

LCFC Confidential
Skids/Mudflap
E14/R14/E15/R15
NM-C421 Rev1.0 Schematic

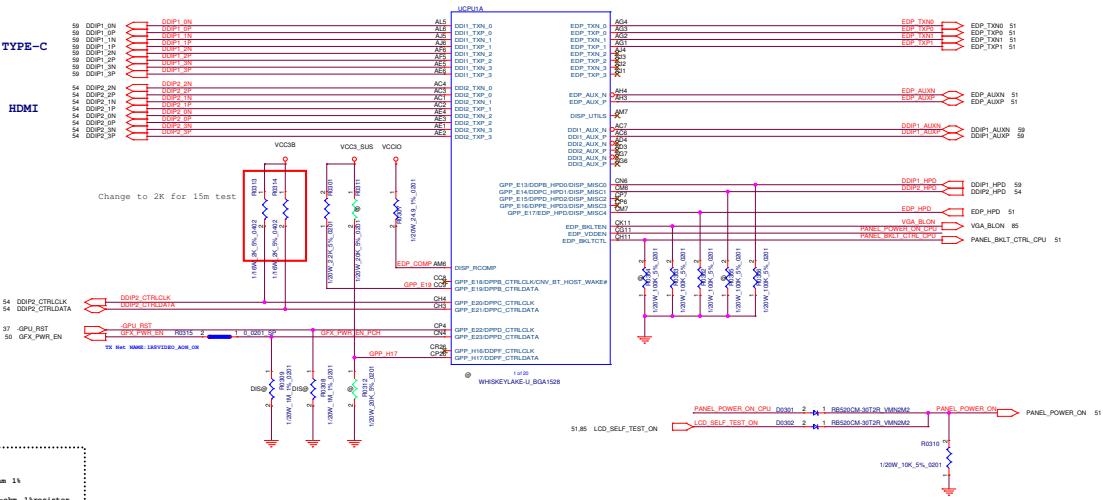
Intel Comet Processor with DDR4 + PCH
AMD R19M-P25 50/70
AMD R19M-M25-50
2019-07-05 Rev1.0

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Size	Document Number	Rev	
Custom	E14/E15 NM-C421	0.1	
Date:	Thursday, July 04, 2019	Sheet	1 of 128

TABLE : Functional Strap

GPP_E19/DDP1_CTRLDATA/TBT_LSX0_RXD (DDP1 I2C / TBT LSX #0 PINS VCCIO CONFIGURATION)	
GPP_E21/DDP2_CTRLDATA/TBT_LSX1_RXD (DDP2 I2C / TBT LSX #1 PINS VCCIO CONFIGURATION)	
GPP_D10/DDP3_CTRLDATA/TBT_LSX2_RXD (DDP3 I2C / TBT LSX #2 PINS VCCIO CONFIGURATION)	
GPP_D12/DDP4_CTRLDATA/TBT_LSX3_RXD (DDP4 I2C / TBT LSX #3 PINS VCCIO CONFIGURATION)	
HIGH	3.3V
LOW	1.8V

DP port	Enable	Disable
DDPB_CTRLDATA	Pull up to 3.3 V with 2.2-k ohm \pm 5% resistor	no connect
DDPC_CTRLDATA	Pull up to 3.3 V with 2.2-k ohm \pm 5% resistor	no connect

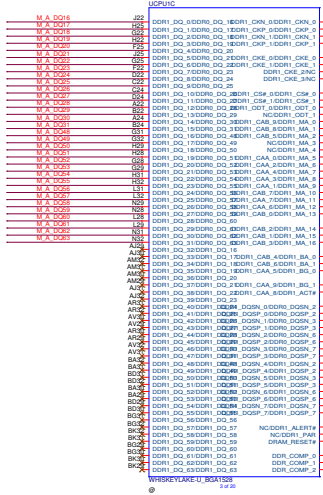


•ddp_acomp
•trace Width: 5 mils
•Isolation Spacing: 25 mils
•Resistor Value: 34.9 or 100 ohm 1%
•Max Length: 600 mils
•Pull-up to VCCIO through 24.9-ohm 1%resistor.
•For CML, it is 100 ohm 1%
•Please refer to P00 Table 3-2.
•Date: 10/27/2015, L_C_FUTURE

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2015/01/12		2016/01/12		Rev. 1.0	
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Date		Version		Sheet	
2015/01/12		1.0		51	

TABLE	Pin	Interleave	Non-Interleave
Block 1	J22	DDR1_DQ[0]	DDR0_DQ[16]
	H25	DDR1_DQ[1]	DDR0_DQ[17]
	G22	DDR1_DQ[2]	DDR0_DQ[18]
	H22	DDR1_DQ[3]	DDR0_DQ[19]
	F25	DDR1_DQ[4]	DDR0_DQ[20]
	J25	DDR1_DQ[5]	DDR0_DQ[21]
	G25	DDR1_DQ[6]	DDR0_DQ[22]
	F22	DDR1_DQ[7]	DDR0_DQ[23]
	D22	DDR1_DQ[8]	DDR0_DQ[24]
	C22	DDR1_DQ[9]	DDR0_DQ[25]
	C24	DDR1_DQ[10]	DDR0_DQ[26]
	D24	DDR1_DQ[11]	DDR0_DQ[27]
	A22	DDR1_DQ[12]	DDR0_DQ[28]
	B22	DDR1_DQ[13]	DDR0_DQ[29]
	A24	DDR1_DQ[14]	DDR0_DQ[30]
	B24	DDR1_DQ[15]	DDR0_DQ[31]
Block 3	G31	DDR1_DQ[16]	DDR0_DQ[48]
	G32	DDR1_DQ[17]	DDR0_DQ[49]
	H29	DDR1_DQ[18]	DDR0_DQ[50]
	H28	DDR1_DQ[19]	DDR0_DQ[51]
	G28	DDR1_DQ[20]	DDR0_DQ[52]
	G29	DDR1_DQ[21]	DDR0_DQ[53]
	H31	DDR1_DQ[22]	DDR0_DQ[54]
	H32	DDR1_DQ[23]	DDR0_DQ[55]
	L31	DDR1_DQ[24]	DDR0_DQ[56]
	L32	DDR1_DQ[25]	DDR0_DQ[57]
	N29	DDR1_DQ[26]	DDR0_DQ[58]
	N28	DDR1_DQ[27]	DDR0_DQ[59]
	L28	DDR1_DQ[28]	DDR0_DQ[60]
	N29	DDR1_DQ[29]	DDR0_DQ[61]
	N31	DDR1_DQ[30]	DDR0_DQ[62]
	N32	DDR1_DQ[31]	DDR0_DQ[63]
Block 5	AJ29	DDR1_DQ[32]	DDR1_DQ[16]
	AJ30	DDR1_DQ[33]	DDR1_DQ[17]
	AM32	DDR1_DQ[34]	DDR1_DQ[18]
	AM31	DDR1_DQ[35]	DDR1_DQ[19]
	AM29	DDR1_DQ[36]	DDR1_DQ[20]
	AJ31	DDR1_DQ[37]	DDR1_DQ[21]
	AJ32	DDR1_DQ[38]	DDR1_DQ[22]
	AR31	DDR1_DQ[39]	DDR1_DQ[23]
	AR32	DDR1_DQ[40]	DDR1_DQ[24]
	AV30	DDR1_DQ[41]	DDR1_DQ[25]
	AV29	DDR1_DQ[42]	DDR1_DQ[26]
	AR30	DDR1_DQ[43]	DDR1_DQ[27]
	AR28	DDR1_DQ[44]	DDR1_DQ[28]
	AV32	DDR1_DQ[45]	DDR1_DQ[29]
	AV31	DDR1_DQ[46]	DDR1_DQ[30]
		DDR1_DQ[47]	DDR1_DQ[31]
Block 7	BA32	DDR1_DQ[48]	DDR1_DQ[48]
	BA31	DDR1_DQ[49]	DDR1_DQ[49]
	BD31	DDR1_DQ[50]	DDR1_DQ[50]
	BD32	DDR1_DQ[51]	DDR1_DQ[51]
	BA30	DDR1_DQ[52]	DDR1_DQ[52]
	BA29	DDR1_DQ[53]	DDR1_DQ[53]
	BD29	DDR1_DQ[54]	DDR1_DQ[54]
	BD30	DDR1_DQ[55]	DDR1_DQ[55]
	BG31	DDR1_DQ[56]	DDR1_DQ[56]
	BG32	DDR1_DQ[57]	DDR1_DQ[57]
	BK31	DDR1_DQ[58]	DDR1_DQ[58]
	BG29	DDR1_DQ[59]	DDR1_DQ[59]
	BG30	DDR1_DQ[60]	DDR1_DQ[60]
	BK30	DDR1_DQ[61]	DDR1_DQ[61]
	BK29	DDR1_DQ[62]	DDR1_DQ[62]
		DDR1_DQ[63]	DDR1_DQ[63]

↑
LOGIC



WHL PDQ[0] for CNL DQ[4] COMPENSATION
DDR_RCOMP[0] Pull down 121 ohm resistor
DDR_RCOMP[1] Pull down 80.6 ohm resistor
DDR_RCOMP[2] Pull down 100 ohm resistor
DDR_RCOMP[3] Pull down 100 ohm resistor

TABLE	Pin	Interleave	Non-Interleave
Block 1	H24	DDR1_DQS[0]	DDR0_DQS[2]
	G24	DDR1_DQS[1]	DDR0_DQS[3]
	D23	DDR1_DQS[2]	DDR0_DQS[4]
Block 3	G30	DDR1_DQS[2]	DDR0_DQS[6]
	H30	DDR1_DQS[3]	DDR0_DQS[7]
	N30	DDR1_DQS[4]	DDR0_DQS[8]
Block 5	AL31	DDR1_DQS[4]	DDR1_DQS[2]
	AL30	DDR1_DQS[5]	DDR1_DQS[3]
	AU30	DDR1_DQS[6]	DDR1_DQS[4]
Block 7	BC31	DDR1_DQS[6]	DDR1_DQS[6]
	BC30	DDR1_DQS[7]	DDR1_DQS[7]
	BH30	DDR1_DQS[8]	DDR1_DQS[8]

↑
LOGIC

TABLE	Pin	DDR3L	LPDDR3	DDR4
Block 1	AF35	DDR1_MA[5]	DDR1_CAA[0]	DDR1_MA[5]
	AE29	DDR1_MA[6]	DDR1_CAA[1]	DDR1_MA[9]
	AE37	DDR1_MA[6]	DDR1_CAA[2]	DDR1_MA[6]
	AE36	DDR1_MA[6]	DDR1_CAA[3]	DDR1_MA[6]
	AC29	DDR1_MA[7]	DDR1_CAA[4]	DDR1_MA[7]
	W29	DDR1_BA[2]	DDR1_CAA[5]	DDR1_BG[0]
	AE28	DDR1_MA[12]	DDR1_CAA[6]	DDR1_MA[12]
	W28	DDR1_MA[11]	DDR1_CAA[7]	DDR1_MA[11]
	Y28	DDR1_MA[15]	DDR1_CAA[8]	DDR1_MA[15]
		DDR1_MA[14]	DDR1_CAA[9]	DDR1_BG[1]
Block 5	AK35	DDR1_MA[13]	DDR1_CAB[0]	DDR1_MA[13]
	AK34	DDR1_CAS#	DDR1_CAB[1]	DDR1_MA[15]
	AJ35	DDR1_WE#	DDR1_CAB[2]	DDR1_MA[14]
	AJ34	DDR1_RAS#	DDR1_CAB[3]	DDR1_MA[16]
	AF34	DDR1_BA[0]	DDR1_CAB[4]	DDR1_BA[0]
	AF33	DDR1_MA[2]	DDR1_CAB[5]	DDR1_MA[2]
	AG36	DDR1_BA[1]	DDR1_CAB[6]	DDR1_BA[1]
	AG35	DDR1_MA[10]	DDR1_CAB[7]	DDR1_MA[10]
	AG34	DDR1_MA[11]	DDR1_CAB[8]	DDR1_MA[11]
	AE35	DDR1_MA[3]	Not Used	DDR1_MA[3]
Block 7		DDR1_MA[4]		DDR1_MA[4]

↑
LOGIC

M_A_DQ[63] 4.33
M_A_DQ[67] 4.33
M_A_DQ[67] 4.33

Table 3-1. RCOMP Recommendation for WHL and CFL

Interface	Pin Name	Board Items (Ohm)	Board Rdc (Ohm)	Note
DDR - LP3	DDR_RCOMP[0]	2000 ± 1% on pig to VSS	N/A	
	DDR_RCOMP[1]	80.62 ± 1% on pig to VSS	N/A	
	DDR_RCOMP[2]	1670 ± 1% on pig to VSS	N/A	
DDR - DDR4 SODIMM	DDR_RCOMP[0]	121G ± 1% on pig to VSS	N/A	Different RCOMP value in CNL. Refer to Table 3-2
	DDR_RCOMP[1]	80.62 ± 1% on pig to VSS	N/A	
	DDR_RCOMP[2]	1000 ± 1% on pig to VSS	N/A	

Table 3-2. RCOMP Recommendation for CNL

Interface	Pin Name	Board Items (Ohm)	Board Rdc (Ohm)	Note
DDR - DDR4 SODIMM	DDR_RCOMP[0]	1000 ± 1% on pig to VSS	N/A	No LP3 support in CNL
	DDR_RCOMP[1]	1000 ± 1% on pig to VSS	N/A	
	DDR_RCOMP[2]	1000 ± 1% on pig to VSS	N/A	

CPU SKU	U43e	U42
Pin A14	OPCE_RCOMP	Reserved
Pin B14	OPC_RCOMP	Reserved

ITP_PMODE (DFX Test Mode)	
HIGH	DFX Test Mode Disabled (Default)
LOW	DFX Test Mode Enabled

GPP_E6 (JTAG ODT Disable)	
HIGH	Enabled
LOW	Disabled

GPP_H2/CNV_BT_I2S_SDO (eSPI Flash Sharing Mode)	
HIGH	Slave Attached Flash Sharing (SAFS) Enabled
LOW	Master Attached Flash Sharing (MAFS) Enabled (Default)

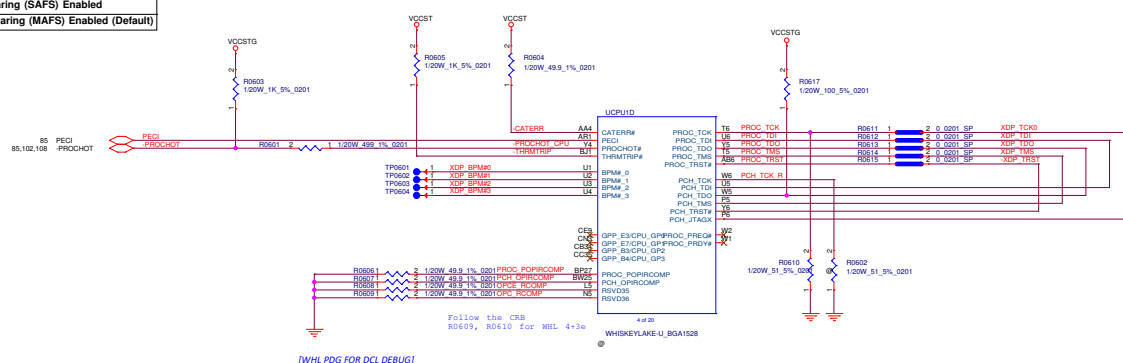
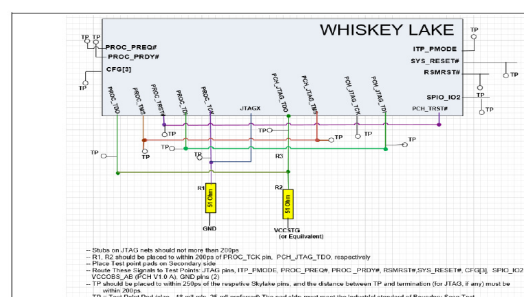

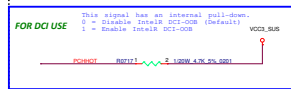




Figure 13-6. Primary Debug PortConnector Less Routing Topology




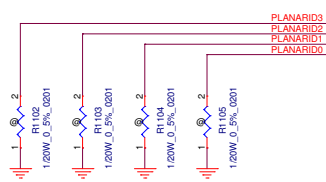
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Date December 14, 2015				

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PLANARID[3:0]	PHASE
0h (0000b)	EVT
1h (0001b)	FVT
2h (0010b)	SIT
3h (0011b)	SIT-R
Fh (1111b)	SVT

This strap must be configured to 0 (SAFS is disabled) if the eSPI or LPC strap is configured to 0 (eSPI is disabled)

GPP_H21, Internal Weak
pull-down
LOW: 38.4/19.2MHZ (DEFAULT)
HIGH: 24MHZ

20190123
Intel update Mow
Spec to 75K Ohm


AAWP_PRESENT

5V

R1117
1/20W_75K_5%_0

0V

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CPU (9/16): CSI-2/EMMC/CNV			
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E14/E15 NM-C421			
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7.3.2.3 WHLU PCH-LP Platform XTAL Routing Guidelines

Figure 7-7. WHLU PCH-LP Platform Crystal XTAL_IN/OUT Topology

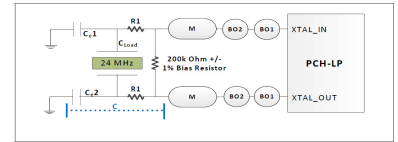


TABLE of XTAL (Y1201)		
Vendor	LCFC P/N	Description
TXC	SJ10000S500	S CRYSTAL 24MHZ 12PF +-20PPM 8Y24000034
HARMONY	SJ10000RR00	S CRYSTAL 24MHZ 12PF X2C024000DC1H-HU

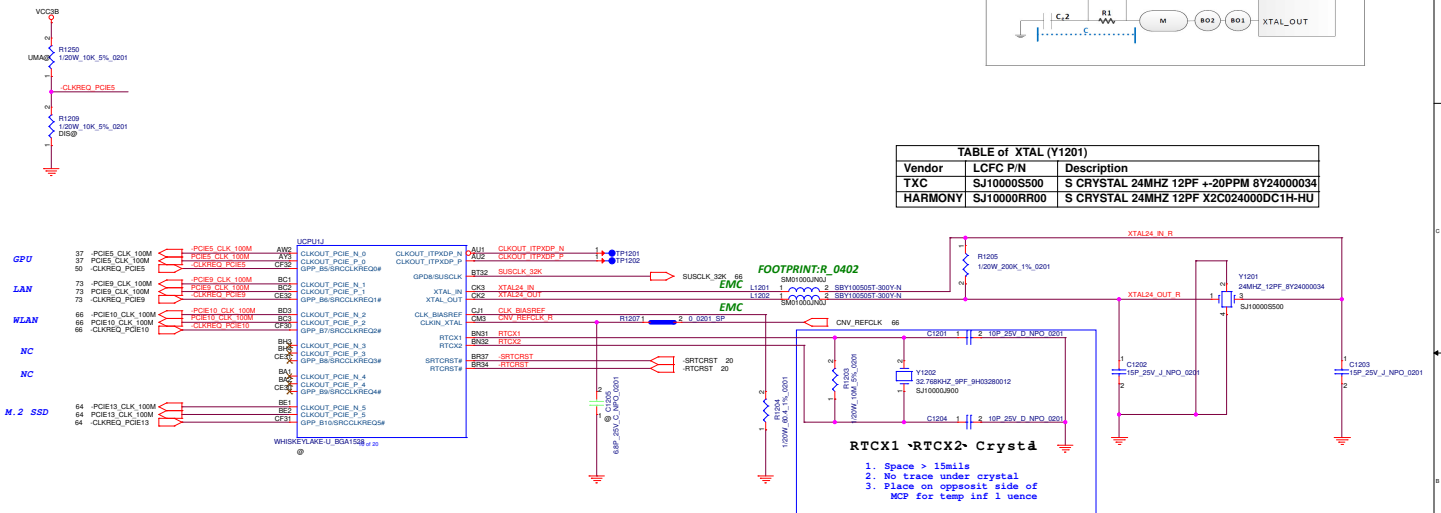
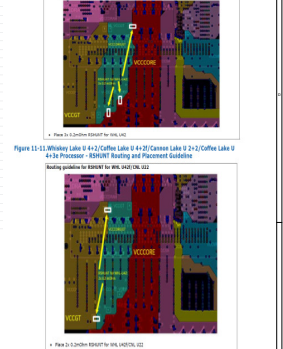

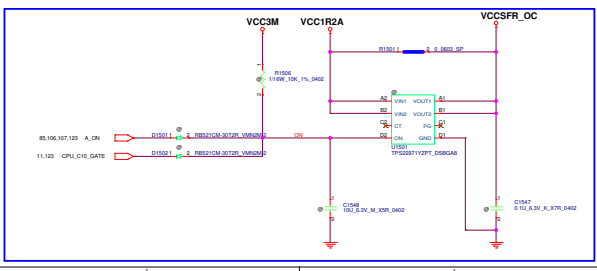
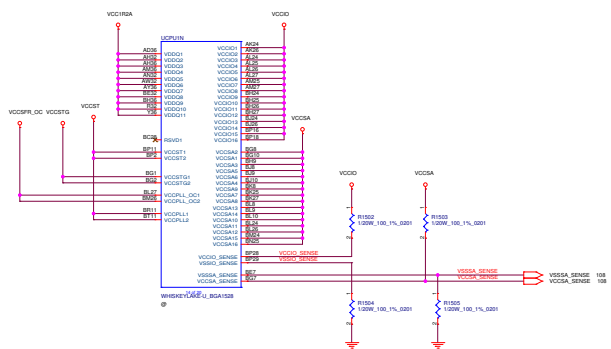
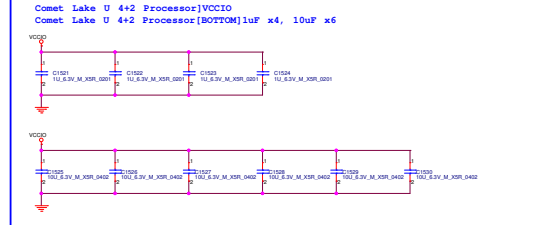
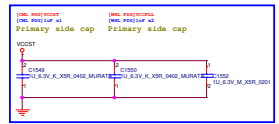
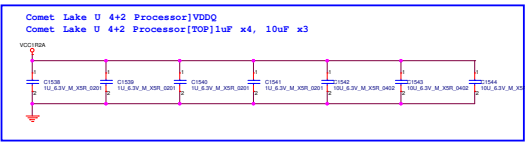
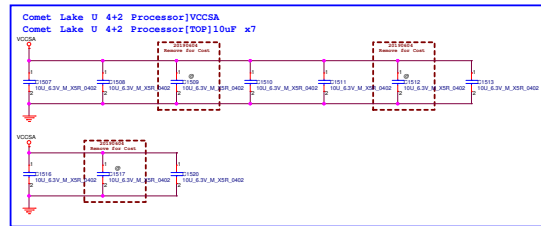
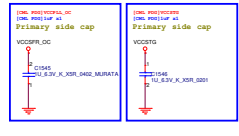
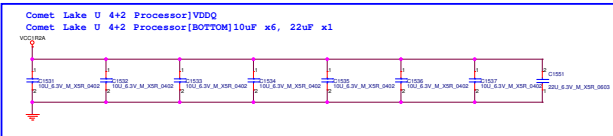
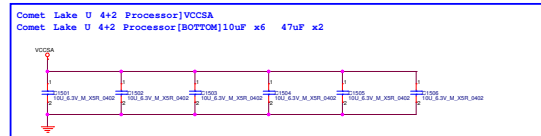



TABLE of XTAL (Y1202)		
Vendor	LCFC P/N	Description
TXC	SJ10000J900	S CRYSTAL 32.768KHZ 9PF 20PPM
KDS	SJ100069400	S CRYSTAL 32.768KHZ 9PF 1TJF09

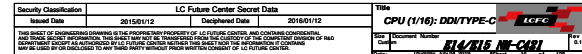
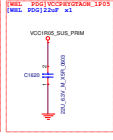
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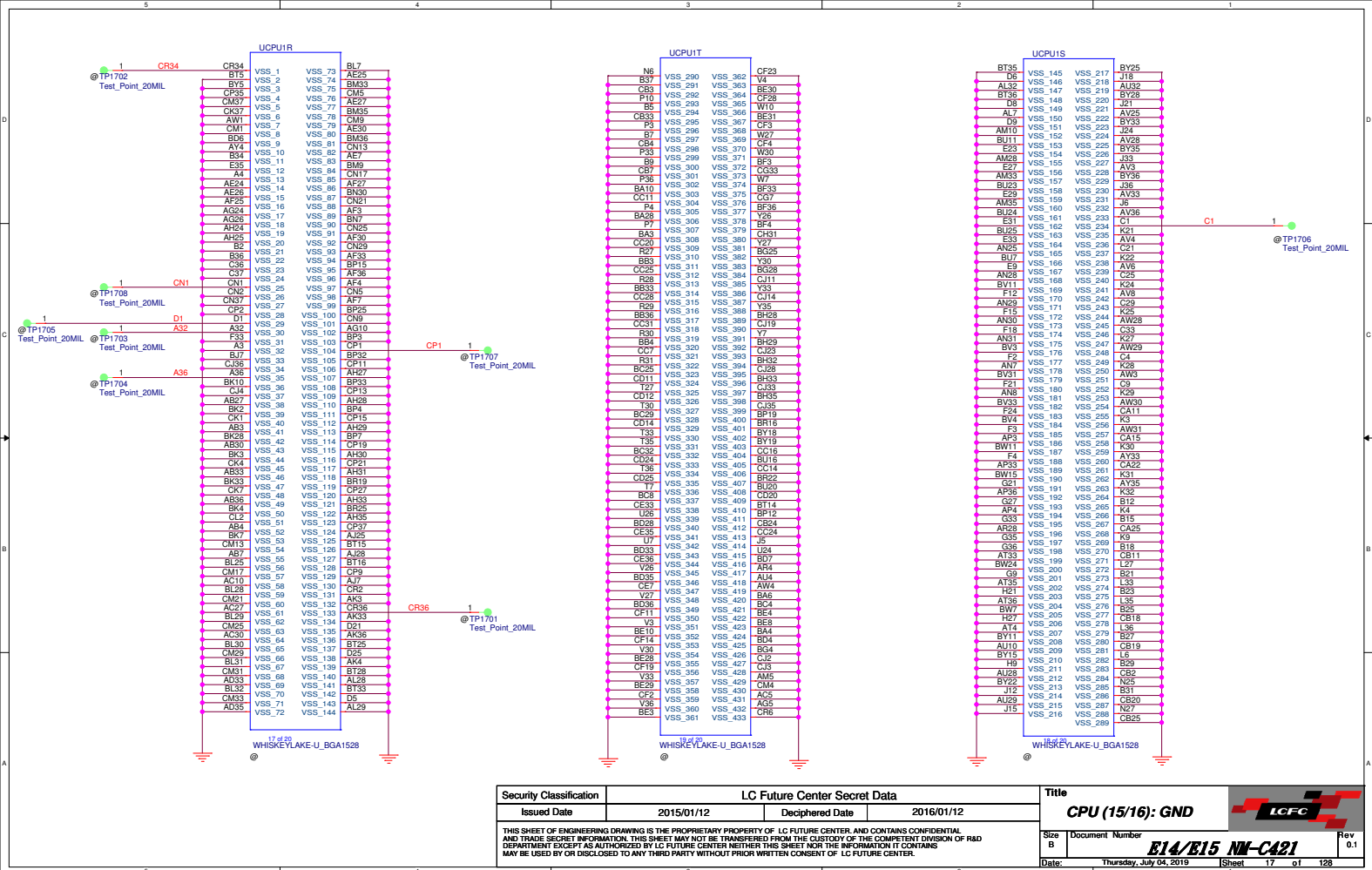



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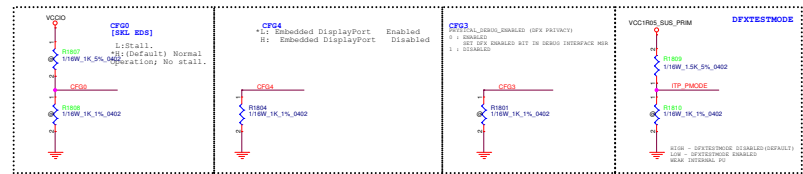


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TABLE

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

CFG4 : eDP Enable
1 : Disabled
0 : Enabled

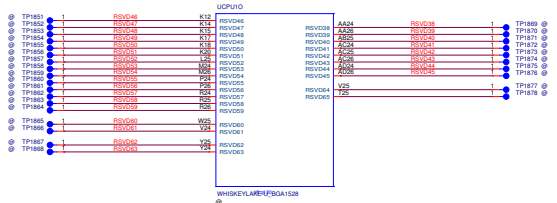
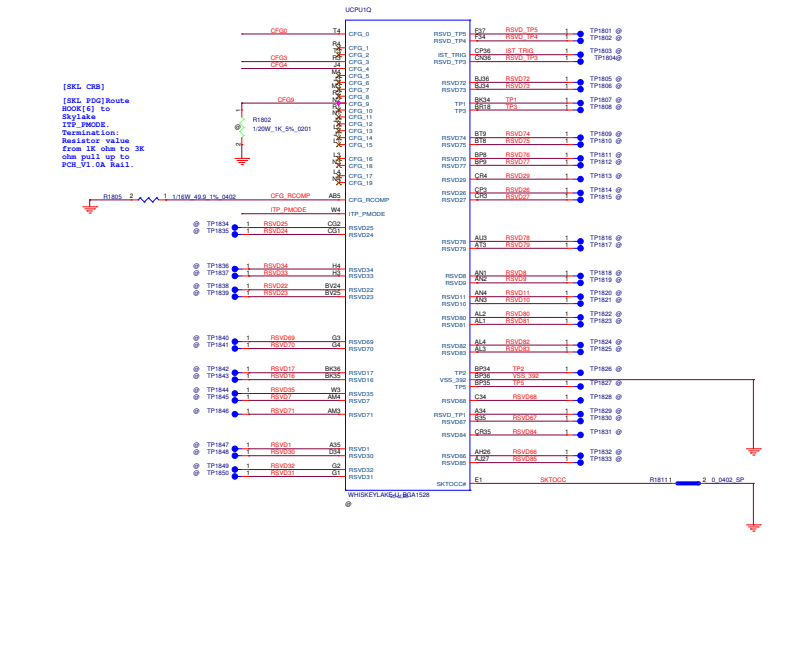
CFG9 : SVID Bus Communication
1 : Enabled
0 : Disabled

[SKL EDS]Zero Voltage Mode/VCCOPC is fixed OPC VR output voltage of 1V, the processor can drive VR to 12W (Low Power Mode) which sets VR output to 0V using SVM# signal as shown below:



SVM# state	VCCOPC
0V	0V
1V	1V

[SKL EDS]Minimum Speed Mode: VCCOPC can be connected to OPC VR in this case VCCOPC is fixed to 1V. The processor can drive VR to 12W (Low Power Mode) which sets VR output to 0V using SVM# signal. In order to achieve better power/performance it is recommended to use a separate VR for VCCOPC in this case VCCOPC is configurable to 0.8V/1V. The processor drives the VR to set VCCOPC value(0.8V/1V) using MM# signal, based on the required bandwidth for the XOPC interface as shown below:

SVM# state	MM# state	VCCOPC
0V	X	0V
1V	0V	0.8V
1V	1V	1V



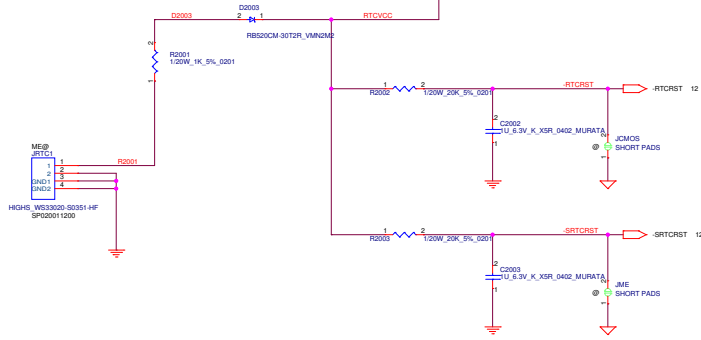
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RTC CONN.

RTC External Circuit

RTCBATT(R2001 D2003)
RTCVCC
Trace width = 20mils



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Date		Thursday, 25/01/2015		Sheet	
25		01		128	

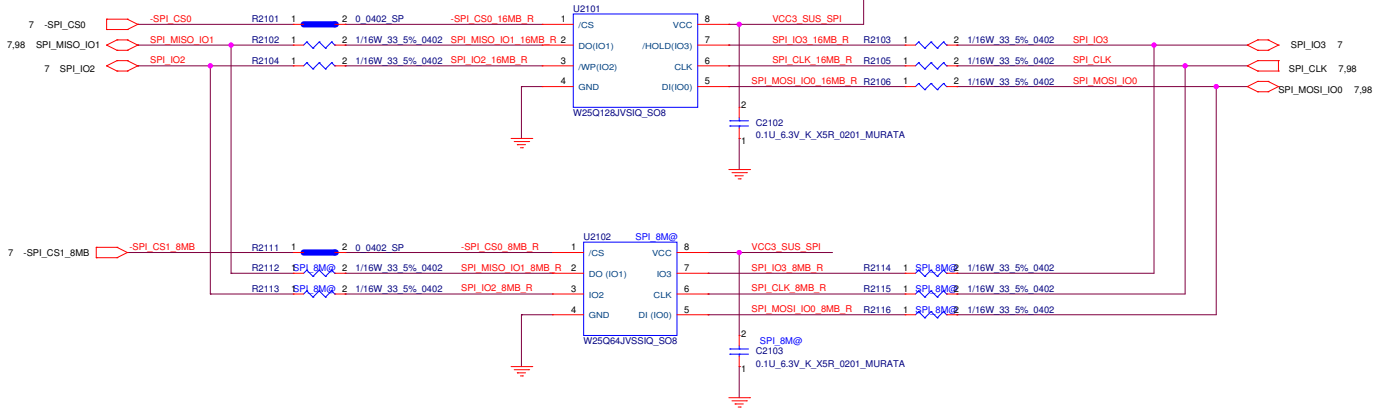
VCC3_SUS_SPI VCC3_SUS_SPI 7.85
VCC3_SUS VCC3_SUS 3.7,8,9,10,11,13,16,50,93,98,124

Mirror Code, Close to SPI ROM (U2101).

85	-ECSP1_SS	R2107.1	2	0.0402 SP	-SPI_CS0 16MB R
85	ECSP1_MOSI	R2108.1	2	0.0402 SP	SPI_MOSI IO0 16MB R
85	ECSP1_MISO	R2109.1	2	0.0402 SP	SPI_MISO IO1 16MB R
85	ECSP1_CLK	R2110.1	2	0.0402 SP	SPI_CLK 16MB R

TABLE of SPI ROM (U2101)

Vendor	LCFC P/N	Description
WINBOND	SA00008A300	S IC FL 128M W25Q128JVSQ SOIC 8P SPI
MXIC	SA00009WJ00	S IC FL 128M MX25L12872FM2I-10




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Title	SPI FLASH
Size	B
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Date	Thursday, July 04, 2019
Sheet	21 of 128
Rev	0.1



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Date:	Thursday, 25/01/2016			Sheet 25 of 128


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			Date	


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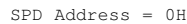
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				B14/E15 NH-C421
Date: Thursday, 2/2/16				Rev. 0.1

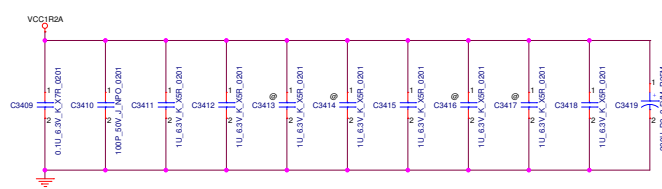
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Date:	Thursday, 22/01/2016			Sheet 01 1/1




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Total quantity is referring to 2 channels.




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01	E14/E15 NM-C491	1		01
ESPEC		1/20/2016, 1/20/2017		1/20/2016, 1/20/2017

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					Date: Thursday, July 04, 2019	Sheet 36	of 128



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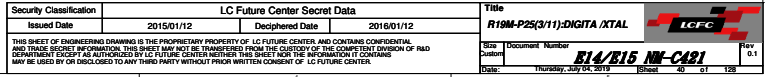

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Date:	Thursday, 22/01/2016			Sheet 01 1/1

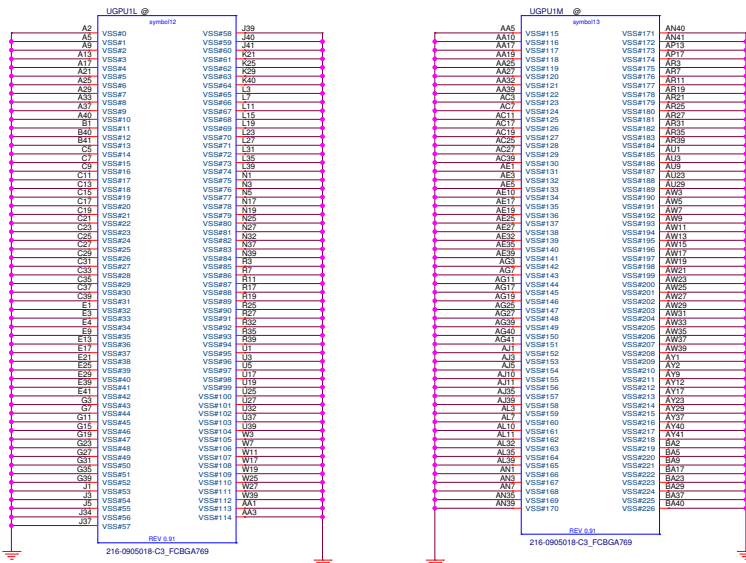
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Date:	Thursday, 25/01/2016			Sheet 45 of 128

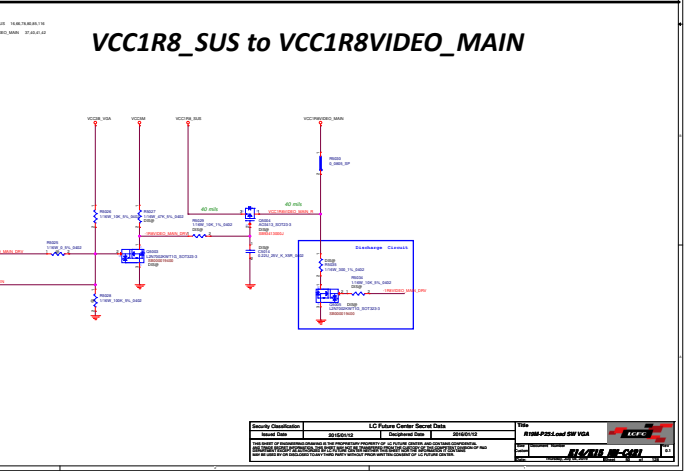
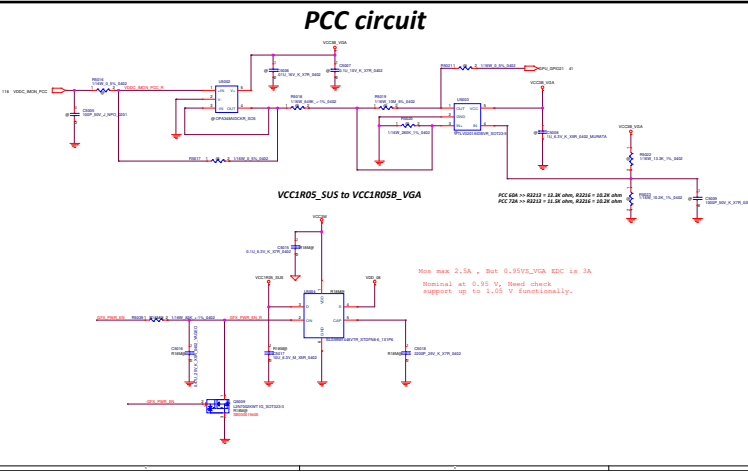
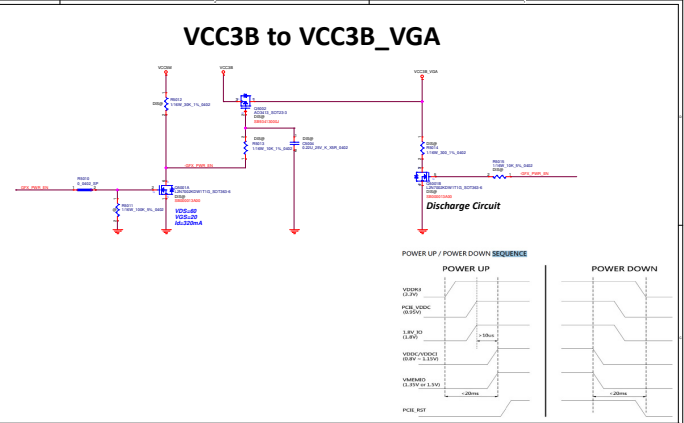
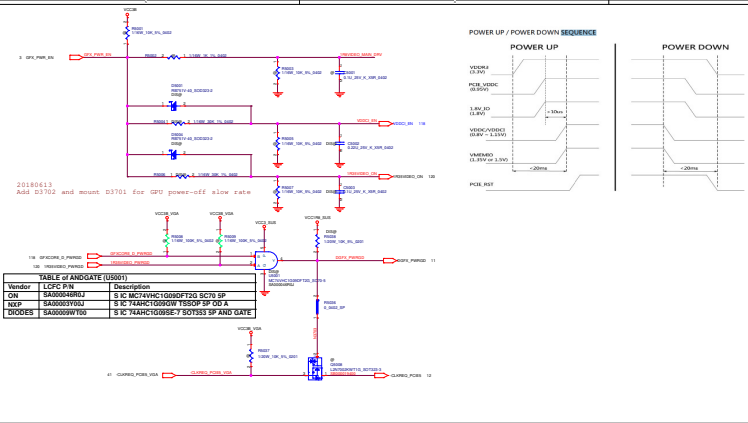
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Date:	Thursday, 25/01/2016			Sheet 48 of 128

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			Date	Thursday, July 04, 2017
			Sheet	21
			Sheet	128



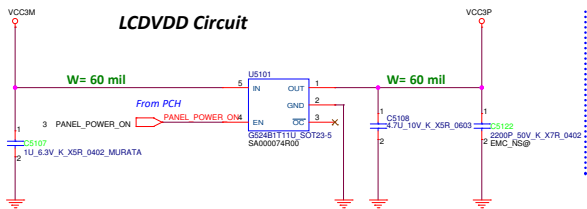
Security Classification	IC Future Center Secret Data	Date	File
Secret	20180613	20180613	W180613_001_VGA

W180613_001_VGA

ICFC

W180613_001_VGA

LCDVDD Circuit



LOGO LED Side A

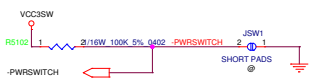
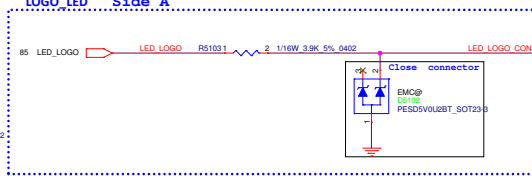


TABLE of POWER SWITCH (U5101)

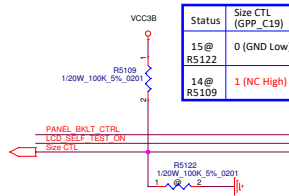
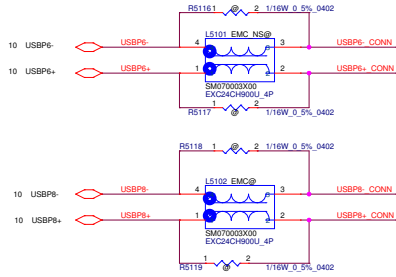
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SILERGY	SA000074P00	S IC SY628C20AAC SOT23 5P POWER SWITCH

LCD_Self_test

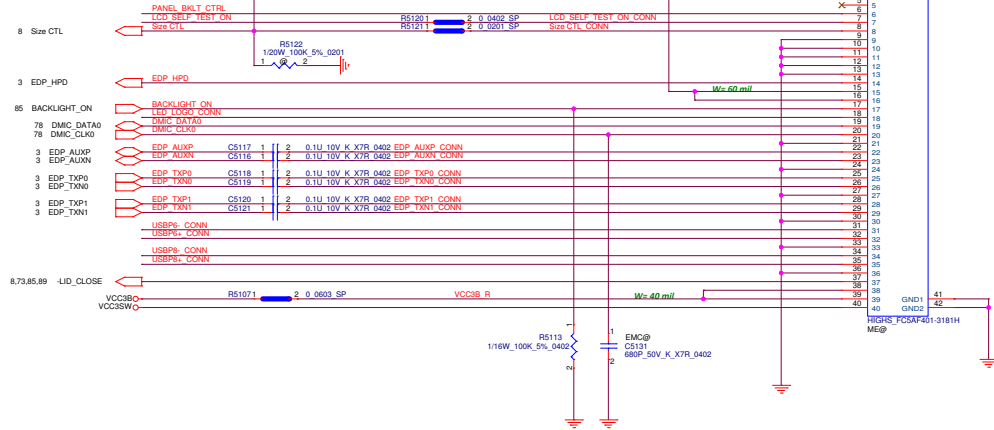


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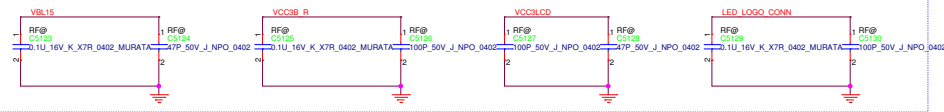
CAMERA



eDP/CMOS/LOGO-LED CONN.




RF




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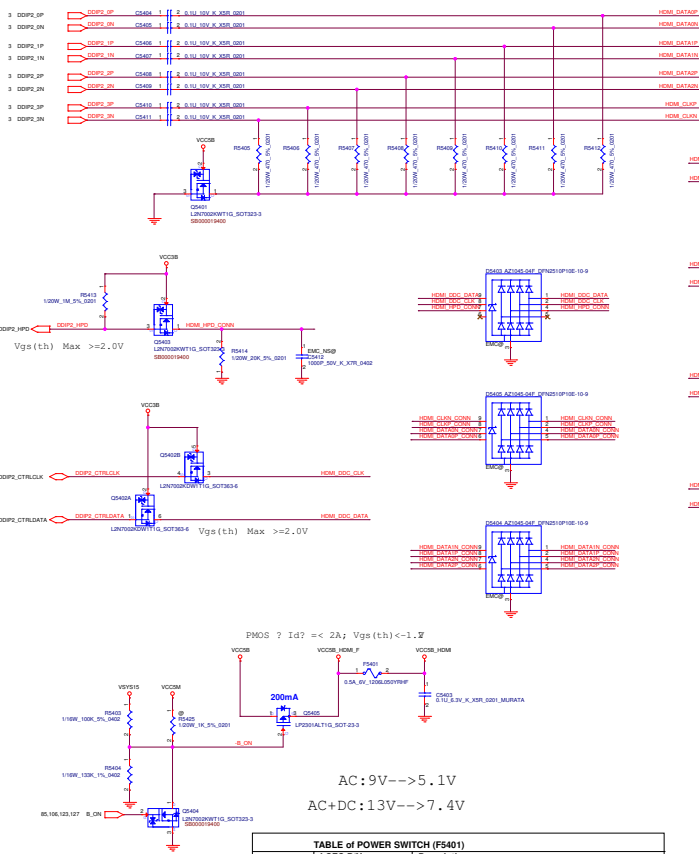


TABLE OF POWER SWITCH (F5401)		
LCFC P/N	Description	
LYTTEL FUSE	SP040005G00	S FUSE 706L850YRHF 0.5A 6V CURUS-TUV
BOURNS	SP040005L00	S PPTC TH MF-NSMF050-2 0.5A 13.2V UL-TUV

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				Rev#	Revision
				Rev#	Revision

HDMI CONNECTOR		HDMI CONNECTOR	
Doc#	Document Number	Rev#	Revision
Rev#	Revision	Rev#	Revision

Figure 1-2. HDMI* HPD Active Level Shifter Design Recommendation

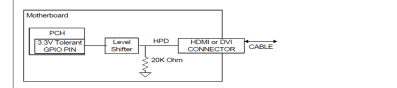
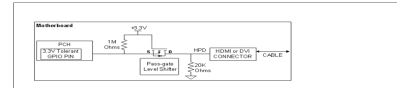




Figure 1-3. HDMI* HPD Cost Reduced Level Shifter Design Recommendation




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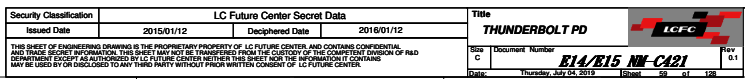
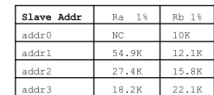
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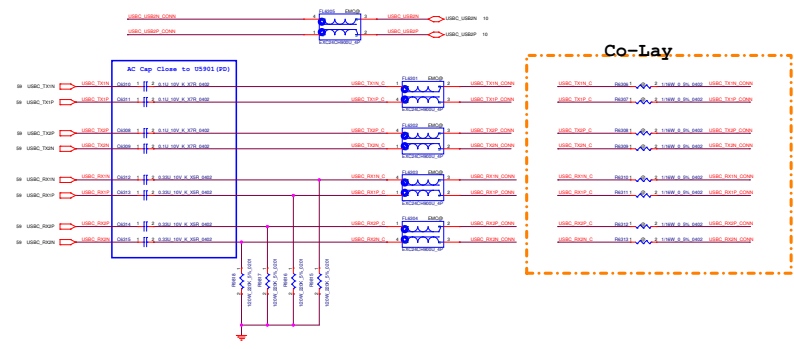
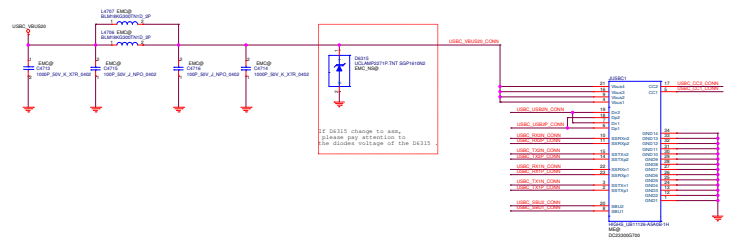
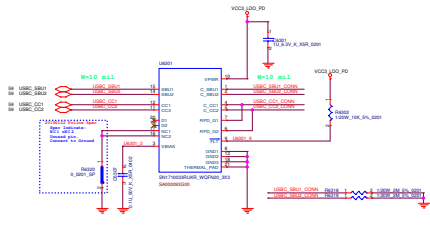
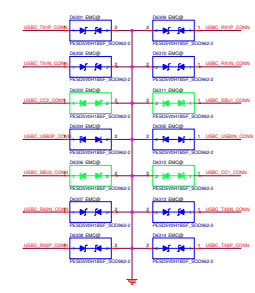
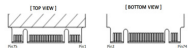
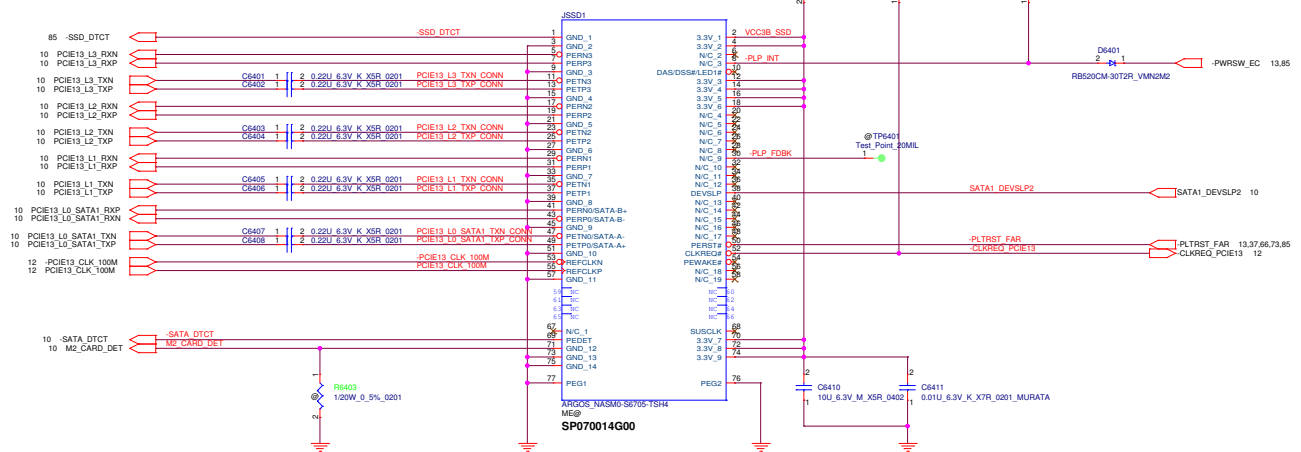


TABLE OF EMC TVS (D6301-D6314)		
Vendor	LCFC P/N	Description
RAY	SC40000900	S DIO ESD PES05V0H18SF SODM62
AMAZING	SC400009F00	S DIO ESD AZ586S-01B.R7G CSP0603P2Y



Security Classification			LG Future Center Secret Data		Type	
Secret	Secret	Secret	Secret	Secret	TYPE-C CONNECTOR	TYPE-C CONNECTOR
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100% Based on LG Future Center Secret Data			100% Based on LG Future Center Secret Data		100% Based on LG Future Center Secret Data	
100% Based on LG Future Center Secret Data			100% Based on LG Future Center Secret Data		100% Based on LG Future Center Secret Data	

For E-Series



Unit 10/11 Assignments			
Prac	Assignment	Due Date	Prac
1	None	None	7
2	1.1, 1.2	None	8
3	1.3	None	9
4	1.4	None	10
5	1.5	None	11
6	1.6	None	12
7	2.1	None	13
8	2.2	None	14
9	2.3	None	15
10	2.4	None	16
11	2.5	None	17
12	2.6	None	18
13	2.7	None	19
14	2.8	None	20
15	2.9	None	21
16	2.10	None	22
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90	2.84	None	96
91	2.85	None	97
92	2.86	None	98
93	2.87	None	99
94	2.88	None	100

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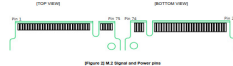


Figure 22 M.2 Signal and Power plots


Part	MSB	LSB	Signal Assignments	Direction	Power	Notes
1	AN12	AN11	Random access path	0	0.25W	0.15V nominal
2	AN10	AN9	Random access path	0	0.25W	0.15V nominal
3	AN8	AN7	PC12 To TA	0	0.25W	0.15V nominal
4	AN6	AN5	PC12 To TA	0	0.25W	0.15V nominal
5	AN4	AN3	PC12 To TA	0	0.25W	0.15V nominal
6	AN2	AN1	PC12 To TA	0	0.25W	0.15V nominal
7	AN0	AN0	PC12 To TA	0	0.25W	0.15V nominal
8	AN0	AN0	PC12 To TA	0	0.25W	0.15V nominal
9	AN0	AN0	PC12 To TA	0	0.25W	0.15V nominal
10	AN0	AN0	PC12 To TA	0	0.25W	0.15V nominal
11	AN0	AN0	PC12 To TA	0	0.25W	0.15V nominal
12	AN0	AN0	PC12 To TA	0	0.25W	0.15V nominal
13	AN0	AN0	PC12 To TA	0	0.25W	0.15V nominal
14	AN0	AN0	PC12 To TA	0	0.25W	0.15V nominal
15	AN0	AN0	PC12 To TA	0	0.25W	0.15V nominal
16	AN0	AN0	PC12 To TA	0	0.25W	0.15V nominal
17	AN0	AN0	PC12 To TA	0	0.25W	0.15V nominal
18	AN0	AN0	PC12 To TA	0	0.25W	0.15V nominal
19	AN0	AN0	PC12 To TA	0	0.25W	0.15V nominal
20	AN0	AN0	PC12 To TA	0	0.25W	0.15V nominal
21	AN0	AN0	PC12 To TA	0	0.25W	0.15V nominal
22	AN0	AN0	PC12 To TA	0	0.25W	0.15V nominal
23	AN0	AN0	PC12 To TA	0	0.25W	0.15V nominal
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32	AN0	AN0	PC12 To TA	0	0.25W	0.15V nominal
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34	AN0	AN0	PC12 To TA	0	0.25W	0.15V nominal
35	AN0	AN0	PC12 To TA	0	0.25W	0.15V nominal
36	AN0	AN0	PC12 To TA	0	0.25W	0.15V nominal
37	AN0	AN0	PC12 To TA	0	0.25W	0.15V nominal
38	AN0	AN0	PC12 To TA	0	0.25W	0.15V nominal
39	AN0	AN0	PC12 To TA	0	0.25W	0.15V nominal
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44	AN0	AN0	PC12 To TA	0	0.25W	0.15V nominal
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57	AN0	AN0	PC12 To TA	0	0.25W	0.15V nominal
58	AN0	AN0	PC12 To TA	0	0.25W	0.15V nominal
59	AN0	AN0	PC12 To TA	0	0.25W	0.15V nominal
60	AN0	AN0	PC12 To TA	0	0.25W	0.15V nominal
61	AN0	AN0	PC12 To TA	0	0.25W	0.15V nominal
62	AN0	AN0	PC12 To TA	0	0.25W	0.15V nominal
63	AN0	AN0	PC12 To TA	0	0.25W	0.15V nominal
6						

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74	2	CONF_2 = GND	75
75	2	GND	76
76	2	3.3V	77
77	2	CONF_1 = NC	78
78	2	CONF_1 = NC	79
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81	2	NC	82
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76	1.4M	NOG	77
77	1.4M	NOG	78
78	1.4M	NOG	79
79	1.4M	NOG	80
80	100G(128MM) NOG 80S	PEDET (PC-PCH)	81
81		N/C	82
82	Module Key	Module Key	83
83	Module Key	Module Key	84
84	Module Key	Module Key	85
85		NOG	86
86	ReconnectMPO Data	RESEAP	87
87	PEWMAQ (PCWMAQ) Data	REHOUN	88
88	CALCUM (CALCUM) Data	NOG	89
89	PEDETA (PEDETA) Data	PEWMAQ	90
90		PEWMAQ	91
91	N/C	PEWMAQ	92
92	N/C	PEWMAQ	93
93	N/C	PEWMAQ	94
94	N/C	PEWMAQ	95
95	N/C	PEWMAQ	96
96	DEVSLP (S)	PEWMAQ	97
97	N/C	PEWMAQ	98
98	N/C	PEWMAQ	99
99	N/C	PEWMAQ	100
100	N/C	PEWMAQ	101
101	N/C	PEWMAQ	102
102	N/C	PEWMAQ	103
103	N/C	PEWMAQ	104
104	N/C	PEWMAQ	105
105	N/C	PEWMAQ	106
106	N/C	PEWMAQ	107
107	N/C	PEWMAQ	108
108	N/C	PEWMAQ	109
109	N/C	PEWMAQ	110
110	N/C	PEWMAQ	111
111	N/C	PEWMAQ	112
112	N/C	PEWMAQ	113
113	N/C	PEWMAQ	114
114	N/C	PEWMAQ	115
115	N/C	PEWMAQ	116
116	N/C	PEWMAQ	117
117	N/C	PEWMAQ	118
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120	N/C	PEWMAQ	121
121	N/C	PEWMAQ	122
122	N/C	PEWMAQ	123
123	N/C	PEWMAQ	124
124	N/C	PEWMAQ	125
125	N/C	PEWMAQ	126
126	N/C	PEWMAQ	127
127	N/C	PEWMAQ	128
128	N/C	PEWMAQ	129
129	N/C	PEWMAQ	130
130	N/C	PEWMAQ	131
131	N/C	PEWMAQ	132
132	N/C	PEWMAQ	133
133	N/C	PEWMAQ	134
134	N/C	PEWMAQ	135
135	N/C	PEWMAQ	136
136	N/C	PEWMAQ	137
137	N/C	PEWMAQ	138
138	N/C	PEWMAQ	139
139	N/C	PEWMAQ	140
140	N/C	PEWMAQ	141
141	N/C	PEWMAQ	142
142	N/C	PEWMAQ	143
143	N/C	PEWMAQ	144
144	N/C	PEWMAQ	145
145	N/C	PEWMAQ	146
146	N/C	PEWMAQ	147
147	N/C	PEWMAQ	148
148	N/C	PEWMAQ	149
149	N/C	PEWMAQ	150
150	N/C	PEWMAQ	151
151	N/C	PEWMAQ	152
152	N/C	PEWMAQ	153
153	N/C	PEWMAQ	154
154	N/C	PEWMAQ	155
155	N/C	PEWMAQ	156
156	N/C	PEWMAQ	157
157	N/C	PEWMAQ	158
158	N/C	PEWMAQ	159
159	N/C	PEWMAQ	160
160	N/C	PEWMAQ	161
161	N/C	PEWMAQ	162
162	N/C	PEWMAQ	163
163	N/C	PEWMAQ	164
164	N/C	PEWMAQ	165
165	N/C	PEWMAQ	166
166	N/C	PEWMAQ	167
167	N/C	PEWMAQ	168
168	N/C	PEWMAQ	169
169	N/C	PEWMAQ	170

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			Sheet	61 138

KEY-E NGFF CCARD FOR WLAN

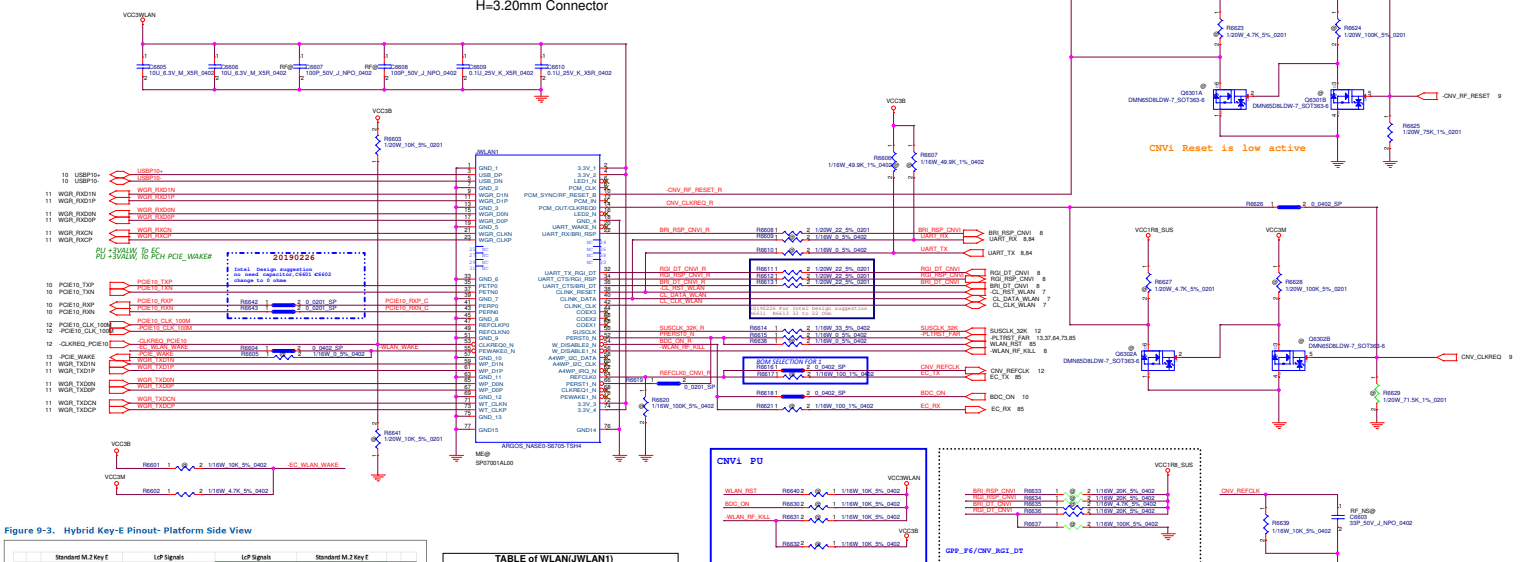




Figure 9-3. Hybrid Key-E Pinout- Platform Side View

74	Standard M-Key E	LSP Signals	LSP Signals	Standard M-Key E	75
70	LSR		WST_CASP	REPL1	73
72	LSR		WST_CASP	REPL2	75
70	PRMSP (P-CHS) E		WST_CASP	PRMSP	73
72	LSR		WST_CASP	PRMSP	75
66	PRMSP (P-CHS) E		WST_CASP	PRMSP	68
68	REPL1 (P-CHS) E		WST_CASP	PRMSP	70
62	ALERT (P-CHS) E	ANMP_RGR	WST_CASP	PRMSP	66
64	WST_CASP (P-CHS) E	ANMP_RGR	WST_CASP	PRMSP	68
66	WST_CASP (P-CHS) E	ANMP_RGR	WST_CASP	PRMSP	70
68	WST_CASP (P-CHS) E	ANMP_RGR	WST_CASP	PRMSP	72
70	WST_CASP (P-CHS) E	ANMP_RGR	WST_CASP	PRMSP	74
72	WST_CASP (P-CHS) E	ANMP_RGR	WST_CASP	PRMSP	76
74	WST_CASP (P-CHS) E	ANMP_RGR	WST_CASP	PRMSP	78
76	WST_CASP (P-CHS) E	ANMP_RGR	WST_CASP	PRMSP	80
78	WST_CASP (P-CHS) E	ANMP_RGR	WST_CASP	PRMSP	82
80	WST_CASP (P-CHS) E	ANMP_RGR	WST_CASP	PRMSP	84
82	WST_CASP (P-CHS) E	ANMP_RGR	WST_CASP	PRMSP	86
84	WST_CASP (P-CHS) E	ANMP_RGR	WST_CASP	PRMSP	88
86	WST_CASP (P-CHS) E	ANMP_RGR	WST_CASP	PRMSP	90
88	WST_CASP (P-CHS) E	ANMP_RGR	WST_CASP	PRMSP	92
90	WST_CASP (P-CHS) E	ANMP_RGR	WST_CASP	PRMSP	94
92	WST_CASP (P-CHS) E	ANMP_RGR	WST_CASP	PRMSP	96
94	WST_CASP (P-CHS) E	ANMP_RGR	WST_CASP	PRMSP	98
96	WST_CASP (P-CHS) E	ANMP_RGR	WST_CASP	PRMSP	100
98	WST_CASP (P-CHS) E	ANMP_RGR	WST_CASP	PRMSP	102
100	WST_CASP (P-CHS) E	ANMP_RGR	WST_CASP	PRMSP	104
102	WST_CASP (P-CHS) E	ANMP_RGR	WST_CASP	PRMSP	106
104	WST_CASP (P-CHS) E	ANMP_RGR	WST_CASP	PRMSP	108
106	WST_CASP (P-CHS) E	ANMP_RGR	WST_CASP	PRMSP	110
108	WST_CASP (P-CHS) E	ANMP_RGR	WST_CASP	PRMSP	112
110	WST_CASP (P-CHS) E	ANMP_RGR	WST_CASP	PRMSP	114
112	WST_CASP (P-CHS) E	ANMP_RGR	WST_CASP	PRMSP	116
114	WST_CASP (P-CHS) E	ANMP_RGR	WST_CASP	PRMSP	118
116	WST_CASP (P-CHS) E	ANMP_RGR	WST_CASP	PRMSP	120
118	WST_CASP (P-CHS) E	ANMP_RGR	WST_CASP	PRMSP	122
120	WST_CASP (P-CHS) E	ANMP_RGR	WST_CASP	PRMSP	124
122	WST_CASP (P-CHS) E	ANMP_RGR	WST_CASP	PRMSP	126
124	WST_CASP (P-CHS) E	ANMP_RGR	WST_CASP	PRMSP	128
126	WST_CASP (P-CHS) E	ANMP_RGR	WST_CASP	PRMSP	130
128	WST_CASP (P-CHS) E	ANMP_RGR	WST_CASP	PRMSP	132
130	WST_CASP (P-CHS) E	ANMP_RGR	WST_CASP	PRMSP	134
132	WST_CASP (P-CHS) E	ANMP_RGR	WST_CASP	PRMSP	136
134	WST_CASP (P-CHS) E	ANMP_RGR	WST_CASP	PRMSP	138
136	WST_CASP (P-CHS) E	ANMP_RGR	WST_CASP	PRMSP	140
138	WST_CASP (P-CHS) E	ANMP_RGR	WST_CASP	PRMSP	142
140	WST_CASP (P-CHS) E	ANMP_RGR	WST_CASP	PRMSP	144
142	WST_CASP (P-CHS) E	ANMP_RGR	WST_CASP	PRMSP	146
144	WST_CASP (P-CHS) E	ANMP_RGR	WST_CASP	PRMSP	148
146	WST_CASP (P-CHS) E	ANMP_RGR	WST_CASP	PRMSP	150
148	WST_CASP (P-CHS) E	ANMP_RGR	WST_CASP	PRMSP	152
150	WST_CASP (P-CHS) E	ANMP_RGR	WST_CASP	PRMSP	154
152	WST_CASP (P-CHS) E	ANMP_RGR	WST_CASP	PRMSP	156
154	WST_CASP (P-CHS) E	ANMP_RGR	WST_CASP	PRMSP	158
156	WST_CASP (P-CHS) E	ANMP_RGR	WST_CASP	PRMSP	160
158	WST_CASP (P-CHS) E	ANMP_RGR	WST_CASP	PRMSP	162
160	WST_CASP (P-CHS) E	ANMP_RGR	WST_CASP	PRMSP	164
162	WST_CASP (P-CHS) E	ANMP_RGR	WST_CASP	PRMSP	166
164	WST_CASP (P-CHS) E	ANMP_RGR	WST_CASP	PRMSP	168
166	WST_CASP (P-CHS) E	ANMP_RGR	WST_CASP	PRMSP	170
168	WST_CASP (P-CHS) E	ANMP_RGR	WST_CASP	PRMSP	172
170	WST_CASP (P-CHS) E	ANMP_RGR	WST_CASP	PRMSP	174
172	WST_CASP (P-CHS) E	ANMP_RGR	WST_CASP	PRMSP	176
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176	WST_CASP (P-CHS) E	ANMP_RGR	WST_CASP	PRMSP	180
178	WST_CASP (P-CHS) E	ANMP_RGR	WST_CASP	PRMSP	182
180	WST_CASP (P-CHS) E	ANMP_RGR	WST_CASP	PRMSP	184
182	WST_CASP (P-CHS) E	ANMP_RGR	WST_CASP	PRMSP	186
184	WST_CASP (P-CHS) E	ANMP_RGR	WST_CASP	PRMSP	188
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188	WST_CASP (P-CHS) E	ANMP_RGR	WST_CASP	PRMSP	192
190	WST_CASP (P-CHS) E	ANMP_RGR	WST_CASP	PRMSP	194
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204	WST_CASP (P-CHS) E	ANMP_RGR	WST_CASP	PRMSP	208
206	WST_CASP (P-CHS) E	ANMP_RGR	WST_CASP	PRMSP	210
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210	WST_CASP (P-CHS) E	ANMP_RGR	WST_CASP	PRMSP	214
212	WST_CASP (P-CHS) E	ANMP_RGR	WST_CASP	PRMSP	216
214	WST_CASP (P-CHS) E	ANMP_RGR	WST_CASP	PRMSP	218
216	WST_CASP (P-CHS) E	ANMP_RGR	WST_CASP	PRMSP	220
218	WST_CASP (P-CHS) E	ANMP_RGR	WST_CASP	PRMSP	222
220	WST_CASP (P-CHS) E	ANMP_RGR	WST_CASP	PRMSP	224
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232	WST_CASP (P-CHS) E	ANMP_RGR	WST_CASP	PRMSP	236
234	WST_CASP (P-CHS) E	ANMP_RGR	WST_CASP	PRMSP	238
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240	WST_CASP (P-CHS) E	ANMP_RGR	WST_CASP	PRMSP	244
242	WST_CASP (P-CHS) E	ANMP_RGR	WST_CASP	PRMSP	246
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246	WST_CASP (P-CHS) E	ANMP_RGR	WST_CASP	PRMSP	250
248	WST_CASP (P-CHS) E	ANMP_RGR	WST_CASP	PRMSP	252
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252	WST_CASP (P-CHS) E	ANMP_RGR	WST_CASP	PRMSP	256
254	WST_CASP (P-CHS) E	ANMP_RGR	WST_CASP	PRMSP	258
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286	WST_CASP (P-CHS) E	ANMP_RGR	WST_CASP	PRMSP	290
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296	WST_CASP (P-CHS) E	ANMP_RGR	WST_CASP	PRMSP	300
298	WST_CASP (P-CHS) E	ANMP_RGR	WST_CASP	PRMSP	302
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404	WST_CASP (P-CHS) E	ANMP_RGR	WST_CASP	PRMSP	408
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TABLE of WLAN(JWLAN1)		
Vendor	P/N	LCFC P/N
TE	TE_1-2199119-1_75P-T	SP021703091

Security Classification	LC Future Center Secret Data		Title	 WLAN NGFF CONN.	
Issued Date	2015/01/12	Declassified Date	2016/01/12	Size	Document Number
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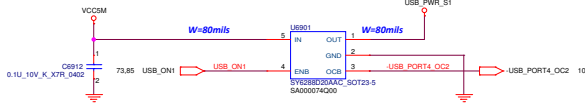
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		E14/16 N-C421		1	
Created	Thursday, July 6, 2015	Sheet	67	of 138	

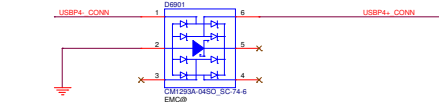
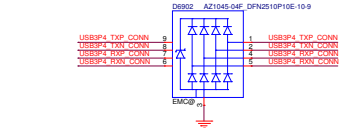
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Rev	01	Discipline	MECHANICAL
Drawn	R14/R15 MM-C421		Rev
Check	R14/R15 MM-C421		Rev
Date	Thursday, 23rd Dec 2015	Sheet	61

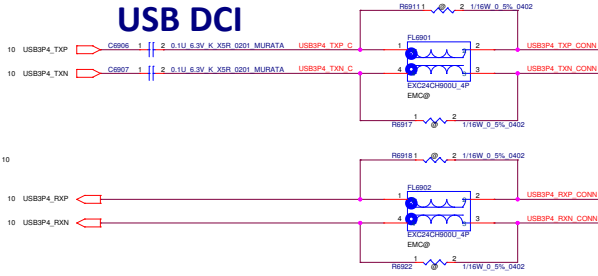
USB POWER SWITCH



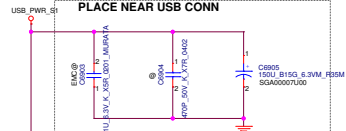
Vendor	LCFC P/N	Description
SILERGY	SA000074Q00	S IC SY628BD20AAC SOT23 5P POWER SWITCH
GMT	SA000079400	S IC G517F2T11U SOT-23 5P POWER SWITCH



USB DCI

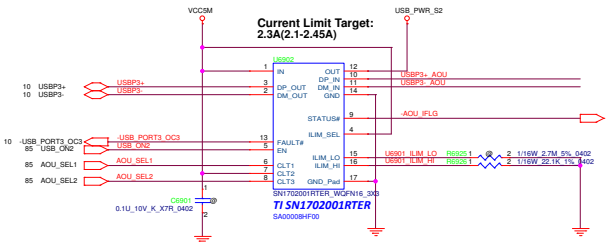


Vendor	LCFC P/N	Description
PANASONIC	SGA00007U00	S POLY C 150U 6.3V M B15G R35M TPG H1.4
NECTOKIN	SGA00009W00	S POLY C 150U 6.3V M B15G R35M PSL H1.4
KEMTE	SGA0000AN00	S POLY C 150U 6.3V M B15G R35M T520 H1.5



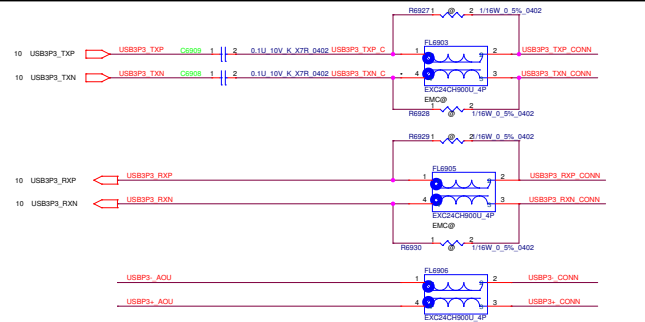
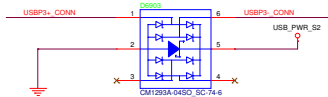
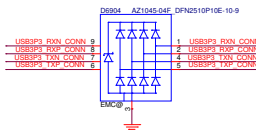
Pin No	Signal Assignment
# 1	VBUS
# 2	D-
# 3	D+
# 4	PGND
# 5	SSRX-
# 6	SSRX+
# 7	GND
# 8	SSTX-
# 9	SSTX+

USB AOU

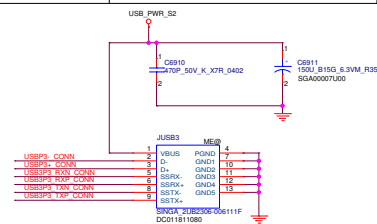


Vendor	LCFC P/N	Description
TI	SA00008HF00	S IC SN1702001RTER WQFN 16P USB CHARGING
DIODES	SA00009D800	S IC PI5USB2546HZHEX TQFN 16P CONTROLLER

CLT1	CLT2	CLT3	ILIM_SEL	MOD
0	0	0	X	DCR
1	1	1	1	CDP
1	1	1	0	SDP1
1	1	0	X	SDP1
0	1	0	X	SDP1
1	0	0	X	DCP_Short
1	0	1	X	DCP_Divider
0	1	1	X	DCP_Auto
0	0	1	X	DCP_Auto




Vendor	LCFC P/N	Description
PANASONIC	SGA00007U00	S POLY C 150U 6.3V M B15G R35M TPG H1.4
NECTOKIN	SGA00009W00	S POLY C 150U 6.3V M B15G R35M PSL H1.4
KEMTE	SGA0000AN00	S POLY C 150U 6.3V M B15G R35M T520 H1.5



Pin No	Signal Assignment
# 1	VBUS
# 2	D-
# 3	D+
# 4	PGND
# 5	SSRX-
# 6	SSRX+
# 7	GND
# 8	SSTX-
# 9	SSTX+

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Doc Number	814/815	Rev
Doc Date	17/04/2015	Rev


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<small>DATE: Thursday, July 04, 2019</small>				Sheet	71 of 126


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USB2.0


GBE LAN PHY

Finger Printer


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				Date:	Thursday, July 04, 2019	Sheet	74 of 128

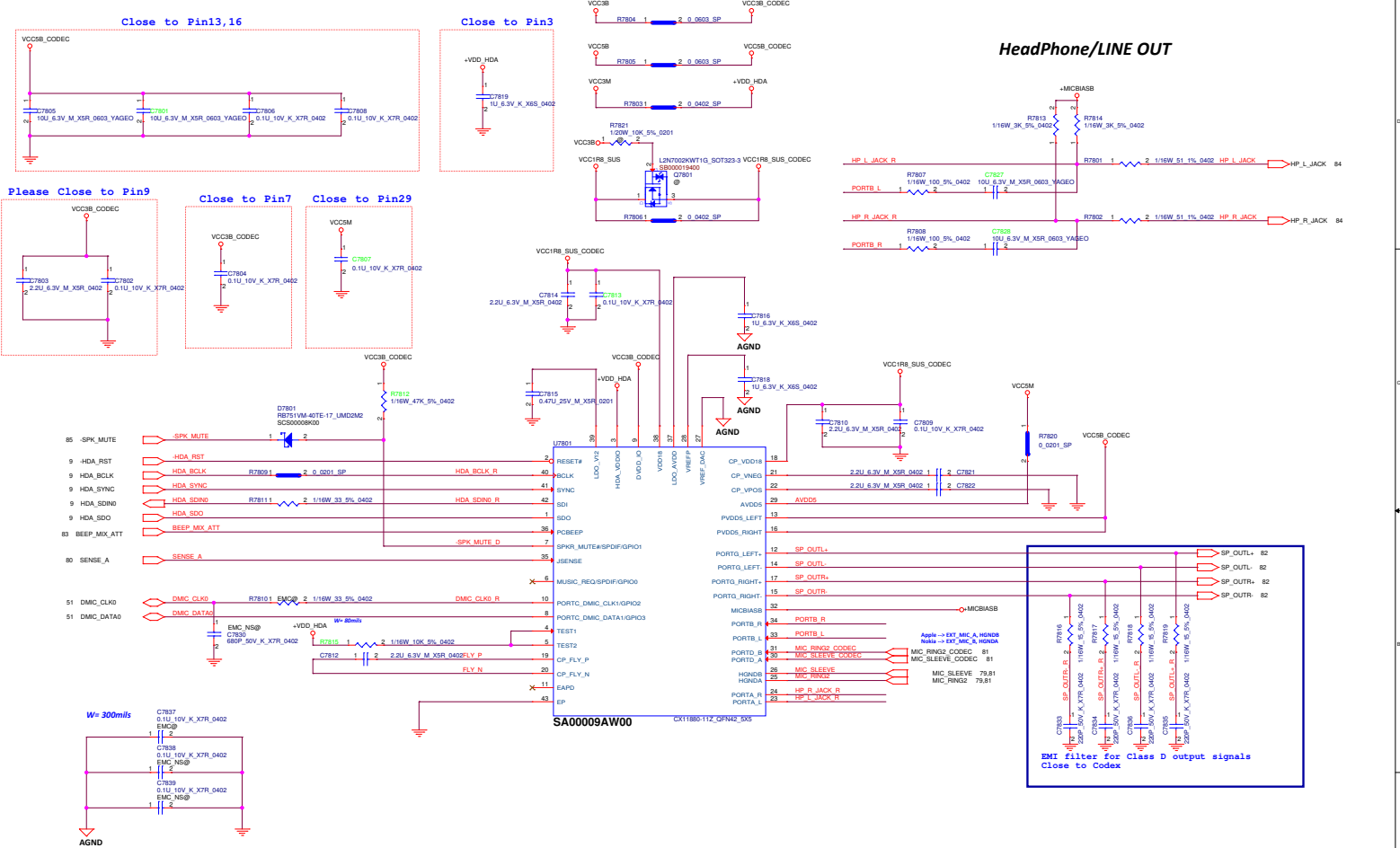
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1	B14/E15 NH-C421			0.1
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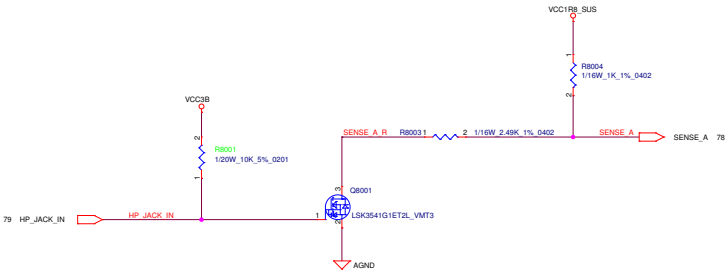
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Date: Thursday, July 04, 2019				Sheet 77 of 128			



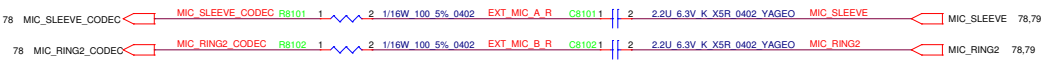
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VCC1R8_SUS VCC1R8_SUS 15,50,66,79,85,116



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EXT. MIC/LINE IN Apple --> EXT_MIC_A, HGND B
Nokia --> EXT_MIC_B, HGND A



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Title

AUDIO EXT MIC I/F

Size

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Date

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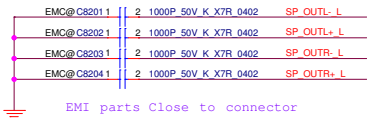
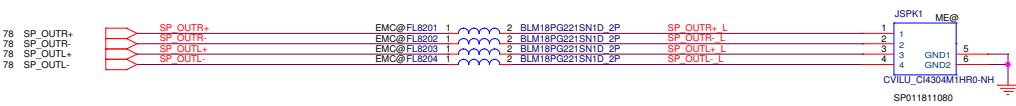
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Rev

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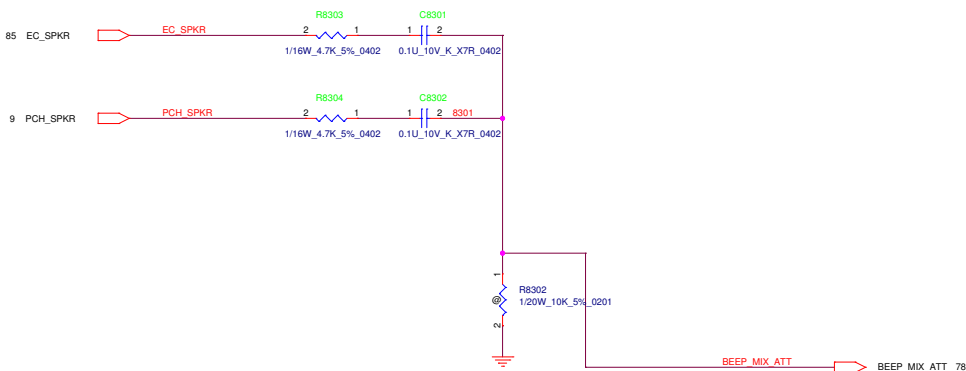



SPK CONN.



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Audio Beep



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FUNCTION TABLE

A _{SEL}	V _{AUDIO}	V _{BUS}	L,R	D+, D-
L	L	L	OFF	OFF
L	L	H	OFF	OFF
L	H	L	ON	OFF
L	H	H	OFF ⁽¹⁾	ON
H	L	L	OFF	OFF
H	L	H	OFF	OFF
H	H	L	ON	OFF
H	H	H	ON	OFF

(1) 100Ω shunt resistors are enabled in this state.

Audio Debug Function

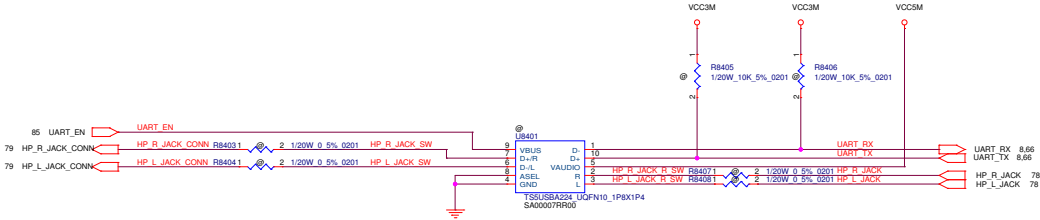
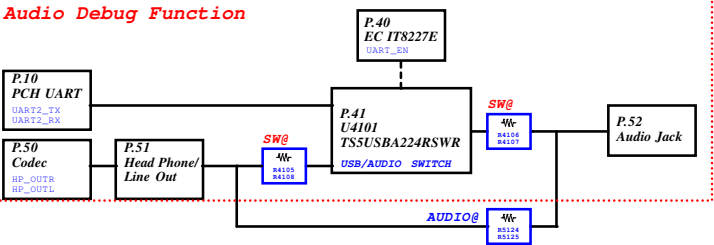


TABLE:

Mode	Audio	UART
UART_EN	L	H

AUDIO DEBUG PORT

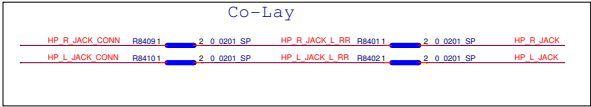
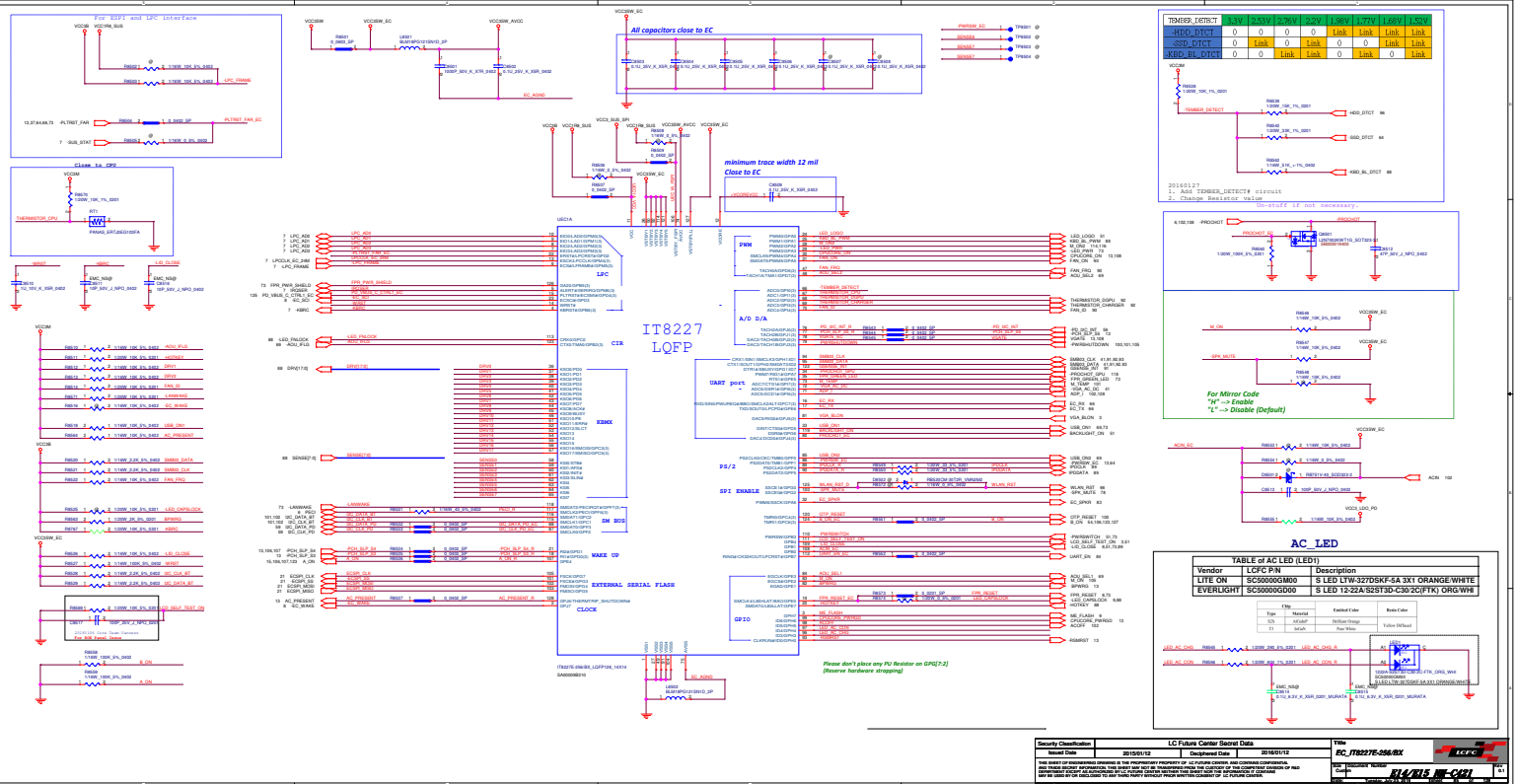



TABLE:



Part Name	For NPI	For MP
U4101 SW@	ASM	NA
R4102 SW@	ASM	NA
R4106 SW@	ASM	NA
R4107 SW@	ASM	NA
R5014 SW@	ASM	NA
R5015 SW@	ASM	NA
R4105 AUDIO@	NA	ASM
R4108 AUDIO@	NA	ASM



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Date:				Thursday, July 04, 2019		Sheet	86 of 128

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			EC_178227E-256/DX	
			Rev	Rev
			1	0.1
			Date	Thursday, 25/01/2016
			Sheet	67 of 128

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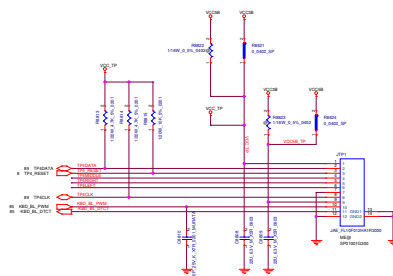
Pin #	Assign
1	SENSE1
2	SENSE2
3	SENSE3
4	DRV14
5	SENSE4
6	SENSE5
7	DRV0
8	SENSE6
9	SENSE5
10	DRV4
11	DRV2
12	SENSE5
13	DRV1
14	DRV3
15	DRV5
16	DRV7
17	DRV5
18	DRV15
19	DRV13
20	DRV9
21	DRV12
22	DRV10
23	DRV8
24	DRV11
25	VCC
26	LED1
27	LED2
28	LED3
29	HOTKEY
30	GND
31	LED4
32	MIC
33	M1
34	M2
35	M3
36	DRV16
37	DRV17
38	LED6
39	NC

Assign	Purpose
Vcc	Vcc 3V for LED
LED1	LED for FinLk
LED2	LED for F1
LED3	LED for F4
LED4	LED for CapsLk
LED5	LED for NumLock

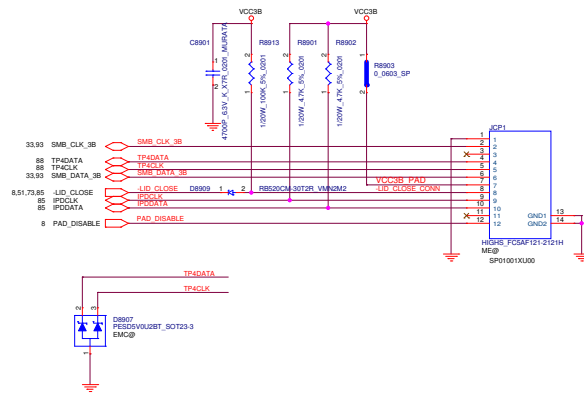
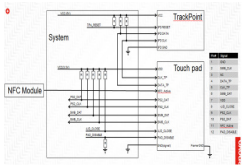
Assign	Purpose
MC	Common pin for TrackPoint click button
M1	Left button
M2	Right button
M3	Center button


TrackPoint and Backlight FPC Pin Assignment

Pin #	Assign
1	VCC (3.3V) ←
2	IPD DATA
3	IPD RST
4	MIDDLE
5	RIGHT
6	LEFT
7	IPD GND
8	IPD CLK
9	LED VCC5 (5V)
10	LED PWM
11	Backlight detection
12	LED GND

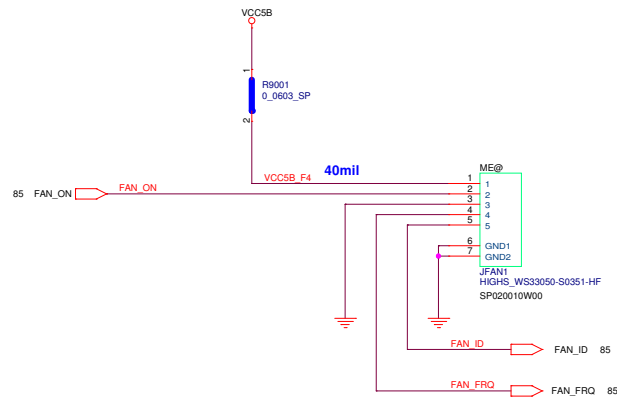


Click Pad



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Date:	Thursday, July 04, 2018	Sheet	4	of 126

FAN CONN.



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				0.1	
Date:		Thursday, July 04, 2019		Sheet 90 of 128	

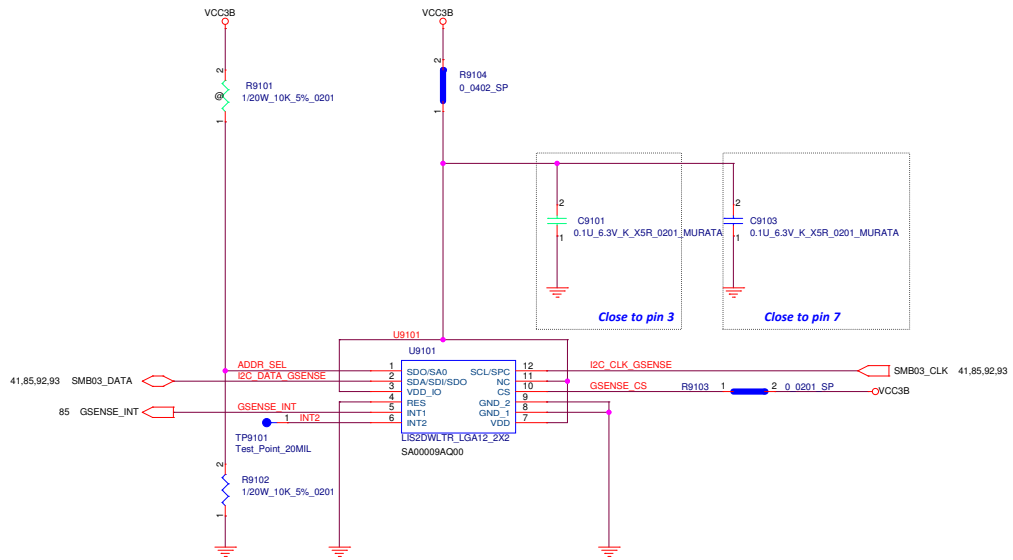


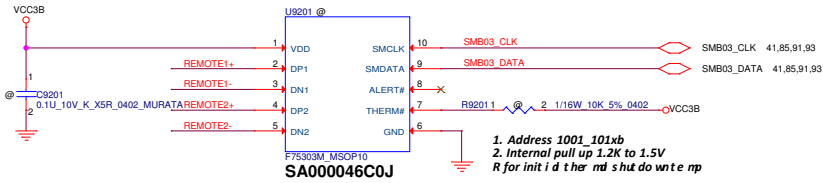
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Vendor	LCFC P/N	Description
ST	SA00009AQ00	S IC LIS2DWLTR LGA 12P G-SENSOR
KIONIX	SA000081E00	S IC KX022-1020 LGA 12P G-SENSOR

Security Classification		LC Future Center Secret Data		Title	
Issued Date	2015/01/12	Deciphered Date	2016/01/12	APS G-SENSOR	
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Size	B	Document Number	E14/E15 NM-C421		
Date:	Thursday, July 04, 2019	Sheet	91	c1	128

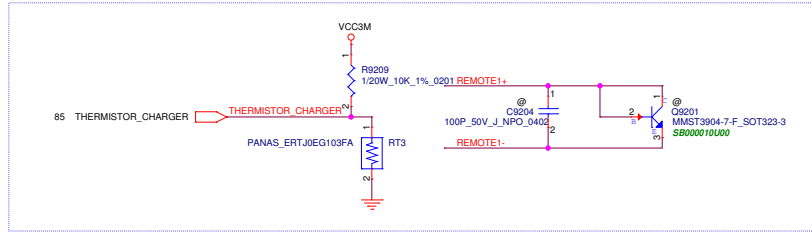


Thermal Sensor

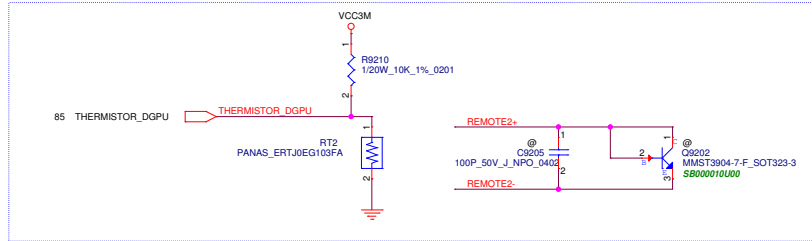
Close to CPU




Close to CHARGER



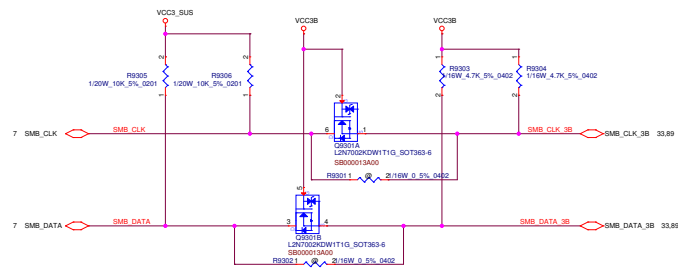
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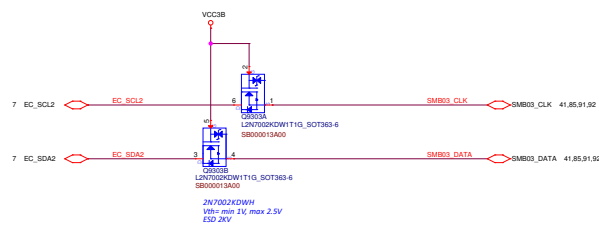
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Date:	Thursday, July 04, 2019	Sheet	92 of 128	


SMBus

DIMM1,CP




GPU, Thermal Sensor,
Embedded Controller, G sensor





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Date: Thursday, 2015.01.12				Rev 0.1

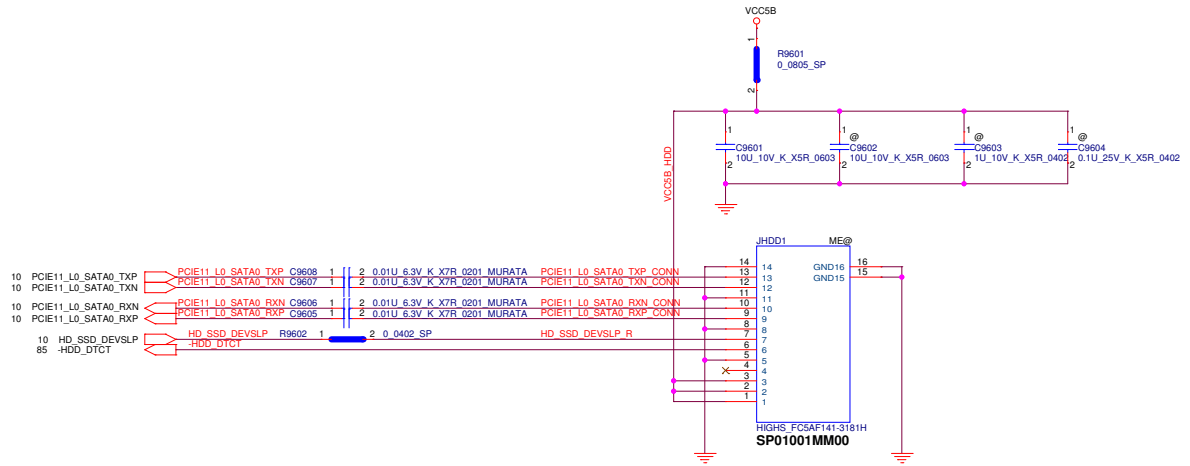
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			Doc. Number	
			Date	Thursday, 2015-01-12


SATA HDD CONN.



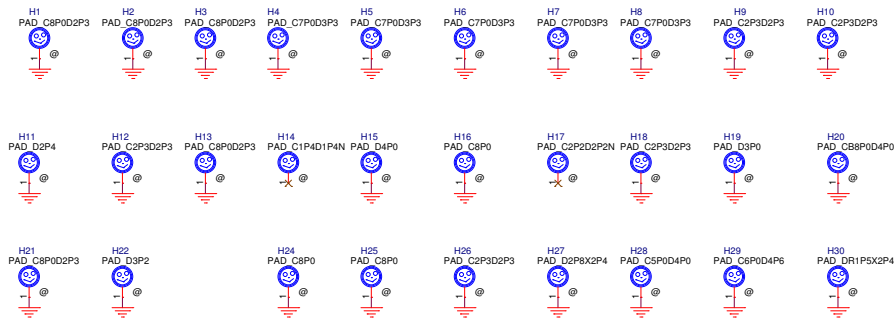
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+5VS	1	1	+5VS
+5VS	2	2	+5VS
+5VS	3	3	+5VS
NC	4	4	NC
GND	5	5	GND
HDD_DETECT#	6	6	HDD_DETECT#
-CLKREQ_DEVS_LP	7	7	-CLKREQ_DEVS_LP
GND	8	8	GND
PCIE7_SATA0_CRX_DTX_P_CONN	9	9	PCIE7_SATA0_CRX_DTX_P_CONN
PCIE7_SATA0_CRX_DTX_N_CONN	10	10	PCIE7_SATA0_CRX_DTX_N_CONN
GND	11	11	GND
PCIE7_SATA0_CTX_DRX_N_CONN	12	12	PCIE7_SATA0_CTX_DRX_N_CONN
PCIE7_SATA0_CTX_DRX_P_CONN	13	13	PCIE7_SATA0_CTX_DRX_P_CONN
GND	14	14	GND

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Screw Hole

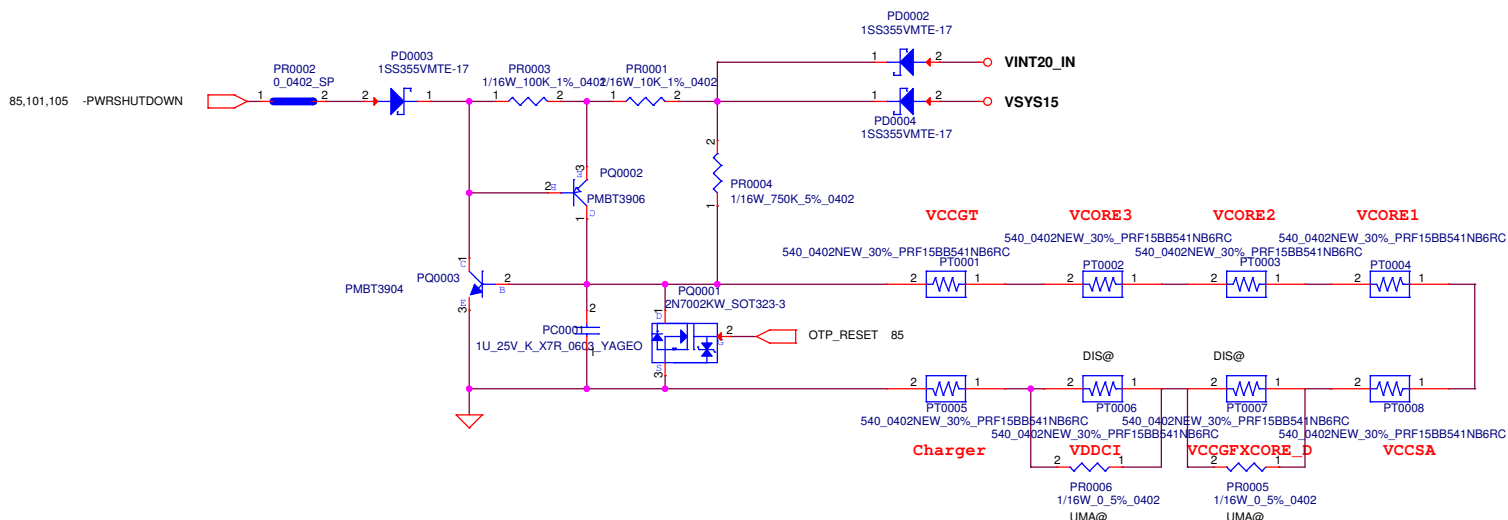


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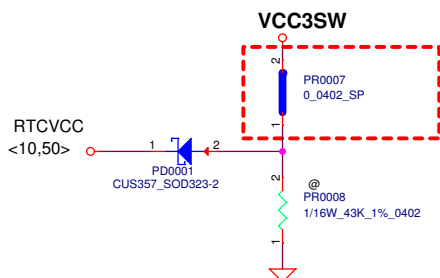



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				Date:	Thursday, July 04, 2019	Sheet 99 of 128

VINT20_IN VINT20_IN 102,125
VSYS15 VSYS15 51,54,102,103,105,106,108,109,110,111,114,118,120,127
VCC3SW VCC3SW 51,59,73,85,101,102,105,127
RTCVCC RTCVCC 13,16,20

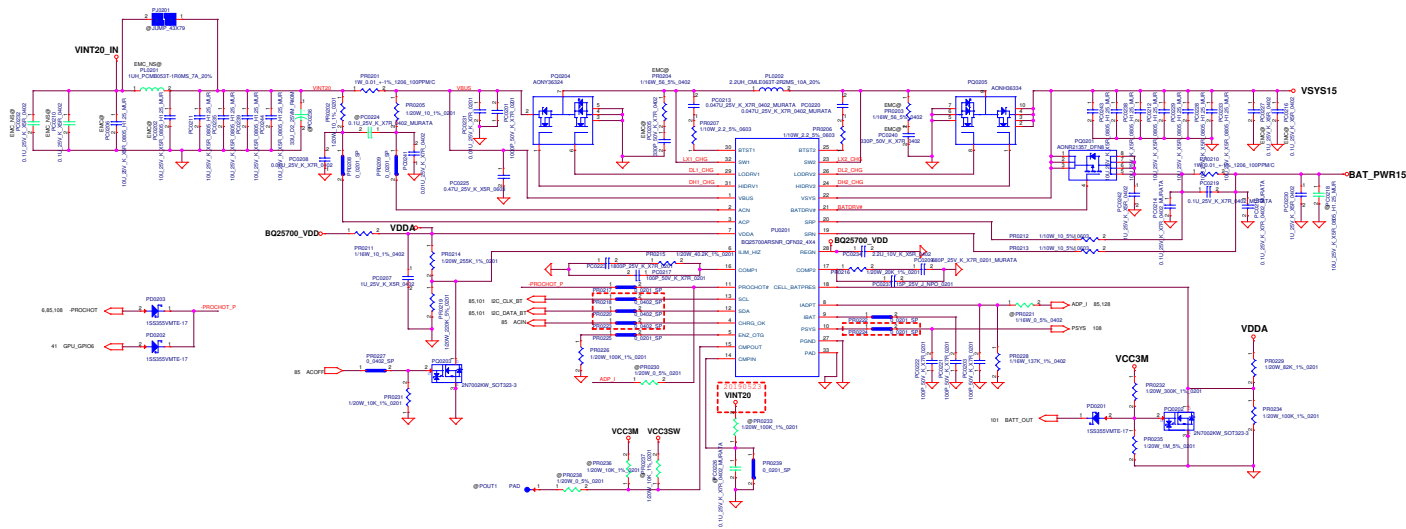


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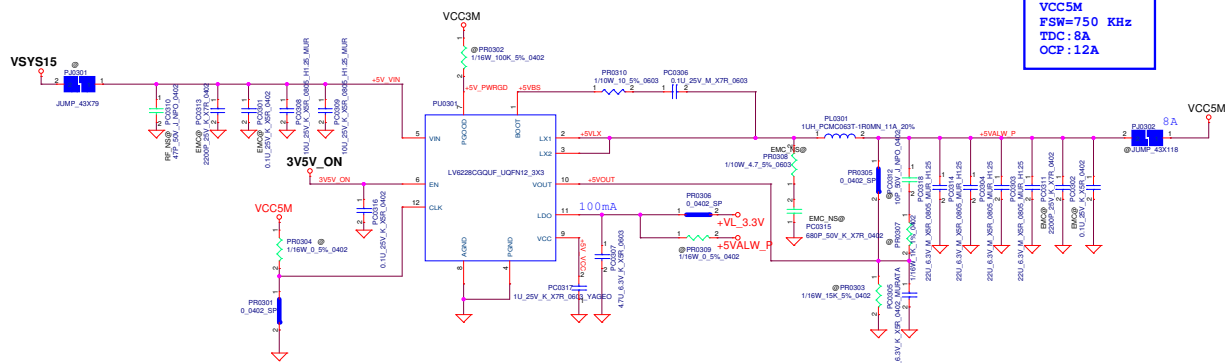
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VINT20_IN 100,105
VSYS15 51,54,100,102,103,106,108,110,111,114,118,120,127
BAT_PWR15




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VCC5M 50,54,59,69,73,78,84,107,108,109,110,111,116,118,120,125,127

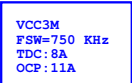



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Rev	2.0	Date	Thursday, May 04, 2012	Sheet	108 of 128

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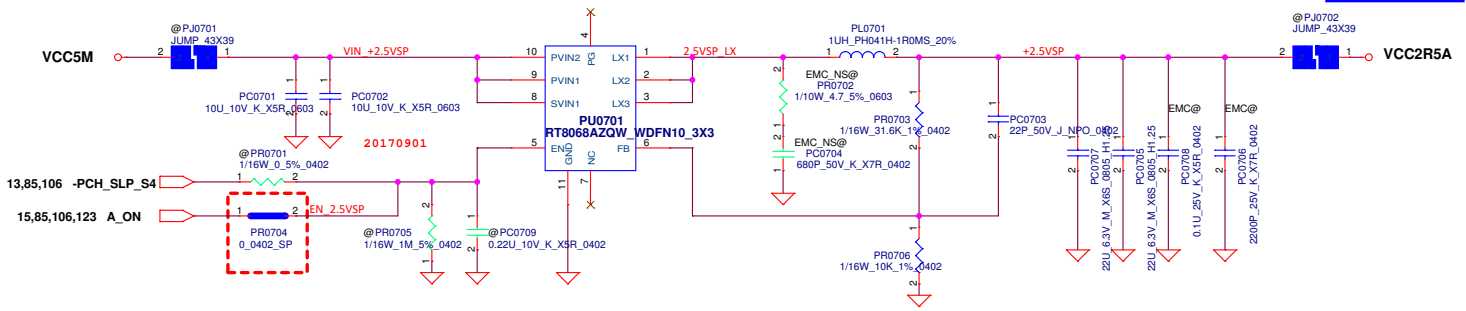
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			Date	Thursday, 25/04/2019	19:00


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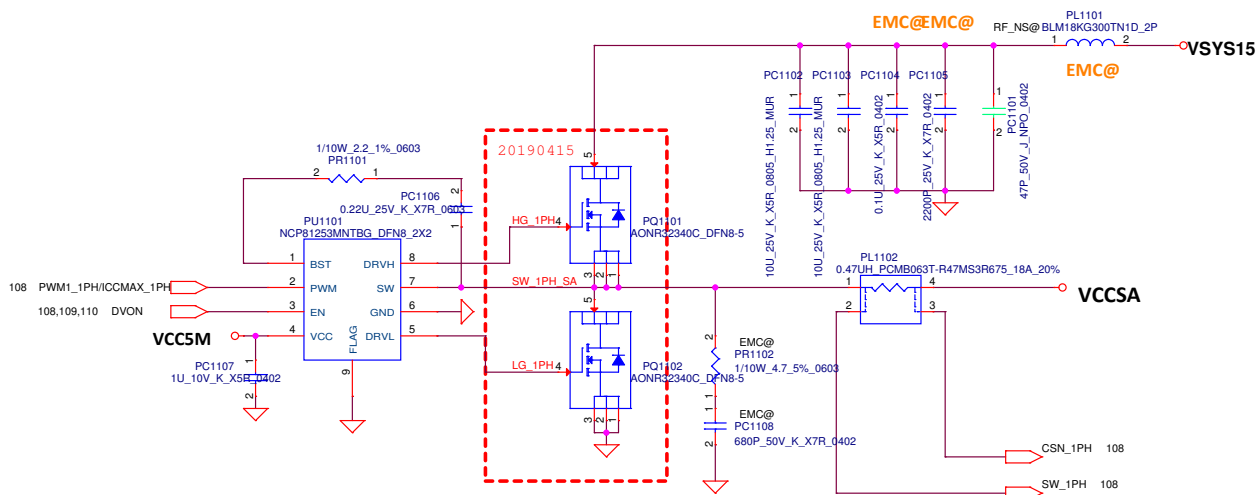
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VCC2R5A
TDC: 2A
OCP: 4A
Fsw: 1MHz



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				Document Number E14/E15 NW-C421	Rev 2.0
				Date: Thursday, July 4, 2019	Sheet 107 of 128

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VCCSA 15,112



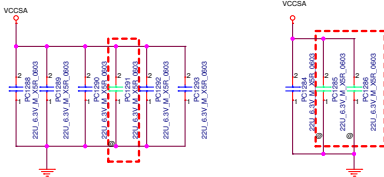
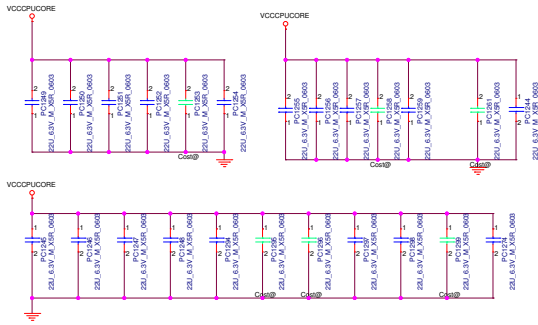
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IccMAX=6A
OCP = 9A

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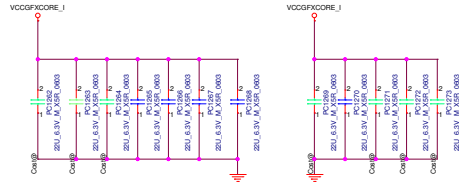

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CCCPUCORE
Decoupling Requirements for Comet Lake U 4+2 Processor]10uFx8, 47uFx20
primary side cap.

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VCCGFXCORE_I
[Decoupling Requirements for Comet Lake U 4+2 Processor]1uFx15, 10uFx15
Secondary side cap.



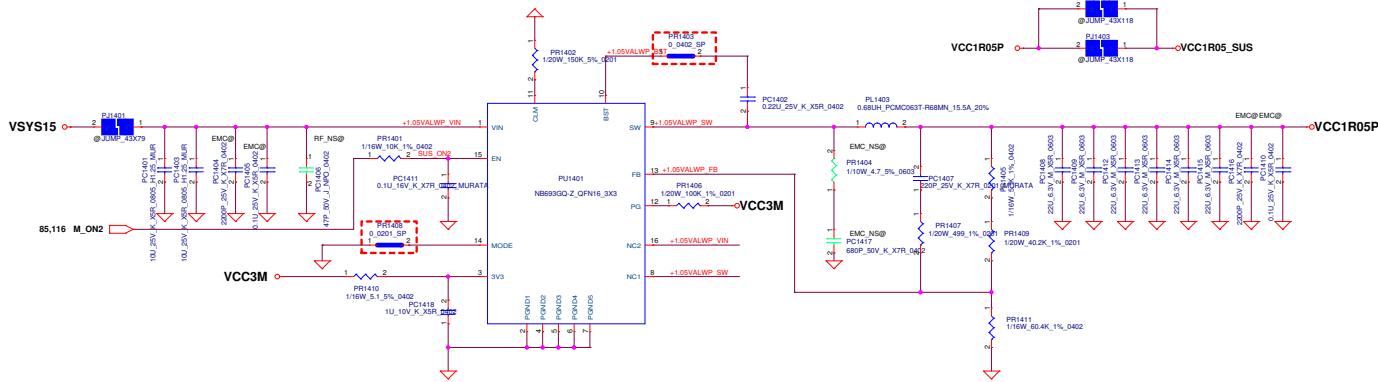
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VSYS15 VCC1R05_SUS
VCC1R05_SUS VCC1R05_SUS

VCC1R05_SUS
FSW=700KHz
TDC:10A
OCP:13A



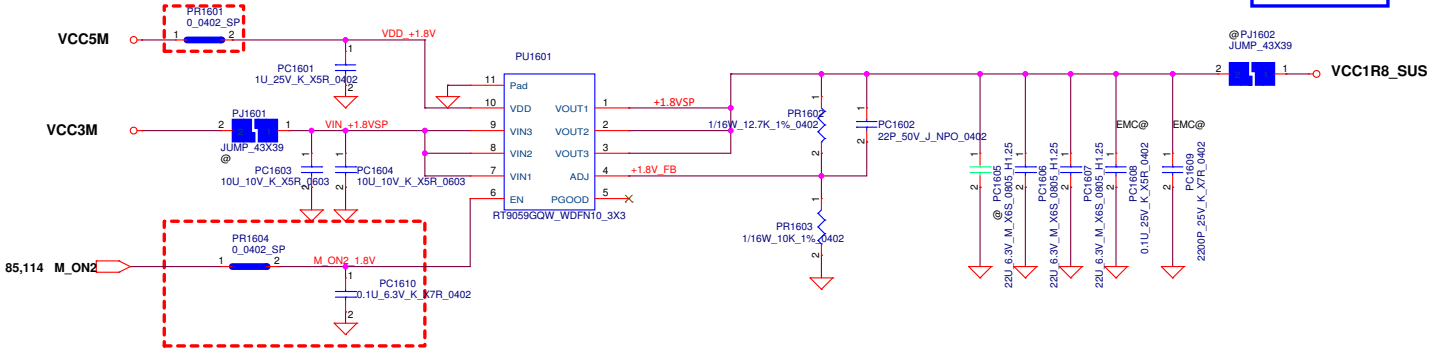
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VCC3M VCC3M 4,11,13,15,16,50,51,66,78,84,85,88,92,102,103,105,106,108,114,118,120,123,124,126,127,128
VCC5M VCC5M 50,54,59,69,73,78,84,103,107,108,109,110,111,118,123,125,127
VCC1R8_SUS VCC1R8_SUS 16,50,66,78,80,85

VCC1R8_SUS
TDC: 2A





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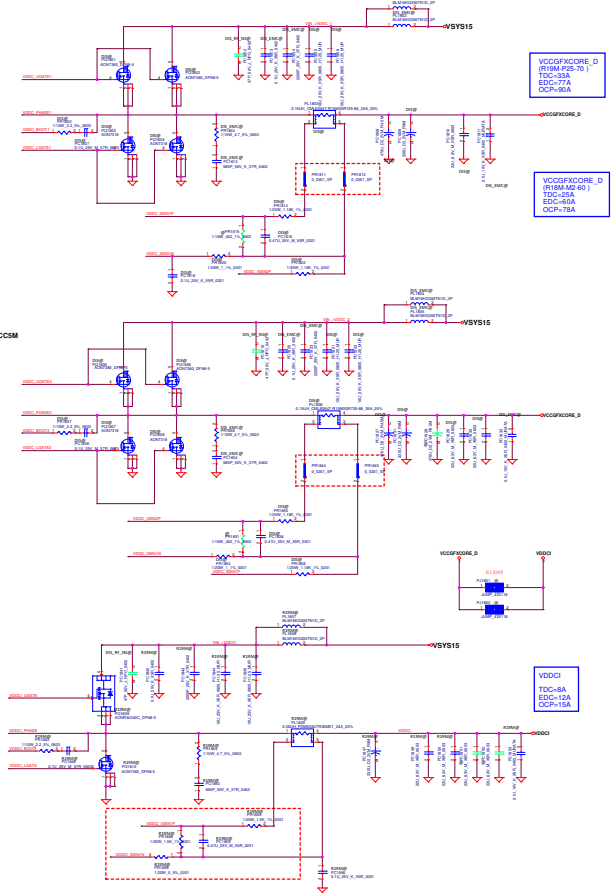
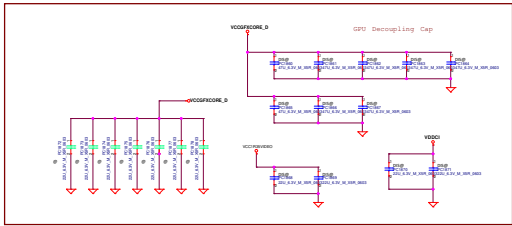
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VDDCPROBE_0 42

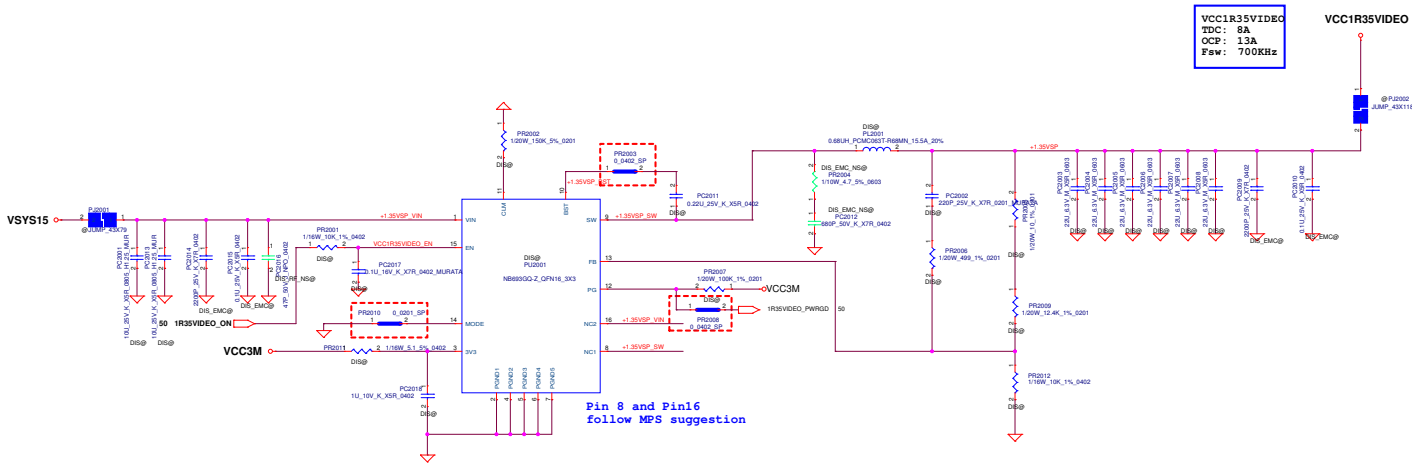


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VSYS15 51.54,100,102,103,105,106,108,109,110,111,114,116,127
VCC1R35VIDEO 38.42,45,118




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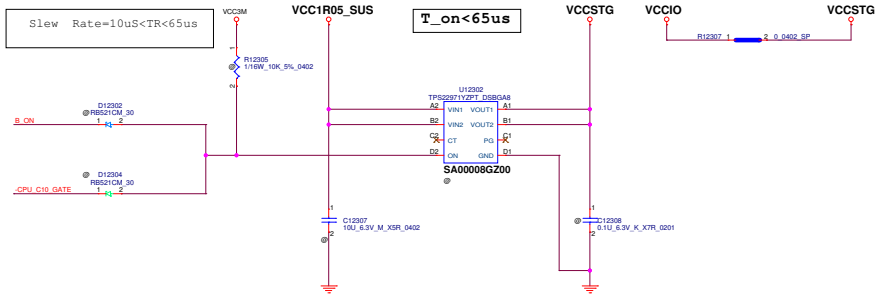
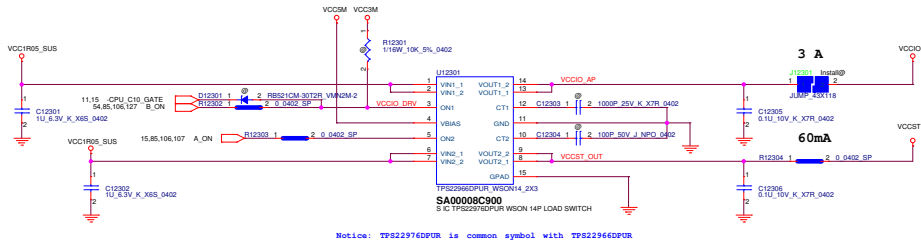
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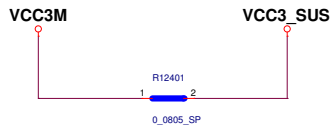
VCC1R05_BUS VCC1R05_BUS 13,16,50,114
VCCSTG VCCSTG 6,14,15
VCCIO VCCIO 3,15,18
VCCSM VCCSM 50,54,59,69,73,78,84,103,107,108,109,110,111,116,118,125,127
VCCST VCCST 6,14,15,108


TABLE of POWER SWITCH (U12301)		
Vendor	LCFC P/N	Description
TI	SA00008C900	S IC TPS22976DPUR WSON 14P LOAD SWITCH
GMT	SA00008F400	S IC G2898KD1U TDFN 14P LOAD SWITCH
RIKTEK	SA000067200	S IC RT9740AGQW WDFN 14P LOAD SWITCH

VCC1R05M to VCCIO & VCCST



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USBC_VBUS20 59.63
VCC3_LDO_PD 59.63.85
VINT20_IN 100.102
VCCM 50.54,59.69,73.78,84,103,107,108,109,110,111,116,118,123,127
5V_IN 59

TABLE of DIODE (D12501 D12503)		
Vendor	LCFC P/N	Description
ROHM	SC100007L00	S DIO 1SS355VMT-17 SOD323
PANJIT	SC100001K0J	S DIO 1SS355 SOD323 T/R-5K
LRC	SC100007100	S DIO L1SS355T1G SOD-323

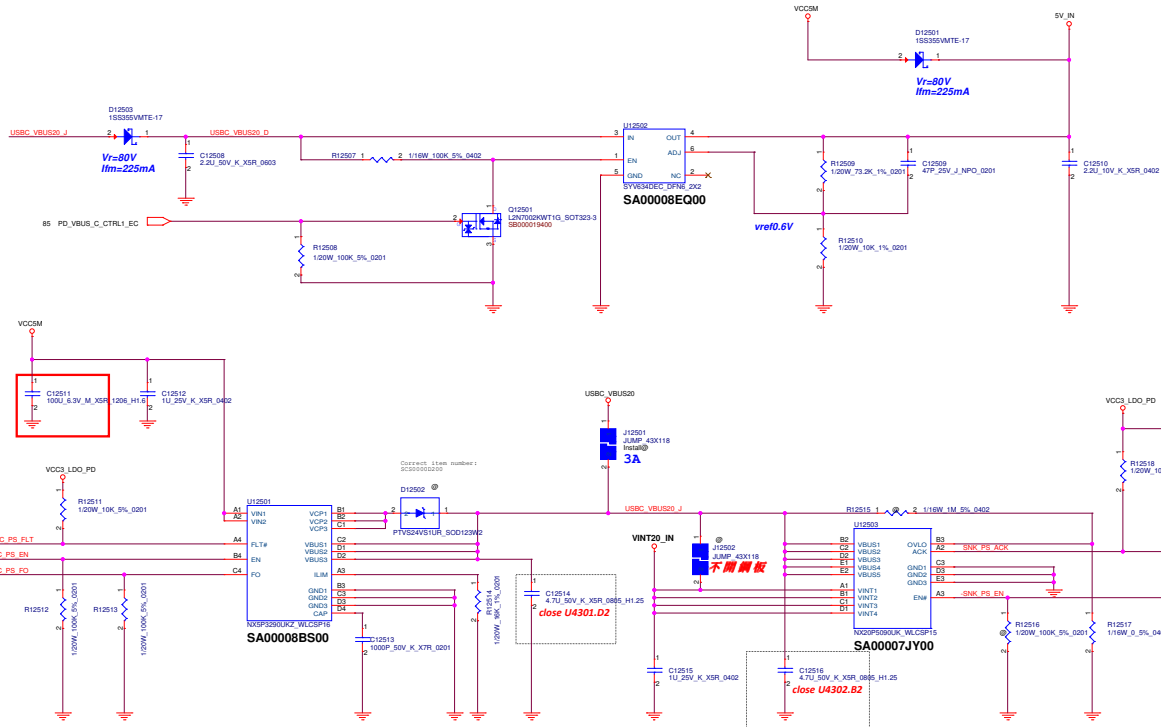


TABLE of TypeC Load Switch (U12501)		
Vendor	LCFC P/N	P/N
NXP	SA00008BS00	S IC NX5P3290UKZ WLCSP 16P
GMT	SA0000A2J00	S IC G3712B61U WLCSP 16P

TABLE of TypeC Load Switch (U12503)		
Vendor	LCFC P/N	P/N
NXP	SA00007JY00	NX20P5090UKAZ
KINETIC	SA00009G700	KTS1677EVH-TR

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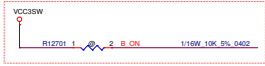
VCC3LAN VCC3LAN 73



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Title			
LOAD SW LAN			
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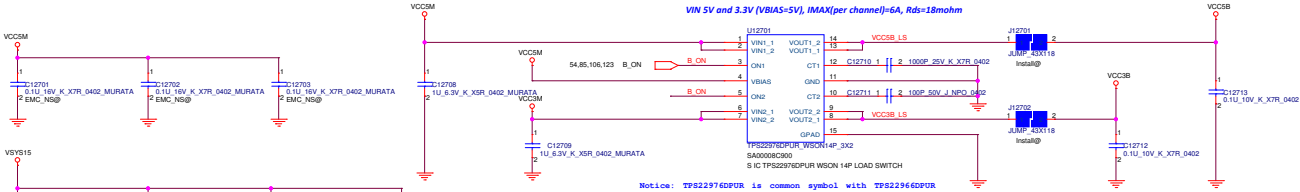
VCC3BW		VCC3BW	51,59,73,85,100,101,102,105
VCC3M		VCC3M	4,11,13,15,16,50,51,66,78,84,85,88,92,102,103,105,106,108,114,116,118,120,123,124,126,128
VCC5M		VCC5M	50,54,59,69,73,78,84,103,107,108,109,110,111,116,118,123,125
VCC5B		VCC5B	54,78,88,90,96
VCC3B		VCC3B	3,7,8,9,10,12,13,33,50,51,54,64,66,73,78,80,85,88,89,91,92,93,98,101,128



1. MIRROR code, is correct????
2. After reset EC, EC control "Low", not High or Disable.

Smart Switch
VCC5M To VCC5B
VCC3M To VCC3B

VIN 5V and 3.3V (VBIAS=5V), IMAX(per channel)=6A, Rds=18mohm



Notice: TPS22976DPUR is common symbol with TPS22946DPUR

TABLE of POWER SWITCH (U12601)		
Vendor	LCFC P/N	Description
TI	SA00008C900	S IC TPS22976DPUR WSON 14P LOAD SWITCH
GMT	SA00008F400	S IC G2898KD1U TDFN 14P LOAD SWITCH
RICHTEK	SA000067200	S IC RT9740AGQW WDFN 14P LOAD SWITCH

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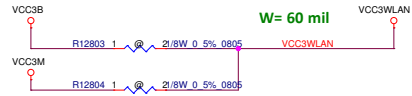
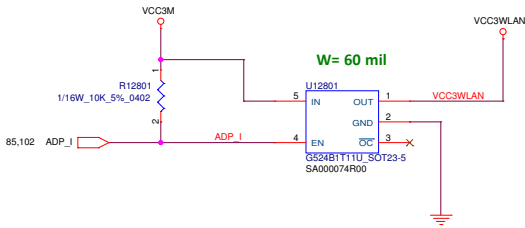


TABLE of POWER SWITCH (U12801)		
Vendor	LCFC P/N	Description
GMT	SA000074R00	S IC G524B1T11U SOT23 5P POWER SWITCH
SILERGY	SA000074P00	S IC SY6288C20AAC SOT23 5P POWER SWITCH

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