

# NOZOMI-3 SWG SDV2 LOGIC SCHEMATICS

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NZM3H-2  
VER 2.10  
JUNE/08/2010

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BASE LOGIC :NZM3 SWG SDV  
VER 1.22  
APR/26/2010

- 70.THERMAL SENSOR
- 71.EEPROM/SMBUS SW
- 72.DC-IN
- 73.BATTERY INPUT
- 74.BATTERY CHARGER(BQ24742)
- 75.CHARGE SELECTOR
- 76.BATTERY MONITOR
- 77.POWER SEQUENCE
- 78.DC/DC VCC5M/VCC3M(TPS51220ARSNR)
- 79.DC/DC VCCCPUCORE(VT1316/VT1317)
- 80.BLANK
- 81.DC/DC VCCGFXCORE\_I(VT1317)
- 82.VCCCPUCORE DECOUPLING
- 83.DC/DC VCCGFXCORE\_D(ADP3211)
- 84.DC/DC VCC1R05B\_VTT(VT357)
- 85.DC/DC VCC1R05LAN(VT356)
- 86.DC/DC VCC1R5A(VT357)
- 87.DC/DC VCC0R75B(MAX1510)
- 88.DC/DC VCC1R5VIDEO(BD9139)
- 89.DC/DC VCC1R8B(TPS62290)
- 90.DC/DC VCCSA(VT356)
- 91.DC/DC RINKAN-2
- 92.LOAD SW LAN
- 93.LOAD SW VIDEO
- 94.LOAD SW AMT/ MEPWRG
- 95.LOAD SW B
- 96.LOAD SW VCC5MUBAY
- 97.LOAD SW WAN & WLAN
- 98.PTH FOR SCREW HOLES
- 99.BLANK

EC HISTORY

NOZOMI-3 PRE-DV :BASE LOGIC NZM1 EXT 512MB SIT VER.7.03 12/01/2009

VER.0.01 12/10/2009 APPLIED PDV\_EC001  
VER.0.02 12/14/2009 APPLIED PDV\_EC002-012  
VER.0.03 12/15/2009 APPLIED PDV\_EC013-025  
VER.0.04 12/16/2009 APPLIED PDV\_EC026-033  
VER.0.05 12/17/2009 APPLIED PDV\_EC034-038  
VER.0.06 12/18/2009 APPLIED PDV\_EC039-041,043-45,047-054  
VER.0.07 12/21/2009 APPLIED PDV\_EC042,046,055-066  
VER.0.08 12/22/2009 APPLIED PDV\_EC067-080  
VER.0.09 12/24/2009 APPLIED PDV\_EC081-085  
VER.0.10 12/25/2009 APPLIED PDV\_EC086-089  
VER.0.11 12/28/2009 APPLIED PDV\_EC090-095  
VER.0.12 01/06/2010 APPLIED PDV\_EC096-112  
VER.0.13 01/07/2010 APPLIED PDV\_EC113-120  
VER.0.14 01/08/2010 APPLIED PDV\_EC121  
VER.0.15 01/12/2010 APPLIED PDV\_EC122  
VER.0.16 01/13/2010 APPLIED PDV\_EC123-125  
VER.0.17 01/14/2010 APPLIED PDV\_EC126-128,130  
VER.0.18 01/15/2010 APPLIED PDV\_EC131-133  
VER.0.19 01/18/2010 APPLIED PDV\_EC134-137

VER.0.20 01/19/2010 APPLIED PDV\_EC138  
VER.0.21 01/20/2010 APPLIED PDV\_EC139,140  
VER.0.22 01/21/2010 APPLIED PDV\_EC141-146  
VER.0.23 01/22/2010 APPLIED PDV\_EC147,148  
VER.0.24 01/25/2010 APPLIED PDV\_EC149-160  
VER.0.25 01/26/2010 APPLIED PDV\_EC162-168  
VER.0.26 01/27/2010 APPLIED PDV\_EC169-176  
VER.0.27 01/28/2010 APPLIED PDV\_EC177-179  
VER.0.28 01/29/2010 APPLIED PDV\_EC180  
VER.0.29 02/01/2010 APPLIED PDV\_EC181-189  
VER.0.30 02/02/2010 APPLIED PDV\_EC190-193  
VER.0.31 02/03/2010 APPLIED PDV\_EC194-197  
VER.0.32 02/04/2010 APPLIED PDV\_EC198-202

NOZOMI-3 SDV :BASE LOGIC NZM3 PRE-DV VER.0.32 02/04/2010

VER.1.00 02/05/2010 APPLIED SDV\_EC001-004  
VER.1.01 02/08/2010 APPLIED SDV\_EC005-007  
VER.1.02 02/09/2010 APPLIED SDV\_EC010  
VER.1.03 02/10/2010 APPLIED SDV\_EC011-013  
VER.1.04 02/15/2010 APPLIED SDV\_EC014  
VER.1.05 02/16/2010 APPLIED SDV\_EC015-019  
VER.1.06 02/17/2010 APPLIED SDV\_EC020-022  
VER.1.07 02/18/2010 APPLIED SDV\_EC024,025,027  
VER.1.08 02/19/2010 APPLIED SDV\_EC028,030-032  
VER.1.09 02/22/2010 APPLIED SDV\_EC033-035  
VER.1.10 02/23/2010 APPLIED SDV\_EC036-038

VER.1.11 03/18/2010 APPLIED SDV\_EC045,046  
VER.1.12 03/19/2010 APPLIED SDV\_EC040-043,CNV\_EC061-066  
VER.1.13 03/22/2010 APPLIED SDV\_EC048-052  
VER.1.14 03/24/2010 APPLIED SDV\_EC053-059, ECR001-003  
VER.1.15 03/26/2010 APPLIED SDV\_EC061  
VER.1.16 04/1/2010 APPLIED SDV\_EC065-075, except SDV\_EC069, SDV\_EC076-079  
VER.1.17 04/6/2010 APPLIED SDV\_EC080-084, ECR004, ECR008 and ECR009  
VER.1.18 04/8/2010 APPLIED SDV\_EC085-091, SDV\_ECR010-013  
VER.1.19 04/13/2010 APPLIED SDV\_EC092-094, change PCB footprint of all resistors from xxx to xxx-R, SDV\_EC103 and EC047  
VER.1.20 04/16/2010 APPLIED SDV\_EC105-110 and ECR023, ECR026 and ECR027  
VER.1.21 04/21/2010 APPLIED ECR028

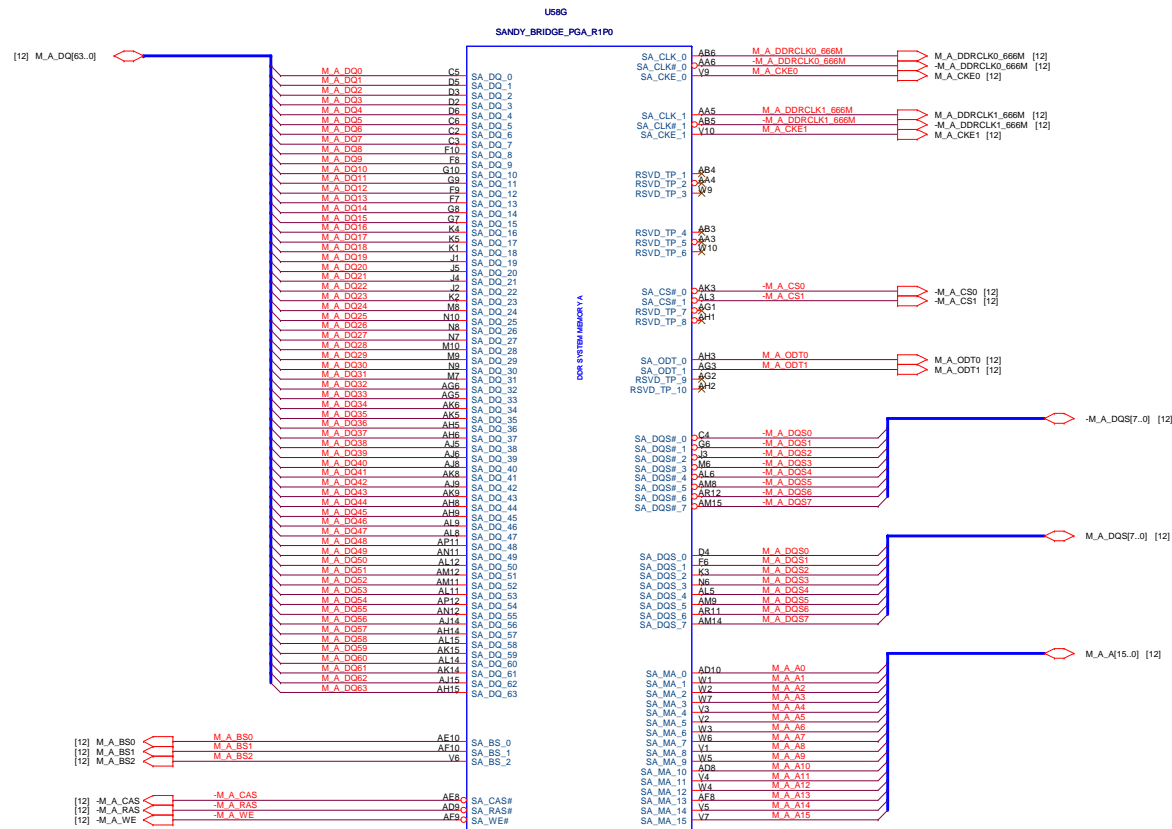
~~VER.1.22 04/26/2010 APPLIED EC111-113, EC115-117~~ NZM3\_SWG\_SDV2\_EC077

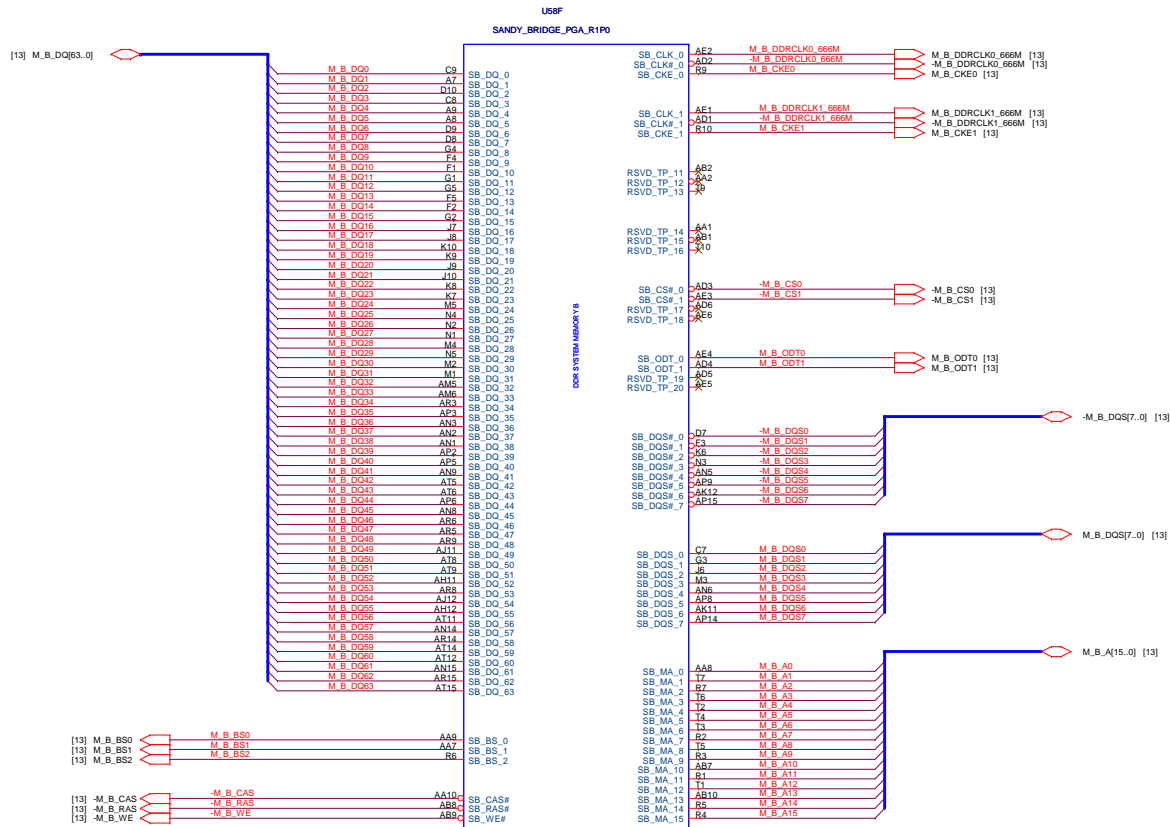
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VER.2.01 04/30/2010 APPLIED NZM3\_SWG\_SDV2\_EC022-033  
VER.2.02 05/04/2010 APPLIED NZM3\_SWG\_SDV2\_EC035-061  
VER.2.03 05/07/2010 APPLIED NZM3\_SWG\_SDV2\_EC062-065  
VER.2.04 05/12/2010 APPLIED NZM3\_SWG\_SDV2\_EC066-071  
VER.2.05 05/13/2010 APPLIED NZM3\_SWG\_SDV2\_EC072  
VER.2.06 05/21/2010 APPLIED NZM3\_SWG\_SDV2\_EC073, EC076 and NZM3\_SWG\_SDV2\_ECR001-003  
VER.2.07 05/25/2010 APPLIED NZM3\_SWG\_SDV2\_EC077,EC078, EC079, EC082, EC083, EC084, EC086, EC087, EC088, EC089 and EC095  
VER.2.08 06/02/2010 APPLIED NZM3\_SWG\_SDV2\_EC096-EC100, EC104, EC106 and EC107  
VER.2.09 06/03/2010 APPLIED NZM3\_SWG\_SDV2\_EC108-EC110  
VER.2.10 06/08/2010 APPLIED NZM3\_SWG\_SDV2\_EC105

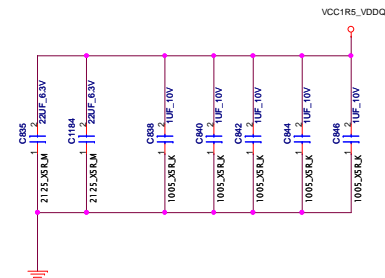
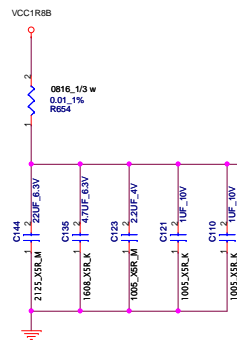




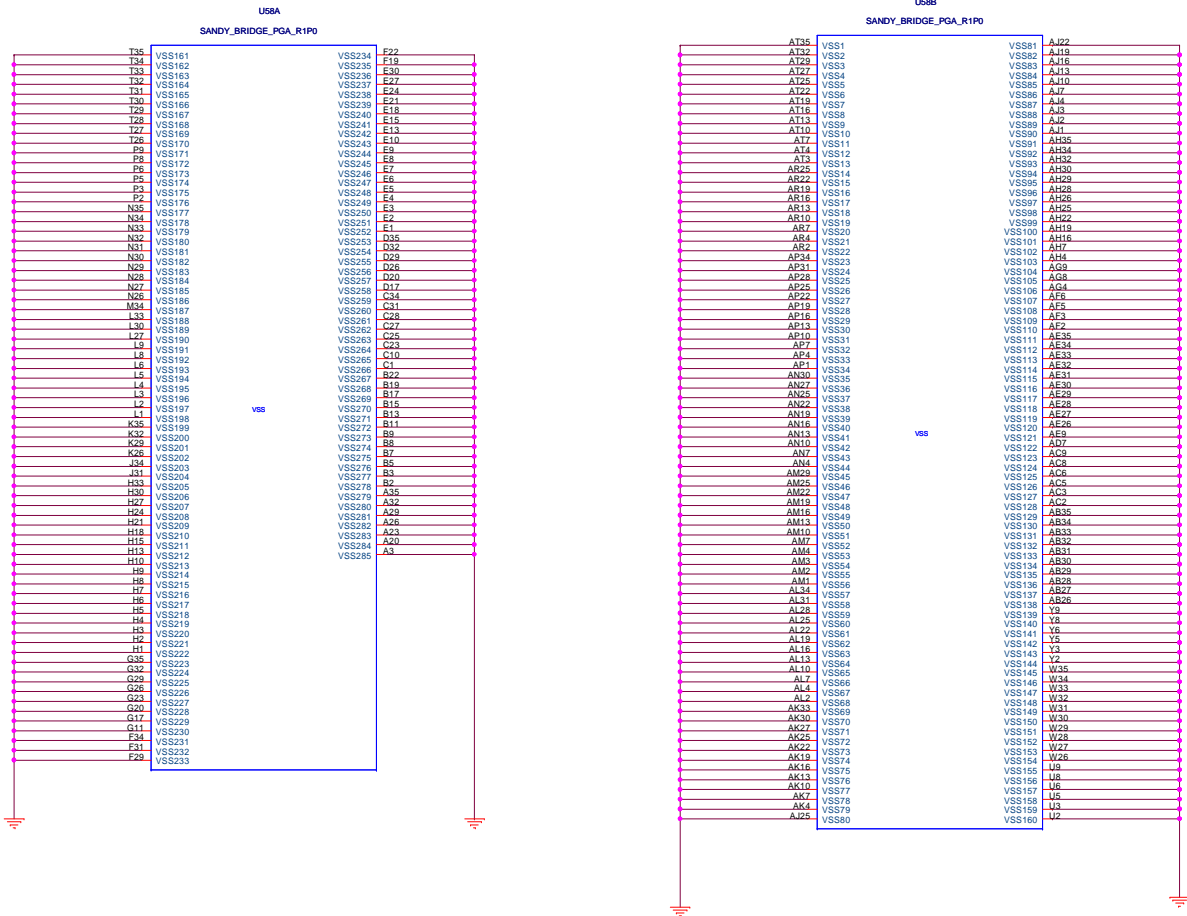




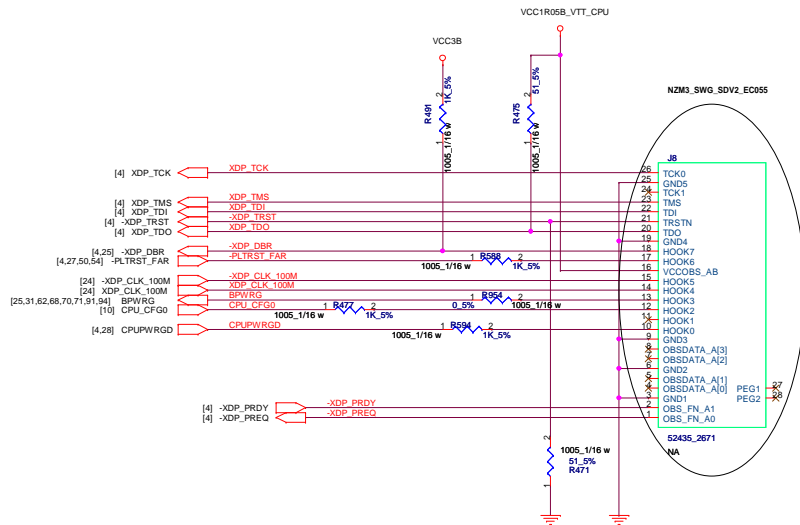












CNV\_EC062

TABLE NOTE: J8 "ASM" FOR SDV1 ONLY.

SIGNAL	REF DES	ENABLE	DISABLE
TDO	R475	ASM	NO ASM
TRST#	R471	ASM	ASM
DBRST#	R491	ASM	ASM
RESET#	R588	ASM	NO ASM
CFG0	R477	ASM	NO ASM
PWRGD	R594	ASM	NO ASM
BPWRG	R954	ASM	NO ASM
	J8	ASM	NO ASM

LOGIC

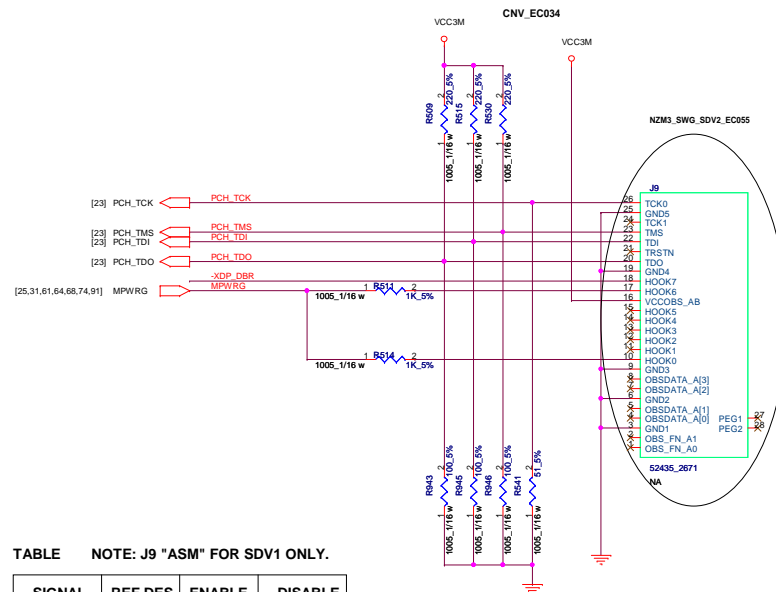
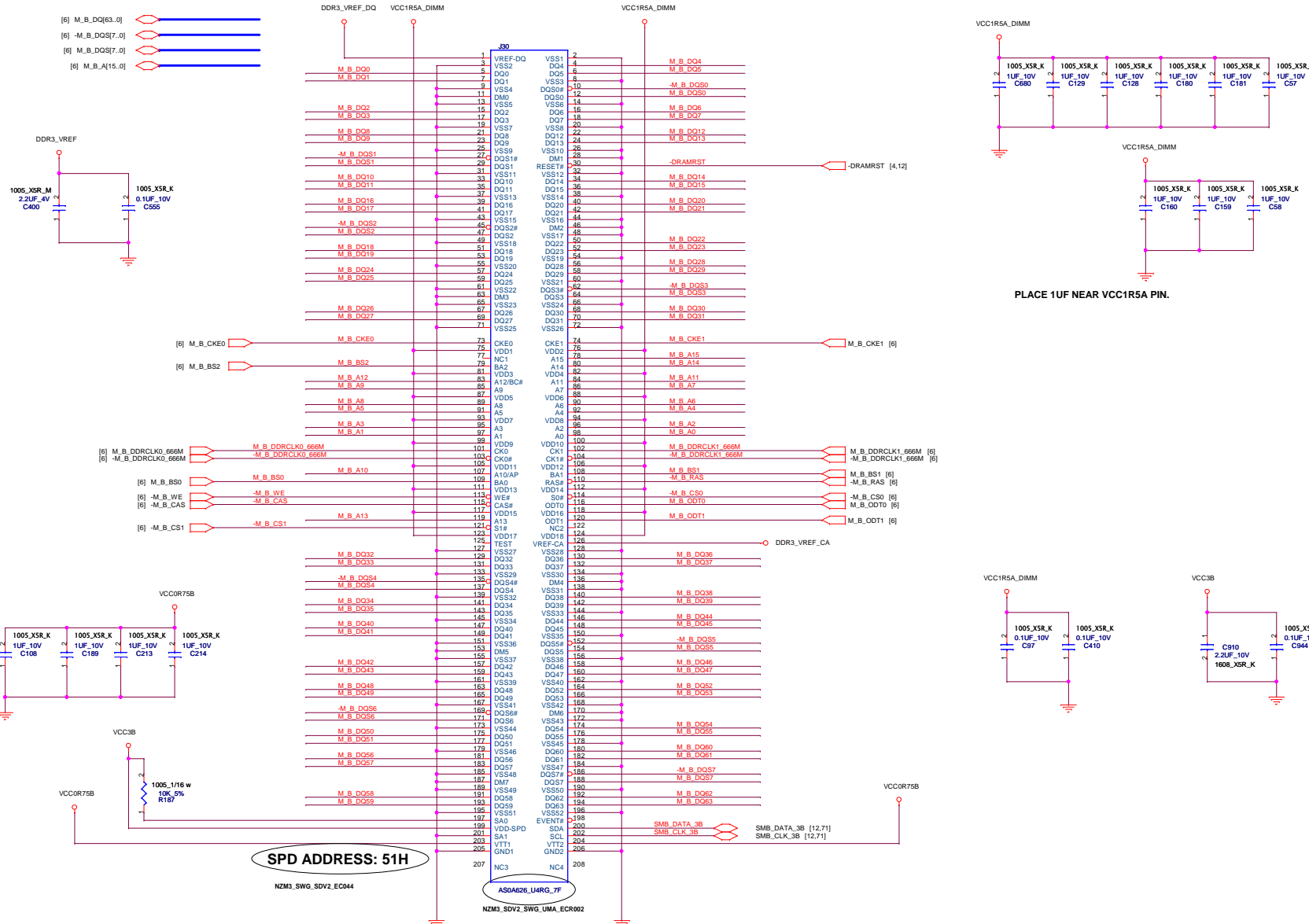


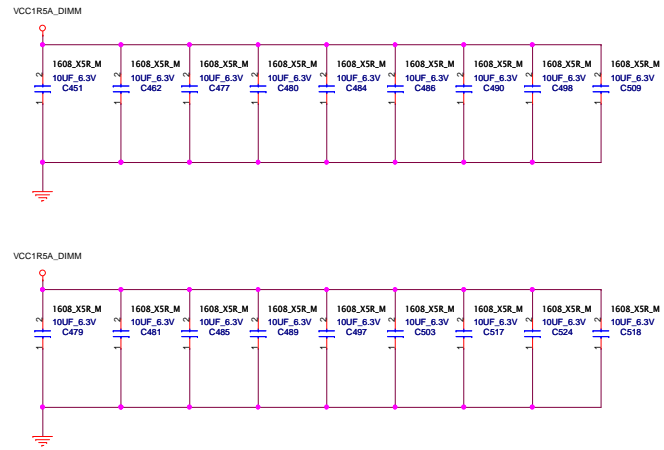
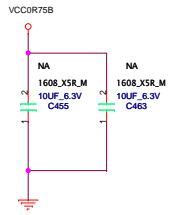
TABLE NOTE: J9 "ASM" FOR SDV1 ONLY.

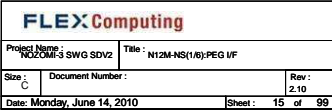
SIGNAL	REF DES	ENABLE	DISABLE
TDO	R509 R943	200 100	NO ASM NO ASM
TMS	R530 R946	220 100	NO ASM NO ASM
TDI	R515 R945	220 100	NO ASM NO ASM
TCK	R541	51	51
MPWRG	R511 R514	ASM ASM	NO ASM NO ASM
	J9	ASM	NO ASM

LOGIC





















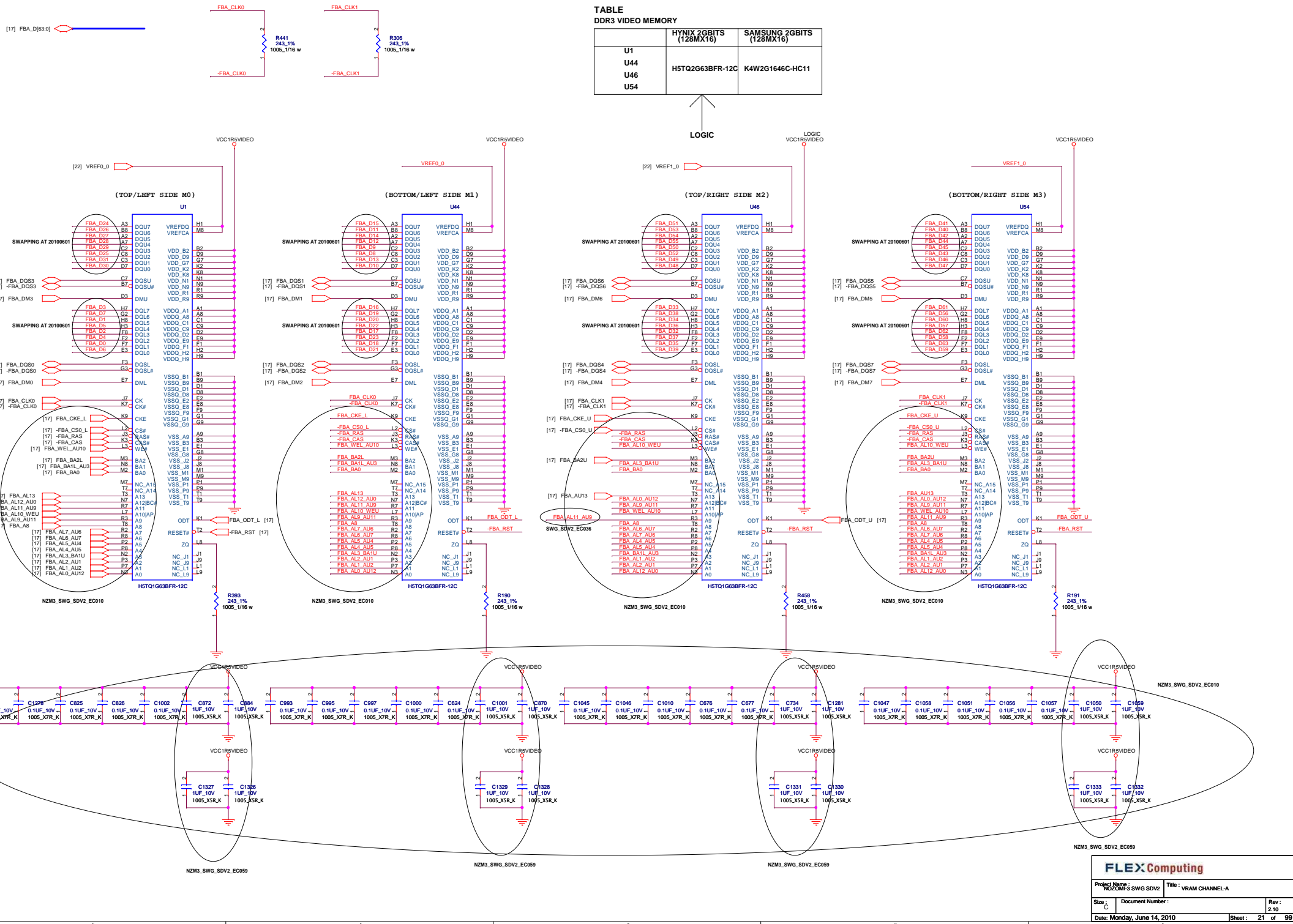
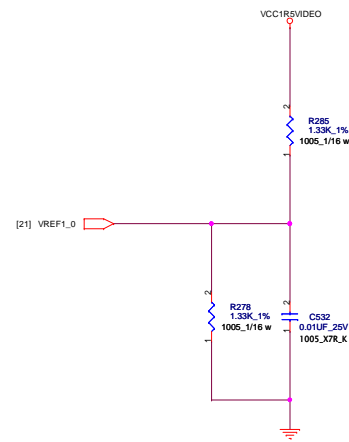
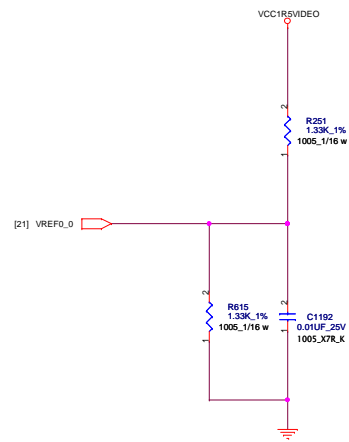


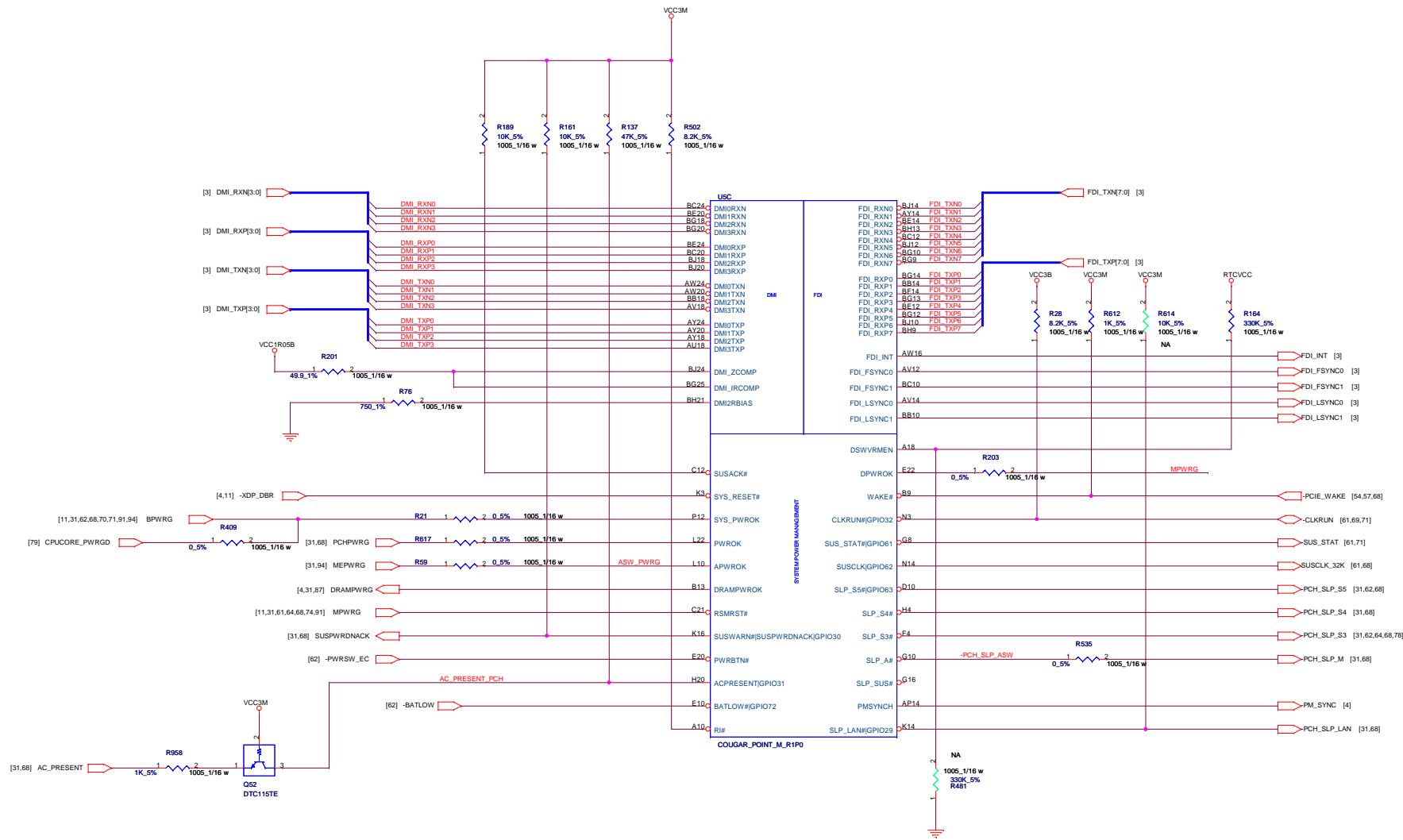
TABLE DDR3 VIDEO MEMORY		
	HYNIX 2GBITS (128MX16)	SAMSUNG 2GBITS (128MX16)
U1		
U44	H5TQ2G63BFR-12C	K4W2G1646C-HC11
U46		
U54		



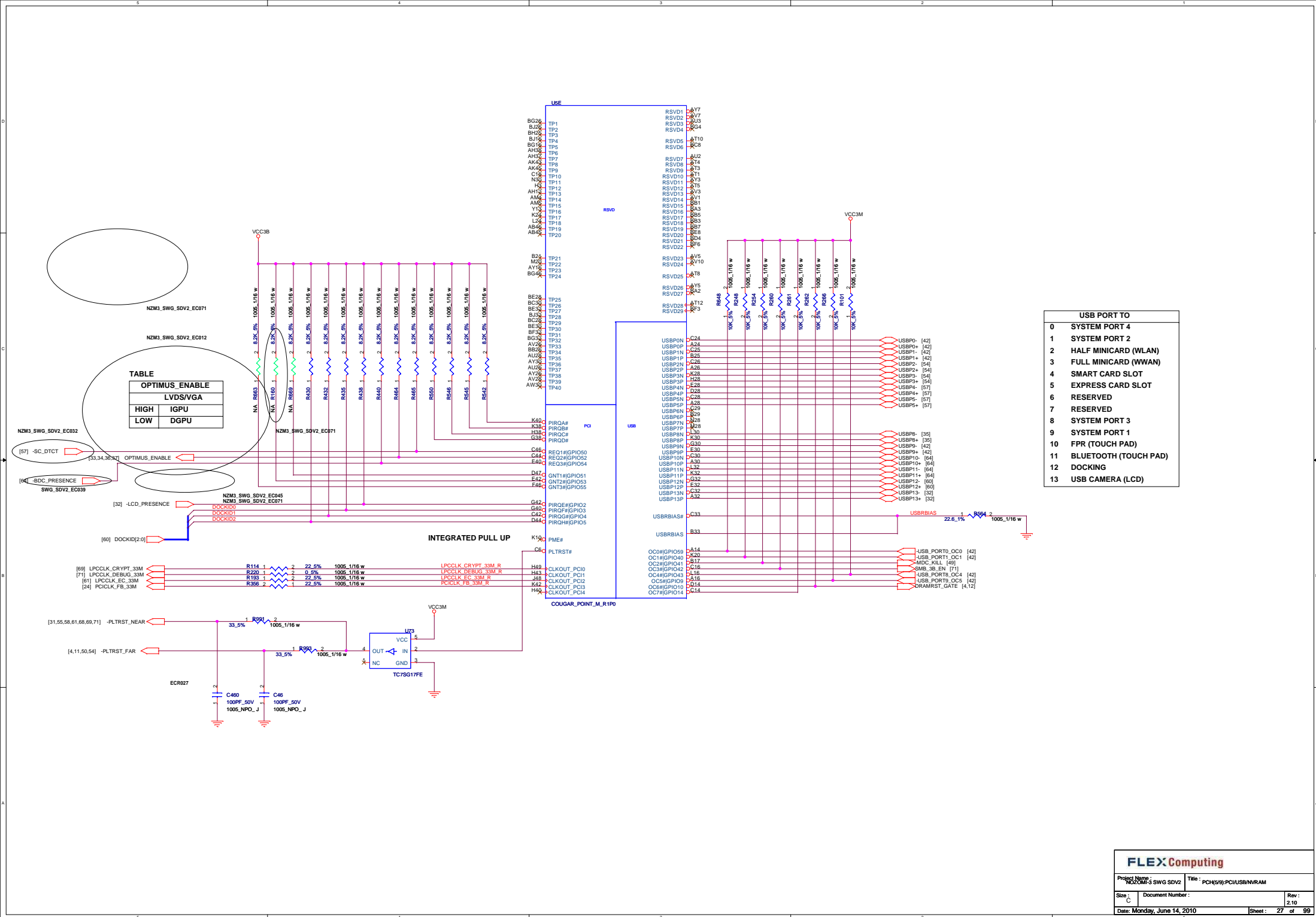






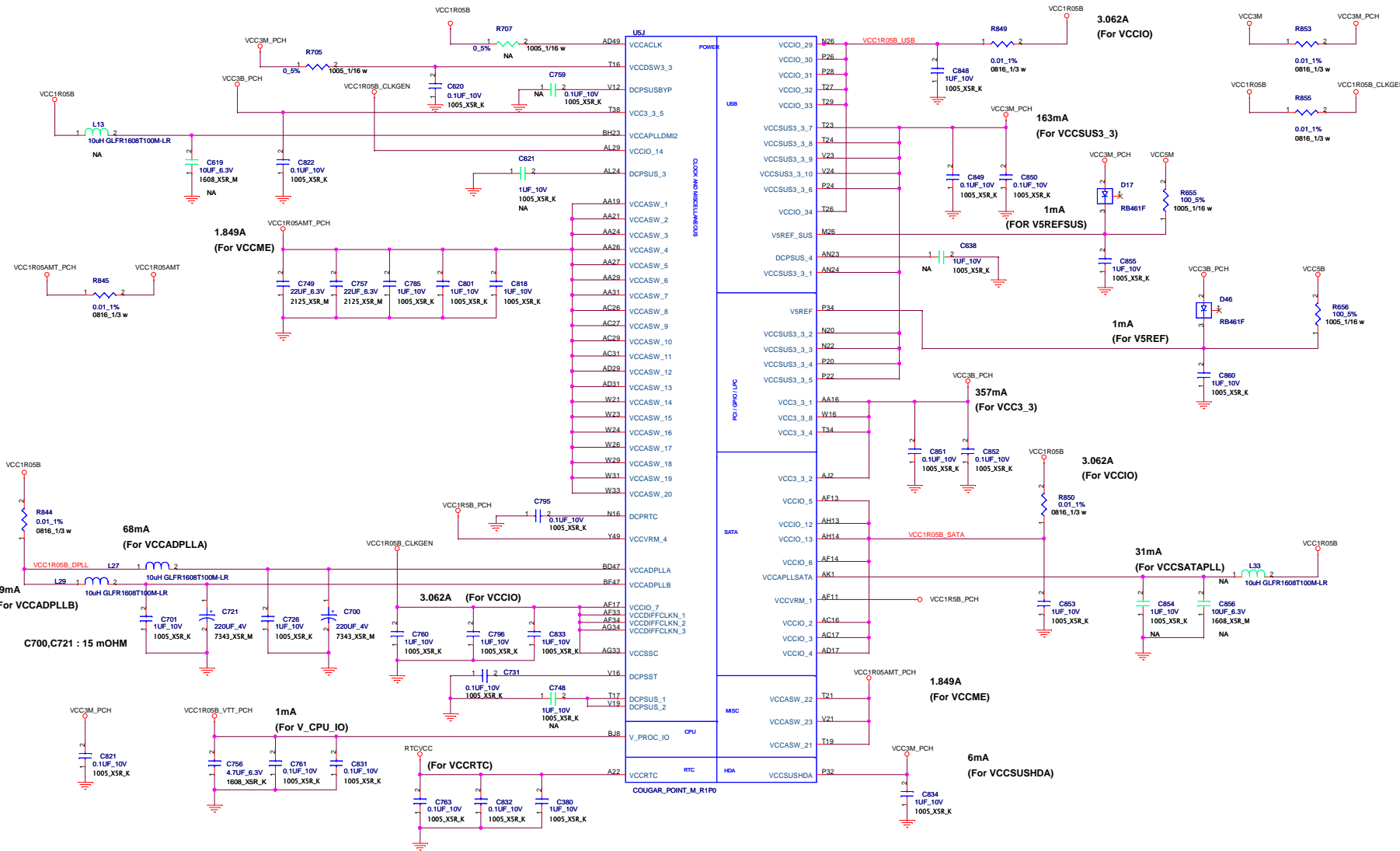




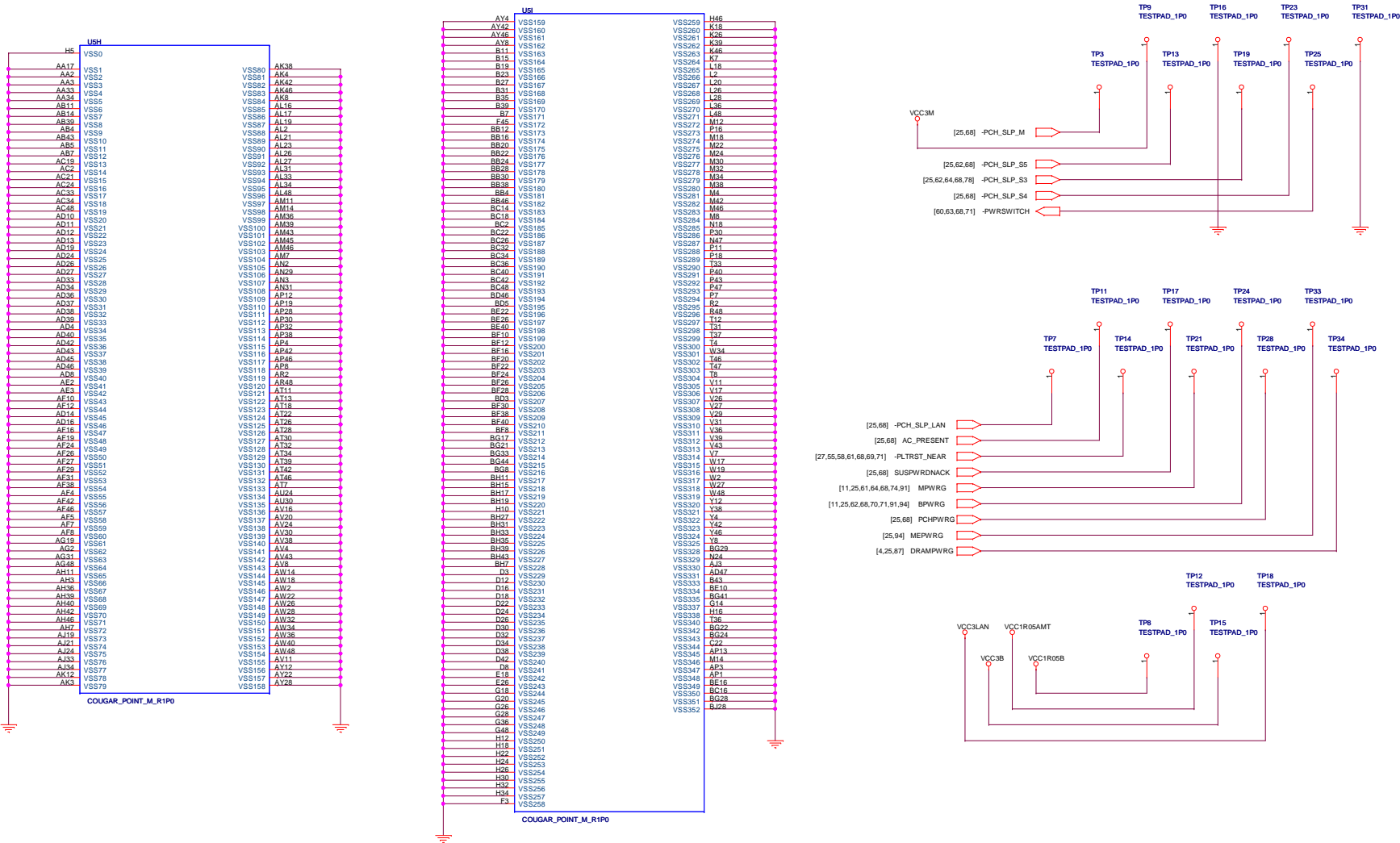


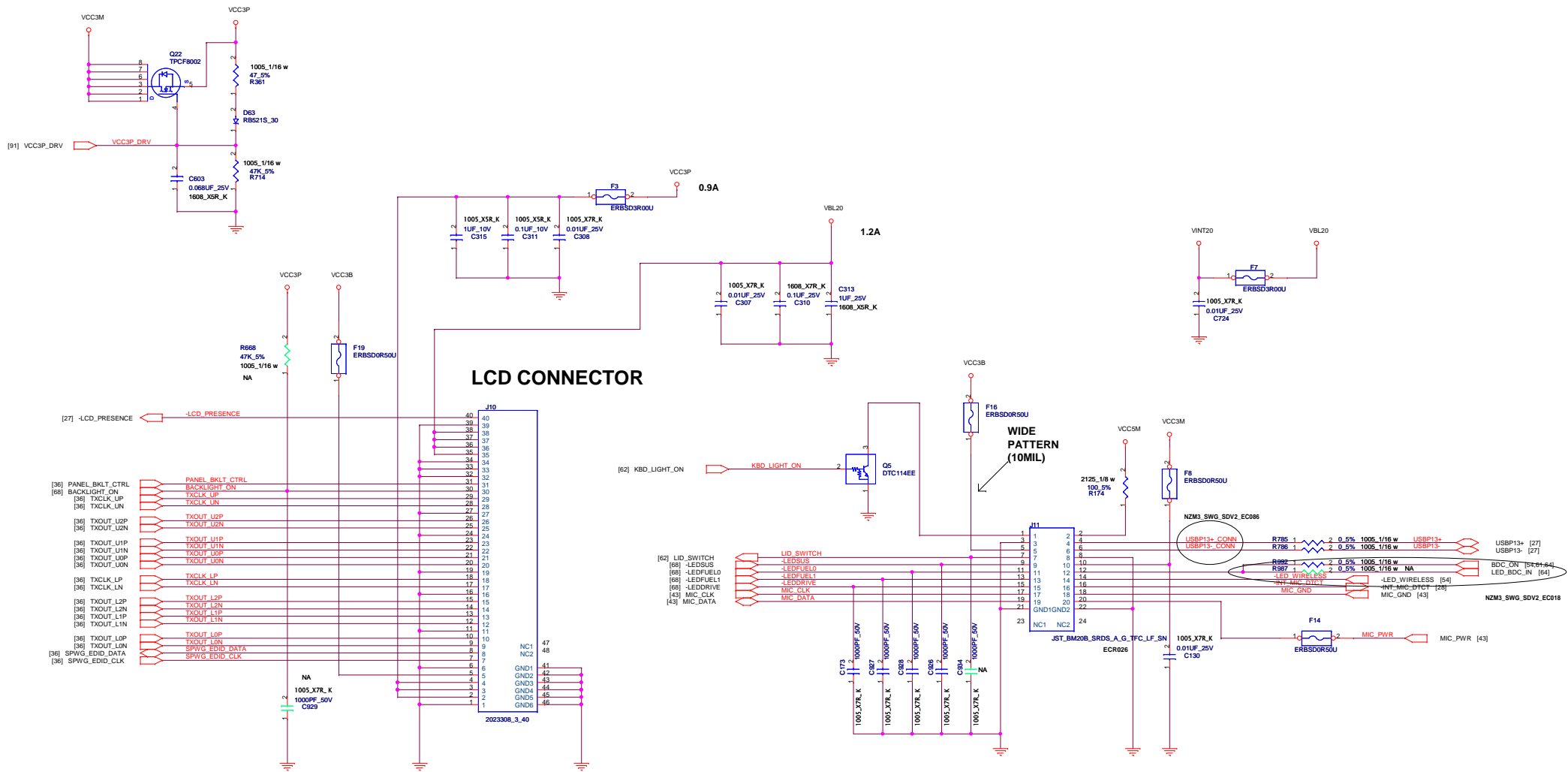




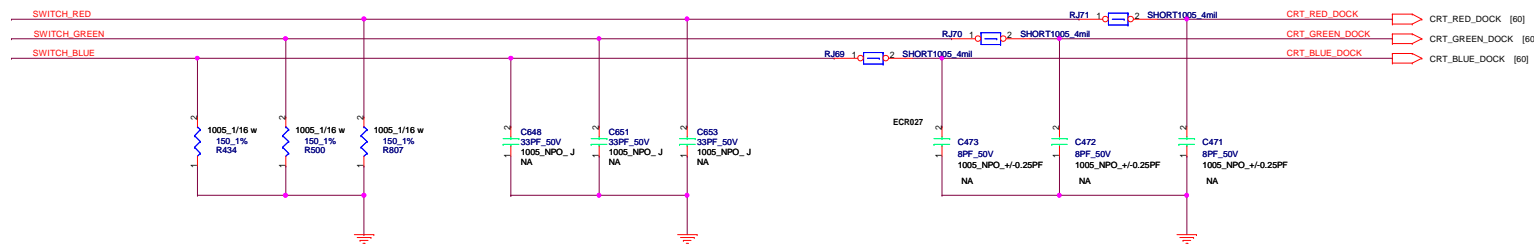
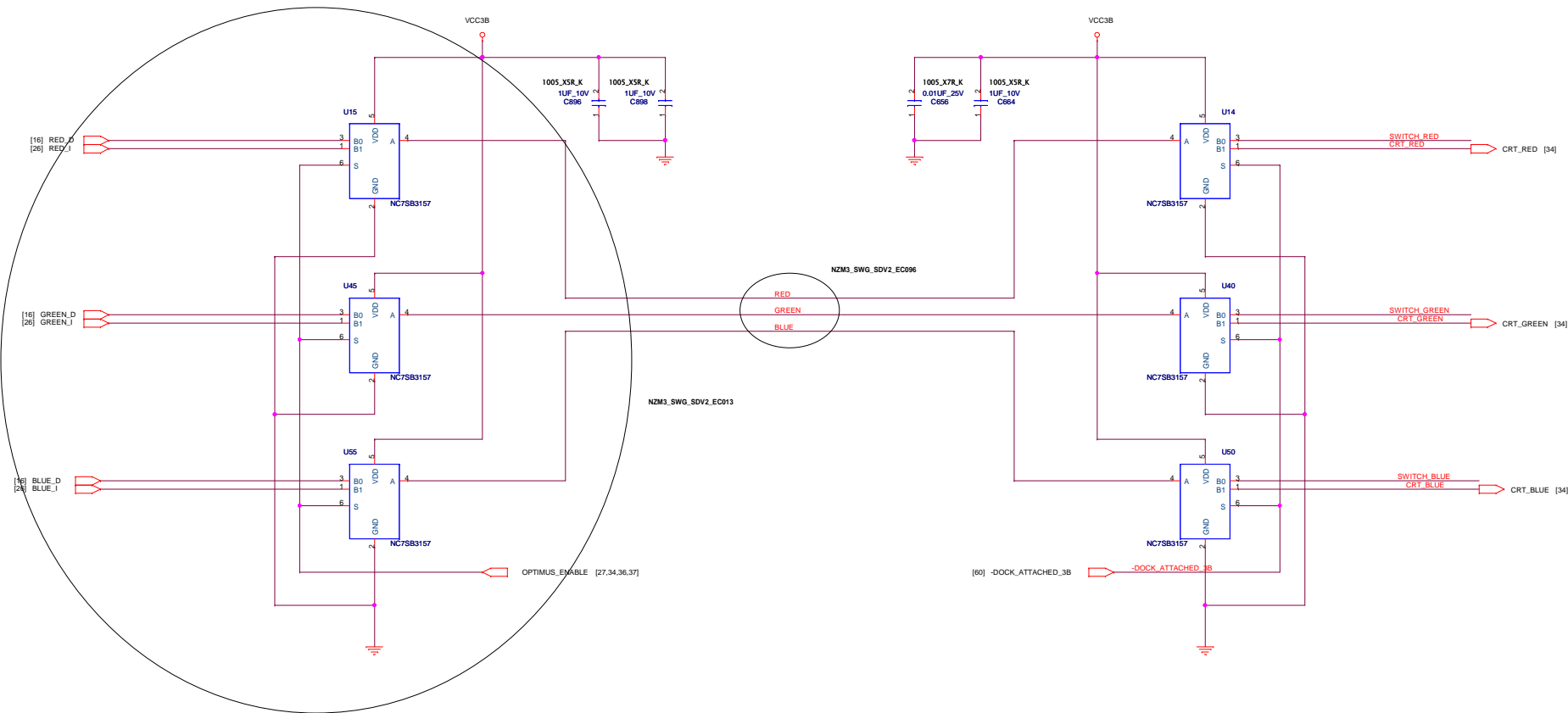


TEST PAD FOR METS/APS



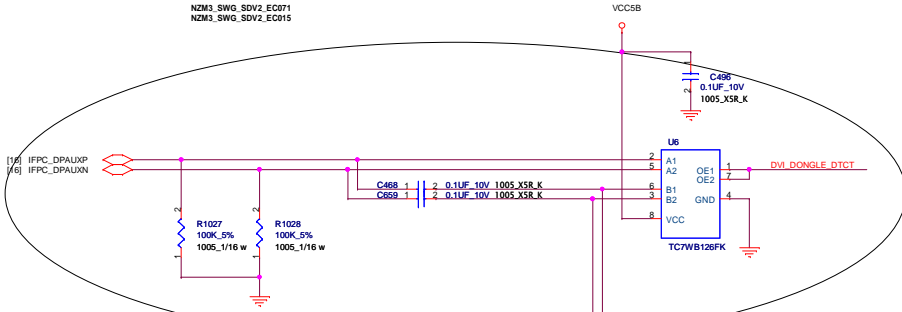




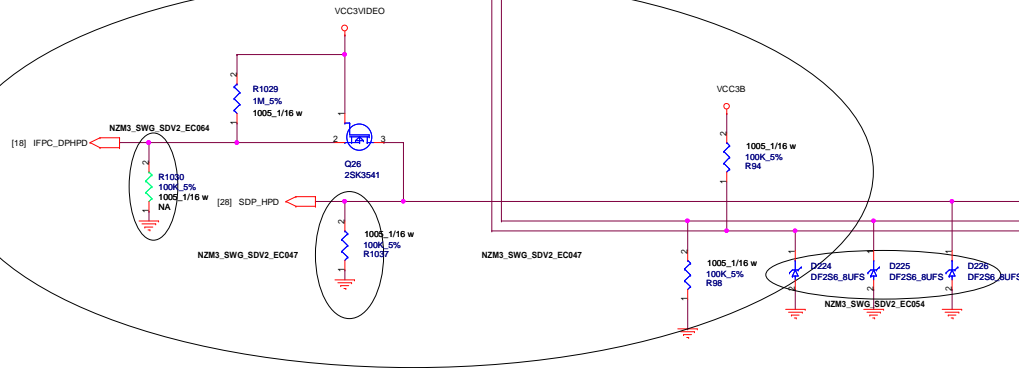




NZM3\_SWG\_SDV2\_EC071  
NZM3\_SWG\_SDV2\_EC015

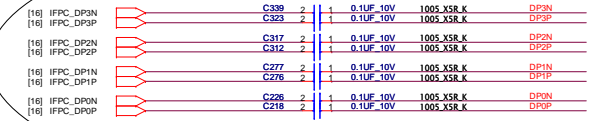


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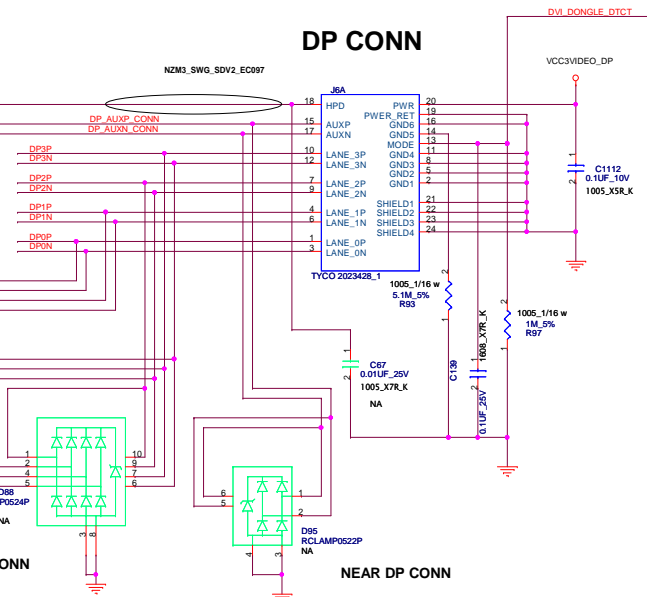
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NZM3\_SWG\_SDV2\_EC047  
NZM3\_SWG\_SDV2\_EC071

FOR SYSTEM DP NEAR DP CONN



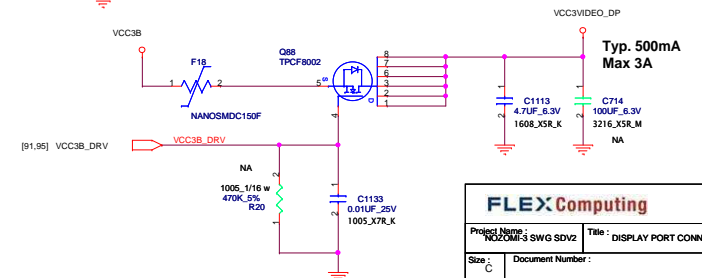
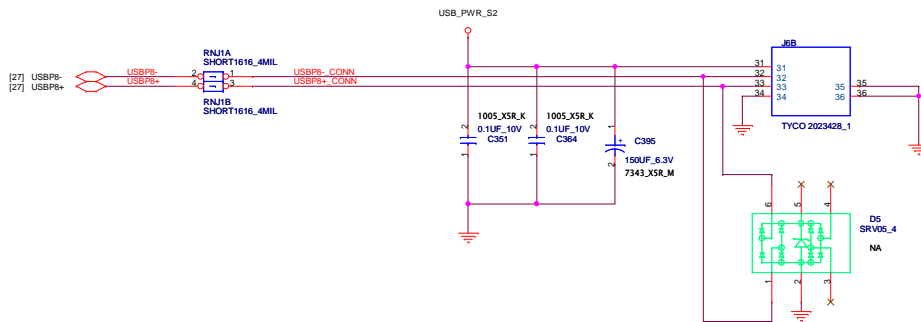
DP CONN

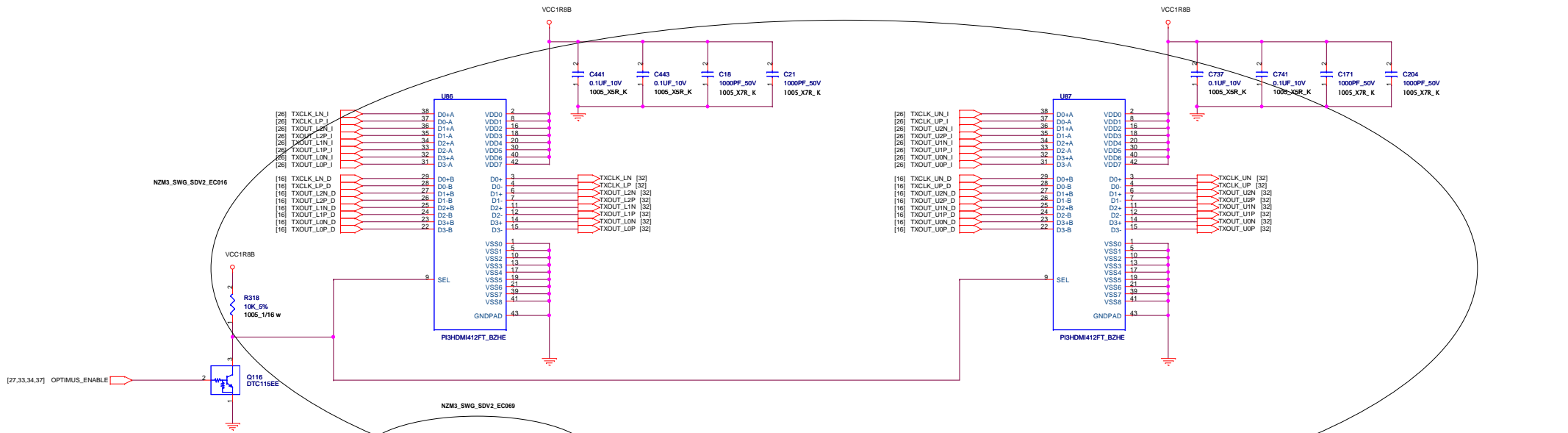
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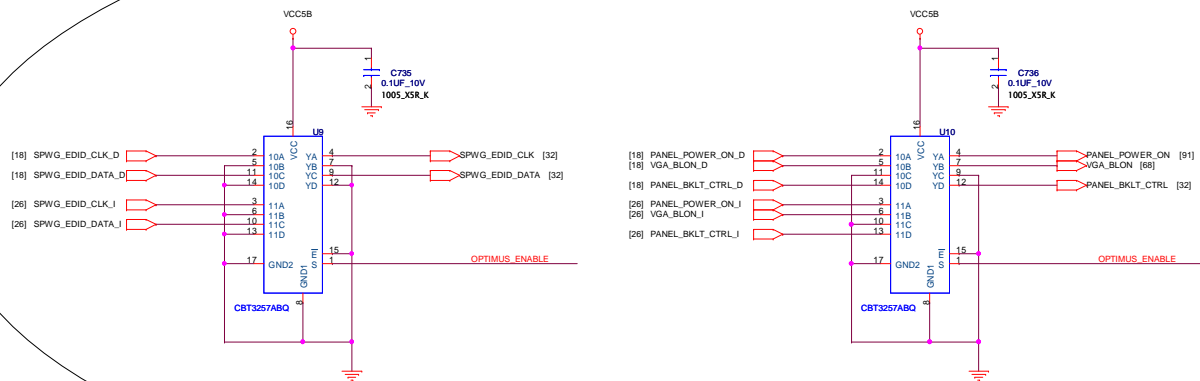
NEAR DP CONN

NEAR DP CONN





NZM3\_SWG\_SDV2\_EC016



NZM3\_SWG\_SDV2\_EC017



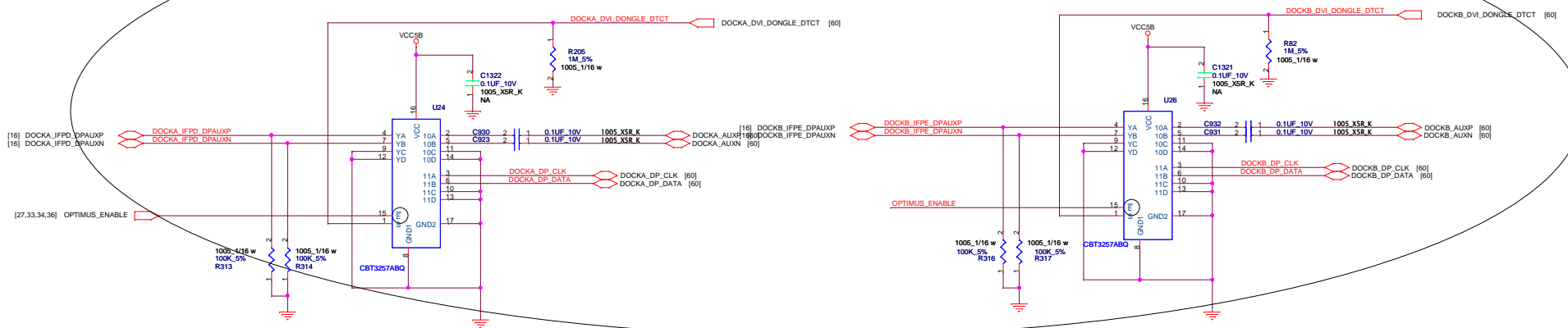
NEAR DOCK CONN

[16] IFPD_DP3N	C841	2	1	0.1UF_10V	1005_XSR_K	DOCKA_DP3N	[60]
[16] IFPD_DP3P	C843	2	1	0.1UF_10V	1005_XSR_K	DOCKA_DP3P	[60]
[16] IFPD_DP2N	C883	2	1	0.1UF_10V	1005_XSR_K	DOCKA_DP2N	[60]
[16] IFPD_DP2P	C887	2	1	0.1UF_10V	1005_XSR_K	DOCKA_DP2P	[60]
[16] IFPD_DP1N	C901	2	1	0.1UF_10V	1005_XSR_K	DOCKA_DP1N	[60]
[16] IFPD_DP1P	C900	2	1	0.1UF_10V	1005_XSR_K	DOCKA_DP1P	[60]
[16] IFPD_DP0N	C903	2	1	0.1UF_10V	1005_XSR_K	DOCKA_DP0N	[60]
[16] IFPD_DP0P	C902	2	1	0.1UF_10V	1005_XSR_K	DOCKA_DP0P	[60]

NEAR DOCK CONN

[16] IFPE_DP3N	C904	2	1	0.1UF_10V	1005_XSR_K	DOCKB_DP3N	[60]
[16] IFPE_DP3P	C907	2	1	0.1UF_10V	1005_XSR_K	DOCKB_DP3P	[60]
[16] IFPE_DP2N	C909	2	1	0.1UF_10V	1005_XSR_K	DOCKB_DP2N	[60]
[16] IFPE_DP2P	C906	2	1	0.1UF_10V	1005_XSR_K	DOCKB_DP2P	[60]
[16] IFPE_DP1N	C922	2	1	0.1UF_10V	1005_XSR_K	DOCKB_DP1N	[60]
[16] IFPE_DP1P	C920	2	1	0.1UF_10V	1005_XSR_K	DOCKB_DP1P	[60]
[16] IFPE_DP0N	C919	2	1	0.1UF_10V	1005_XSR_K	DOCKB_DP0N	[60]
[16] IFPE_DP0P	C918	2	1	0.1UF_10V	1005_XSR_K	DOCKB_DP0P	[60]

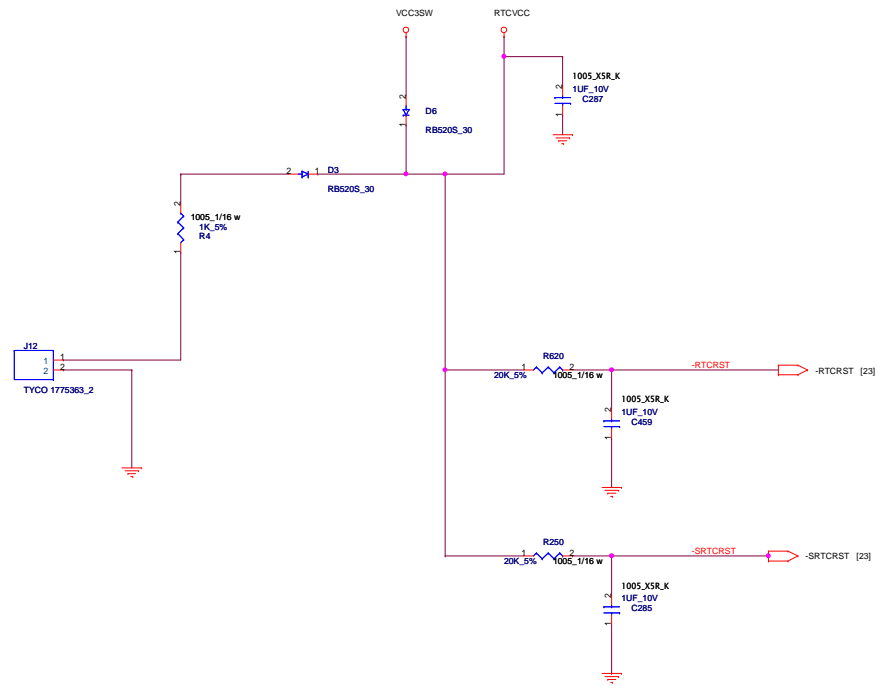
NZM3\_SWG\_SDV2\_EC017

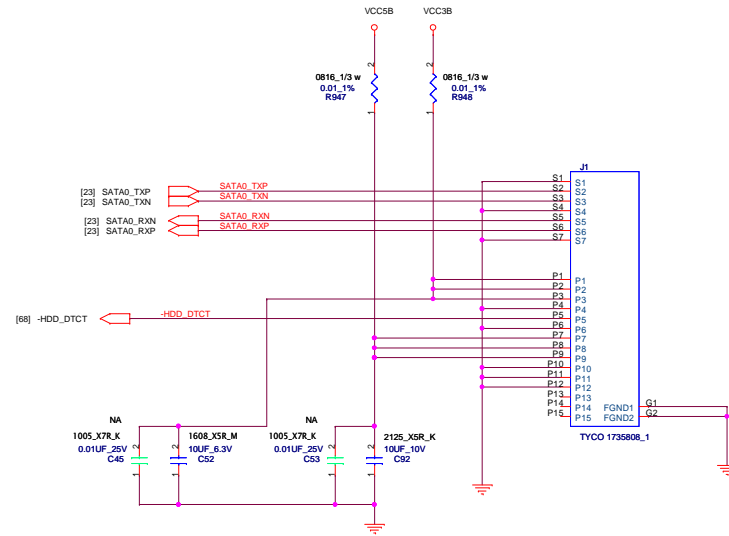


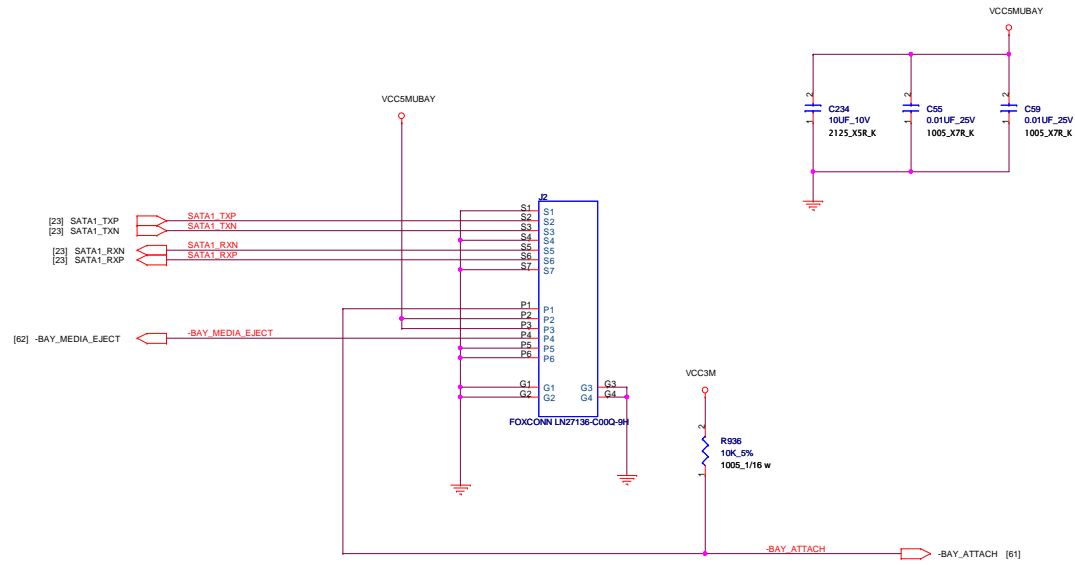
**FLEX** Computing

Project Name: NZM3\_SWG\_SDV2 Title: DISPLAY PORT MUX

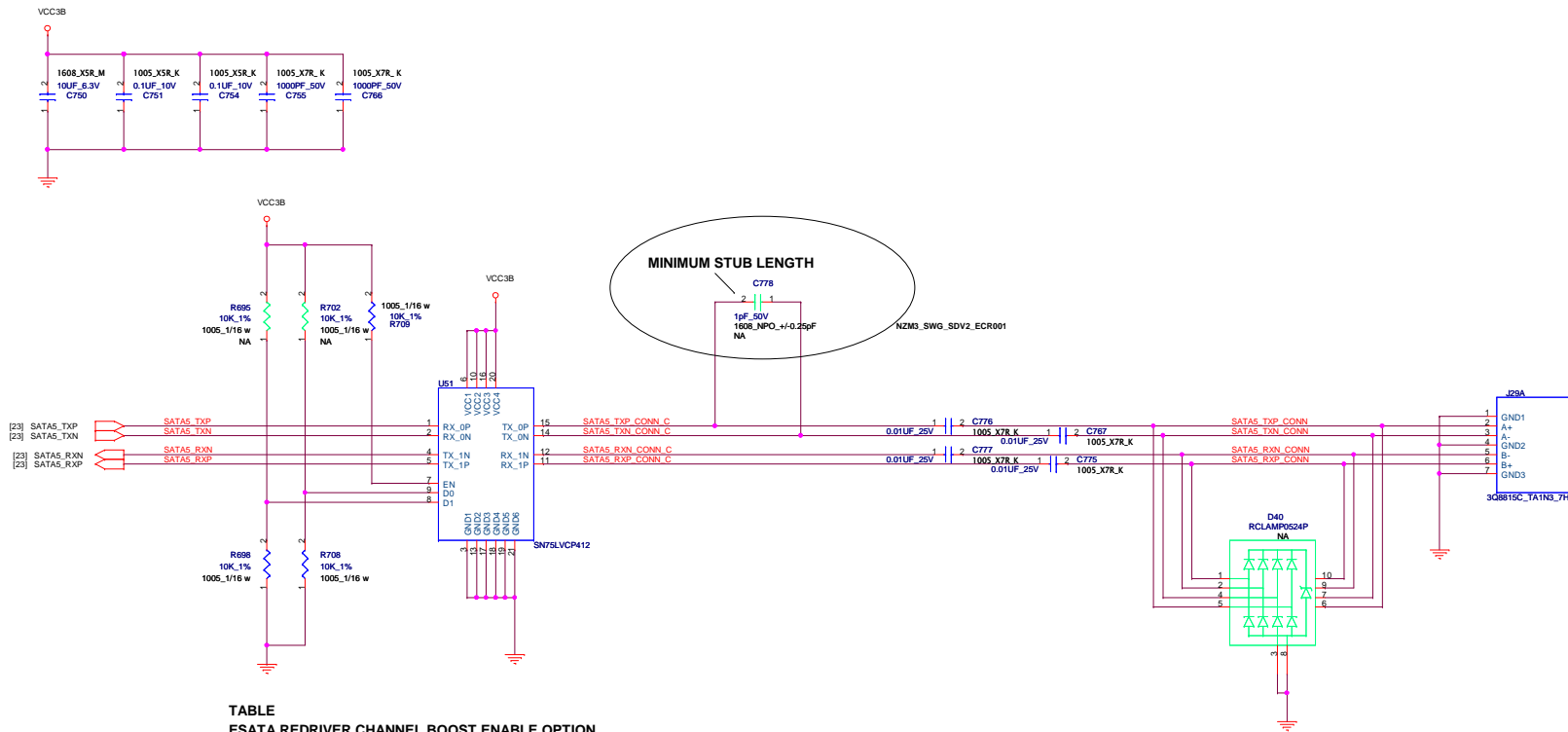
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Date: Monday, June 14, 2010 Sheet: 37 of 99











**TABLE**  
**ESATA REDRIVER CHANNEL BOOST ENABLE OPTION**

EN	D0	D1	CH-0	CH-1
0	X	X	STANDBY	STANDBY
1	0	0	STANDARD	STANDARD
1	1	0	BOOST	STANDARD
1	0	1	STANDARD	BOOST
1	1	1	BOOST	BOOST

← LOGIC

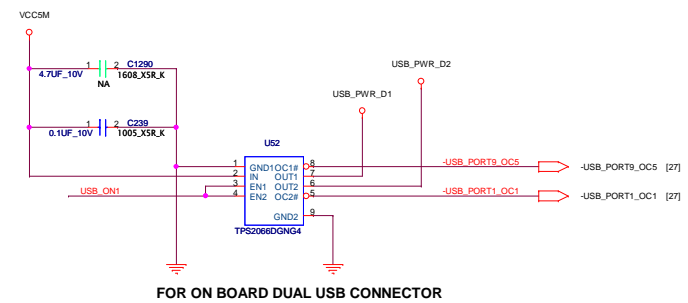
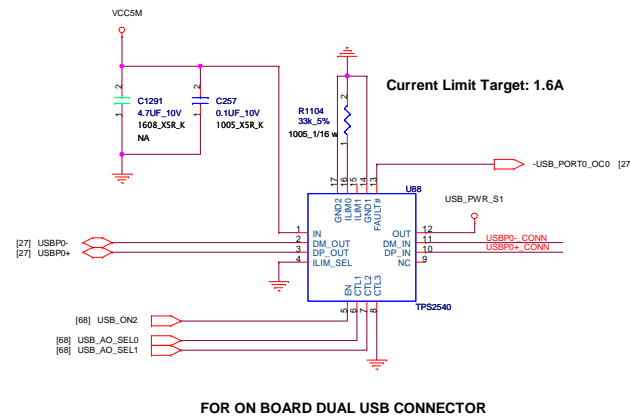
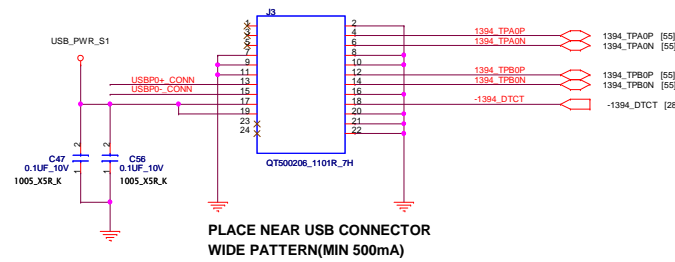
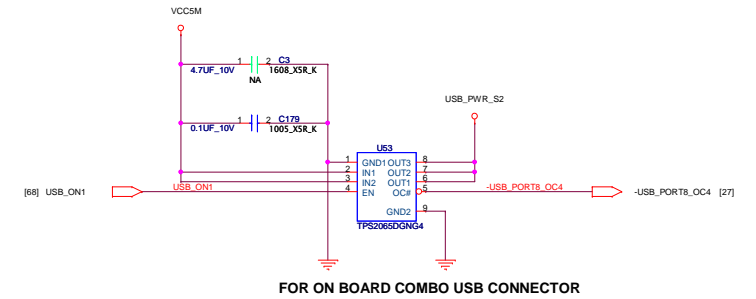
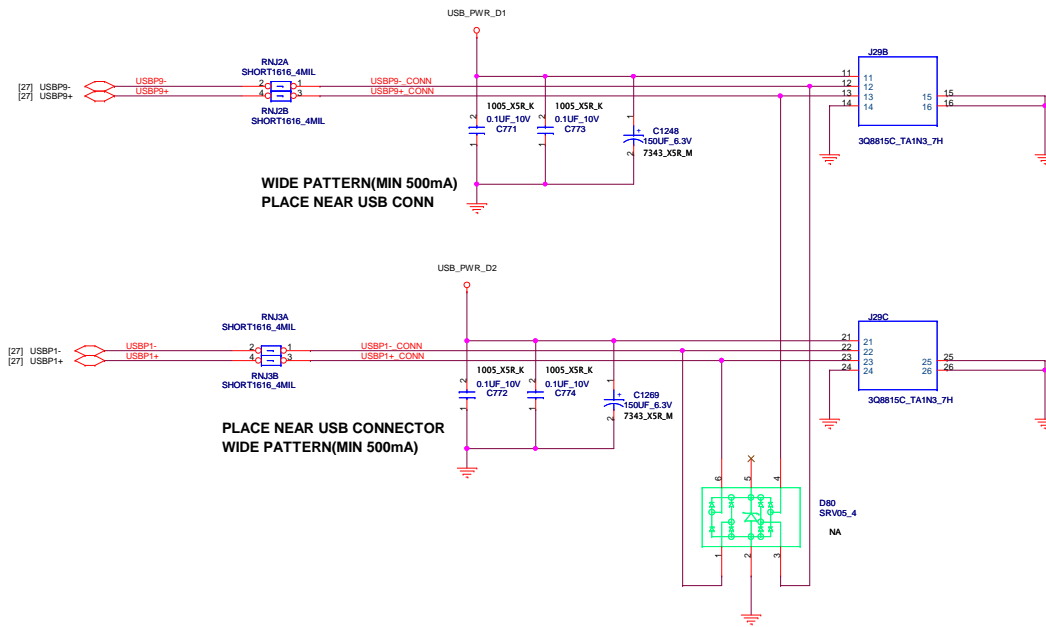
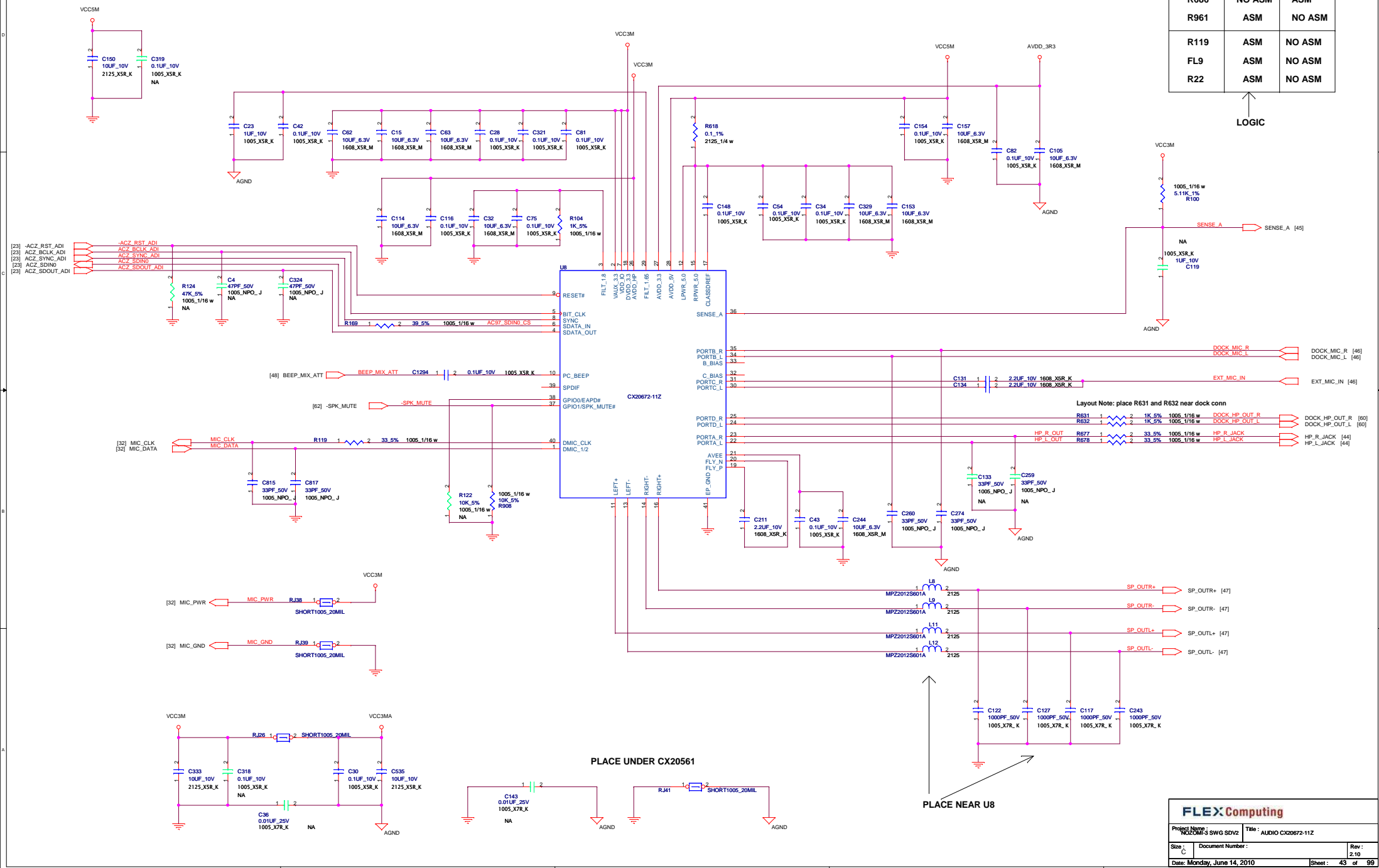
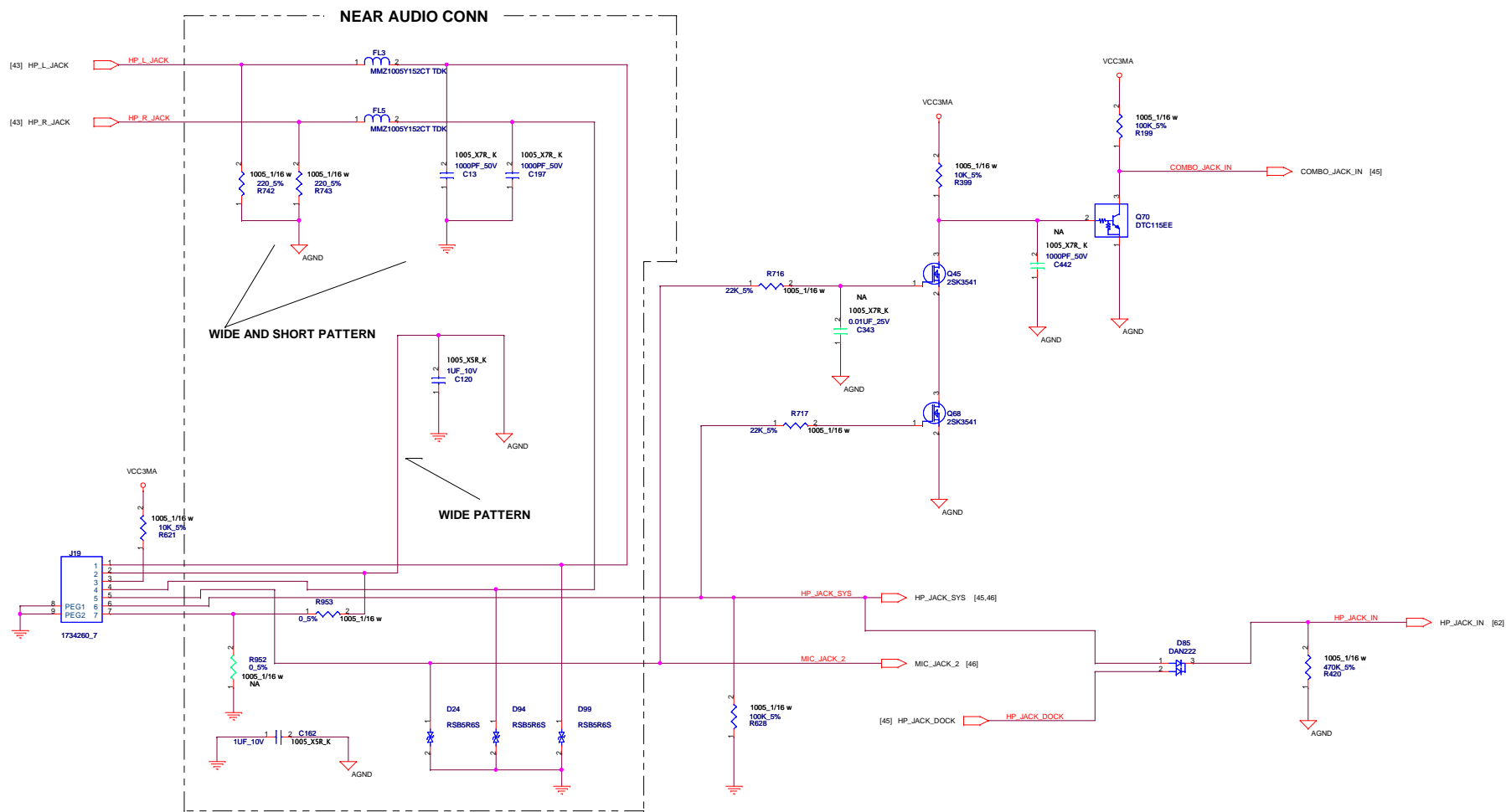


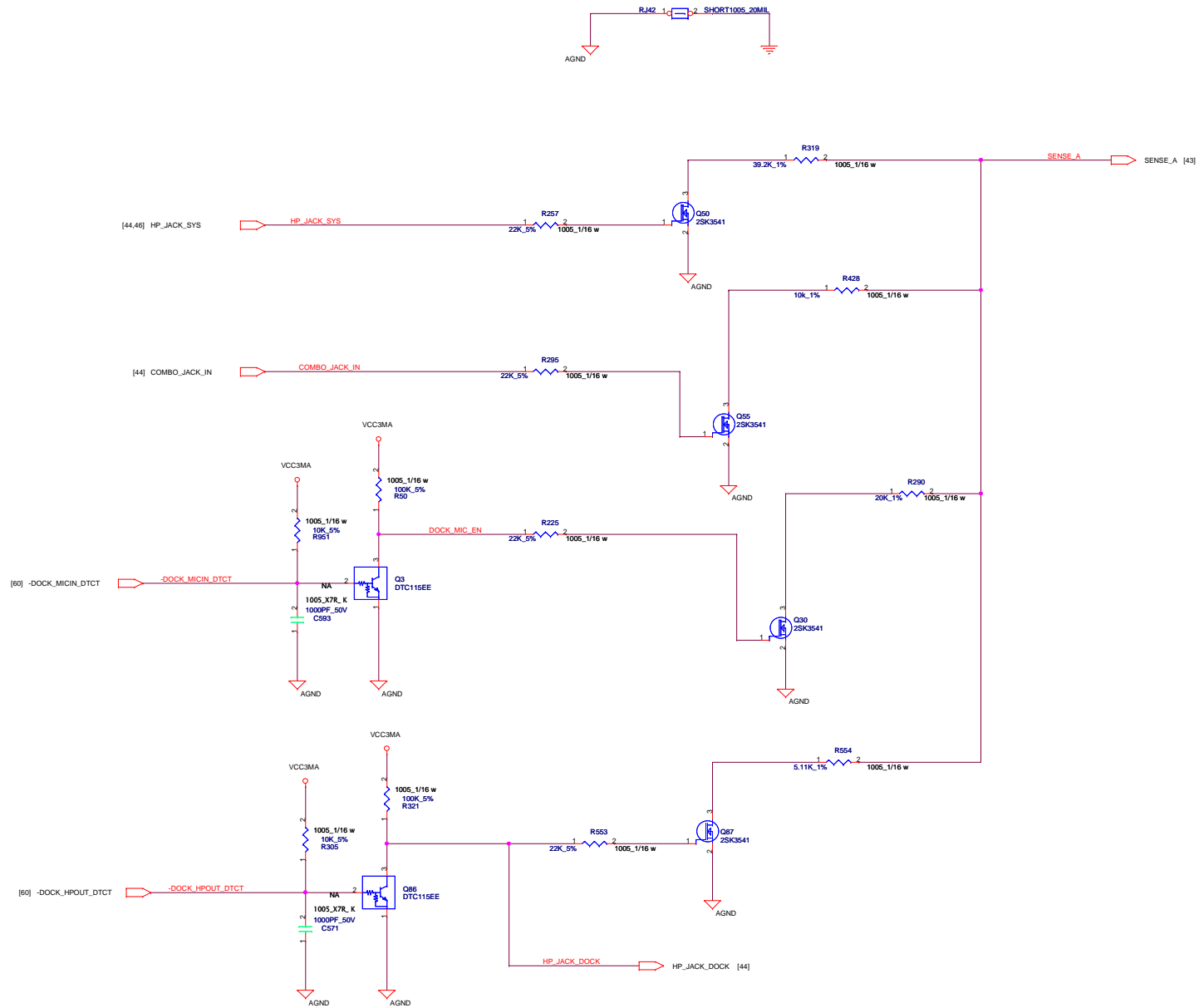
TABLE MIC HW ENABLE/DISABLE

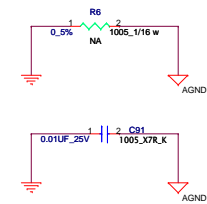
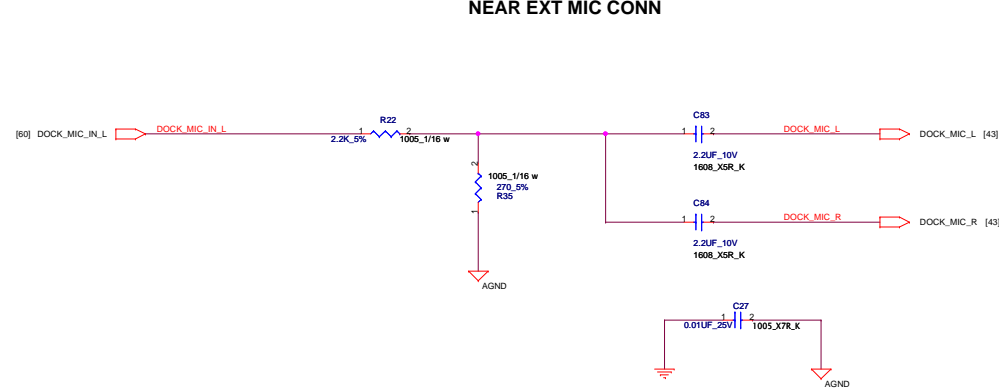
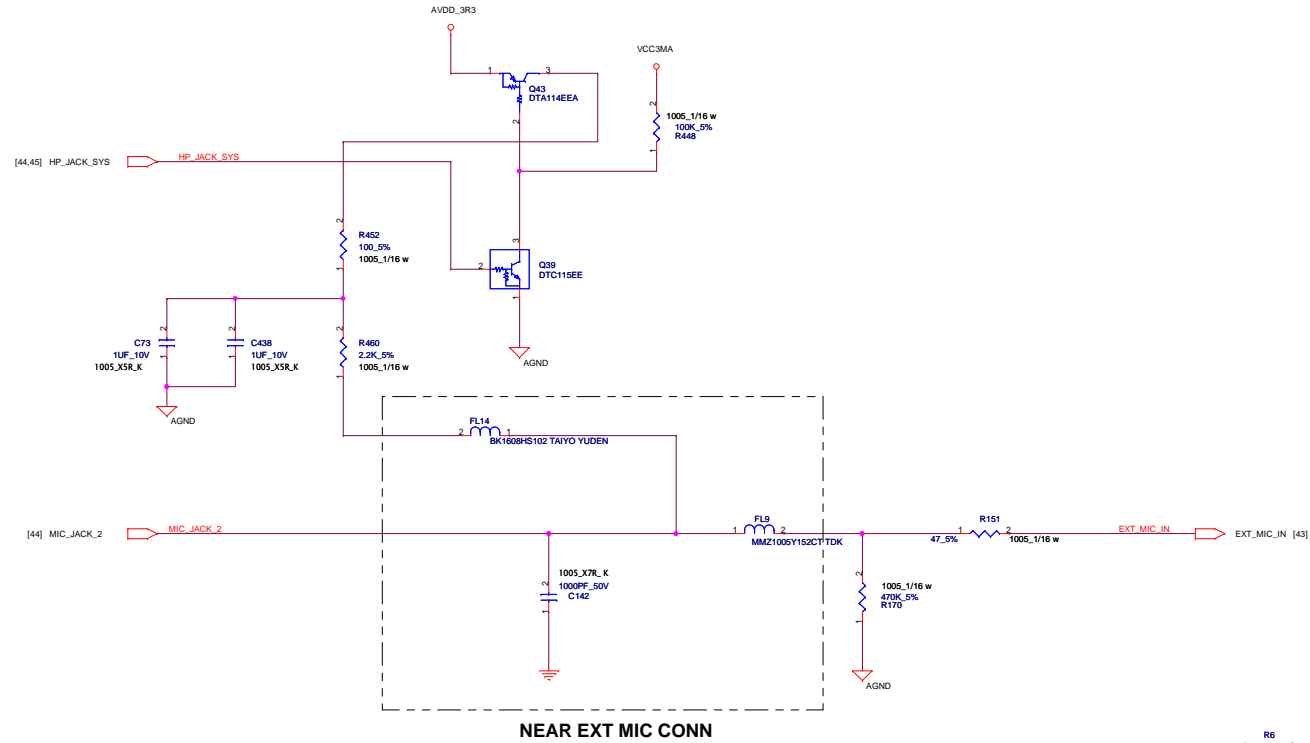
	ENABLE	DISABLE
R686	NO ASM	ASM
R961	ASM	NO ASM
R119	ASM	NO ASM
FL9	ASM	NO ASM
R22	ASM	NO ASM

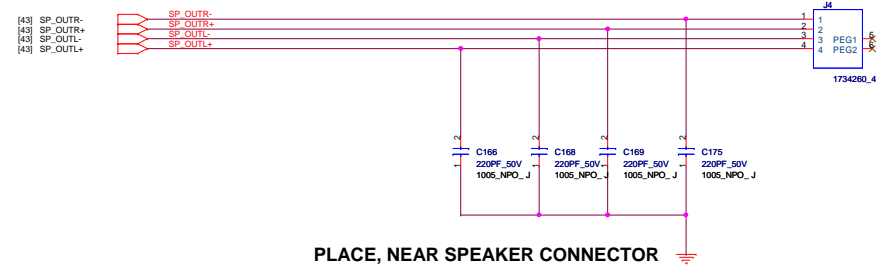
LOGIC

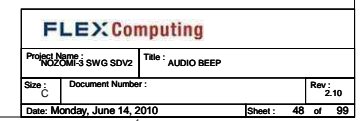




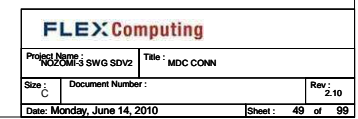


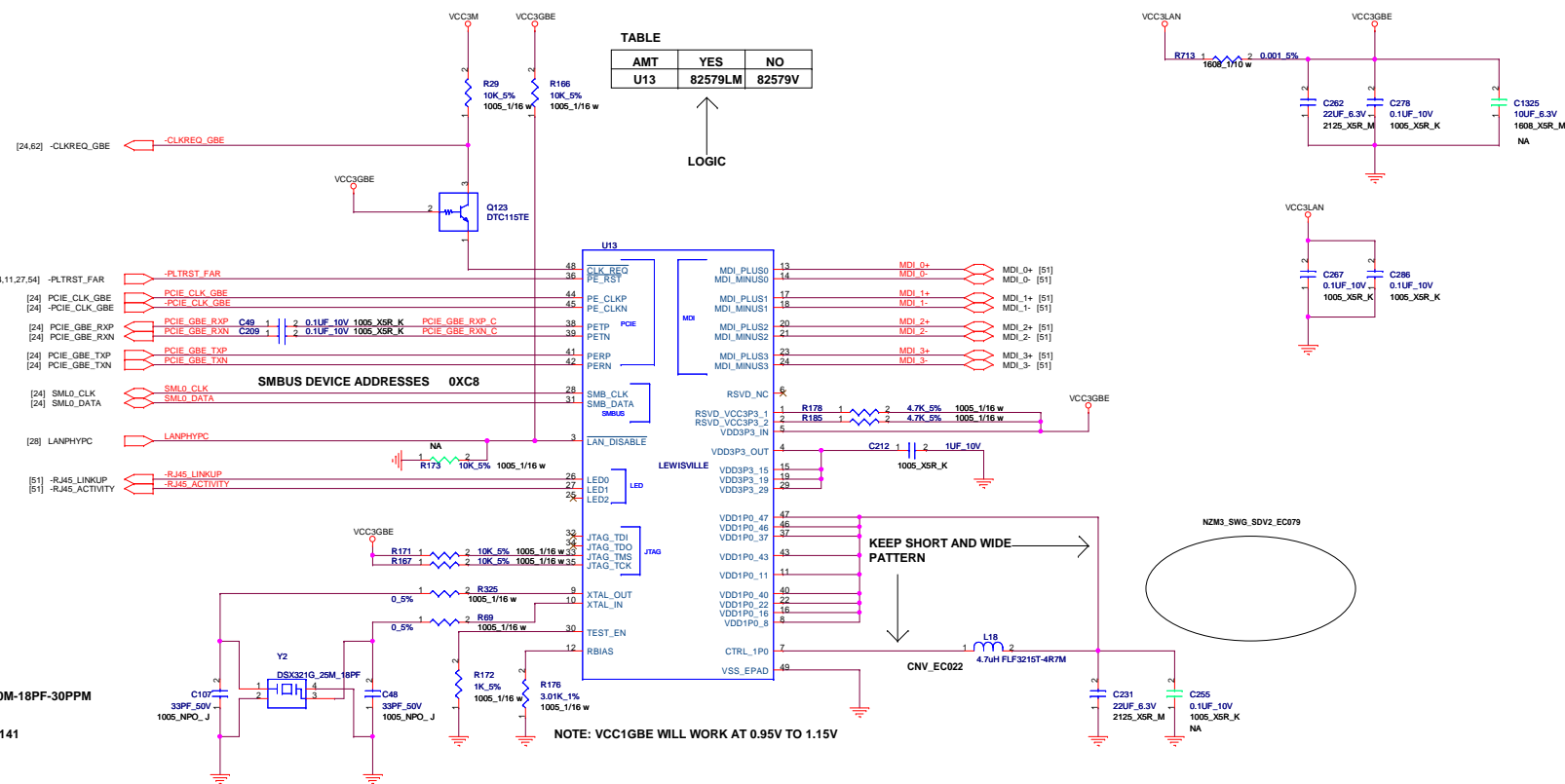




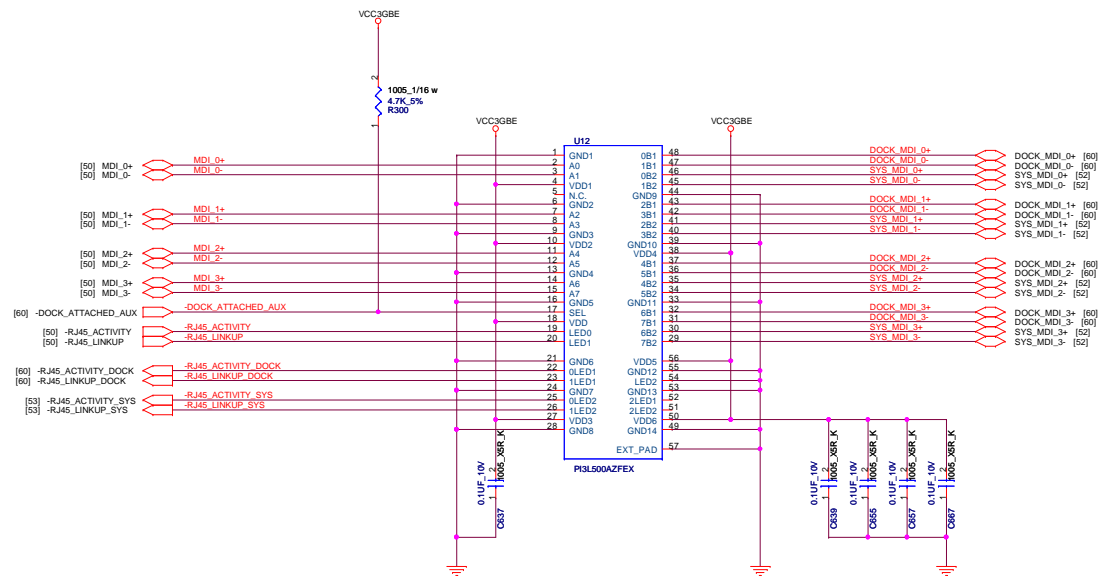






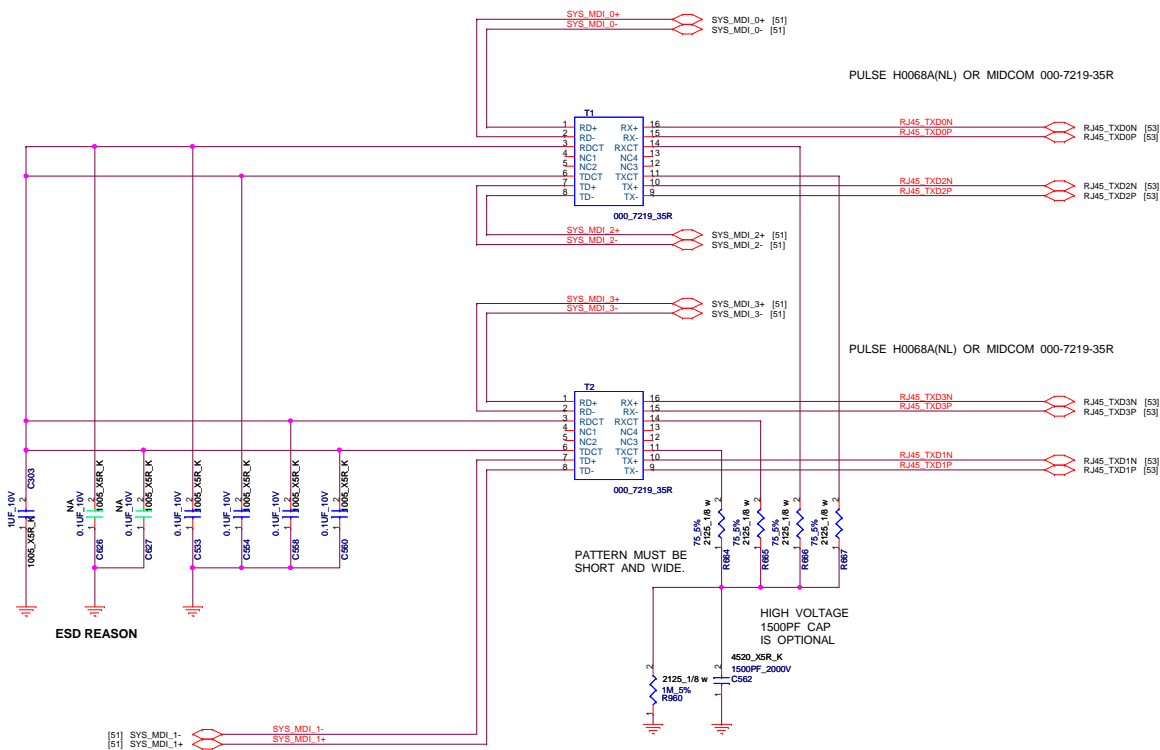


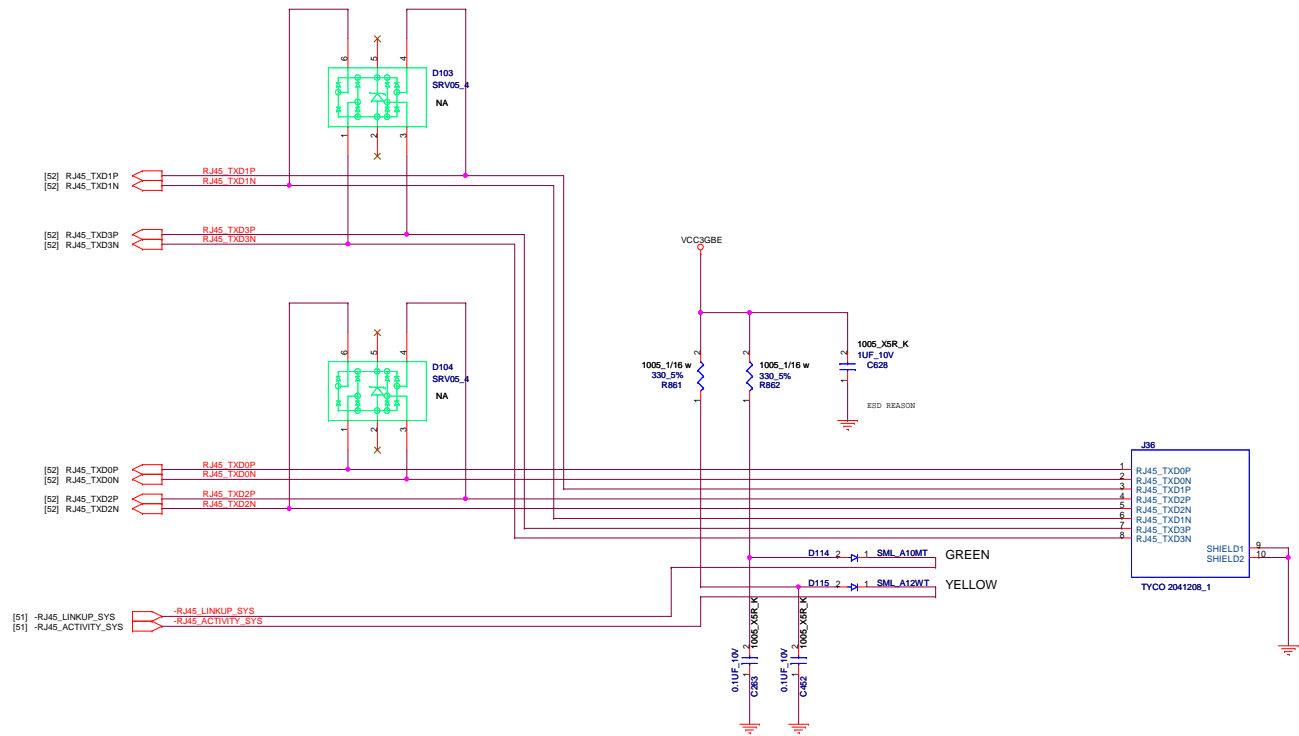
P/N 41U6141  
 KDS DSX321G-25.000M-18PF-30PPM  
 TXC 7V25020001  
 RIVER FCX-04-25MJ90141



THE WIDTH OF THESE TRACE SHOULD  
BE WIDER THAN 35MIL TO PREVENT  
VOLTAGE DROP.

C303  
SHOULD BE PLACED AS CLOSE  
TO MAGNETICS AS POSSIBLE.





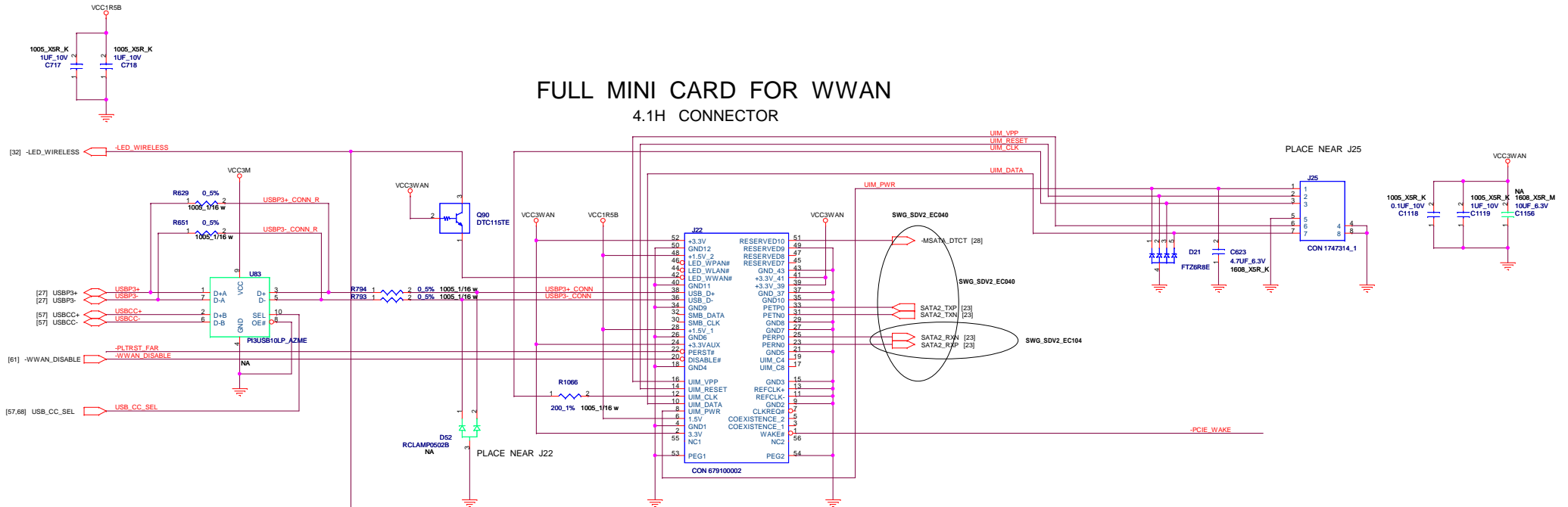
**FLEX** Computing

Project Name : RJ45 CONNECTOR

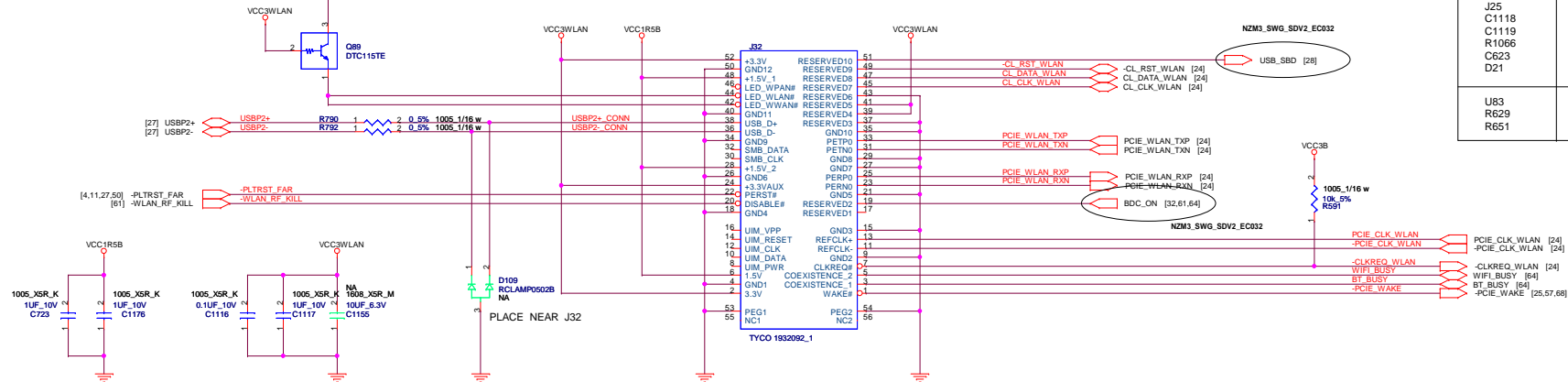
Size : C Document Number : Rev : 2.10

Date: Monday, June 14, 2010 Sheet : 53 of 99

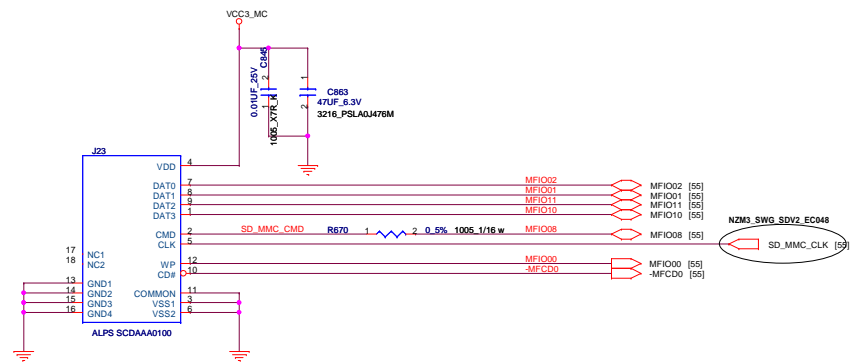
# FULL MINI CARD FOR WWAN 4.1H CONNECTOR



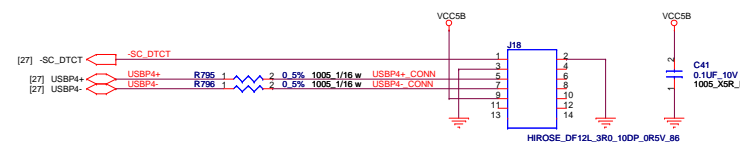
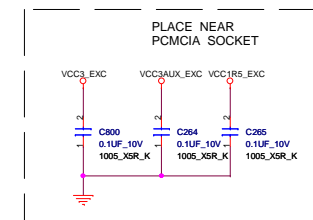
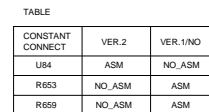
# FULL MINI CARD FOR WLAN 7.0H CONNECTOR







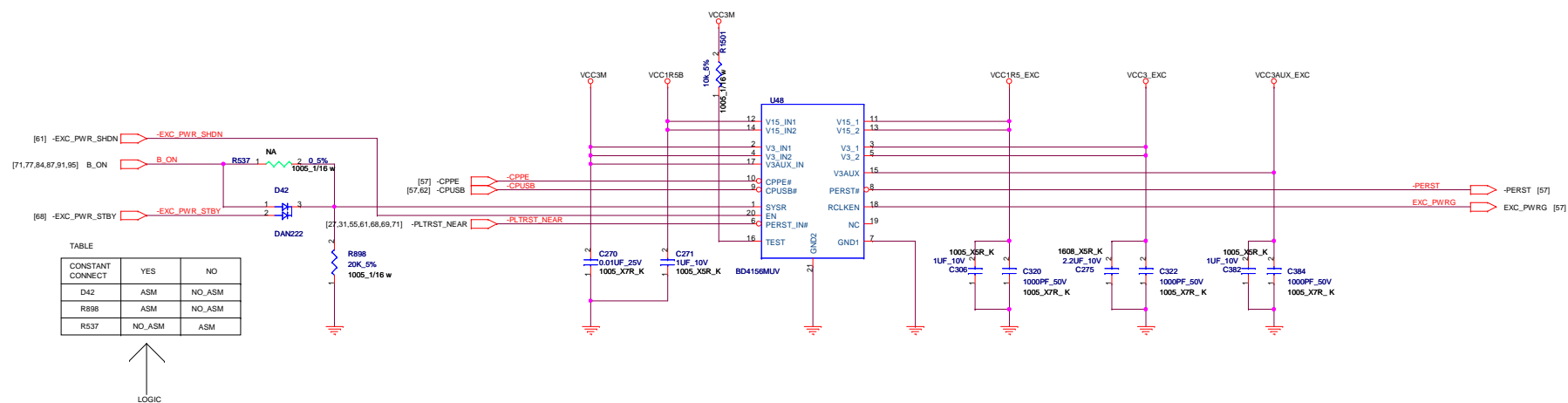




TABLE

CONSTANT CONNECT	VER.2/VER.1	NO
U48	BD4156MUV TPS2231MRGPR-3	TPS2231MRGPR BD4156MUV W83L351YG
R1501	ASM	NO_ASM

LOGIC



TABLE

CONSTANT CONNECT	YES	NO
D42	ASM	NO_ASM
R898	ASM	NO_ASM
R537	NO_ASM	ASM

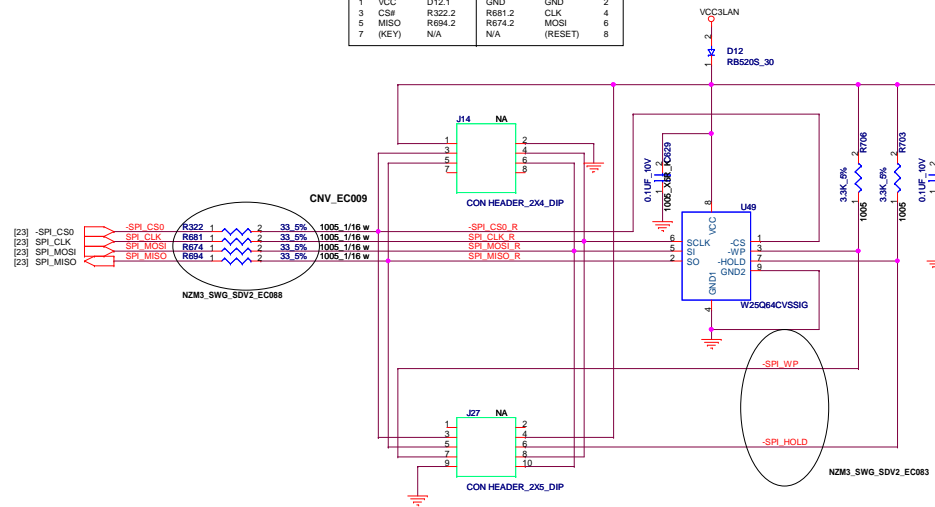
LOGIC

FLEX Computing

Project Name: NEXCOM-3 SWG SDV2 Title: SLOT POWER CONTROL

Size: C Document Number: Rev: 2.10  
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SF100 PIN HEADER INTERFACE (TOP VIEW)					
1	VCC	D12.1	GND	GND	2
3	CS#	R322.2	R681.2	CLK	4
5	MISO	R694.2	R674.2	MOSI	6
7	(KEY)	N/A	N/A	(RESET)	8



1	(HOLD1#)	(CS1#)	2
3	CS0#	VCC	4
5	MISO	HOLD0#	6
7	WP0#	CLK	8
9	GND	MOSI	10

AMT RPAT	YES YES	NO YES	NO NO
U49	8MB	8MB	4MB

LOGIC

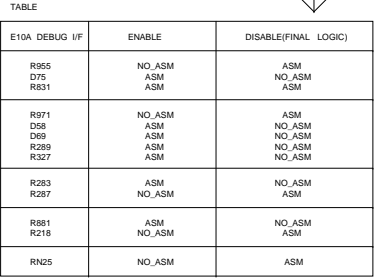
8MB SOIC8  
MACRONIX MX25L6436EM2I-10G  
WINBOND W25Q64BVSSIG  
WINBOND W25Q64CVSSIG

8MB WSON8  
NUMONYX M25PX64-VMD6TG

4MB SOIC8  
MACRONIX MX25L3236DM2I-10G  
WINBOND W25Q32BVSSIG  
NUMONYX M25PX32-VMW6F



NEAR H8S2112  
SHORT PATTERN.  
NO PATTERN UNDER  
THIS AREA.

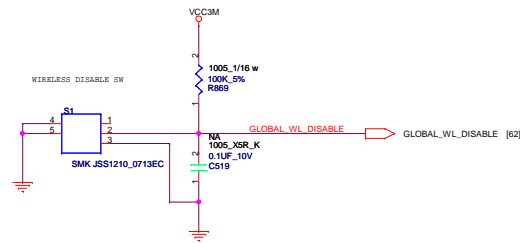


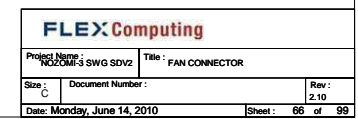


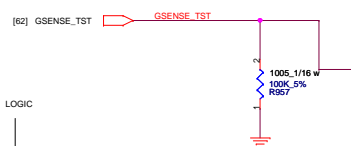


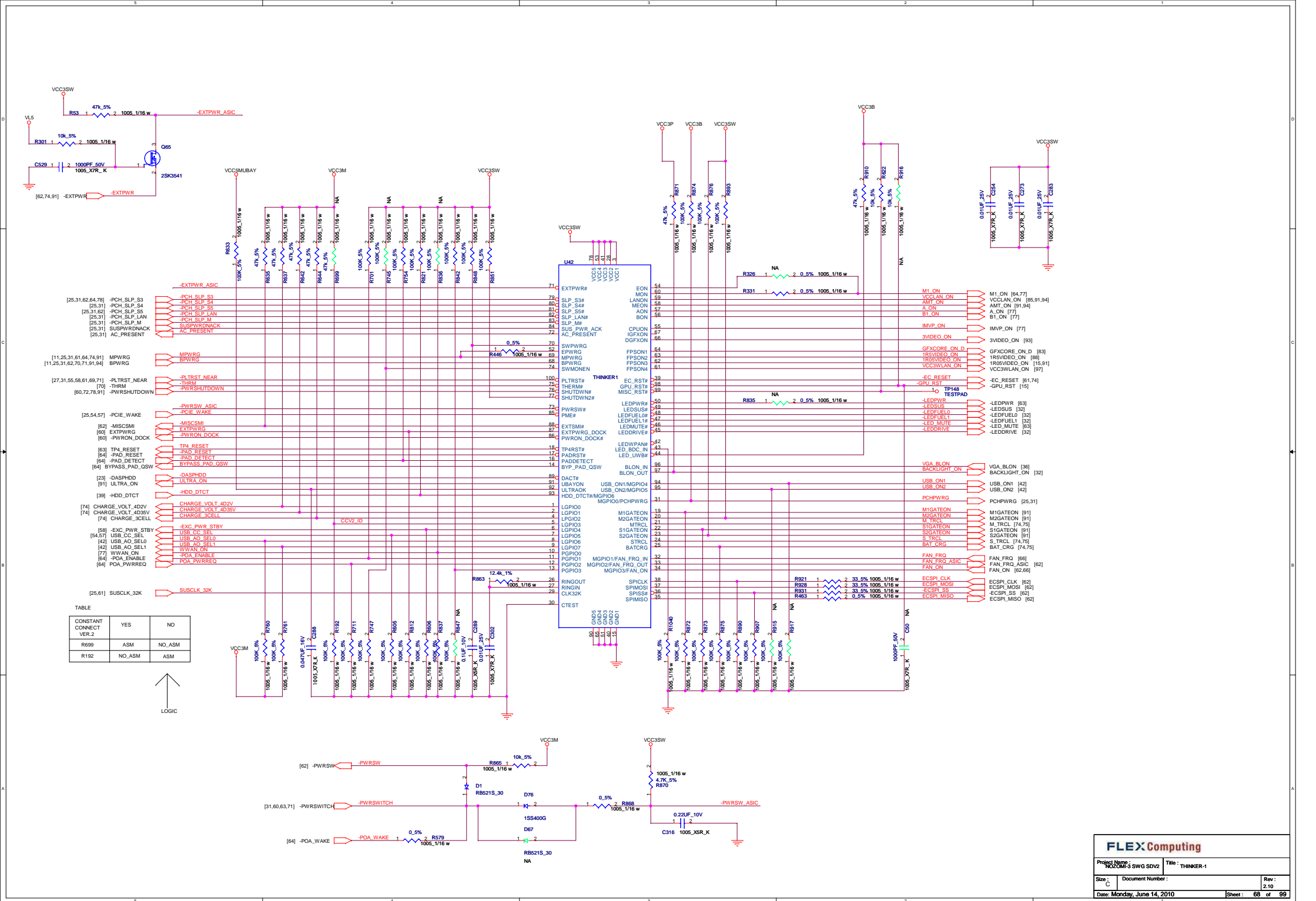


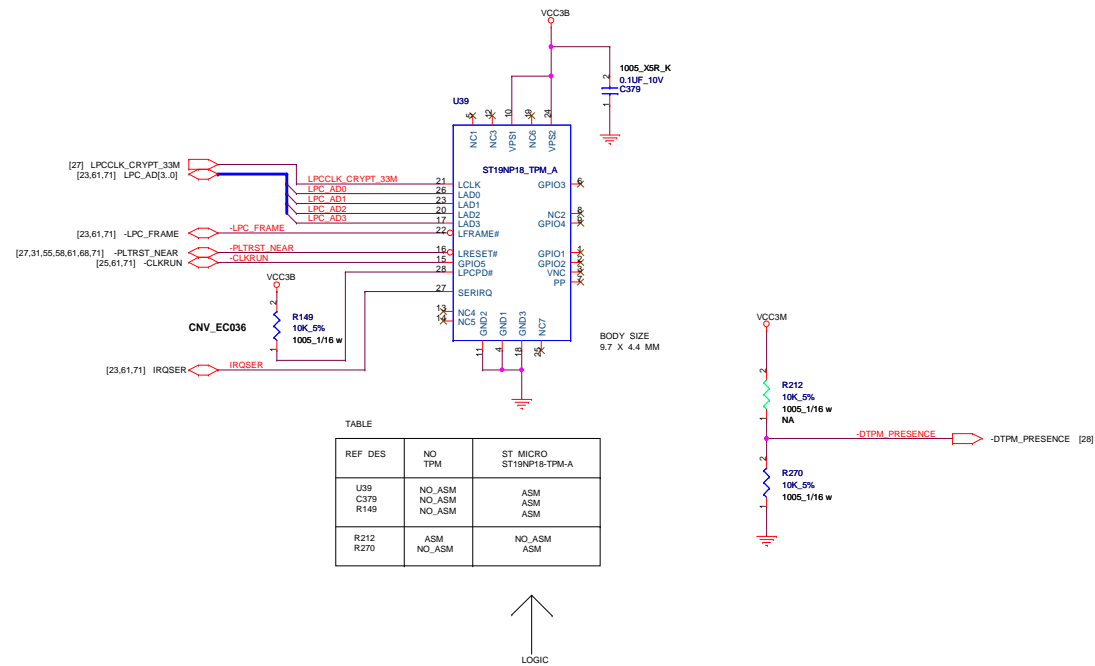


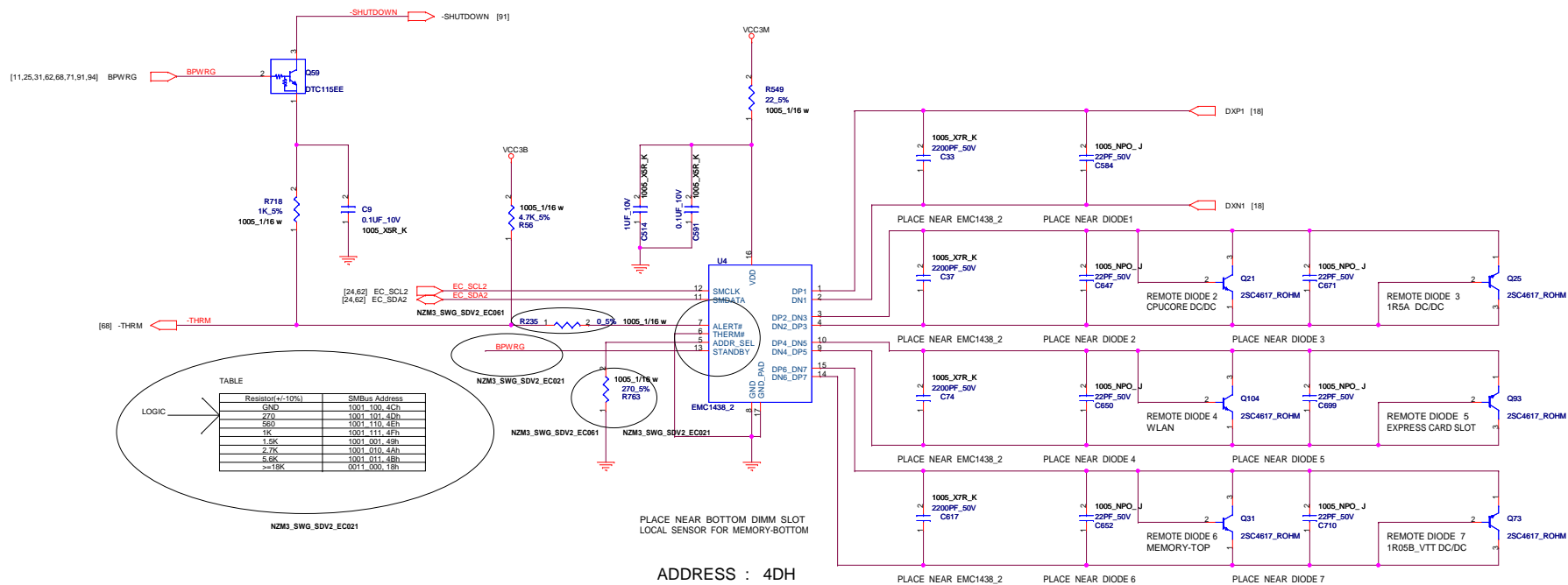




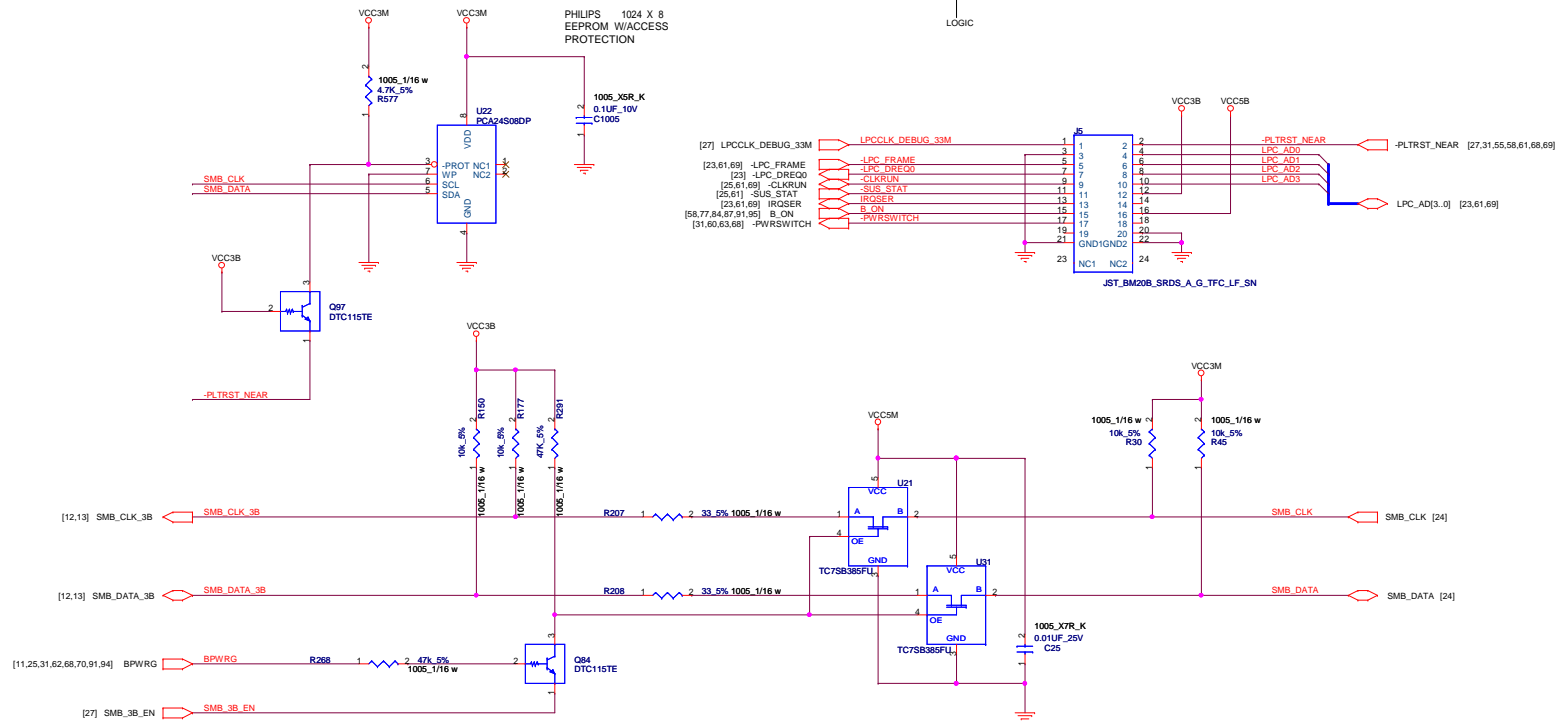
N3M3 SWG SDV2 EC073





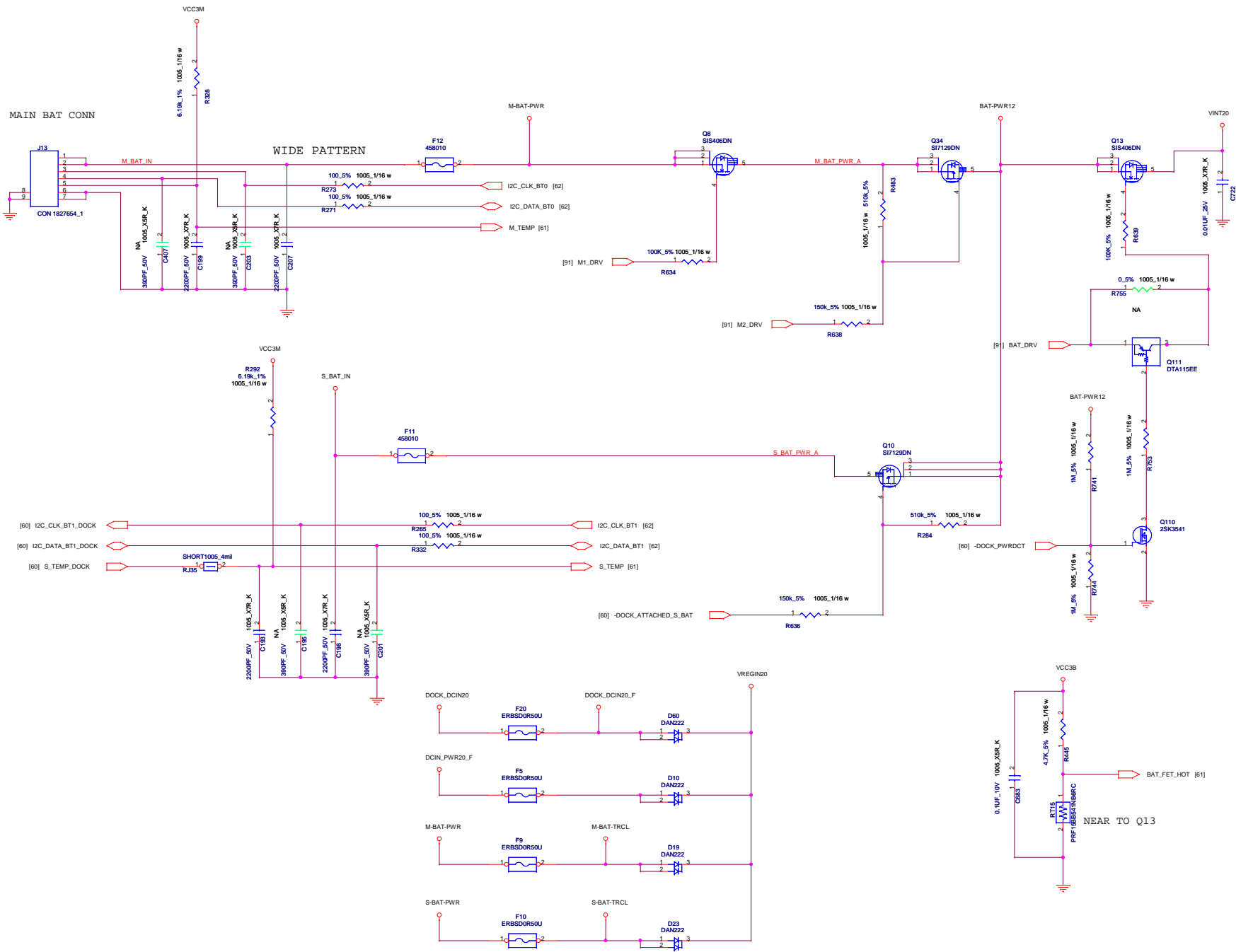


REF	DES	ENABLE	DISABLE
J5		ASM	NO_ASM
R220		ASM	NO_ASM

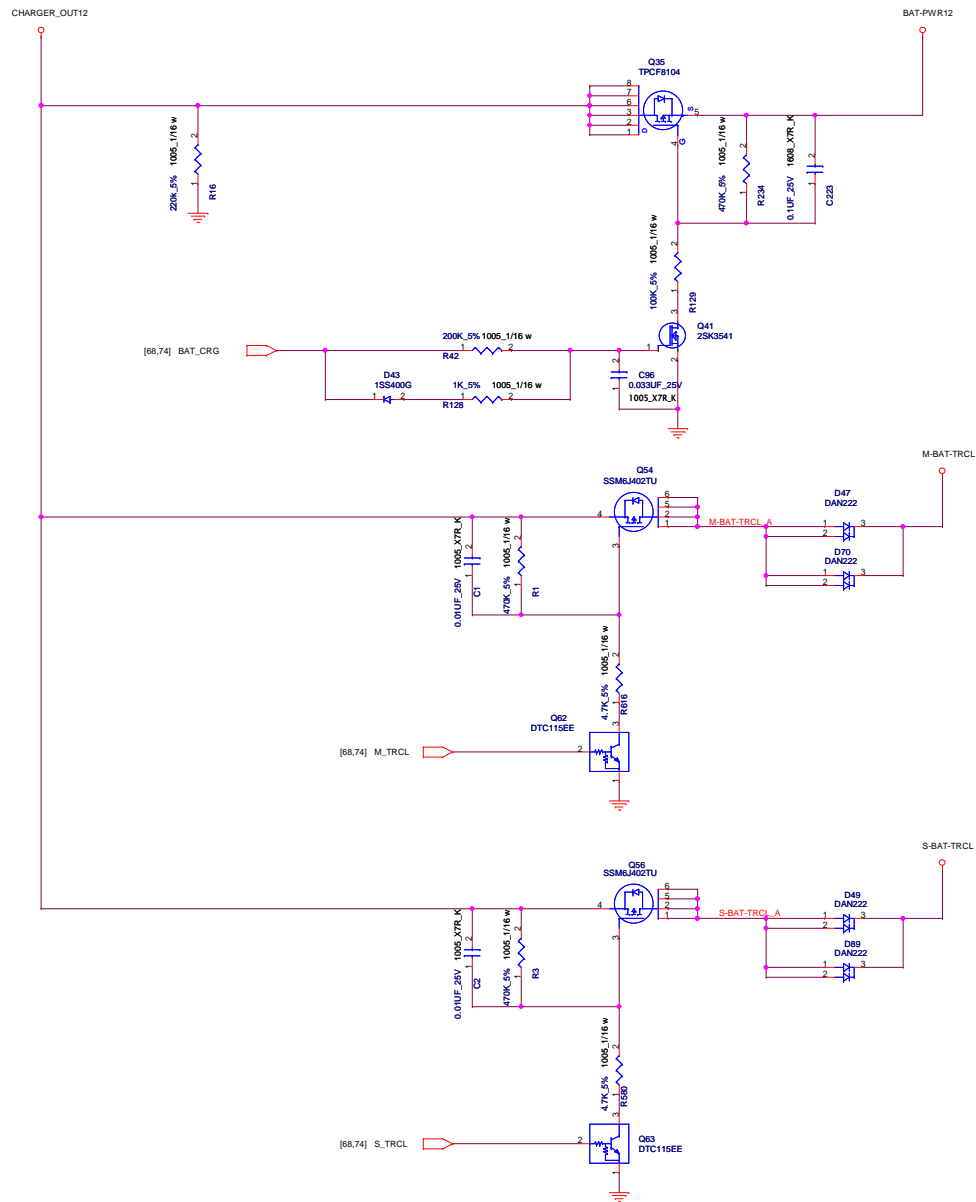


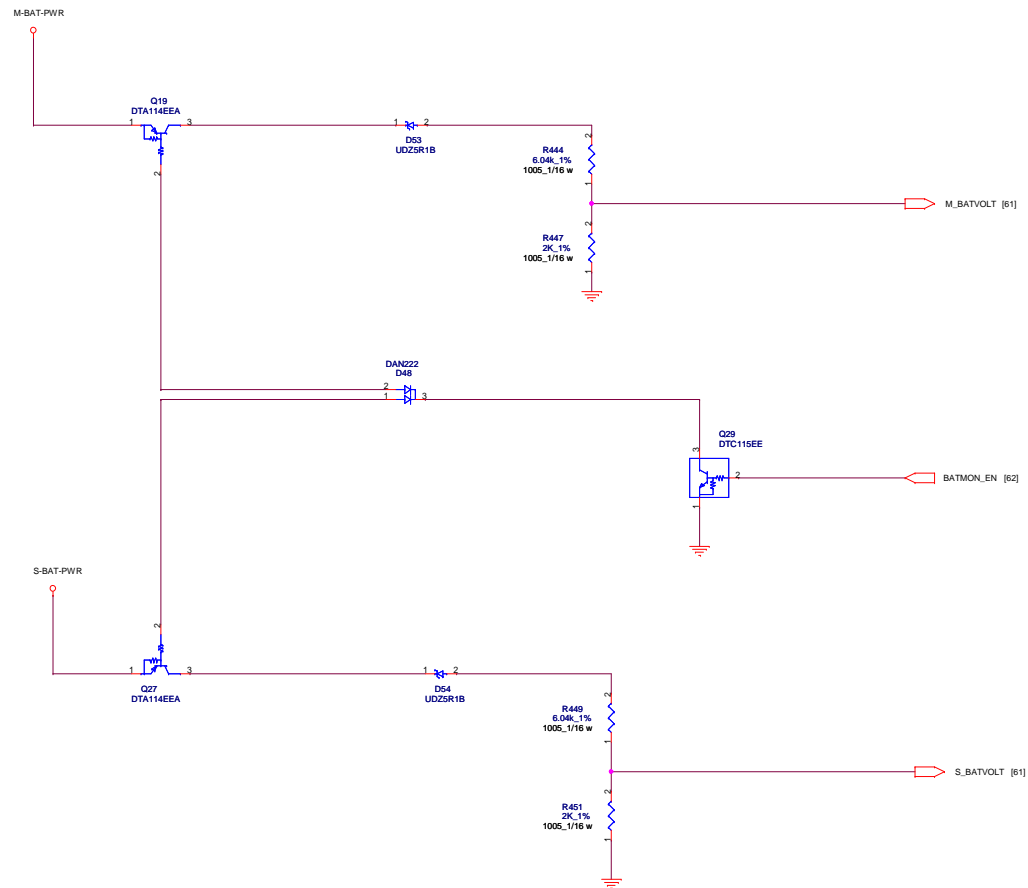


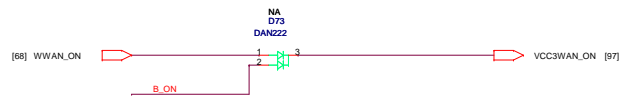
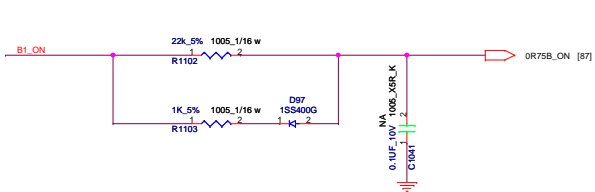
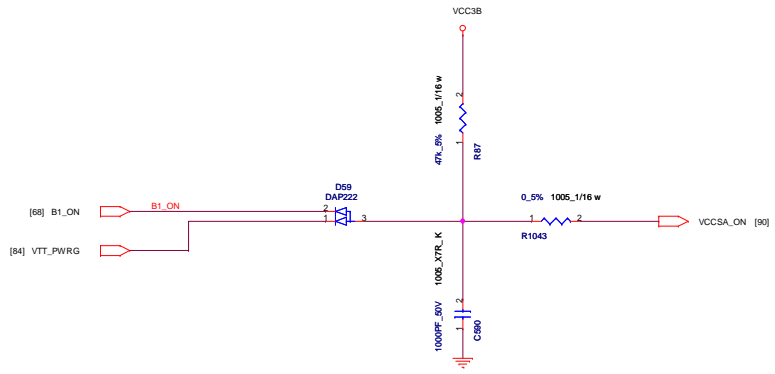
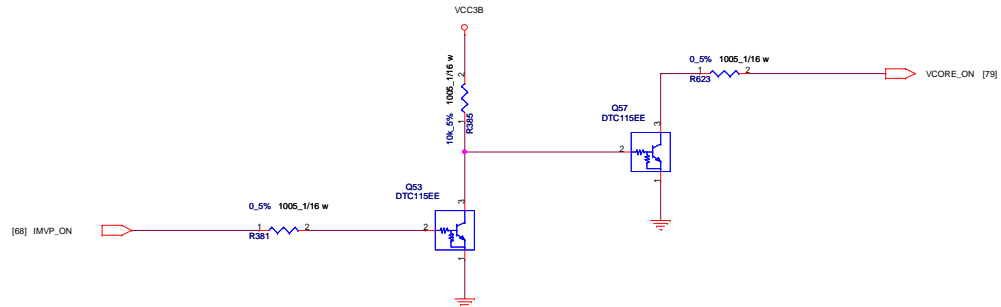
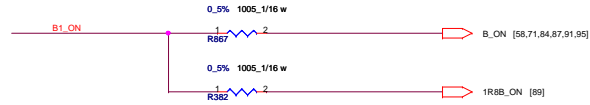
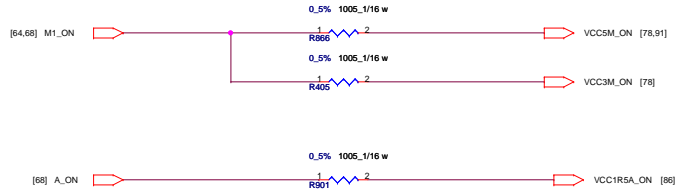












TABLE

CONSTANT CONNECT	VER . 2	VER . 1 / NO
D73	ASM	NO-ASM

↑  
LOGIC

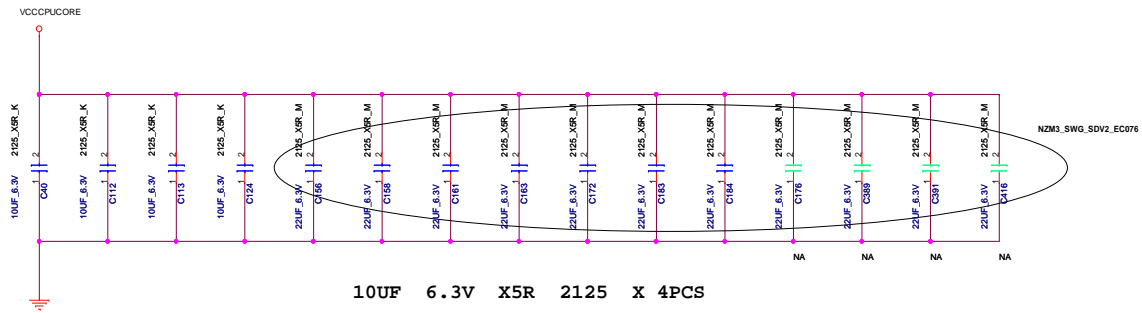
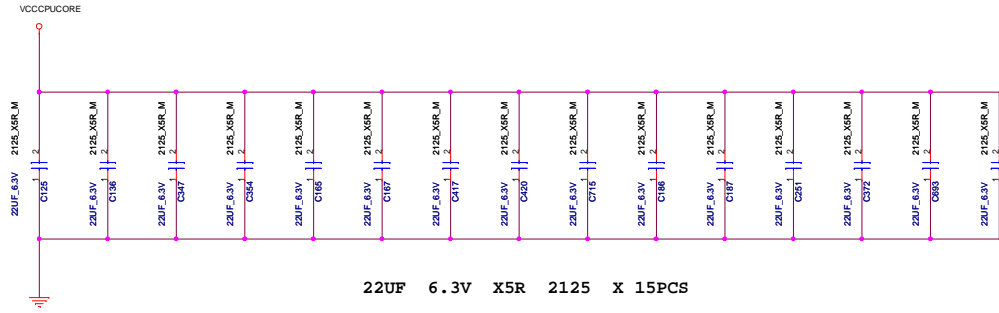




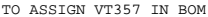












<b>FLEX</b> Computing		NZM3_SWG_SDV2_EC077	
Project Name : NZCOM-3 SWG SDV2		Title : DC/DC VCC1R06B_VTT	
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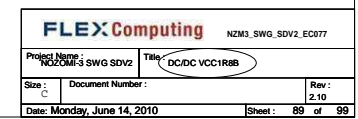


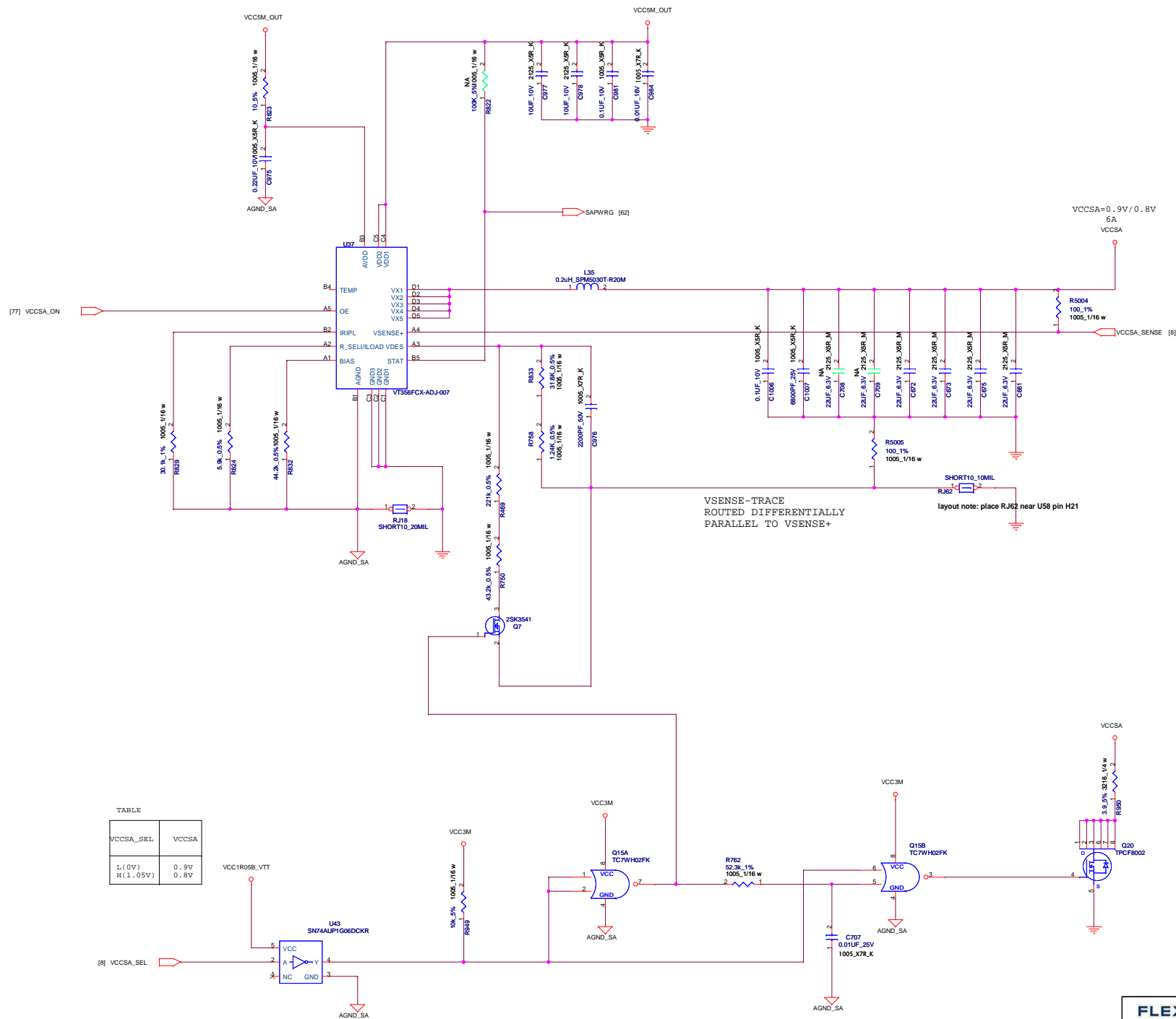




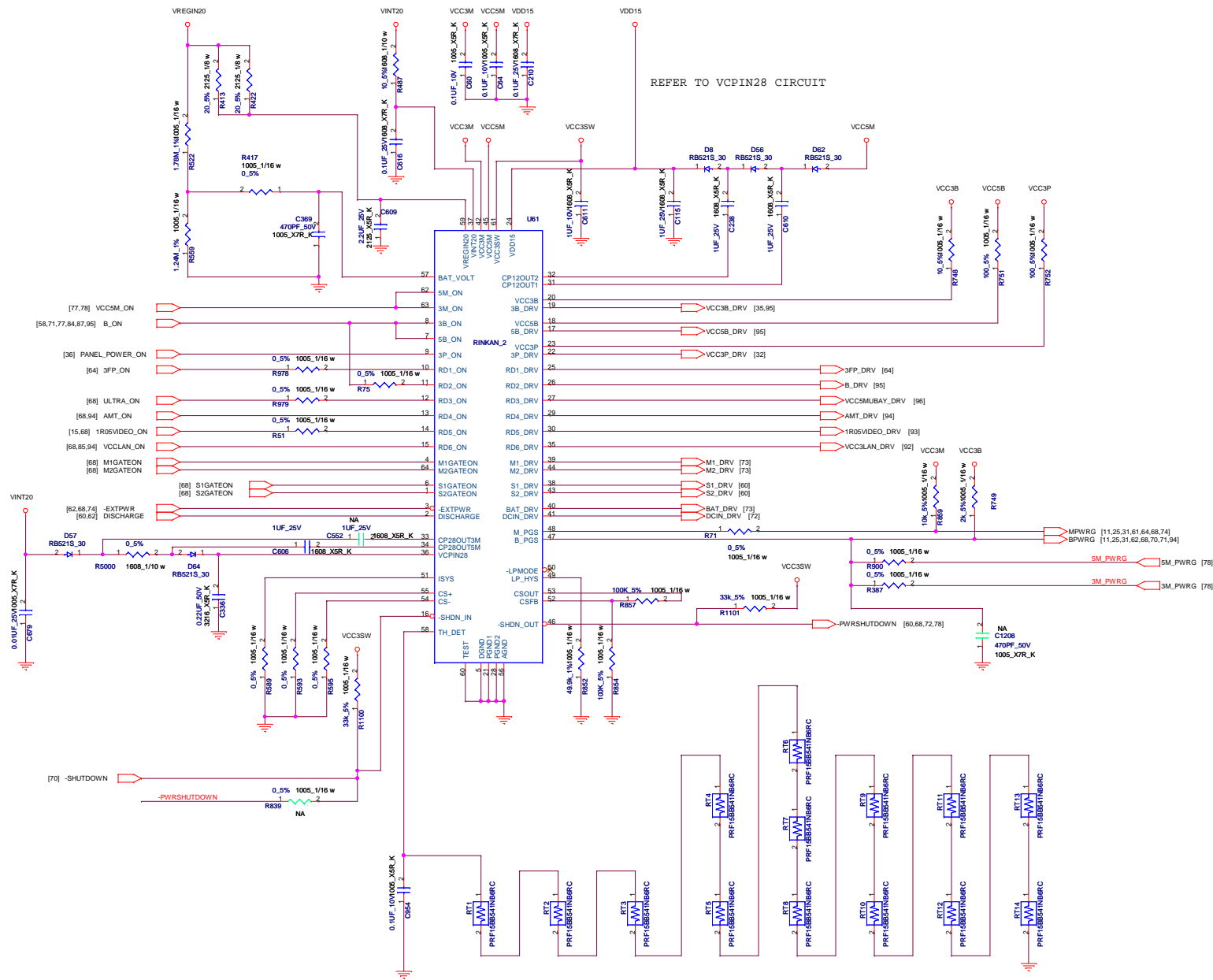


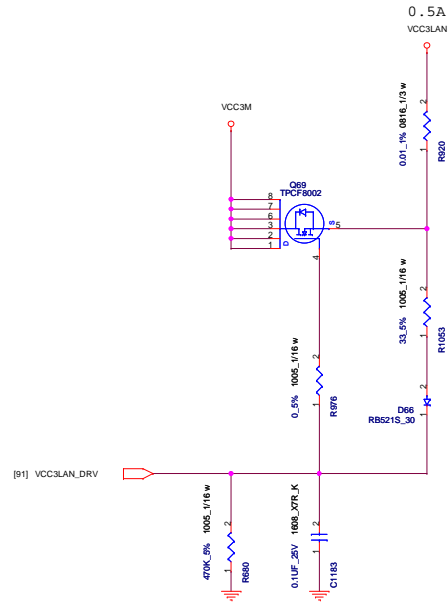






VCCSA_SEL	VCCSA
L(0V)	0.9V
H(1.05V)	0.8V





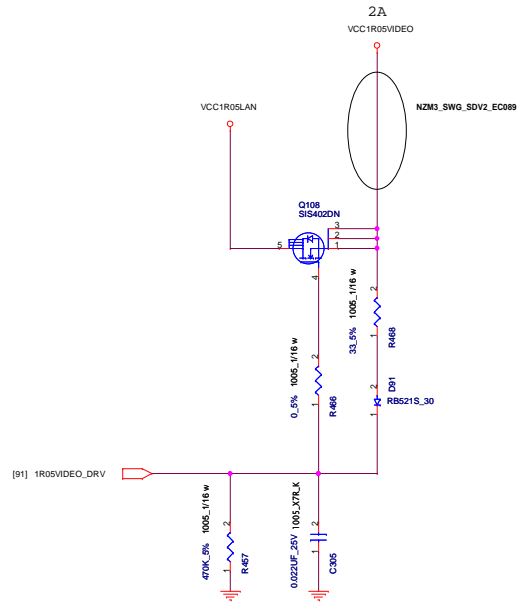
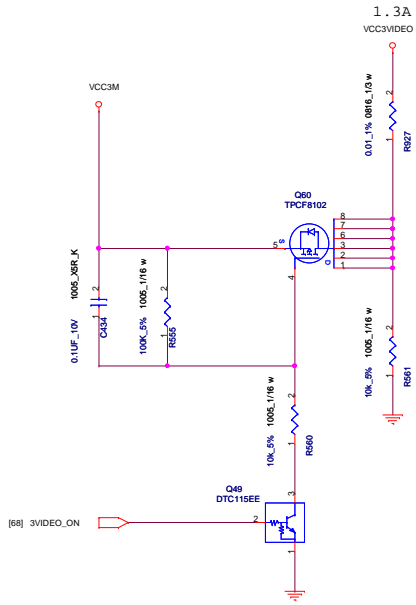


TABLE		
AMT	YES	NO
Q96	ASM	NO-ASM
R597	ASM	NO-ASM
R640	ASM	NO-ASM
D20	ASM	NO-ASM
R547	ASM	NO-ASM
C89	ASM	NO-ASM
R641	NO_ASM	ASM

↑  
LOGIC

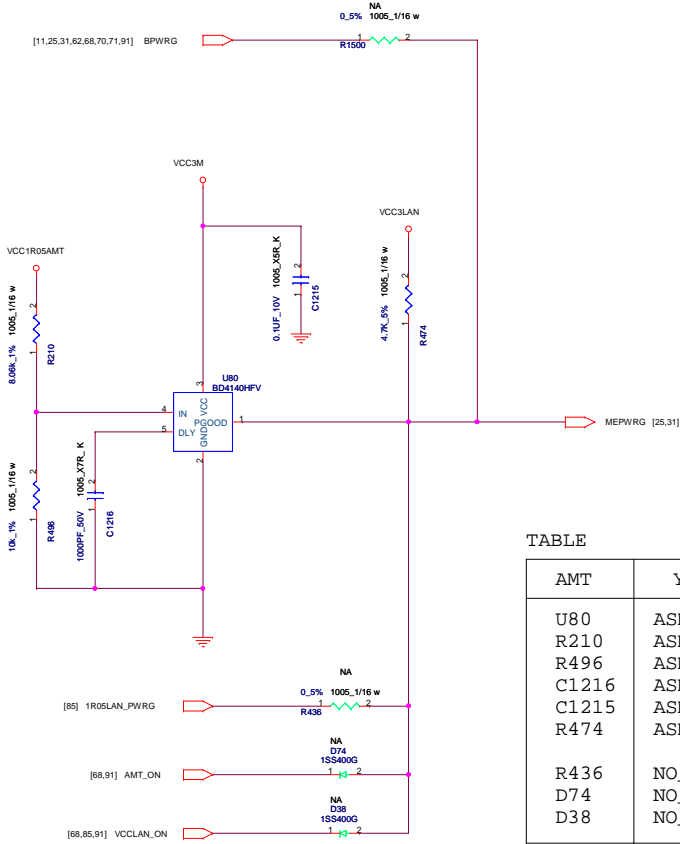
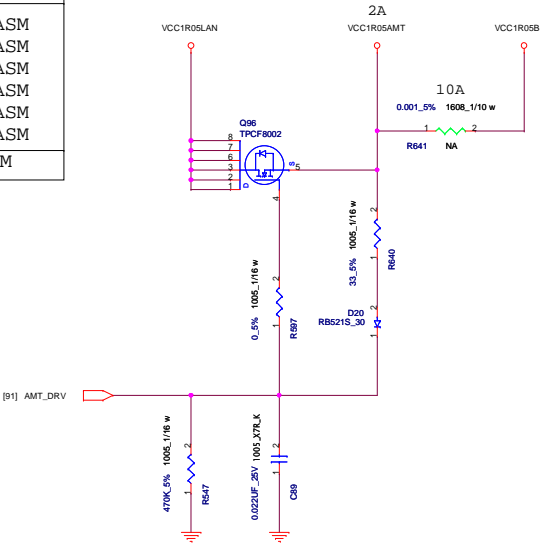
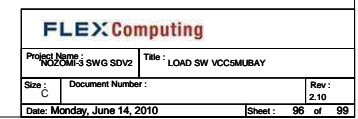


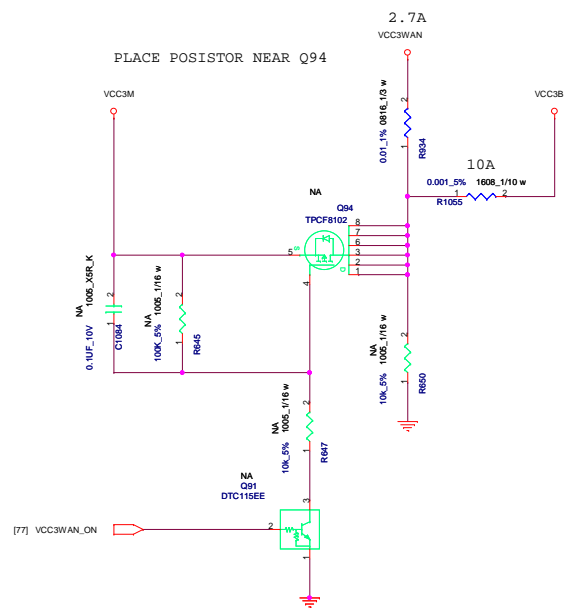
TABLE		
AMT	YES	NO
U80	ASM	NO-ASM
R210	ASM	NO-ASM
R496	ASM	NO-ASM
C1216	ASM	NO-ASM
C1215	ASM	NO-ASM
R474	ASM	NO-ASM
R436	NO_ASM	NO_ASM
D74	NO_ASM	NO_ASM
D38	NO_ASM	NO_ASM
R1500	NO_ASM	ASM

↑  
LOGIC





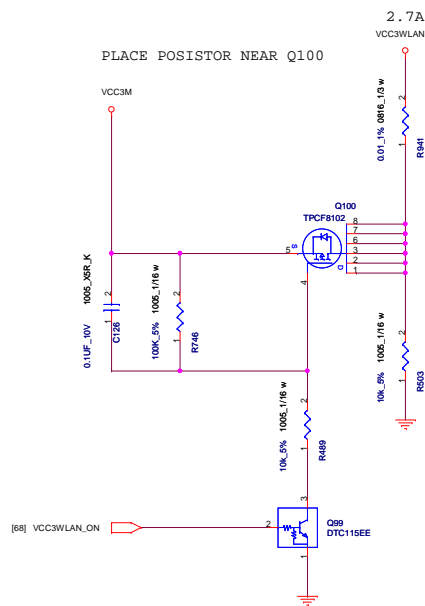




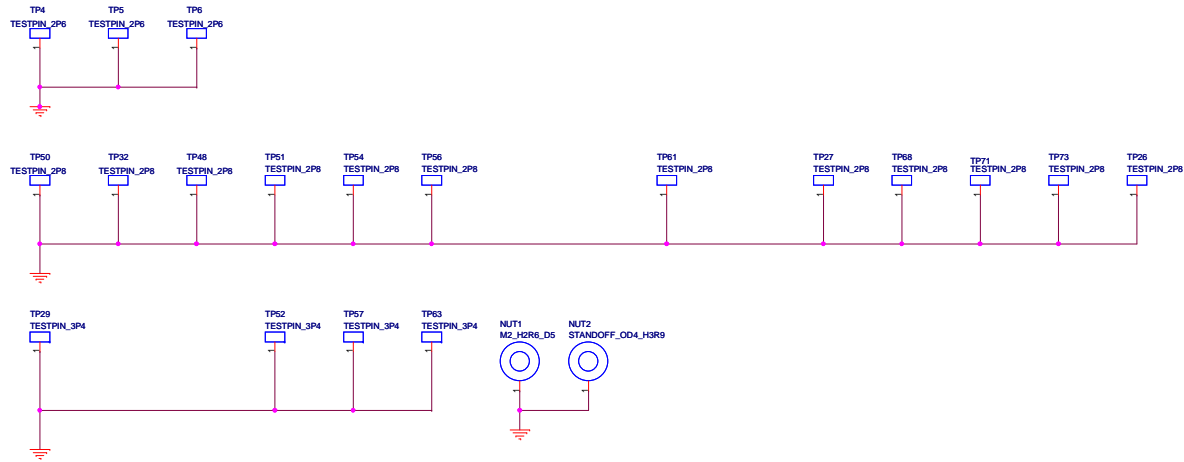
TABLE

CONSTANT CONNECT	VER. 2	VER. 1 / NO
R1055	NO_ASM	ASM
Q94	ASM	NO-ASM
R650	ASM	NO-ASM
R645	ASM	NO-ASM
C1084	ASM	NO-ASM
R647	ASM	NO-ASM
Q91	ASM	NO-ASM

↑  
LOGIC



PTH FOR SCREW HOLE



NPTH



FID  
Board Area

FD1  
●× NC, NO CONNECT TO ANY.

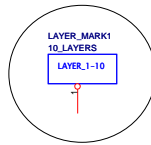
FD2  
●× NC, NO CONNECT TO ANY.

FD3  
●× NC, NO CONNECT TO ANY.

FD4  
●× NC, NO CONNECT TO ANY.

FD5  
●× NC, NO CONNECT TO ANY.

FD6  
●× NC, NO CONNECT TO ANY.



FID  
Component Area

CF1  
●× NC, NO CONNECT TO ANY.

CF2  
●× NC, NO CONNECT TO ANY.

CF3  
●× NC, NO CONNECT TO ANY.

CF4  
●× NC, NO CONNECT TO ANY.

CF5  
●× NC, NO CONNECT TO ANY.

CF6  
●× NC, NO CONNECT TO ANY.

CF7  
●× NC, NO CONNECT TO ANY.

CF8  
●× NC, NO CONNECT TO ANY.

CF9  
●× NC, NO CONNECT TO ANY.

CF10  
●× NC, NO CONNECT TO ANY.

CF11  
●× NC, NO CONNECT TO ANY.

CF12  
●× NC, NO CONNECT TO ANY.

CF13  
●× NC, NO CONNECT TO ANY.

CF14  
●× NC, NO CONNECT TO ANY.

CF15  
●× NC, NO CONNECT TO ANY.

CF16  
●× NC, NO CONNECT TO ANY.

CF17  
●× NC, NO CONNECT TO ANY.

CF18  
●× NC, NO CONNECT TO ANY.

