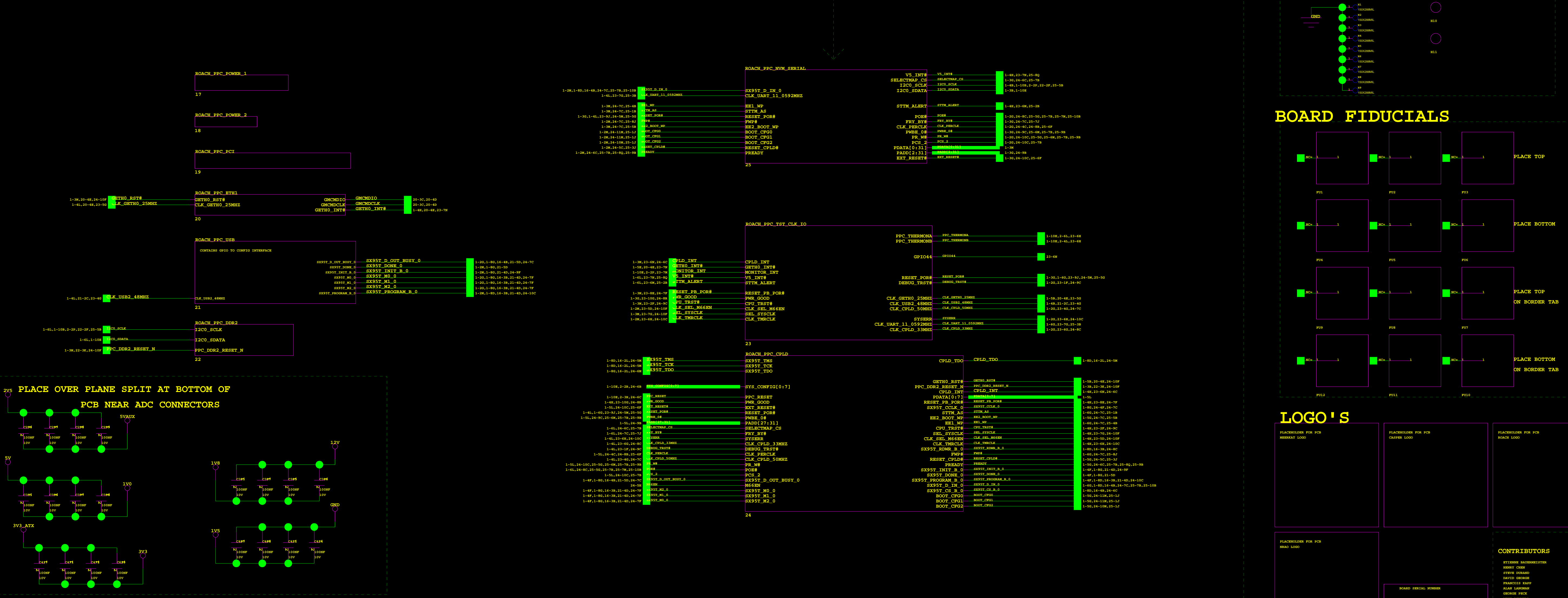


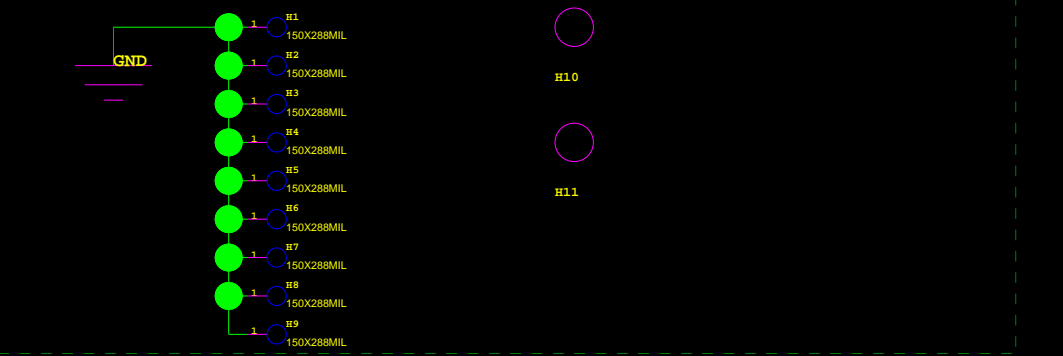
# VIRTEX5



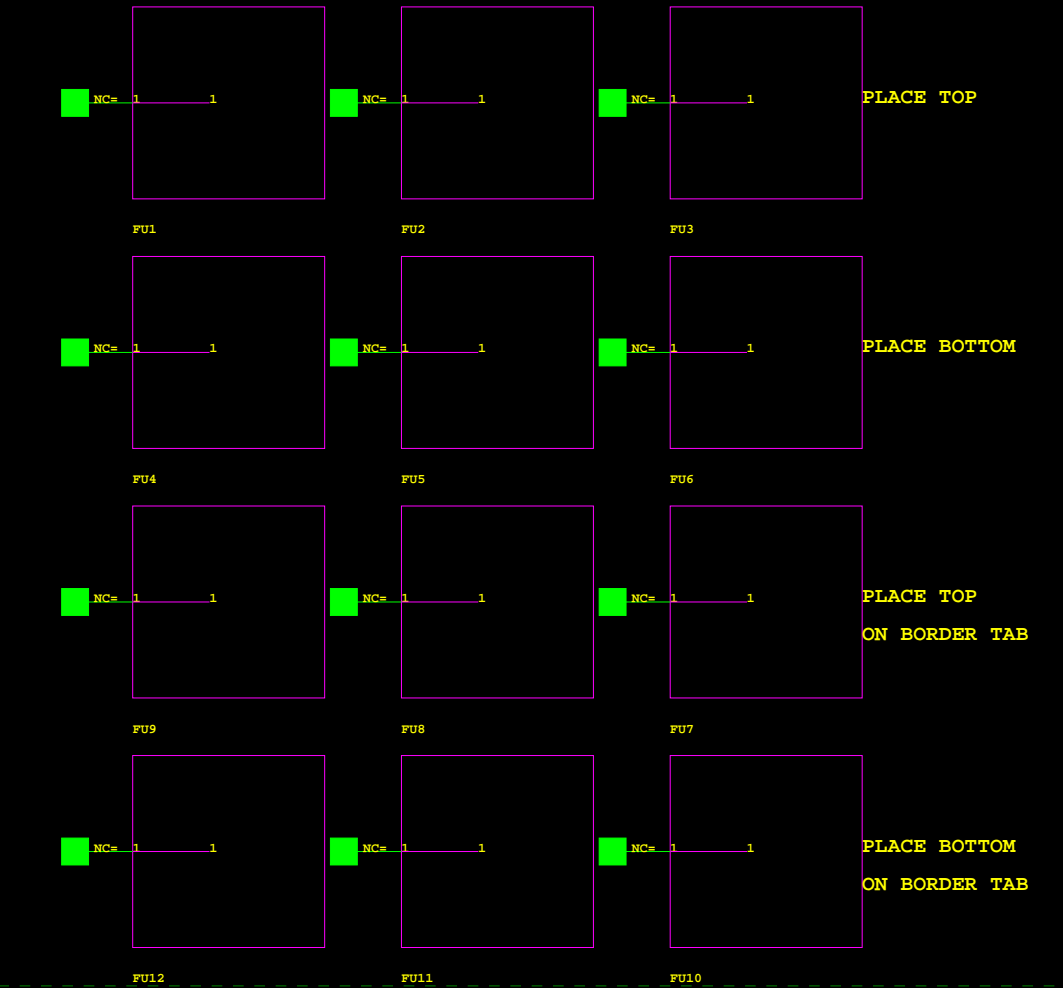
# PPC



# MECHANICAL



# BOARD FIDUCIALS



# LOGO'S



ROACH/iBOB2		ROACH_TOP	
COLLABORATORS:		ROACH	REVISION
CAUVER GROUP, UC BERKELEY		1.0.2	
NRAO, SOCCORBO			
MEEFAT, CAPE TOWN			
http://cauver.berkeley.edu/			
11-27-2008.13:45			
PATH		PATH	PATH
CHECKED:		BY: E. BAUERMEISTER	SHEET





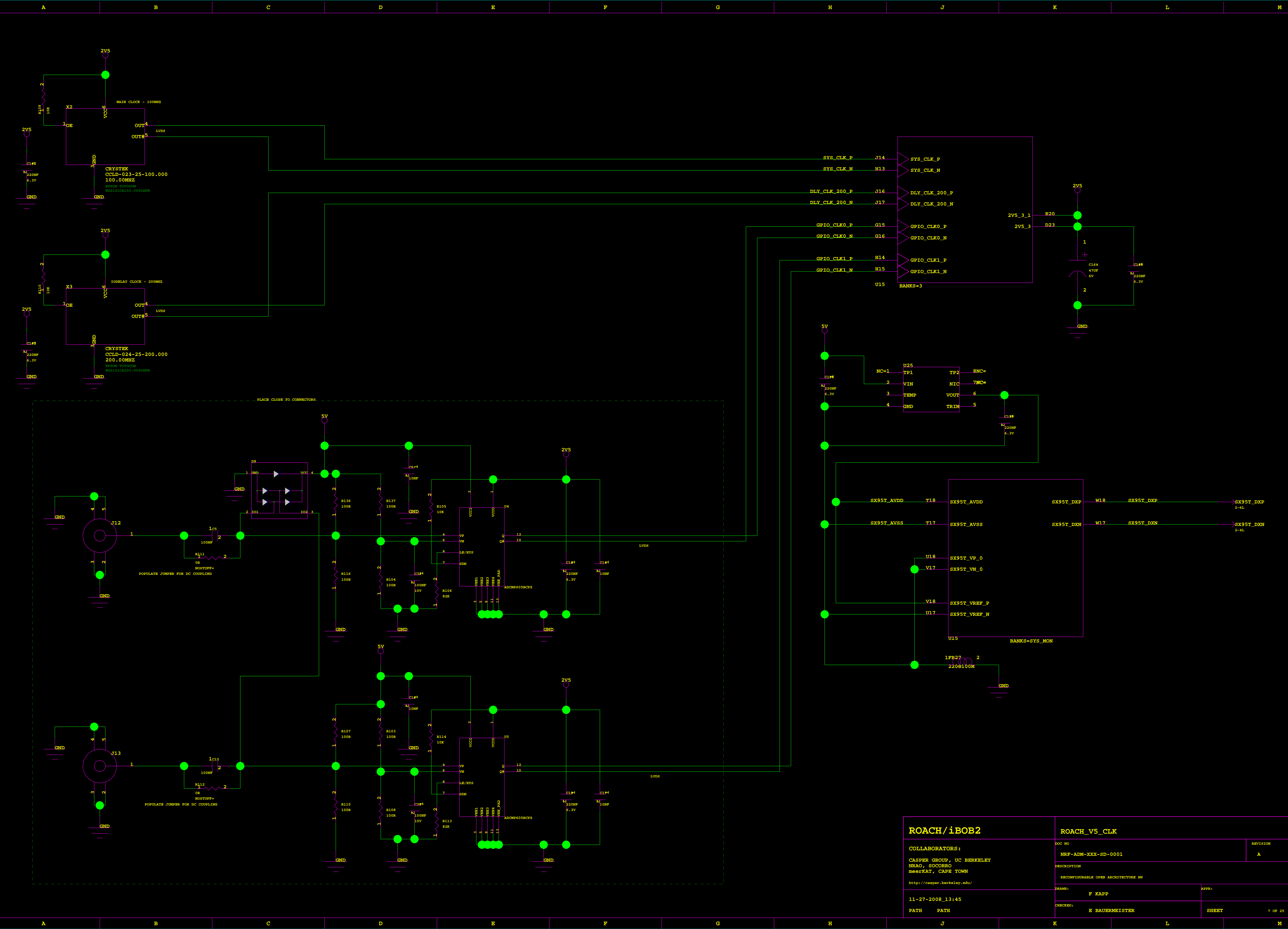










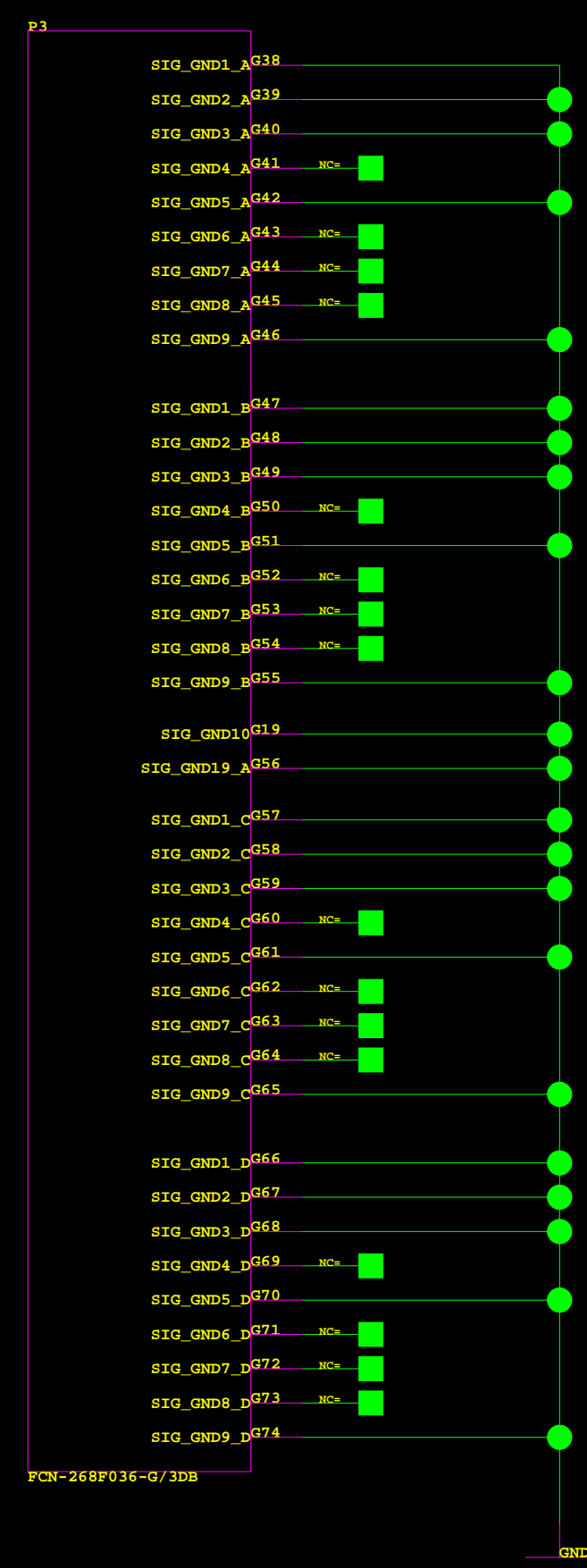


ROACH/iBOB2		ROACH_V5_CLK	
COLLABORATORS: CASPER GROUP, UC BERKELEY NRAO, SOCORRO meerkAT, CAPE TOWN  http://casper.berkeley.edu/		DOC NO NRF-ADM-XXX-SD-0001	REVISION A
11-27-2008_13:45		DESCRIPTION RECONFIGURABLE OPEN ARCHITECTURE HW	
PATH		DRAWN: F KAPP	APPR: E BAUERMEISTER
PATH		CHECKED: E BAUERMEISTER	SHEET 7 OF 25









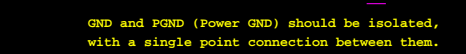
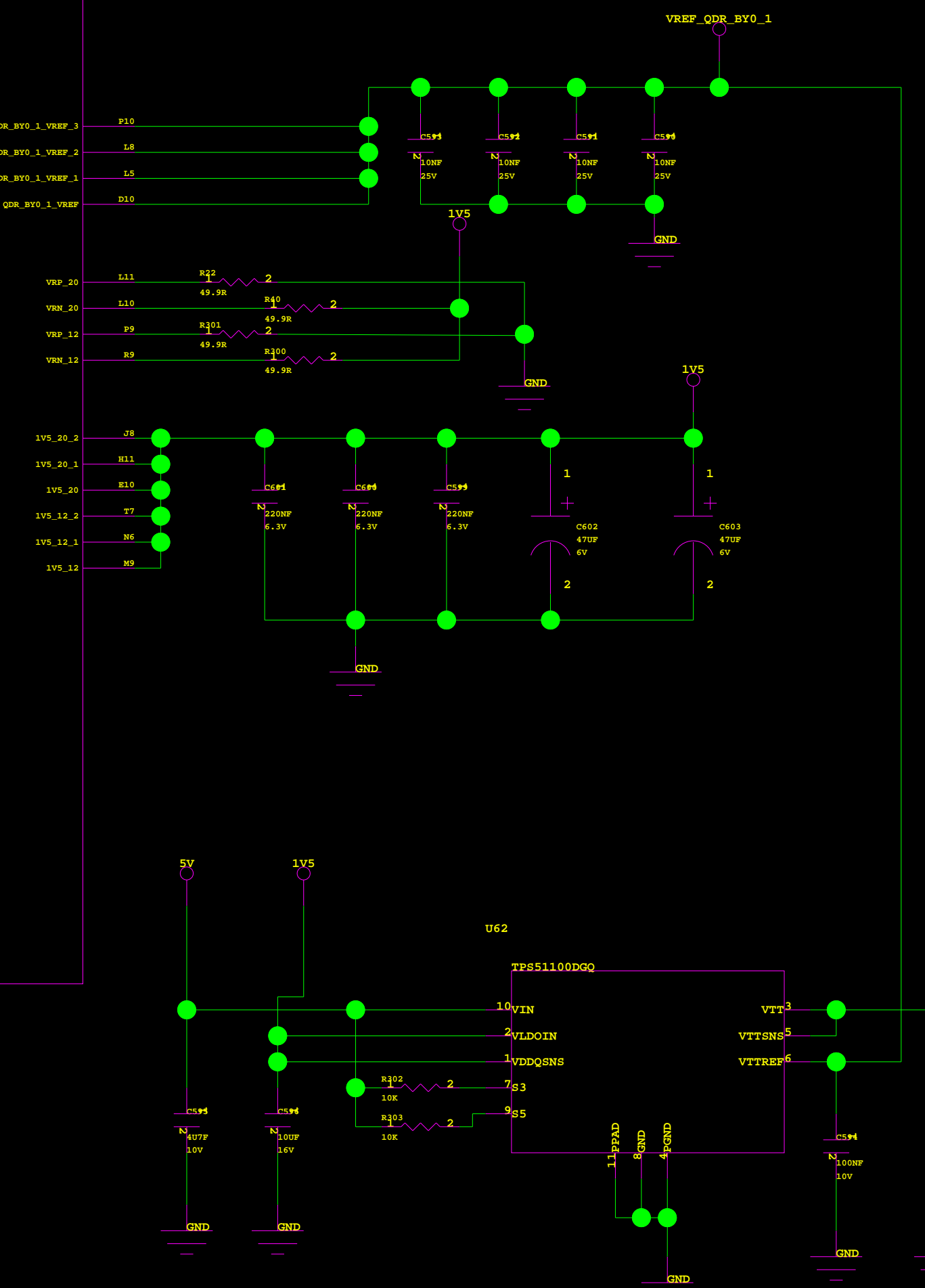
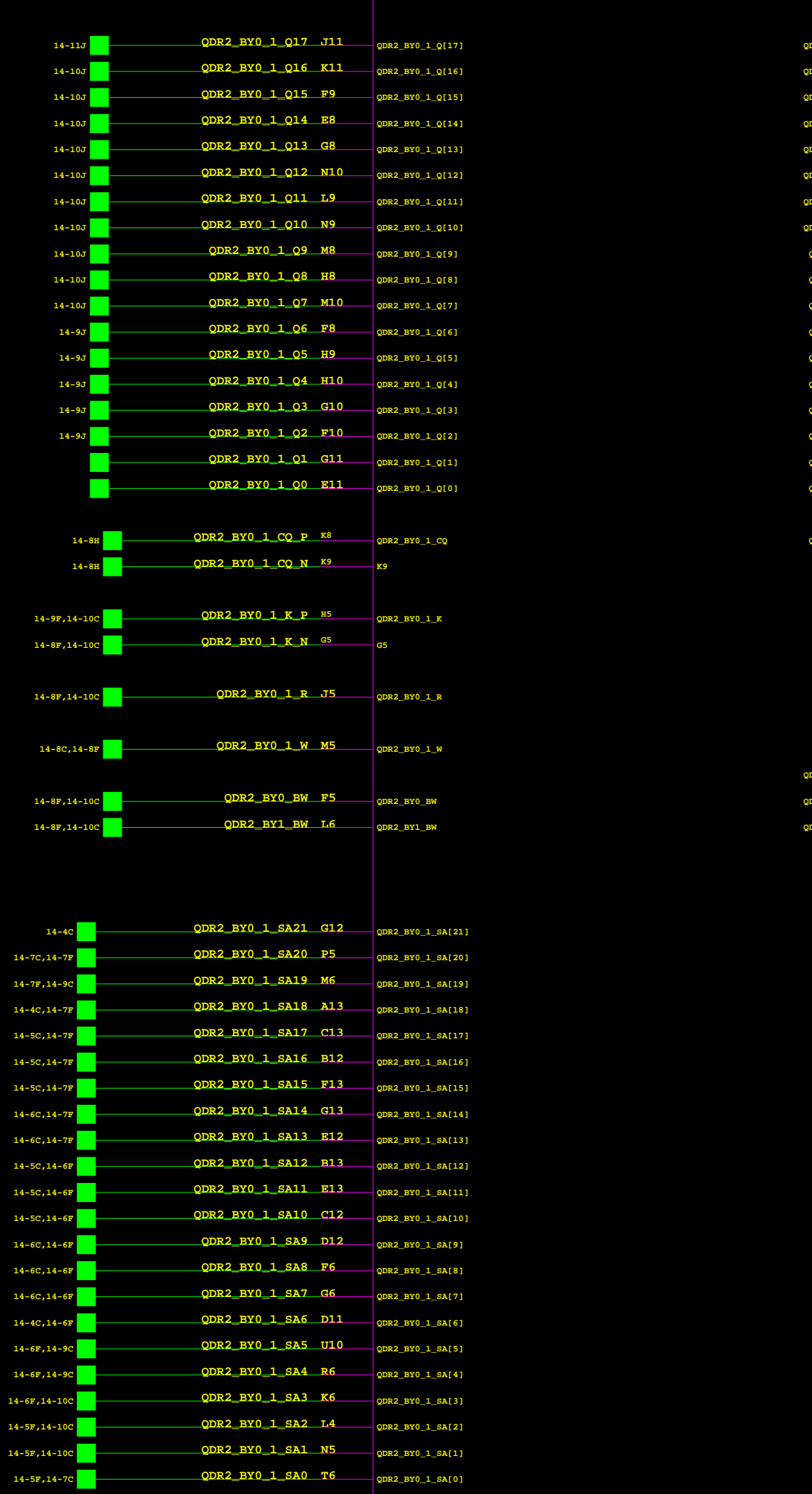
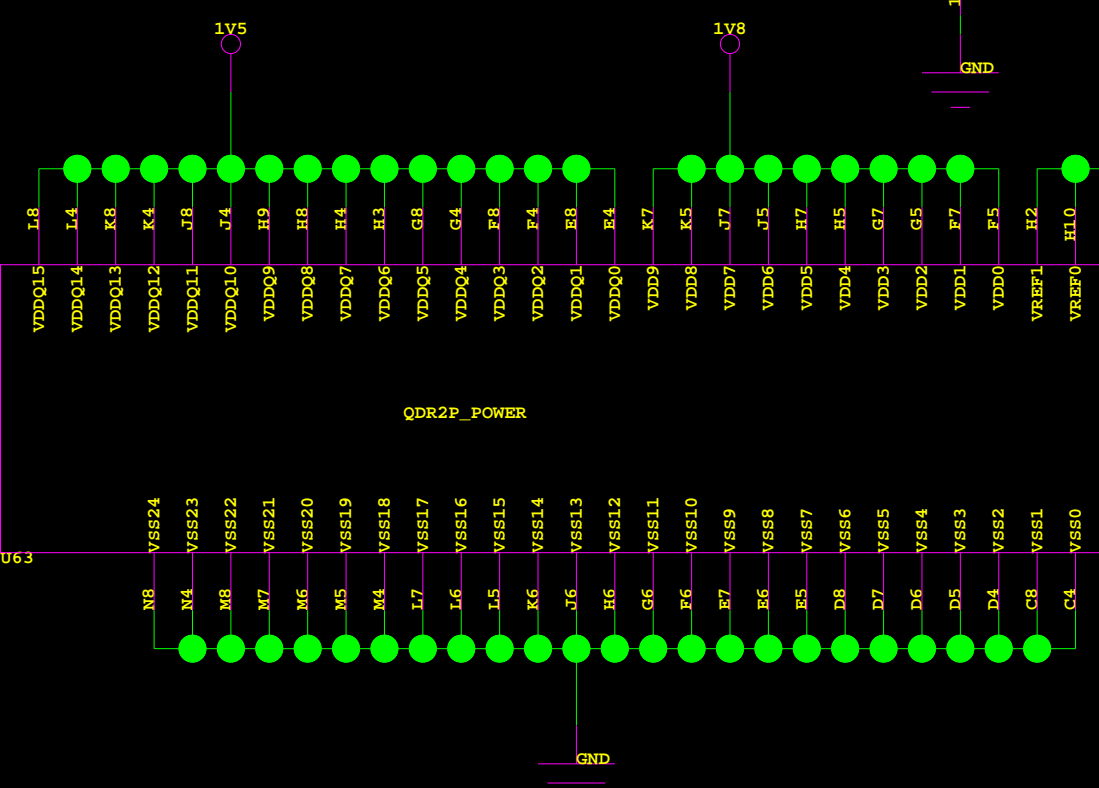
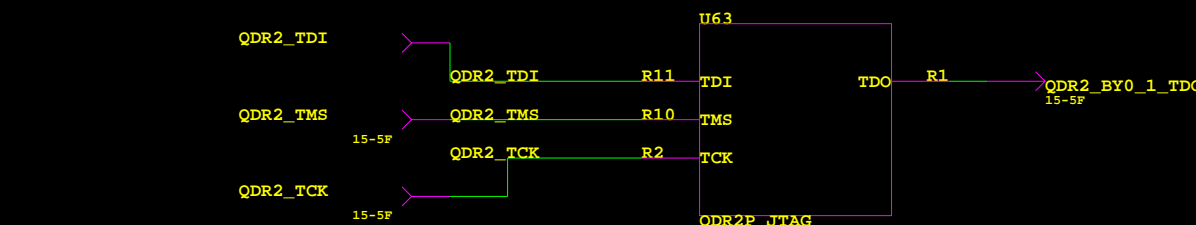
<b>ROACH/iBOB2</b>		<b>ROACH_TRANSCEIVERS_PSU</b>	
<b>COLLABORATORS:</b> CASPER GROUP, UC BERKELEY MIRA, COATED MERRIAT, CEC TOWN <a href="http://casper.berkeley.edu/">http://casper.berkeley.edu/</a>		DOC NO NRP-ADM-XXX-SD-0001 DESCRIPTION ROACH/ISSUEABLE OPER ARCHITECTURE SW	REVISION A
11-27-2008_13145 PATH PATH		NAME: F KAPP CHECKED: E BAUERMEISTER	APPR: SHEET 10 OF 25





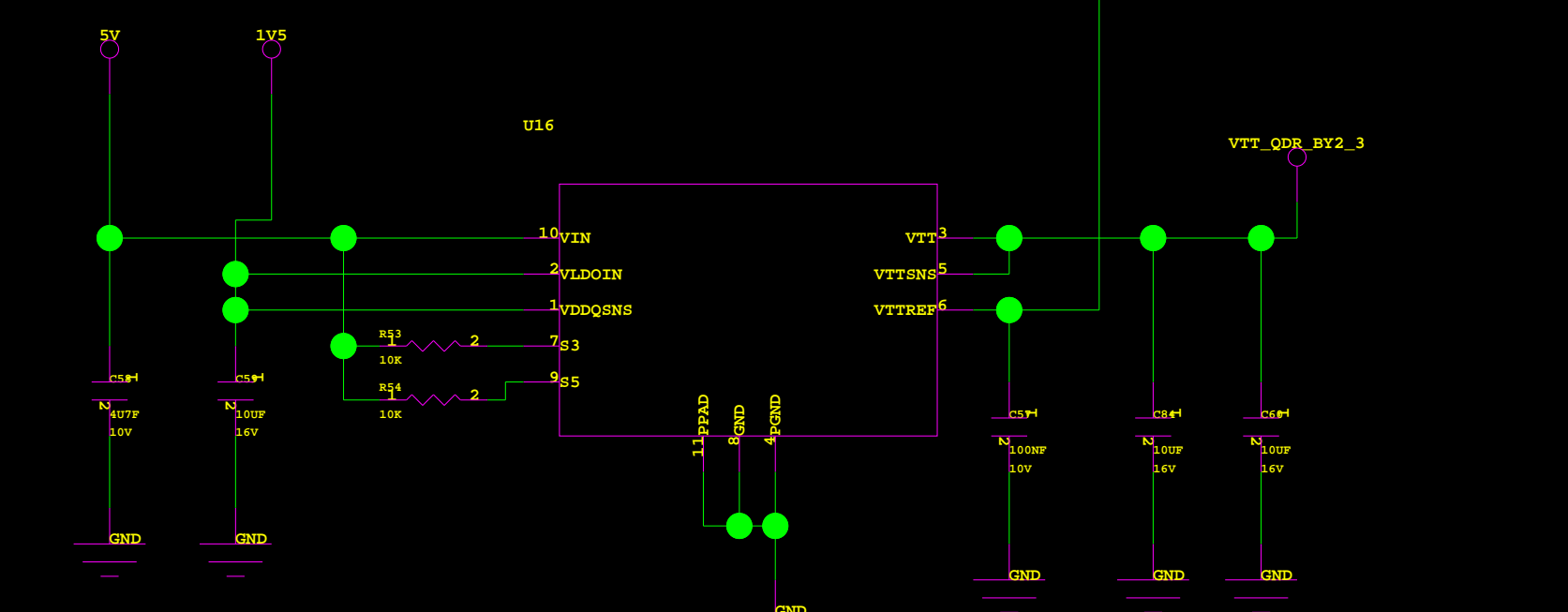
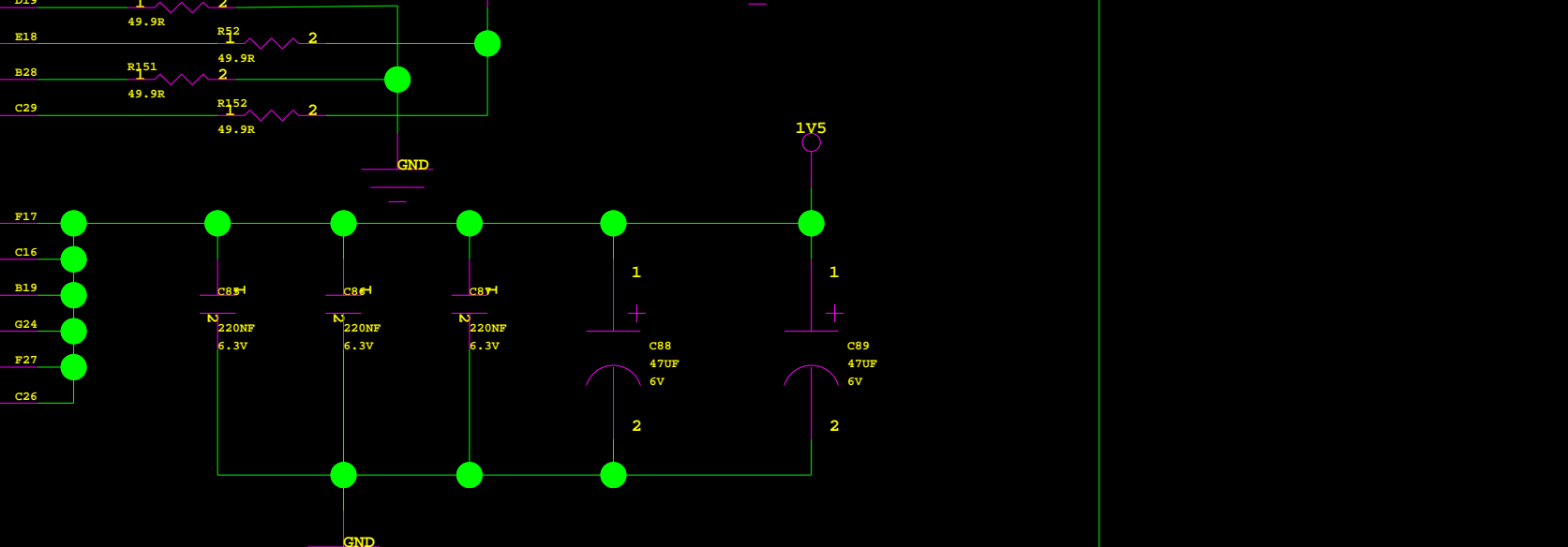
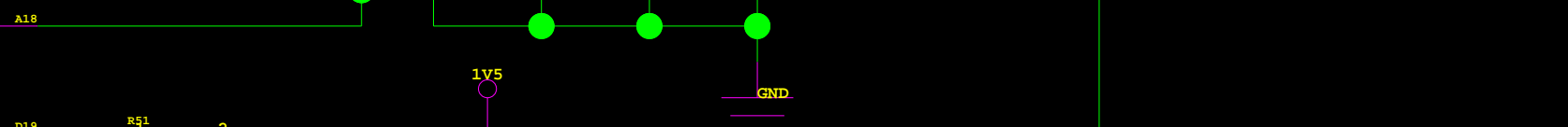
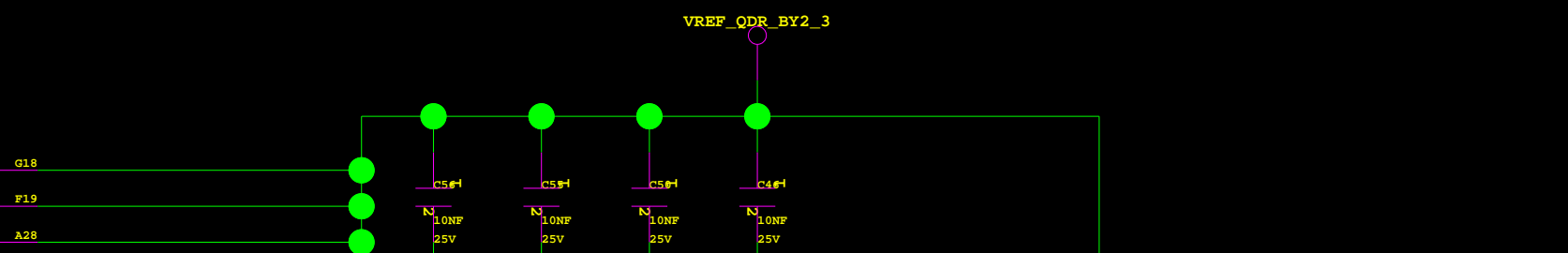
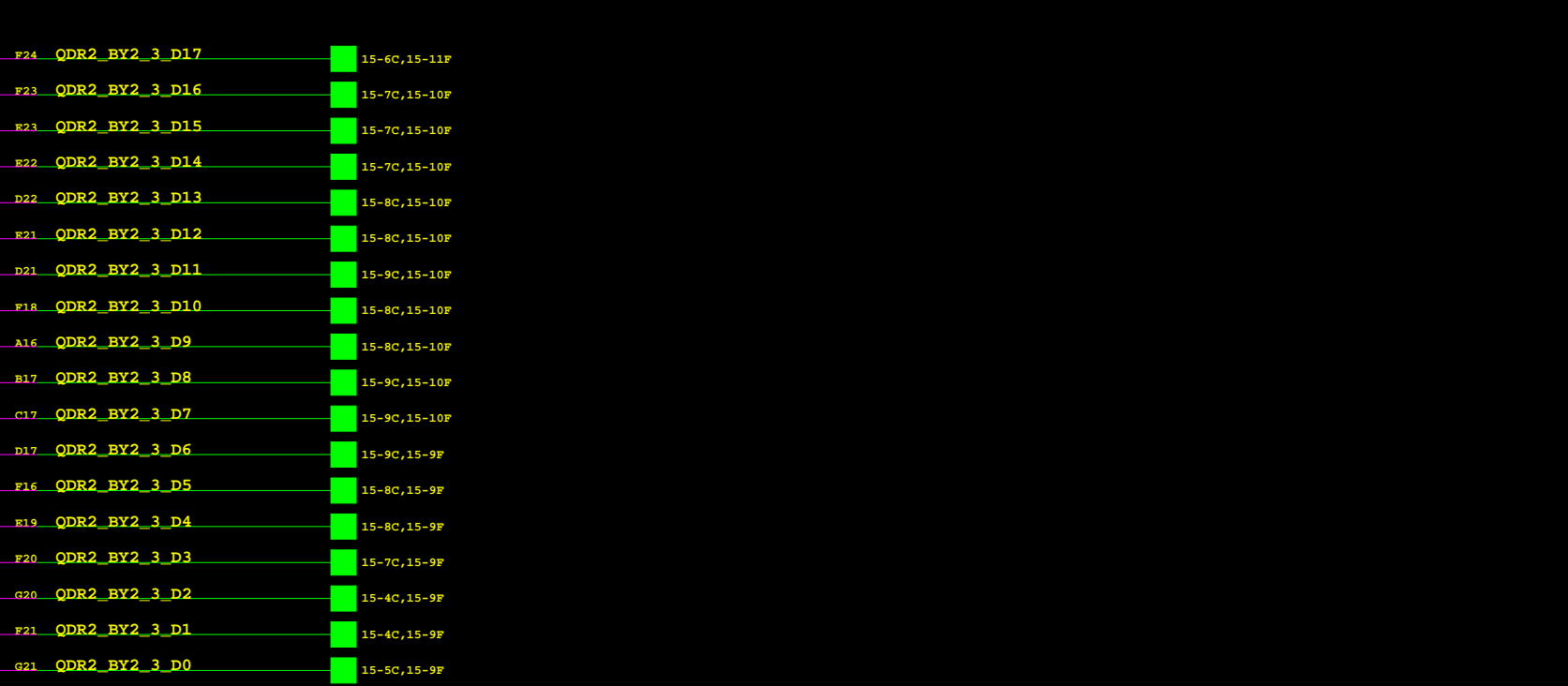
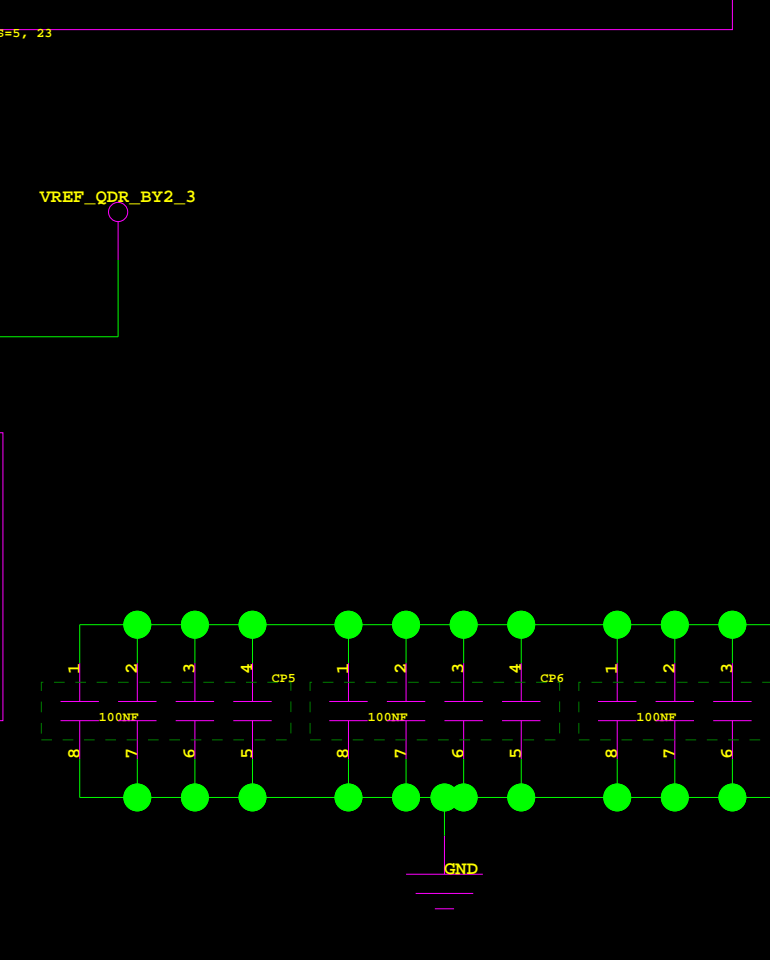
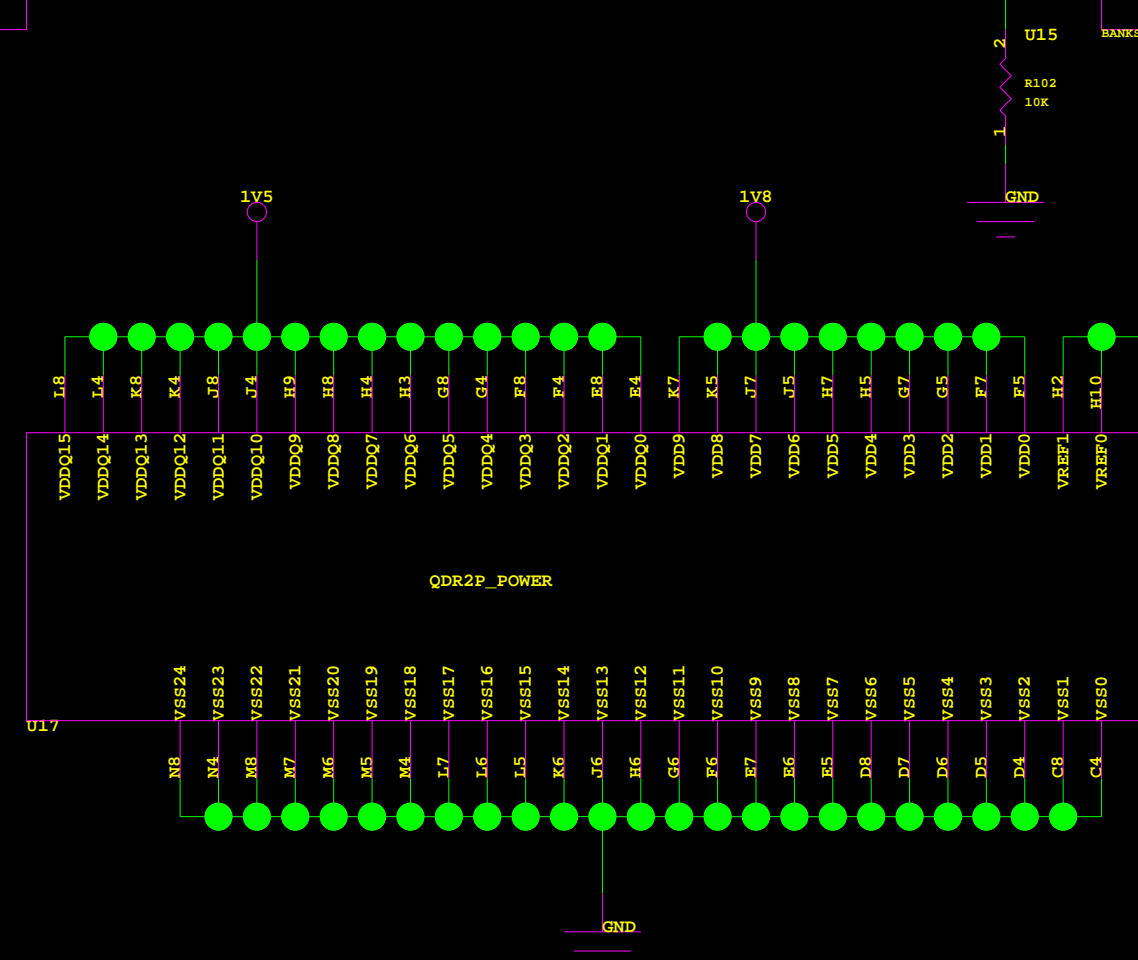
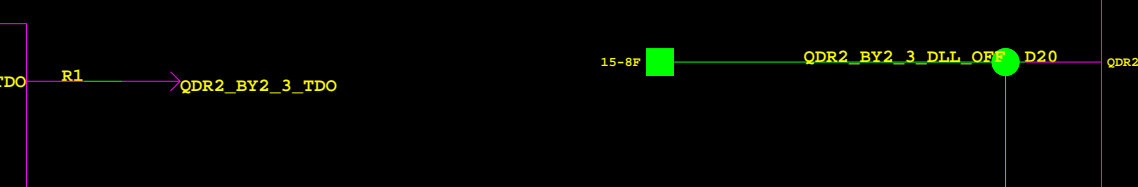
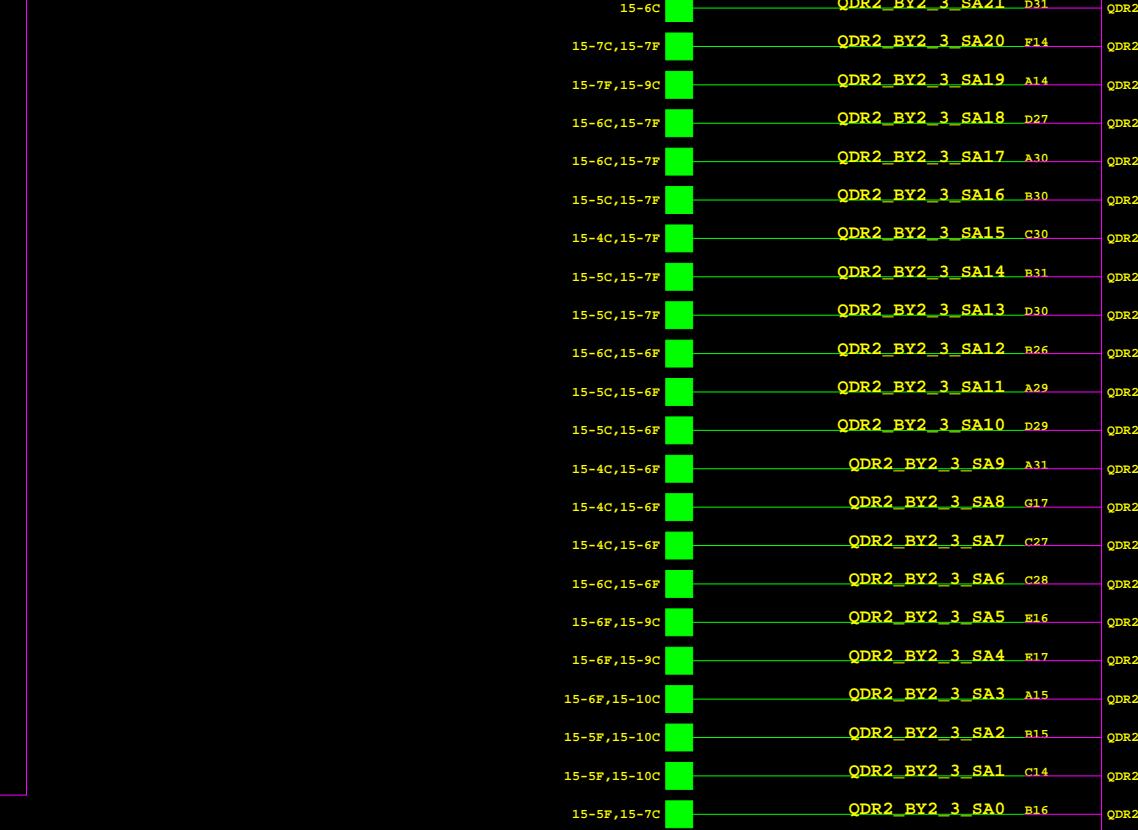
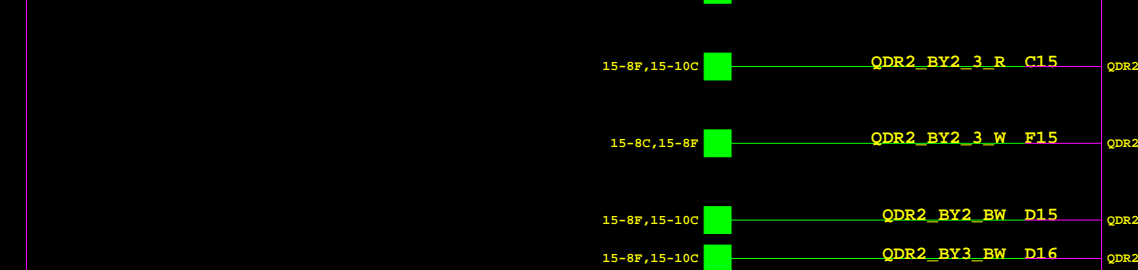
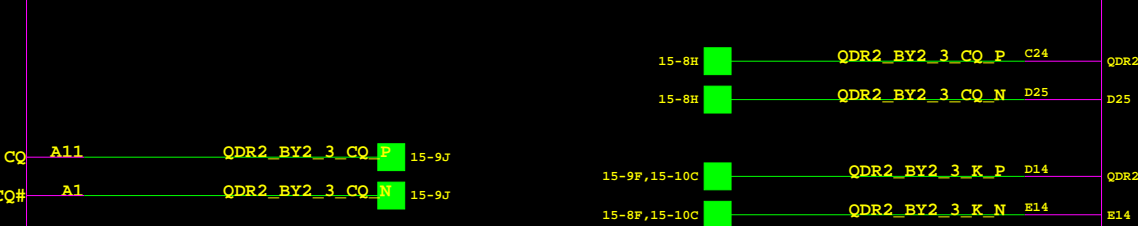
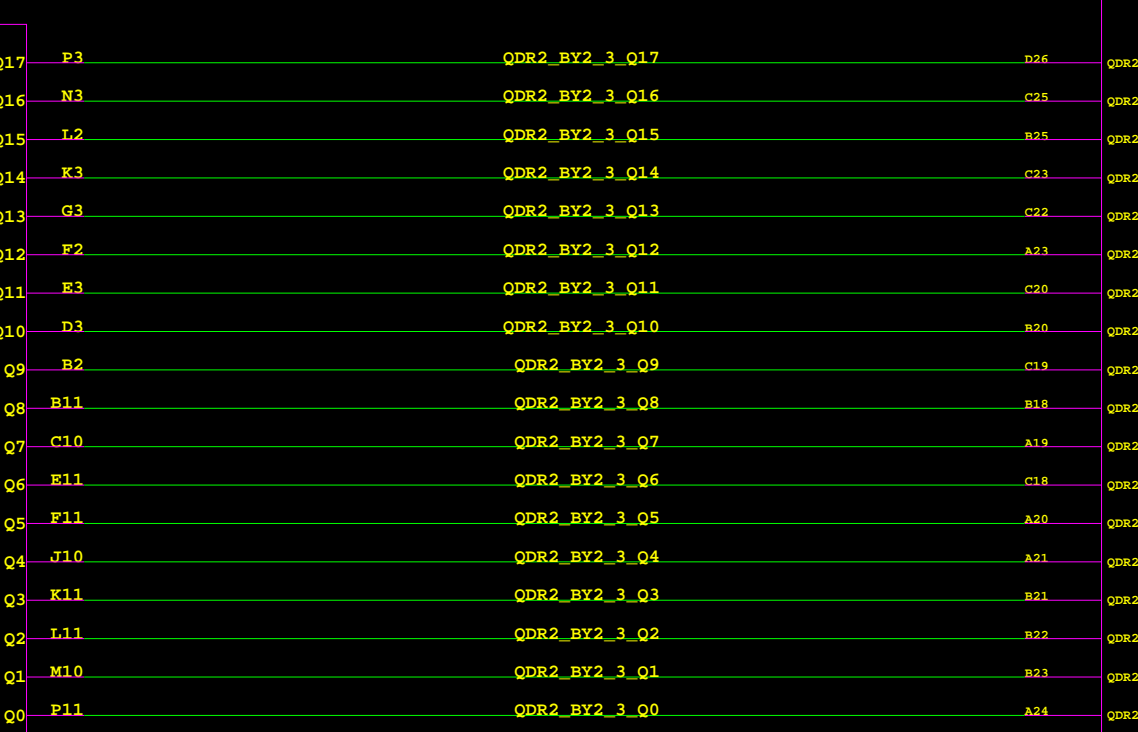
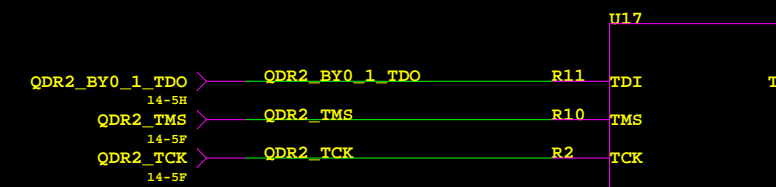
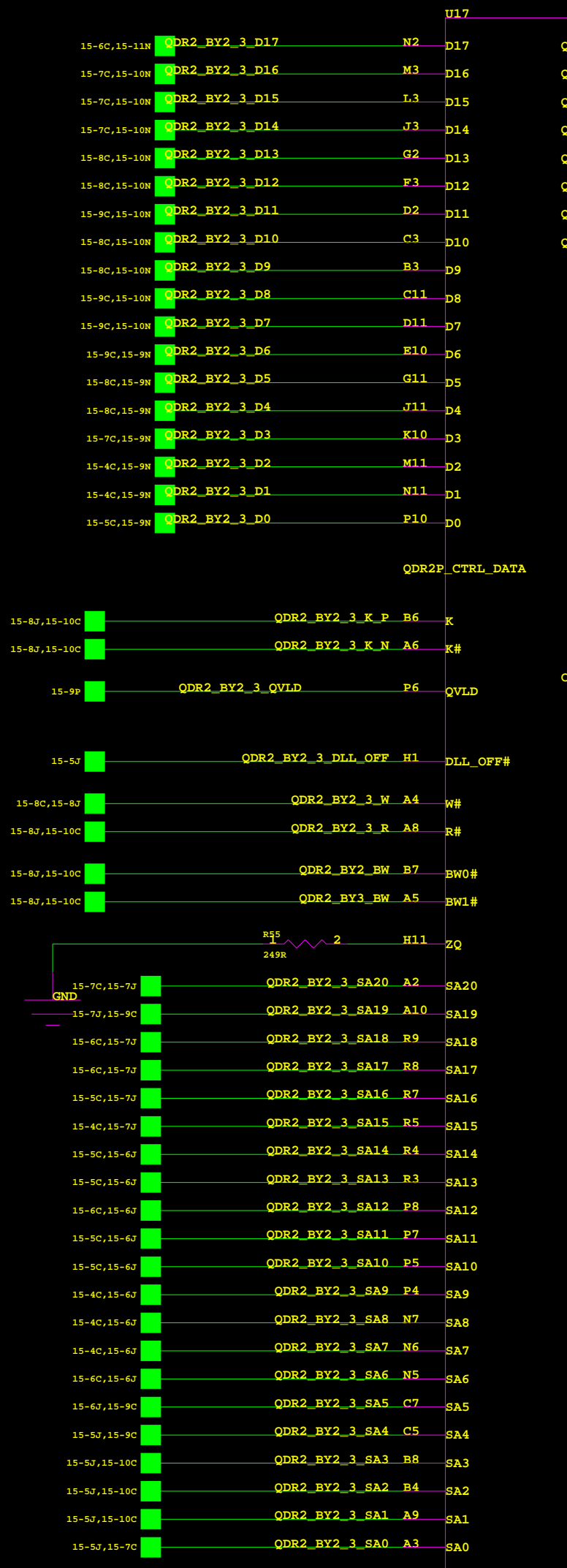
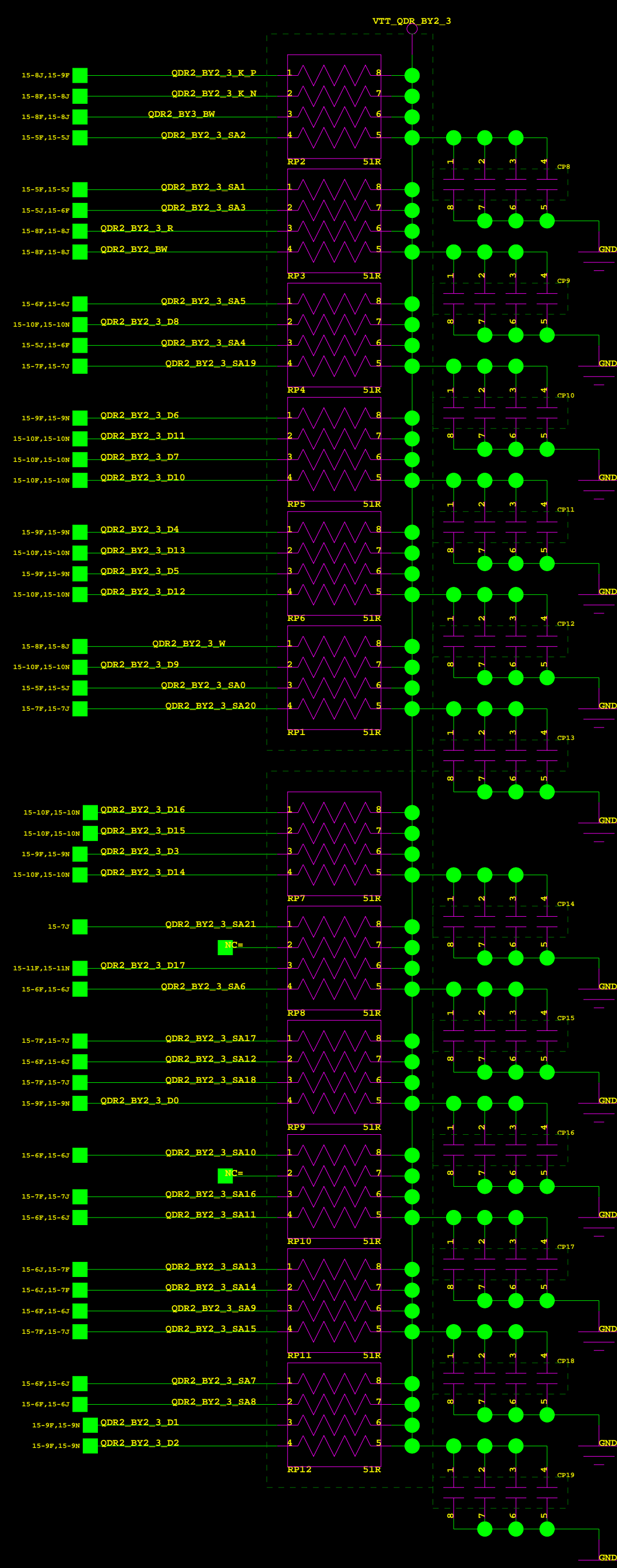






ROACH/iBOB2		ROACH_QDR2P_BY0_1	
COLLABORATORS:		DOC NO:	REVISION
CASPER GROUP, UC BERKELEY		NRF-ADM-XXX-SD-0001	A
MEMO, SICOBO		DESCRIPTION	
MERKAT, CAPE TOWN		RECONSTRUCTABLE OVER ARCHITECTURE RM	
http://casper.berkeley.edu/		NAME:	APP:
11-27-2008_13:45		F KAPP	
PATH PATH		CHECKED:	
		E BAUERHEIMSTER	SWEET 14 OF 14

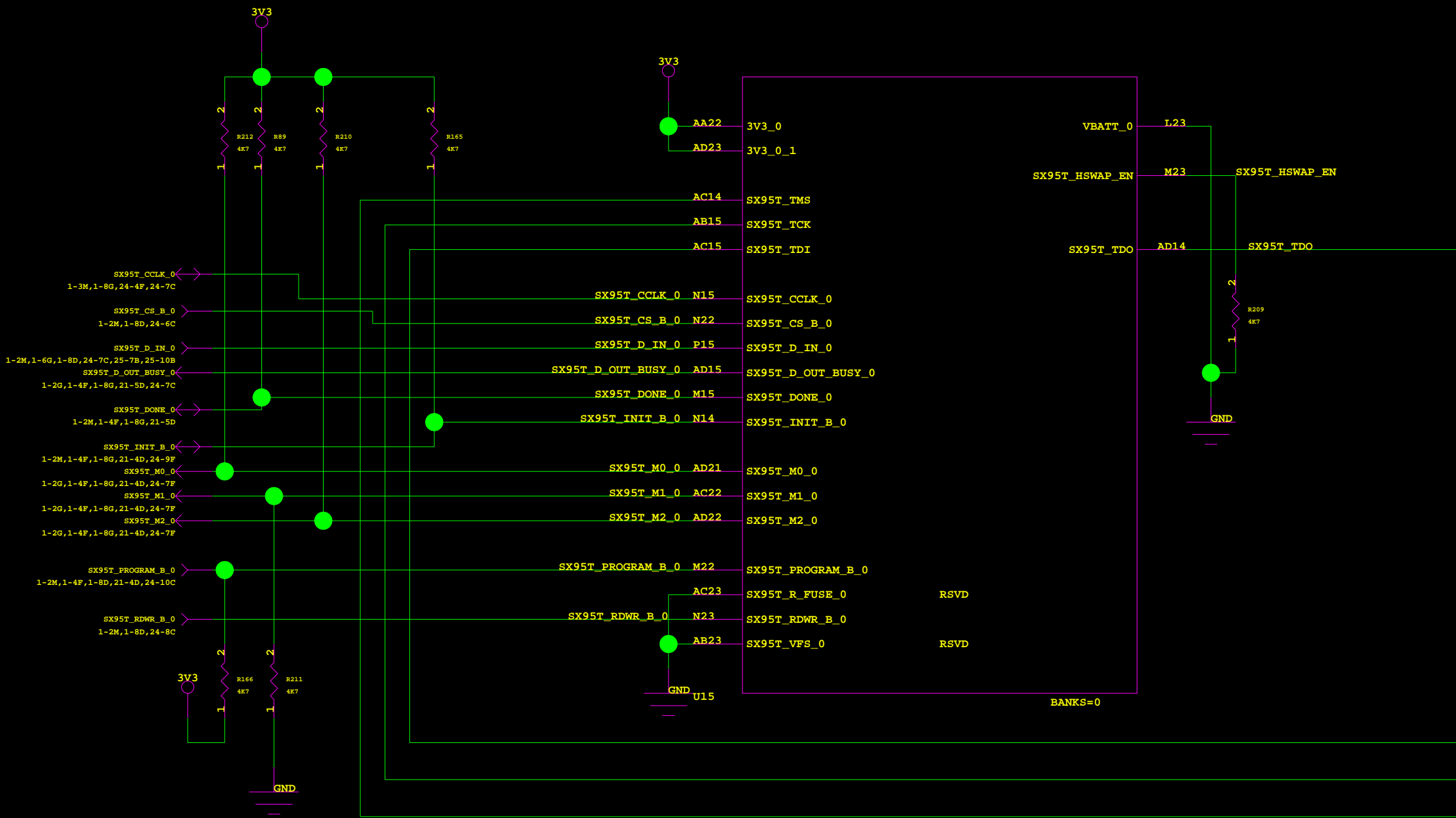
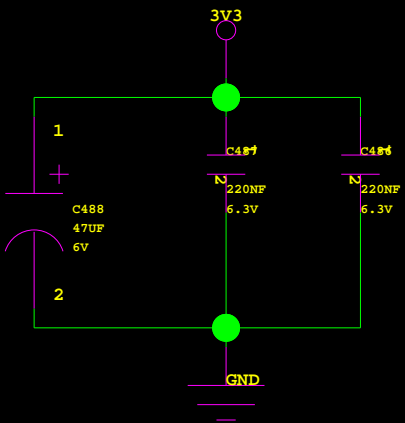




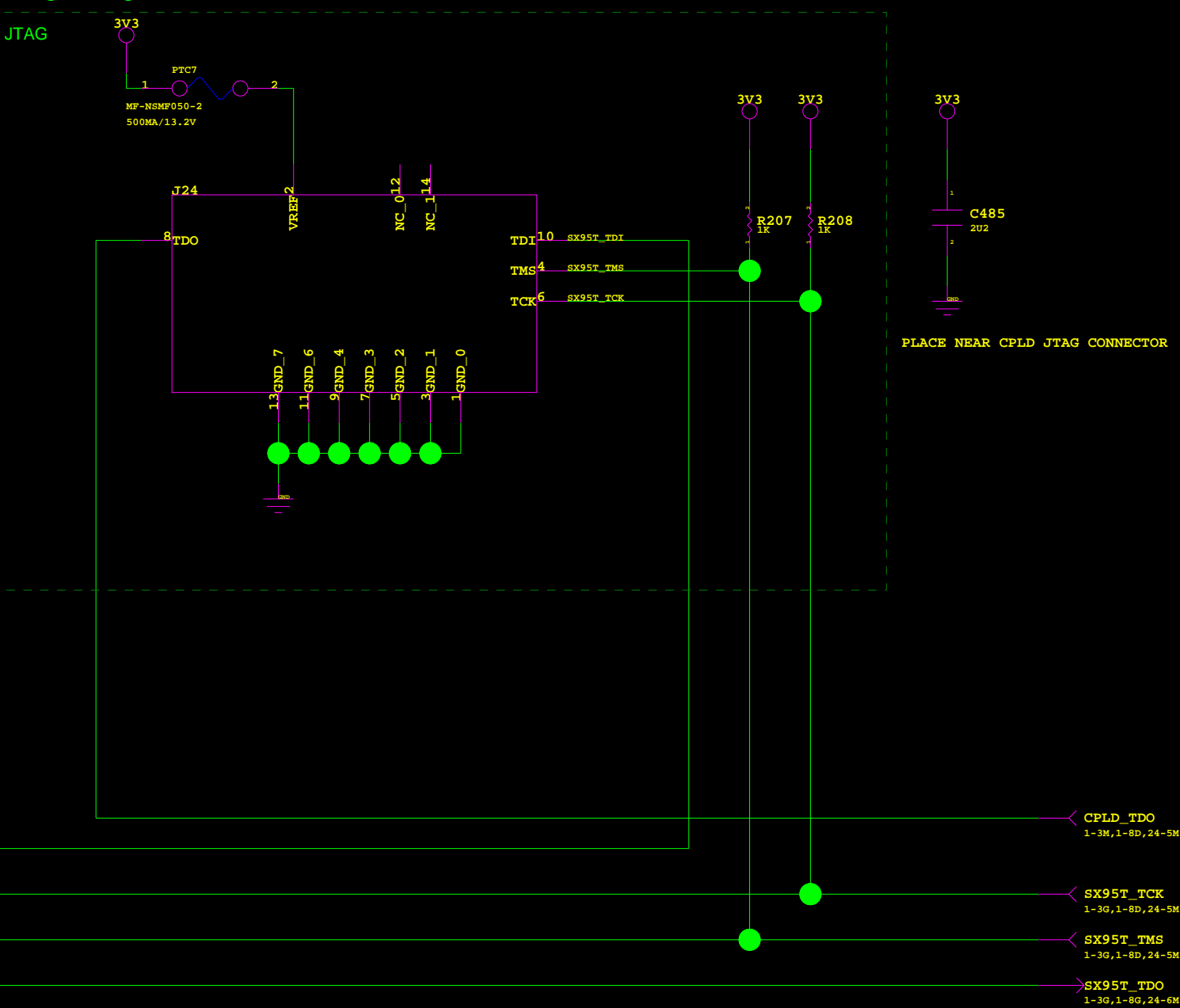
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COLLABORATORS:		DOC NO:	REVISION:
CASPER GROUP, UC BERKELEY ROAD, SOCKERO BERKELEY, CALIF 94720		NRP-ADM-XXX-SD-0001	
http://casper.berkeley.edu/		DESCRIPTION:	
		RECONFIGURABLE OPEN ARCHITECTURE BW	
1-27-2008 13:45		ISSUED:	APPROVED:
		F KAPP	
DATE DATE		CHECKED:	SHEET
		E BAUERMEISTER	

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



### Xilinx Programming Cable



### ROACH/iBOB2

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

11-27-2008\_13:45

PATH

PATH

### ROACH\_CONFIG

DOC NO  
NRF-ADM-XXX-SD-0001

DESCRIPTION  
RECONFIGURABLE OPEN ARCHITECTURE HW

DRAWN: F KAPP

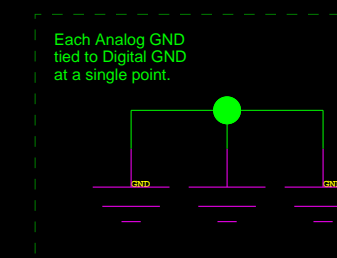
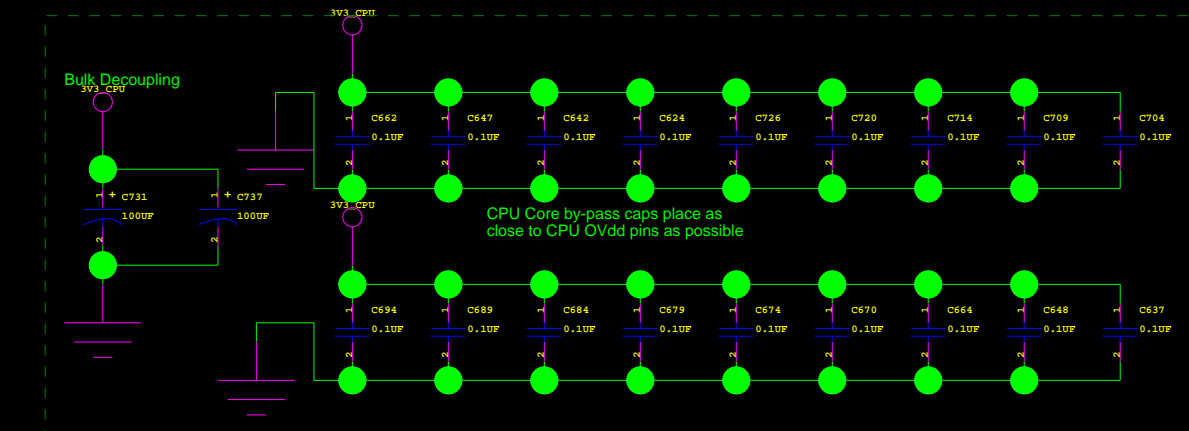
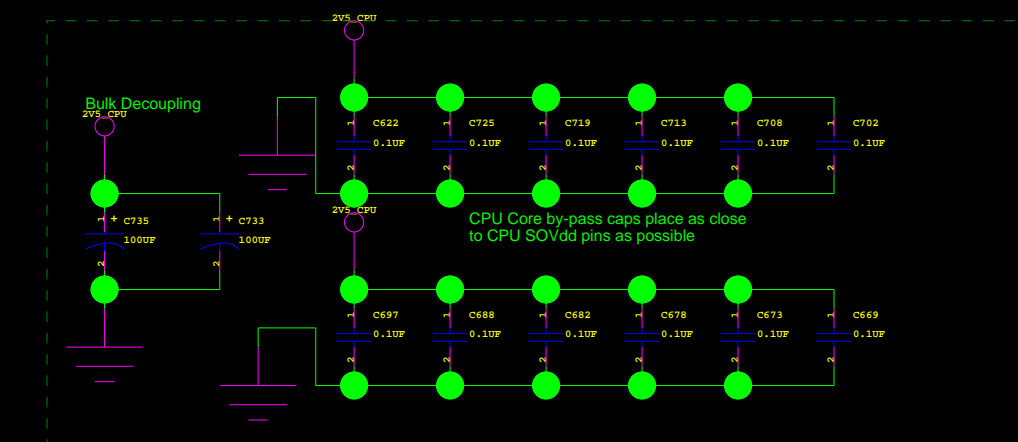
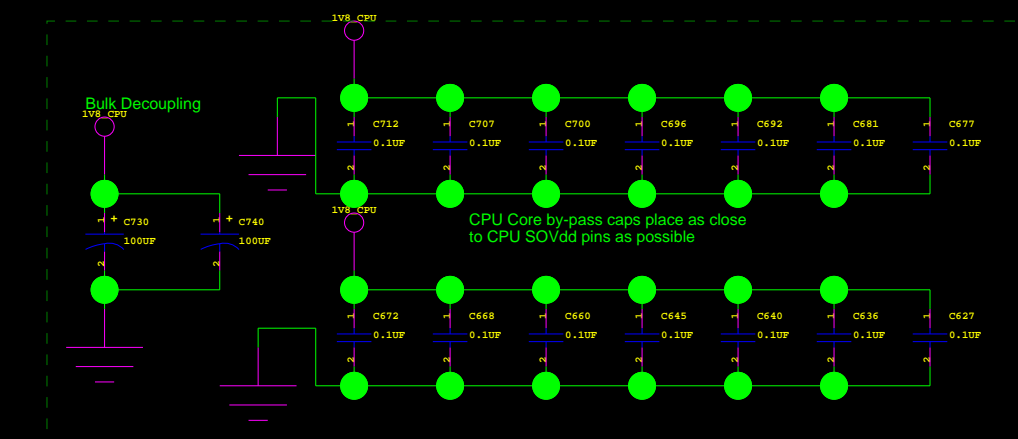
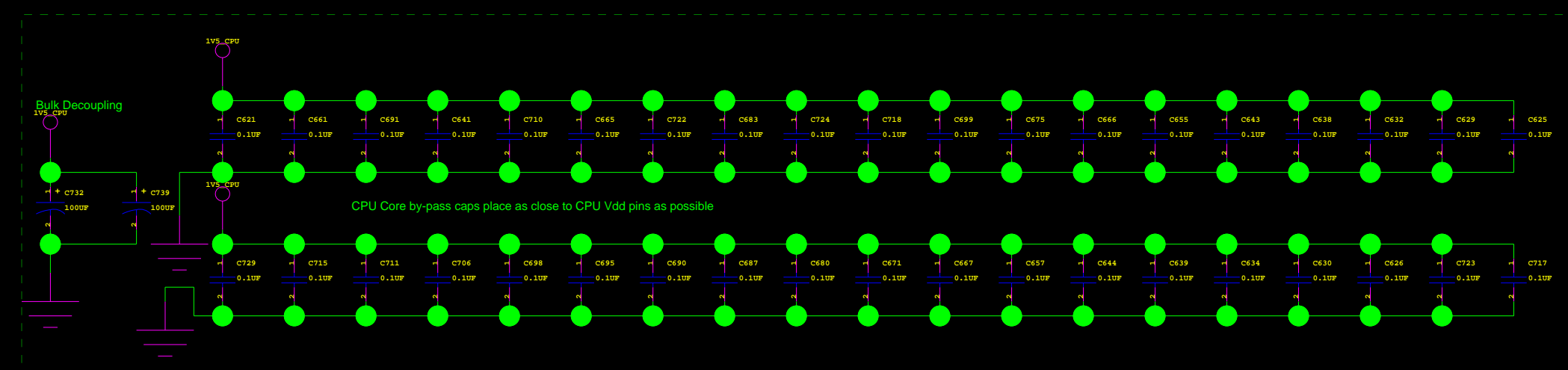
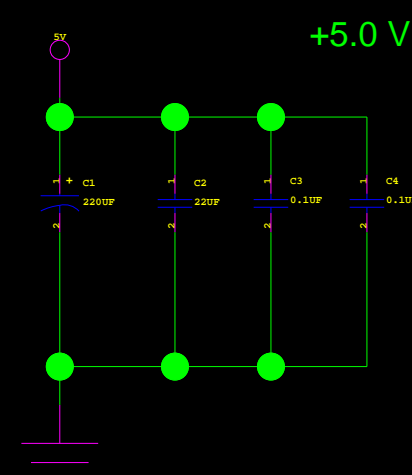
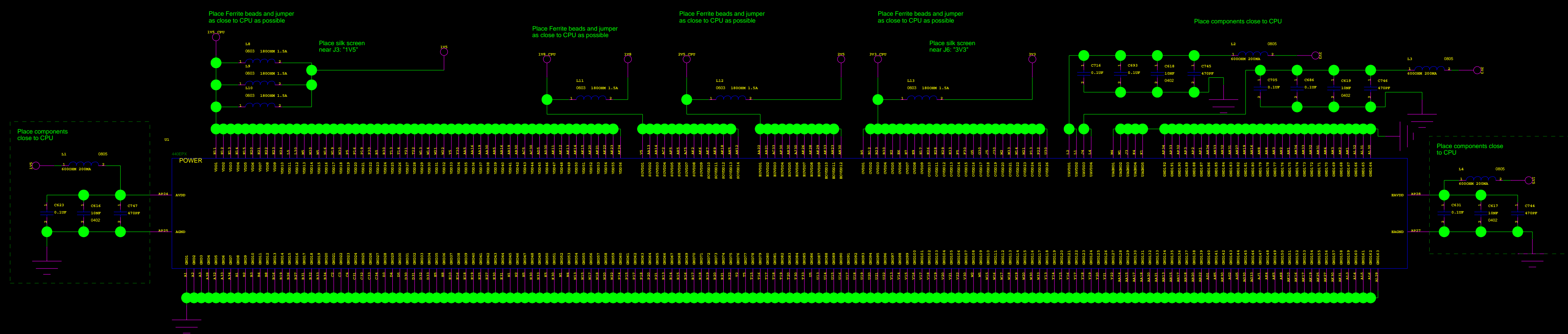
CHECKED: E BAUERMEISTER

REVISION  
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APPR:

SHEET

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

REMOVED VTT AND VREF - INCLUDED ON ROACH\_PPC\_DDR2

<b>ROACH/iBOB2</b>		<b>ROACH_PPC_POWER_1</b>	
<b>COLLABORATORS:</b>		<b>DOC NO</b>	<b>REVISION</b>
CASPER GROUP, UC BERKELEY HBAO, OCCURRO MERRAT, CAPE TOWN		<b>NEP-ADM-XXX-ED-0001</b>	<b>A</b>
<a href="http://casper.berkeley.edu/">http://casper.berkeley.edu/</a>		<b>DESCRIPTION</b>	
		<b>RECONFIGURABLE OPEN ARCHITECTURE IN</b>	
<b>DATE:</b>	<b>NAME:</b>	<b>APP:</b>	
11-27-2008_13:45	F KAPP		
<b>PATH</b>	<b>DESIGN:</b>	<b>SHEET</b>	<b>17 OF 21</b>
<b>PATH</b>	E BAUMEISTER		



7

6

5

4

3

2

1

0

A

B

C

D

E

F

G

H

J

K

L

M

REMOVED 3V3 GENERATION

REMOVED +12V GENERATION

REMOVED -12V GENERATION

REMOVED +1V GENERATION

REMOVED +2V5 GENERATION

3V3

Place one cap at each corner of the PCB

C4610

C4608

C4609

C4611

1000PF

1000PF

1000PF

1000PF

GROUND

ROACH/iBOB2

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

11-27-2008\_13:45

PATH      PATH

ROACH\_PPC\_POWER\_2

DOC NO  
NRF-ADM-XXX-SD-0001

DESCRIPTION  
RECONFIGURABLE OPEN ARCHITECTURE HW

DRAWN:  
F KAPP

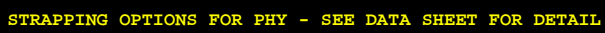
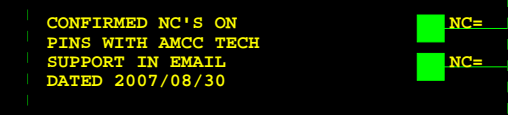
CHECKED:  
E BAUERMEISTER

REVISION  
A

APPR:

SHEET  
18 OF 25





ROACH/iBOB2

COLLABORATORS:		DOC NO:	REVISION
CASPER GROUP, UC BERKELEY NRAD, SOCCERRO nearKAT, CAPE TOWN		NRF-ADM-XXX-SD-0001	A
DESCRIPTION:			
http://casper.berkeley.edu/		RECONFIGURABLE OVER ARCHITECTURE IN	
		NAME: F KAPP	APP:
11-27-2008 13:45		CHARGE: E BAUERHOLTER	SHEET 20 OF 3
PATH	PATH		



ROACH/iBOB2		ROACH_PPC_USB	
COLLABORATORS:		DOC NO	REVISION
CASPER GROUP, UC BERKELEY NRAC, SOCORRO maerKAT, CAPE TOWN		NRF-ADM-XXX-SD-0001	A
http://casper.berkeley.edu/		DESCRIPTION	
		RECONFIGURABLE OPEN ARCHITECTURE HW	
11-27-2008_13:45		DRAWN:	APPR:
		F KAPP	
PATH PATH		CHECKED:	SHEET
		E BAUERMEISTER	21 OF 25





<b>ROACH/1BOB2</b>		<b>ROACH_PPC_CPLD</b>	
COLLABORATORS:		DOC NO:	REVISION:
CASPER GROUP, UC BERKELEY HWAC, ECCORRO BEEFAT, CAPE TOWN		NRF-ADM-XXX-SD-0001	A
DESCRIPTION:		RECONSTRUCTABLE OPM ARCHITECTURE IN	
<a href="http://casper.berkeley.edu/">http://casper.berkeley.edu/</a>		NAME:	DATE:
11-27-2008 13:45		F KAPP	
PATH PATH		CHECKED:	SHEET
		E BAUMGARTNER	24 OF 25



