

Yoda-2 SVT Logic Schematics

- | | | |
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| 5.CPU(3/16) : DDR CHANNEL-B | 41.M.2 SOCKET 2 MODULE I/F | 76.BLANK |
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| 9.CPU(7/16) : AUDIO/SDXC | 45.BLANK | 80.BLANK |
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| 11.CPU(9/16) : CSI-2/EMMC | 47.BLANK | 82.LOAD SW PCH SUS/MS |
| 12.CPU(10/16) : CLOCK SIGNALS | 48.BLANK | 83.LOAD SW LAN/VCC1R2B_HDMI |
| 13.CPU(11/16) : SYSTEM PM | 49.AUDIO BEEP | 84.LOAD SW B |
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| 31.ALPINERIDGE(1/2) | 67.DC/DC IMVP8 CONTROLLER(MP2949A) | |
| 32.THUNDERBOLT PD | 68.DC/DC VCCCPUCORE(MP86901C) | |
| 33.THUNDERBOLT DMUX | 69.DC/DC VCCGFXCORE_I(MP86901C) | |
| 34.THUNDERBOLT CONNECTOR | 70.DC/DC VCCSA(MP86901A) | |
| 35.M.2 SOCKET 3 MODULE I/F | 71.BLANK | |
| 36.USB POWER/CONN | | |

EC HISTORY

TABLE: Chip Capacitor Thermal Characteristics

		Code
-55 to 150degC	+/-30ppm/degC	NPO
-55 to 125degC	+/-30ppm/degC	C0G
-55 to 125degC	+/-15%	X7R
-55 to 105degC	+/-22%	X6S
-55 to 85degC	+/-15%	X5R

TABLE: Chip Capacitor Tolerance

Tolerance	Code
+/-0.25pF	C
+/-0.5pF	D
+/-5%	J
+/-10%	K
+/-20%	M
+60/-20%	Z

TABLE: Chip Part Dimension

Size [mm]	mm Size Code	Inch Size Code
0.40 x 0.20	0402	01005
0.60 x 0.30	0603	0201
1.00 x 0.50	1005	0402
1.60 x 0.80	1608	0603
2.00 x 1.25	2125	0805
2.00 x 1.60	2016	0806
2.50 x 2.00	2520	1008
3.20 x 1.60	3216	1206
3.20 x 2.50	3225	1210
4.50 x 1.60	4516	1806
4.50 x 2.50	4525	1810
4.50 x 3.20	4532	1812
5.00 x 2.50	5025	2010
6.40 x 3.20	6432	2512

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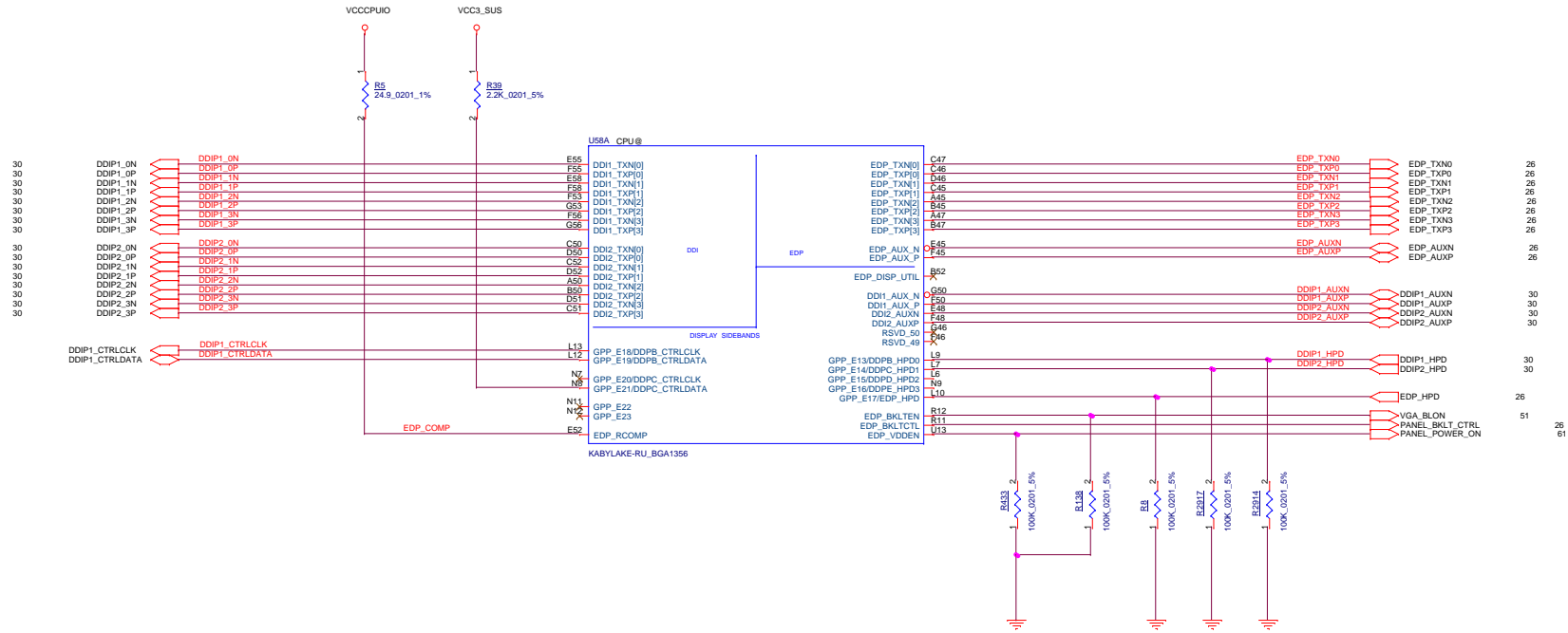
TABLE : Functional Strap

DDPB_CTRLDATA

HIGH Port B is detected.
 LOW Port B is not detected.

DDPC_CTRLDATA

HIGH Port C is detected.
 LOW Port C is not detected.

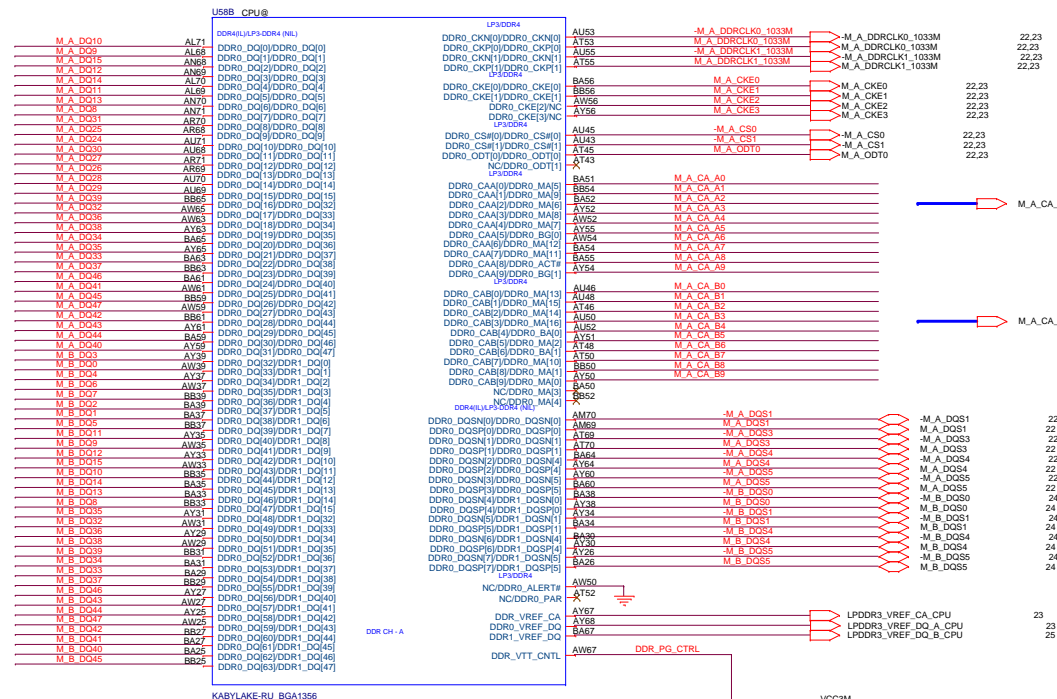




TABLE

	Pin	Interleave	Non-Interleave
Block 0	AL71	DDR0_DQ[0]	DDR0_DQ[0]
	AL68	DDR0_DQ[1]	DDR0_DQ[1]
	AN68	DDR0_DQ[2]	DDR0_DQ[2]
	AL70	DDR0_DQ[3]	DDR0_DQ[3]
	AL69	DDR0_DQ[4]	DDR0_DQ[4]
	AN70	DDR0_DQ[5]	DDR0_DQ[5]
	AN71	DDR0_DQ[6]	DDR0_DQ[6]
	AR70	DDR0_DQ[7]	DDR0_DQ[7]
	AR68	DDR0_DQ[8]	DDR0_DQ[8]
	AU77	DDR0_DQ[9]	DDR0_DQ[9]
	AU68	DDR0_DQ[10]	DDR0_DQ[10]
	AR69	DDR0_DQ[11]	DDR0_DQ[11]
	AU70	DDR0_DQ[12]	DDR0_DQ[12]
	AU70	DDR0_DQ[13]	DDR0_DQ[13]
	AU69	DDR0_DQ[14]	DDR0_DQ[14]
Block 2	BB65	DDR0_DQ[16]	DDR0_DQ[32]
	AW65	DDR0_DQ[17]	DDR0_DQ[33]
	AW63	DDR0_DQ[18]	DDR0_DQ[34]
	AY63	DDR0_DQ[19]	DDR0_DQ[35]
	BA65	DDR0_DQ[20]	DDR0_DQ[36]
	AY65	DDR0_DQ[21]	DDR0_DQ[37]
	BA63	DDR0_DQ[22]	DDR0_DQ[38]
	BB63	DDR0_DQ[23]	DDR0_DQ[39]
	BA61	DDR0_DQ[24]	DDR0_DQ[40]
	BB59	DDR0_DQ[25]	DDR0_DQ[41]
	BB59	DDR0_DQ[26]	DDR0_DQ[42]
	AW61	DDR0_DQ[27]	DDR0_DQ[43]
	AY61	DDR0_DQ[28]	DDR0_DQ[44]
	BA59	DDR0_DQ[29]	DDR0_DQ[45]
	AY59	DDR0_DQ[30]	DDR0_DQ[46]
Block 4	AY39	DDR0_DQ[32]	DDR1_DQ[0]
	AW39	DDR0_DQ[33]	DDR1_DQ[1]
	AY37	DDR0_DQ[34]	DDR1_DQ[2]
	AW37	DDR0_DQ[35]	DDR1_DQ[3]
	BB39	DDR0_DQ[36]	DDR1_DQ[4]
	BA37	DDR0_DQ[37]	DDR1_DQ[5]
	BB37	DDR0_DQ[38]	DDR1_DQ[6]
	AY35	DDR0_DQ[39]	DDR1_DQ[7]
	AW35	DDR0_DQ[40]	DDR1_DQ[8]
	AY33	DDR0_DQ[41]	DDR1_DQ[9]
	AW33	DDR0_DQ[42]	DDR1_DQ[10]
	BB35	DDR0_DQ[43]	DDR1_DQ[11]
	BA35	DDR0_DQ[44]	DDR1_DQ[12]
	BA33	DDR0_DQ[45]	DDR1_DQ[13]
	BB33	DDR0_DQ[46]	DDR1_DQ[14]
Block 6	AY31	DDR0_DQ[48]	DDR1_DQ[32]
	AW31	DDR0_DQ[49]	DDR1_DQ[33]
	AY29	DDR0_DQ[50]	DDR1_DQ[34]
	AW29	DDR0_DQ[51]	DDR1_DQ[35]
	BB31	DDR0_DQ[52]	DDR1_DQ[36]
	BA31	DDR0_DQ[53]	DDR1_DQ[37]
	BA29	DDR0_DQ[54]	DDR1_DQ[38]
	BB29	DDR0_DQ[55]	DDR1_DQ[39]
	AY27	DDR0_DQ[56]	DDR1_DQ[40]
	AY25	DDR0_DQ[57]	DDR1_DQ[41]
	AW25	DDR0_DQ[58]	DDR1_DQ[42]
	BB27	DDR0_DQ[59]	DDR1_DQ[43]
	BA27	DDR0_DQ[60]	DDR1_DQ[44]
	BA25	DDR0_DQ[61]	DDR1_DQ[45]
	BB25	DDR0_DQ[62]	DDR1_DQ[46]
		DDR1_DQ[47]	

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TABLE

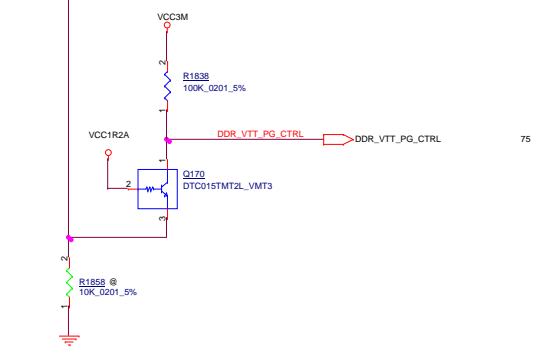
	Pin	Interleave	Non-Interleave
Block 0	AM70	DDR0_DQSN[0]	DDR0_DQSN[0]
	AM69	DDR0_DQSP[0]	DDR0_DQSP[0]
	AT69	DDR0_DQSN[1]	DDR0_DQSN[1]
Block 2	BA64	DDR0_DQSN[2]	DDR0_DQSN[2]
	AY64	DDR0_DQSP[2]	DDR0_DQSP[2]
	BA60	DDR0_DQSN[3]	DDR0_DQSN[3]
Block 4	BA38	DDR0_DQSN[4]	DDR1_DQSN[0]
	AY38	DDR0_DQSP[4]	DDR1_DQSP[0]
	BA34	DDR0_DQSN[5]	DDR1_DQSN[1]
Block 6	BA30	DDR0_DQSN[6]	DDR1_DQSN[4]
	AY30	DDR0_DQSP[6]	DDR1_DQSP[4]
	BA26	DDR0_DQSN[7]	DDR1_DQSN[5]

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TABLE

Pin	DDR3L	LPDDR3	DDR4
BA51	DDR0_MA[5]	DDR0_CAA[0]	DDR0_MA[5]
BB54	DDR0_MA[9]	DDR0_CAA[1]	DDR0_MA[9]
BA52	DDR0_MA[6]	DDR0_CAA[2]	DDR0_MA[6]
AY52	DDR0_MA[8]	DDR0_CAA[3]	DDR0_MA[8]
AW52	DDR0_MA[7]	DDR0_CAA[4]	DDR0_MA[7]
AW55	DDR0_MA[2]	DDR0_CAA[5]	DDR0_BG[0]
BA54	DDR0_MA[12]	DDR0_CAA[6]	DDR0_MA[12]
BA85	DDR0_MA[11]	DDR0_CAA[7]	DDR0_MA[11]
AY54	DDR0_MA[15]	DDR0_CAA[8]	DDR0_ACT#
	DDR0_MA[14]	DDR0_CAA[9]	DDR0_BG[1]
AU46	DDR0_MA[13]	DDR0_CAB[0]	DDR0_MA[13]
AU48	DDR0_CAS#	DDR0_CAB[1]	DDR0_MA[15]
AT46	DDR0_WE#	DDR0_CAB[2]	DDR0_MA[14]
AU50	DDR0_RAS#	DDR0_CAB[3]	DDR0_MA[16]
AU52	DDR0_BA[0]	DDR0_CAB[4]	DDR0_BA[0]
AY51	DDR0_MA[2]	DDR0_CAB[5]	DDR0_MA[2]
AT48	DDR0_BA[1]	DDR0_CAB[6]	DDR0_BA[1]
AT50	DDR0_MA[10]	DDR0_CAB[7]	DDR0_MA[10]
BB50	DDR0_MA[1]	DDR0_CAB[8]	DDR0_MA[1]
AY50	DDR0_MA[0]	DDR0_CAB[9]	DDR0_MA[0]
BA50	DDR0_MA[3]	Not Used	DDR0_MA[3]
BB52	DDR0_MA[4]	Not Used	DDR0_MA[4]

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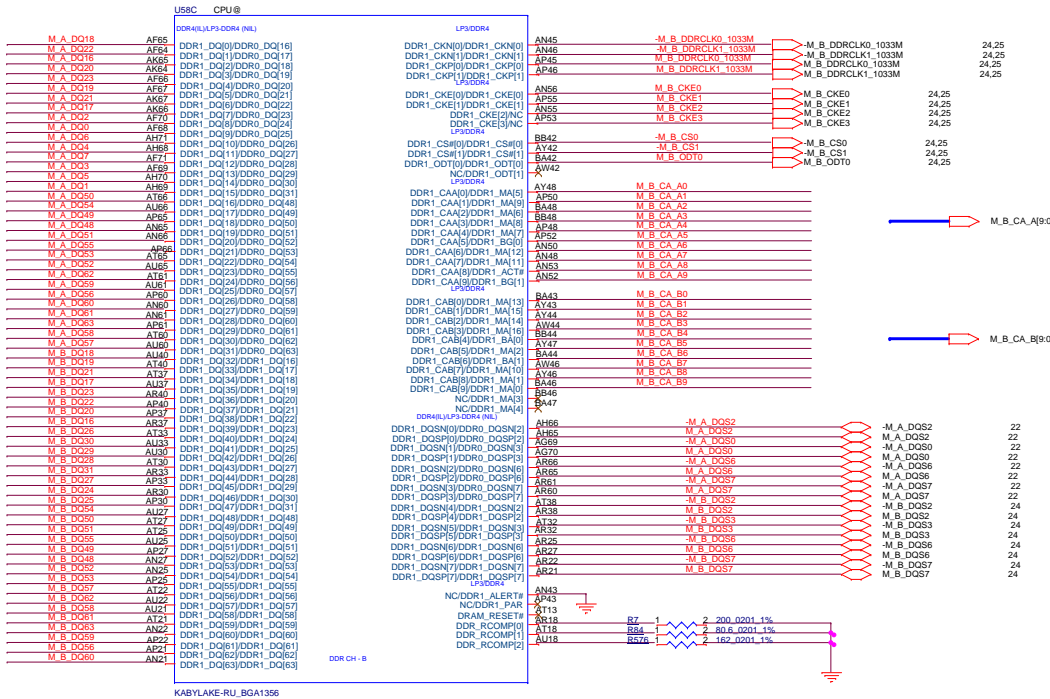


TABLE

	Pin	Interleave	Non-Interleave
Block 1	AF65	DDR1_DQ[0]	DDR0_DQ[16]
	AF64	DDR1_DQ[1]	DDR0_DQ[17]
	AK65	DDR1_DQ[2]	DDR0_DQ[18]
	AK64	DDR1_DQ[3]	DDR0_DQ[19]
	AF66	DDR1_DQ[4]	DDR0_DQ[20]
	AF67	DDR1_DQ[5]	DDR0_DQ[21]
	AK66	DDR1_DQ[6]	DDR0_DQ[22]
	AF70	DDR1_DQ[7]	DDR0_DQ[23]
	AF68	DDR1_DQ[8]	DDR0_DQ[24]
	AH71	DDR1_DQ[9]	DDR0_DQ[25]
	AF68	DDR1_DQ[10]	DDR0_DQ[26]
	AF71	DDR1_DQ[11]	DDR0_DQ[27]
	AF69	DDR1_DQ[12]	DDR0_DQ[28]
	AH70	DDR1_DQ[13]	DDR0_DQ[29]
	AH69	DDR1_DQ[14]	DDR0_DQ[30]
	DDR1_DQ[15]	DDR0_DQ[31]	
Block 3	AT66	DDR1_DQ[16]	DDR0_DQ[48]
	AU66	DDR1_DQ[17]	DDR0_DQ[49]
	AP65	DDR1_DQ[18]	DDR0_DQ[50]
	AN65	DDR1_DQ[19]	DDR0_DQ[51]
	AN66	DDR1_DQ[20]	DDR0_DQ[52]
	AP66	DDR1_DQ[21]	DDR0_DQ[53]
	AT65	DDR1_DQ[22]	DDR0_DQ[54]
	AU65	DDR1_DQ[23]	DDR0_DQ[55]
	AT61	DDR1_DQ[24]	DDR0_DQ[56]
	AP60	DDR1_DQ[25]	DDR0_DQ[57]
	AN60	DDR1_DQ[26]	DDR0_DQ[58]
	AN61	DDR1_DQ[27]	DDR0_DQ[59]
	AP61	DDR1_DQ[28]	DDR0_DQ[60]
	AT60	DDR1_DQ[29]	DDR0_DQ[61]
	AU60	DDR1_DQ[30]	DDR0_DQ[62]
	DDR1_DQ[31]	DDR0_DQ[63]	
Block 5	AU40	DDR1_DQ[32]	DDR1_DQ[16]
	AT40	DDR1_DQ[33]	DDR1_DQ[17]
	AT37	DDR1_DQ[34]	DDR1_DQ[18]
	AU37	DDR1_DQ[35]	DDR1_DQ[19]
	AP40	DDR1_DQ[36]	DDR1_DQ[20]
	AP37	DDR1_DQ[37]	DDR1_DQ[21]
	AR37	DDR1_DQ[38]	DDR1_DQ[22]
	AT33	DDR1_DQ[39]	DDR1_DQ[23]
	AU33	DDR1_DQ[40]	DDR1_DQ[24]
	AU30	DDR1_DQ[41]	DDR1_DQ[25]
	AT30	DDR1_DQ[42]	DDR1_DQ[26]
	AR33	DDR1_DQ[43]	DDR1_DQ[27]
	AR30	DDR1_DQ[44]	DDR1_DQ[28]
	AP30	DDR1_DQ[45]	DDR1_DQ[29]
		DDR1_DQ[46]	DDR1_DQ[30]
	DDR1_DQ[47]	DDR1_DQ[31]	
Block 7	AU27	DDR1_DQ[48]	DDR1_DQ[48]
	AT27	DDR1_DQ[49]	DDR1_DQ[49]
	AT25	DDR1_DQ[50]	DDR1_DQ[50]
	AU25	DDR1_DQ[51]	DDR1_DQ[51]
	AP27	DDR1_DQ[52]	DDR1_DQ[52]
	AN27	DDR1_DQ[53]	DDR1_DQ[53]
	AN25	DDR1_DQ[54]	DDR1_DQ[54]
	AP25	DDR1_DQ[55]	DDR1_DQ[55]
	AT22	DDR1_DQ[56]	DDR1_DQ[56]
	AU21	DDR1_DQ[57]	DDR1_DQ[57]
	AT21	DDR1_DQ[58]	DDR1_DQ[58]
	AN22	DDR1_DQ[59]	DDR1_DQ[59]
	AP22	DDR1_DQ[60]	DDR1_DQ[60]
	AP21	DDR1_DQ[61]	DDR1_DQ[61]
	AN21	DDR1_DQ[62]	DDR1_DQ[62]
	DDR1_DQ[63]	DDR1_DQ[63]	

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TABLE

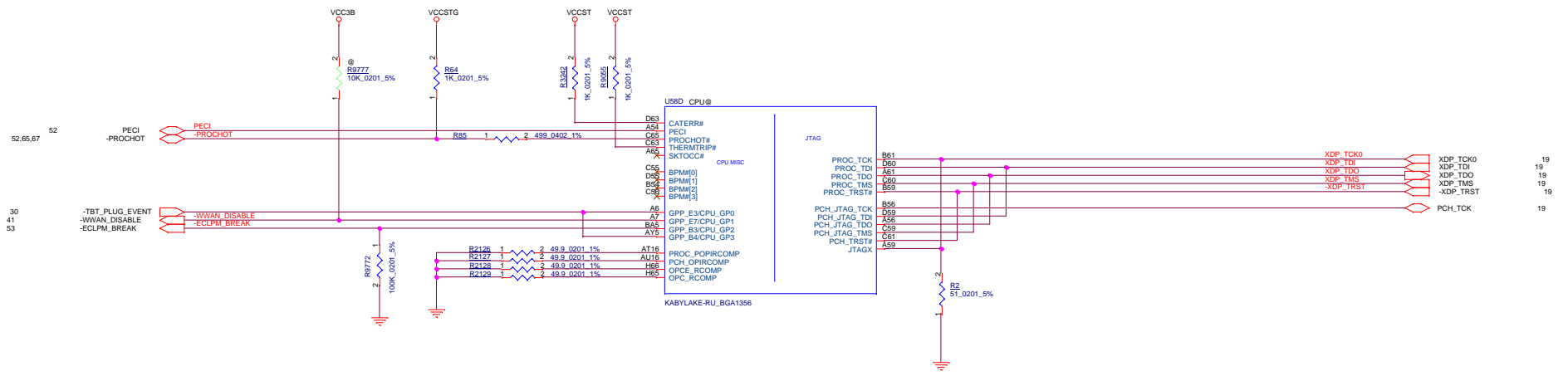
	Pin	Interleave	Non-Interleave
Block 1	AH66	DDR1_DQSN[0]	DDR0_DQSN[2]
	AH65	DDR1_DQSP[0]	DDR0_DQSP[2]
	AG69	DDR1_DQSN[1]	DDR0_DQSN[3]
	AG70	DDR1_DQSP[1]	DDR0_DQSP[3]
Block 3	AR66	DDR1_DQSN[2]	DDR0_DQSN[6]
	AR65	DDR1_DQSP[2]	DDR0_DQSP[6]
	AR61	DDR1_DQSN[3]	DDR0_DQSN[7]
	AR60	DDR1_DQSP[3]	DDR0_DQSP[7]
Block 5	AT38	DDR1_DQSN[4]	DDR1_DQSN[2]
	AR38	DDR1_DQSP[4]	DDR1_DQSP[2]
	AT32	DDR1_DQSN[5]	DDR1_DQSN[3]
	AR32	DDR1_DQSP[5]	DDR1_DQSP[3]
Block 7	AR25	DDR1_DQSN[6]	DDR1_DQSN[6]
	AR27	DDR1_DQSP[6]	DDR1_DQSP[6]
	AR22	DDR1_DQSN[7]	DDR1_DQSN[7]
	AR21	DDR1_DQSP[7]	DDR1_DQSP[7]

TABLE

Pin	DDR3L	LPDDR3	DDR4
AY48	DDR1_MA[5]	DDR1_CAA[0]	DDR1_MA[5]
AP50	DDR1_MA[9]	DDR1_CAA[1]	DDR1_MA[9]
BA48	DDR1_MA[6]	DDR1_CAA[2]	DDR1_MA[6]
AP48	DDR1_MA[8]	DDR1_CAA[3]	DDR1_MA[8]
AP52	DDR1_BA[2]	DDR1_CAA[4]	DDR1_MA[7]
AN50	DDR1_MA[12]	DDR1_CAA[5]	DDR1_BG[0]
AN48	DDR1_MA[11]	DDR1_CAA[6]	DDR1_MA[12]
AN53	DDR1_MA[15]	DDR1_CAA[7]	DDR1_MA[11]
AN52	DDR1_MA[14]	DDR1_CAA[8]	DDR1_ACT#
		DDR1_CAA[9]	DDR1_BG[1]
BA43	DDR1_MA[13]	DDR1_CAB[0]	DDR1_MA[13]
AY43	DDR1_CAS#	DDR1_CAB[1]	DDR1_MA[15]
AY44	DDR1_WE#	DDR1_CAB[2]	DDR1_MA[14]
AW44	DDR1_RAS#	DDR1_CAB[3]	DDR1_MA[16]
BB44	DDR1_BA[0]	DDR1_CAB[4]	DDR1_BA[0]
AY47	DDR1_MA[2]	DDR1_CAB[5]	DDR1_MA[2]
BA44	DDR1_BA[1]	DDR1_CAB[6]	DDR1_BA[1]
AW46	DDR1_MA[10]	DDR1_CAB[7]	DDR1_MA[10]
AY46	DDR1_MA[11]	DDR1_CAB[8]	DDR1_MA[11]
BA46	DDR1_MA[0]	DDR1_CAB[9]	DDR1_MA[0]
BB46	DDR1_MA[3]	Not Used	DDR1_MA[3]
BA47	DDR1_MA[4]	Not Used	DDR1_MA[4]

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TABLE : Functional Strap

SPI0_MOSI (Boot Halt)	
HIGH	Disabled (Default)
LOW	Enabled

TABLE : Functional Strap

SPI0_MISO (JTAG ODT Disable)	
HIGH	Enabled (Default)
LOW	Disabled

TABLE : Functional Strap

GPP_C5/SML0ALERT # (LPC or eSPI)	
HIGH	eSPI is selected
LOW	LPC is selected (Default)

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TABLE : Functional Strap

GPP_C2/SMBALERT# (TLS Confidentiality)	
HIGH	Enable ME Crypto TLS with Confidentiality
LOW	Disable ME Crypto TLS (Default)

← LOGIC

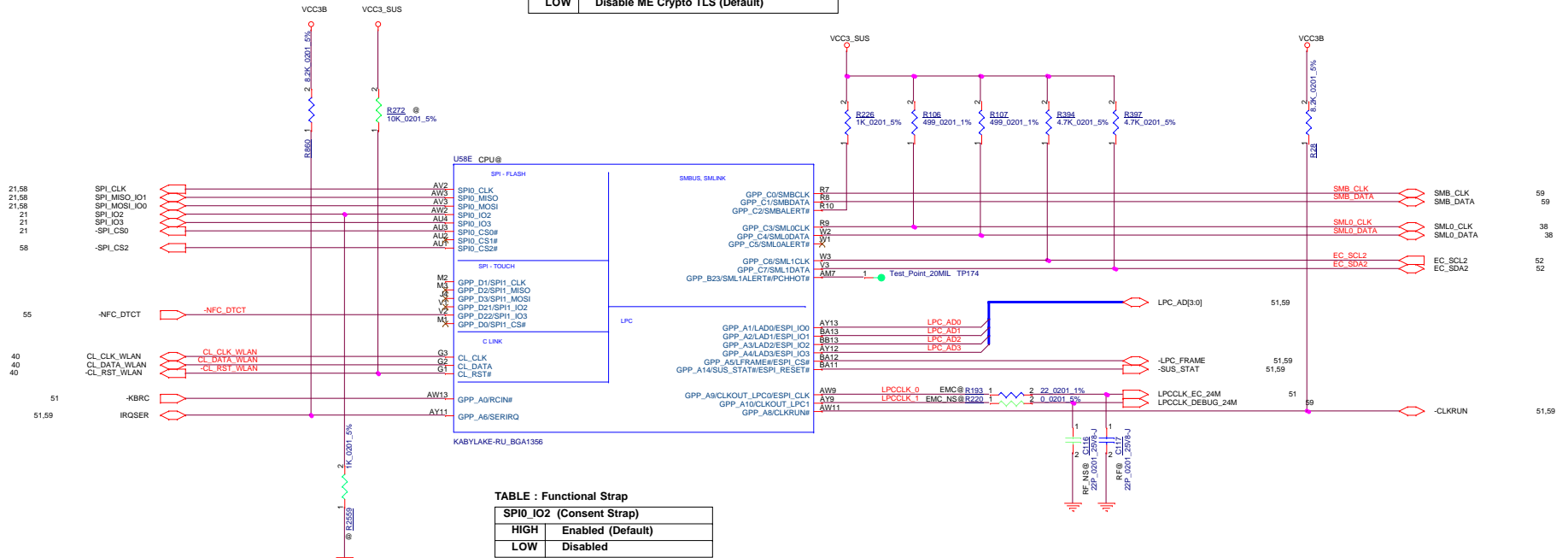


TABLE : Functional Strap

SPI0_IO2 (Consent Strap)	
HIGH	Enabled (Default)
LOW	Disabled

TABLE : Functional Strap

SPI0_IO3 (A0 Personality Strap)	
HIGH	Disabled (Default)
LOW	Enabled

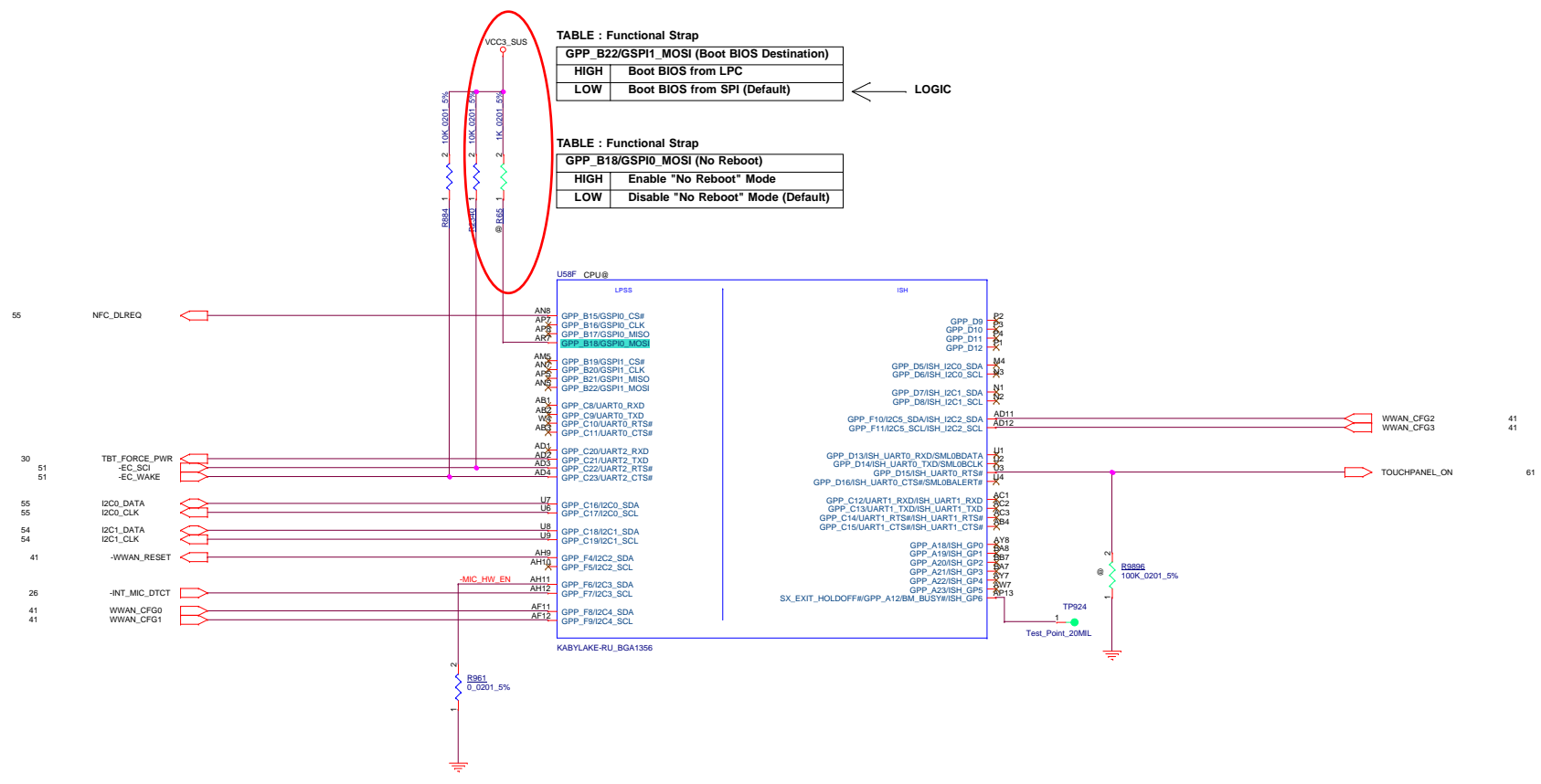


TABLE : Functional Strap

GPP_B22/GSPI1_MOSI (Boot BIOS Destination)	
HIGH	Boot BIOS from LPC
LOW	Boot BIOS from SPI (Default)

← LOGIC

TABLE : Functional Strap

GPP_B18/GSPI0_MOSI (No Reboot)	
HIGH	Enable "No Reboot" Mode
LOW	Disable "No Reboot" Mode (Default)

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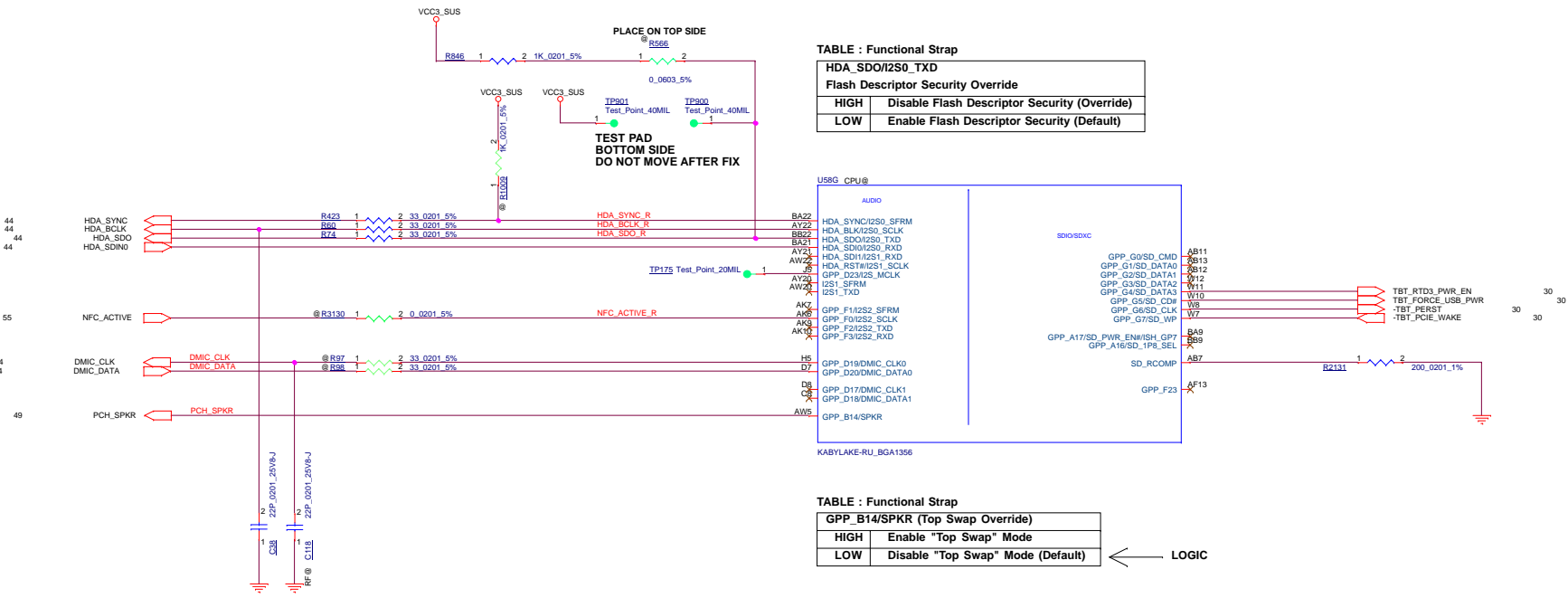


TABLE : Functional Strap

HDA_SDO/I2S0_TXD	
Flash Descriptor Security Override	
HIGH	Disable Flash Descriptor Security (Override)
LOW	Enable Flash Descriptor Security (Default)

TABLE : Functional Strap

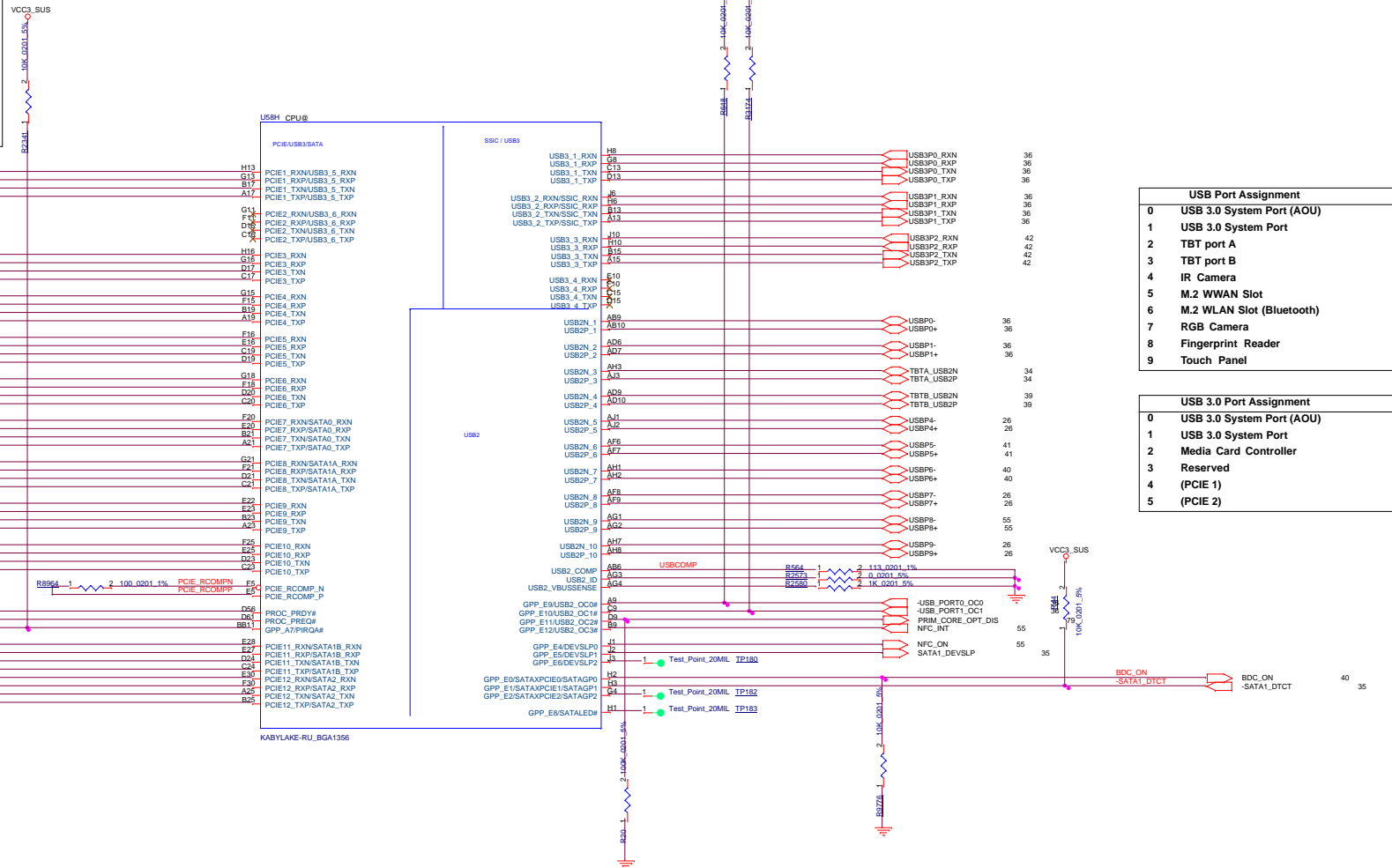
GPP_B14/SPKR (Top Swap Override)	
HIGH	Enable "Top Swap" Mode
LOW	Disable "Top Swap" Mode (Default)

← LOGIC

Flexible I/O Configuration			
I/O	High Speed Signals	Configuration	Net Name
Port 1	USB3 1	USB3 1	USB3P0
Port 2	USB3 2/SSIC	USB3 2	USB3P1
Port 3	USB3 3	USB3 3	USB3P2
Port 4	USB3 4	USB3 4	N/A
Port 5	USB3 5/PCIE 1	PCIE 1	PCIE0
Port 6	USB3 6/PCIE 2	PCIE 2	N/A
Port 7	PCIE 3 (GbE)	PCIE 3	PCIE2
Port 8	PCIE 4 (GbE)	PCIE 4 (GbE)	PCIE3
Port 9	PCIE 5 (GbE)	PCIE 5 (x4)	PCIE4_L3
Port 10	PCIE 6	PCIE 6 (x4)	PCIE4_L2
Port 11	PCIE 7/SATA 0	PCIE 7 (x4)	PCIE4_L1
Port 12	PCIE 8/SATA 1A	GPIO STRAP	PCIE4_L0_SATA1
Port 13	PCIE 9 (GbE)	PCIE 9 (x4)	PCIE8_L0
Port 14	PCIE 10 (GbE)	PCIE 10 (x4)	PCIE8_L1
Port 15	PCIE 11/SATA 1B	PCIE 11 (x4)	PCIE8_L2
Port 16	PCIE 12/SATA 2	PCIE 12 (x4)	PCIE8_L3

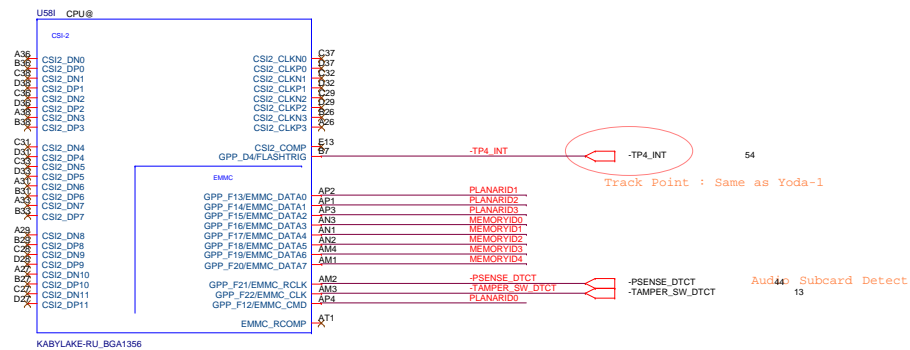
PCIe Port Assignment	
0	M.2 WLAN Slot Port 0
1	N/A
2	WWAN
3	GbE PHY
4 (x4)	PCIe SSD
8 (x4)	Thunderbolt

SATA Port Assignment	
0	(PCIe 7)
1A	SATA SSD
1B	(PCIe 11)
2	(PCIe 12)



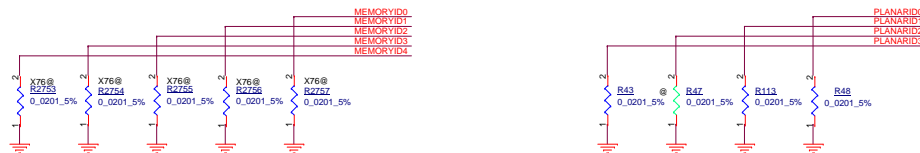
USB Port Assignment	
0	USB 3.0 System Port (AOU)
1	USB 3.0 System Port
2	TBT port A
3	TBT port B
4	IR Camera
5	M.2 WWAN Slot
6	M.2 WLAN Slot (Bluetooth)
7	RGB Camera
8	Fingerprint Reader
9	Touch Panel

USB 3.0 Port Assignment	
0	USB 3.0 System Port (AOU)
1	USB 3.0 System Port
2	Media Card Controller
3	Reserved
4	(PCIe 1)
5	(PCIe 2)



TABLE

MEMORYID[4..0]	U170, U171, U172, U173		
00000b	Micron	MT52L512M32D2PF-093WT:B	16Gbit DDP
00001b			8GB (2133)
00010b			32Gbit QDP
00011b			16GB (2133)
00100b	Samsung	K4E6E304EB-EGCG	16Gbit DDP
00101b			8GB (2133)
00110b			32Gbit QDP
00111b			16GB (2133)
01000b	SK Hynix	H9CCNNNBJTALAR-NVD	16Gbit DDP
01001b			8GB (2133)
01010b			32Gbit QDP
01011b			16GB (2133)



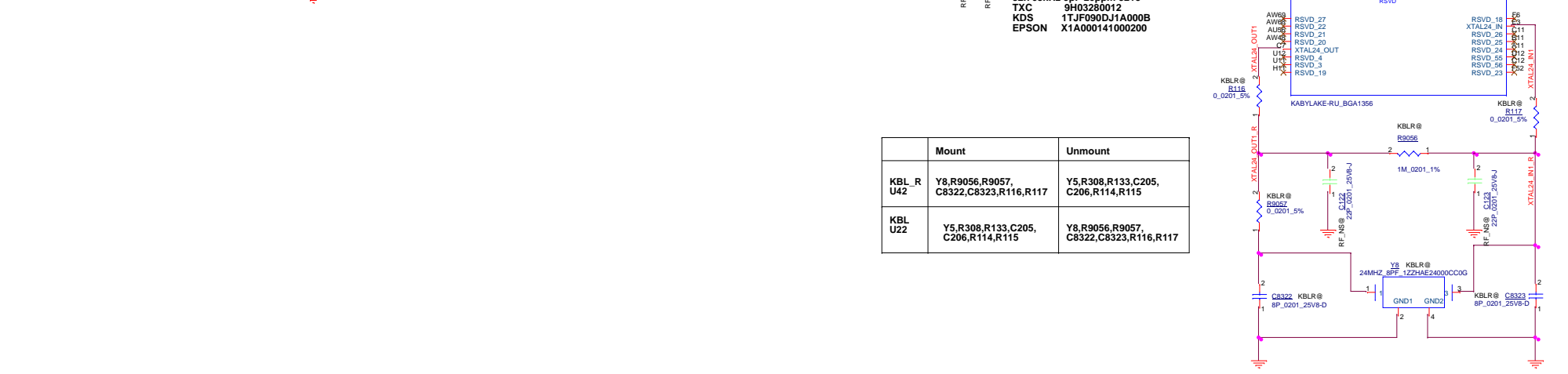
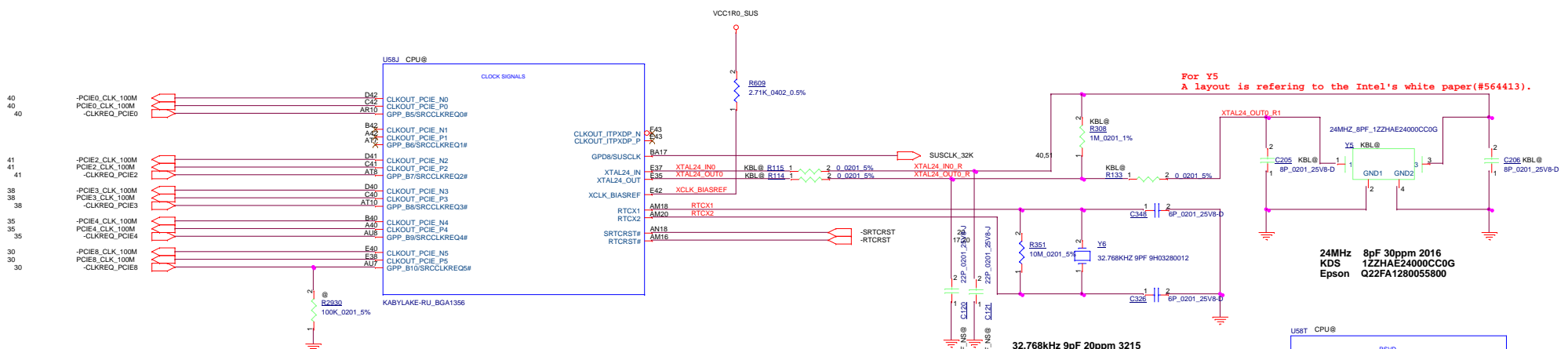
TABLE

LEVEL	PLANAR ID			
	3	2	1	0
	R43	R47	R113	R48
1	NA	NA	NA	NA
0	ASM	ASM	ASM	ASM

TABLE

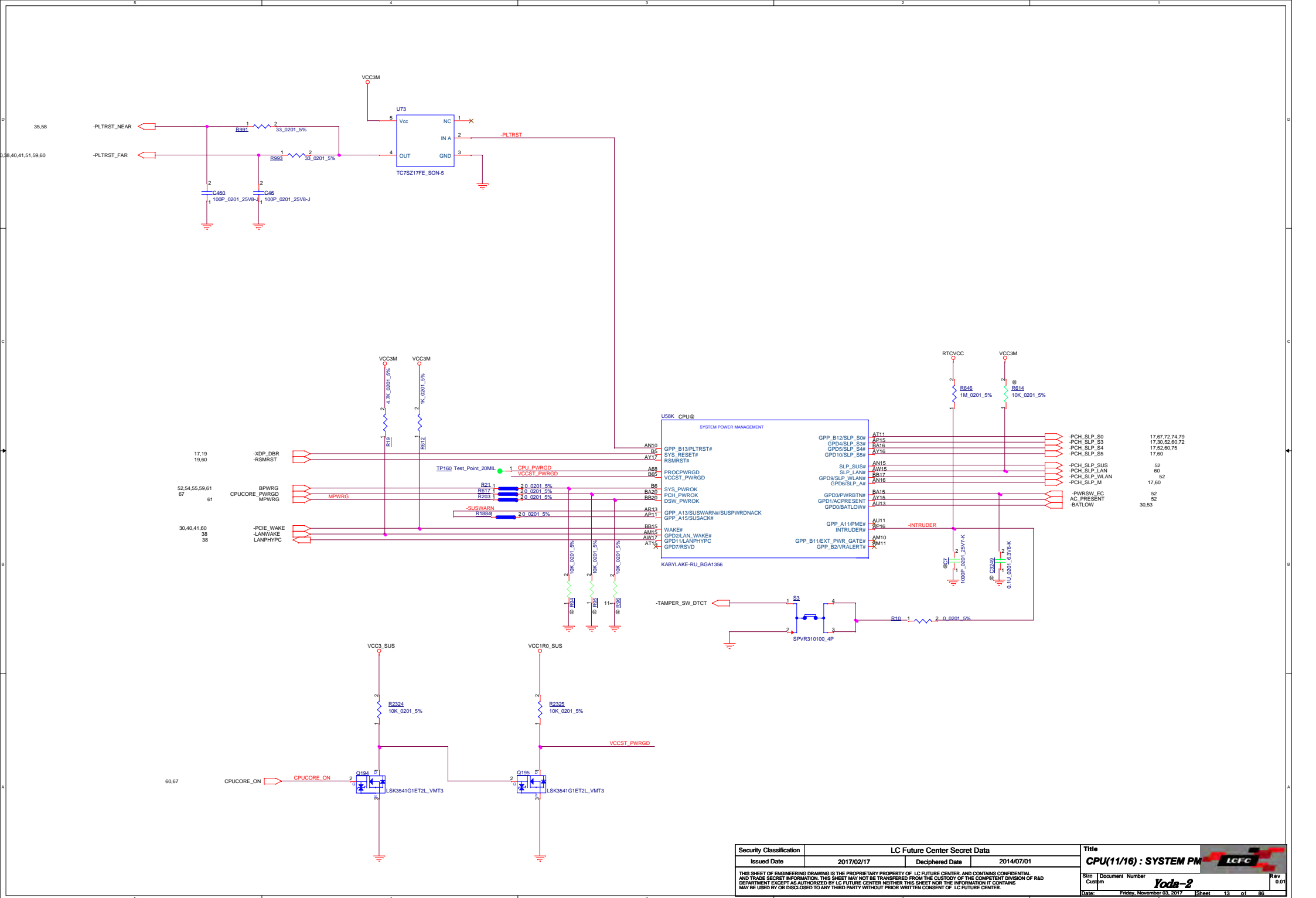
LEVEL	PLANARID[3..0]
EVT	0000B
FVT	0001B
SIT	0010B
SIT-R	0011B
SVT/SOVP	0100B

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Size	Document Number	Rev	
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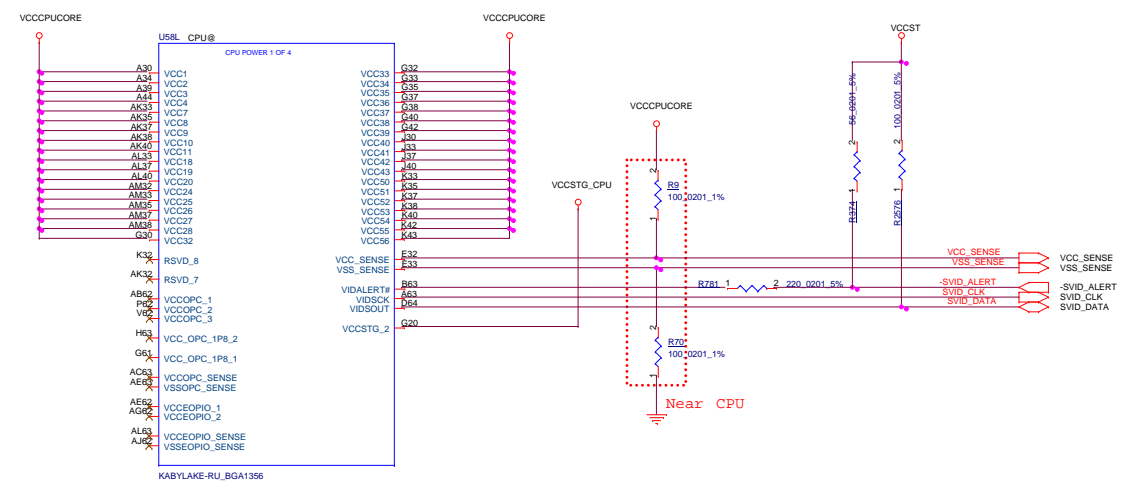
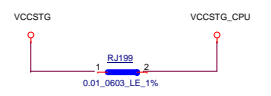
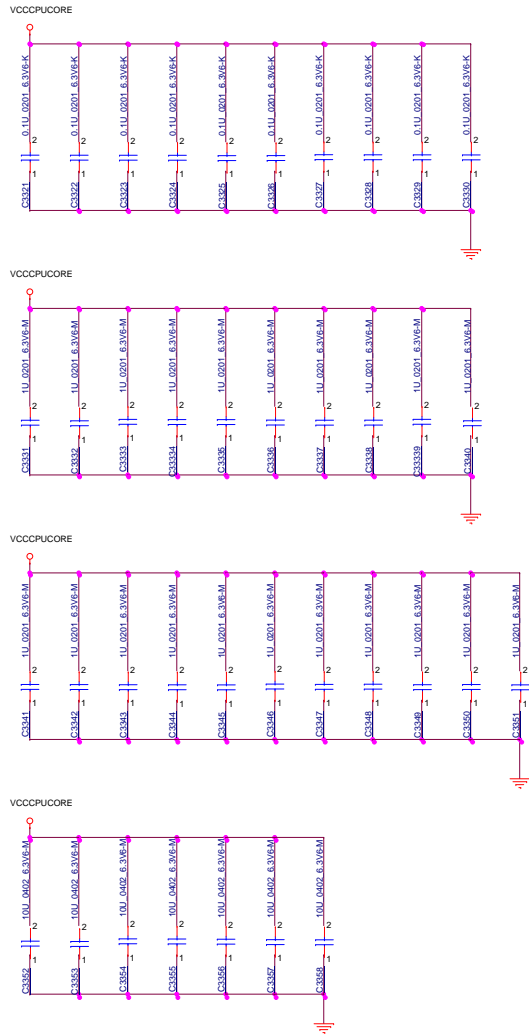


	Mount	Unmount
KBL_R U42	Y8,R9056,R9057, C8322,C8323,R116,R117	Y5,R308,R133,C205, C206,R114,R115
KBL U22	Y5,R308,R133,C205, C206,R114,R115	Y8,R9056,R9057, C8322,C8323,R116,R117

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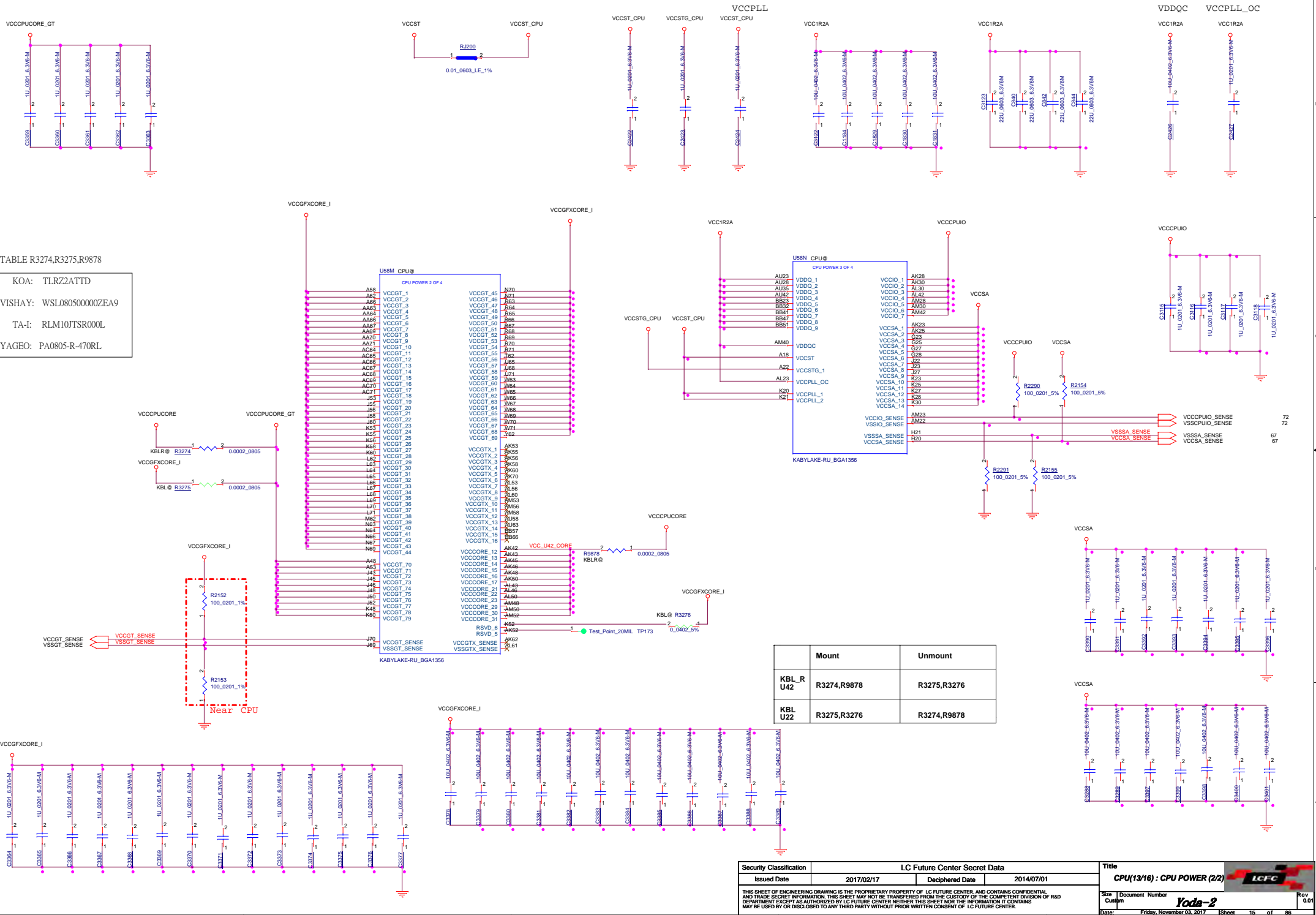


67
67
67

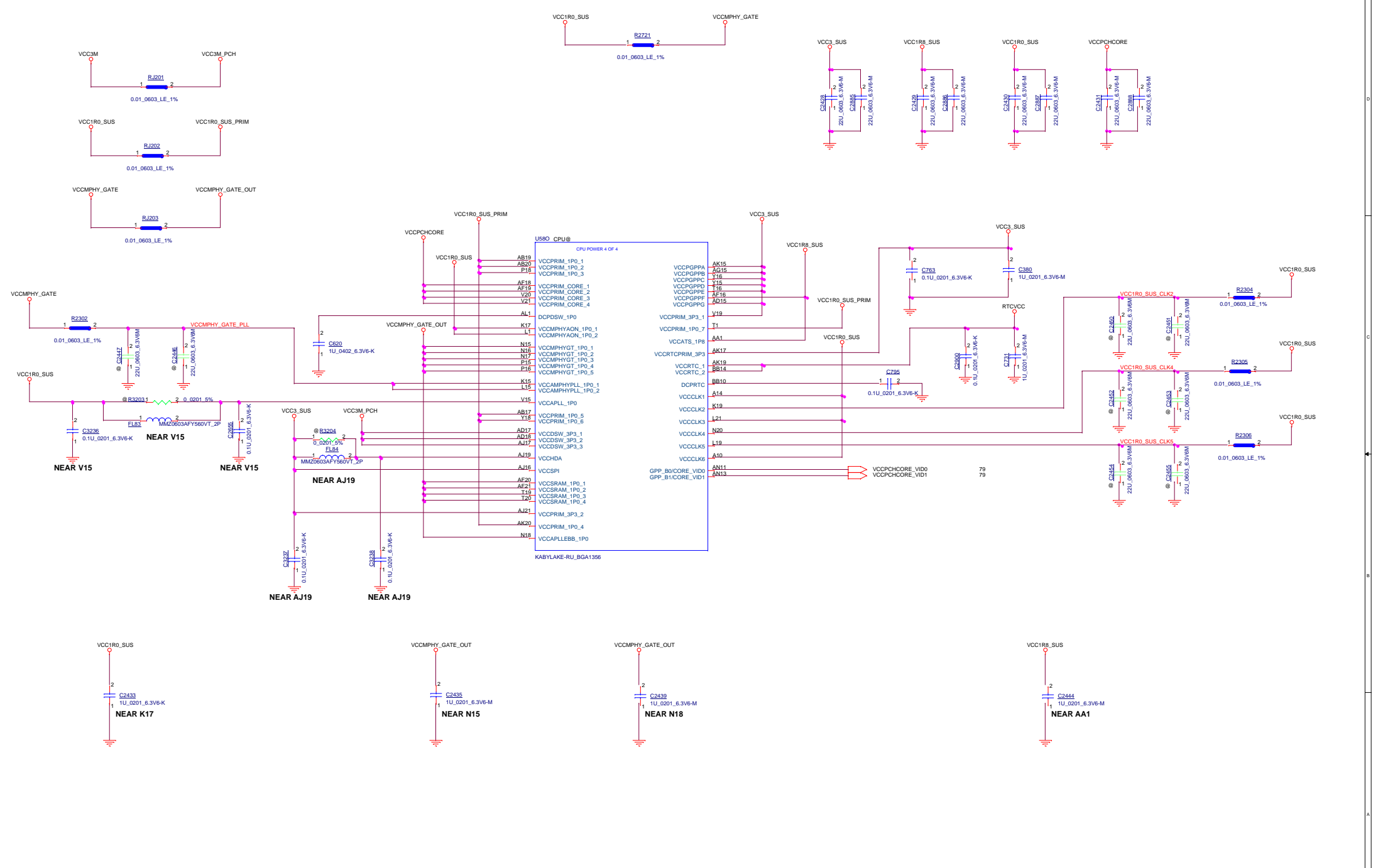
Security Classification		LC Future Center Secret Data		Title	
Issued Date	2017/02/17	Deciphered Date	2014/07/01	CPU(12/16) : CPU POWER (1/2)	
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TABLE R3274,R3275,R9878

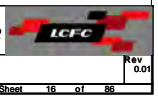
KOA: TLRZ2ATTD
 VISHAY: WSL0805000002EA9
 TA-I: RLM10JTSR000L
 YAGEO: PA0805-R-470RL



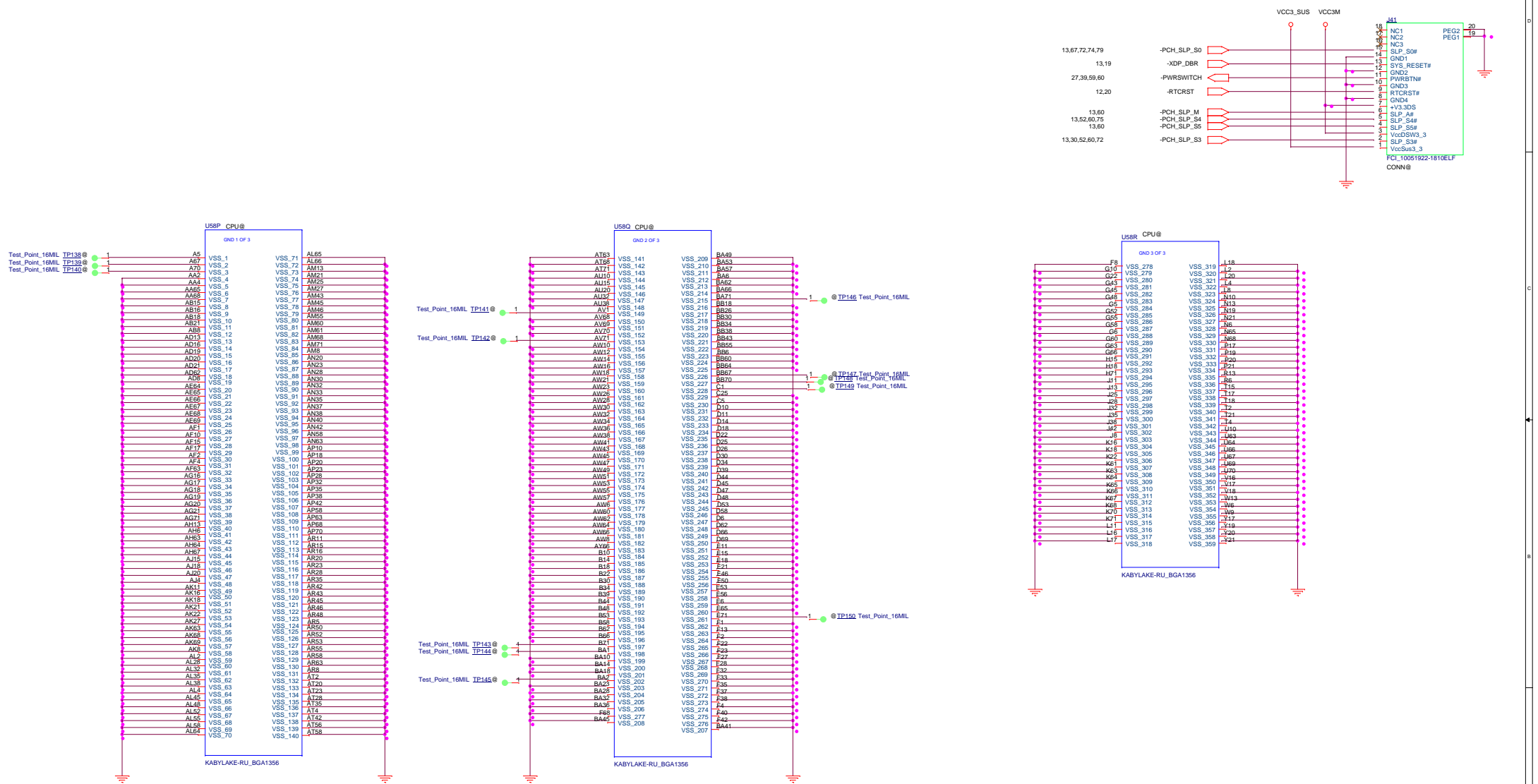
Mount	Unmount
KBL_R U42	R3275,R3276
KBL U22	R3274,R9878



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APS/PETS Interface



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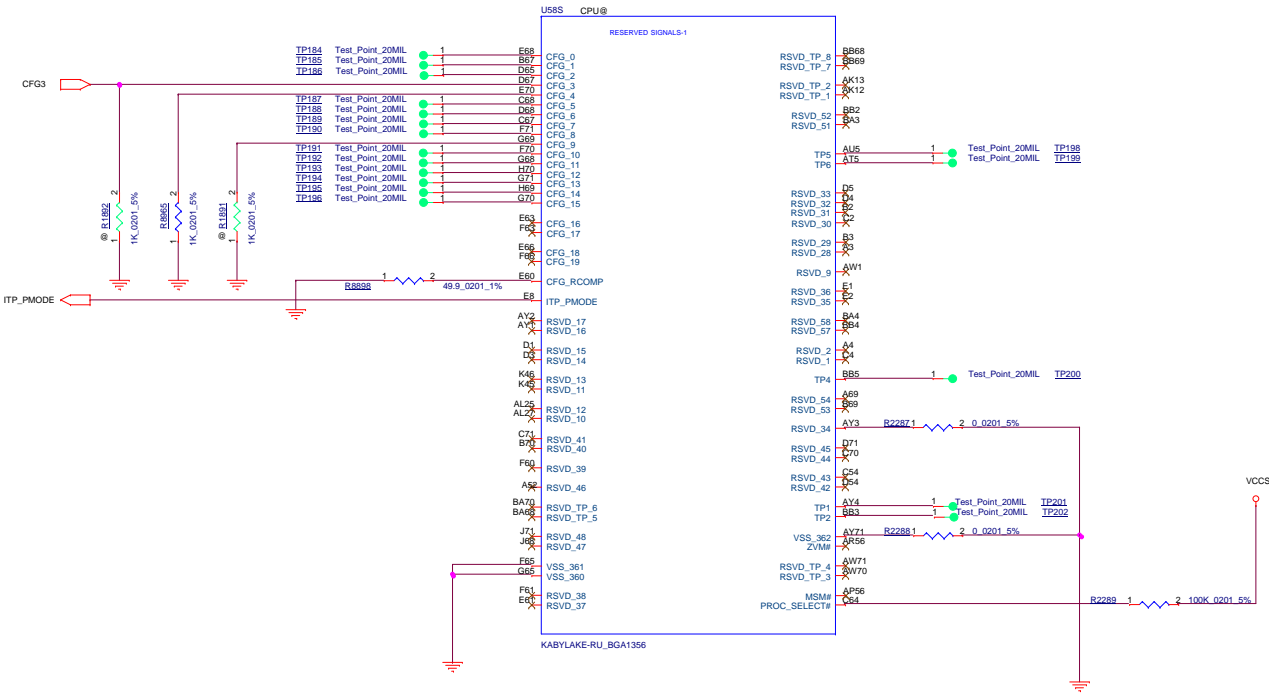
TABLE

CFG0 : Stall Reset Sequence after PCU PLL Lock until de-asserted
 1 : No Stall
 0 : Stall

CFG3 : MSR Privacy Bit Feature
 1 : MSR (C80h) bit[0] setting
 0 : MSR (C80h) bit[0] overridden

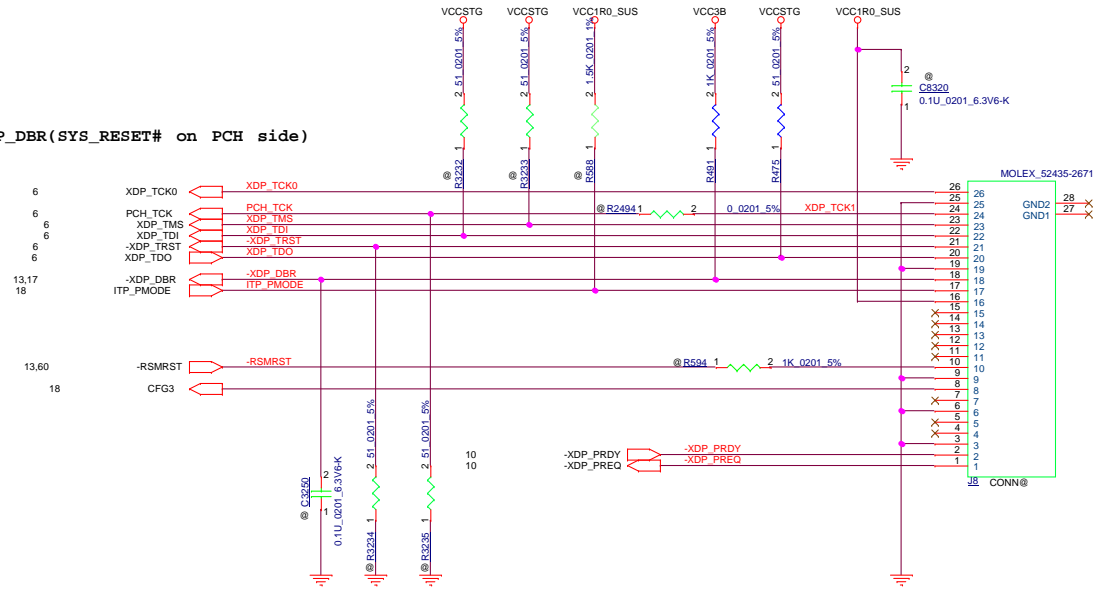
CFG4 : eDP Enable
 1 : Disabled
 0 : Enabled

CFG9 : SVID Bus Communication
 1 : Enabled
 0 : Disabled



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Never remove pull-up on -XDP_DBR(SYS_RESET# on PCH side)

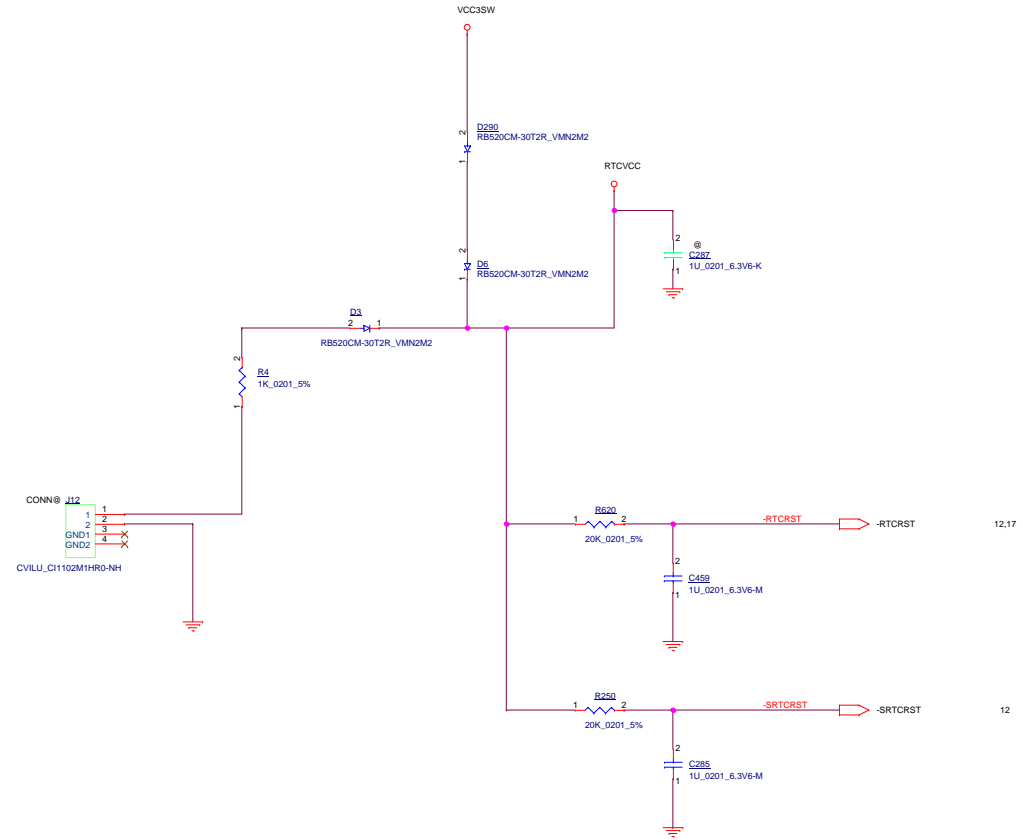


TABLE

Logic	Ref Des	Merged	DCI 2.0
Page 7	R2559	ASM	NO_ASM
Page 18	R1892	ASM	NO_ASM
Page 19	J8	ASM	NO_ASM
	C8320	ASM	NO_ASM
	R475	ASM	ASM
	R491	ASM	ASM
	R588	ASM	NO_ASM
	R594	ASM	NO_ASM
	R2494	ASM	NO_ASM

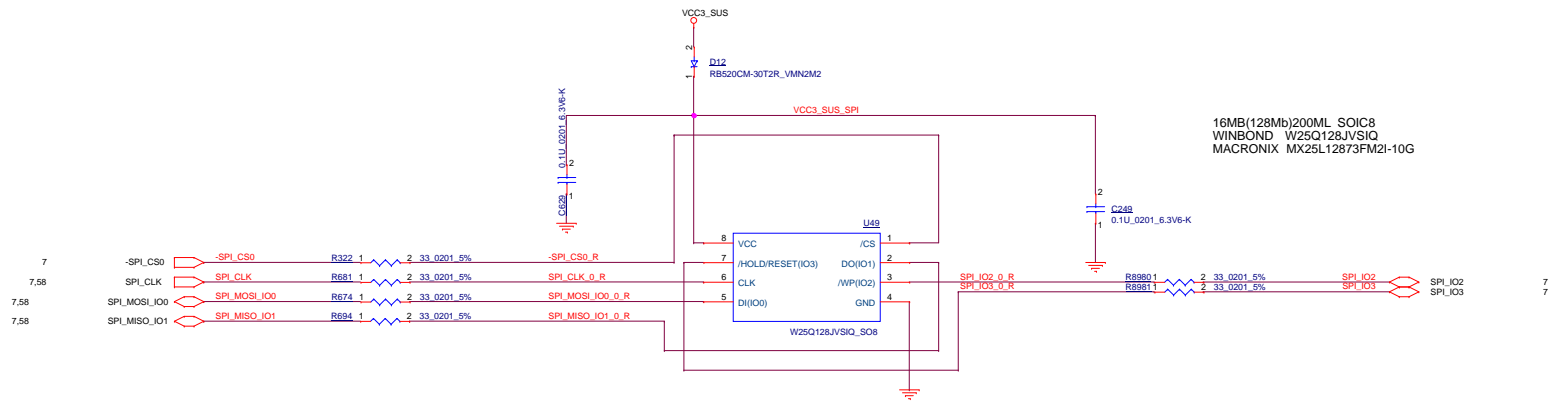
↑
LOGIC

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16MB(128Mb)200ML SOIC8
WINBOND W25Q128JVSQ
MACRONIX MX25L12873FM2I-10G

TABLE

SF100 PIN HEADER INTERFACE (TOP VIEW)							
1	VCC	D12.1	GND	GND	2		
3	CS#	R322.2	R681.2	CLK	4		
5	MISO	R684.2	R674.2	MOSI	6		
7	(KEY)	N/A	N/A	(RESET)	8		

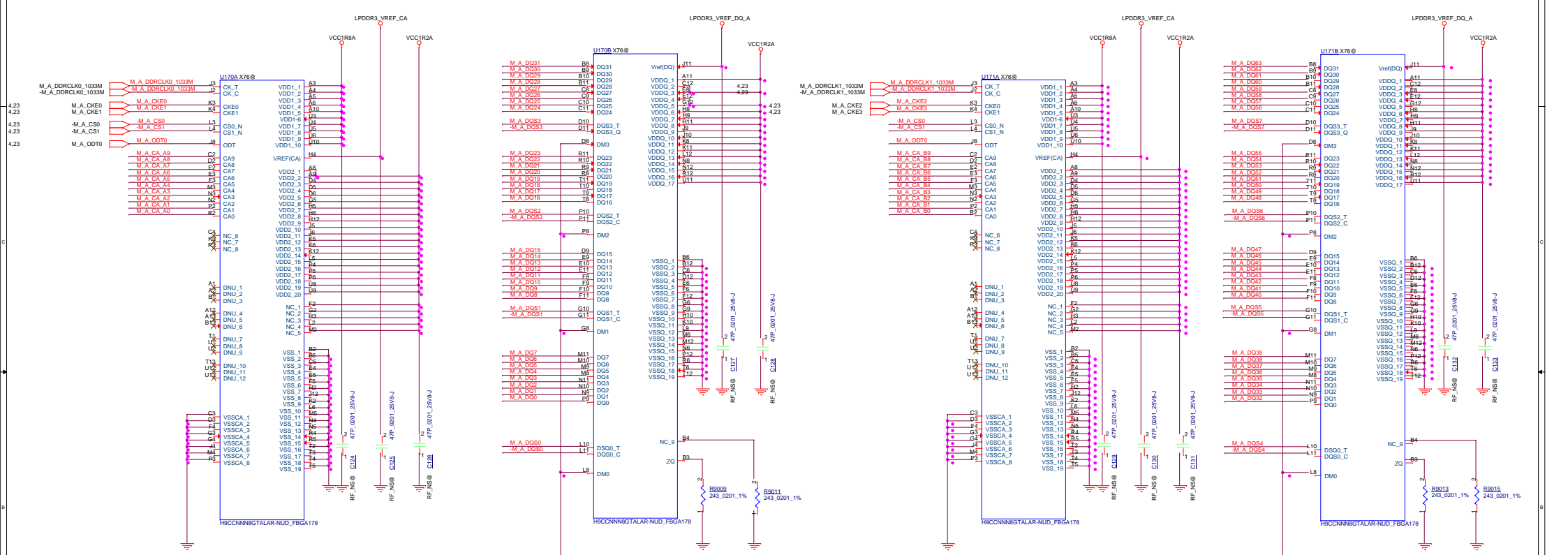
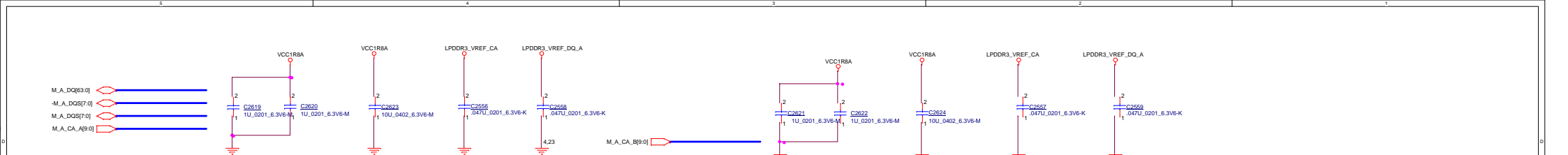
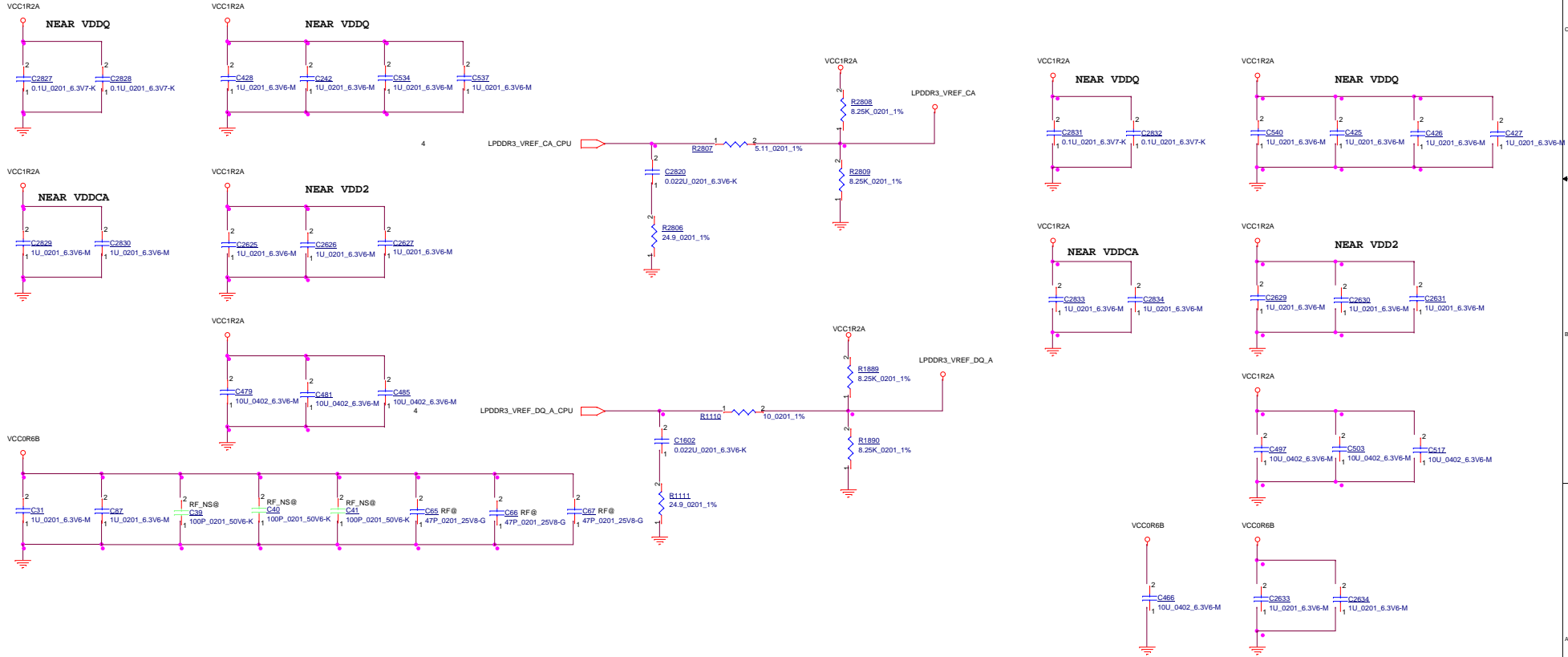
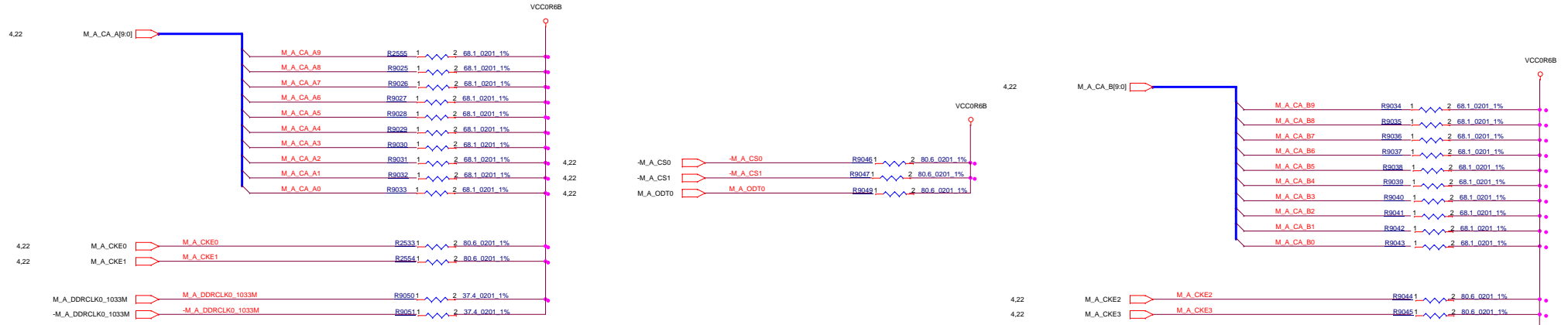


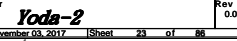
TABLE: LPDDR3 SDRAM Source

Supplier	Capacity	Supplier's P/N	Package Size	Die	Configuration	ZQ0 / ZQ	ZQ1 / NC	CKE0 / CKE	CKE1 / NC	CS0# / CS#	CS1# / NC	Dual Ch
Micron	16Gb	MT52L512M32D2PF-093 WT-B	11.0 x 11.5 mm	8Gb (256Mx32)	2 Rank x (256Mx32)	ZQ0	NC	CKE0	CKE1	CS0#	CS1#	8Gb
	32Gb	MT52L1G32D4PG-093 WT-B	12.0 x 11.5 mm	8Gb (512Mx16)	2 Rank x (512Mx32)	ZQ0	ZQ1	CKE0	CKE1	CS0#	CS1#	16Gb
Samsung	16Gb	K4E6E34EB-EGCC	11.0 x 11.5 mm	8Gb (256Mx32)	2 Rank x (256Mx32)	ZQ0	NC	CKE0	CKE1	CS0#	CS1#	8Gb
	32Gb	K4E6E34EB-EGCC	11.0 x 11.5 mm	8Gb (512Mx16)	2 Rank x (512Mx32)	ZQ0	ZQ1	CKE0	CKE1	CS0#	CS1#	16Gb
SK hynix	16Gb	H9CCNNBJTALAR-NVD	11.0 x 11.5 mm	8Gb (256Mx32)	2 Rank x (256Mx32)	ZQ0	NC	CKE0	CKE1	CS0#	CS1#	8Gb
	32Gb	H9CCNNCLGALAR-NVD	11.0 x 11.5 mm	8Gb (512Mx16)	2 Rank x (512Mx32)	ZQ0	ZQ1	CKE0	CKE1	CS0#	CS1#	16Gb

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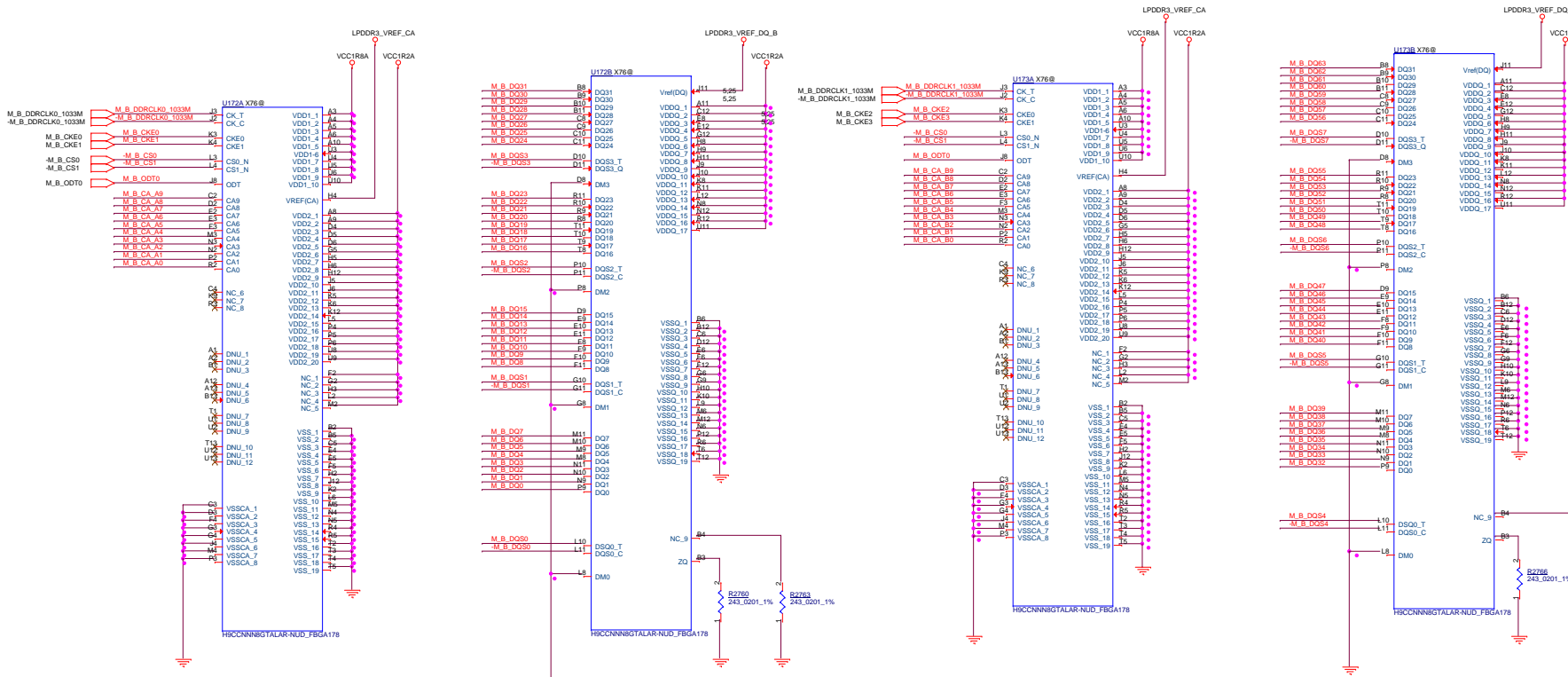
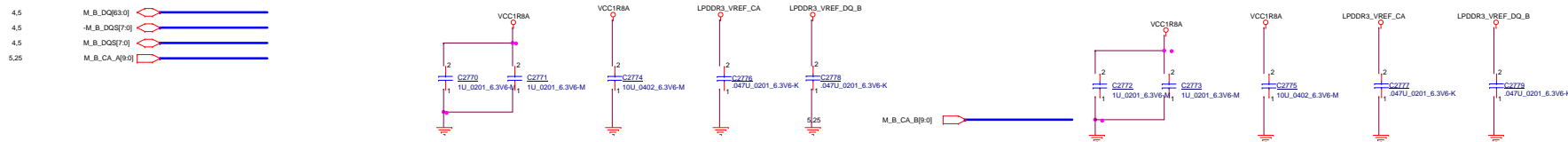
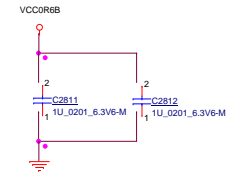
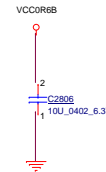
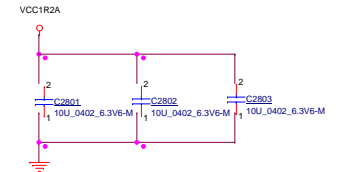
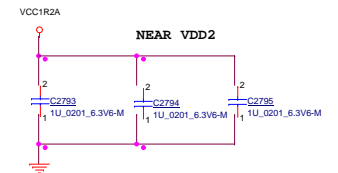
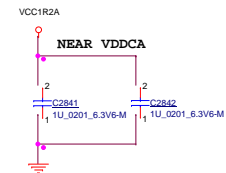
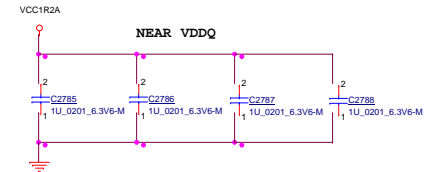
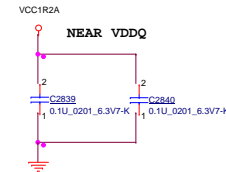
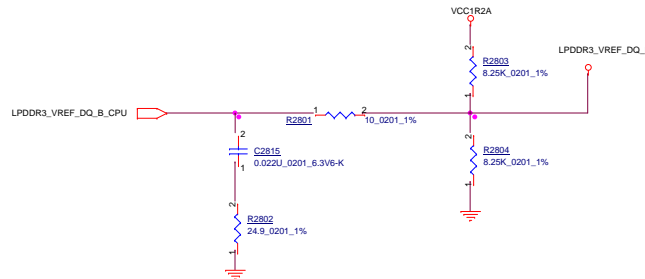
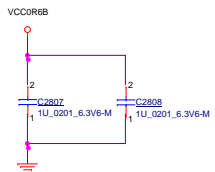
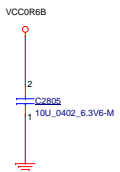
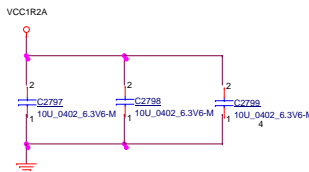
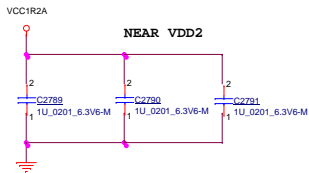
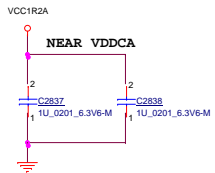
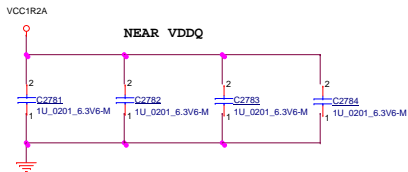
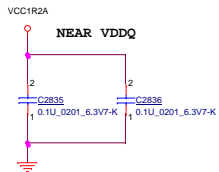
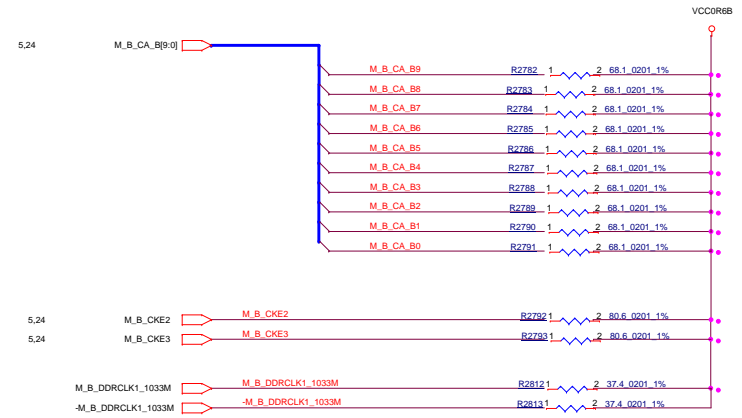
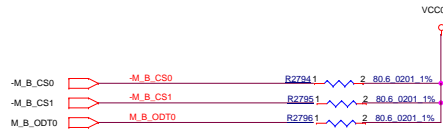
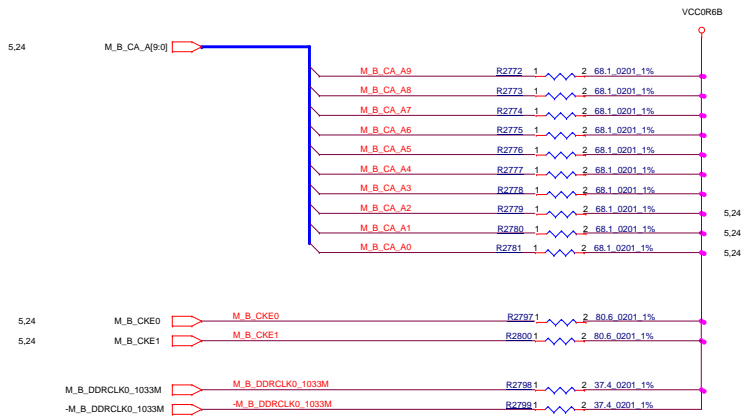



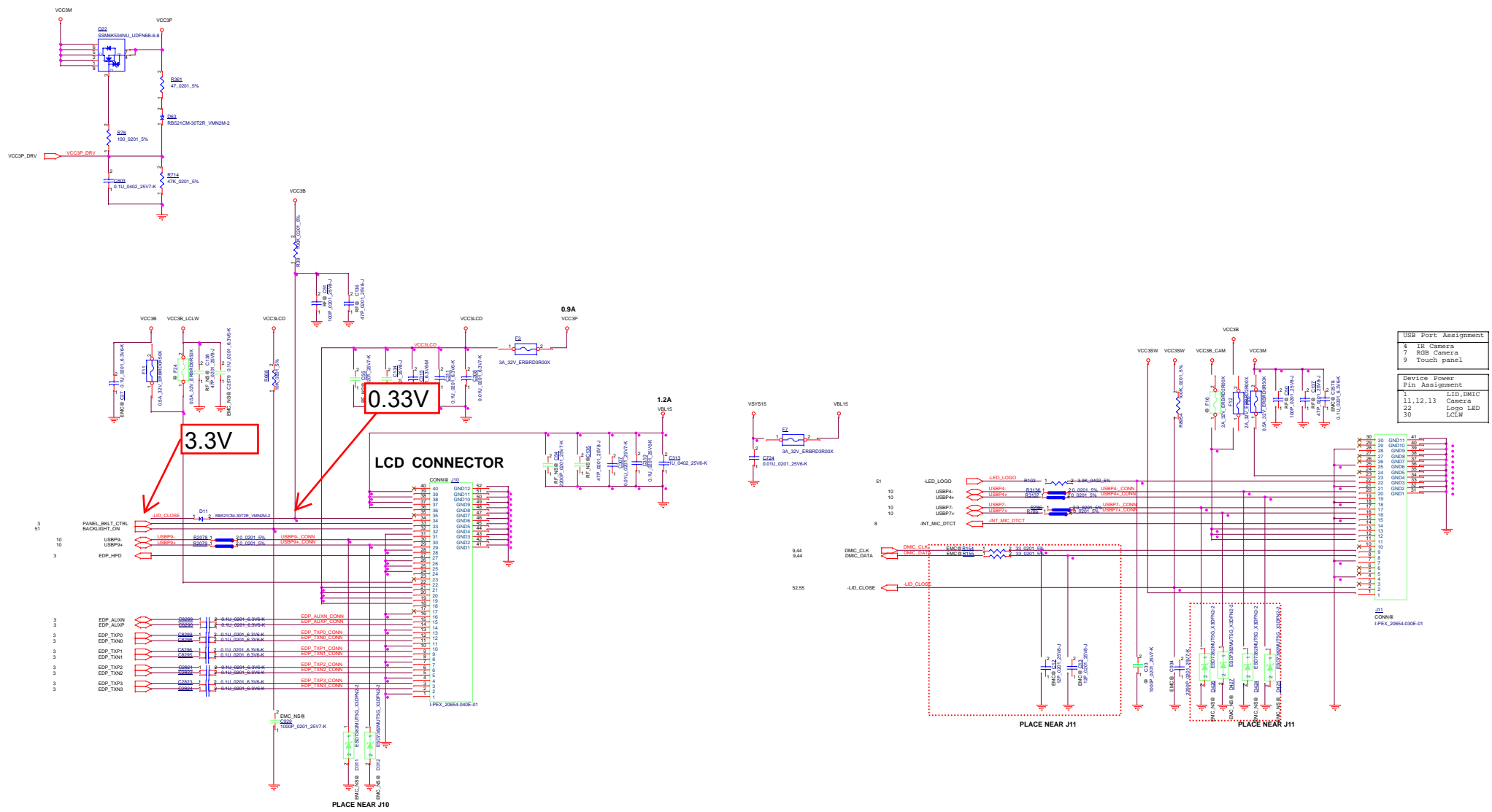
TABLE: LPDDR3 SDRAM Source

Supplier	Capacity	Supplier's P/N	Package Size	Die	Configuration	ZQ0 / ZQ1	ZQ1 / NC	CKE0 / CKE1	CKE1 / NC	CS0# / CS#	CS1# / NC	Dual Ch
Micron	16Gb	MT52L512M32DP-093 WT-B	11.0 x 11.5 mm	DDP 8Gb (256Mx32)	2 Rank x (256Mx32)	ZQ	NC	CKE0	CKE1	CS0#	CS1#	8Gb
	32Gb	MT52L1G32DPG-093 WT-B	12.0 x 11.5 mm	QDP 8Gb (512Mx16)	2 Rank x (512Mx16)	ZQ0	ZQ1	CKE0	CKE1	CS0#	CS1#	16Gb
Samsung	16Gb	K4EBE304EB-EGCG	11.0 x 11.5 mm	DDP 8Gb (256Mx32)	2 Rank x (256Mx32)	ZQ	NC	CKE0	CKE1	CS0#	CS1#	8Gb
	32Gb	K4EBE304EB-EGCG	11.0 x 11.5 mm	QDP 8Gb (512Mx16)	2 Rank x (512Mx16)	ZQ0	ZQ1	CKE0	CKE1	CS0#	CS1#	16Gb
SK hynix	16Gb	H9CCNNBJTALAR-NVD	11.0 x 11.5 mm	DDP 8Gb (256Mx32)	2 Rank x (256Mx32)	ZQ	NC	CKE0	CKE1	CS0#	CS1#	8Gb
	32Gb	H9CCNNCLGALAR-NVD	11.0 x 11.5 mm	QDP 8Gb (512Mx16)	2 Rank x (512Mx16)	ZQ0	ZQ1	CKE0	CKE1	CS0#	CS1#	16Gb

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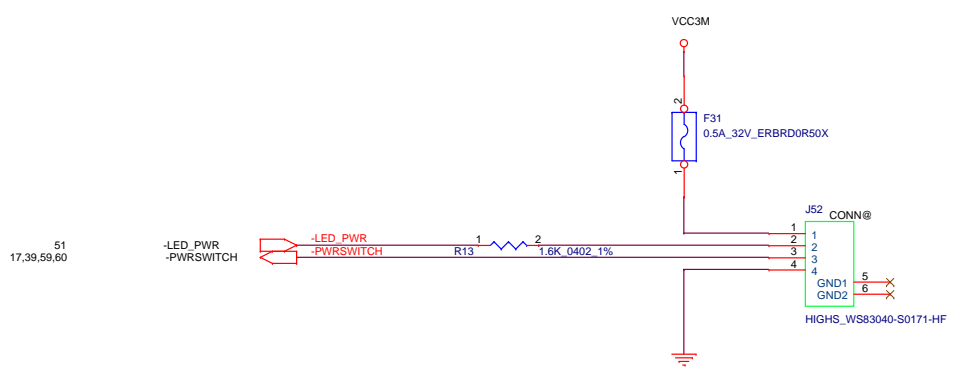
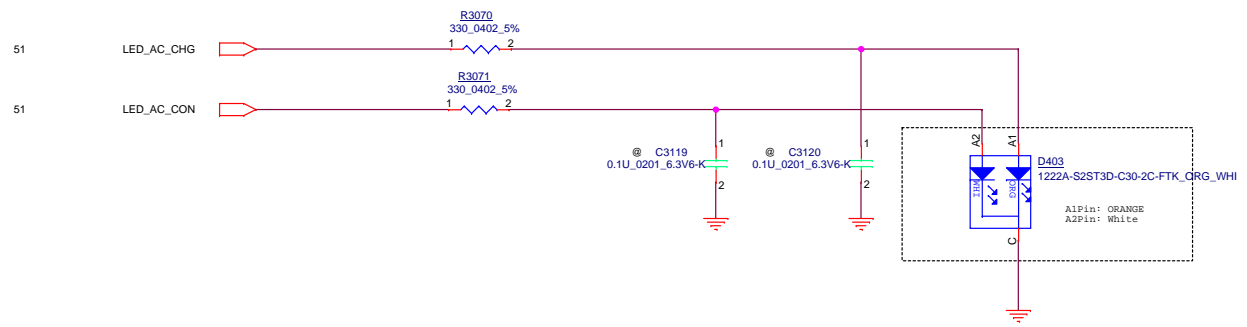
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USB Port Assignment	
4	IR Camera
7	RGB Camera
9	Touch panel

Device Power Pin Assignment	
1	LID, IMC
2,3	Camera
23	Logo LED
30	LCLW

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Scale	1:1	Page	25 of 31




Change from YD-1.
Take distance between VCC3M pin and GND pin.

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				Custom	Yoda-2	0.01
				Date:	Friday, November 03, 2017	Sheet 28 of 86

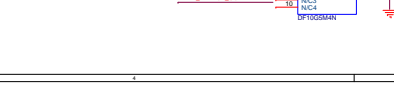
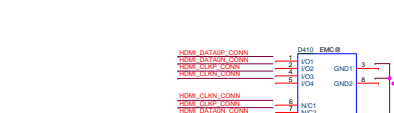
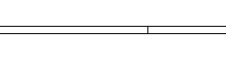
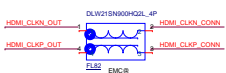
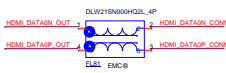
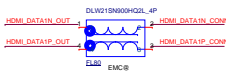
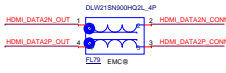
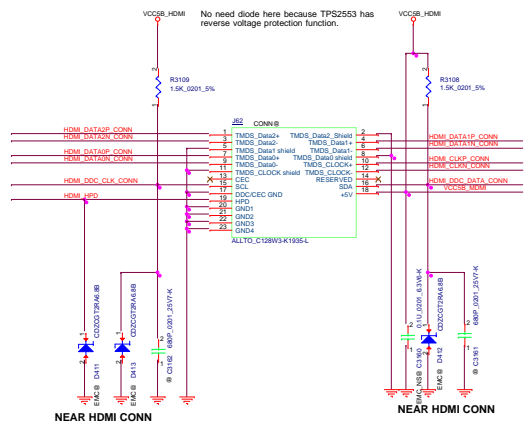
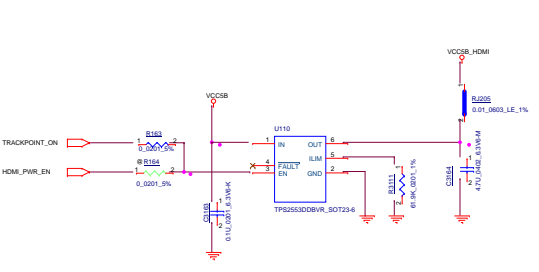
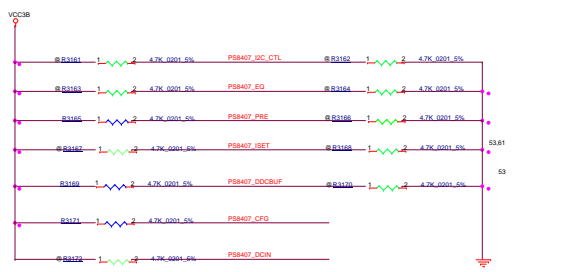
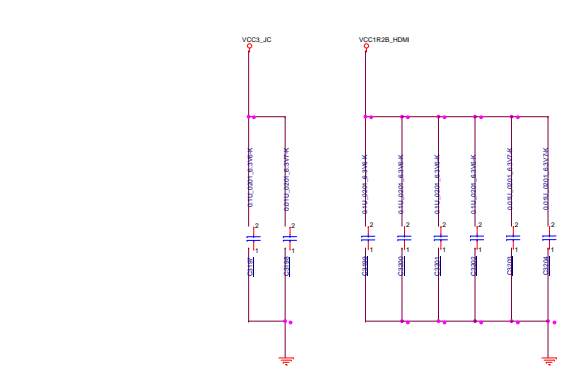
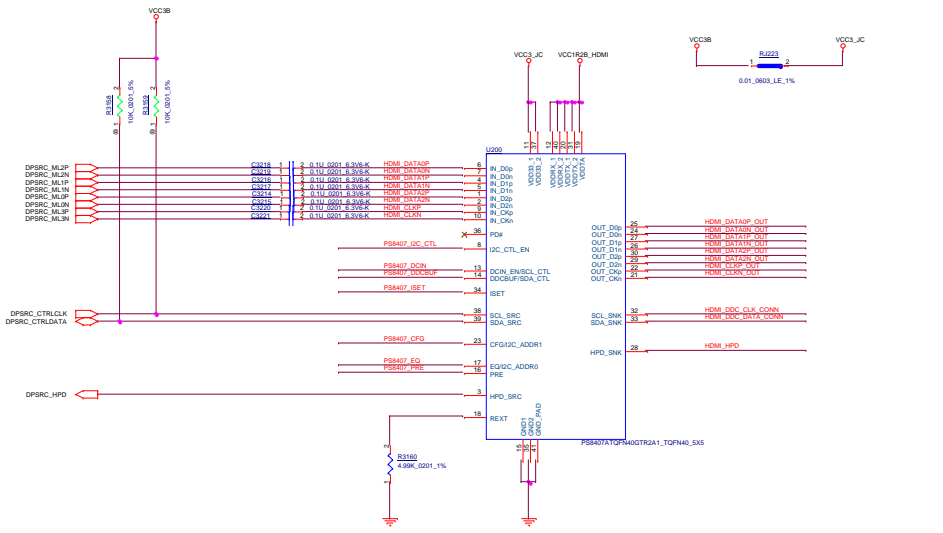
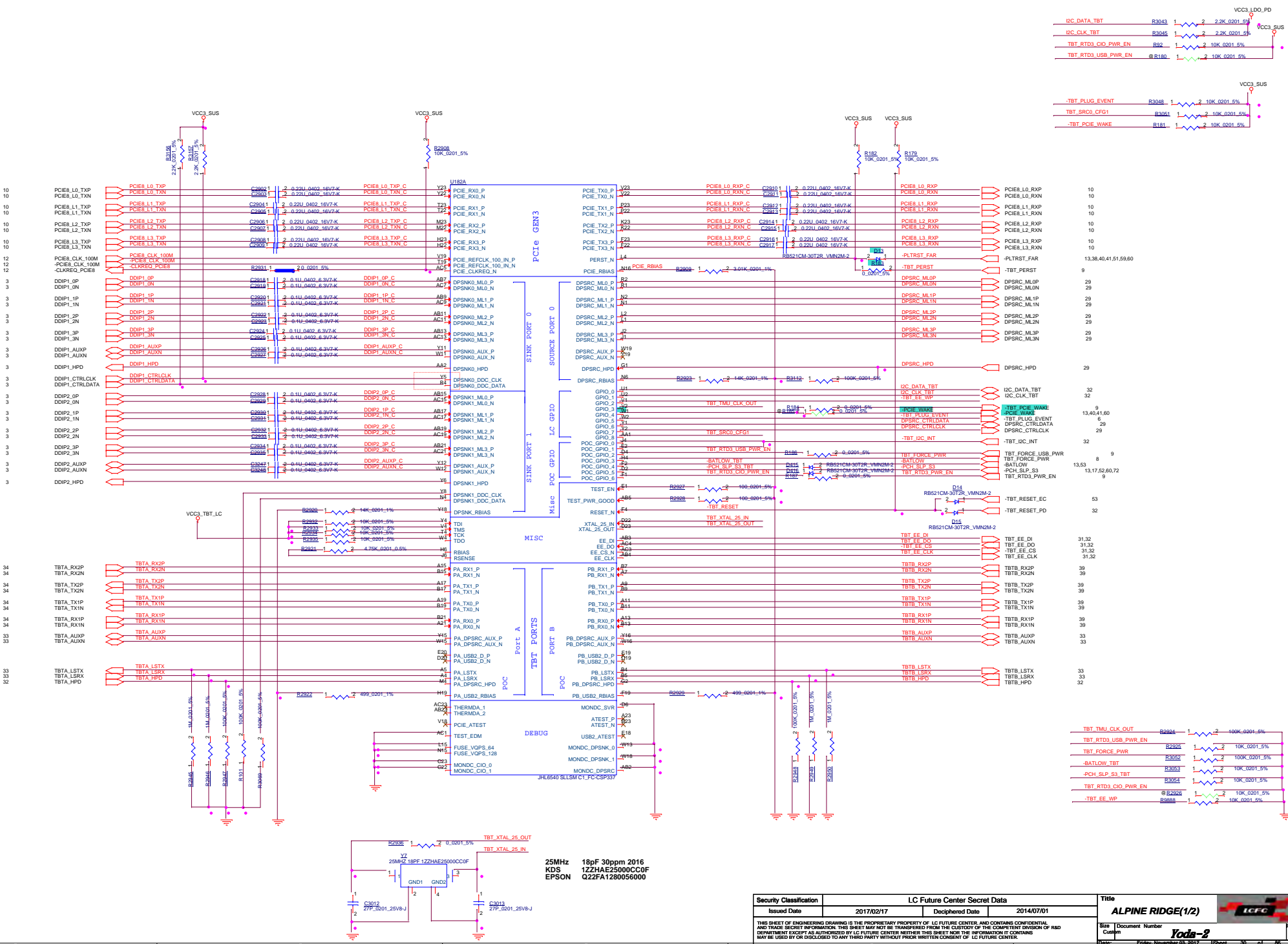
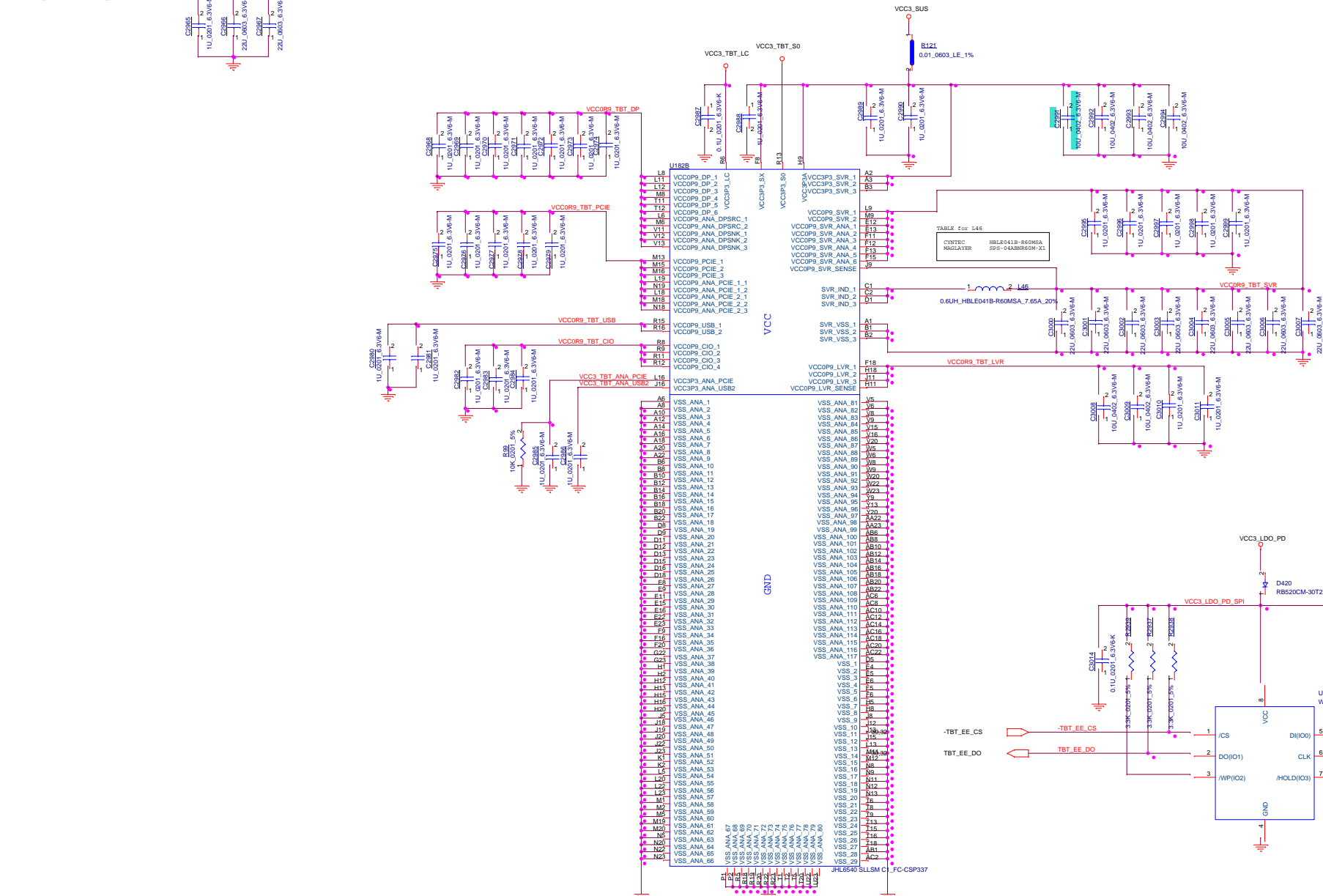
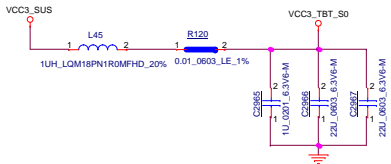


TABLE FL79, FL80, FL81, FL82
Murata DLW21S900HQ2
Chilisin CUW21T-900Y-N

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Date	2016/12/06/01/2017	By					



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Custum					
Date:	Friday, November 03, 2017	1Sheet	30	of	86

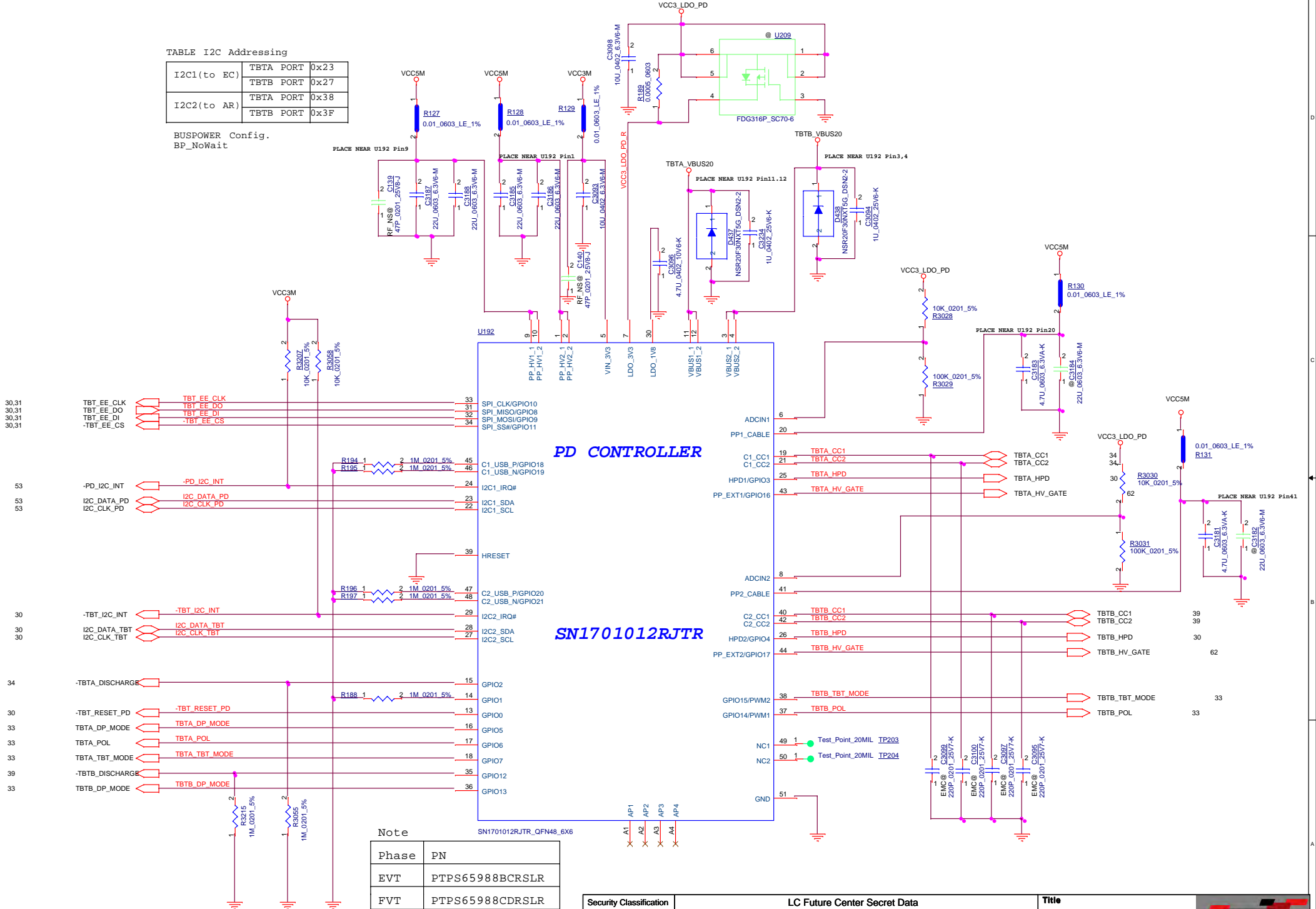


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TABLE I2C Addressing

I2C1(to EC)	TBTA PORT	0x23
	TBTB PORT	0x27
I2C2(to AR)	TBTA PORT	0x38
	TBTB PORT	0x3F

BUSPOWER Config.
BP_NoWait



PD CONTROLLER

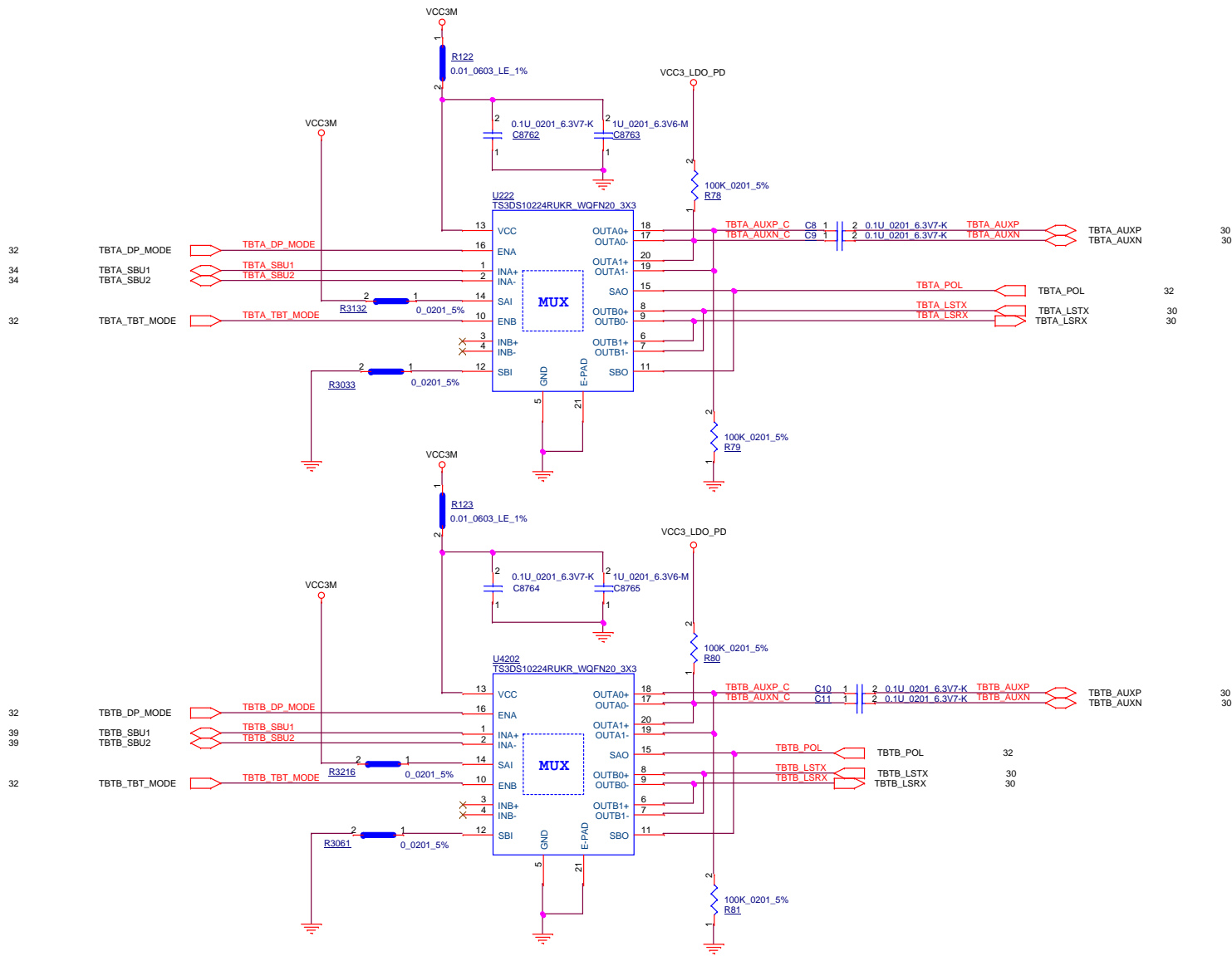
SN1701012RJTR

Note

Phase	PN
EVT	PTPS65988BCRS LR
FVT	PTPS65988CD RSLR
SIT	PTPS65988CERJTR
SIT-R	SN1701012RJTR

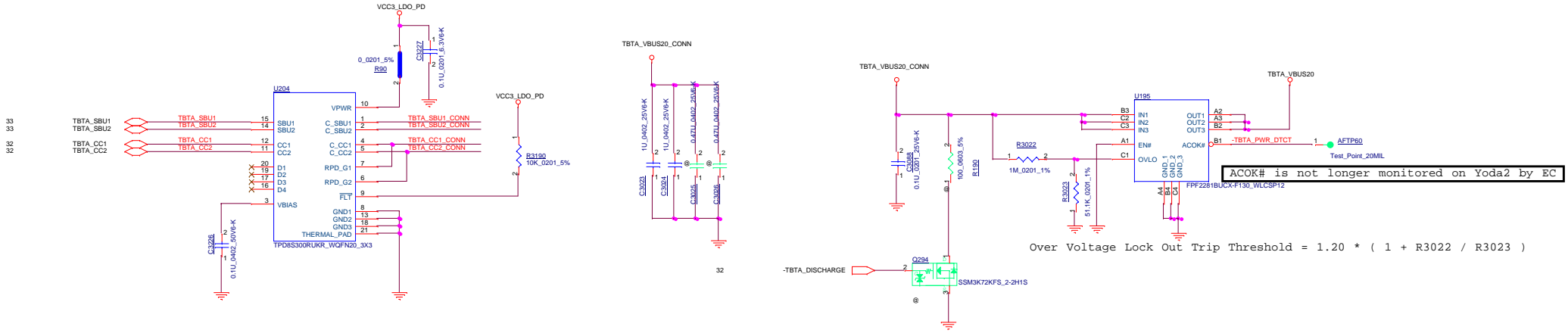
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Title		
THUNDERBOLT PD		
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Title		
THUNDERBOLT DMUX		
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ACOK# is not longer monitored on Yoda2 by EC

$$\text{Over Voltage Lock Out Trip Threshold} = 1.20 * (1 + R3022 / R3023)$$

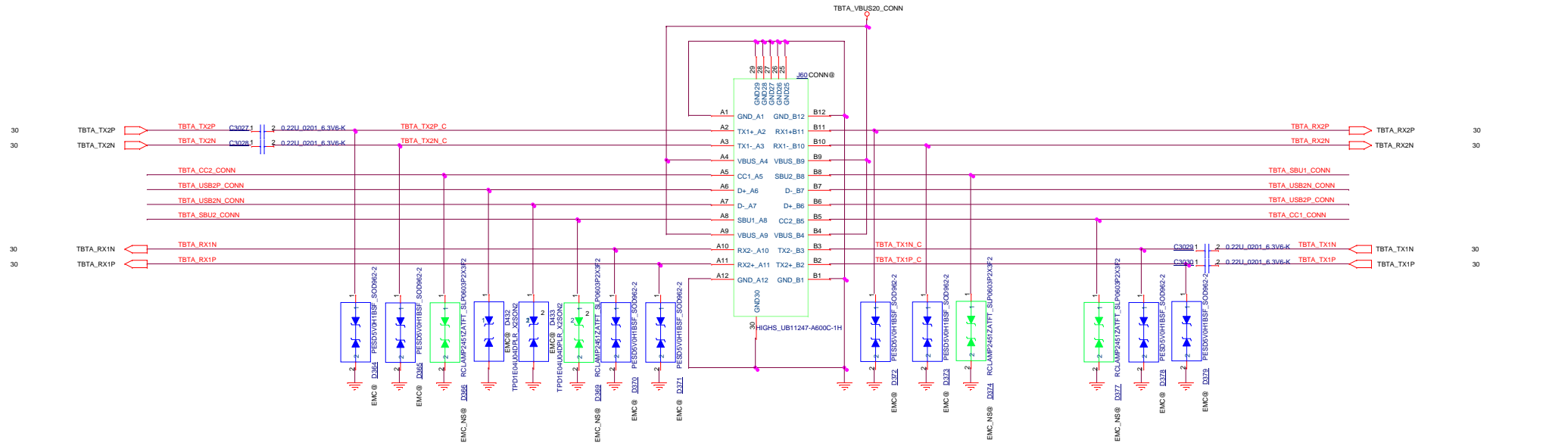
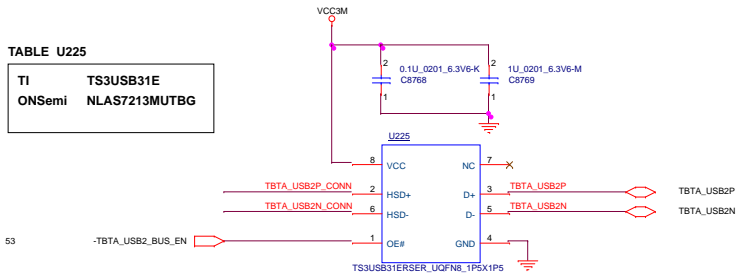


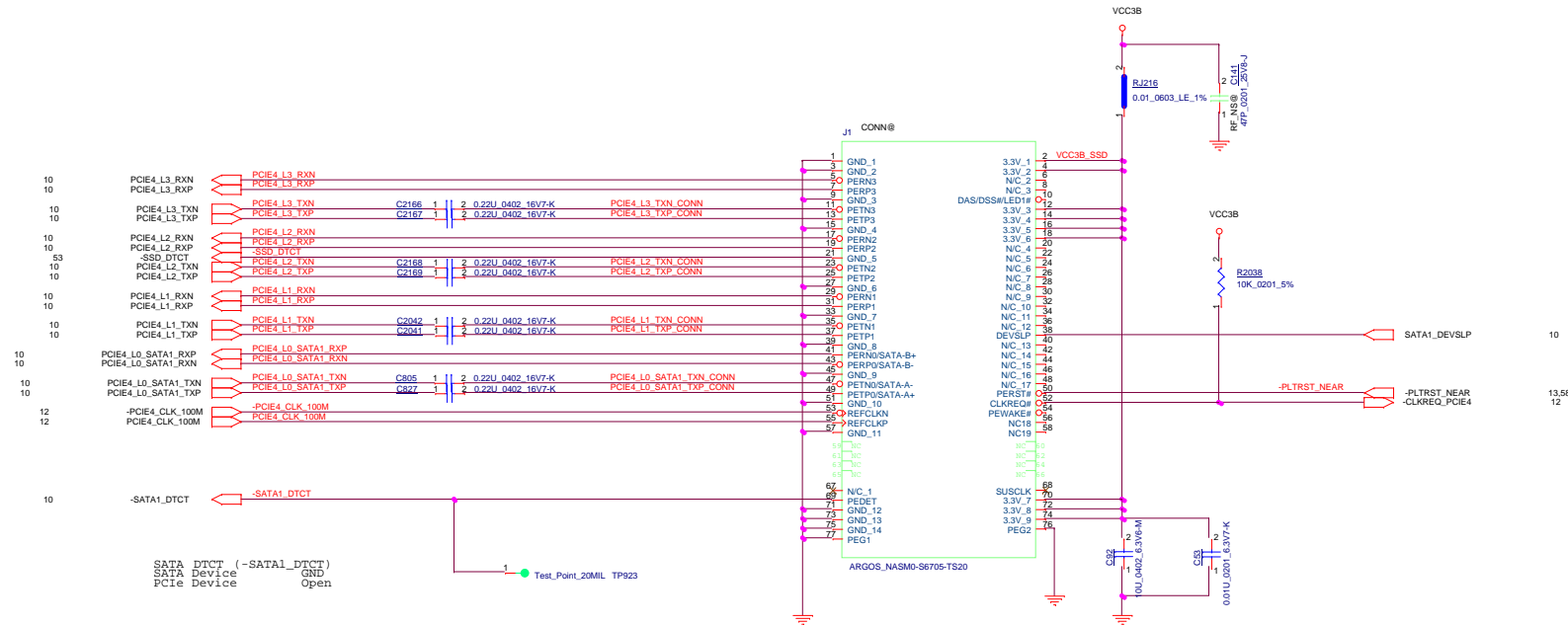
TABLE U225
TI TS3USB31E
ONsemi NLA57213MUTBG




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File	Document Number	Rev	0.01
Ctrl	Yoda-2		
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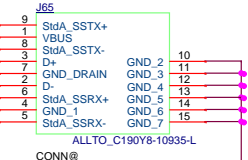
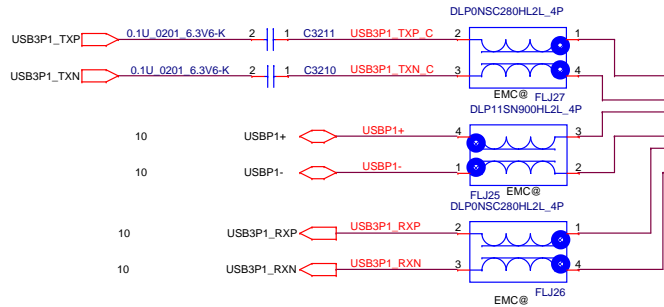
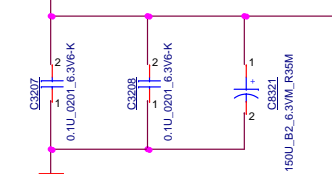
M.2 Socket 3 (Key-M) for 2280 S3 SSD

H=2.00mm Connector



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USB_PWR_S2
WIDE PATTERN(MIN 500mA)
PLACE NEAR USB CONN



D423 Pin assignment

	1st source DF10G5M4N	2nd source ESD7004MUTAG
Pin1	USB3P1_RXN_CONN	USB3P1_RXN_CONN
Pin2	USB3P1_RXP_CONN	USB3P1_RXP_CONN
Pin3	GND	GND
Pin4	USB3P1_TXN_CONN	USB3P1_TXN_CONN
Pin5	USB3P1_TXP_CONN	USB3P1_TXP_CONN
Pin6	USB3P1_TXP_CONN	USB3P1_TXP_CONN
Pin7	USB3P1_TXN_CONN	USB3P1_TXN_CONN
Pin8	-	-
Pin9	USB3P1_RXP_CONN	USB3P1_RXP_CONN
Pin10	USB3P1_RXN_CONN	USB3P1_RXN_CONN

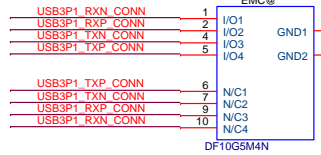
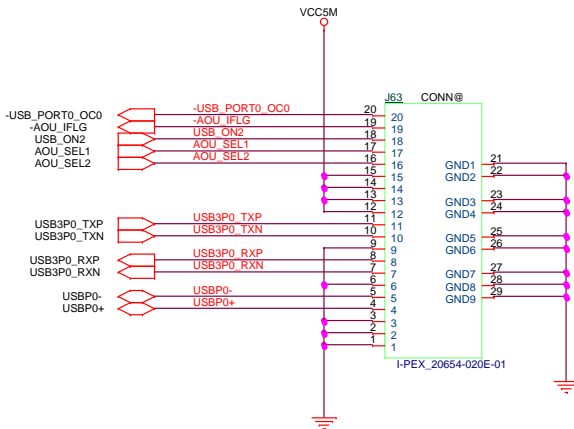
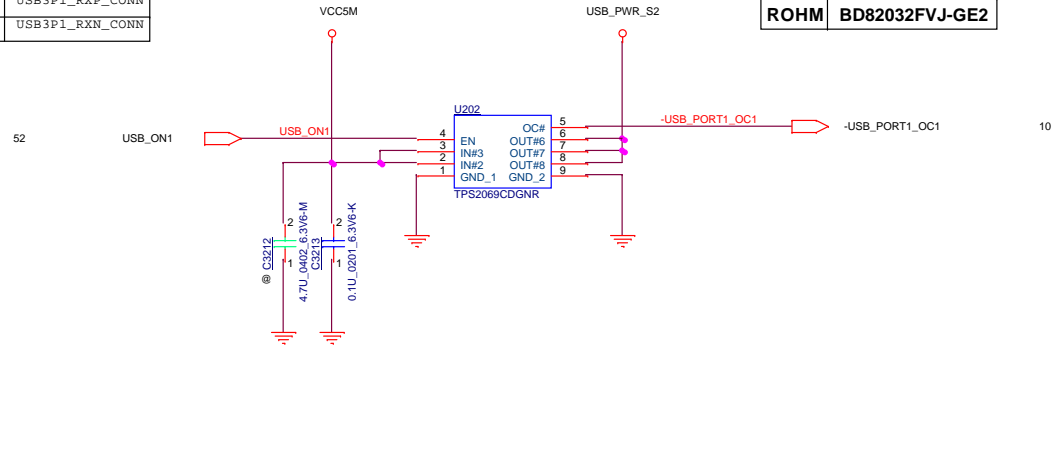



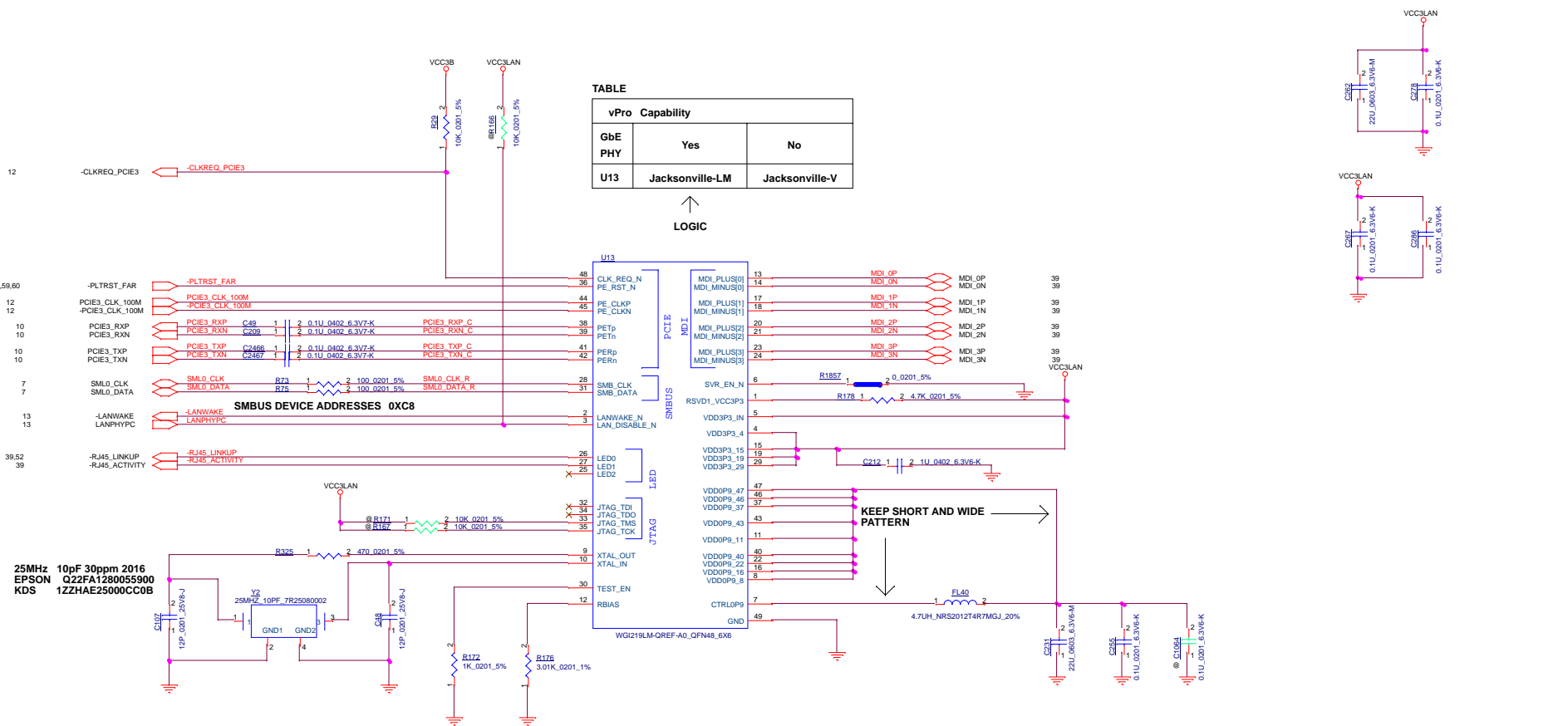
TABLE of USB3.0 Single	
TI	TPS2069CDGNR
ROHM	BD82032FVJ-GE2



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Size	Document Number	Rev	Yoda-2
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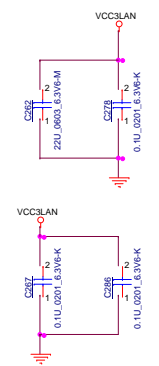
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					Sheet	Yoda-2	0.01
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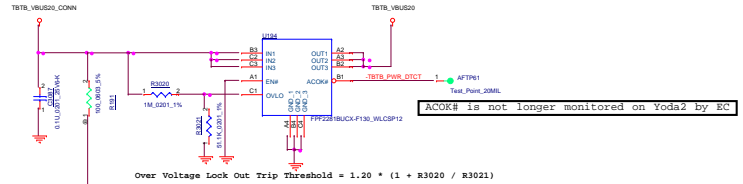
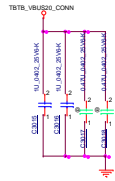
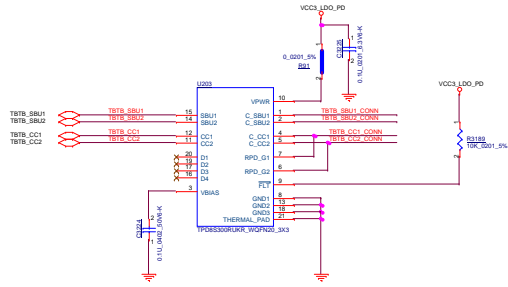
TABLE

vPro Capability		
GbE PHY	Yes	No
U13	Jacksonville-LM	Jacksonville-V

↑
LOGIC



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Custom	Yoda-2	0.01	
Date:	Friday, November 03, 2017	Sheet	38 of 88



Over Voltage Lock Out Trip Threshold = 1.20 * (1 + R3020 / R3021)

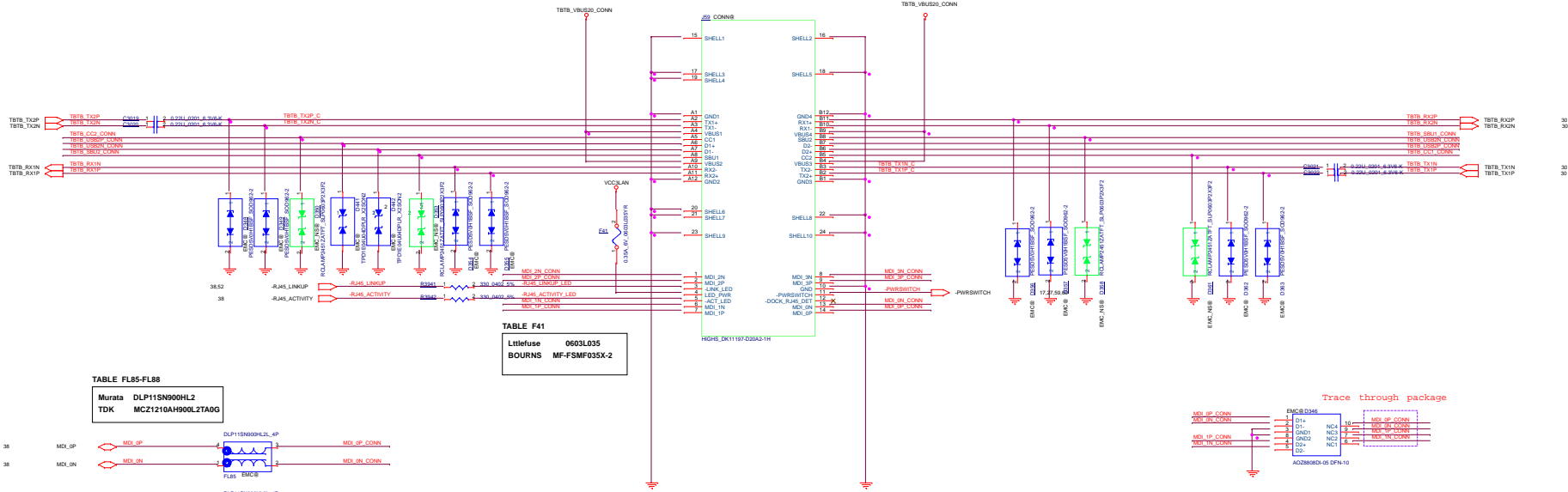


TABLE F41
 Littfuse 0603L035
 BOURNS MF-F5MF035X-2

TABLE FL85-FL88
 Murata DLP115N900HL2
 TDK MCZ1210AH900L2TA0G

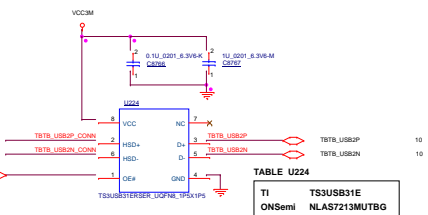
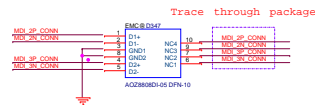
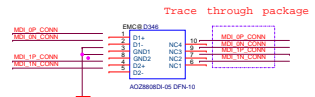
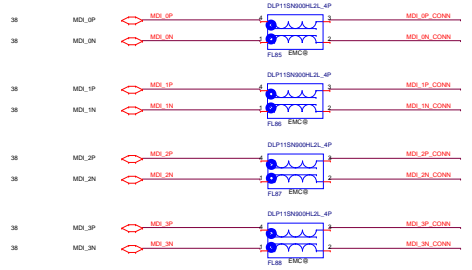
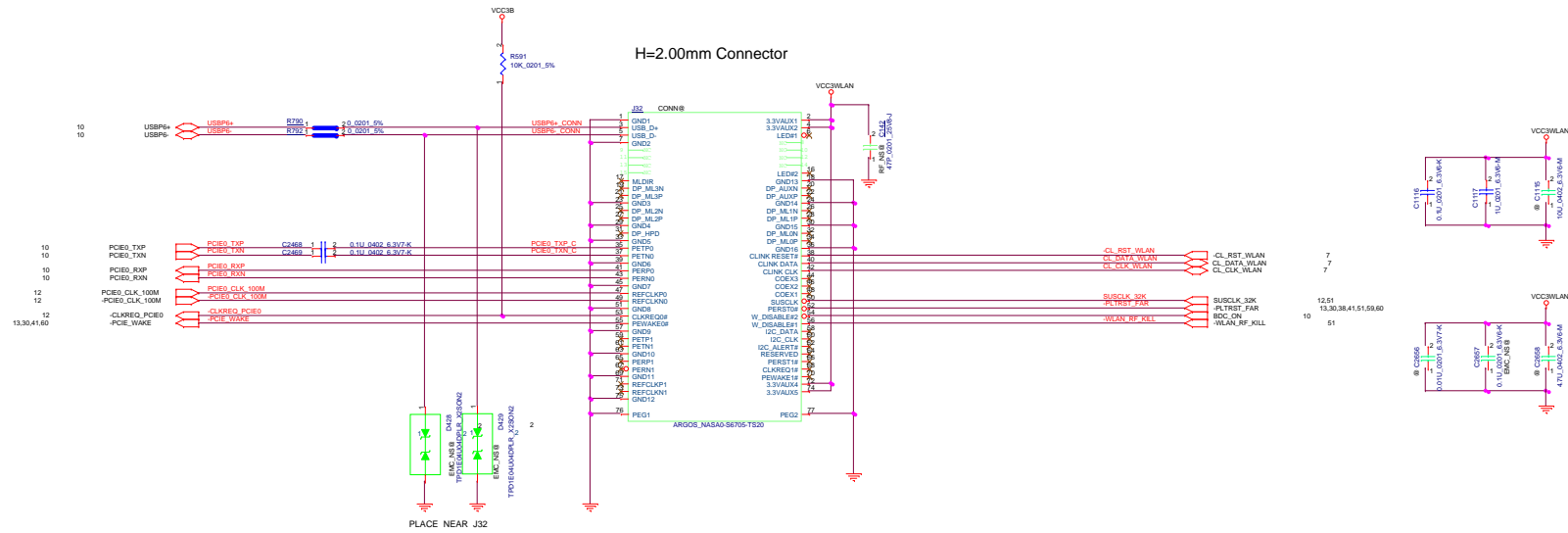
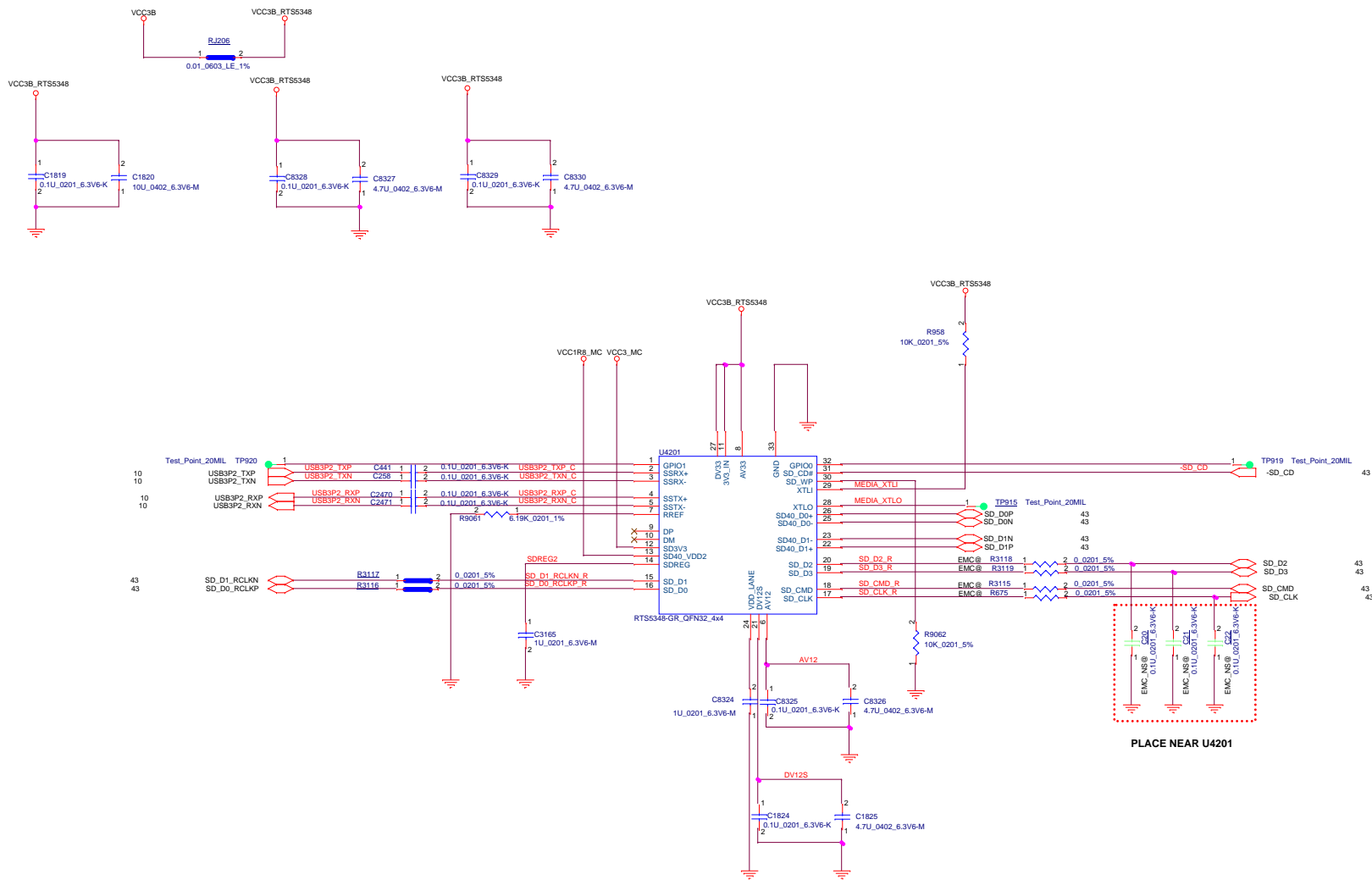


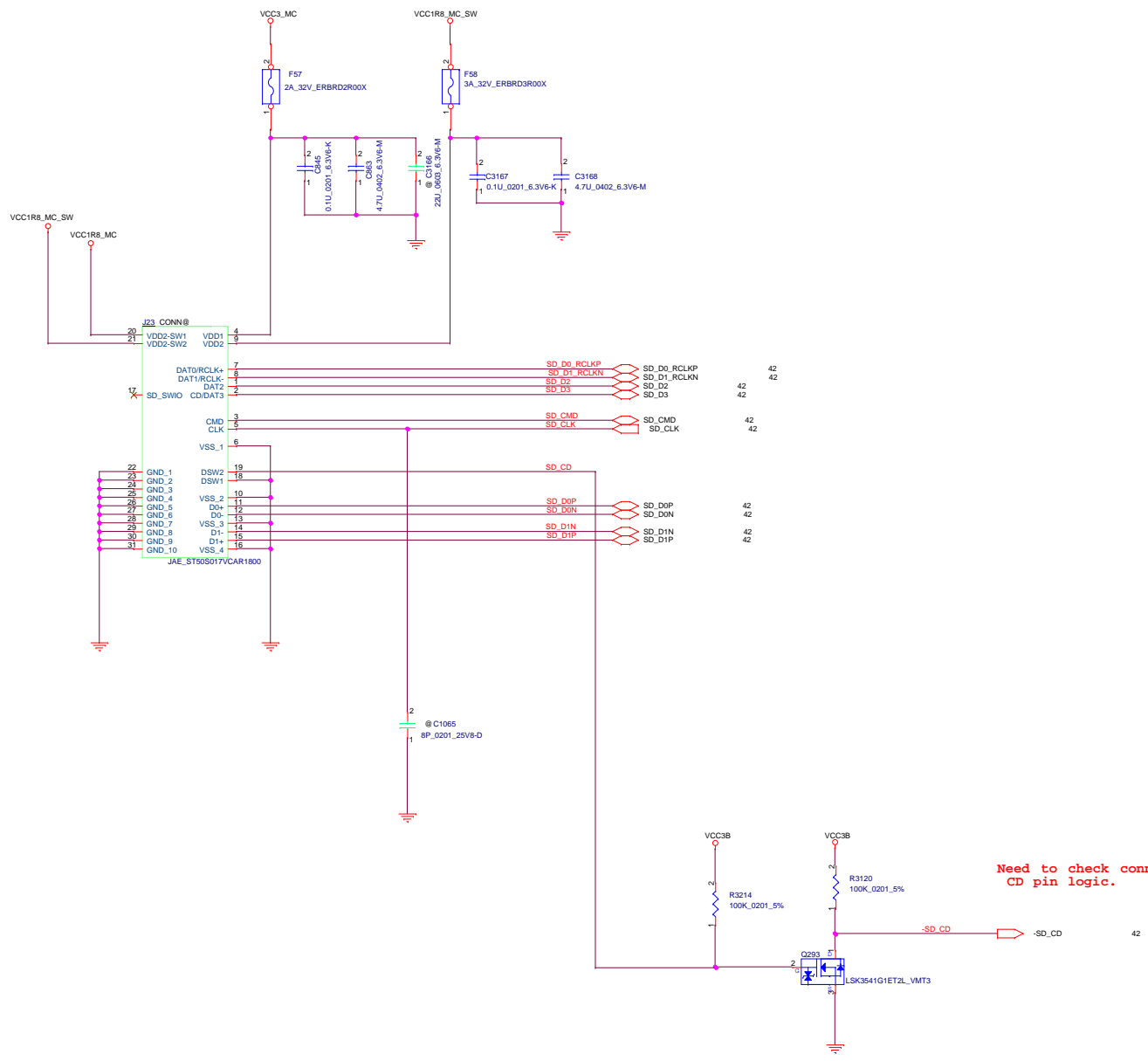
TABLE U224
 TI TSUSB31E
 ONsemi NLA57213MUTBG

M.2 Socket 1 (Key-A) for 2230 S3 WLAN / Bluetooth





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Ctrlm	Yoda-2	0.01	
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TABLE MIC HW ENABLE/DISABLE

	ENABLE	DISABLE
R961	ASM	NO_ASM
R119	ASM	NO_ASM

↑
LOGIC

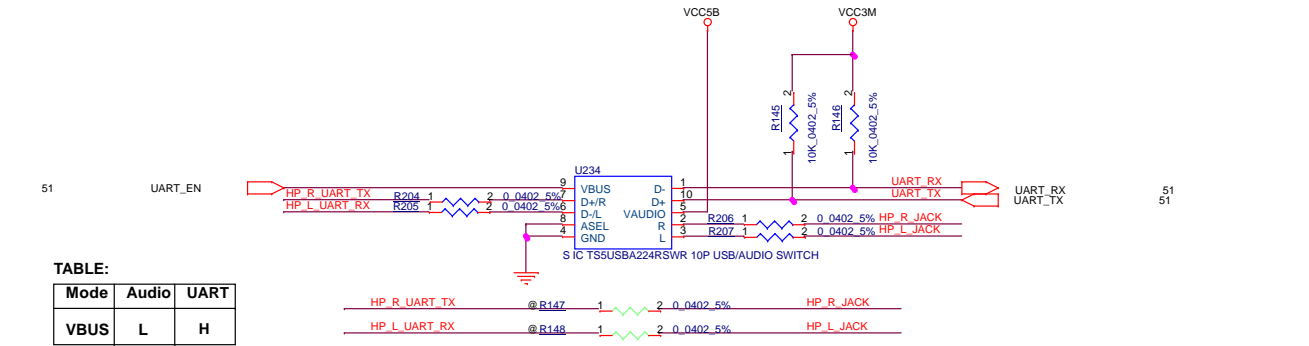
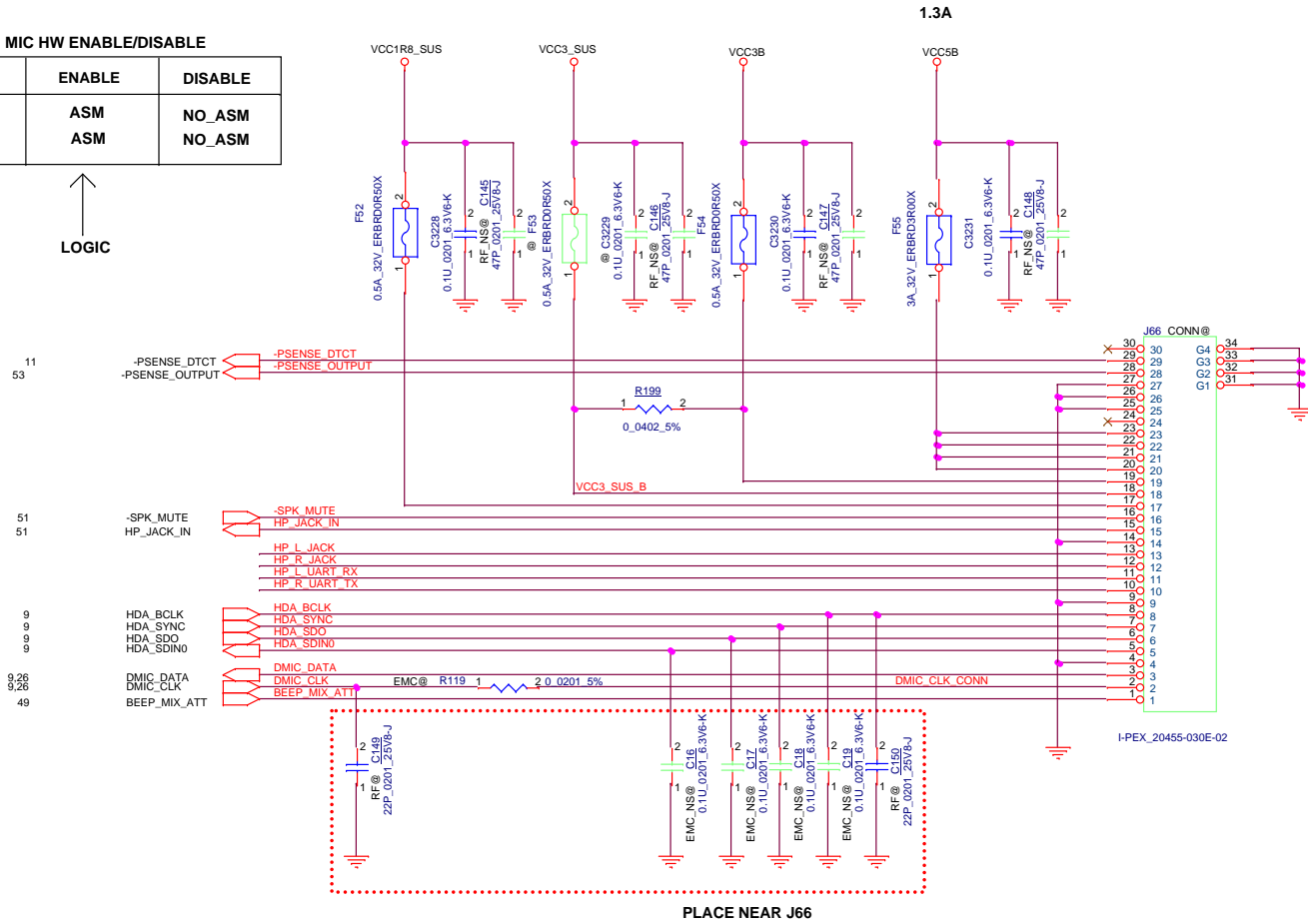


TABLE:

Mode	Audio	UART
VBUS	L	H


Security Classification	LC Future Center Secret Data	
Issued Date	2017/02/17	Deciphered Date 2014/07/01

Title	AUDIO SUBCARD CONNECTOR I/F
-------	-----------------------------


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				Date:	Friday, November 03, 2017	Sheet


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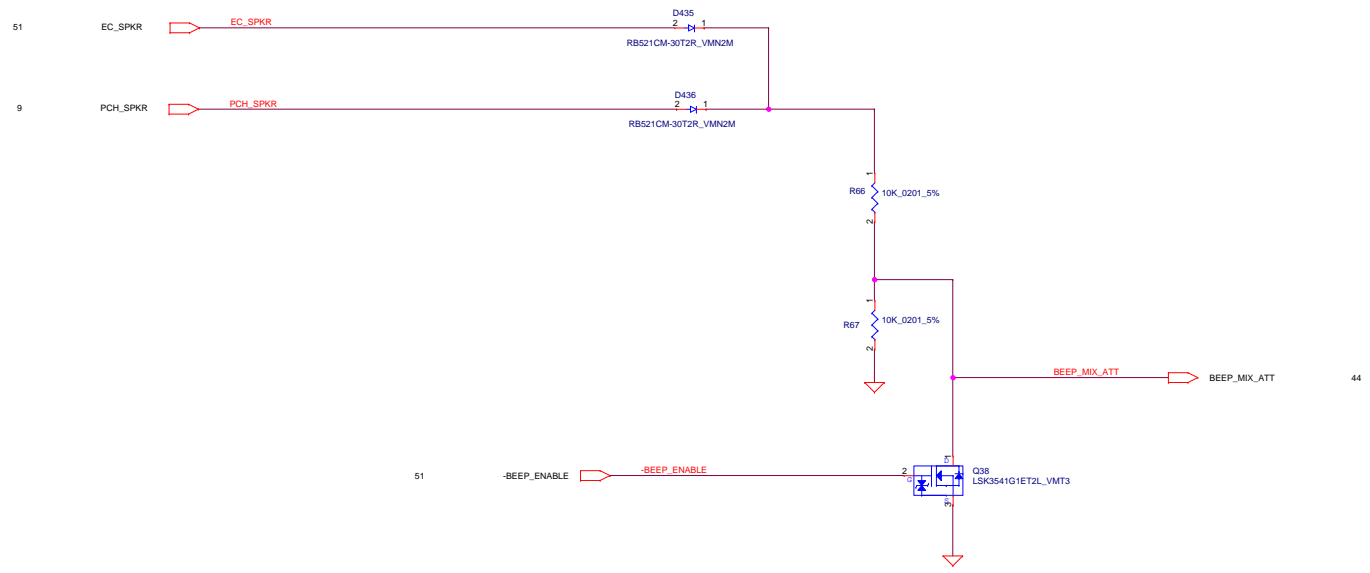
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Size	Document Number	Yoda-2		Rev	0.01
Sheet	Friday, November 03, 2017			Sheet	48 of 88

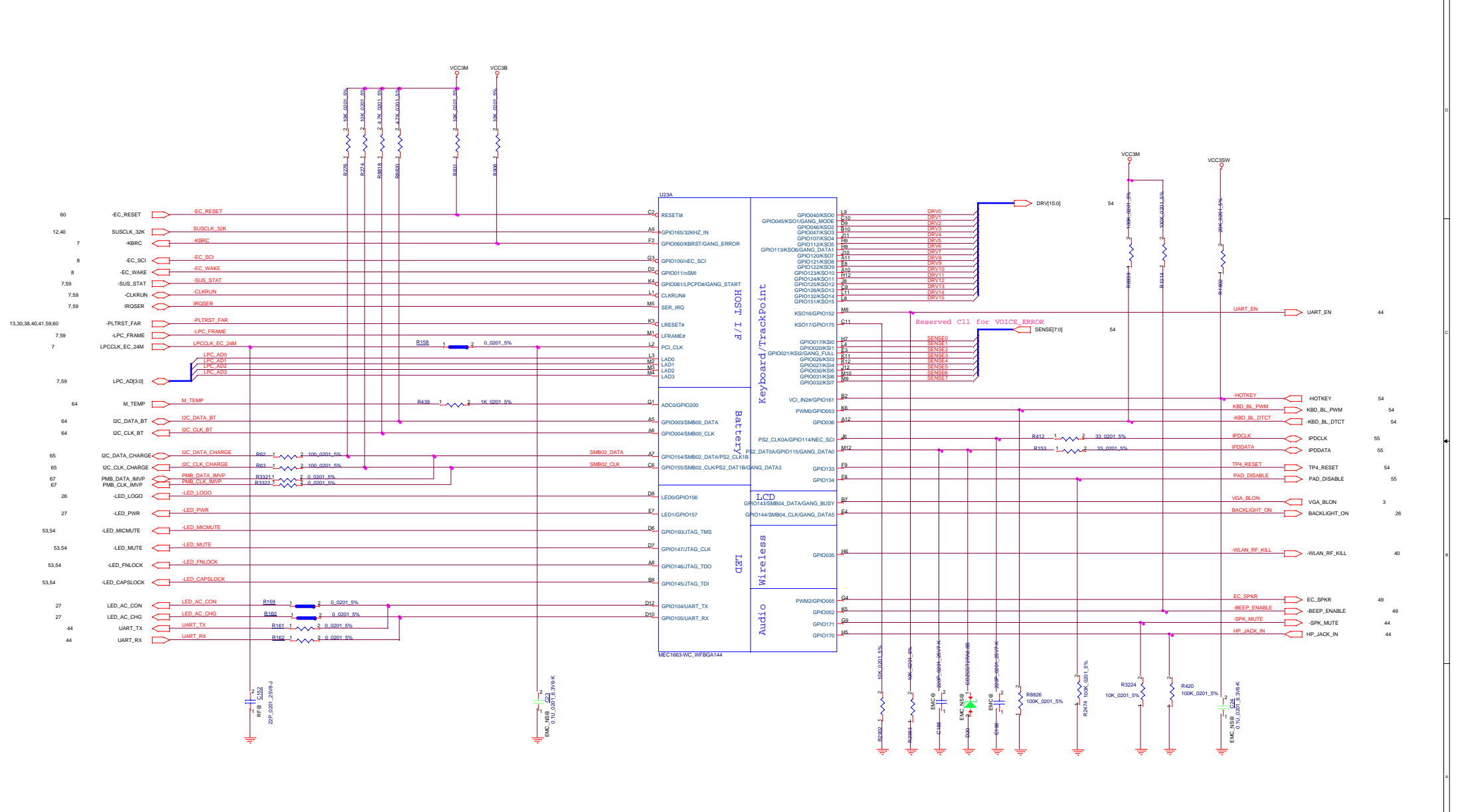


Security Classification		LC Future Center Secret Data		Title	
Issued Date	2017/02/17	Deciphered Date	2014/07/01	AUDIO BEEP	
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				Rev	0.01

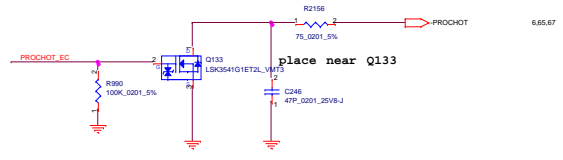
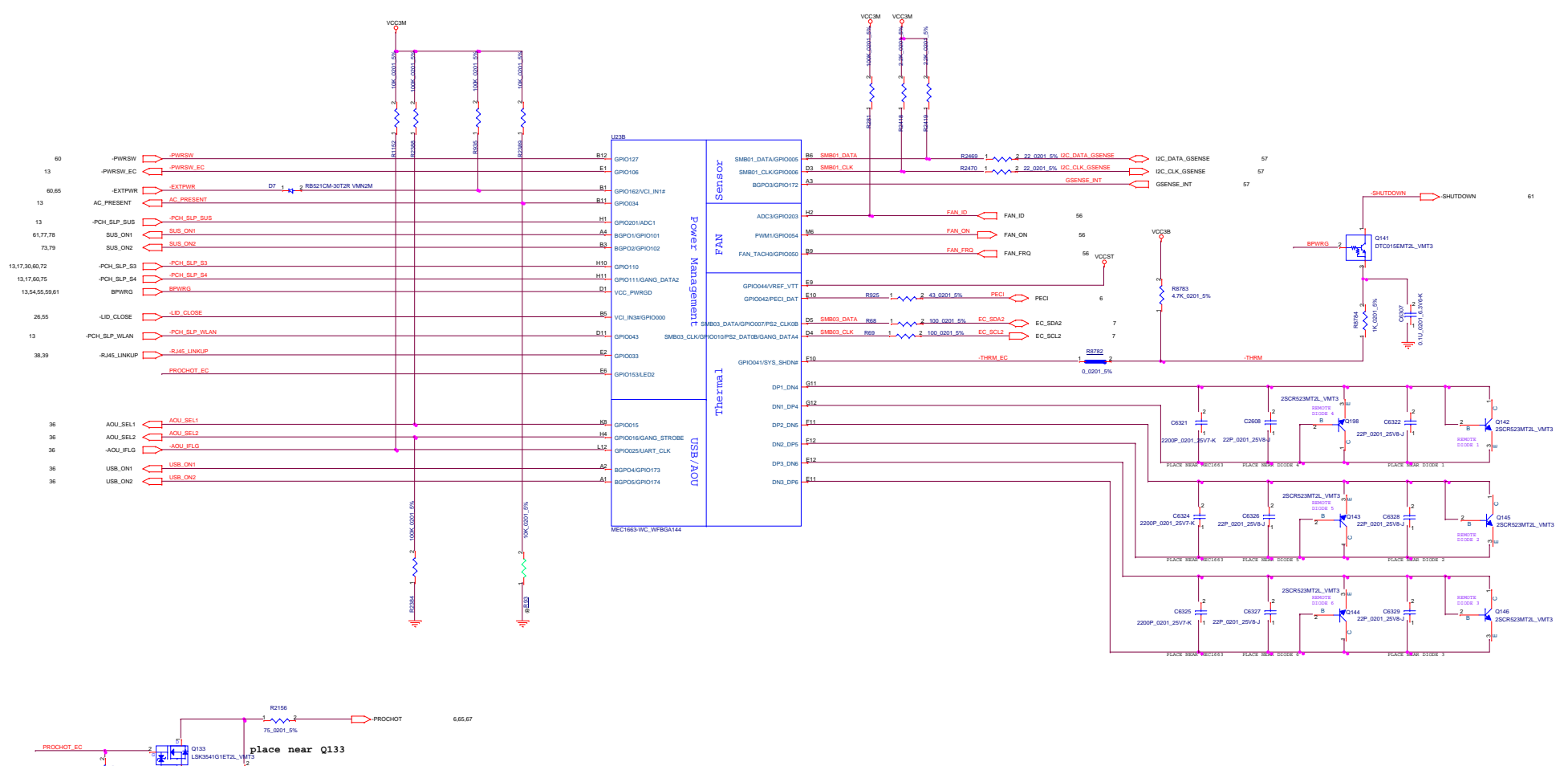


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Custom	Yoda-2	0.01			
Date:	Friday, November 03, 2017	Sheet	50	of	88

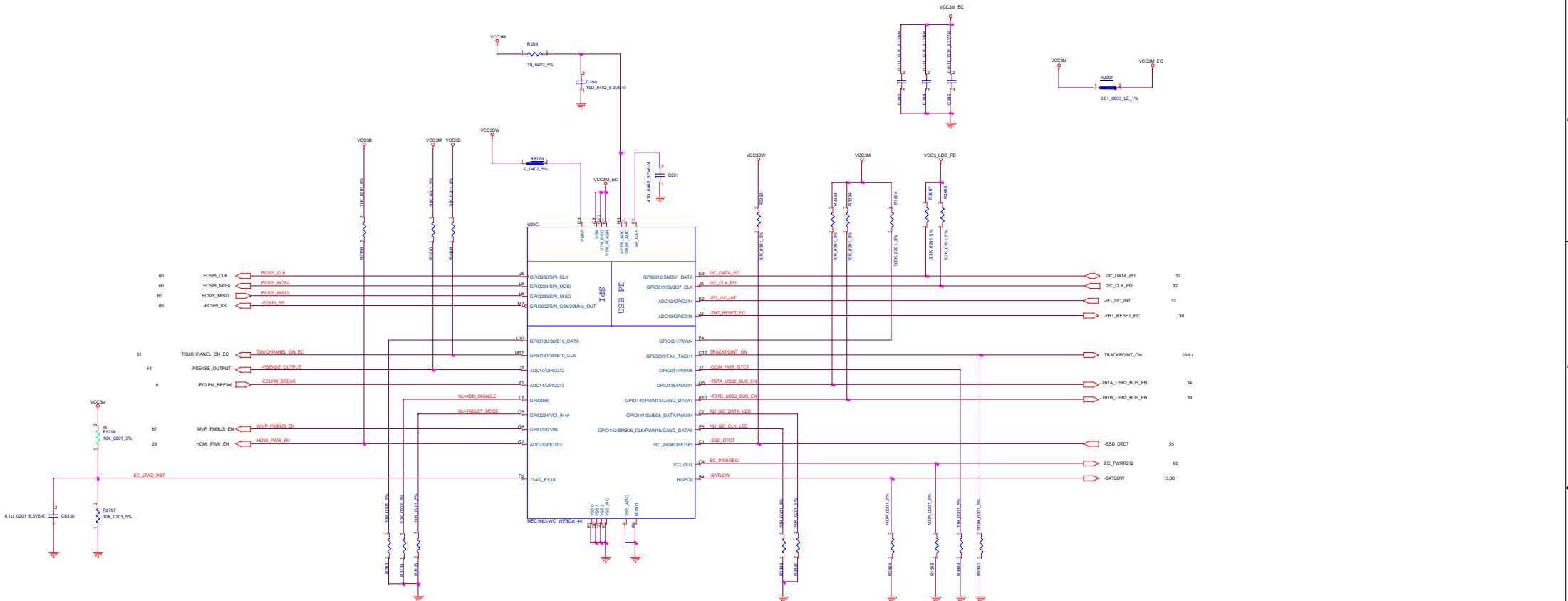


Security Classification			LC Future Center Secret Data		Title
Issued Date	2017/02/17	Deciphered Date	2014/07/01		MEC1663(1/3)
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Rev	0.1	Document Number	Yoda-2		Rev
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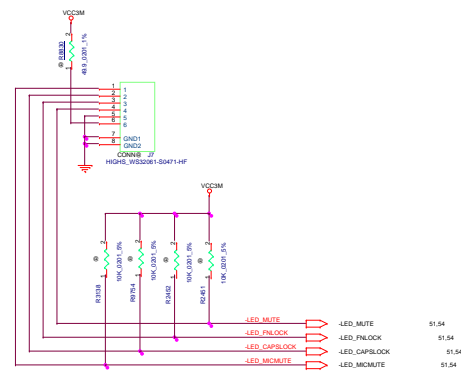
Sensor	Device	Placed on
DIODE0	EC Internal	TOP
DIODE1	CPU DC/DC	BOTTOM
DIODE2	Charger	BOTTOM
DIODE3	FAN	BOTTOM
DIODE4	SSD	BOTTOM
DIODE5	WLAN	BOTTOM
DIODE6	LPDDR3	BOTTOM

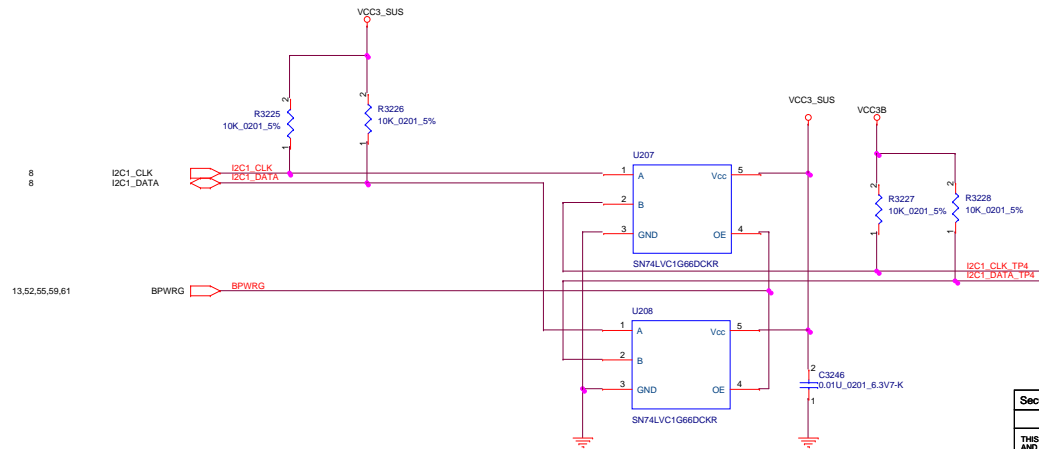
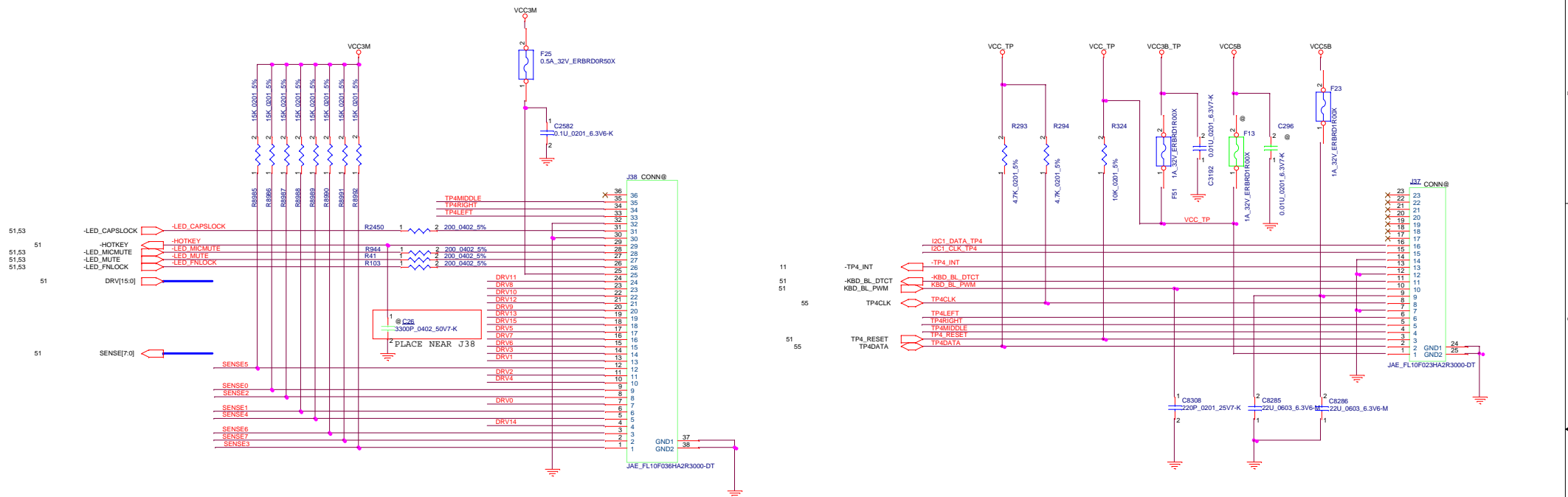
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Issued Date	2017/02/17	Deciphered Date	2014/07/01	
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Table	Document Number	Rev.	Yoda-2	
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			61	



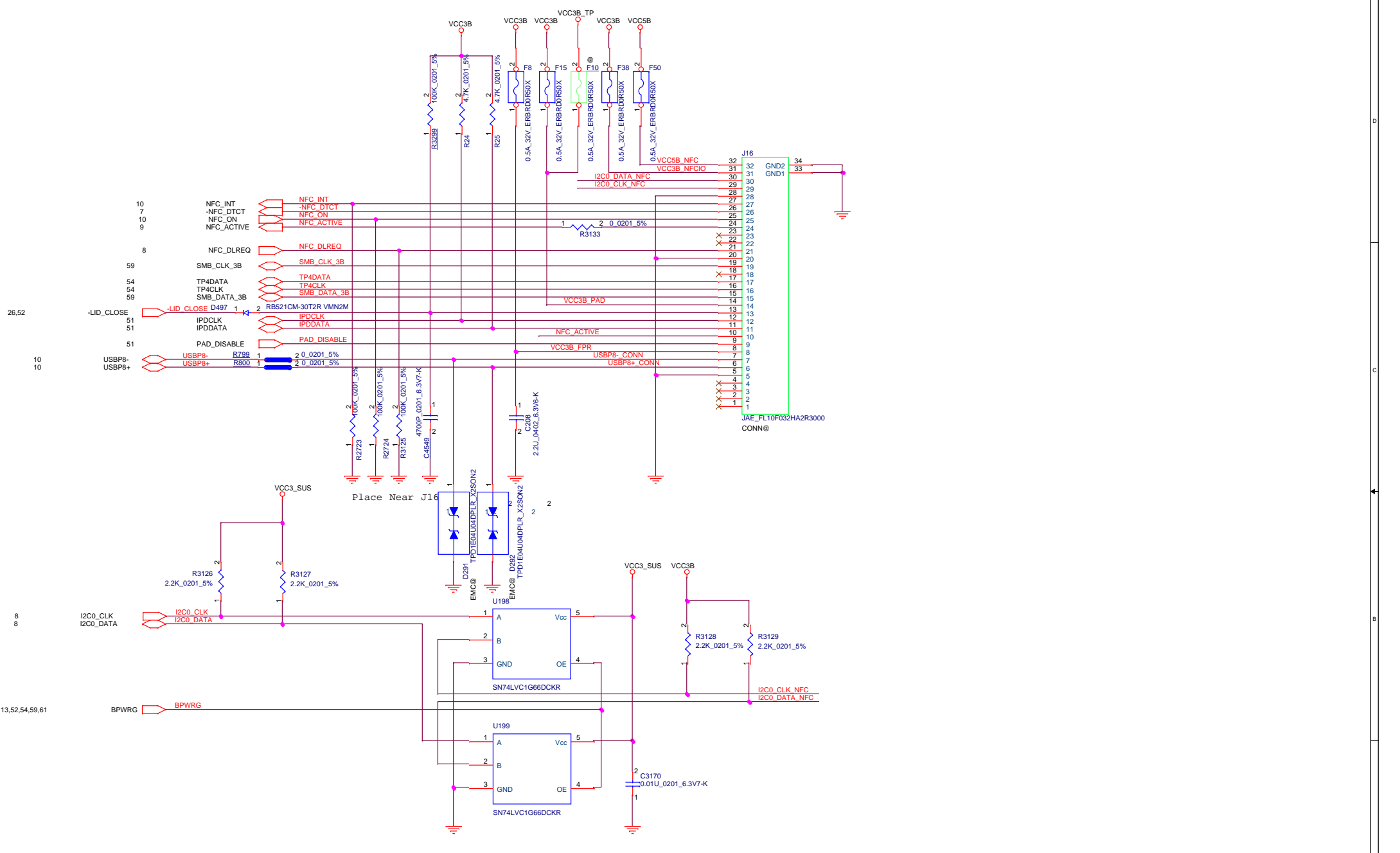
JTAG Debug Port

	Enable	Disable
R8796	ASM	NO_ASM
R8797	NO_ASM	ASM
R8830	ASM	NO_ASM
R3138	ASM	NO_ASM
R9754	ASM	NO_ASM
R2452	ASM	NO_ASM
R2451	ASM	NO_ASM





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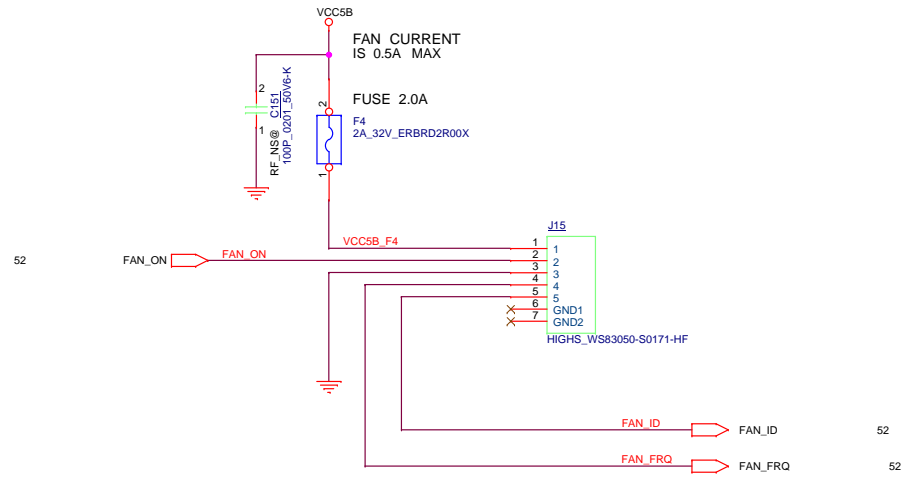
Security Classification	LC Future Center Secret Data	
Issued Date	2017/02/17	Deciphered Date
		2014/07/01

Title	TOUCH PAD/NFC/FPR
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Title		
FAN CONNECTOR		
Size	Document Number	Rev
Custom	Yoda-2	0.01
Date:	Friday, November 03, 2017	Sheet 56 of 86

TABLE

P/N	ADDR_SEL	Address
BMA255	H	32h (W) & 33h (R)
	L	30h (W) & 31h (R)
KX022-1020	H	3Eh (W) & 3Fh (R)
	L	3Ch (W) & 3Dh (R)

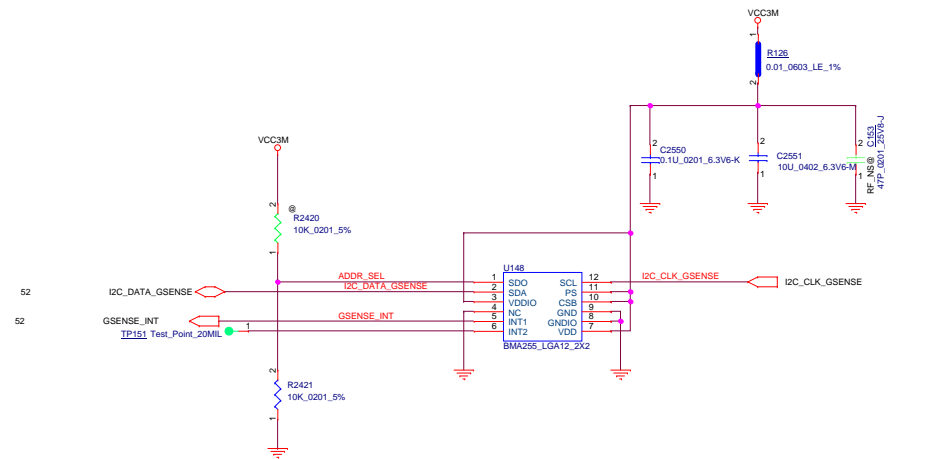
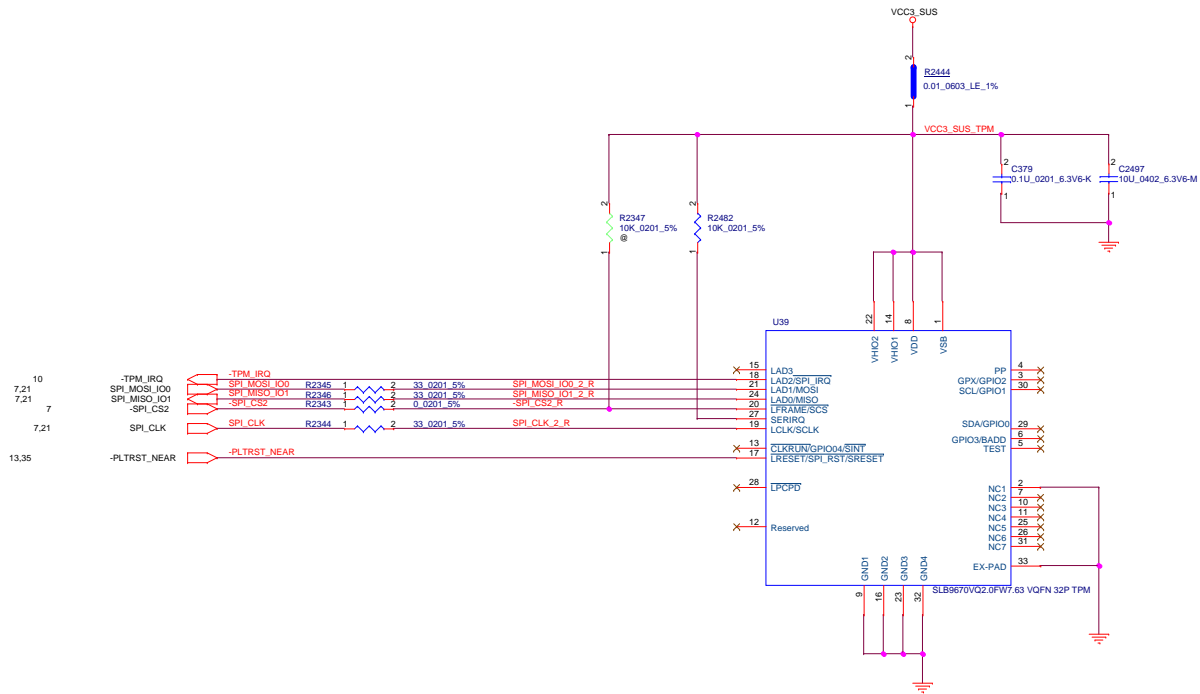



TABLE of G-Sensor (U148)

Vendor	P/N	LCFC P/N
BOSCH	BMA255	SA00005YJ00
Kionix	KX022-1020	SA000081E00



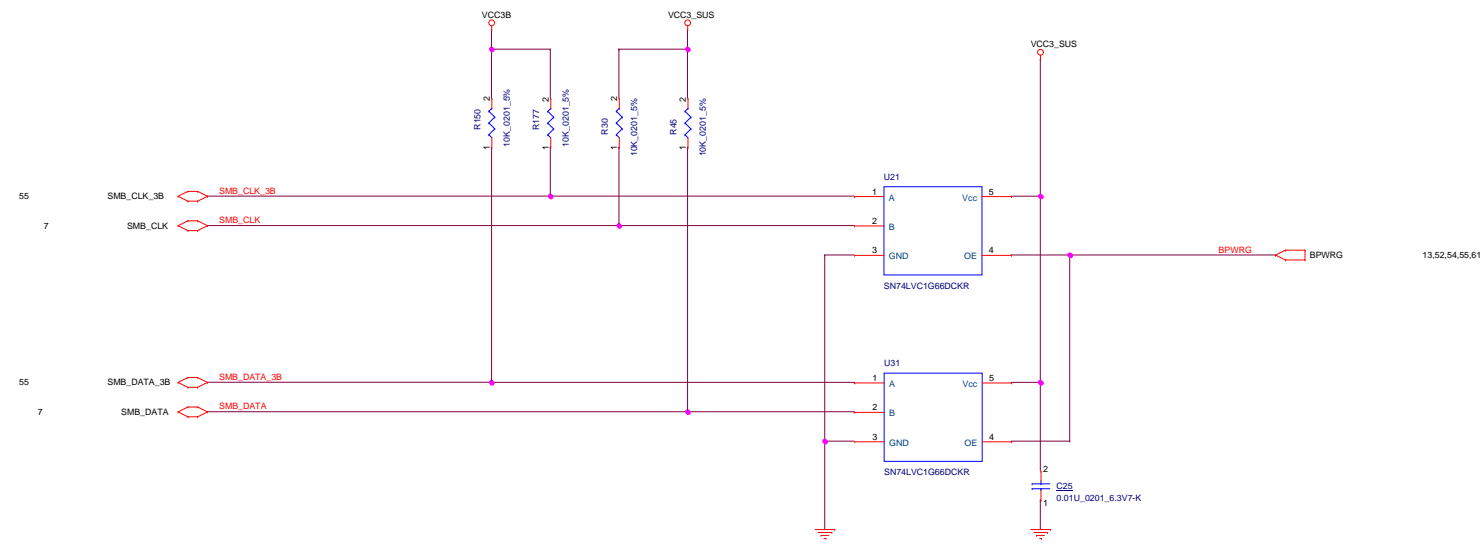
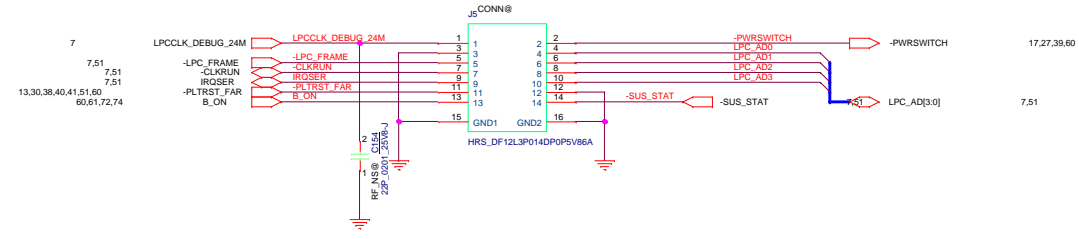
TABLE

Pin No	TCG PTP Spec (v38)	Infineon SLB9670VQ2.0 FW 7.63	ST Micro ST33HTPH2E32AHB4
1	VDD	VDD	NC
2	GND	GND	GND
3	GPIO	NC	NC
4	GPIO	NC	PP
5	NC	NC	NC
6	VNC/GPIO	GPIO	NC
7	GPIO/VDD	PP	GPIO
8	VDD	VDD	NC
9	GND	GND	NC
10	VNC	NC	NC
11	NC	NC	NC
12	NC	NC	NC
13	VNC/GPIO	NC	NC
14	VDD	NC	NC
15	NC	NC	NC
16	GND	NC	NC
17	SPI_RST#	RST#	SPI_RST#
18	SPI_PIRQ#	PIRQ#	SPI_PIRQ#
19	SPI_CLK	SCLK	SPI_CLK
20	SPI_CS#	CS#	SPI_CS#
21	MOSI	MOSI	MOSI
22	VDD	VDD	VPS
23	GND	GND	NC
24	MISO	MISO	MISO
25	NC	NC	NC
26	NC	NC	NC
27	NC	NC	NC
28	NC	NC	NC
29	VNC/GPIO	NC	NC
30	VNC/GPIO	NC	NC
31	VNC	NC	NC
32	GND	GND	NC

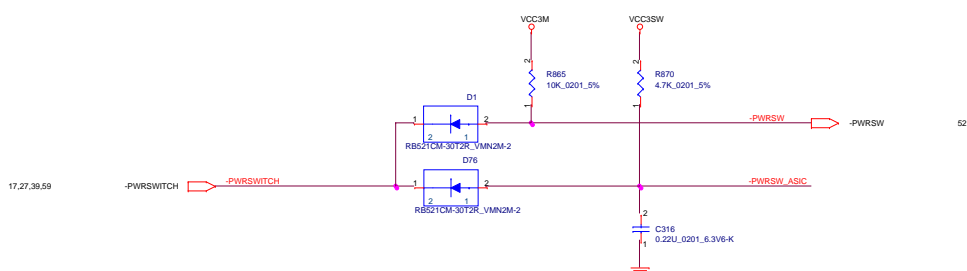
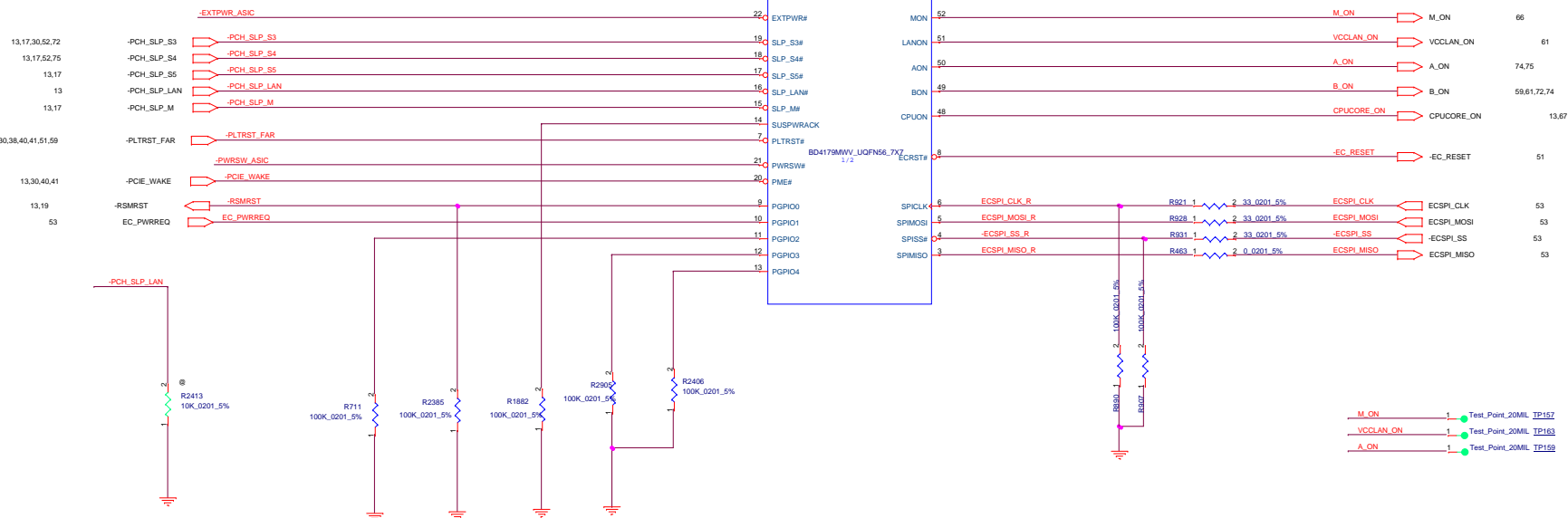
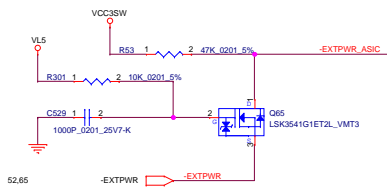
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REF DES	ENABLE	DISABLE
J5	ASM	NO_ASM
R220	ASM	NO_ASM

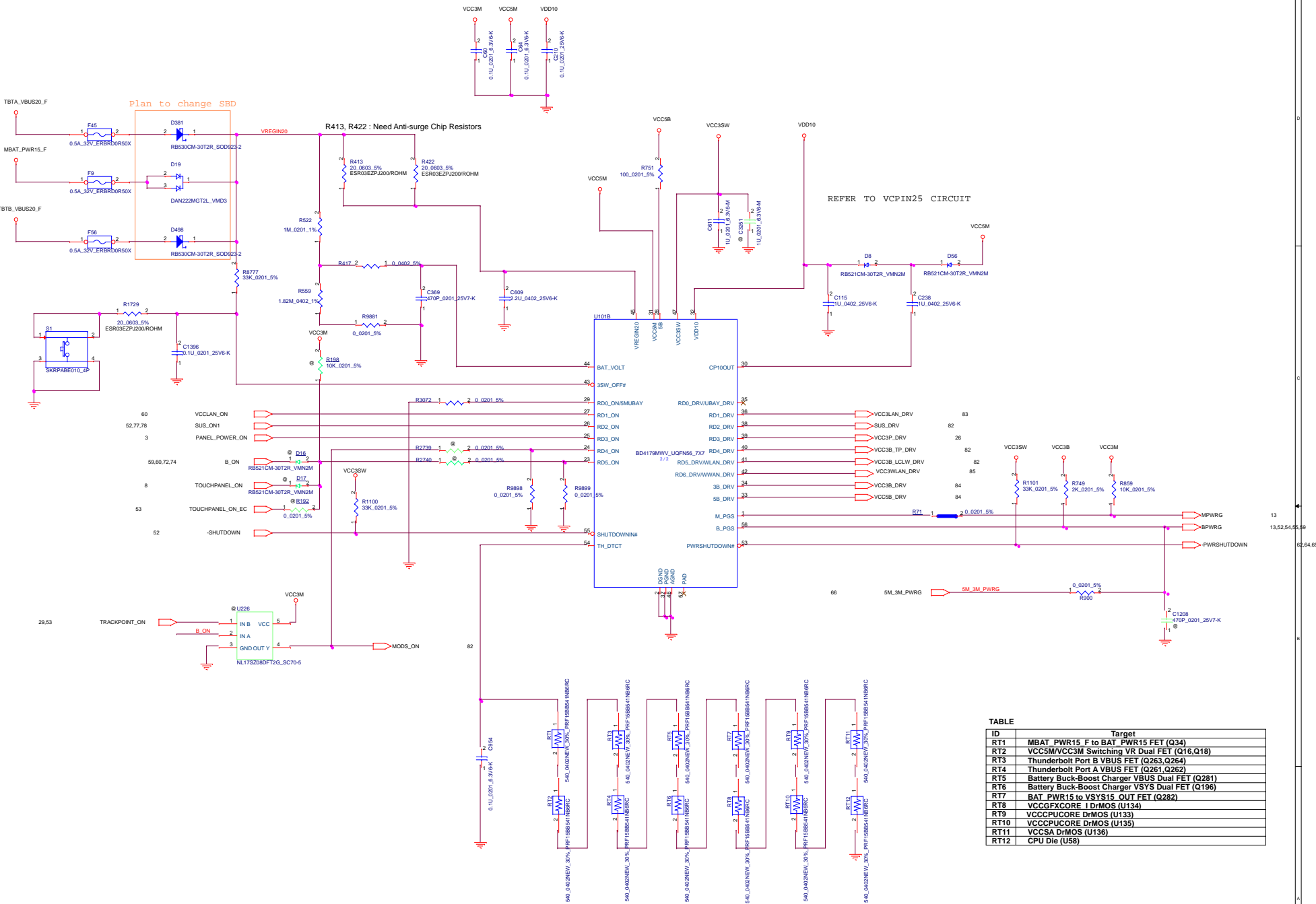
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LOGIC



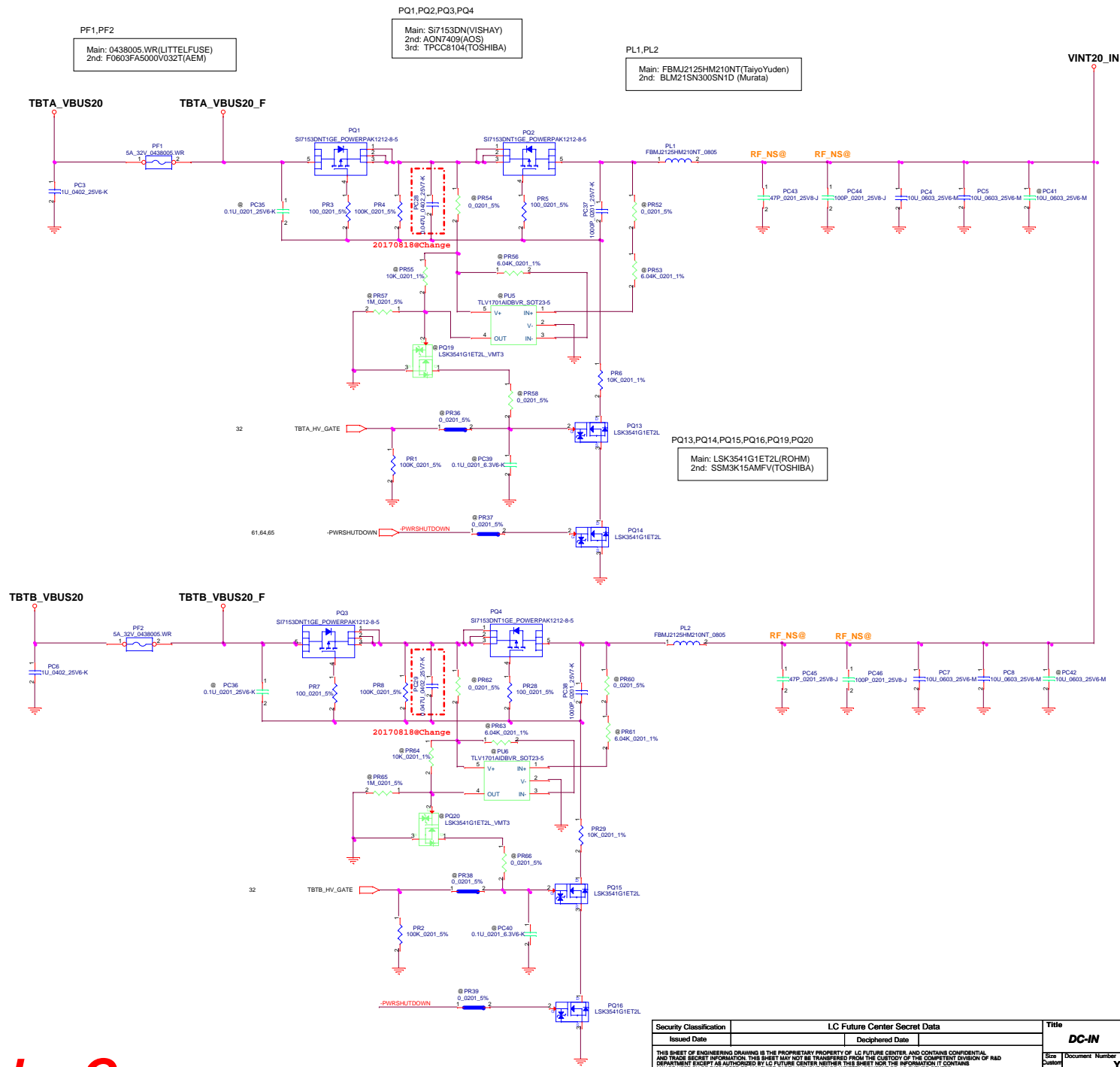
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ID	Target
RT1	MBAT_PWR15 F to BAT_PWR15 FET (Q34)
RT2	VCC3M/VCC3M Switching VR Dual FET (Q16,Q18)
RT3	Thunderbolt Port B VBUS FET (Q263,Q264)
RT4	Thunderbolt Port A VBUS FET (Q261,Q262)
RT5	Battery Buck-Boost Charger VBUS Dual FET (Q281)
RT6	Battery Buck-Boost Charger VSYS Dual FET (Q196)
RT7	BAT_PWR15 to VSYS15 OUT FET (Q282)
RT8	VCC3M/VCC3M I DrMOS (U134)
RT9	VCC3M/VCC3M DrMOS (U133)
RT10	VCC3M/VCC3M DrMOS (U135)
RT11	VCC3M/VCC3M DrMOS (U136)
RT12	CPU Die (U58)

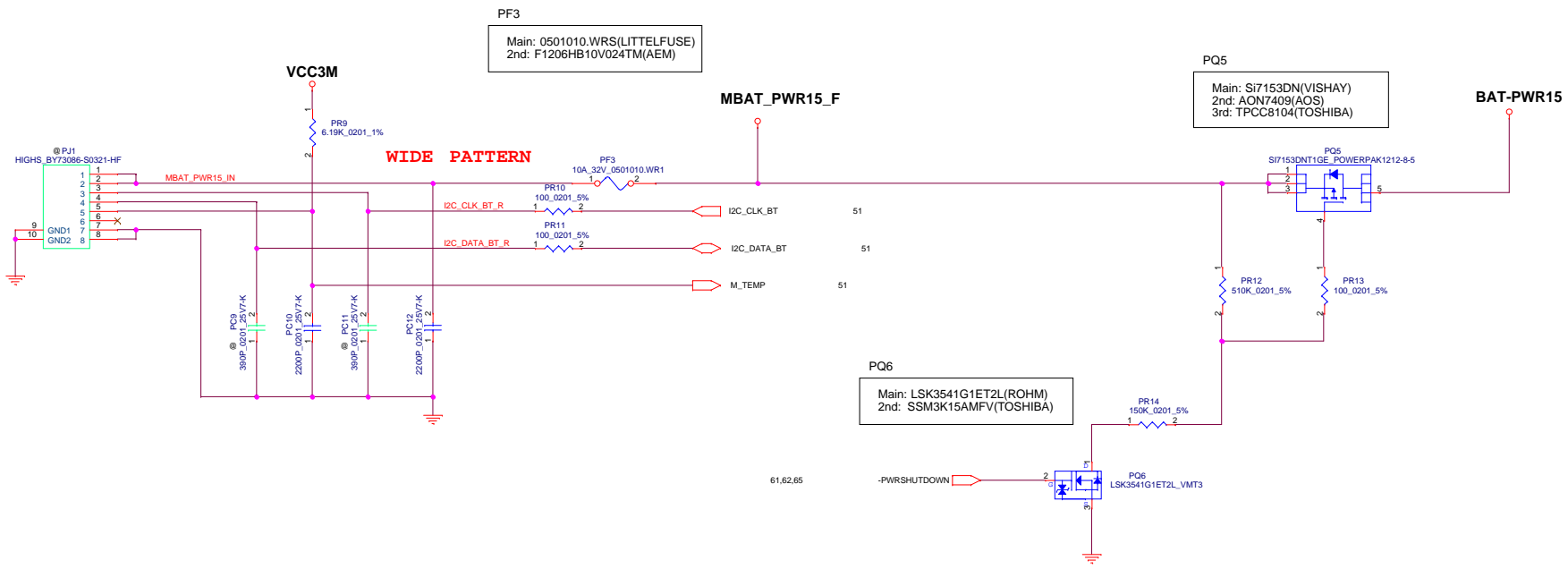


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PF3
Main: 0501010.WRS(LITTELFUSE)
2nd: F1206HB10V024TM(AEM)

PQ5
Main: S7153DN(VISHAY)
2nd: AON7409(AOS)
3rd: TPCC8104(TOSHIBA)

PQ6
Main: LSK3541G1ET2L(ROHM)
2nd: SSM3K15AMFV(TOSHIBA)

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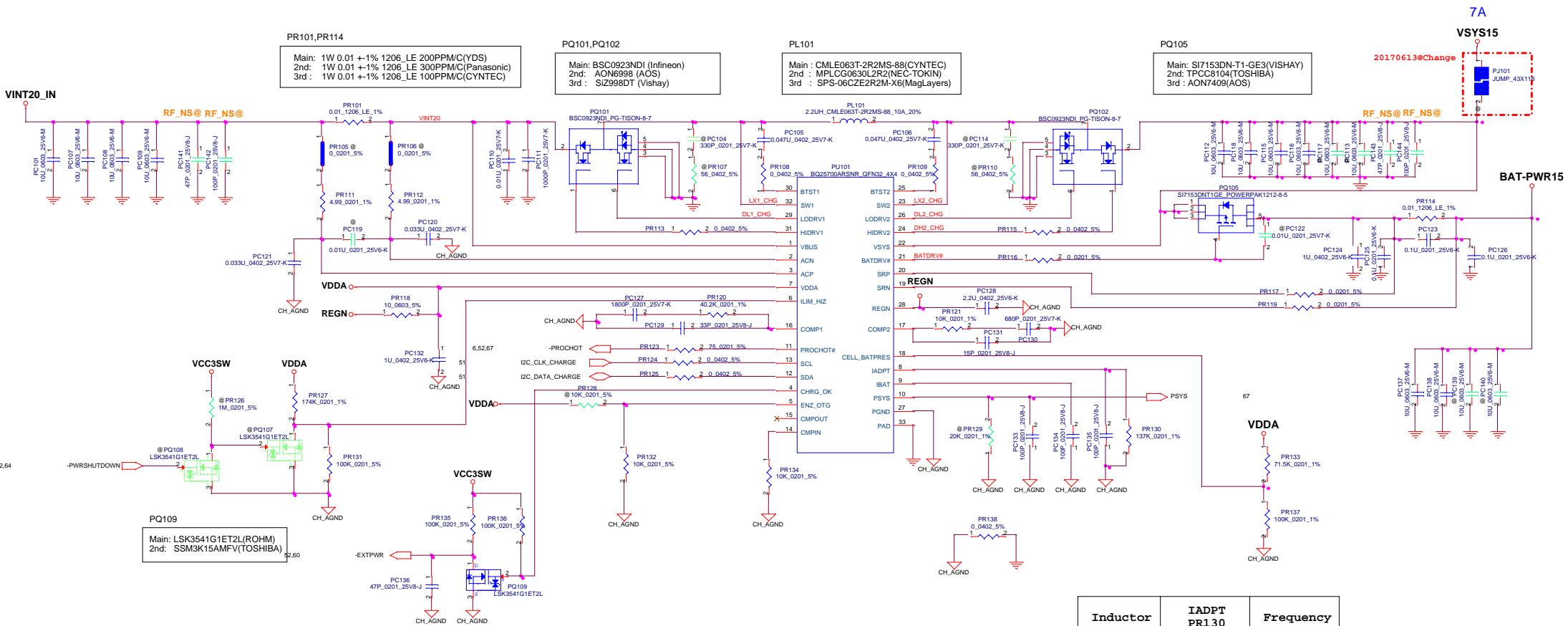


TABLE: ILIM_HIZ

IDPM	V (ILIM)	PR127
500mA	1.2V	402K
1.0A	1.4V	332K
1.5A	1.6V	280K
2.0A	1.8V	237K
3.0A	2.2V	174K
3.25A	2.3V	162K

← LOGIC

TABLE: CELL_BATPRES

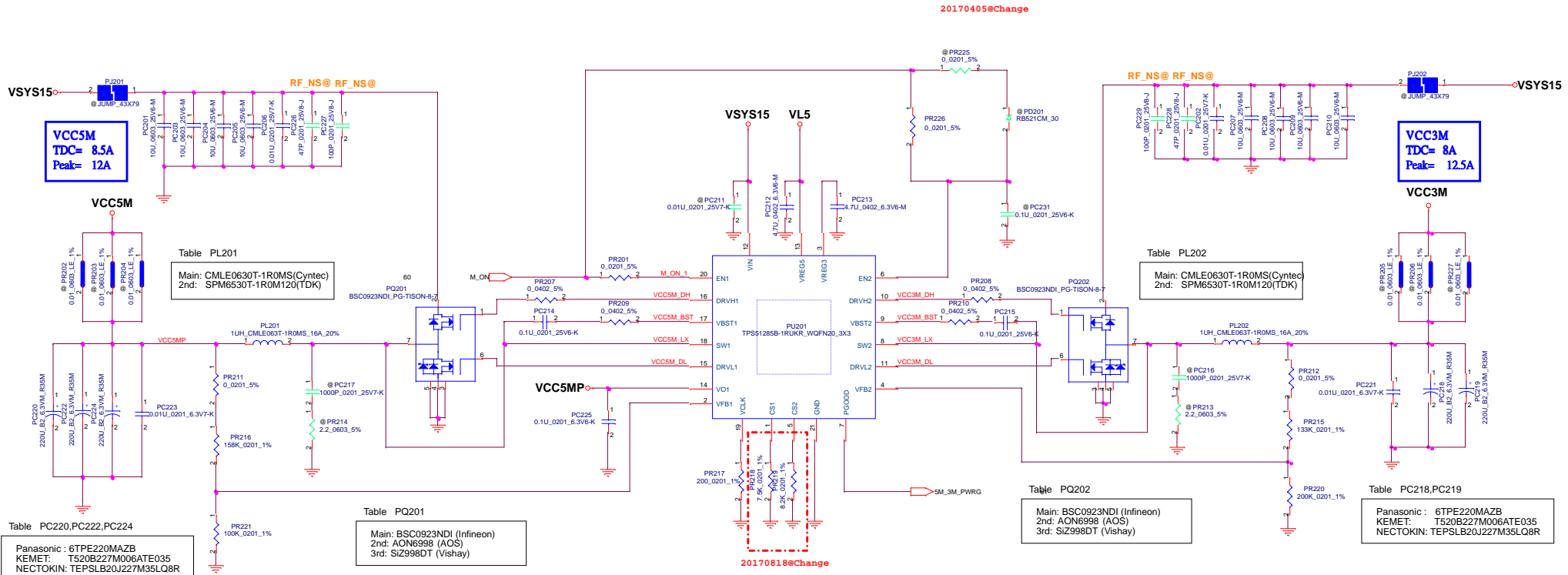
# of CELL	VCELL PRES	PR133
1-CELL	1.5V	301K
2-CELL	2.5V	140K
3-CELL	3.5V	71.5K
4-CELL	4.5V	33.2K

← LOGIC

TABLE

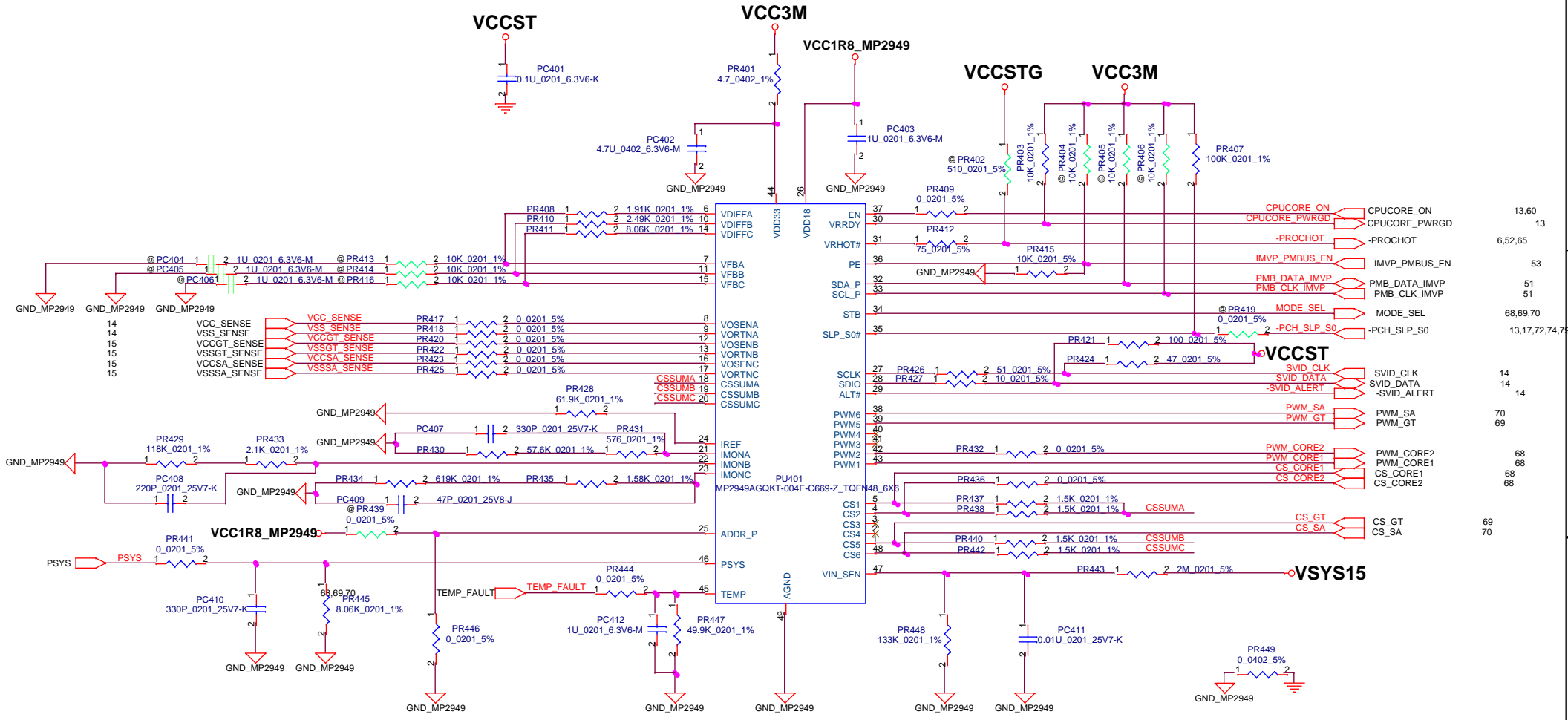
Inductor	IADPT PR130	Frequency
1.0uH	93kohm	800kHz
1.5uH	108kohm	800kHz
2.2uH	137kohm	800kHz
3.3uH	168kohm	800kHz

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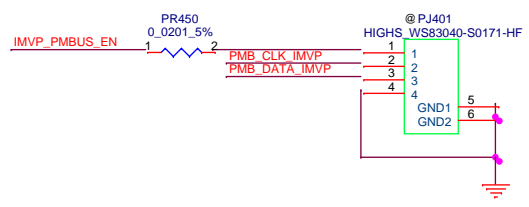


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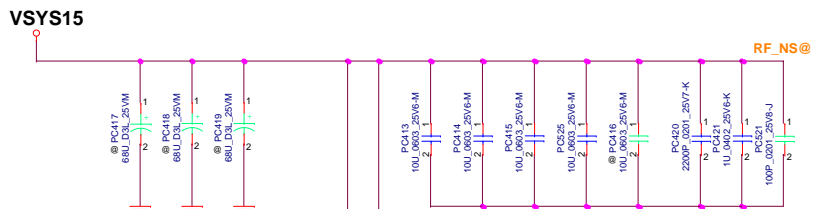
	R U42	U22
PU401	MP2949AGQKT-004E-C669-Z	MP2949AGQKT-004F-C669-Z
PR432	0_0201_5%	NA
PR436	0_0201_5%	NA
PR438	1.5K_0201_1%	NA
PR431	576_0201_1%	1.37K_0201_1%
PR430	57.6K_0201_1%	115K_0201_1%
PC407	330P_0201_25V7-K	220P_0201_25V7-K
PR439	NA	2.8K_0201_1%
PR446	0_0201_5%	20K_0201_1%



MFR_PHASE_CFG[4:0]	Active PWM Pins		
	Rail A	Rail B	Rail C
00100b	1,2,3,4	5	6
00111b	1,2,3	4,5	6
01001b	1,2,3	5	6
01100b	1,2	4,5	6
01110b	1,2	5	6
10001b	1	5	6

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Issued Date	Deciphered Date		DC/DC IMVP8 (MP2949AGQKT)	
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			Yoda-2	
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3pcs 330uF + 28pcs for KBL-R U42 VCCCPUCORE
 1pcs 330uF + 25pcs for KBL U22 VCCCPUCORE



VCCCPUCORE
U42
TDC= 42A
IccMax= 64A
U22
TDC= 32A
IccMax= 21A

VCCCPUCORE

Table PC423,PC424,PC425
 Panasonic ETPE330MA9L
 NEC TOKIN TEPSGB20E337M9
 KEMET T520B337M2R5ATE009

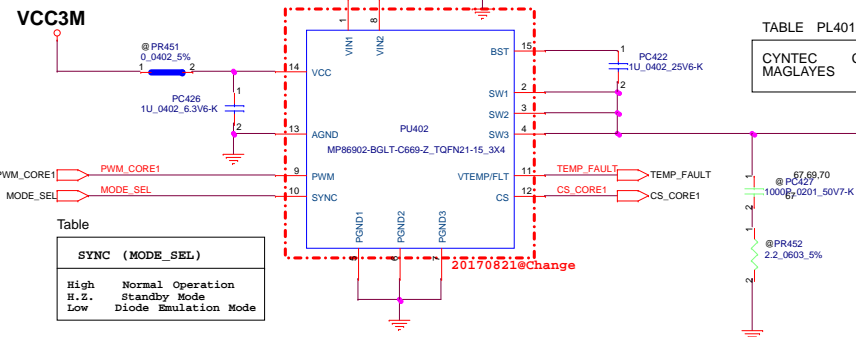
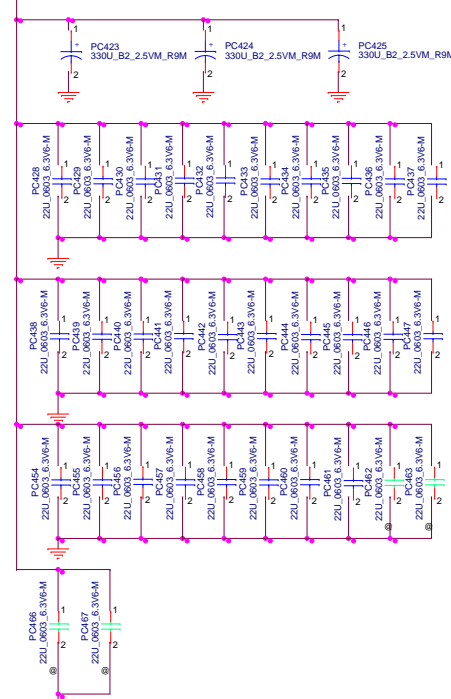


TABLE PL401
 CYNTEC CMLE062E-R15MS0R907-88
 MAGLAYES SPS-06BEIR15MGX5

VCCCPUCORE

Table

SYNC (MODE_SEL)	
High	Normal Operation
H.Z.	Standby Mode
Low	Diode Emulation Mode

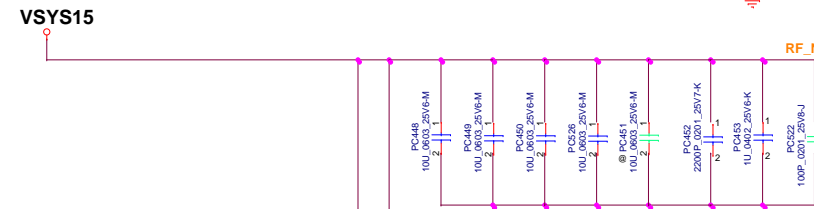
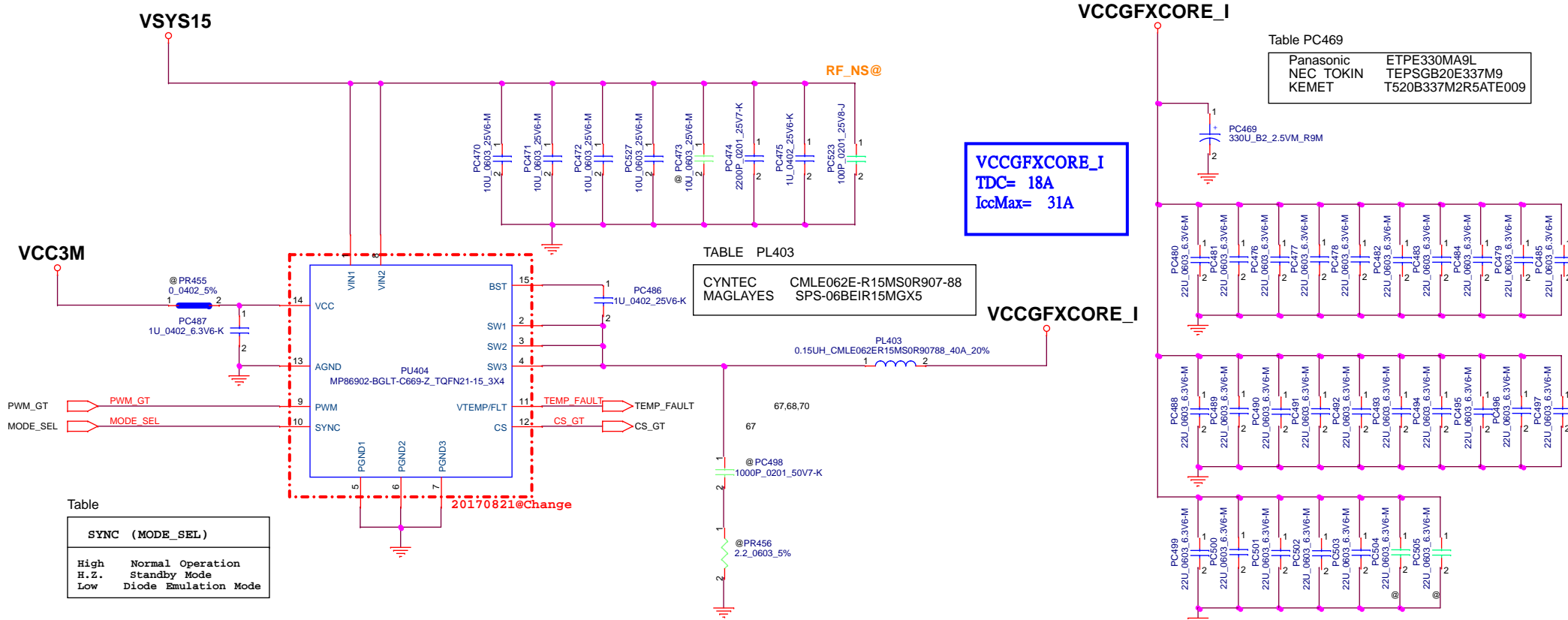


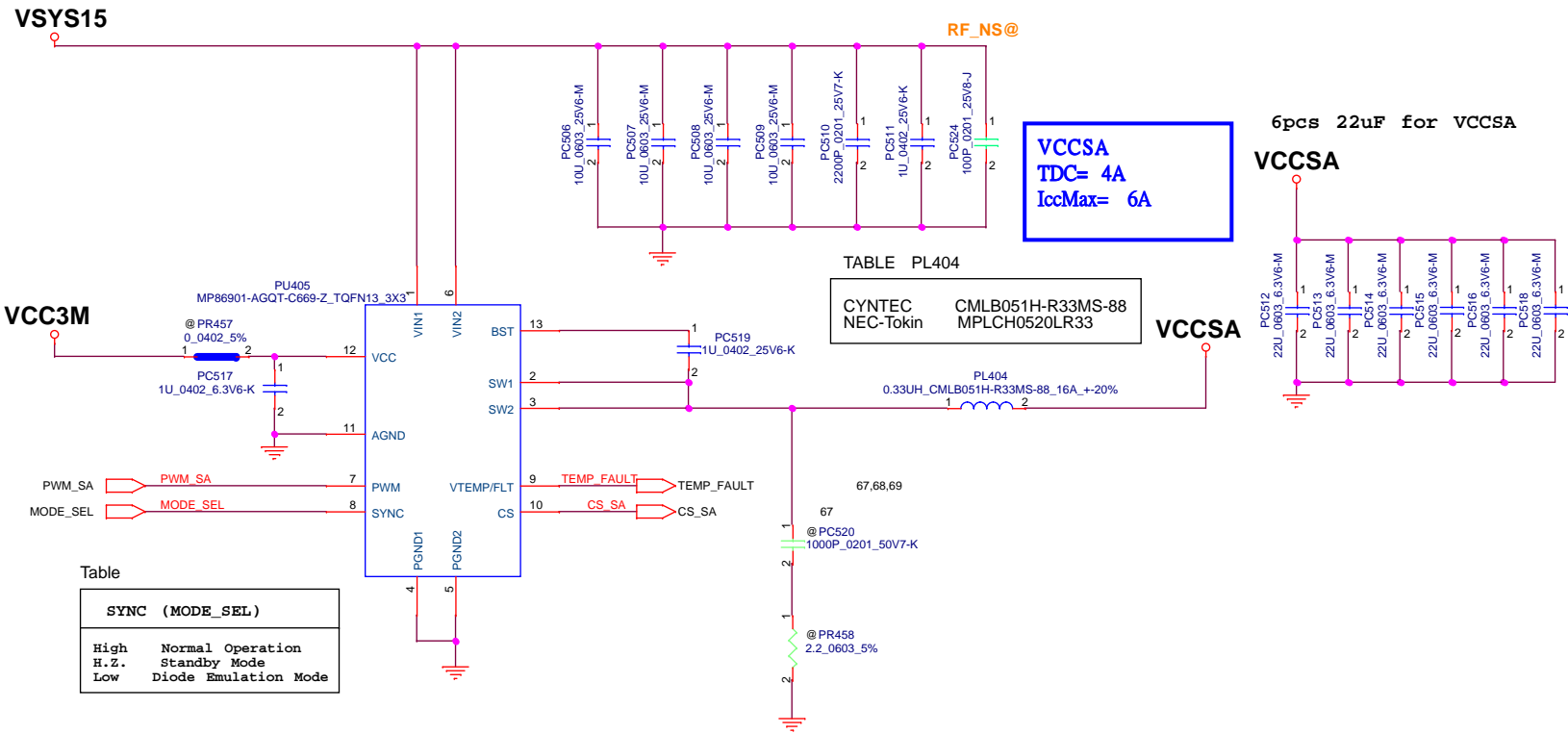
TABLE PL402
 CYNTEC CMLE062E-R15MS0R907-88
 MAGLAYES SPS-06BEIR15MGX5

VCCCPUCORE

	R U-42	U-22	Remark
PU403, PL402, PC448, PC449, PC450, PC526, PC451, PC452, PC453, PR453, PC465, PC464	ASM	NO ASM	
PC424, PC425	ASM	NO ASM	The Number of 330uF KBL R U-42: 3pcs KBL U-22: 1pcs
PC459, PC460, PC461	ASM	NO ASM	The Number of 22uF KBL R U-42: 28pcs KBL U-22: 25pcs

1pcs 330uF + 25pcs for KBL-R U42 VCCGFXCORE_I
 1pcs 330uF + 25pcs for KBL U22 VCCGFXCORE_I





VSYS15

RF_NS@

VCCSA
TDC= 4A
IccMax= 6A

6pcs 22uF for VCCSA

VCCSA

VCC3M

TABLE PL404

CYNTec CMLB051H-R33MS-88
NEC-Tokin MPLCH0520LR33

VCCSA

67


67,68,69

PWM_SA **PWM_SA**
MODE_SEL **MODE_SEL**

Table

SYNC (MODE_SEL)	
High	Normal Operation
H.Z.	Standby Mode
Low	Diode Emulation Mode

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Title		
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A3	Yoda-2	0.01
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Table PD701,PD702

ROHM: RB521CM-30T2R
 ONSEMI: NSR0140P2T5G
 NXP: PMEG4002EL

Table PL701

TOKO: FDS0420-H-1ROM
 Cyntec: CMLB042T-1ROMS
 TDK: SPM4020T-1ROM-LR

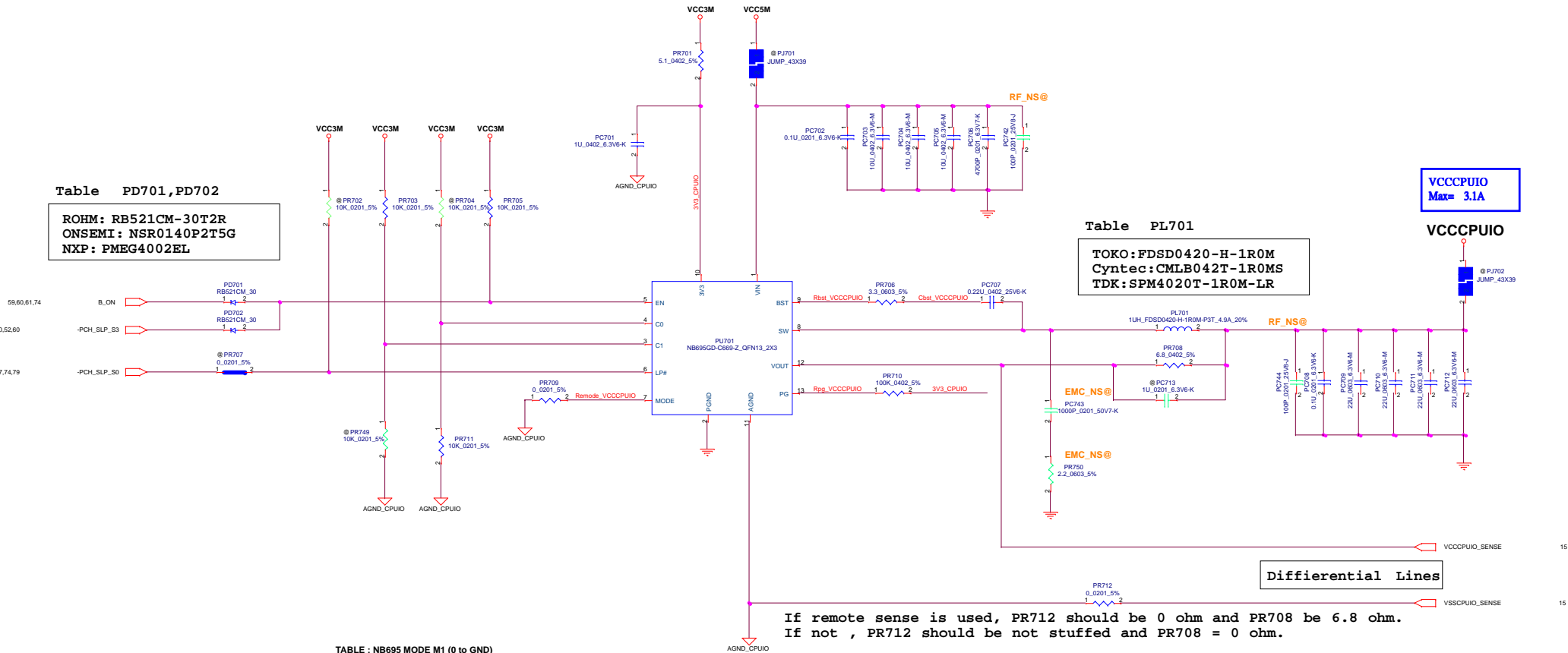



TABLE : NB695 MODE M1 (0 to GND)

LP#	C1	C0	VOUT
0	X	X	0.000V
1	0	0	0.850V
1	0	1	0.875V
1	1	0	0.950V
1	1	1	0.975V

← SLP_S0#

← LOGIC

If remote sense is used, PR712 should be 0 ohm and PR708 be 6.8 ohm.
 If not , PR712 should be not stuffed and PR708 = 0 ohm.

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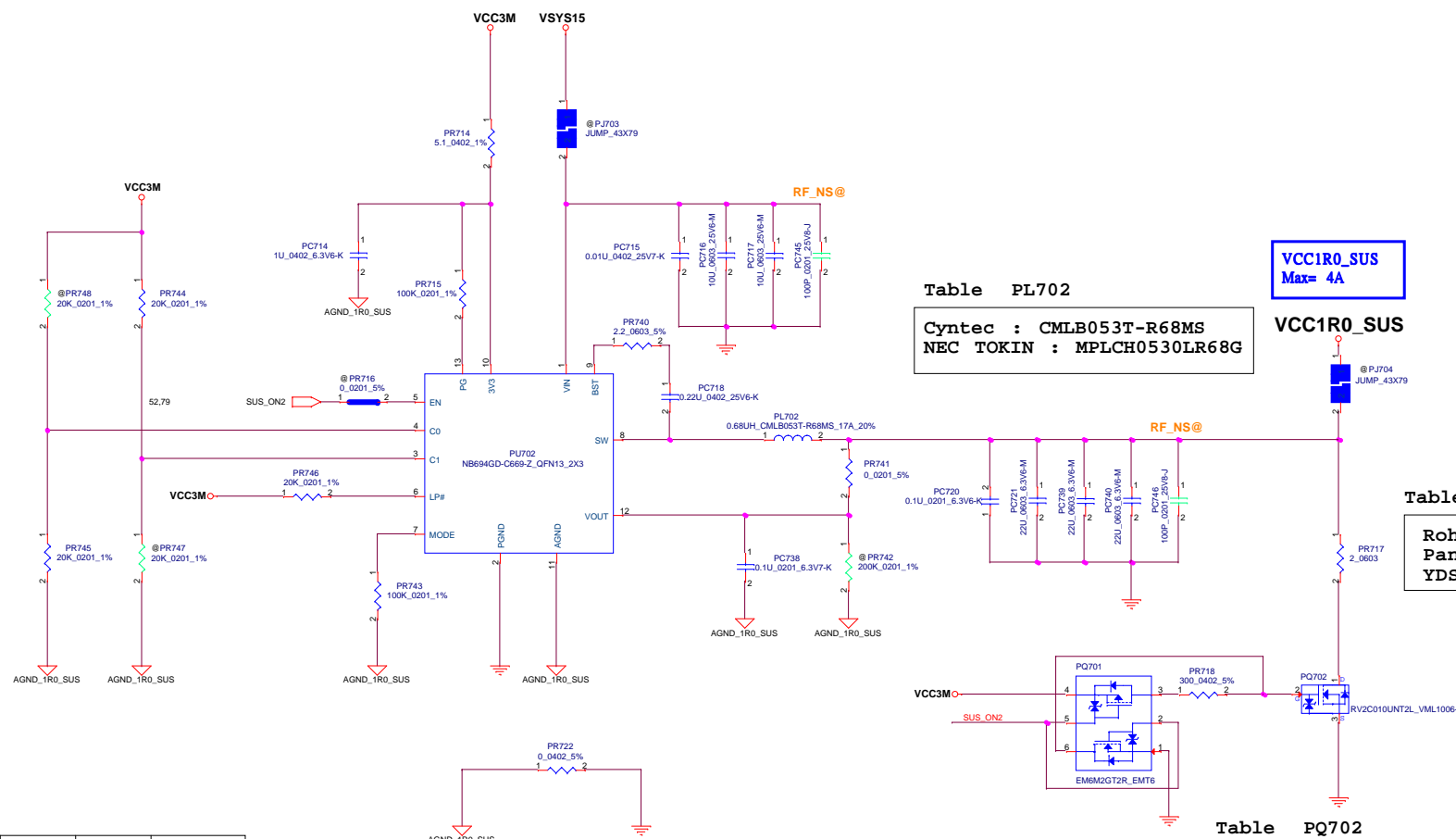


Table PL702
 Cyntec : CMLB053T-R68MS
 NEC TOKIN : MPLCH0530LR68G

VCC1R0_SUS
 Max= 4A

VCC1R0_SUS
 @PJ704
 JUMP_43X79

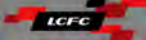
Table PR717 0603 SIZE
 Rohm:ESR03EZPJ2R0
 Pana:ERJPA3J2R0V
 YDS:RN73S2CL-2R00-F

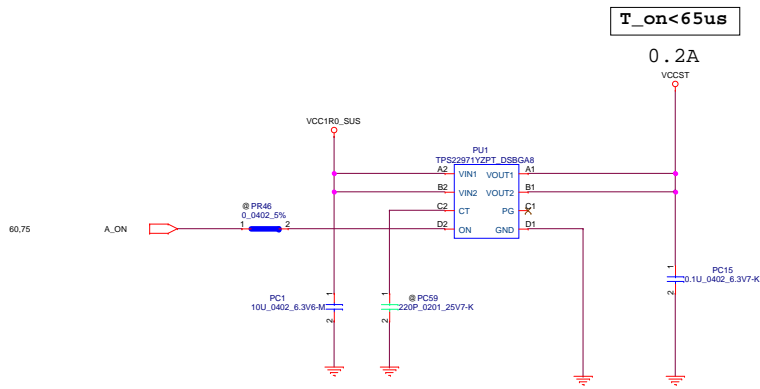
Table PQ702
 ROHM : RV2C010UNT2L
 Toshiba : SSM3K56ACT

Control Bit Logics

	LP#	C1	C0	VOUT(V)
V1.0A	0	X	X	0V
	1	0	0	0.85V
	1	0	1	0.95V
	1	1	0	1V
	1	1	1	1.05V

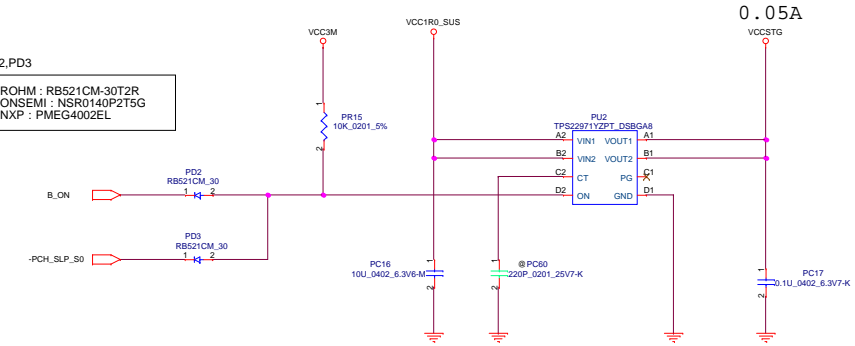
← Default Value

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59.60,61,72
13,17,67,72,79

PD2,PD3
ROHM : RB521CM-30T2R
ONSEMI : NSR0140P2T5G
NXP : PMEG4002EL



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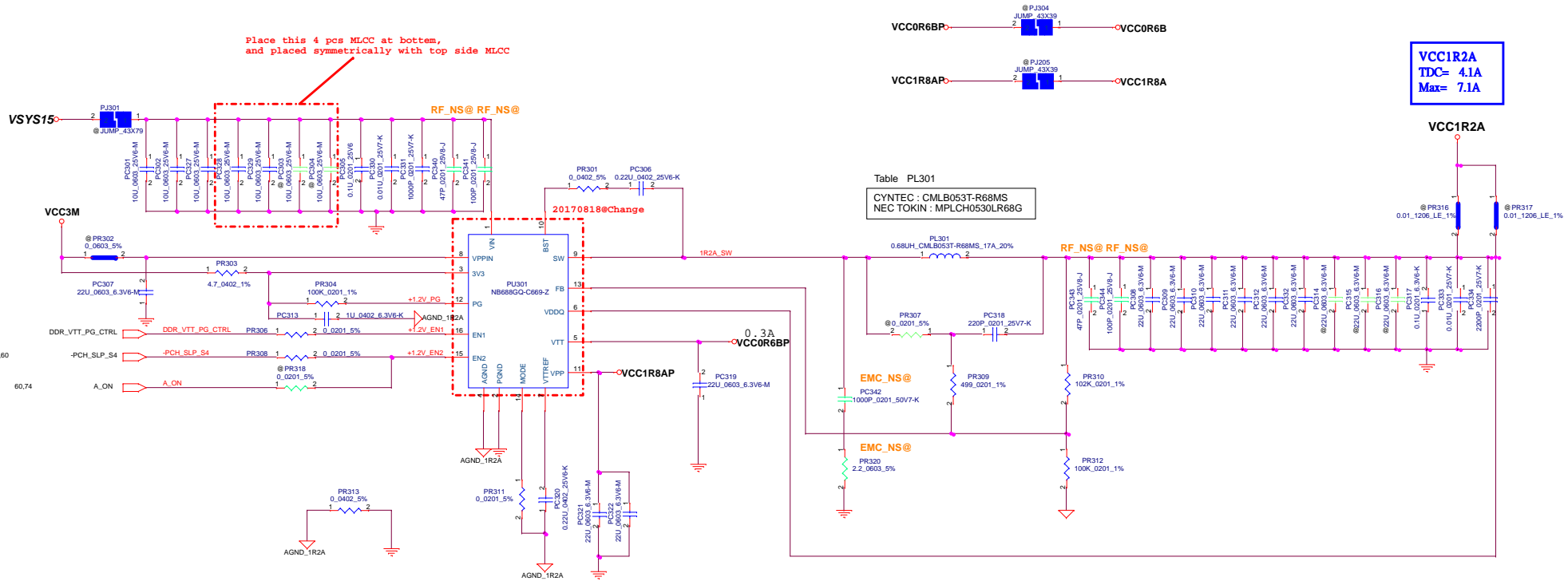


TABLE NB688GQ:EN1/EN2

State	EN1	EN2	VDDQ	VTTREF	VTT	VPP
S0	High	High	ON	ON	ON	ON
S3	Low	High	ON	ON	OFF (High-Z)	ON
S4/S5	Low	Low	OFF	OFF	OFF	OFF
Others	High	Low	OFF	OFF	OFF	OFF


TABLE NB688GQ:MODE

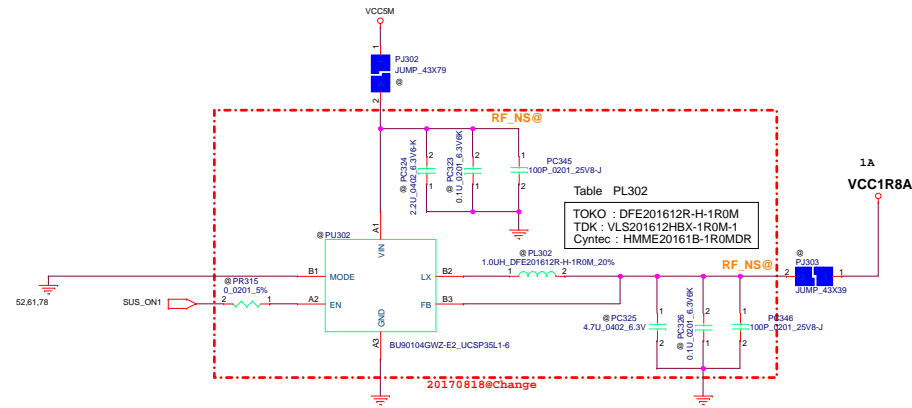
State	USM	Fs	Resistor to GND
M1	NO	700KHz	0
M2	YES	700KHz	90K
M3	NO	500KHz	150K
M4	YES	500KHz	>230K or Float

Component Name	EVT	FVT	SIT
PU301	NB687	NB687	NB688
PR302	NO_ASM	NO_ASM	ASM
PC307	NO_ASM	NO_ASM	ASM
PC321	NO_ASM	NO_ASM	ASM
PC322	NO_ASM	NO_ASM	ASM
PJ205	NO_ASM	NO_ASM	ASM

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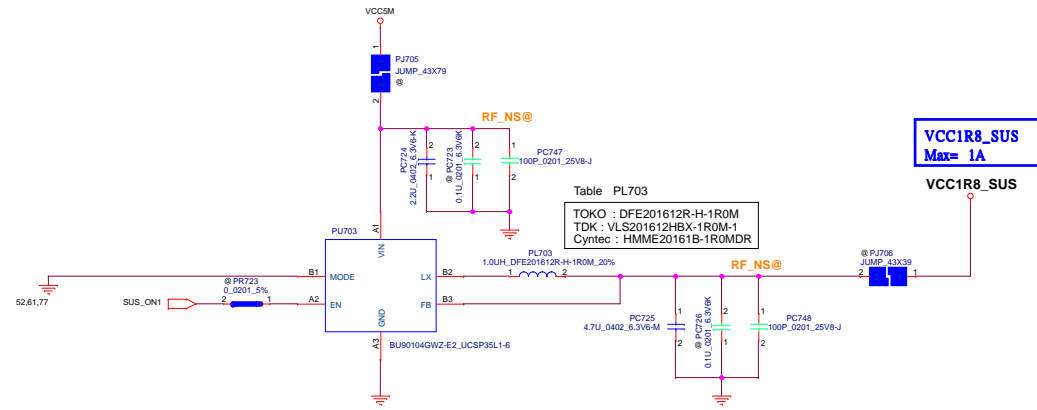
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Component Name	EVT	FVT	SIT	
PU302	ASM	ASM	NO_ASM	
PC324	ASM	ASM	NO_ASM	
PC323	NO_ASM	NO_ASM	NO_ASM	For EMC and RF
PC345	NO_ASM	NO_ASM	NO_ASM	For EMC and RF
PL302	ASM	ASM	NO_ASM	
PC325	ASM	ASM	NO_ASM	
PC326	NO_ASM	NO_ASM	NO_ASM	For EMC and RF
PC346	NO_ASM	NO_ASM	NO_ASM	For EMC and RF
PR315	ASM	ASM	NO_ASM	
PJ302	ASM	ASM	NO_ASM	
PJ303	ASM	ASM	NO_ASM	

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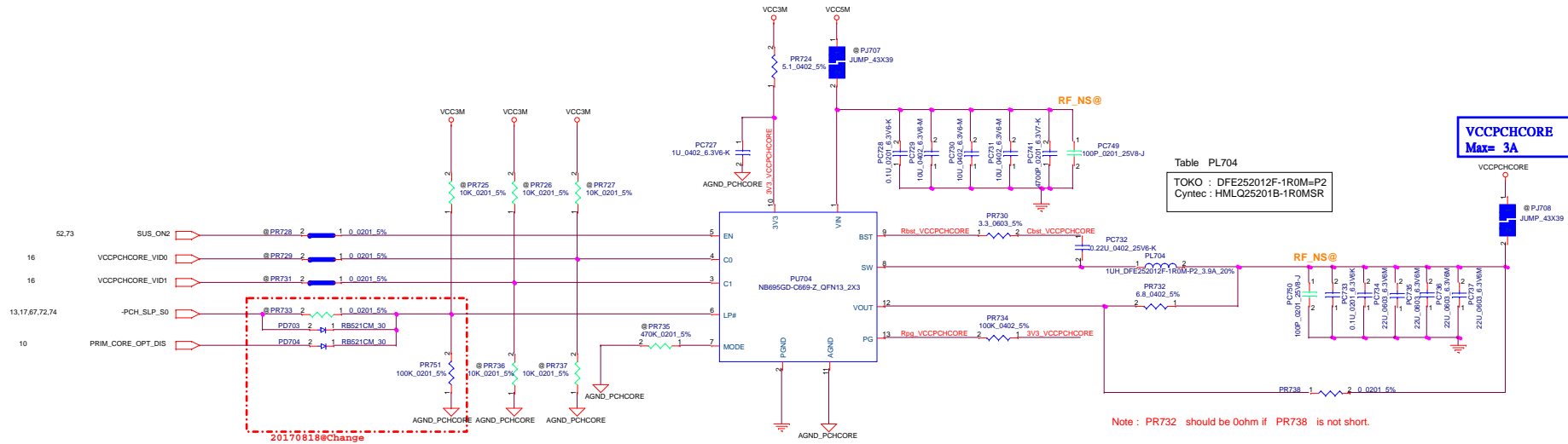


Table PL704
 TOKO : DFE252012F-1R0M=P2
 Cytotec : HMLQ25201B-1ROMSR

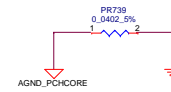
VCCPCHCORE
 Max= 3A

TABLE : NB695 MODE M2 (Float)


LP#	C1	C0	VOUT
0	X	X	0.700V
1	0	0	0.850V
1	0	1	0.900V
1	1	0	0.950V
1	1	1	1.000V

← SLP_S0#


← DEFAULT



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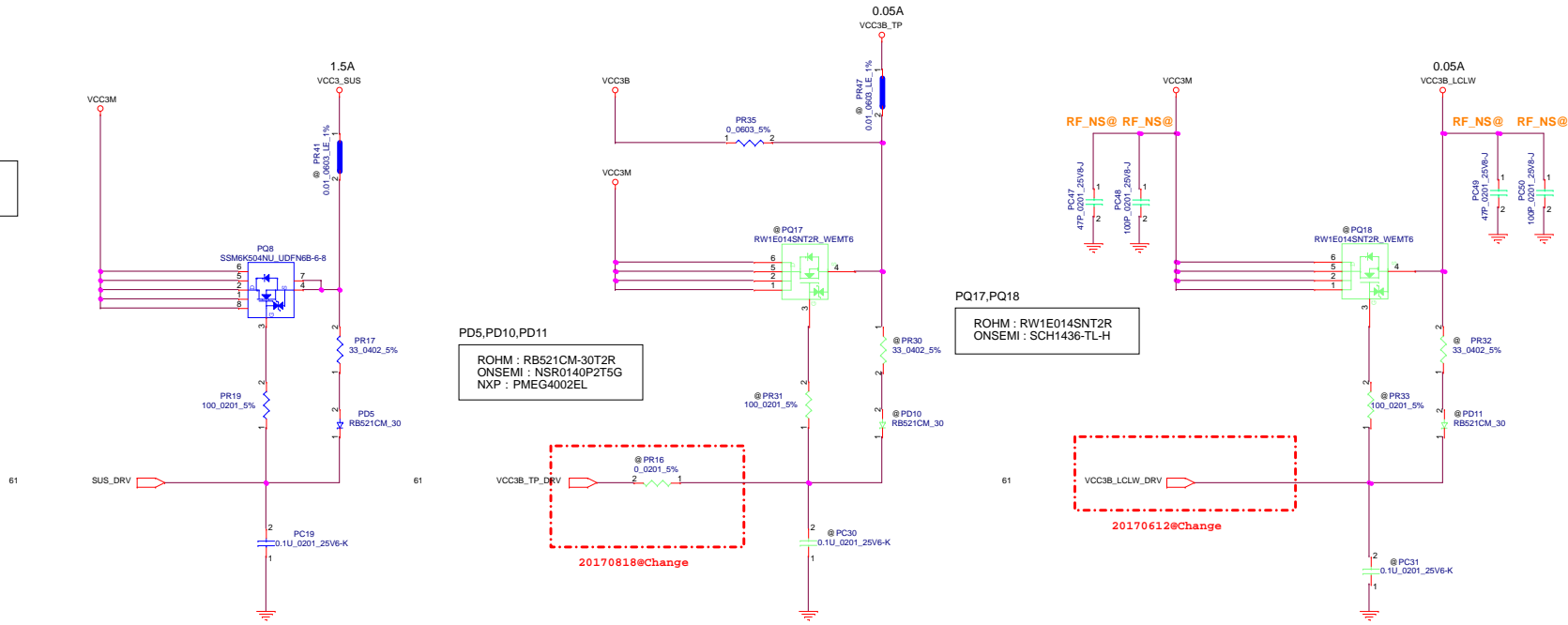
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				Date:	Friday, November 03, 2017	Sheet 80 of 86

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PQ8

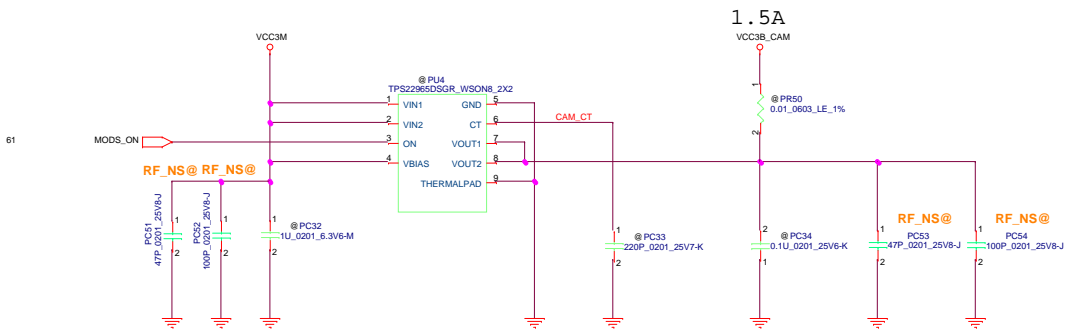
TOSHIBA : SSM6K504NU
AOS : AON2420 1N DFN
FAIRCHILD : FDMA8878



PD5,PD10,PD11
ROHM : RB521CM-30T2R
ONSEMI : NSR0140P2T5G
NXP : PMEG4002EL

PQ17,PQ18
ROHM : RW1E014SNT2R
ONSEMI : SCH1436-TL-H

20170612@Change



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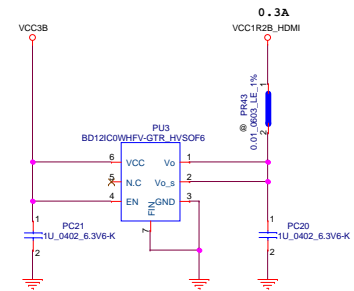
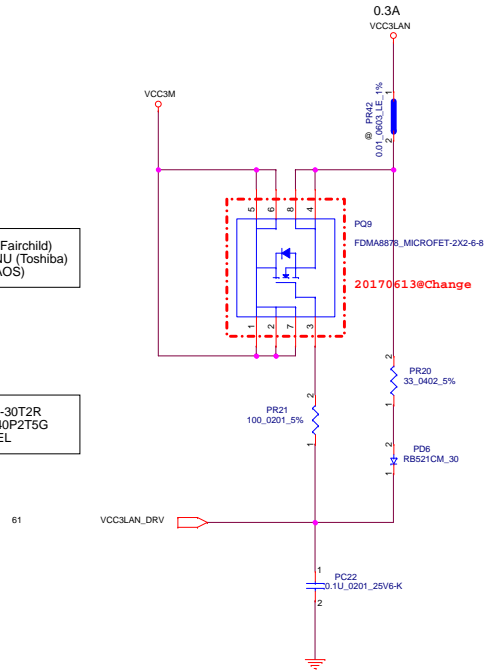
Yoda-2


PQ9

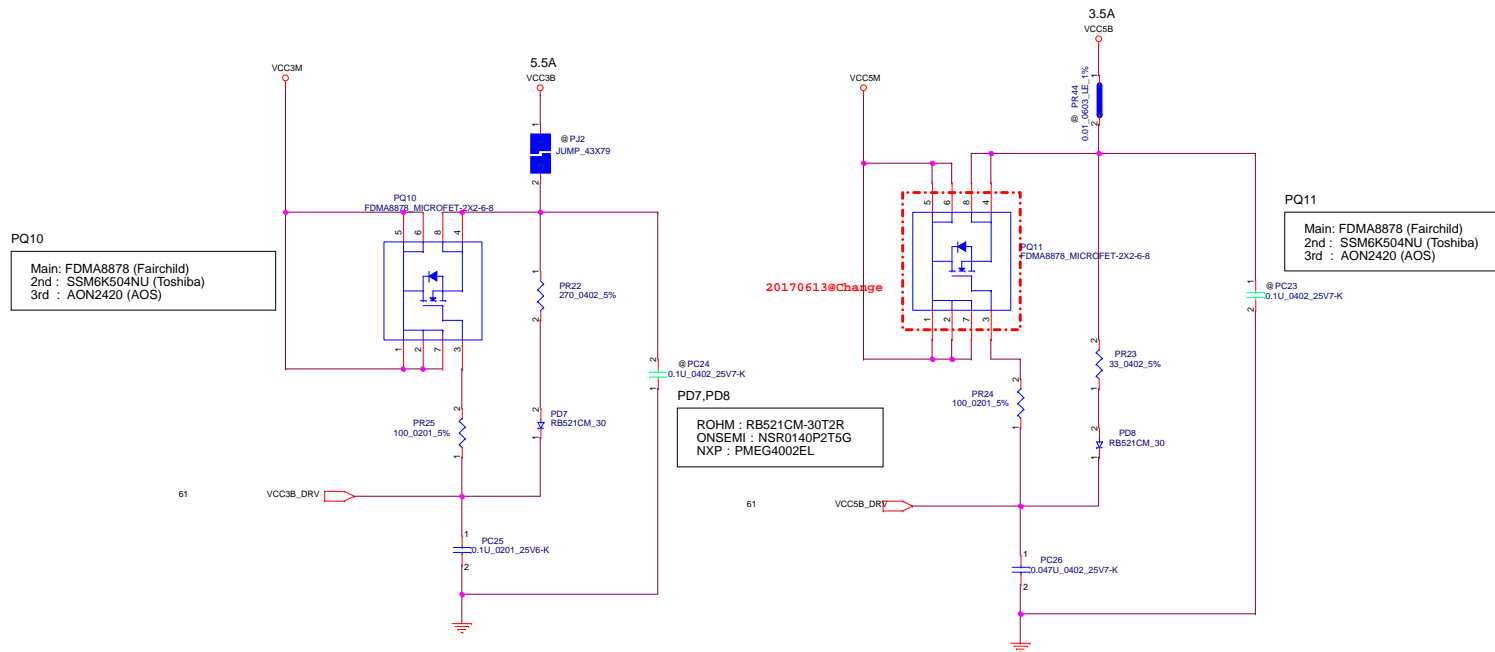
Main: FDMA8878 (Fairchild)
 2nd : SSM6K504NU (Toshiba)
 3rd : AON2420 (AOS)

PD6

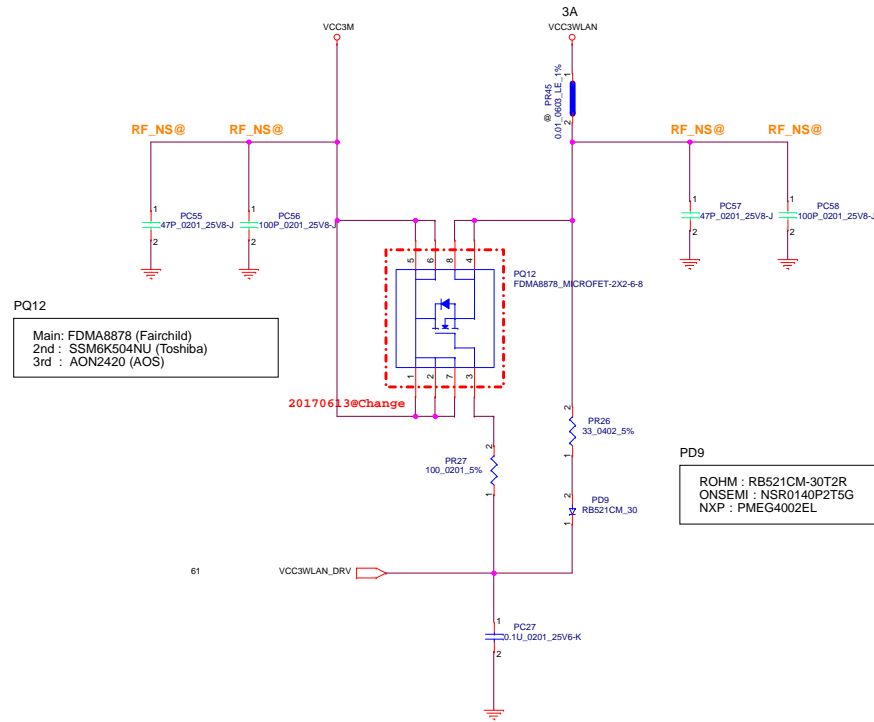
ROHM : RB521CM-30T2R
 ONSEMI : NSR0140P2T5G
 NXP : PMEG4002EL



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PQ12
 Main: FDMA8878 (Fairchild)
 2nd : SSM6K504NU (Toshiba)
 3rd : AON2420 (AOS)

PD9
 ROHM : RB521CM-30T2R
 ONSEMI : NSR0140P2T5G
 NXP : PMEG4002EL

Security Classification	LC Future Center Secret Data			Title	 LOAD SW WLAN
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					Rev 0.01
					Sheet 88 of 88

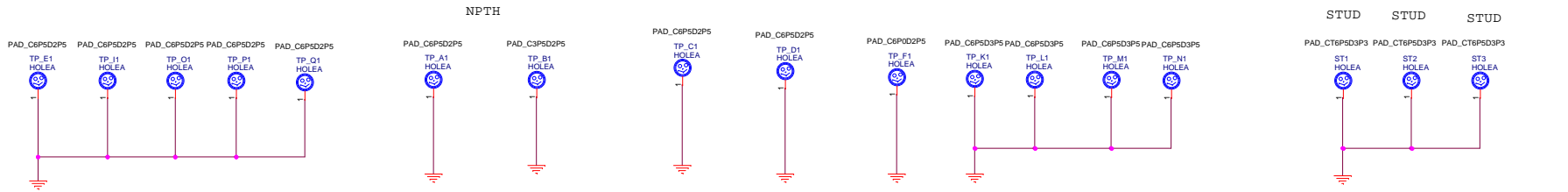
PTH FOR SCREW HOLE

Value	Hole Dia	Pad Dia		QTY
		TOP	BOTTOM	
TESTPIN_2P5_01	2.5	6.5	6.5	5
TESTPIN_2P5_02	2.5	6.5	6.0	1
TESTPIN_2P5_03	2.5	6.0	6.0	1
TESTPIN_2P5_04	2.5	6.5	5.6	1
TESTPIN_2P5_05	2.5	6.5	sha	1
TESTPIN_2P5_06	2.5	6.5	shb	1
TESTPIN_3P5_01	3.5	6.5	6.5	4
STUD_3P3_01 (SM20L66621)	3.3	6.5	6.5	3

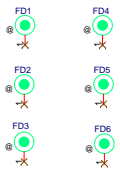
Need to Apply New PCBFootprint

Need to Apply New PCBFootprint

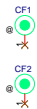
Will Check with ME



FID
Board Area

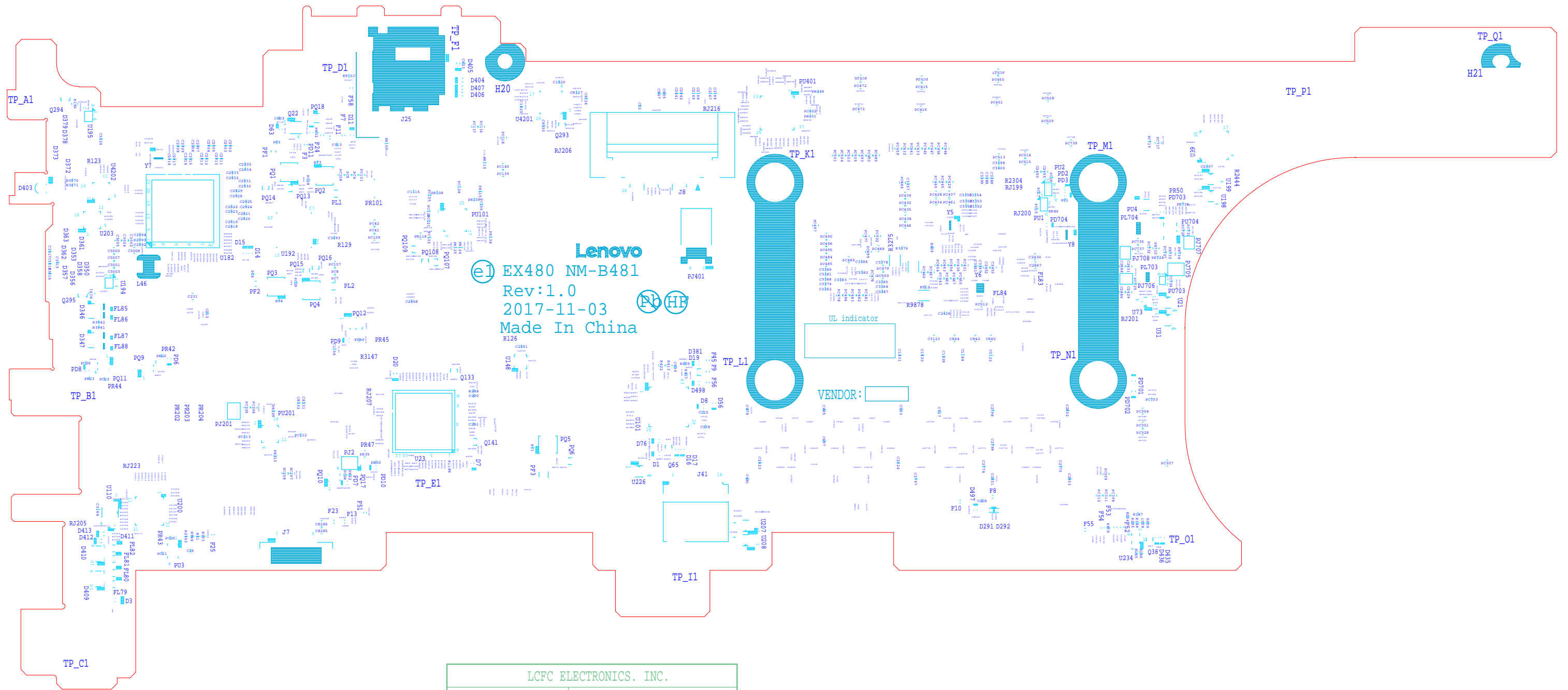


FID
Component Area

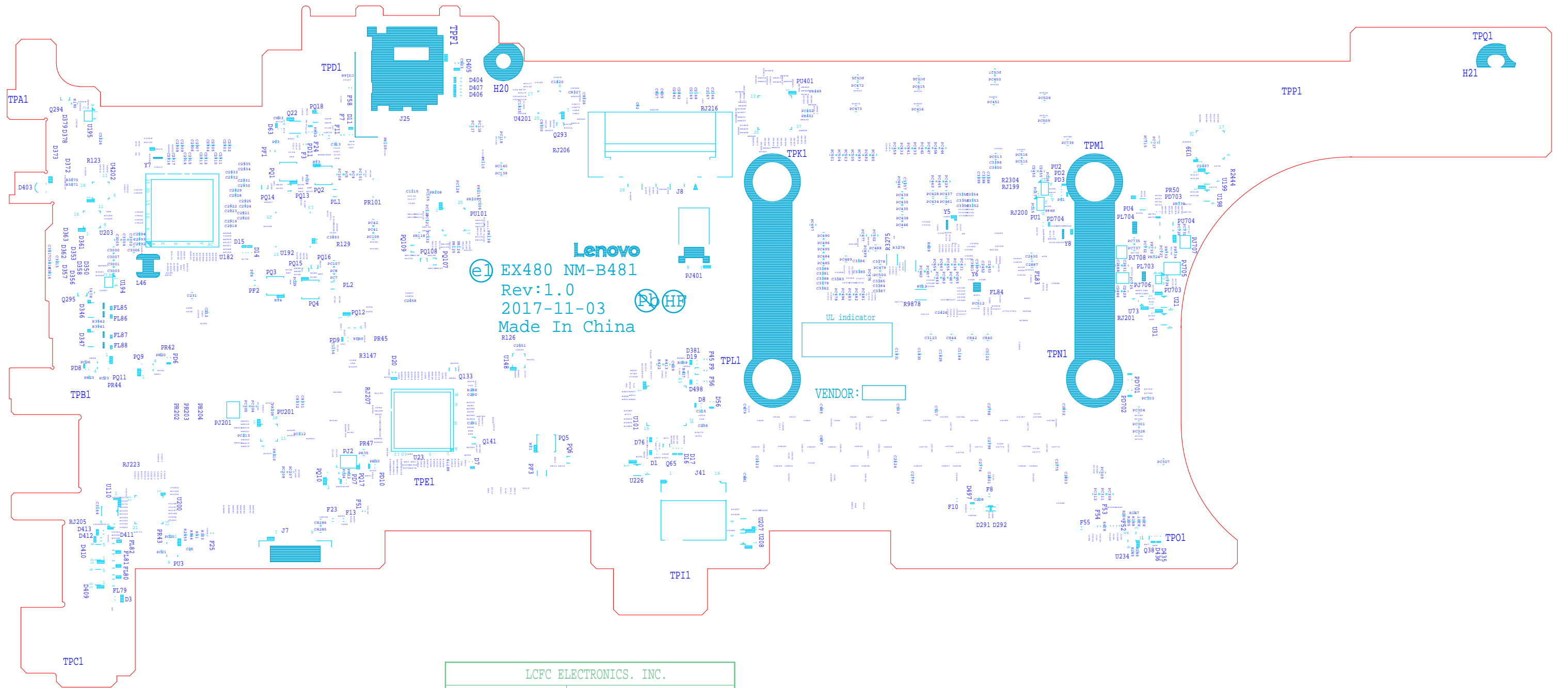


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LCFC ELECTRONICS. INC.	
PROJECT	EX480
BOARD NO.	NM-B481 REV:1.0
LAYER NO.	
DRAW BY	Ruby.Chen
Issued Date	2017-11-03
Security level	Confidential
Decipherment date	2018-11-03




EX480 NM-B481
 Rev:1.0
 2017-11-03
 Made In China

LCFC ELECTRONICS. INC.	
PROJECT	EX480
BOARD NO.	NM-B481 REV:1.0
LAYER NO.	
DRAW BY	Ruby.Chen
Issued Date	2017-11-03
Security level	Confidential
Decipherment date	2018-11-03