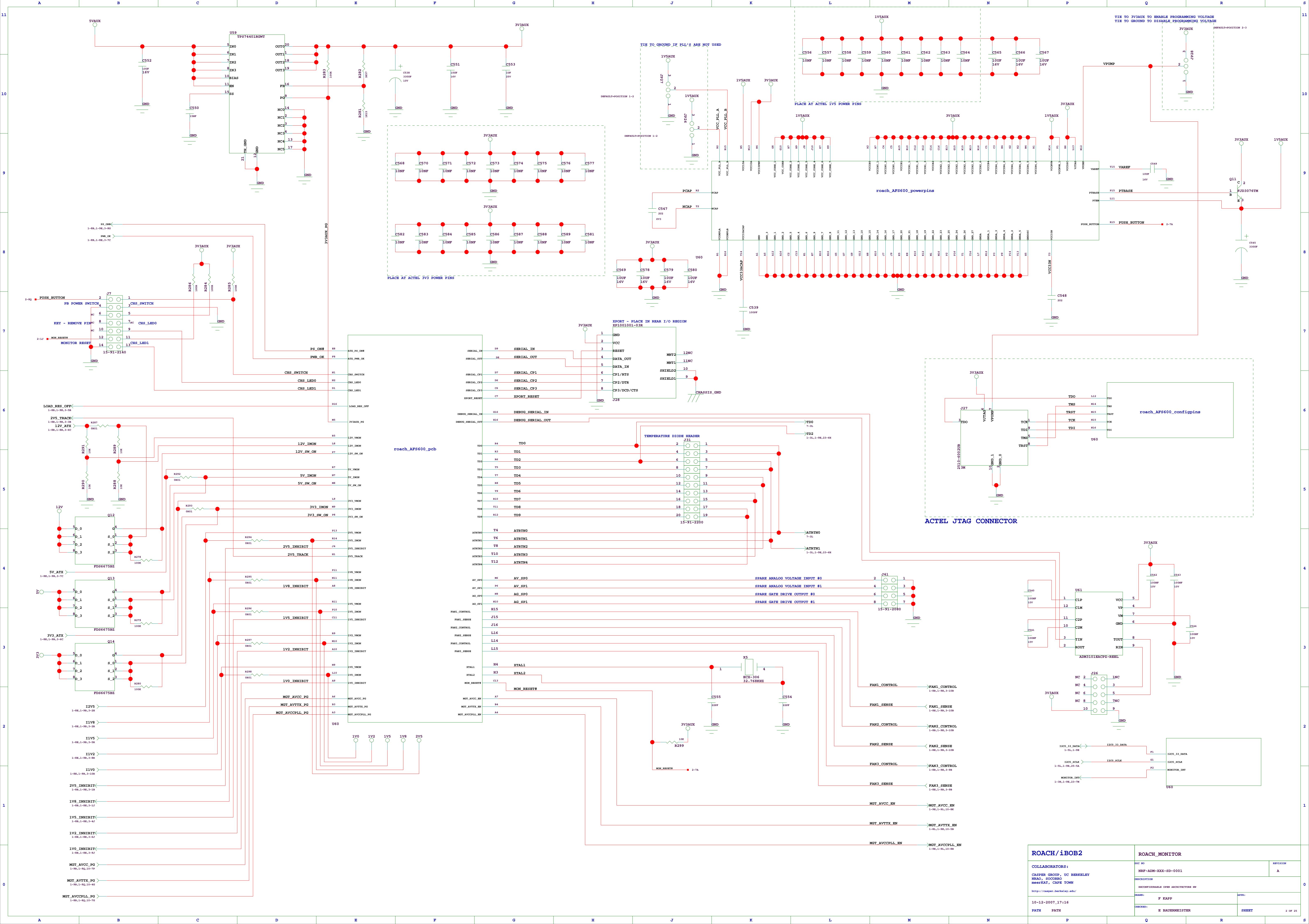
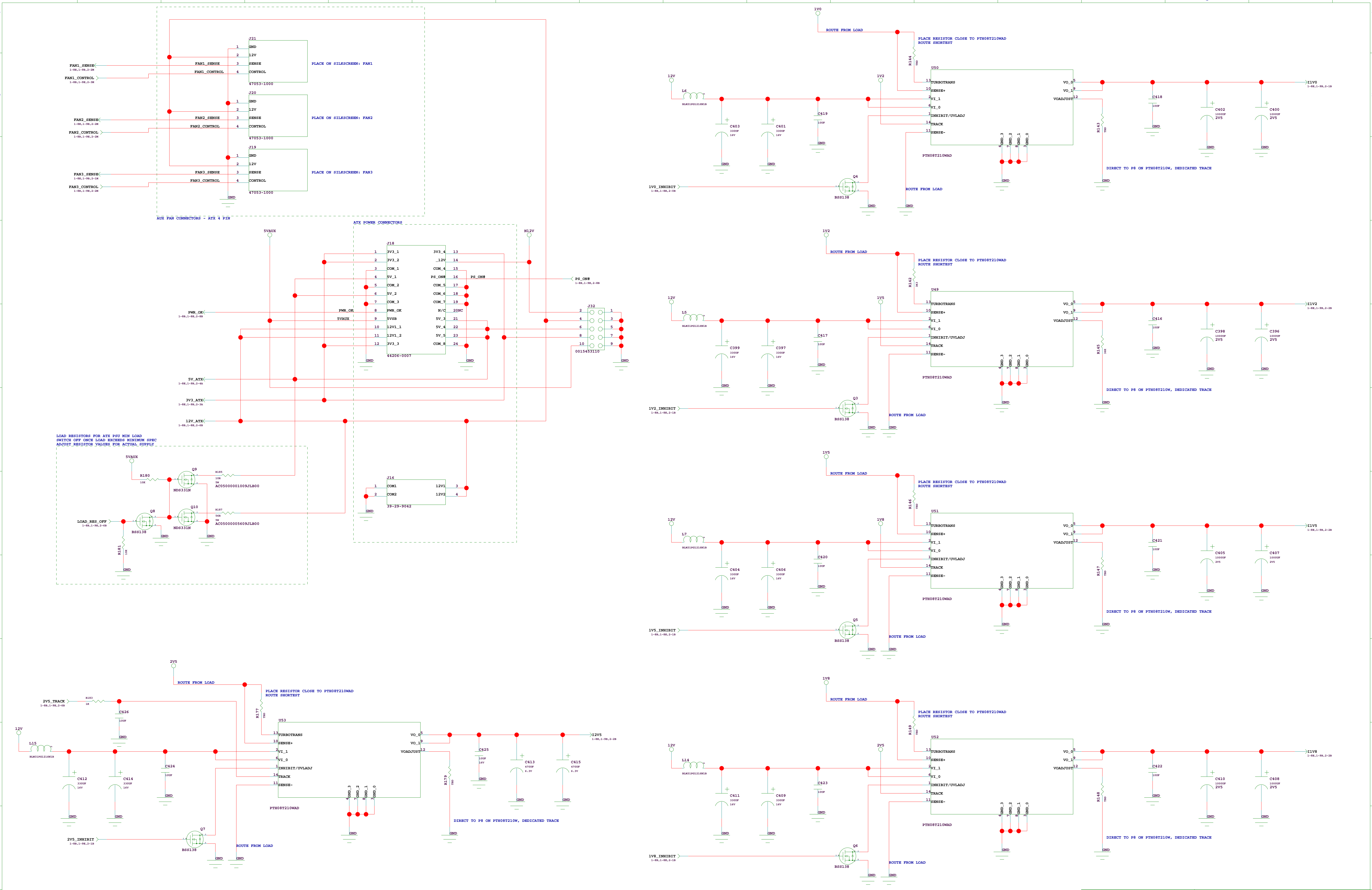


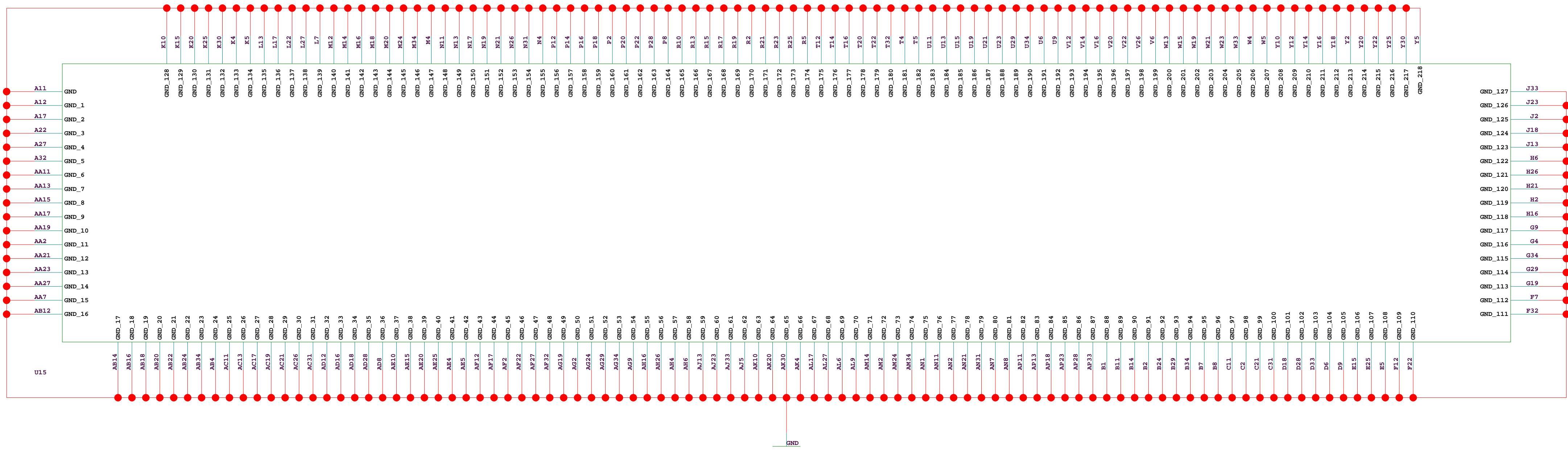
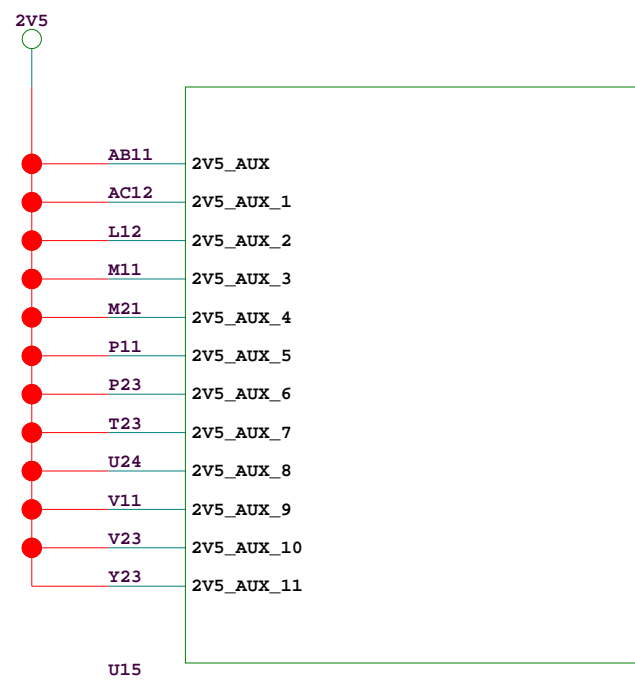
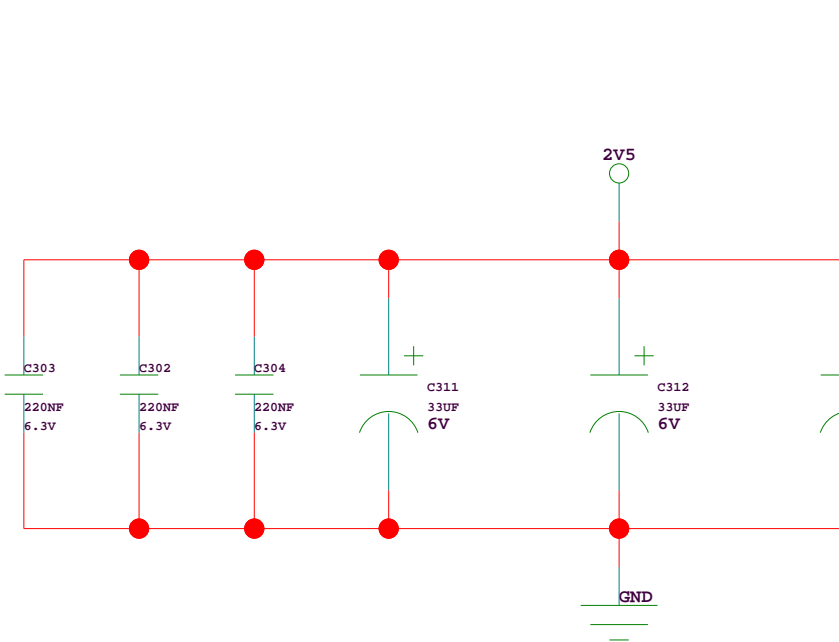
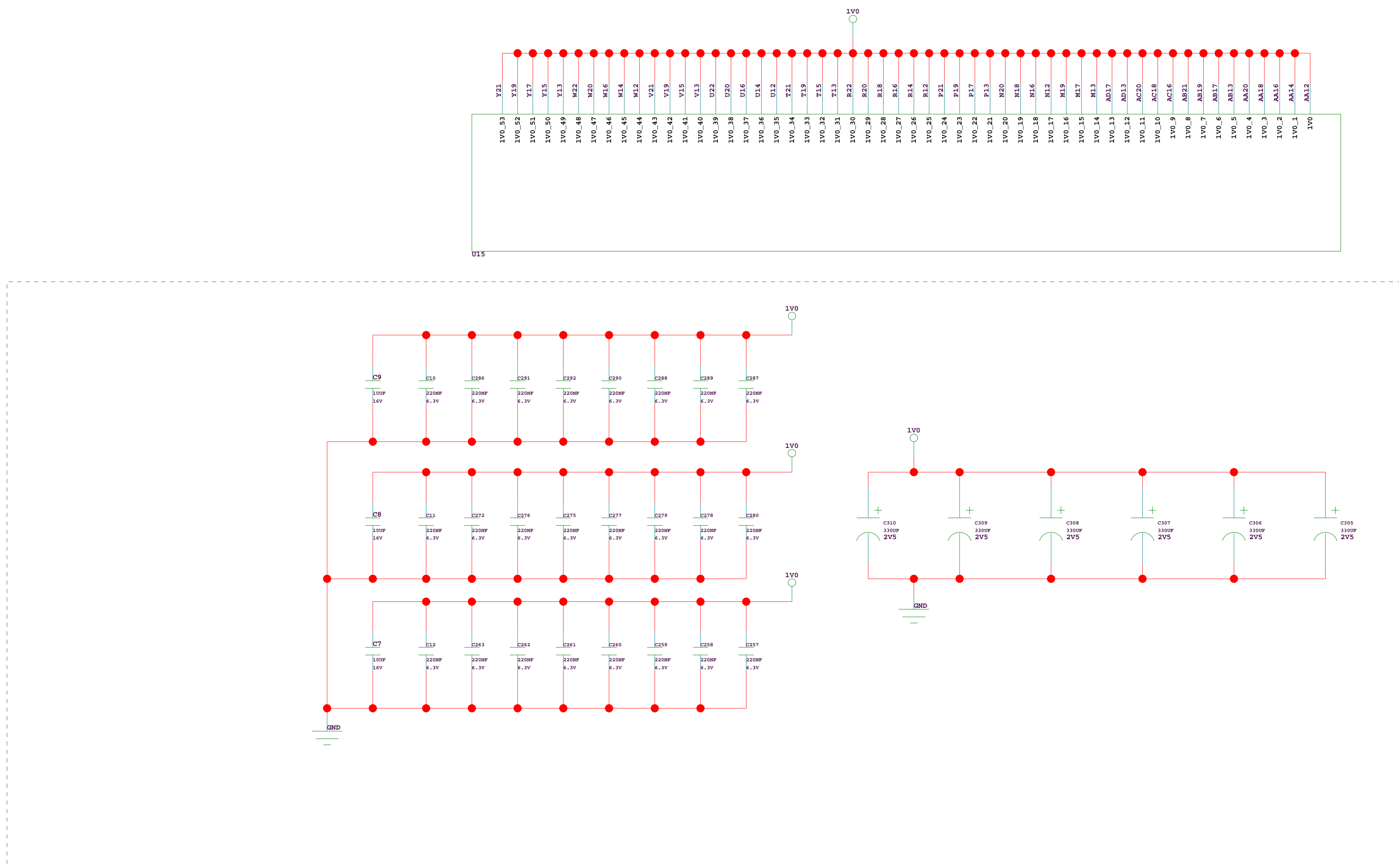
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COLLABORATORS:		DOC NO	REVISION
CASPER GROUP, UC BERKELEY		NRF-ADM-XXX-SD-0001	A
MRAU, SCSOERO		DESCRIPTION	
MEEFKAT, CAPE TOWN		RECONFIGURABLE OPEN ARCHITECTURE HW	
http://casper.berkeley.edu/		BRAND:	APPS:
10-12-2007_17:16		F KAPP	
PATH PATH		CHECKED:	SHEET
		E BAUERMEISTER	1 OF 2





ADJUSTMENT AND T2 RESISTOR VALUES TBD
SOURCE VOLTAGES TO BE SELECTED

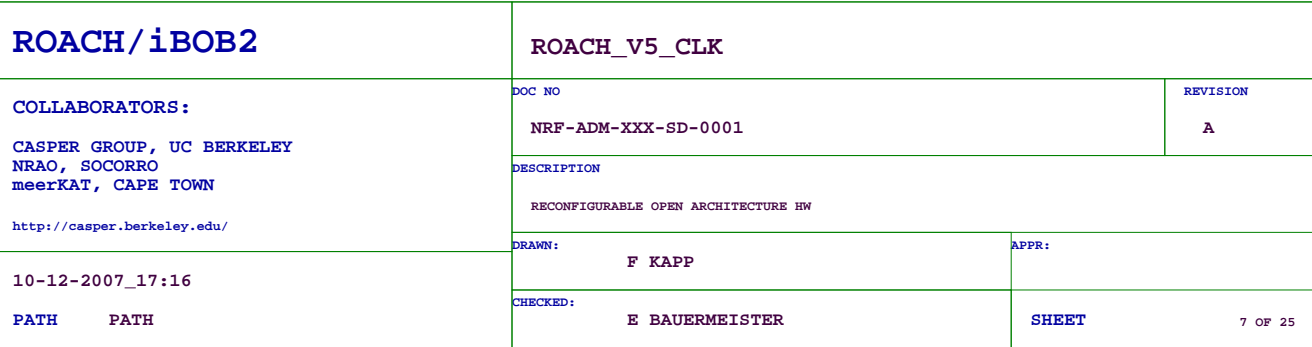
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COLLABORATORS:			DOC NO	REVISION	
CASPER GROUP, UC BERKELEY NRAO, SOCCORRO mesaCAT, CAPE TOWN			NRF-ADM-XXX-BD-0001	A	
			DESCRIPTION		
			RECONFIGURABLE OPEN ARCHITECTURE HW		
http://casper.berkeley.edu/			DRWN:	APPD:	
10-12-2007_17:16			F KAPP		
PATH	PATH		CHECKED:	SHEET	
			E BAUERMEISTER		3 OF 25

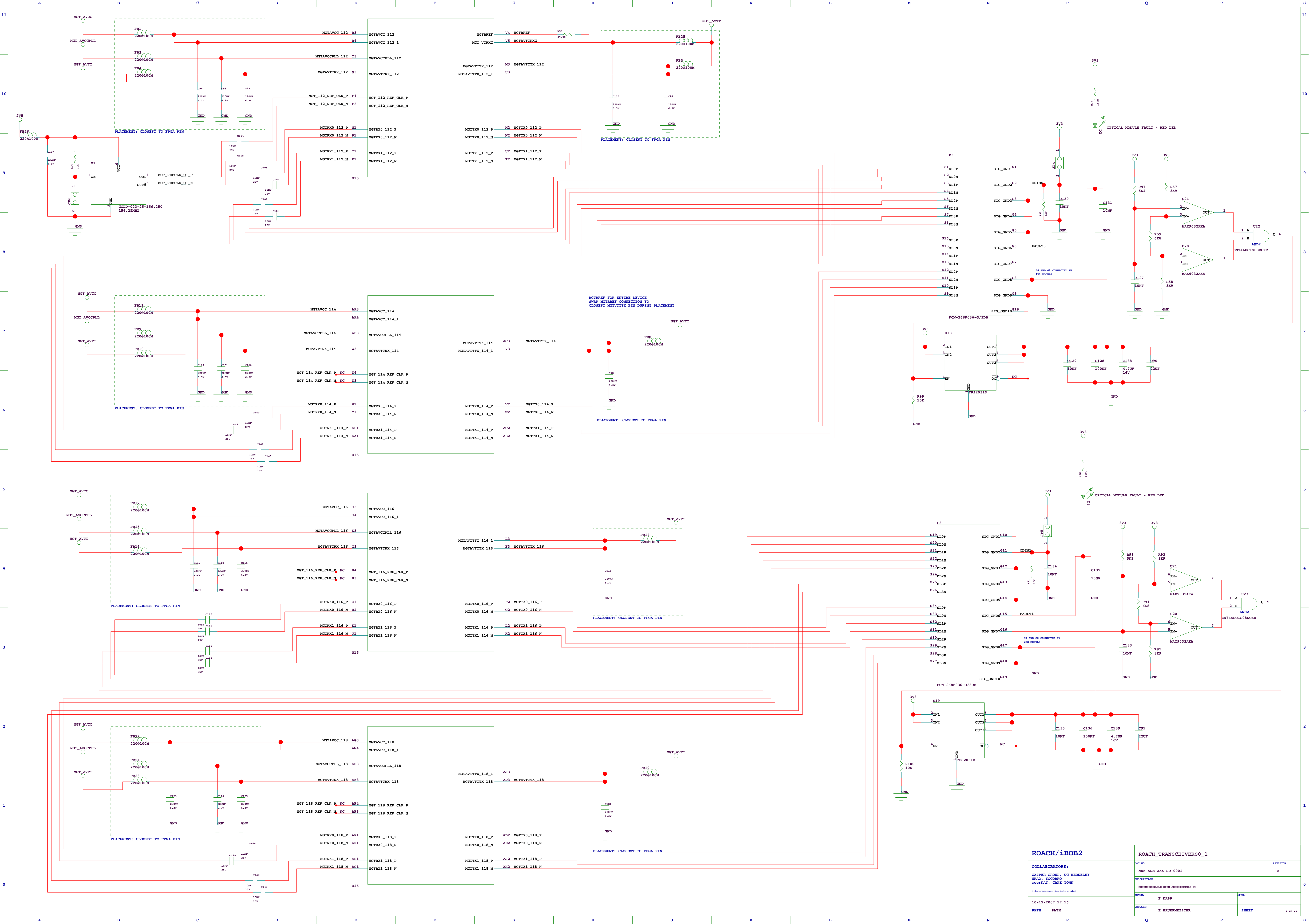


ROACH/iBOB2		ROACH_5V_POWER		REVISION	
COLLABORATORS:		DWG NO		A	
CAPSER GROUP, UC BERKELEY 4800, ROCKWOOD NEWCAST, CA9E TOWN http://capers.berkeley.edu/		NRP-ADM-XXX-ED-0001 DESCRIPTION RECONFIGURABLE OPEN ARCHITECTURE SH			
10-12-2007_17:16		NAME:		APPV:	
PATH PATH		F KAPP			
		CHECKED:		SHEET	
		E BAUERMISTER		4 OF 2	









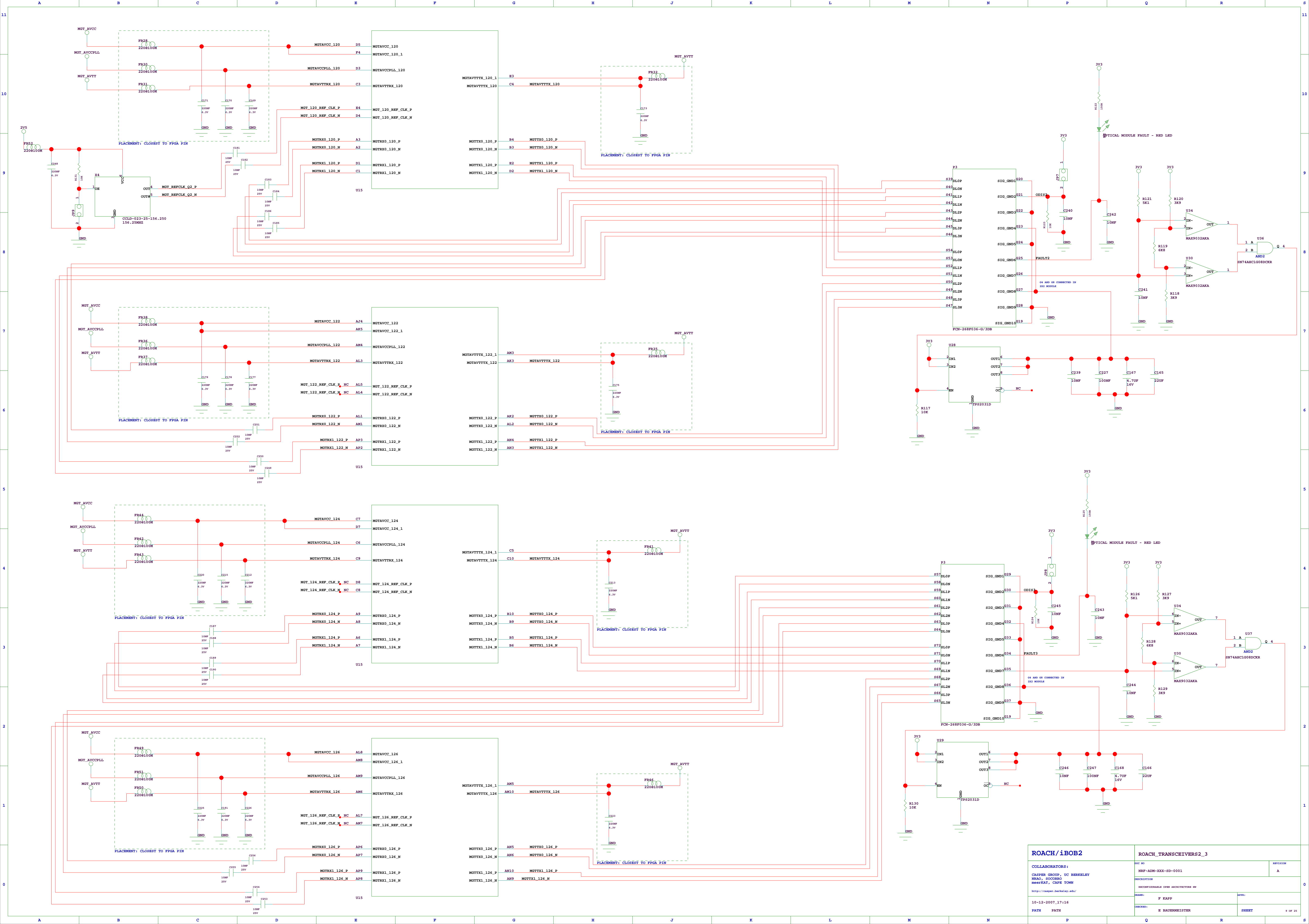
ROACH/iBOE2

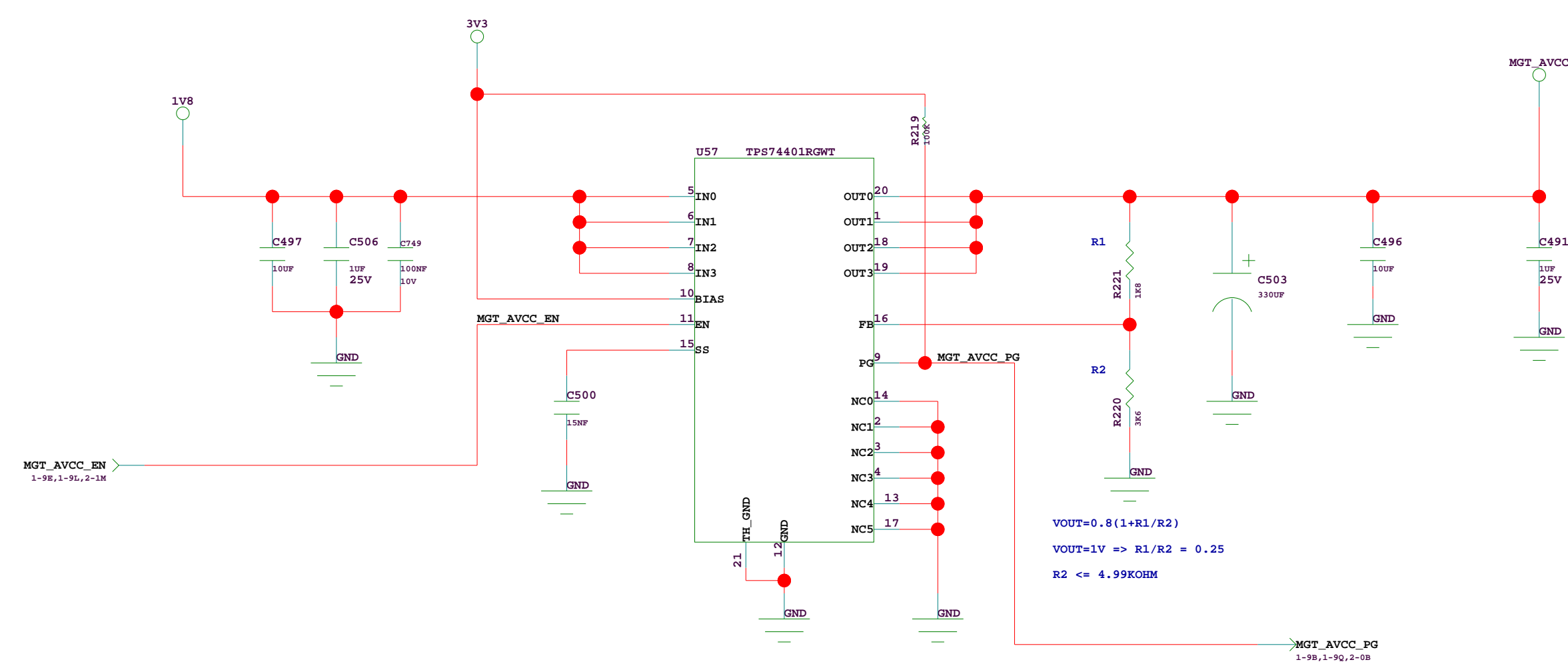
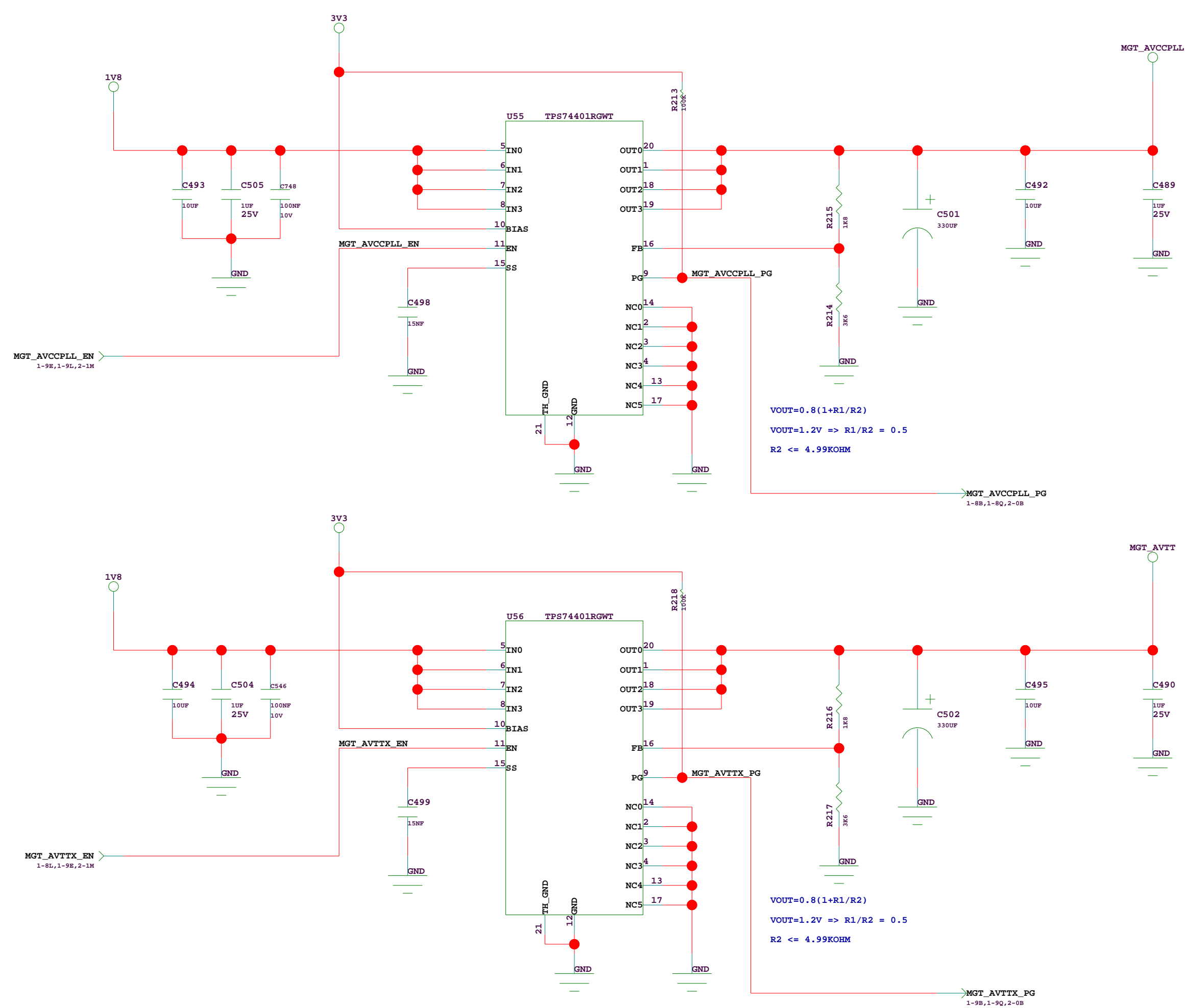
COLLABORATORS:
CASPER GROUP, UC BERKELEY
NRAO, SOCORRO
BASFAT, CAPE TOWN
<http://casper.berkeley.edu/>

10-12-2007_17:16

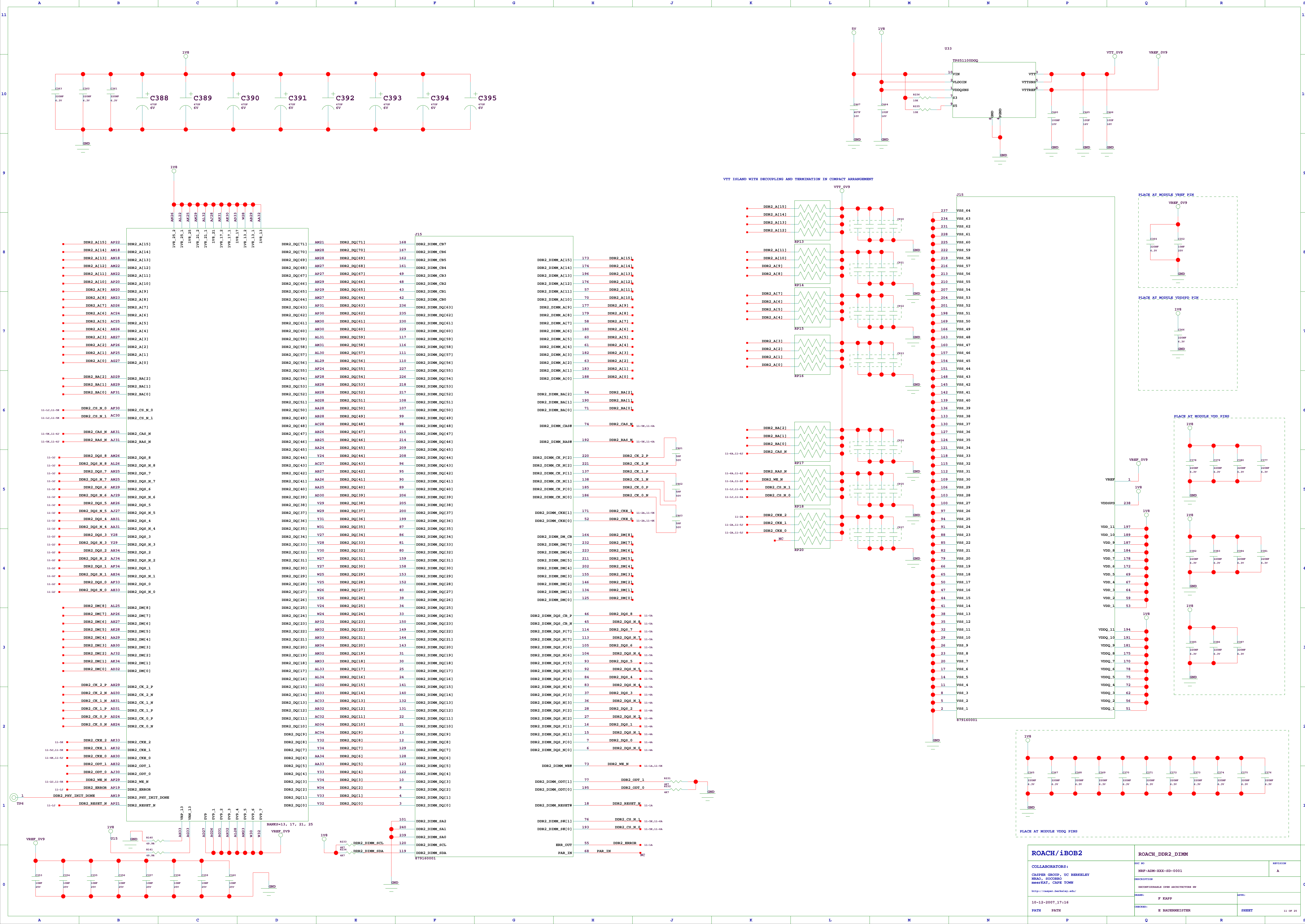
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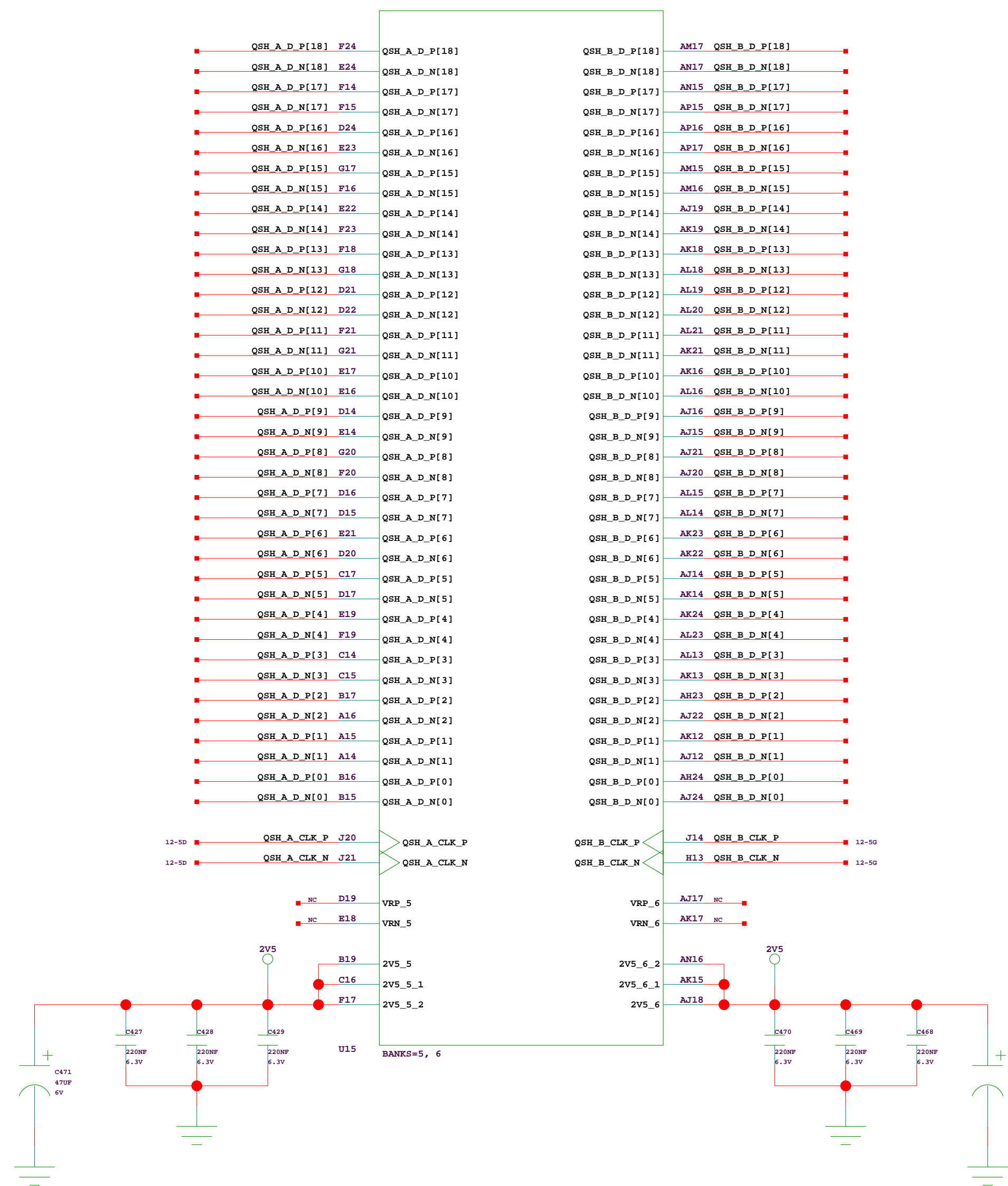
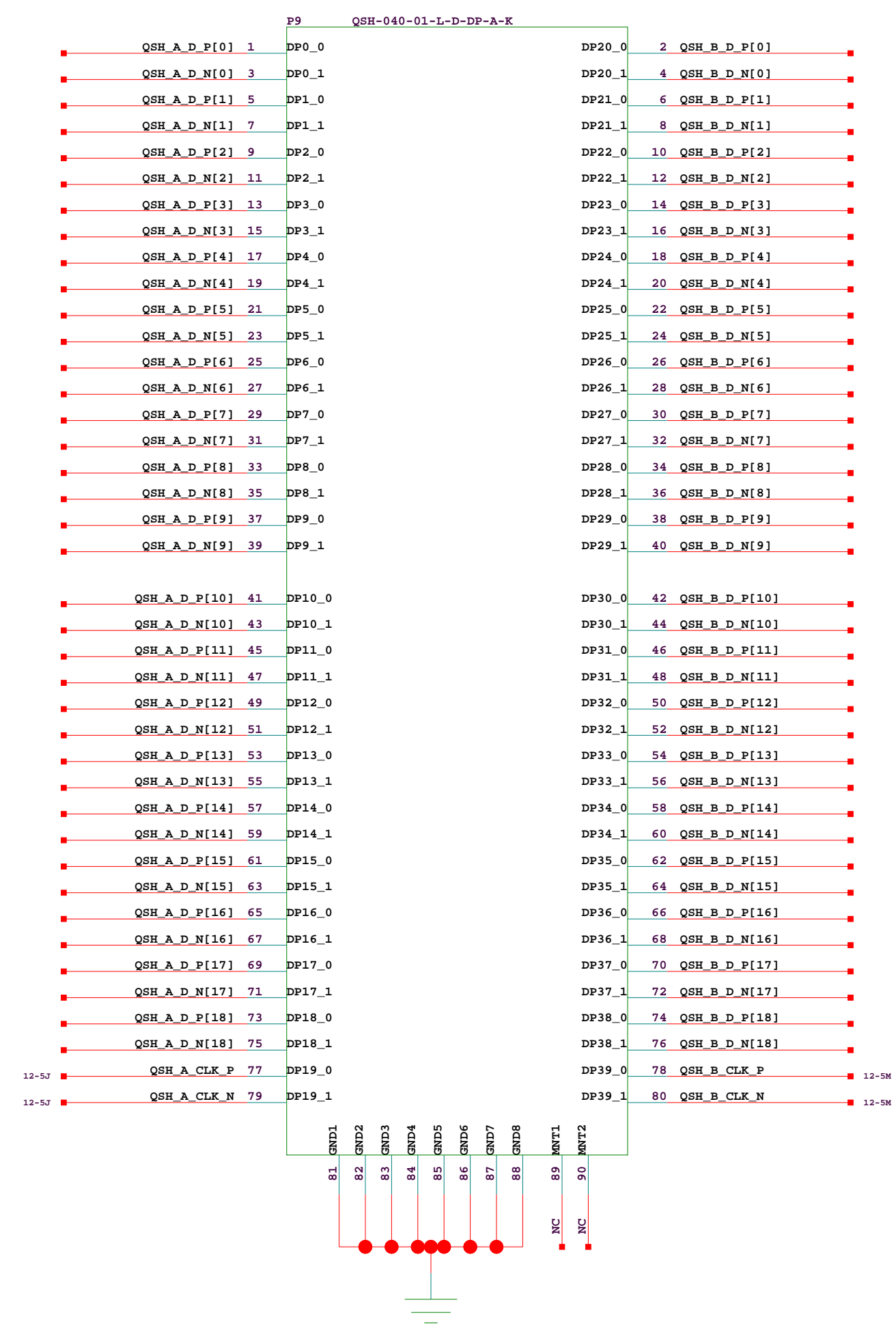
DOC NO	REV
NRF-ADM-XXX-SD-0001	A
DESCRIPTION	
RECONFIGURABLE OPEN ARCHITECTURE HW	
DRWN:	APP:
10-12-2007_17:16	F KAPP
CHECKED:	R BAUERMEISTER
PATH	SHEET



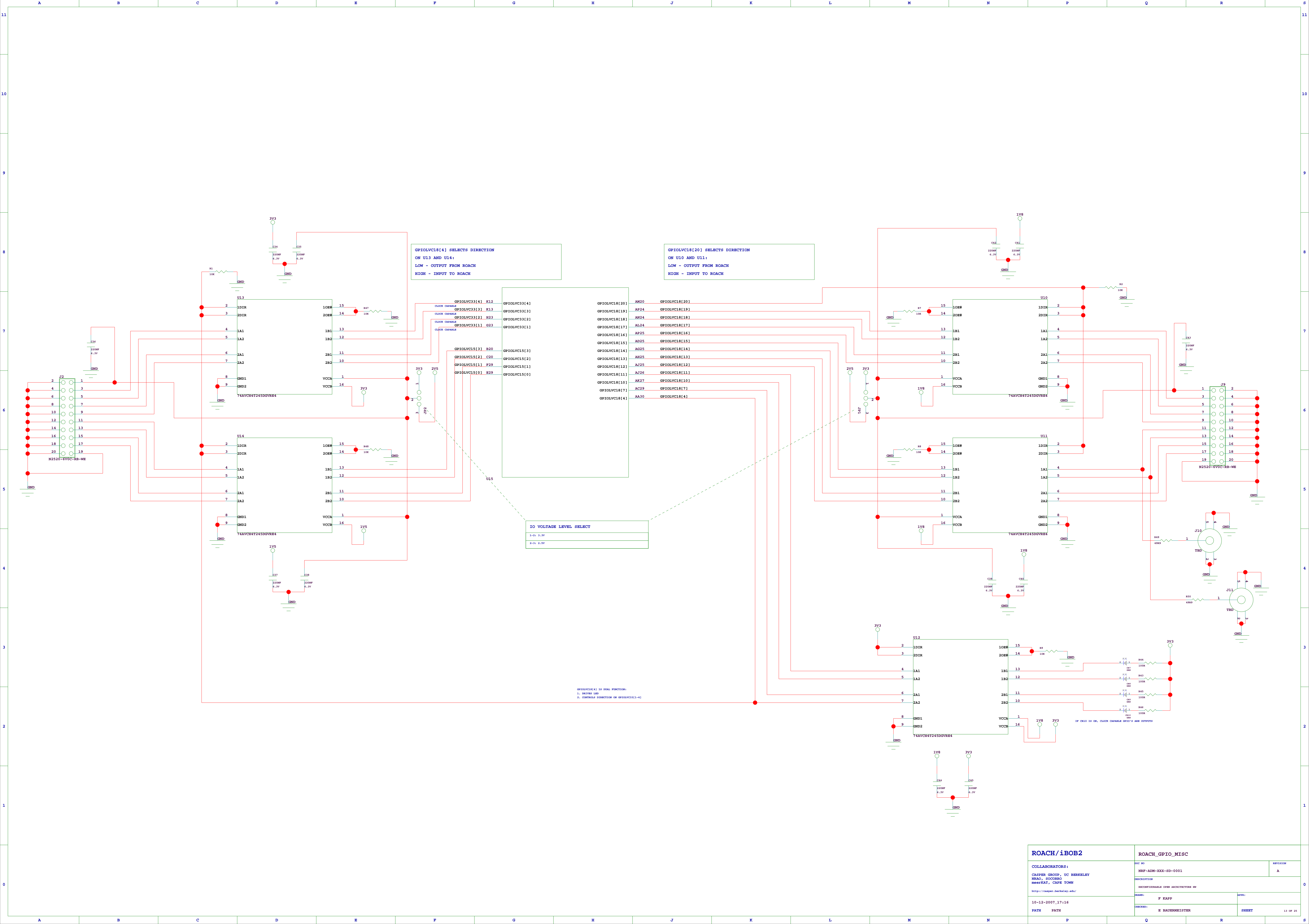


ROACH/iBOB2		ROACH_TRANSCEIVERS_PSU	
COLLABORATORS:		DOC NO	REVISION
CASPER GROUP, UC BERKELEY MESA, (SCORCE) MEMEAT, CAPE TOWN		REF-ADM-XXX-SD-0001	A
http://casper.berkeley.edu/		DESCRIPTION	
10-12-2007.17:16		UNCONFIRMABLE OPEN ARCHITECTURE SW	
PATH	PATH	NAME:	APPR:
		F KAPP	
		CHECKED:	
		E BAUERHEISTER	SHEET
			16 OF 2

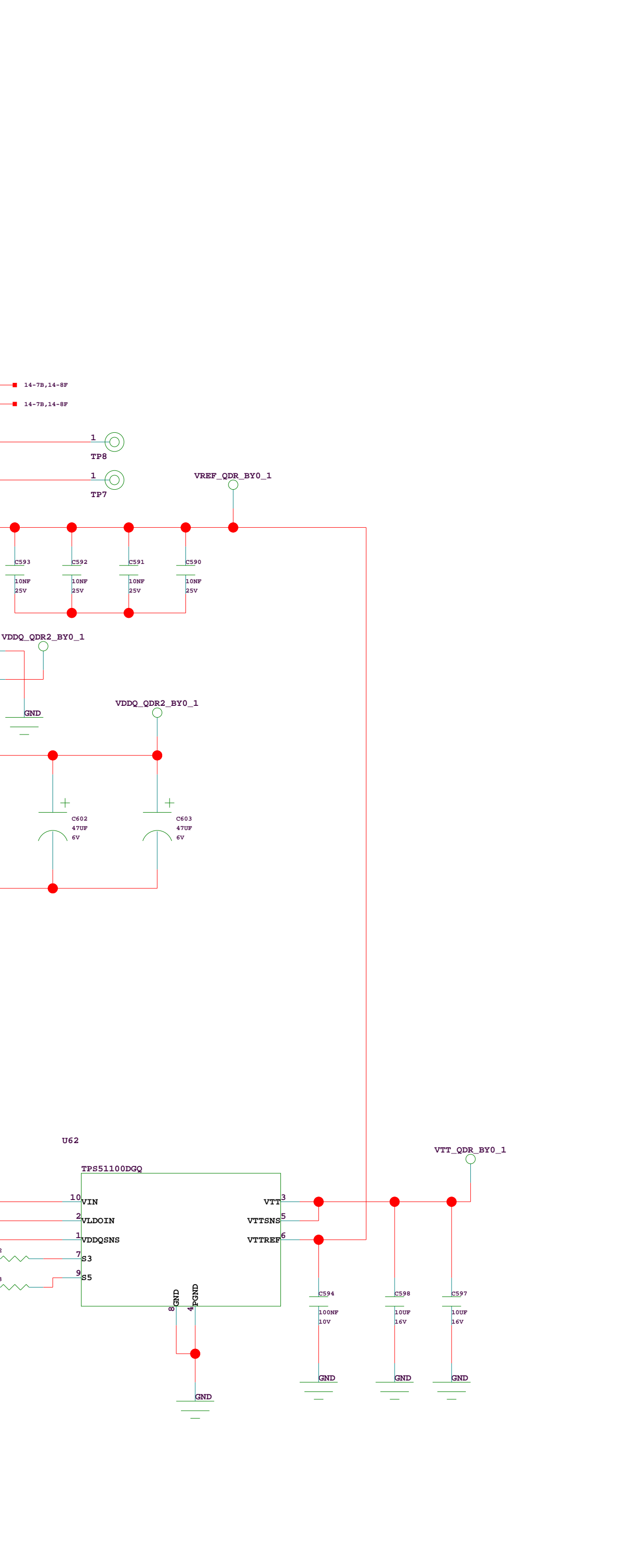
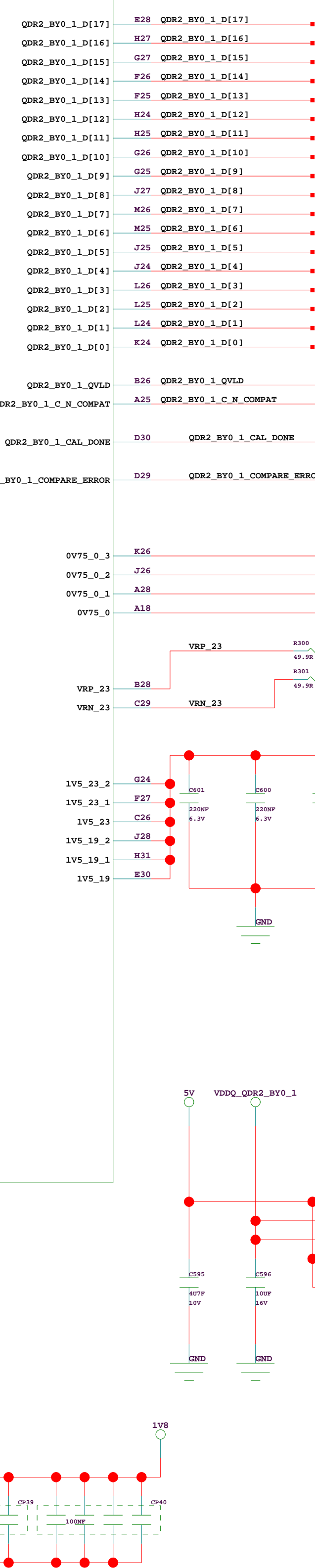
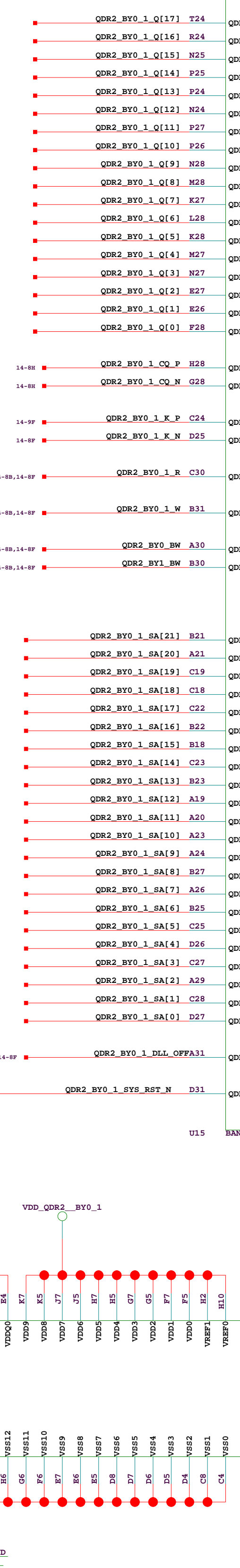
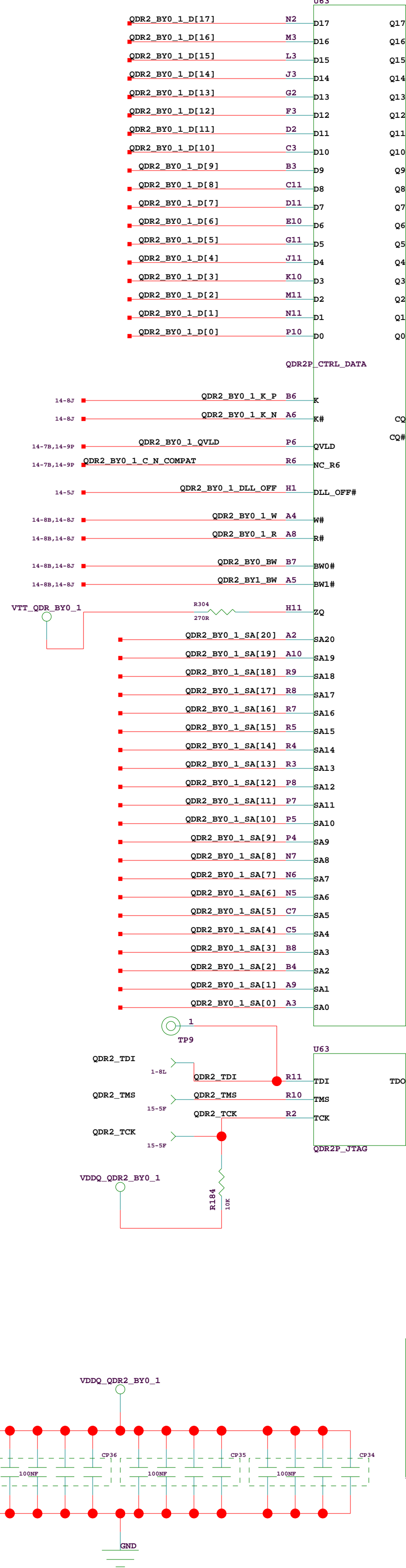
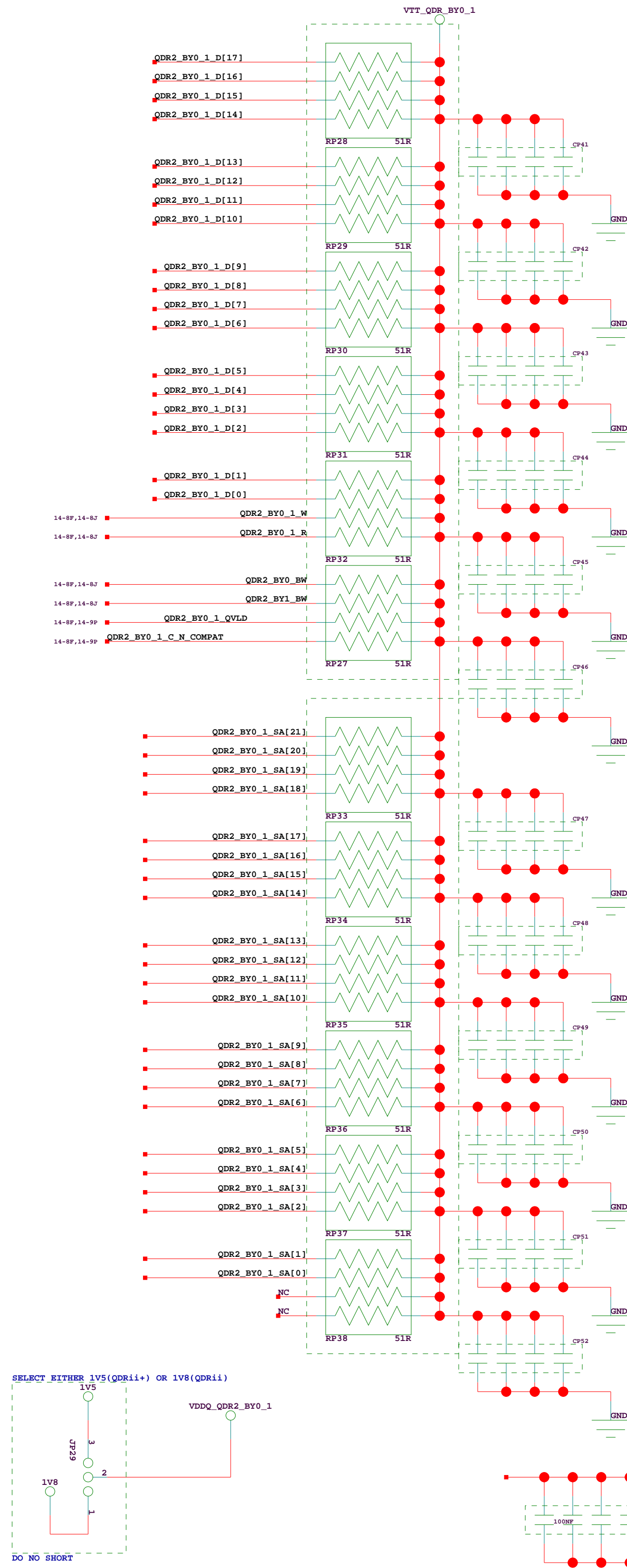




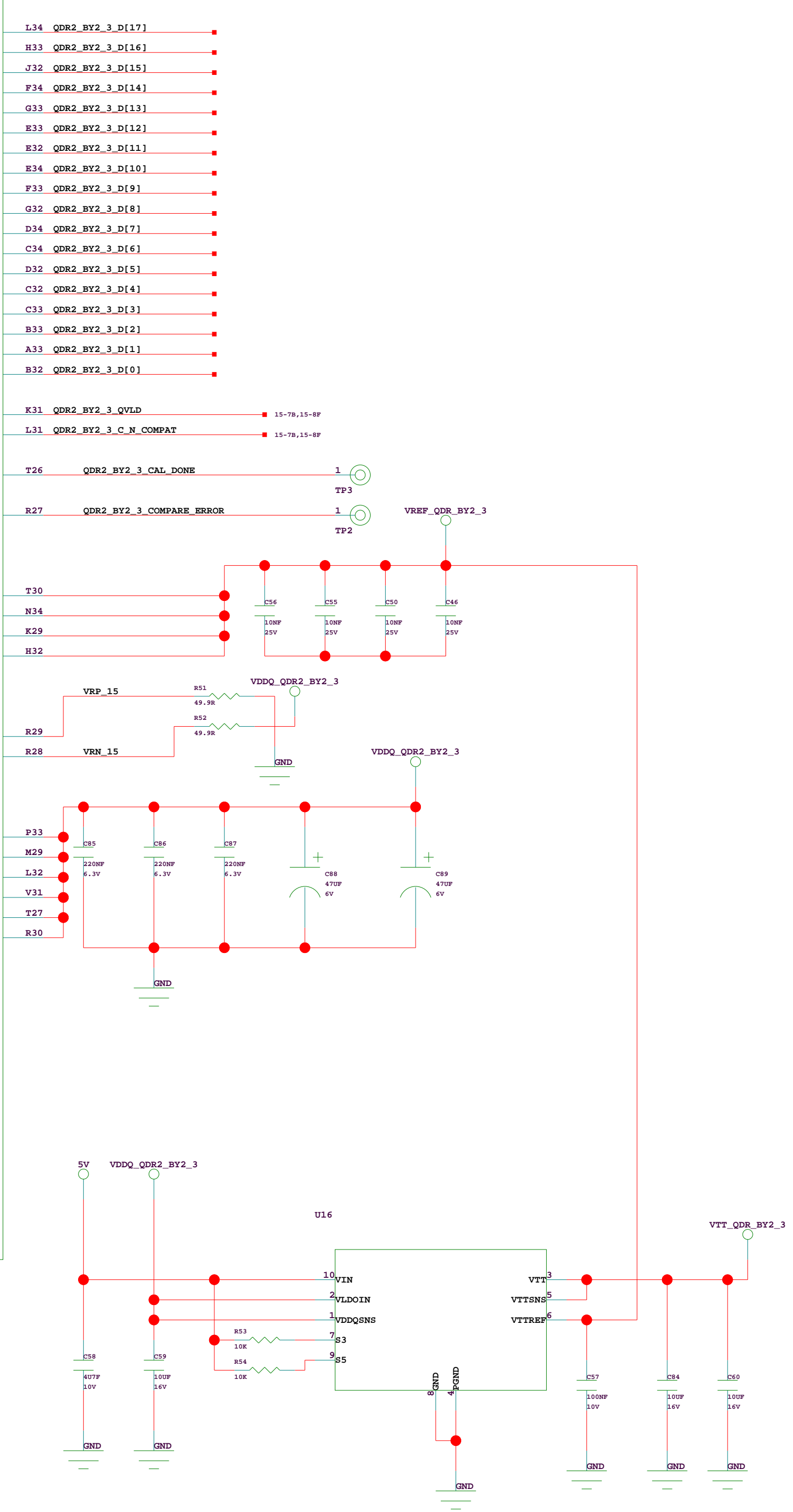
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COLLABORATORS:		DOC NO	REVISION
CASPER GROUP, UC BERKELEY MRSO, ACCORDO MRS&AT, CAPE TOWN		RMF-ADM-XXX-ID-0001	A
DESCRIPTION		RECONFIGURABLE OPEN ARCHITECTURE HW	
http://casper.berkeley.edu/		ISSUE:	APPR:
10-12-2007-17:16		F KAPP	
CHECKIN:		E BAUERMEISTER	SHEET
PATH	PATH		12 OF 2



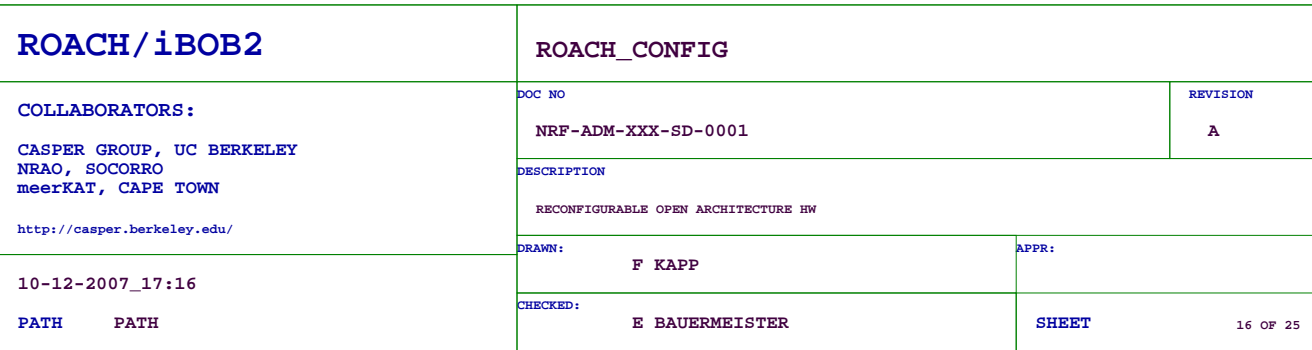
ROACH/iBOE2		ROACH_GPIO_MISC	
COLLABORATORS:		DOC NO	REVISION
CASPER GROUP, UC BERKELEY		NRF-ADM-XXX-SD-0001	A
DESCRIPTION		DESCRIPTION	
NRAO, SOONERO		RECONFIGURABLE OPEN ARCHITECTURE HW	
MMSKAT, CAPE TOWN		DATE:	APP:
http://casper.berkeley.edu/		10-12-2007_17:16	F KAPP
PATH	PATH	CHECKED:	R BAUERNBIESTER
		SHEET	
		13 OF 25	

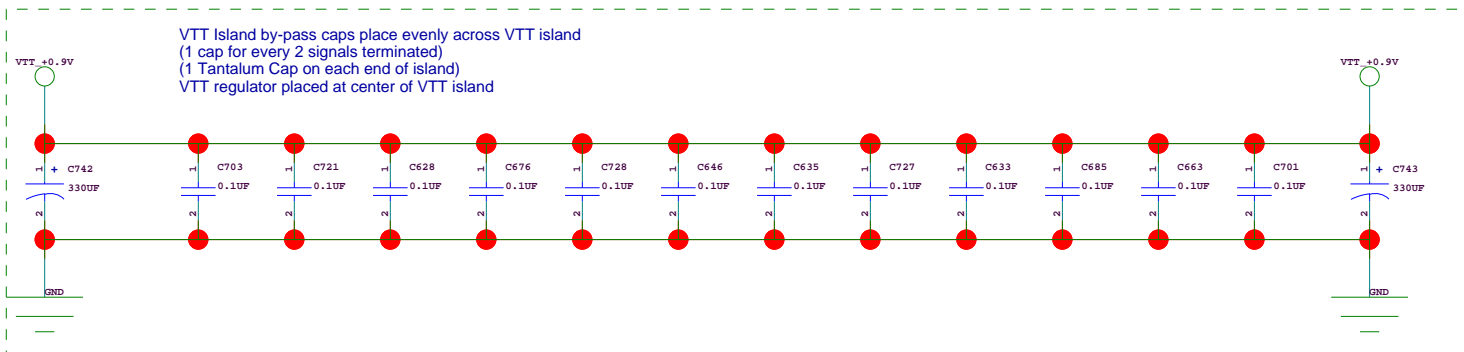
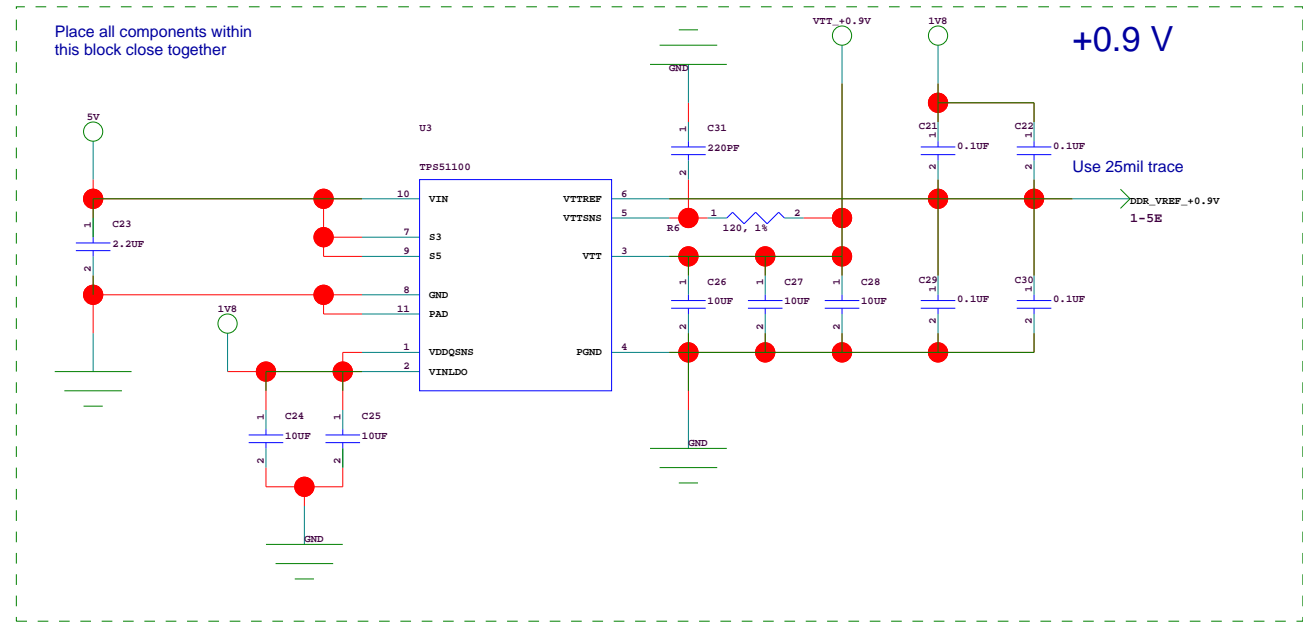
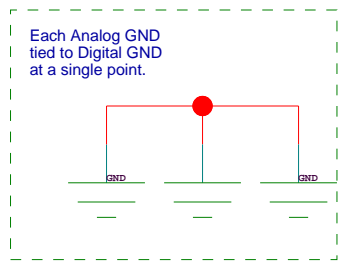
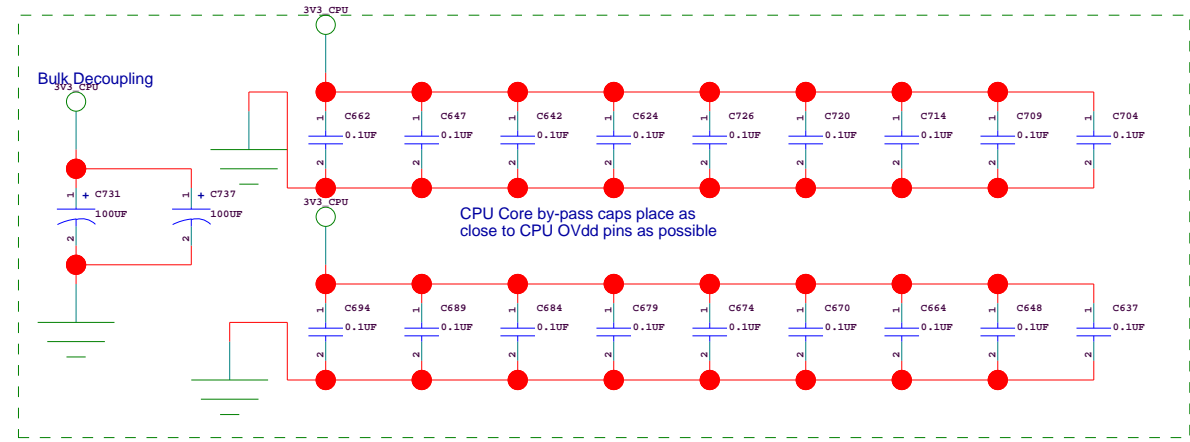
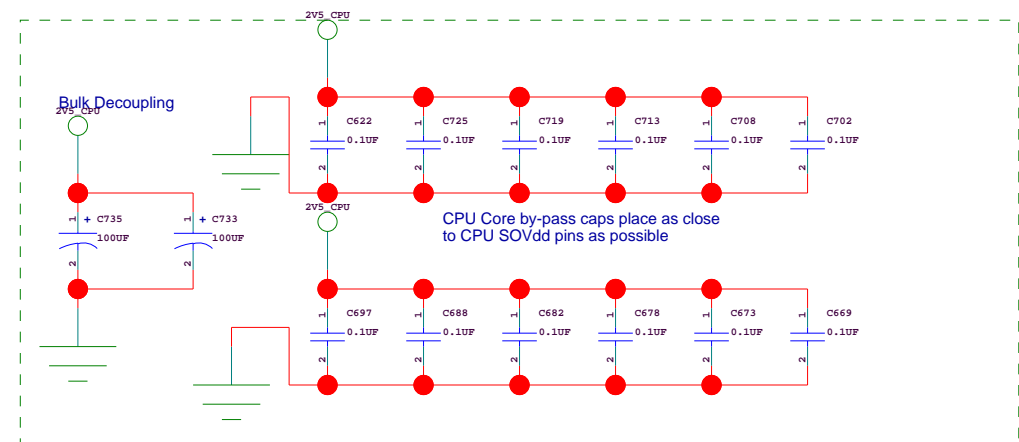
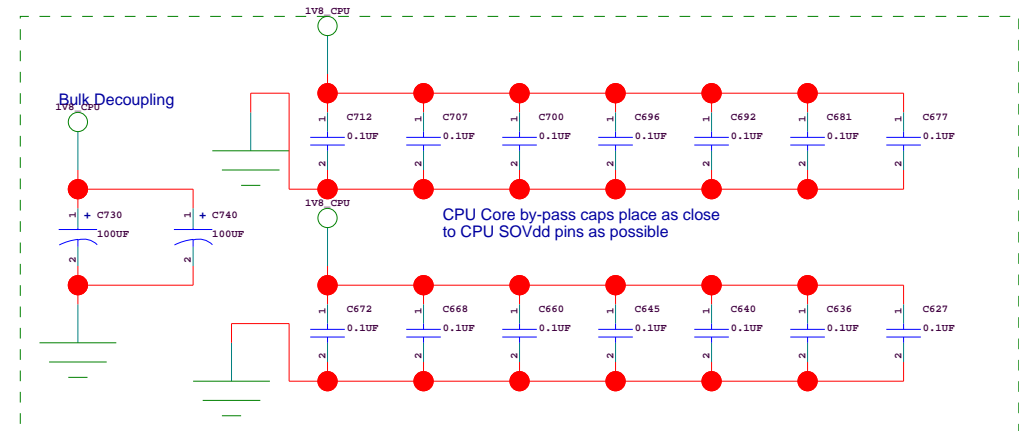
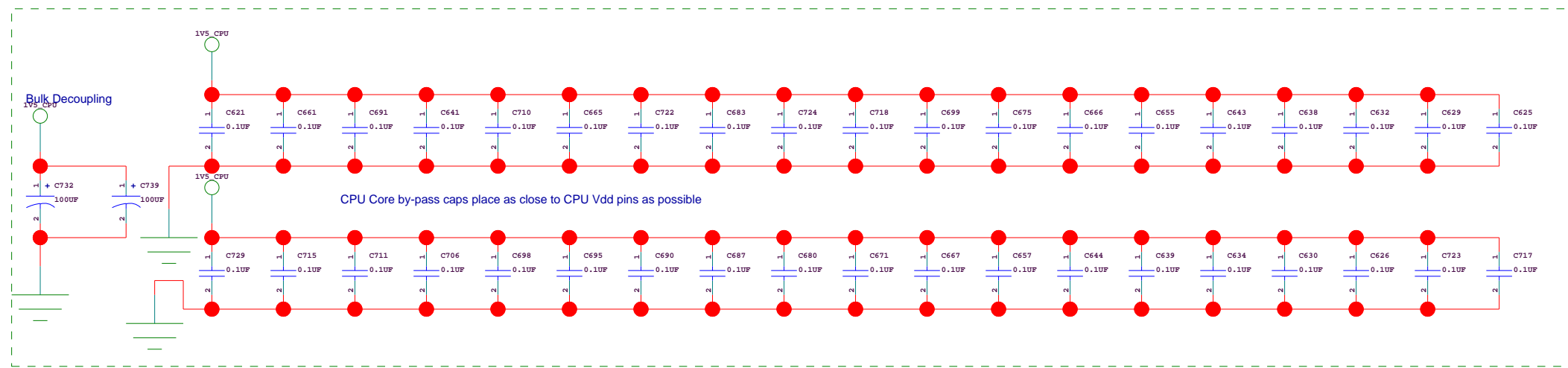
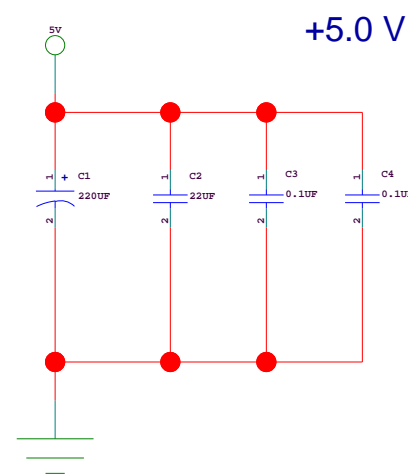
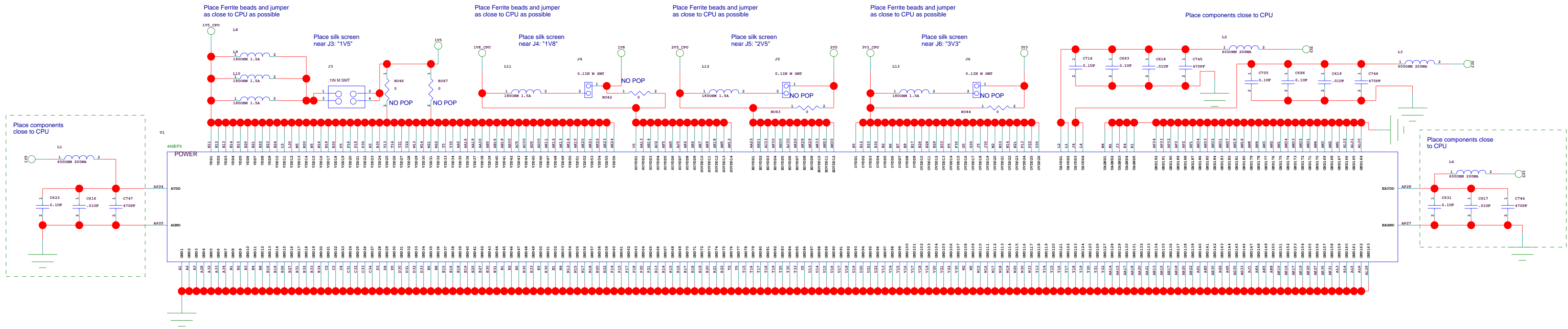


ROACH/iBOE2		ROACH_QDR2P_BY0_1	
COLLABORATORS:		DOC NO	REVISION
CASPER GROUP, UC BERKELEY		NRF-ADM-XXX-SD-0001	A
DESCRIPTION		RECONFIGURABLE OPEN ARCHITECTURE HW	
http://casper.berkeley.edu/		NAME:	APP:
10-12-2007_17:16		F KAPP	
PATH		R BAUERMEISTER	
		CHECKED:	SHEET

15 09 2

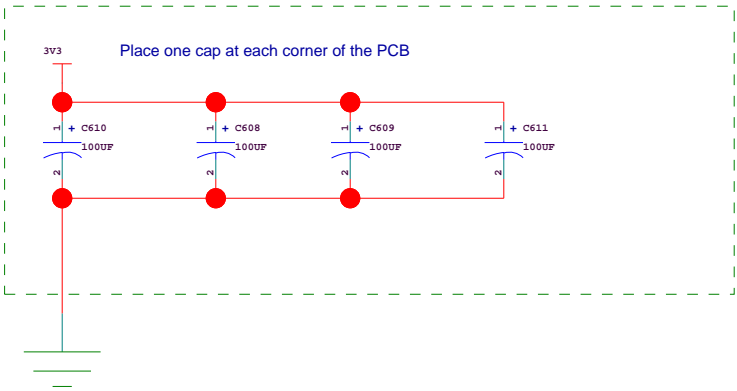
VALID CONFIGURATION MODES			
Configuration Mode	M[2:0]	Bus Width	CLK Direction
Master Serial	000	1	Output
Master SPI	001	1	Output
Master BPI-Up	010	8, 16	Output
Master BPI-Down	011	8, 16	Output
Master SelectMAP	100	8, 16	Output
Master JTAG	101	1	Input (TCK)
Slave SelectMAP	110	8, 16, 32	Input
Slave Serial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





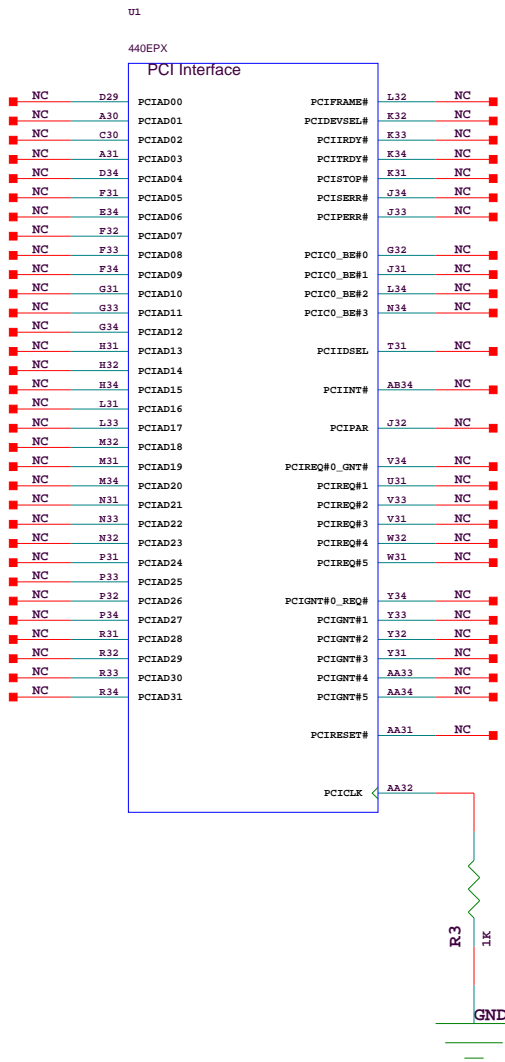
ROACH/iBOE2		ROACH_PPC_POWER_1	
COLLABORATORS: CASPER GROUP, UC BERKELEY NRAO, SOONERO BaeKAT, CAPE TOWN http://casper.berkeley.edu/ 10-12-2007_17:16 PATH PATH	DOC NO NRF-ADM-XXX-SD-0001		REVISION A
	DESCRIPTION RECONFIGURABLE OPEN ARCHITECTURE HW		
	DRAWN: F KAPP		CHECKED: R BAUERMBLOSTER
	SHEET		17 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: 10-12-2007_17:16 F KAPP	APPR: E BAUERMEISTER
PATH	PATH	SHEET 18 OF 25

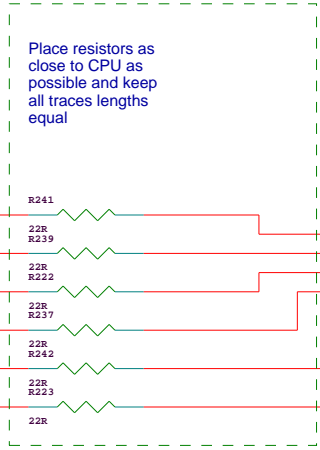
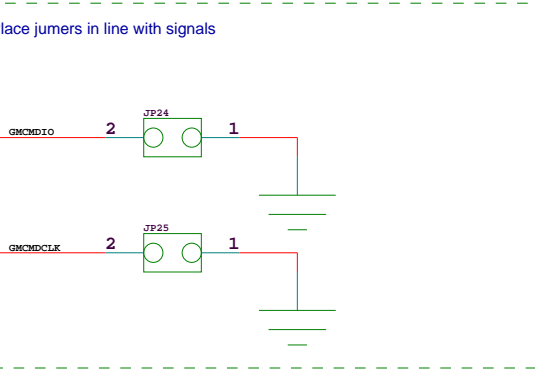
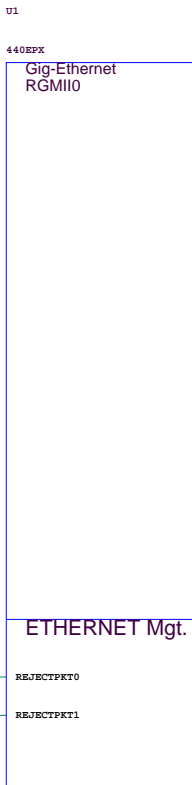
PCI BUS NOT IMPLEMENTED



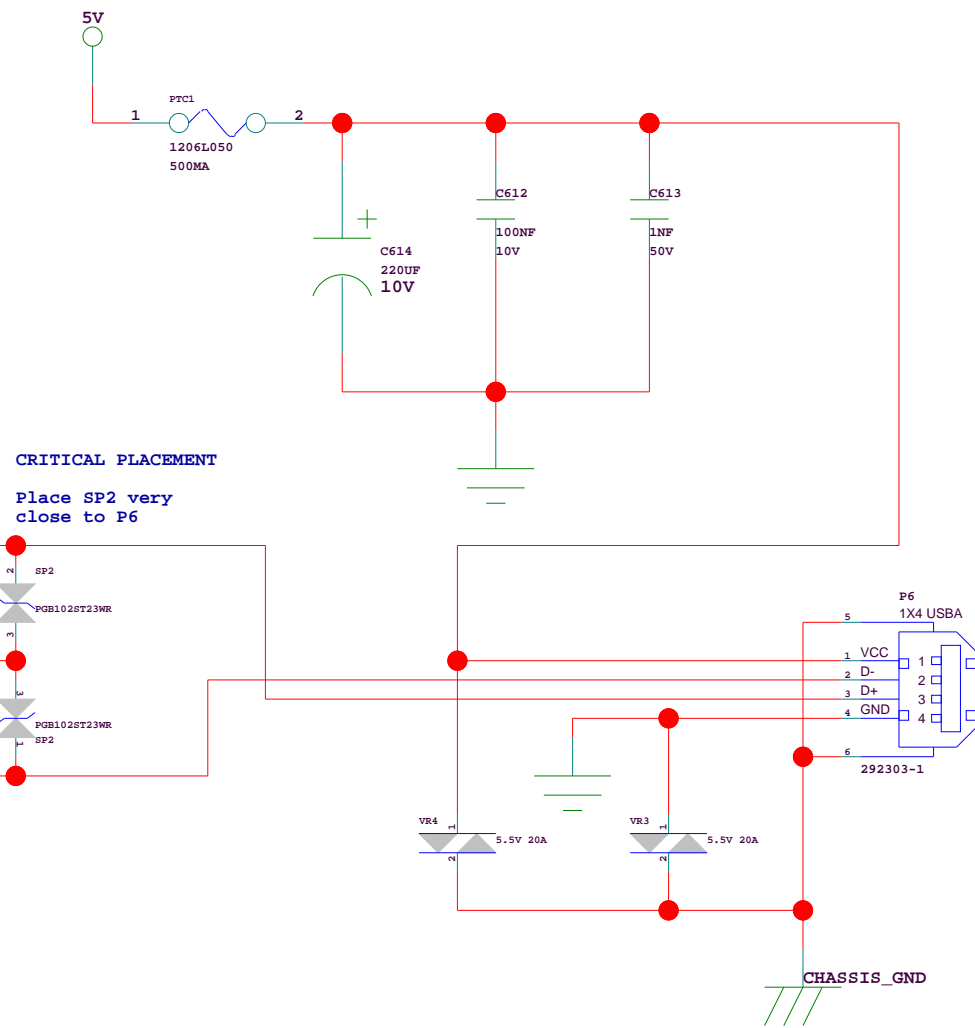
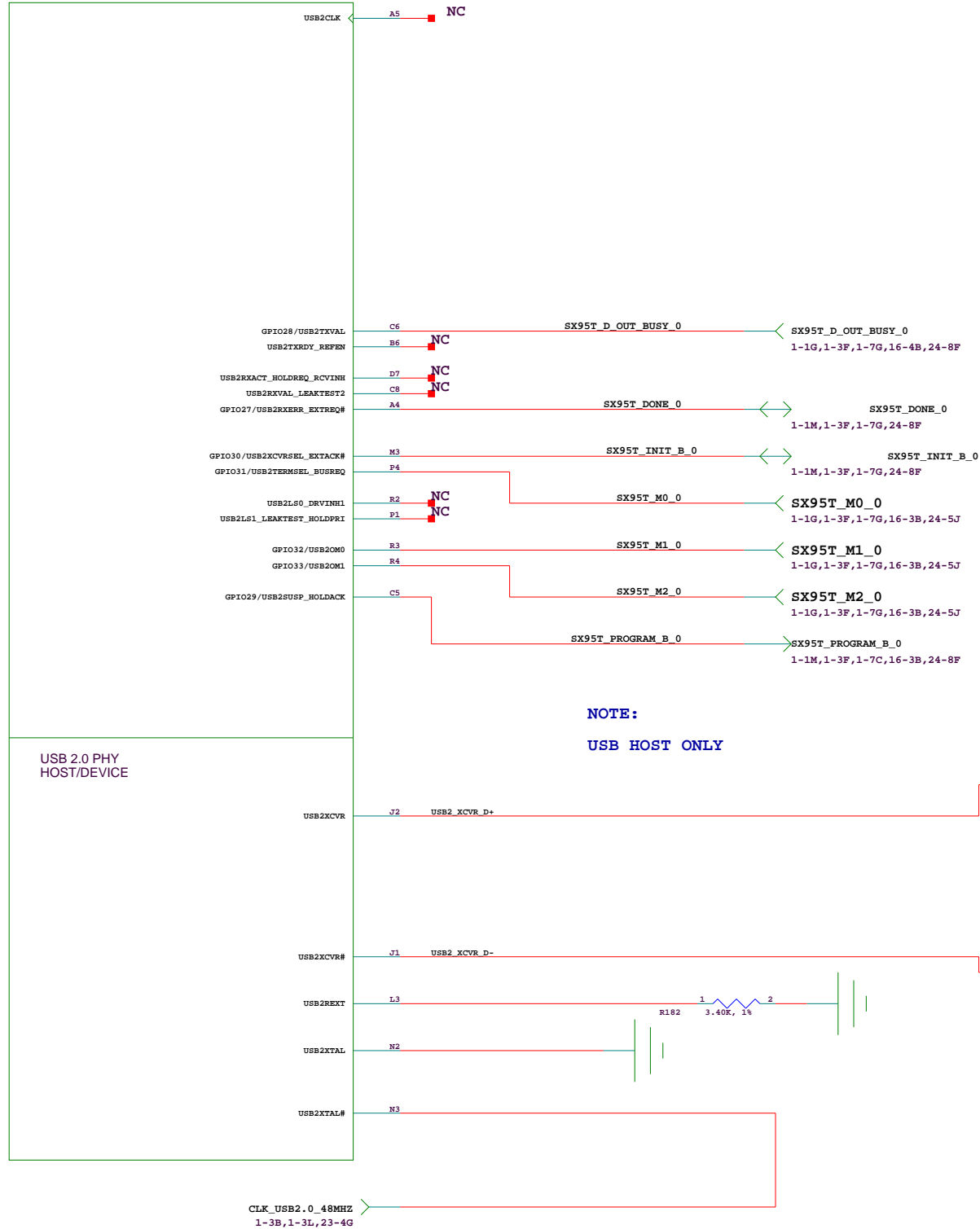
ROACH/iBOB2		ROACH_PPC_PCI	
COLLABORATORS: CASPER GROUP, UC BERKELEY NRAO, SOCCORRO meerKAT, CAPE TOWN http://casper.berkeley.edu/	DOC NO NRF-ADM-XXX-SD-0001		REVISION A
	DESCRIPTION RECONFIGURABLE OPEN ARCHITECTURE HW		
	10-12-2007_17:16	DRAWN: F KAPP	APPR:
PATH	PATH	CHECKED: E BAUERMEISTER	SHEET 19 OF 25

The RGMII signaling is 125 MHz using both rising and falling edges of the clock.
The Tx and the Rx side trace length should be matched within the signal group to minimize timing skew.
It is advised to match the trace length within 0.1 inch within the Tx and Rx signal groups.
Minimize the number of vias on the RGMII lines to minimize timing skew.
Since the signal rise and fall time are sub-nano second, transmission line design guidelines should be followed.

CONFIRMED NC'S ON PINS WITH AMCC TECH SUPPORT IN EMAIL DATED 2007/08/30



U1
USB 2.0 DEVICE
40EPA



ROACH/iBOB2

COLLABORATORS:
CASPER GROUP, UC BERKELEY
NRAO, SOCORRO
meerKAT, CAPE TOWN
<http://casper.berkeley.edu/>

10-12-2007_17:16
PATH PATH

ROACH_PPC_USB

DOC NO
NRF-ADM-XXX-SD-0001

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A

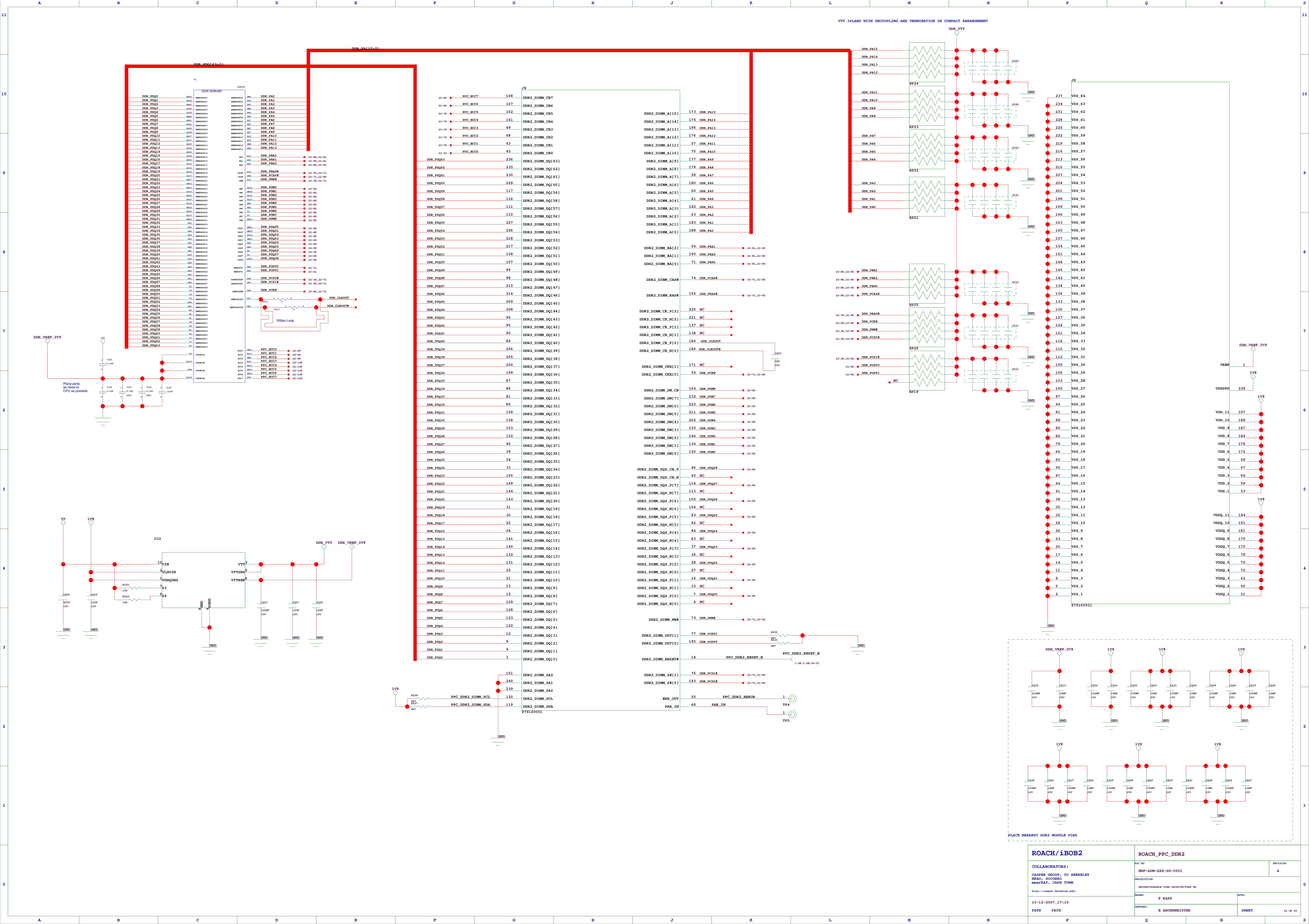
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RECONFIGURABLE OPEN ARCHITECTURE HW

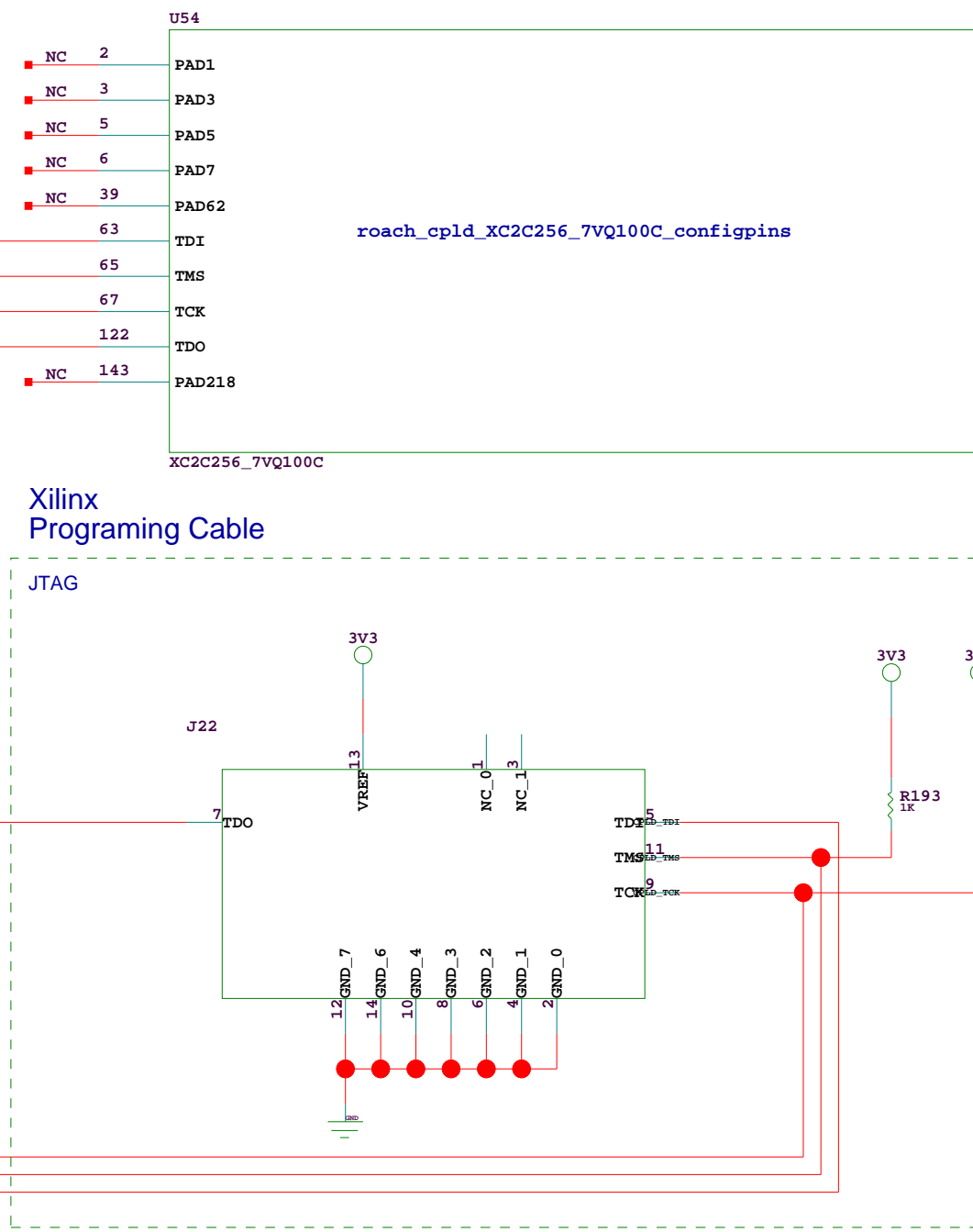
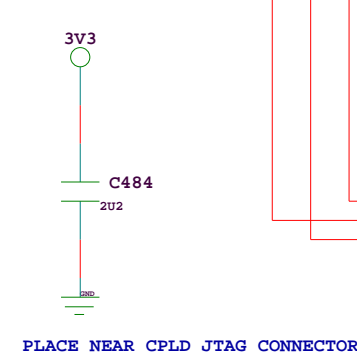
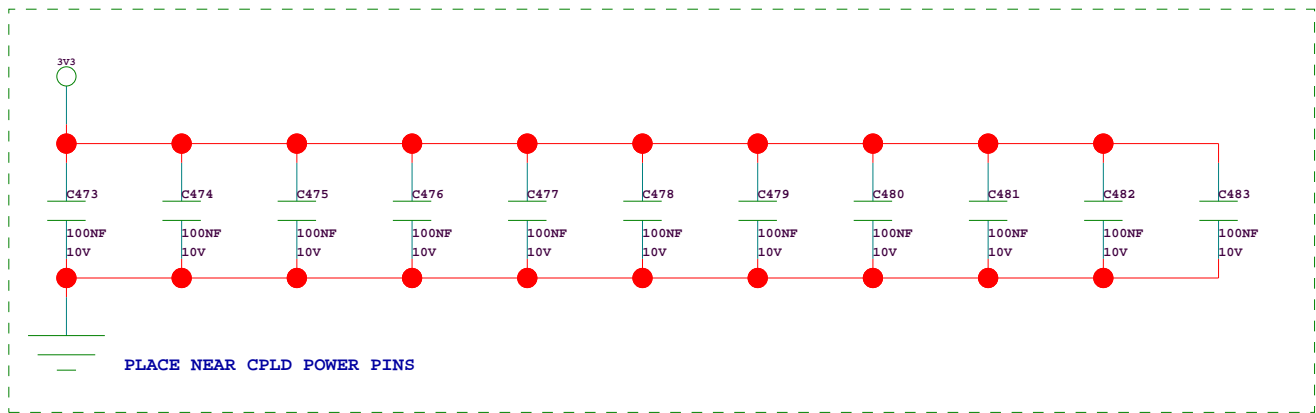
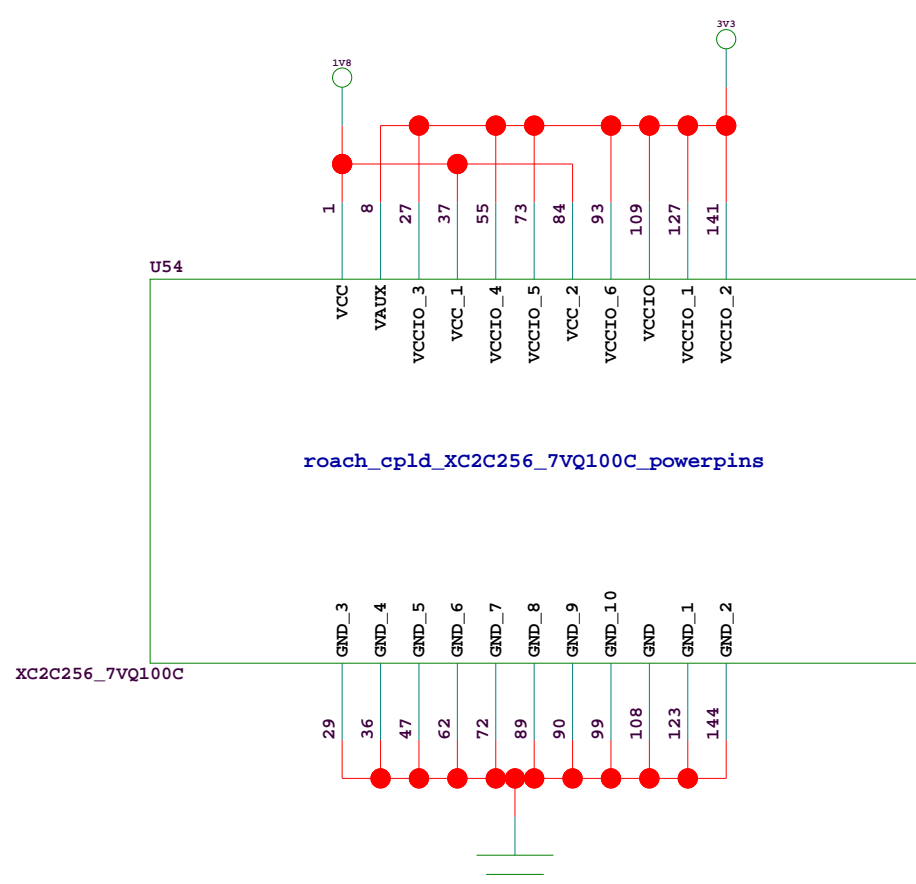
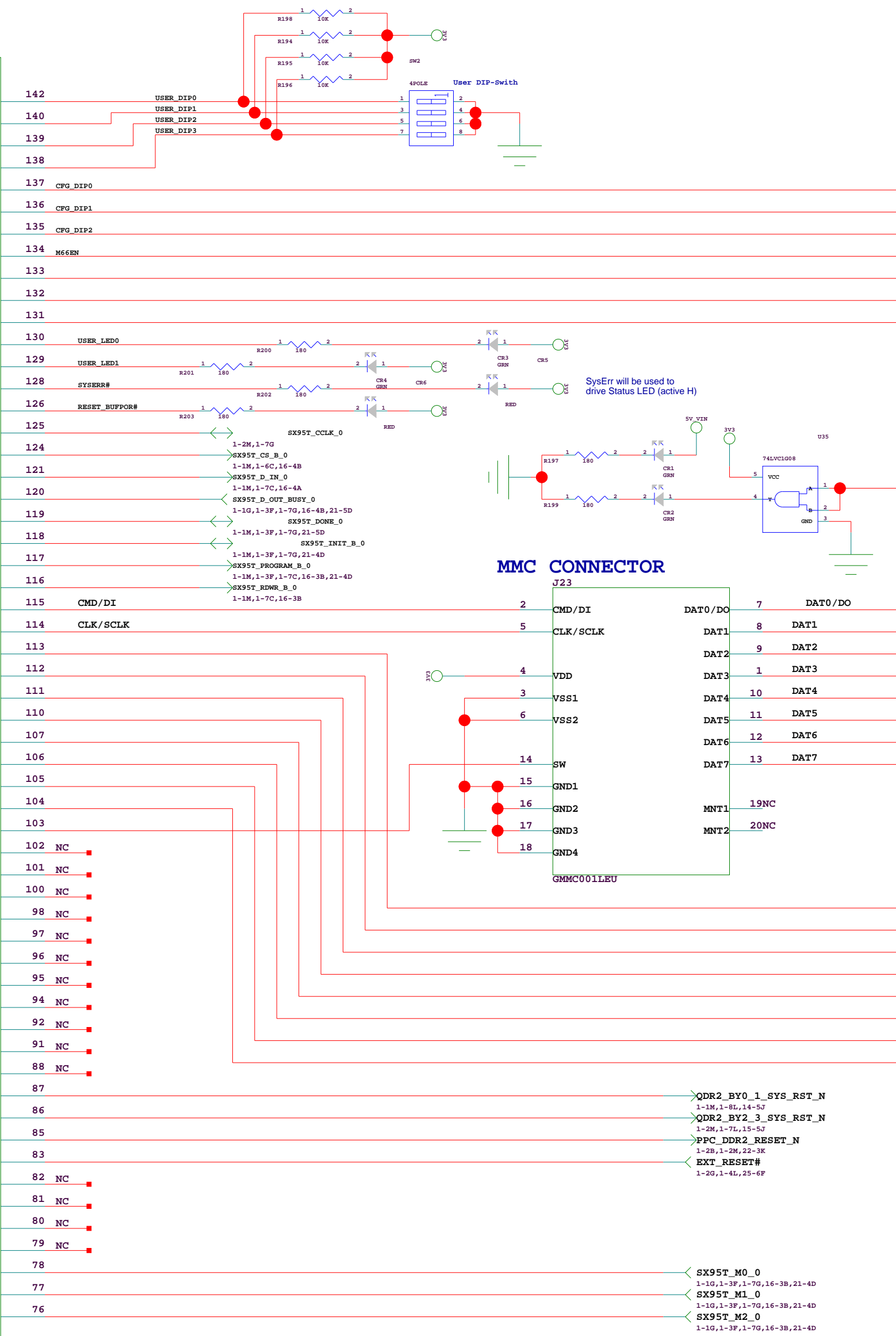
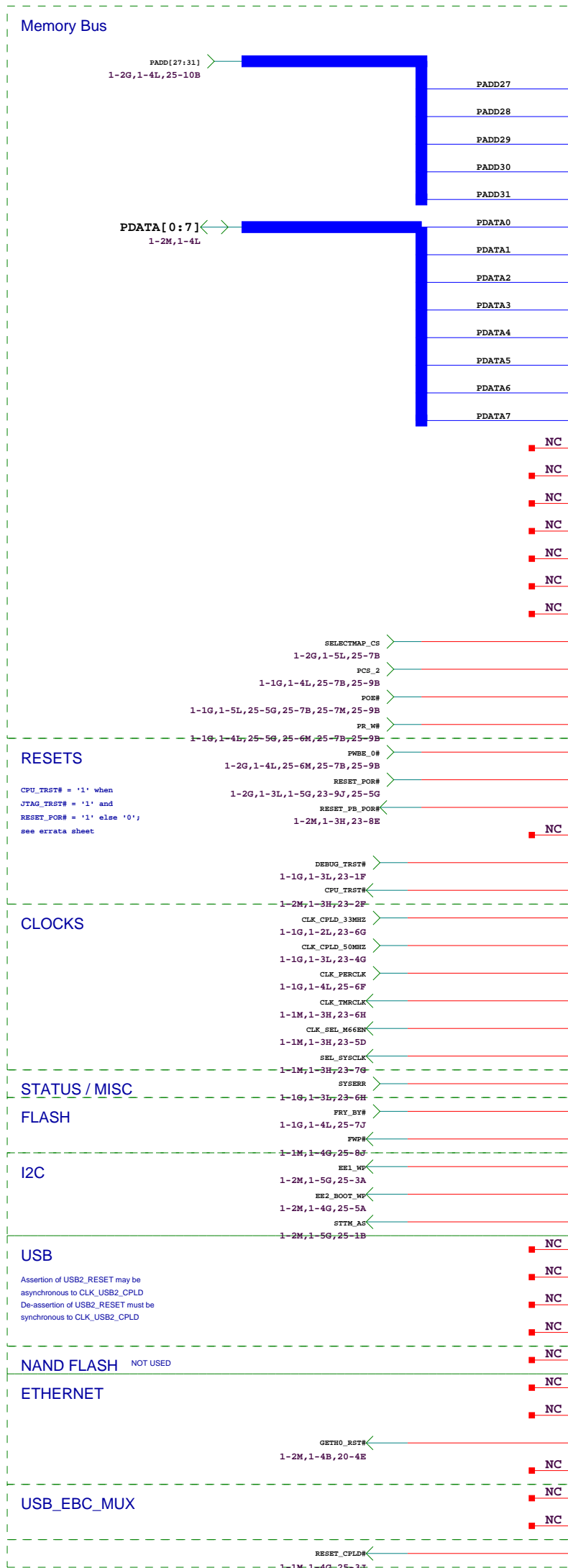
DRAWN: F KAPP

APPR:

CHECKED: E BAUERMEISTER

SHEET





ROACH/iBOE2

COLLABORATORS:
CASPER GROUP, UC BERKELEY
NRAO, SOONERO
BeeKAT, CAPE TOWN

10-12-2007_17:16

PATH

ROACH_PPC_CPLD

DOC NO

NRF-ADM-XXX-BD-0001

DESCRIPTION

RECONFIGURABLE OPEN ARCHITECTURE HW

BRAND:

F KAPP

CHECKED:

R BAUERNBIESTER

REVISION

A

DATE

10-12-2007_17:16

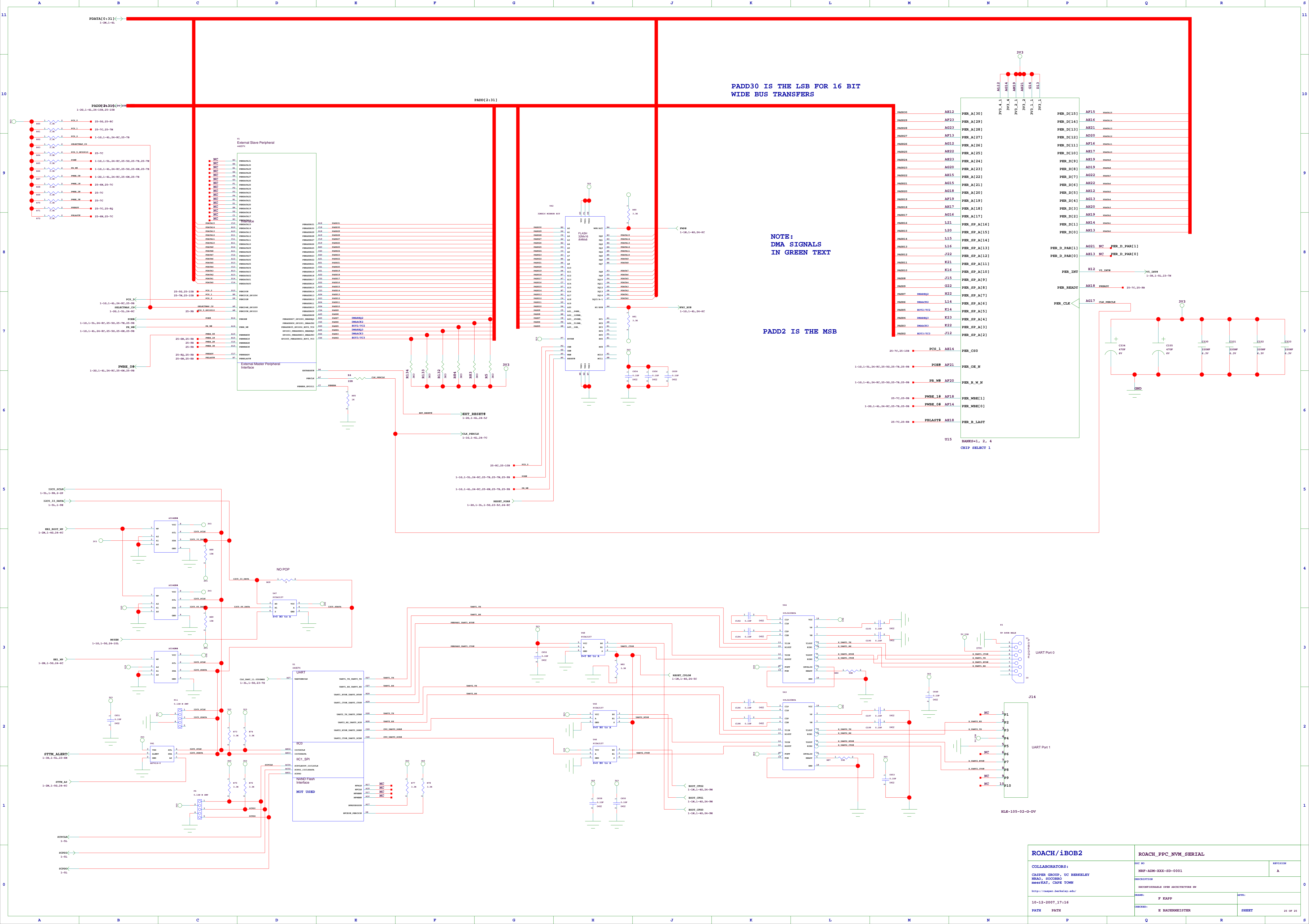
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PATH

PATH

PATH

24 OF 25



ROACH/iBOB2

COLLABORATORS:

CASPER GROUP, UC BERKELEY

NRAO, SOONERO

RoachFAT, CAPE TOWN

http://casper.berkeley.edu/

10-12-2007_17:16

PATH PATH

ROACH_PPC_NVM_SERIAL

DOC NO

NRF-ADM-XXX-SD-0001

DESCRIPTION

RECONFIGURABLE OPEN ARCHITECTURE HW

DESIGNER

F KAPP

CHECKED

R BAUERMBISTER

REVISION

A

DATE

10-12-2007_17:16

PATH

PATH

SHEET

25 OF 25