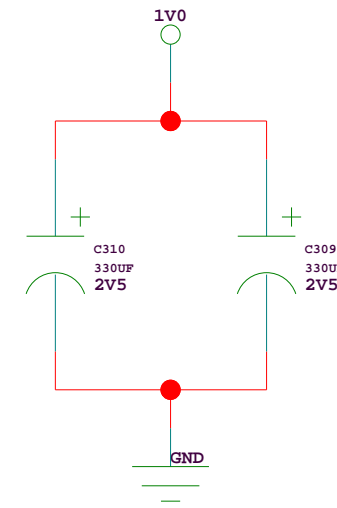
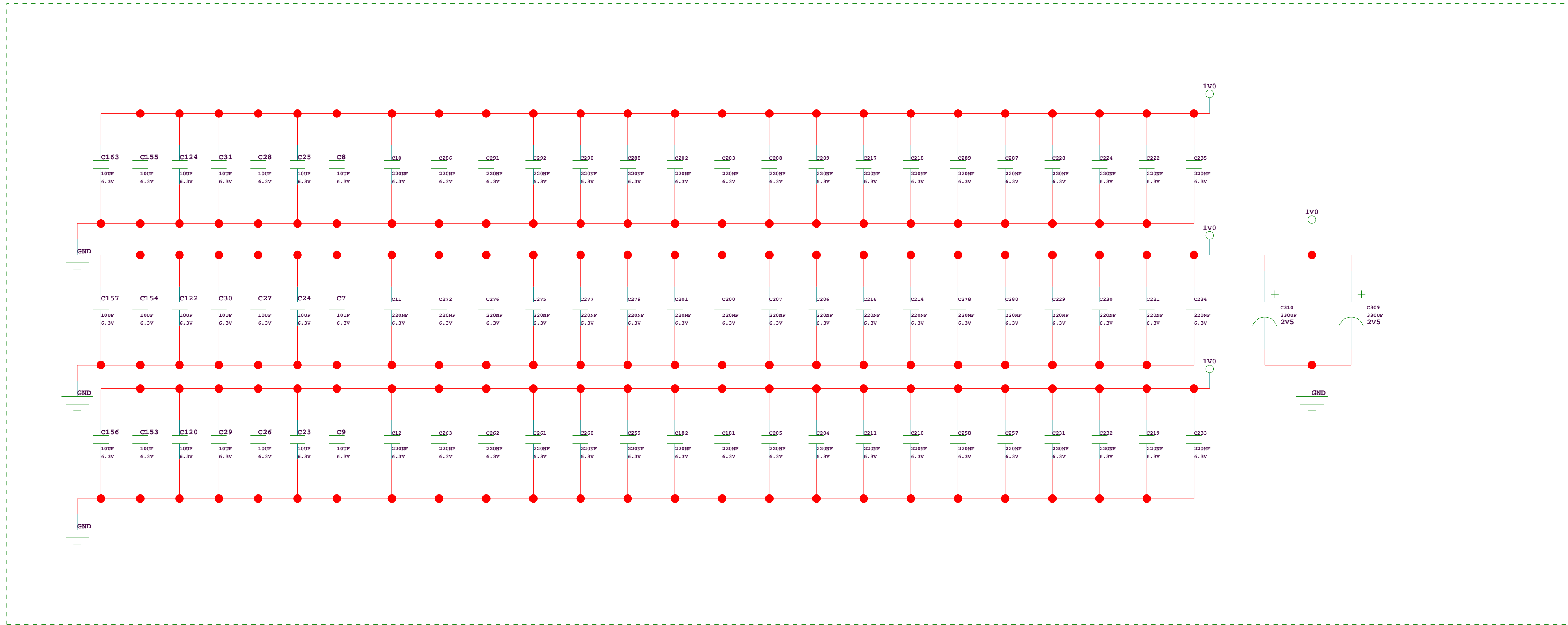
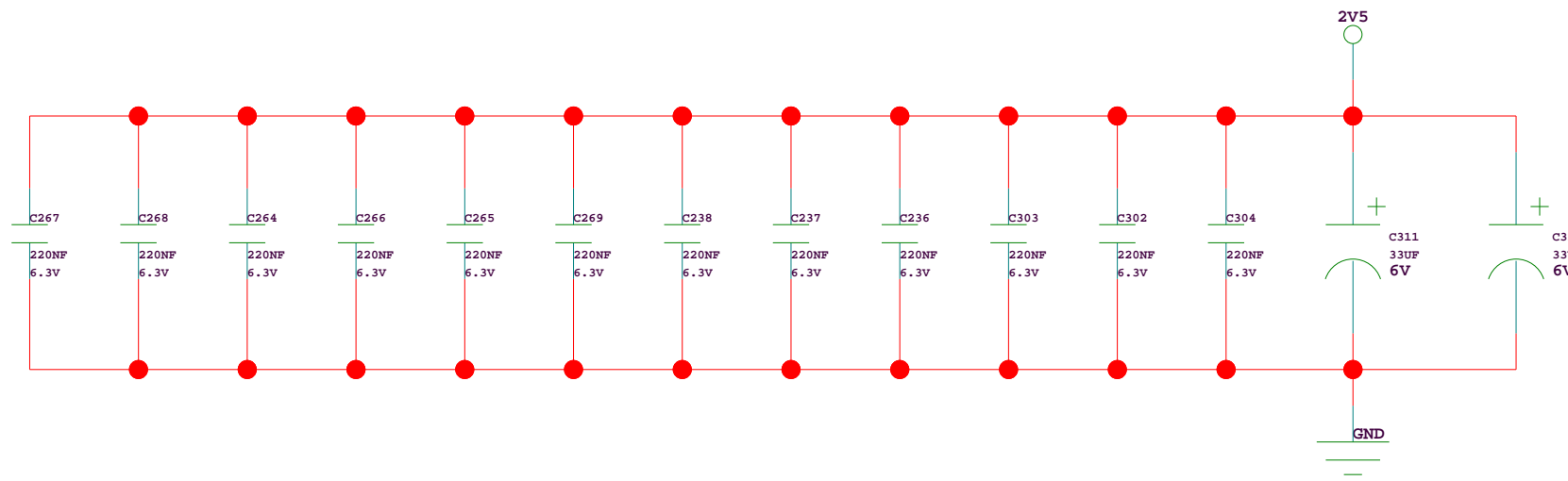
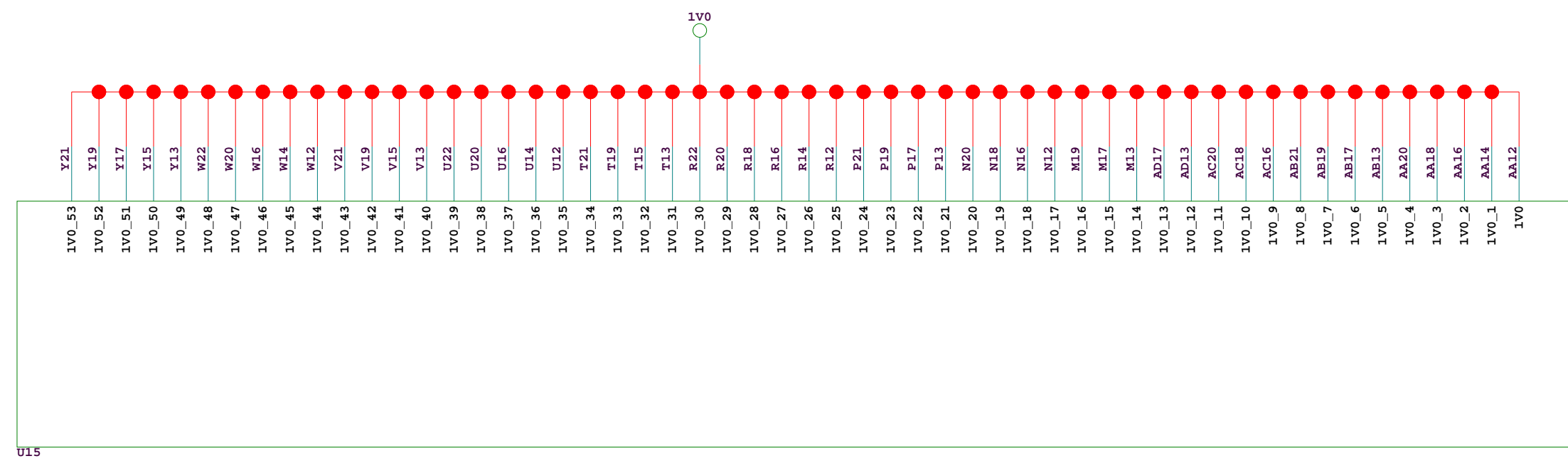
PSU RAIL SUMMARY	
VOLTAGE	1.8V +- 5%
SUPPLIES	PPDA 10V, 100%_P_2
CURRENT (QUIESCENT)	1A
CURRENT (ACTIVE)	12.9A
LOAD STEP	11.9A

PSU INPUT SUMMARY	
VOLTAGE	12V +- 10%
CURRENT (MAX)	1.8A

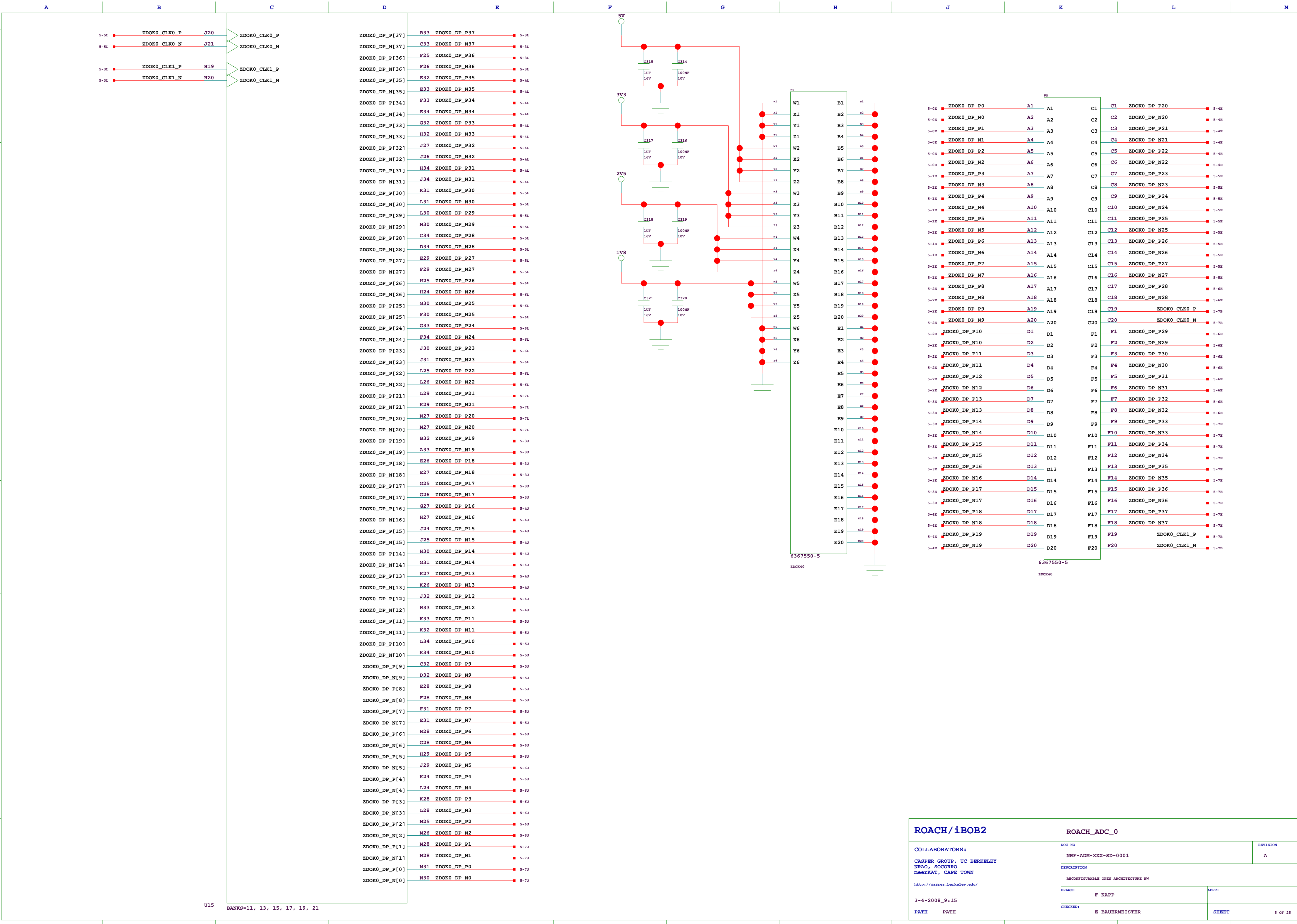
PSU RAIL SUMMARY	
VOLTAGE	2.5V +- 5%
SUPPLIES	PPDA, BIRD, PSC_PHY
CURRENT (QUIESCENT)	9.1A
CURRENT (ACTIVE)	3.6A
LOAD STEP	3.5A

PSU INPUT SUMMARY	
VOLTAGE	12V +- 10%
CURRENT (MAX)	6.8A

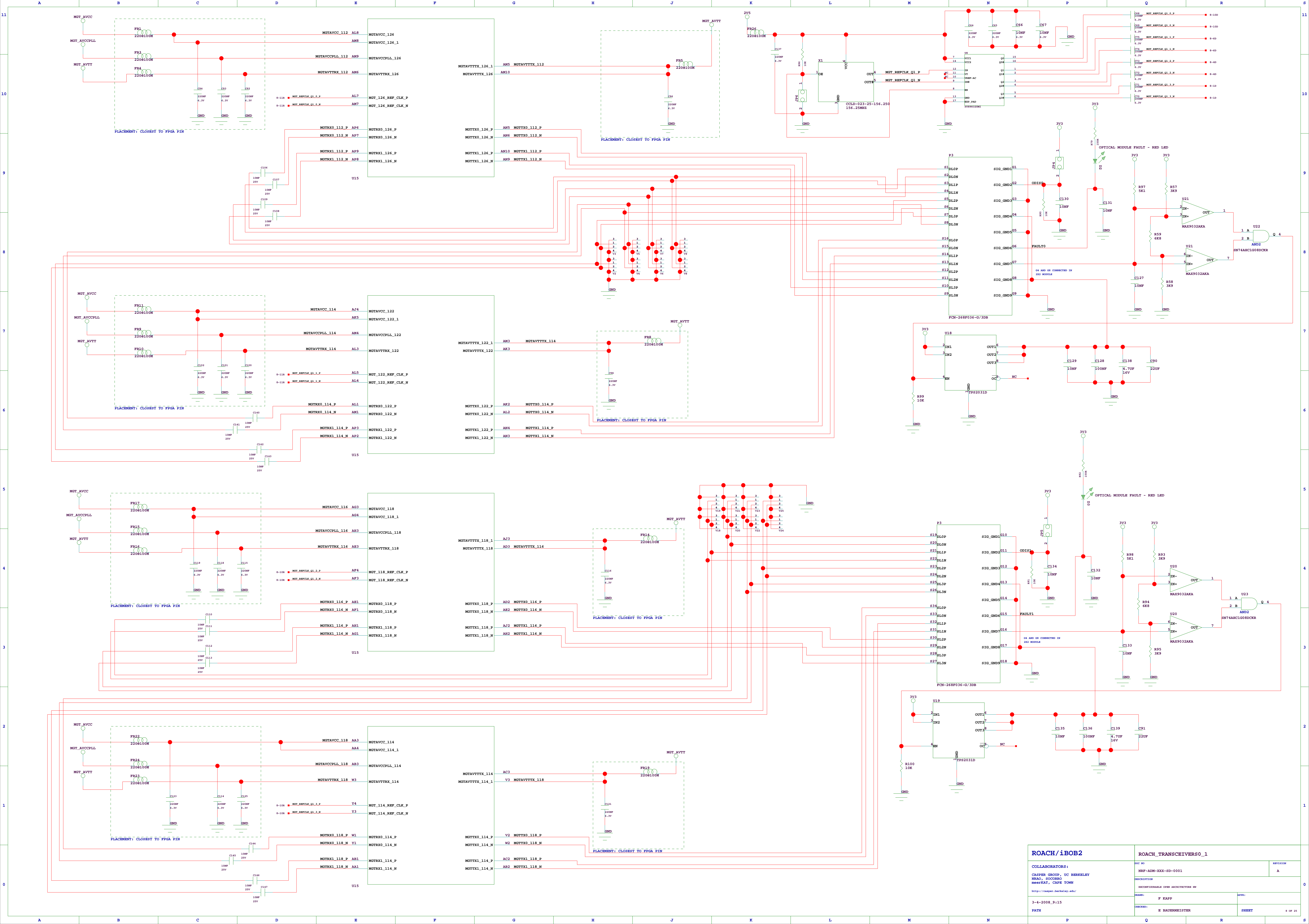
ROACH/iBOE2		ROACH_PSU	
COLLABORATORS:		DOC NO	REVISION
CASPER GROUP, UC BERKELEY		NRF-ADM-XXX-SD-0001	A
NRAO, SOONERO		DESCRIPTION	
BaeKAT, CAPE TOWN		RECONFIGURABLE OPEN ARCHITECTURE HW	
http://casper.berkeley.edu/		DRWN:	APP:
3-4-2008_9:15		F KAPP	
PATH PATH		CHECKED:	SHEET
		R BAUERMEISTER	3 OF 25

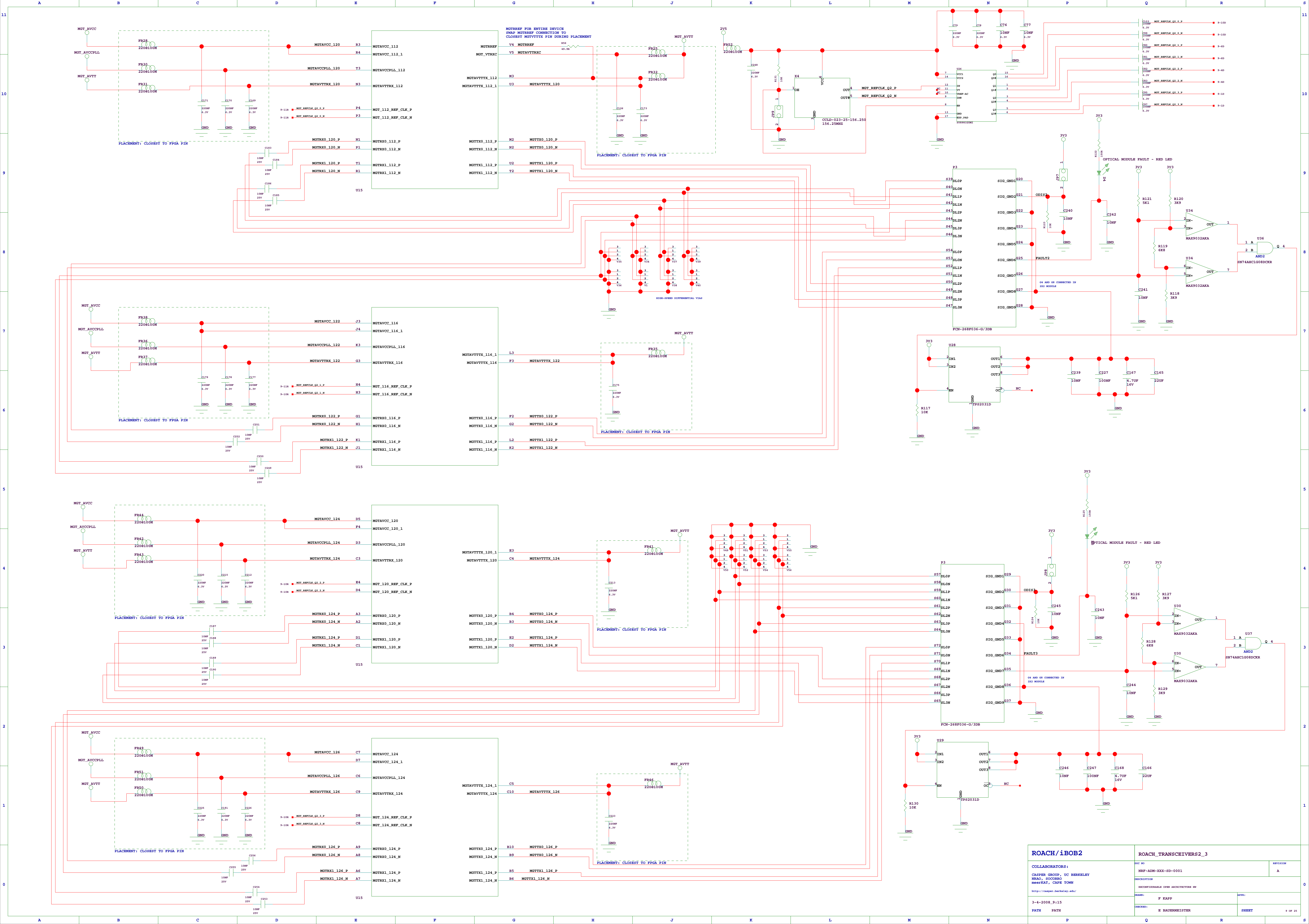


ROACH/iBOB2		ROACH_5V_POWER	
COLLABORATORS: CAPSER GROUP, UC BERKELEY WANG, SPOONER mae@CAT, CAPS TOWN http://casper.berkeley.edu/		DOC NO NRP-ADM-XXX-ED-0001 DESCRIPTION RECONFIGURABLE OPEN ARCHITECTURE HW	REVISION A
3-4-2008_9:15 PATH PATH		NAME: F KAPP CHECKED: F BAUMHOLMISTER	APP: SHEET

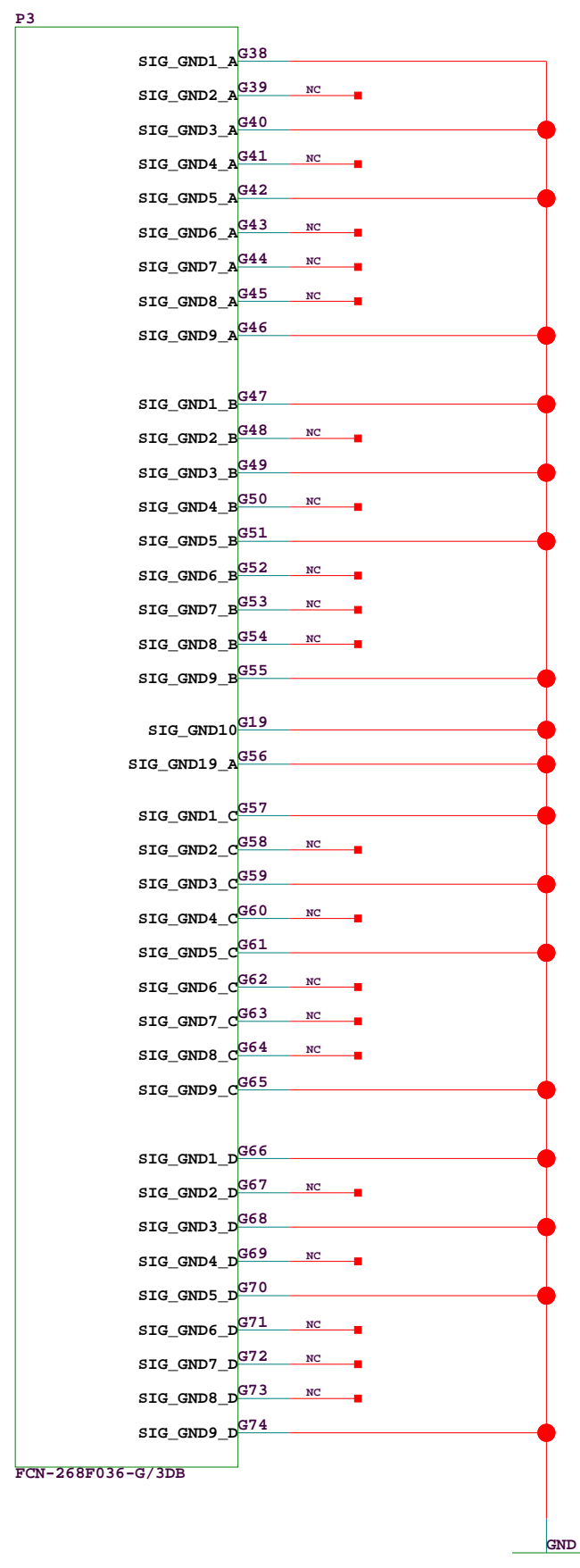
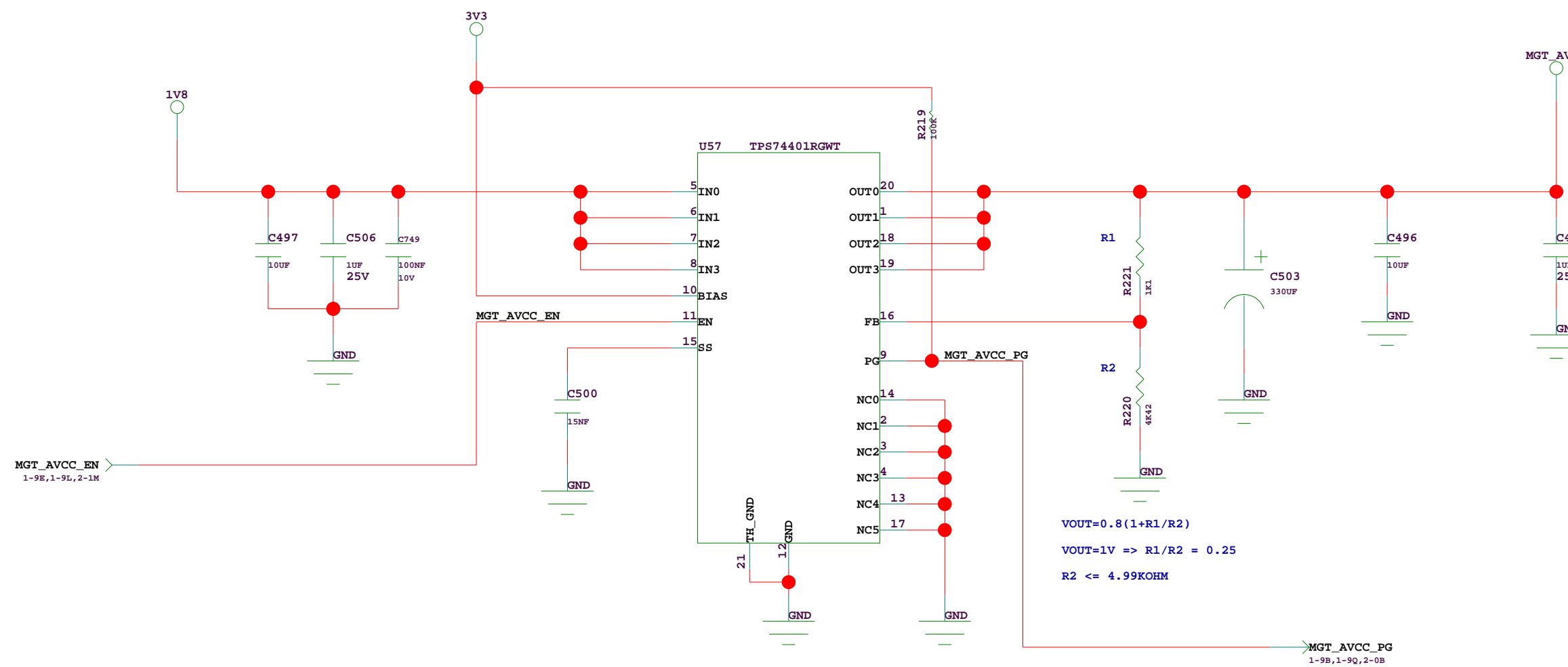
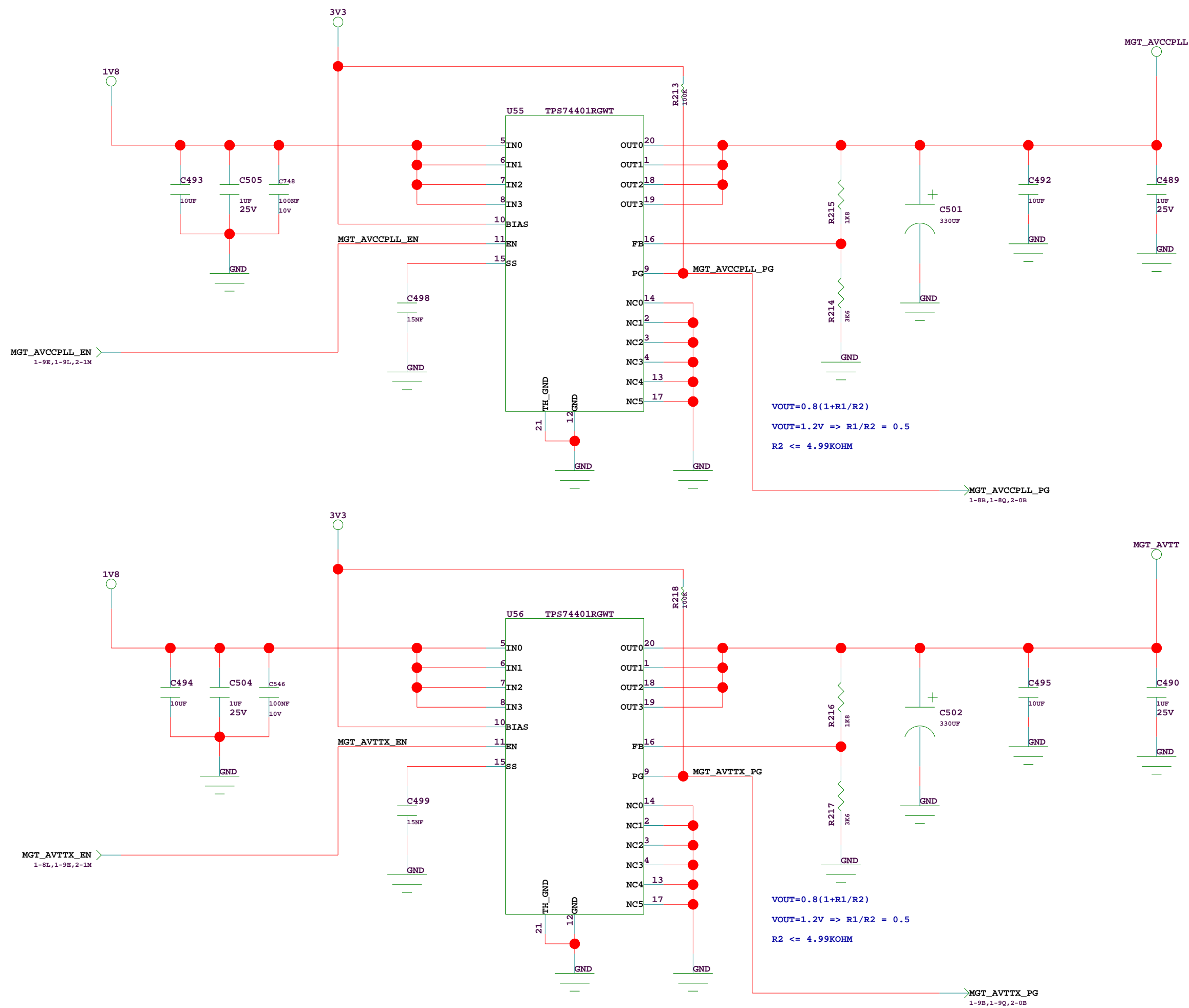




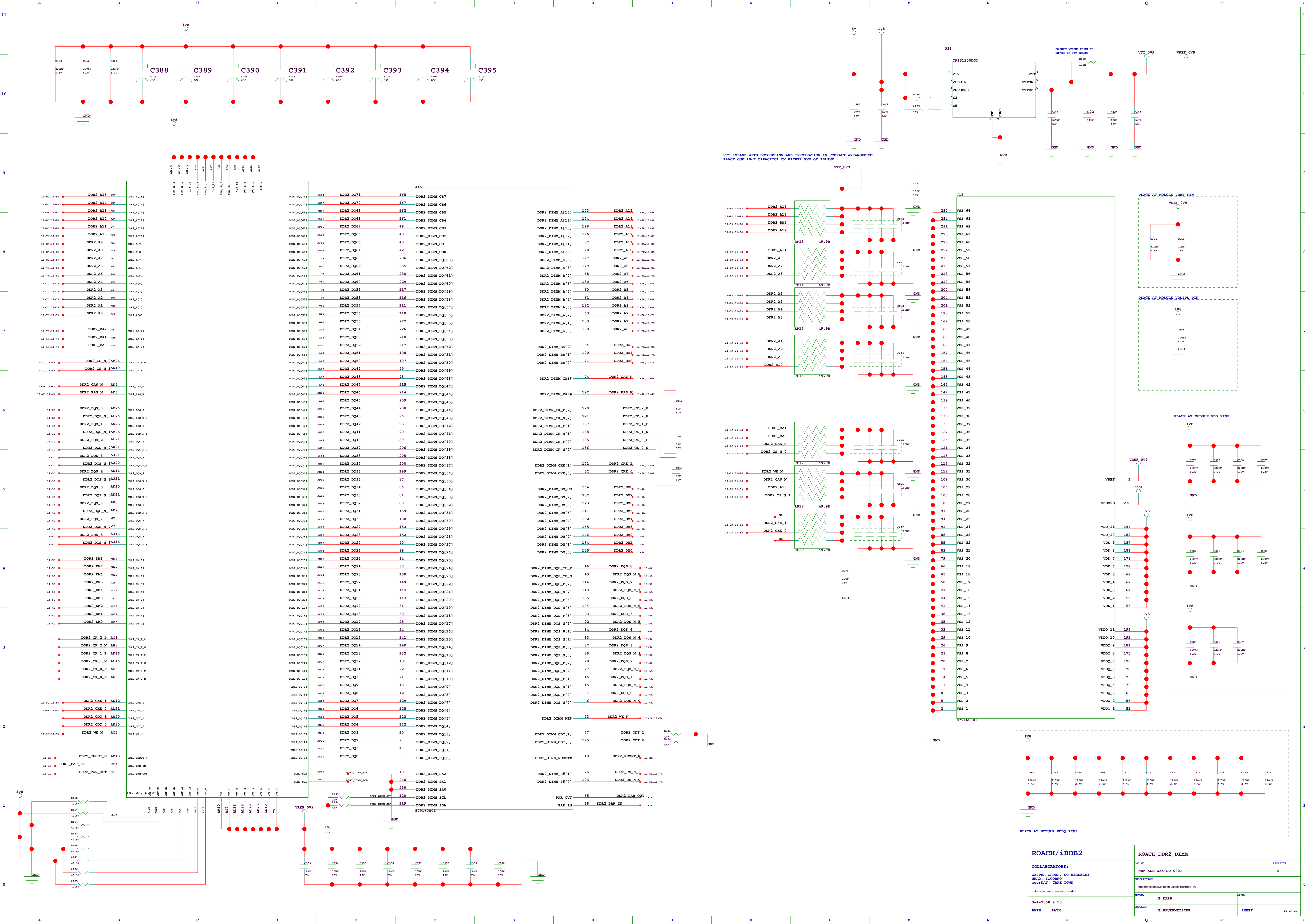


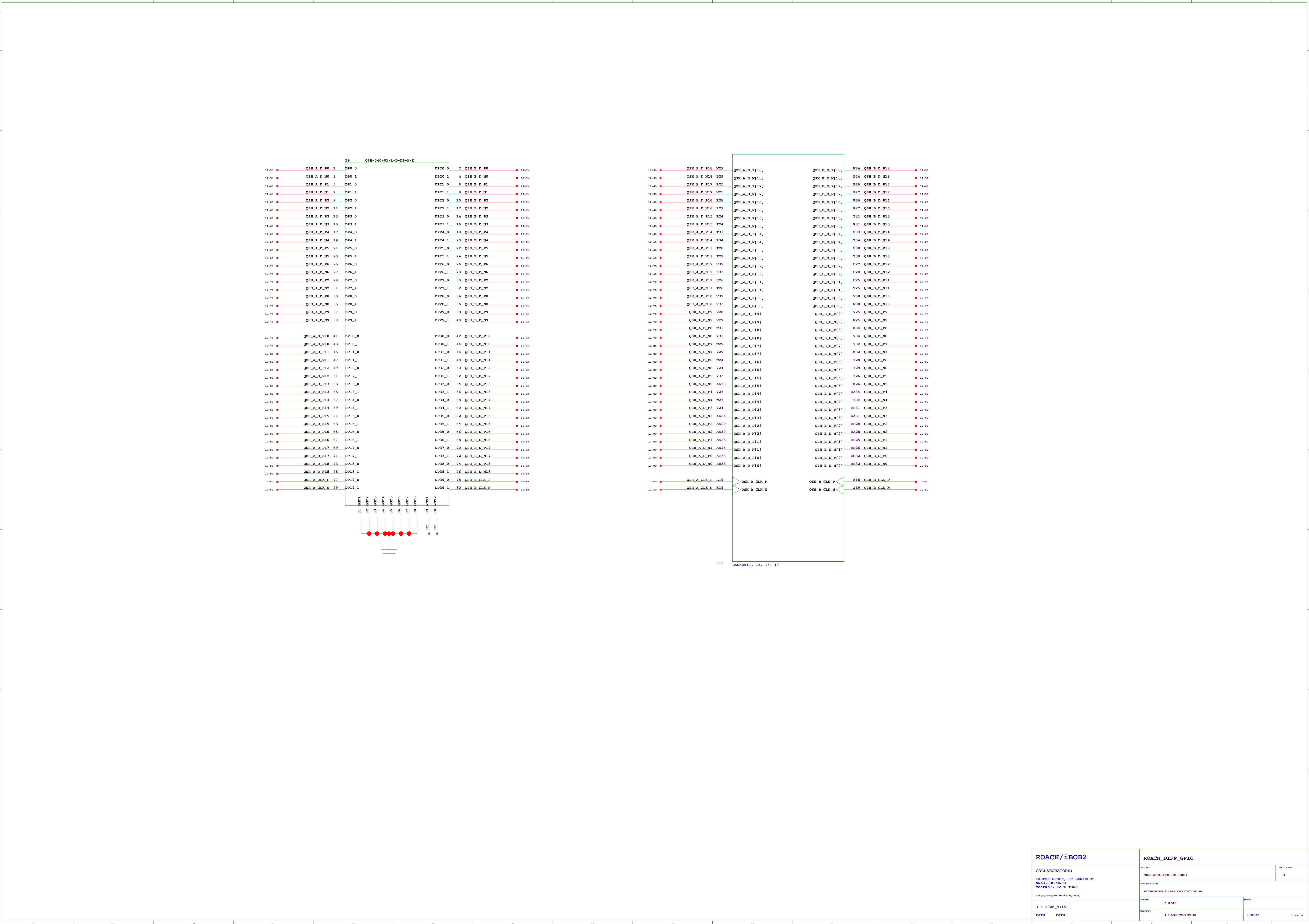


ROACH/iBOE2		ROACH_TRANSCEIVERS2_3	
COLLABORATORS:		DOC NO	REVISION
CASPER GROUP, UC BERKELEY NRAD, SOCCORO BEEKAT, CAPE TOWN		NRF-ADM-XXX-SD-0001	A
DESCRIPTION		RECONFIGURABLE OPEN ARCHITECTURE HW	
http://casper.berkeley.edu/		NAME:	APP:
3-4-2008 9:15		F KAPP	
CHECKED:	K BAUERMEISTER	SHEET	9 OF 25

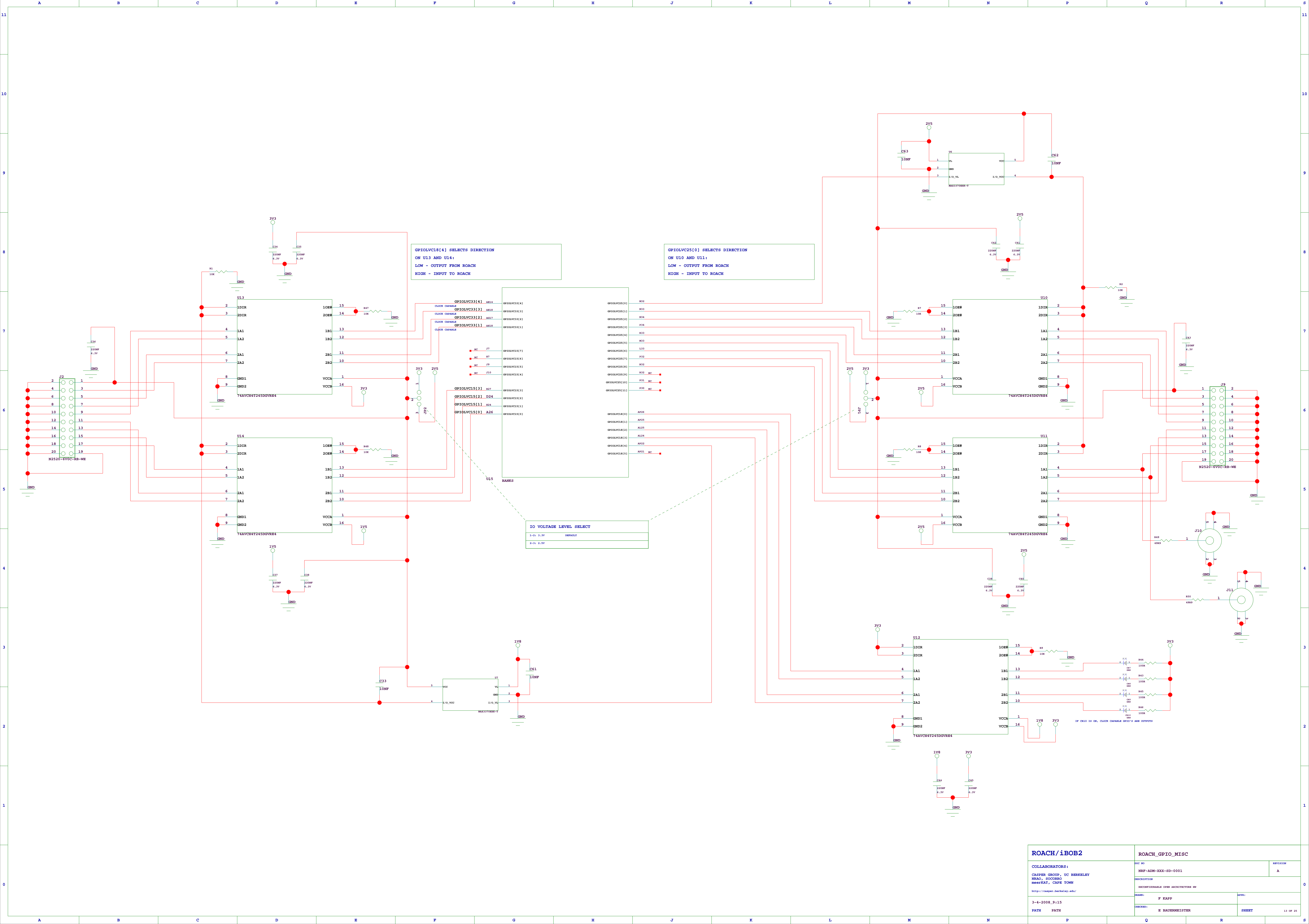


ROACH/iBOE2		ROACH_TRANSCEIVERS_PSU	
COLLABORATORS:		DOC NO	REVISION
CASPER GROUP, UC BERKELEY		NRF-ADM-XXX-SD-0001	A
NRAO, SOCORRO		DESCRIPTION	
BARRACAT, CAPE TOWN		RECONFIGURABLE OPEN ARCHITECTURE HW	
http://casper.berkeley.edu/		DRAWN:	APPD:
3-4-2008_9:15		F KAPP	
PATH PATH		CHECKED:	SHEET
		E BAUERMEISTER	10 OF 2

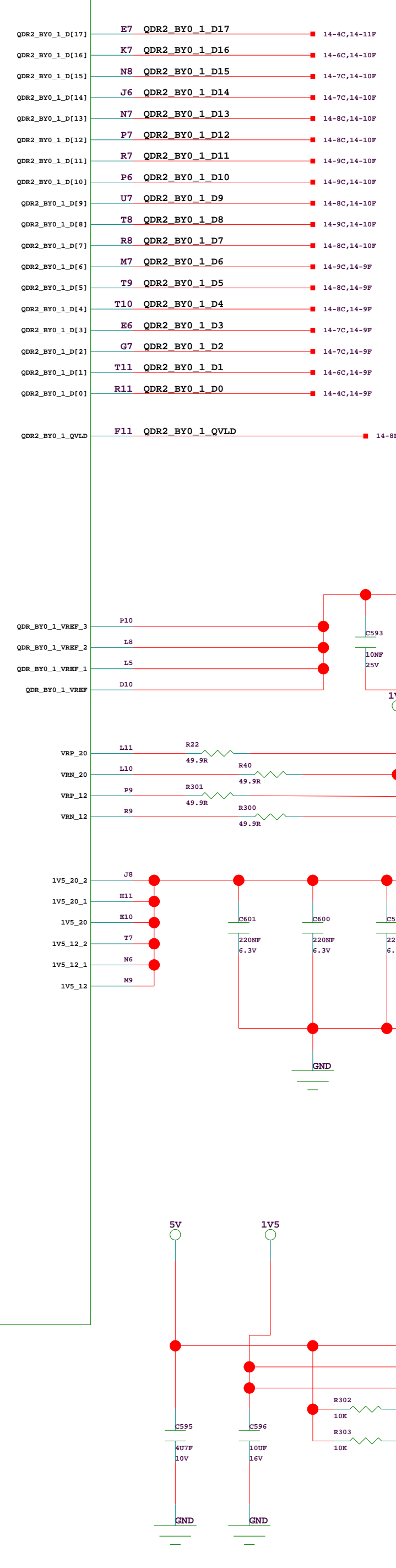
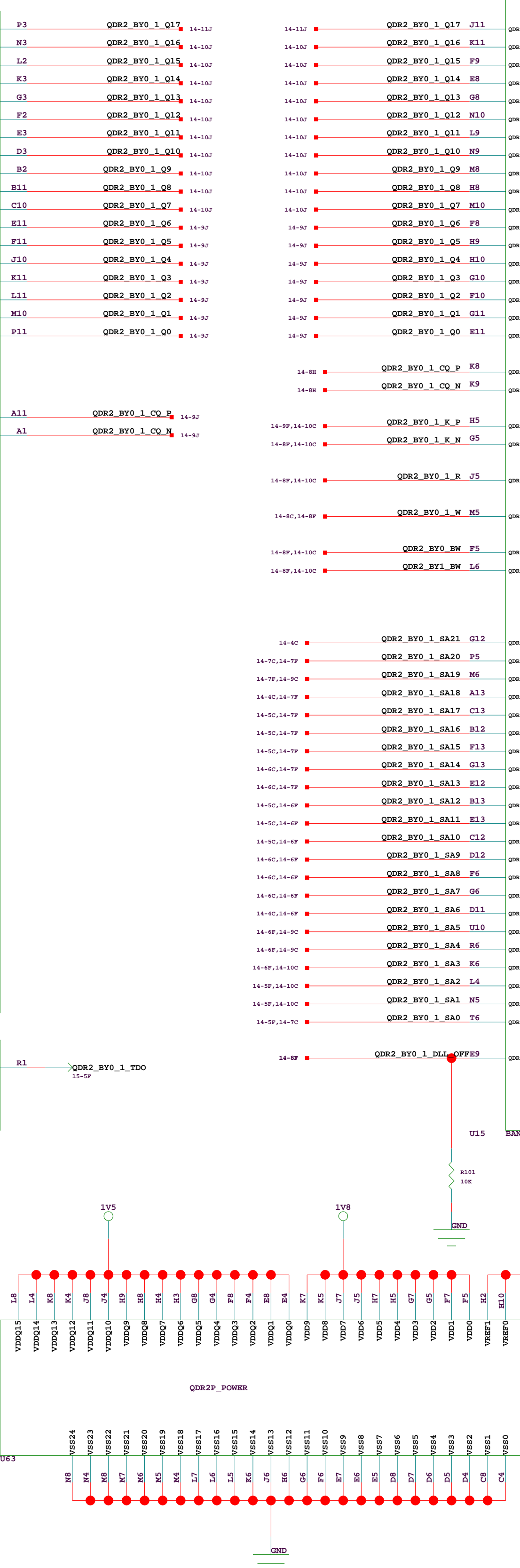
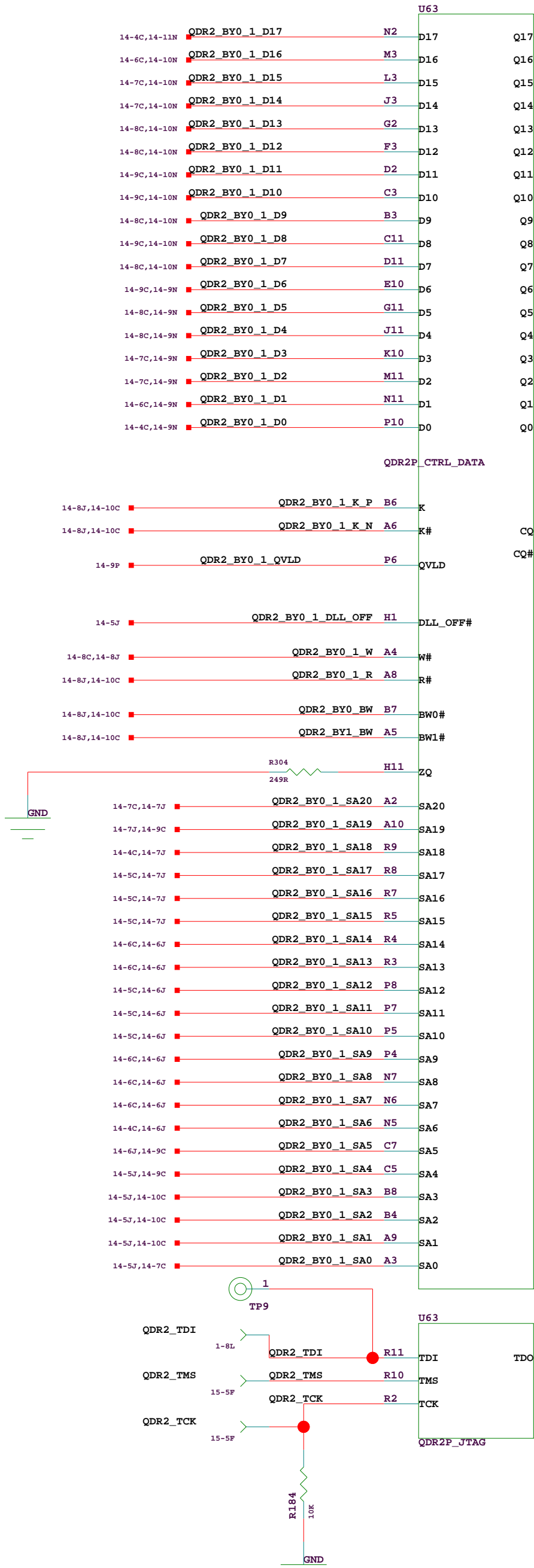
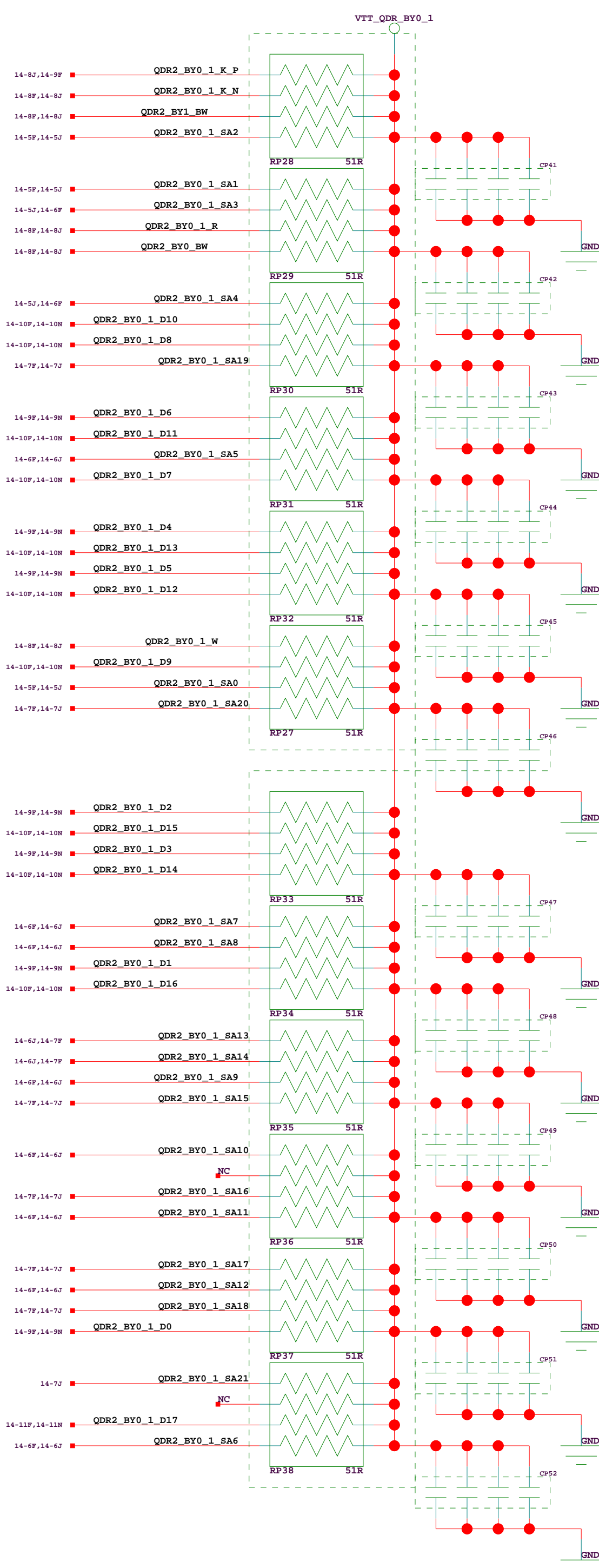




ROACH/iBOE2				ROACH_DIFF_GPIO			
COLLABORATORS: CASPER GROUP, UC BERKELEY NRAO, SOONERO BaeKAT, CAPE TOWN http://casper.berkeley.edu/				DOC NO: NRF-ADM-XXX-SD-0001		REVISION: A	
				DESCRIPTION: RECONFIGURABLE OPEN ARCHITECTURE HW			
				DRAWN: F KAPP		APPR:	
3-4-2008_9:15				CHECKED: E BAUERMEISTER			
PATH		PATH		SHEET		12 OF 25	

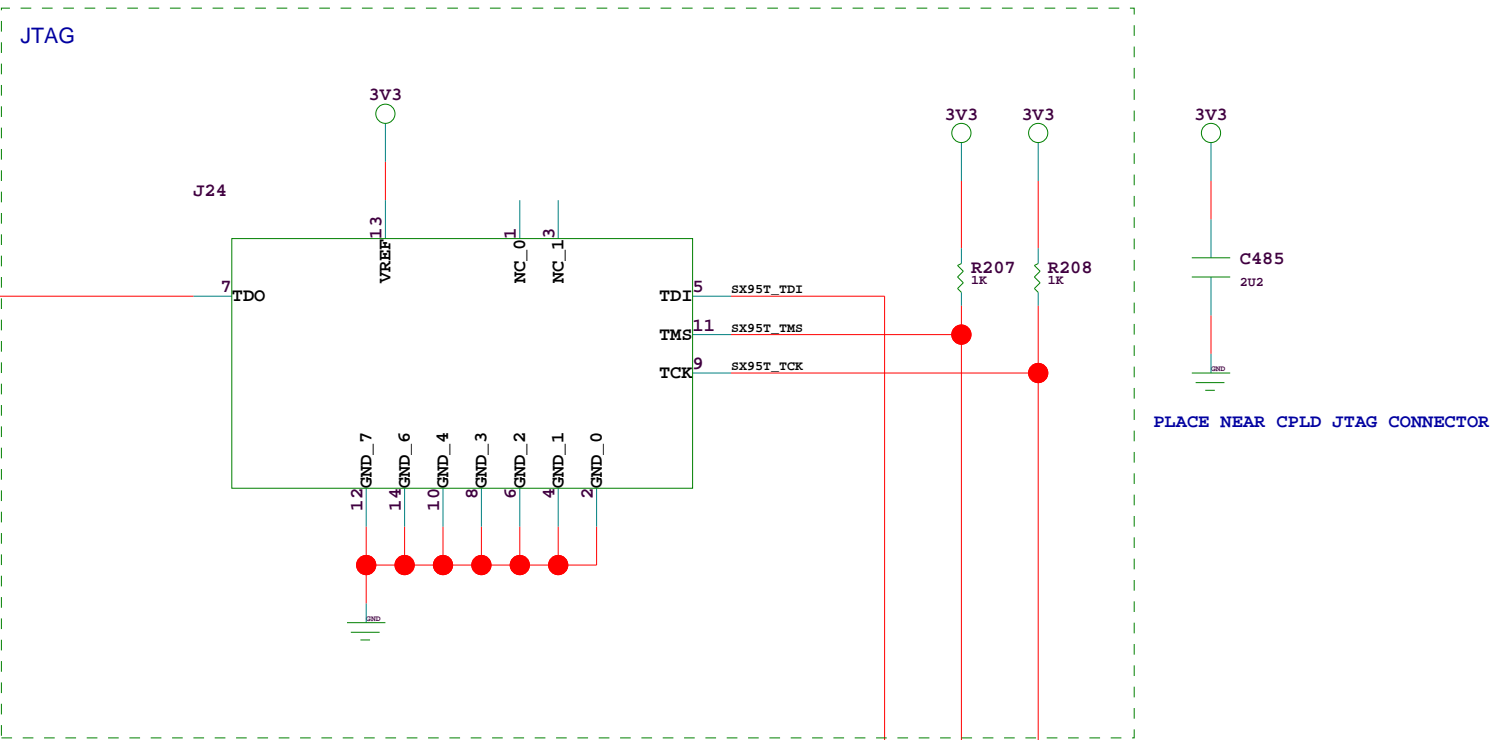
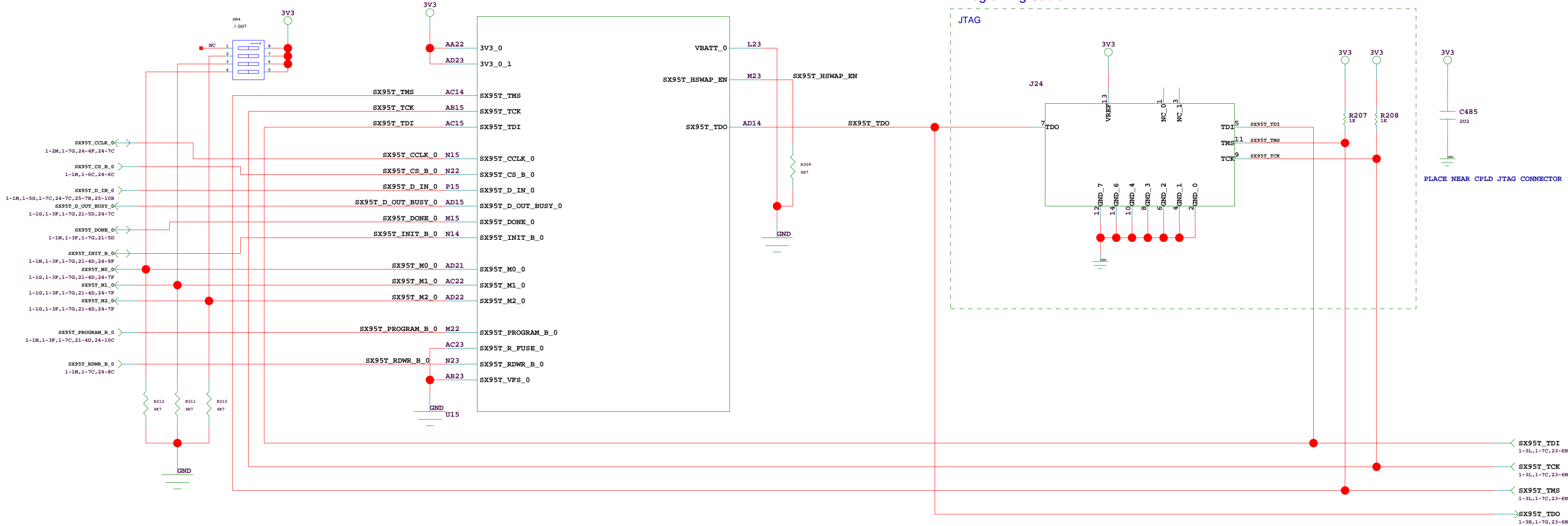


ROACH/iBOE2		ROACH_GPIO_MISC	
COLLABORATORS:		DOC NO	REVISION
CASPER GROUP, UC BERKELEY		NRF-ADM-XXX-BD-0001	A
DESCRIPTION		DESCRIPTION	
NRAO, SOCCORRO		RECONFIGURABLE OPEN ARCHITECTURE HW	
BrewerKAT, CAPE TOWN		ISSUED:	ISSUES:
http://casper.berkeley.edu/		3-4-2008_9:15	F KAPP
PATH	PATH	CHECKED:	R BAUERMISTROT
			SHEET

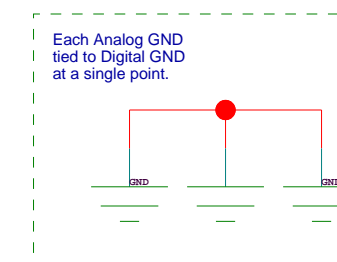
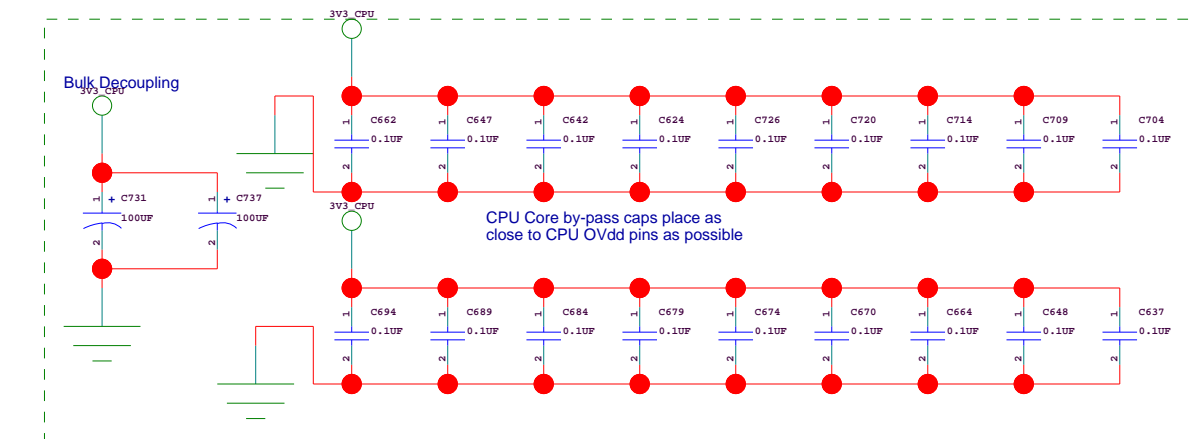
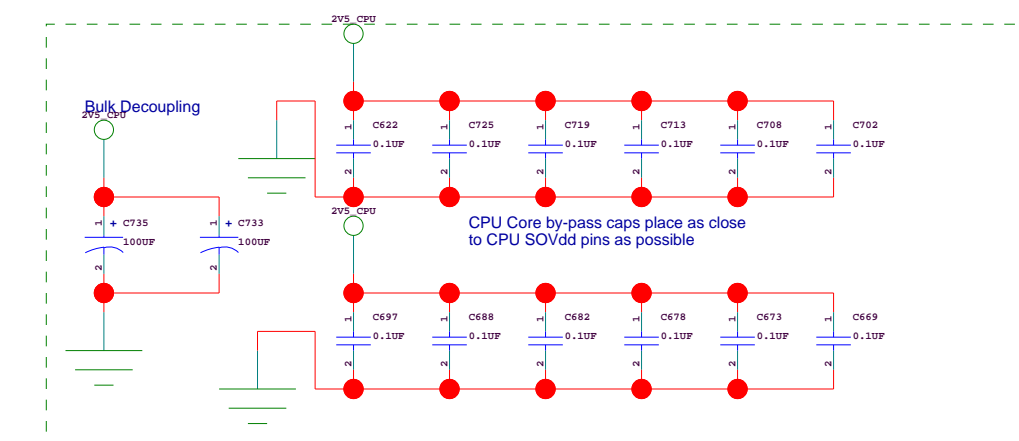
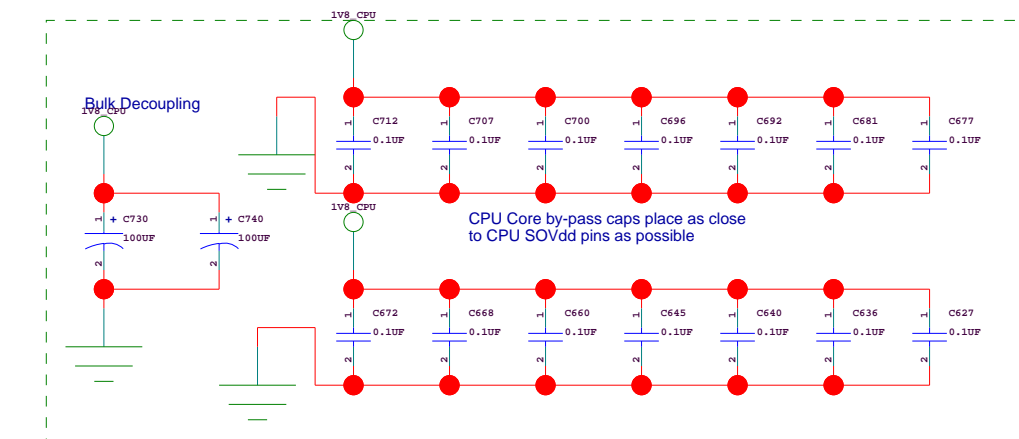
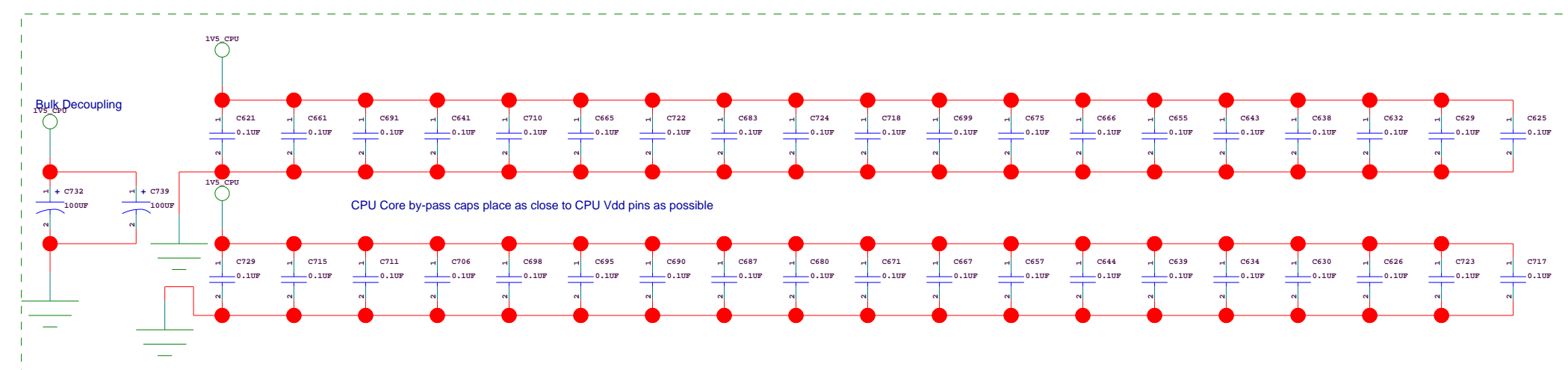
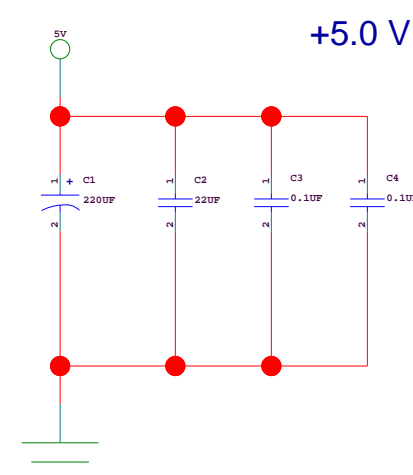
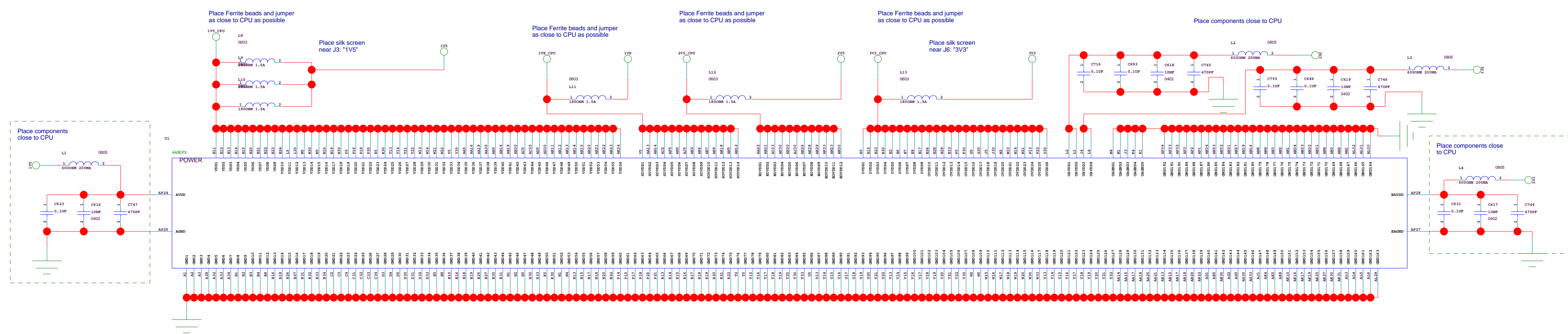


ROACH/iBOB2		ROACH_QDR2P_BY0_1	
COLLABORATORS: CASPER GROUP, UC BERKELEY WRAJ, EOCORBO meerCAT, CAPE TOWN http://casper.berkeley.edu/		DOC NO: NRP-ADM-XXX-SD-0001 DESCRIPTION: SECOND/FOURABLE ORB ARCHITECTURE IM	REVISION: A
3-4-2008_9:15		NAME: F KAPP	APPR:
PATH	PATH	TRACKED: E BAUMEISTER	SHEET 14 OF 2

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:		DOC NO	REVISION
CASPER GROUP, UC BERKELEY NRAO, SOCORRO meerKAT, CAPE TOWN		NRF-ADM-XXX-SD-0001	A
http://casper.berkeley.edu/		DESCRIPTION	
		RECONFIGURABLE OPEN ARCHITECTURE HW	
3-4-2008_9:15		DRAWN:	APPR:
PATH	PATH	F KAPP	
		CHECKED:	
		E BAUERMEISTER	SHEET
			16 OF 25

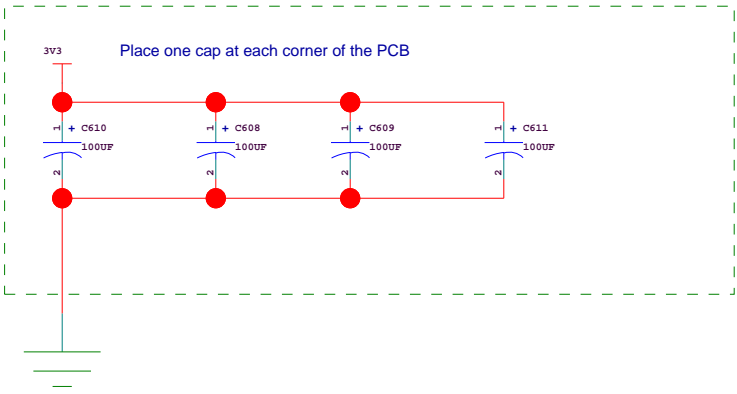


REMOVED 1.8V AND 1.5V REGULATORS, CONNECTED TO V5 RAILS

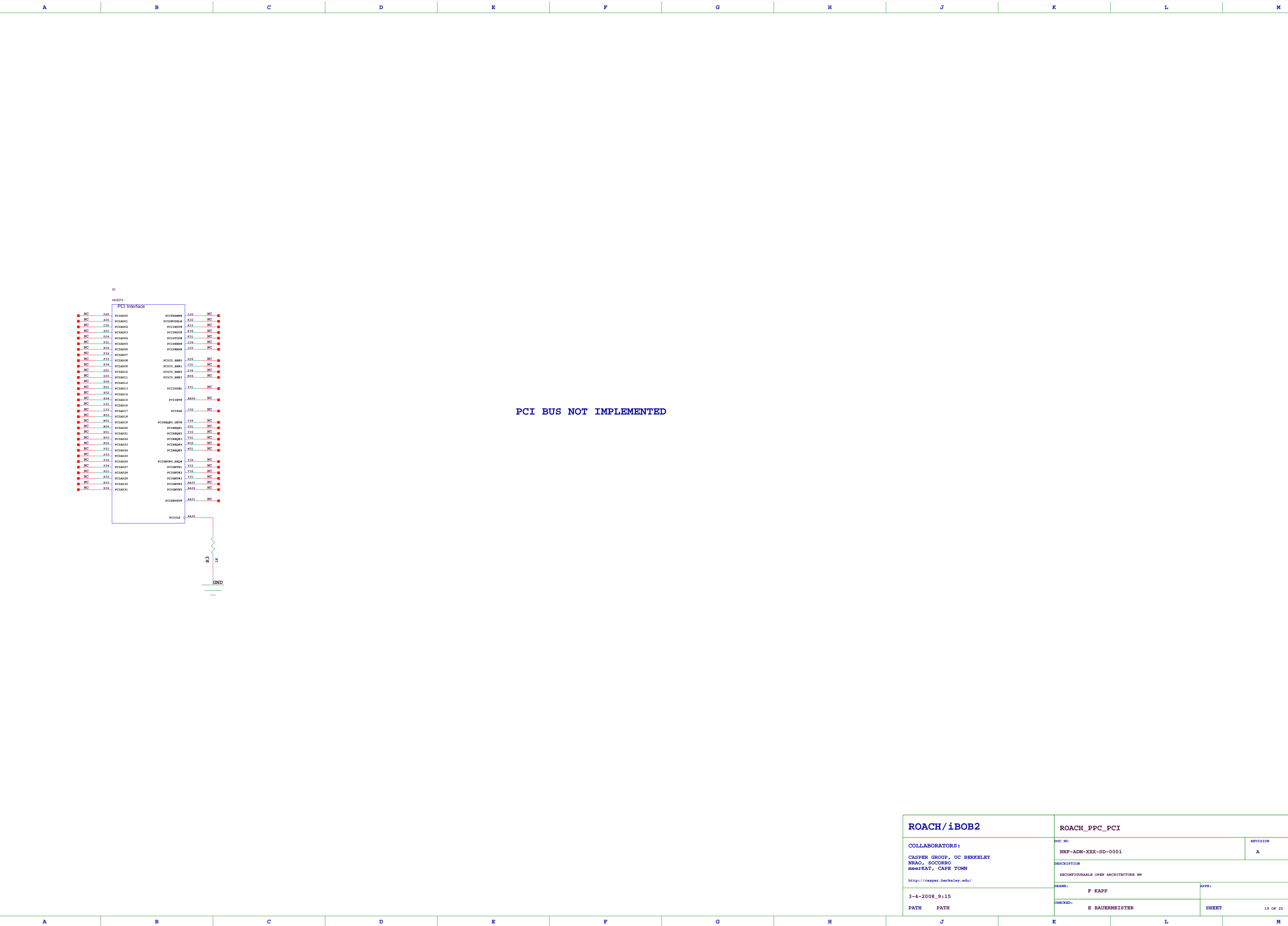
REMOVED VTT AND VREF - INCLUDED ON ROACH_PPC_DDR2

ROACH/iBOB2		ROACH_PPC_POWER_1	
COLLABORATORS:		SOC NO	REVISION
CASPER GROUP, UC BERKELEY MESA, SOCORRO MesaTech, CAPE TOWN		NEP-ADM-XXX-SD-0001	A
		DESCRIPTION	
		RECONFIGURABLE OPEN ARCHITECTURE HW	
http://casper.berkeley.edu/		ISSUES:	
3-4-2008 9:15		ISSUES:	
PATH PATH		F KAPP	
		CHECKED:	
		K BAUMEISTER	
			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:
3-4-2008_9:15	CHECKED: E BAUERMEISTER		SHEET 18 OF 25
PATH	PATH		



PCI BUS NOT IMPLEMENTED

ROACH/iBOB2

ROACH_PPC_PCI

COLLABORATORS:

CASPER GROUP, UC BERKELEY

NRAO, SOCCORRO

meerKAT, CAPE TOWN

<http://casper.berkeley.edu/>

3-4-2008_9:15

PATH

PATH

DOC NO

NRF-ADM-XXX-SD-0001

REVISION

A

DESCRIPTION

RECONFIGURABLE OPEN ARCHITECTURE HW

DRAWN:

F KAPP

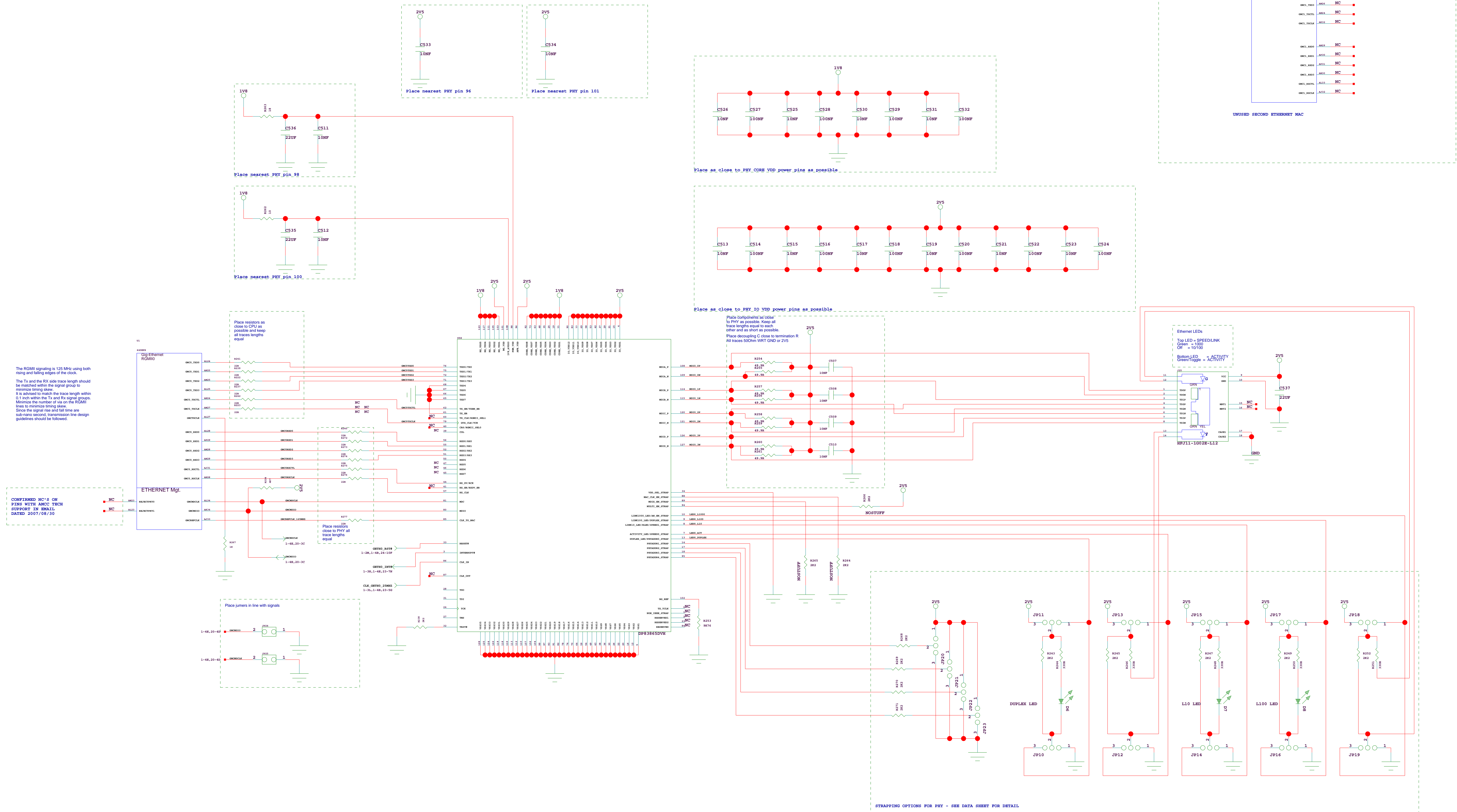
APPR:

CHECKED:

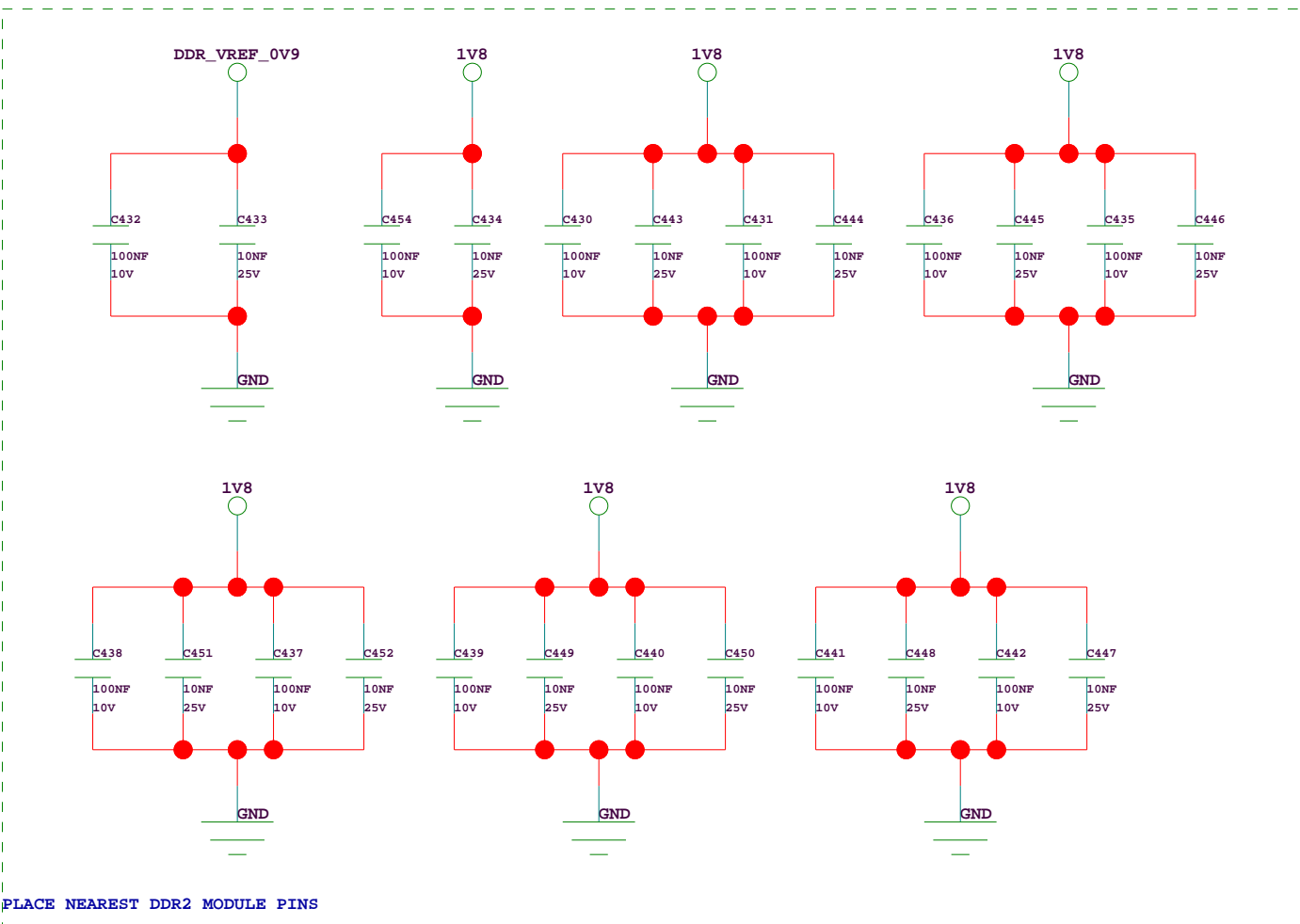
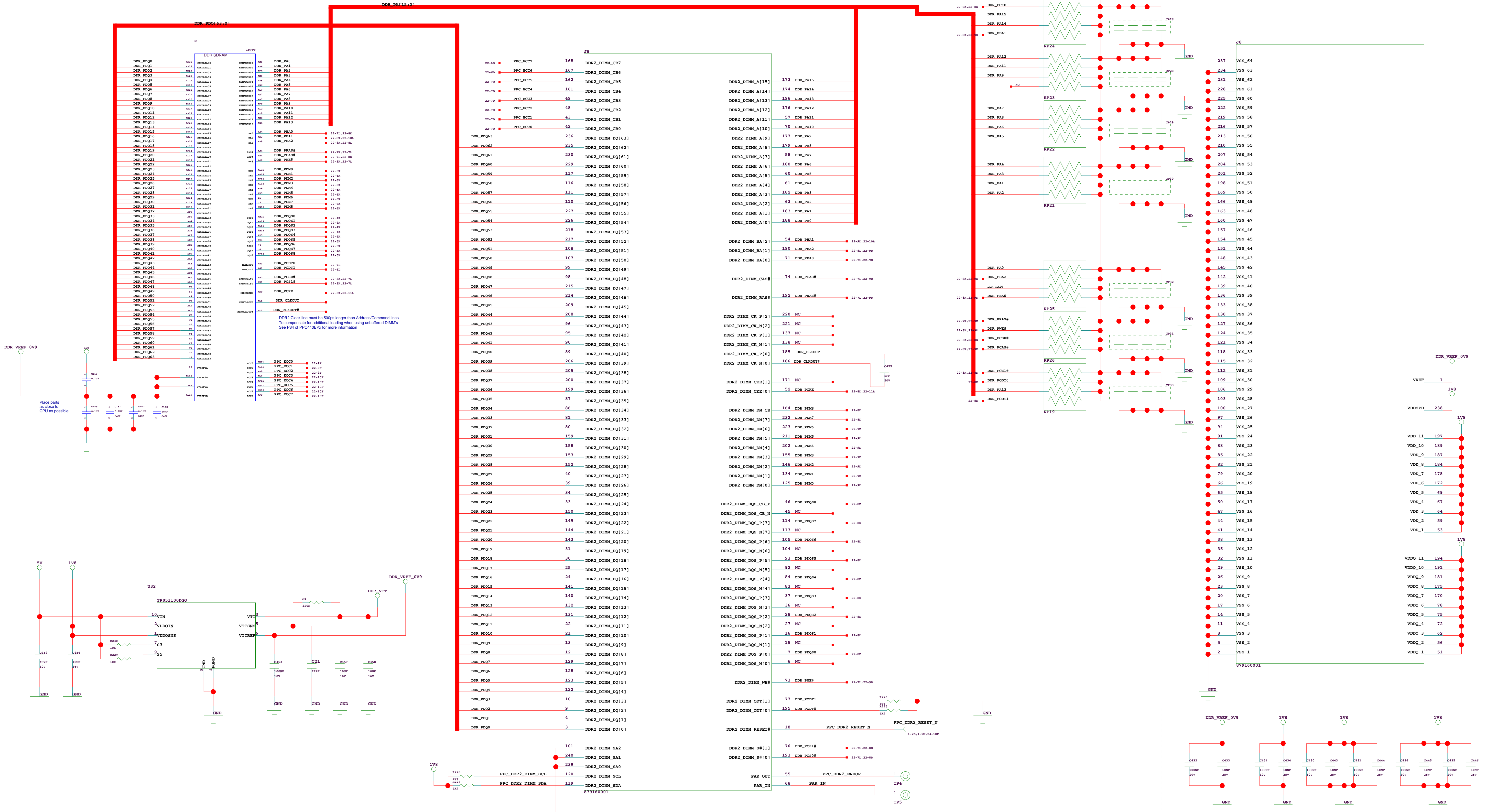
E BAUERMEISTER

SHEET

19 OF 25



ROACH/iBOB2		ROACH_PPC_ETH1	
COLLABORATORS: CAEPER GROUP, UC BERKELEY HEAD, SCORODO BOMEKAT, CAPE TOWN http://caeper.berkeley.edu/		DOC NO NRP-ADM-XXX-SD-0001 DESCRIPTION RECONFIGURABLE OPEN ARCHITECTURE SW	REVISION A
3-4-2008_9115		NAME: F KAPP	APPR:
PATH PATH		CHECKED: R BAUMENHEISTER	SHEET 20 OF 2



ROACH/iBOB2

COLLABORATORS:

CASPER GROUP, UC BERKELEY

NRAO, SOCORRO

RECONSTRUCTED FROM ARCHITECTURE IN

3-4-2008_9:15

PATH PATH

ROACH_PPC_DDR2

DOC NO

NRF-ADM-XXX-SD-0001

DESCRIPTION

RECONSTRUCTED FROM ARCHITECTURE IN

3-4-2008_9:15

PATH PATH

REVISION

A

DESCRIPTION

RECONSTRUCTED FROM ARCHITECTURE IN

3-4-2008_9:15

PATH PATH

22 OF 25

