

LCFC Confidential


Miray-SKY M/B Schematics Document

INTEL SKYLAKE Mobile ULT Platform
INTEL SKY Y-series CPU + LPDDR3 Memory

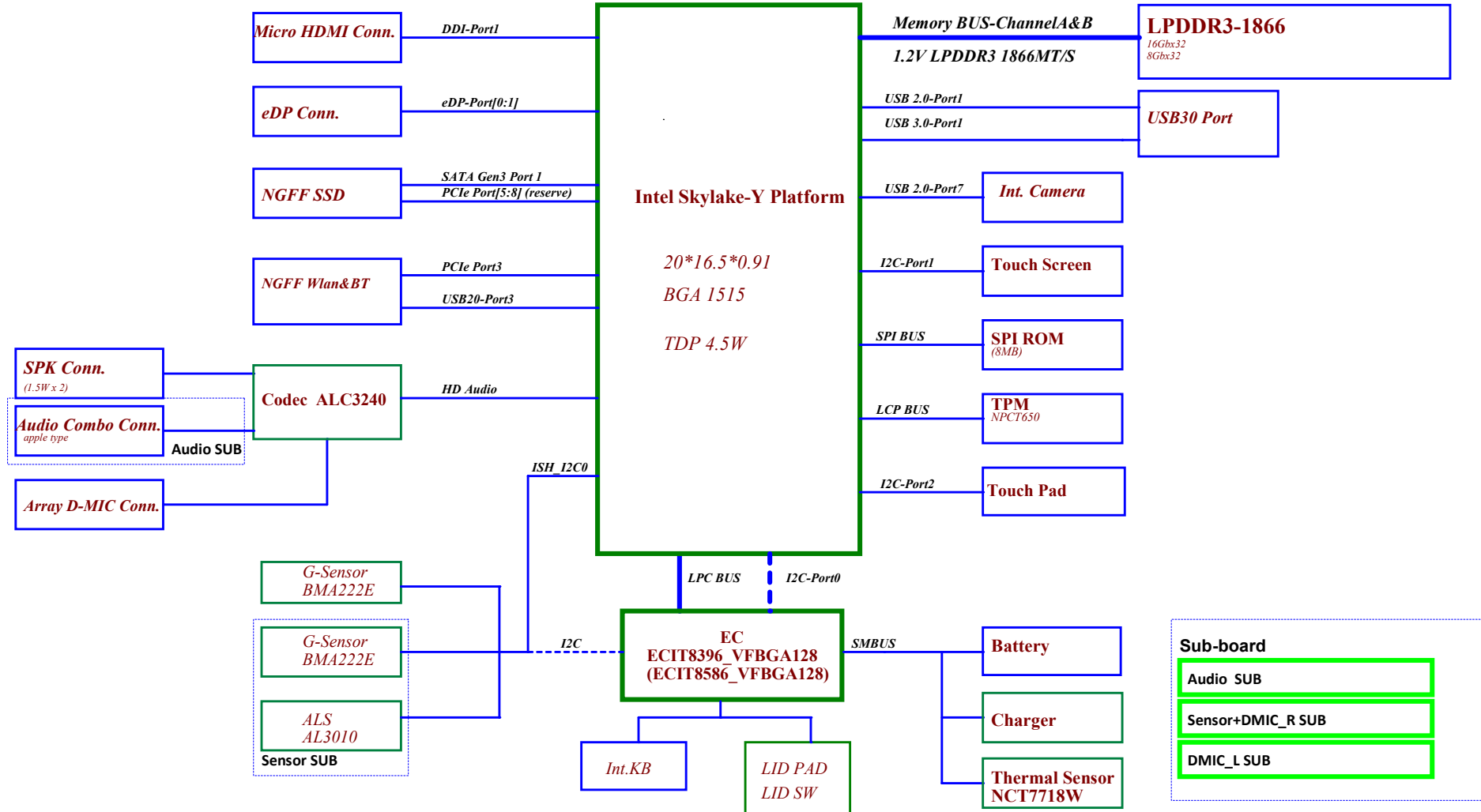
2016-02-17

REV:1.0

Security Classification	LC Future Center Secret Data			Title	
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LCFC-Miary Block diagram



Power Plane State	B+	+3VALW +5VALW +3VL +5VLP	+1.0VALW +1.8VALW +CPU_VCCPRIM	+3VALW_PCH	+DDR_1.2V +DDR_1.8V	+5VS +3VS +1.8VS +DDR_0.6VS +CPU_CORE +CPU_VCCIO +CPU_VCCGT +CPU_VCCSA
S0	O	O	O	O	O	O
S3	O	O	O	O	O	X
DS3	O	O	X	O	O	X
S5 S4/AC Only	O	O	O	X	X	X
S5 S4 Battery only	O	X	X	X	X	X
S5 S4 AC & Battery don't exist	X	X	X	X	X	X

SMBUS Control Table

SM Bus address

PCIE PORT LIST



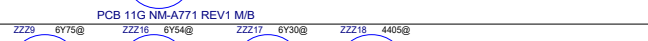

USB Port Table


	USB20	USB30
1	USB	USB
2		
3	BT	
5		
7	Camera	
9		

BOM Structure		BOM Structure	
TI@	TI MIPI camera mount	MIRROR@	EC Mirror-code enable
TPM@	TPM module	UNMIRROR@	EC Mirror-code disable
DEBUG@	DEBUG CARD Part	DA@	PCB
ME@	ME part(connector, hole)	UPI@	UPI MIPI camera mount
RF@	RF request		
EMC@	EMC request		
CD@	COST DOWN Part		
REV@	RESERVER Part		

X76&VGA Configuration Table

PCB And LOGO Config

PCB	 <p>PCB 11G NM-A771 REV1 M/B</p>						LOGO  <p>HDMI@</p> <p>HDMI LOGO</p>
CPU	 <p>6Y75 1.2G 6Y64 D0 1.1G 6Y30 D0 0.9G 4405Y D0 1.4G</p>						
VRAM	 <p>HYNIX 8G MICRON8G SAMSUNG 8G HYNIX 4G MICRON 4G SAMSUNG 4G</p>						

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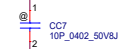
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A

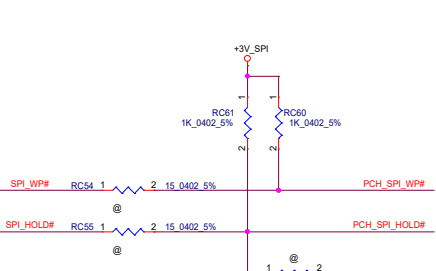




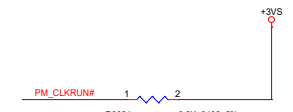
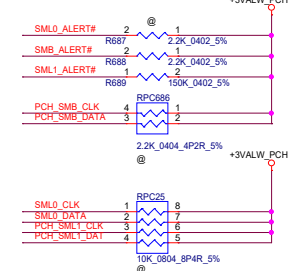
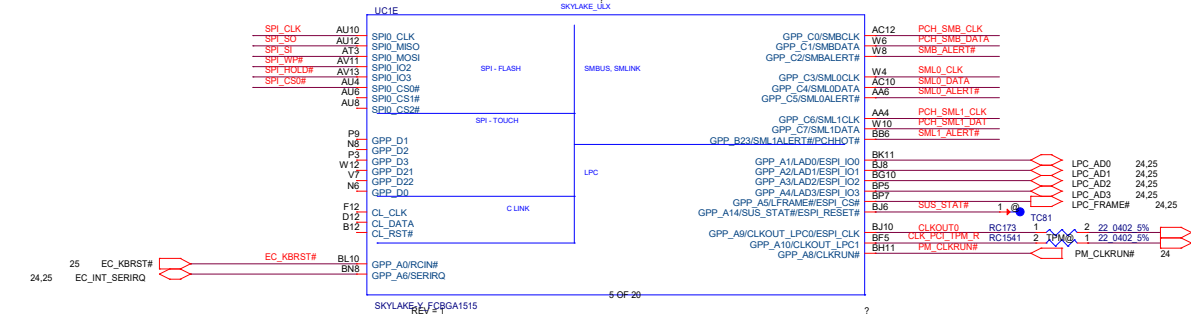
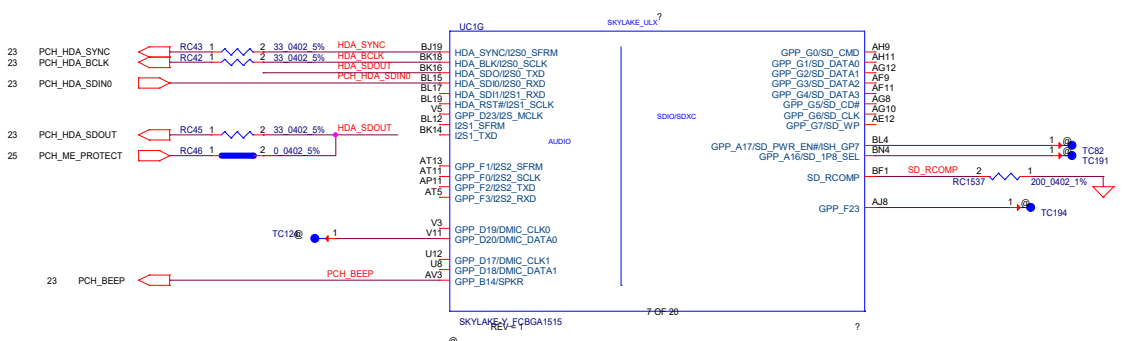
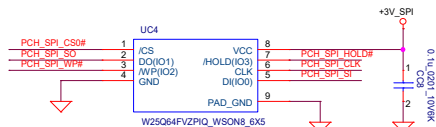
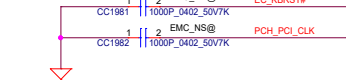
HDA_SDO This signal has a weak internal pull-down.
★ 0 = Enable security measures defined in the Flash Descriptor.
1 = Disable Flash Descriptor Security(override). This strap should only be asserted high during external pull-up in manufacturing/debug environments ONLY.



The signal has a weak internal pull-down.
0 = Disable iTop Swap mode. (Default)
1 = Enable iTop Swap mode.



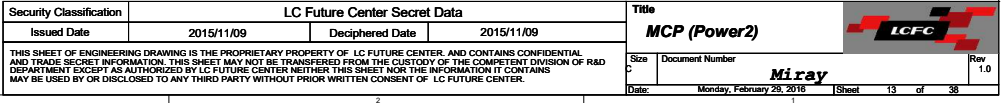
SPI_HOLD# for SKL ES Sample
1. 1K PD, unmont 1K PU with HOLD functionality disabled
*2. 100ohm PD, 1K PU, disabled after RSMRST# de-assertion

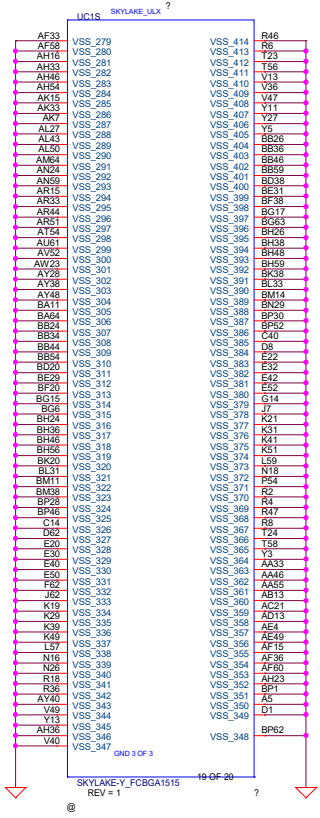
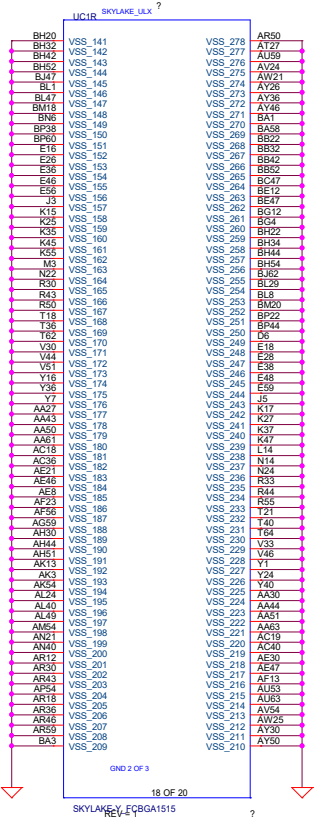
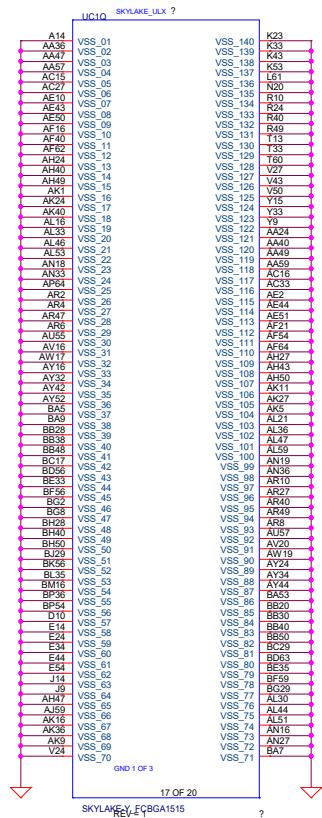


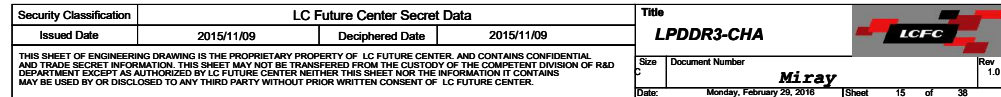
for signal SMB_ALERT#:
This signal has a weak internal pull-down.
0 = Disable Intel ME Crypto Transport Layer Security (TLS) cipher suite (no confidentiality). (Default)
1 = Enable Intel ME Crypto Transport Layer Security (TLS) cipher suite (with confidentiality). Must be pulled up to support Intel AMT with TLS and Intel SBA (Small Business Advantage) with TLS.

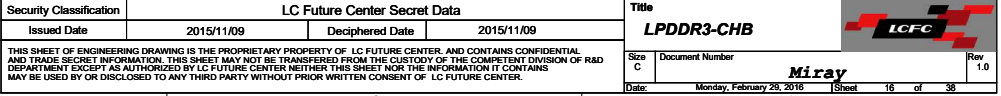
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VCCST :	Sustain voltage for processor in Standby modes
VCCPLL :	CPU PLL power rails
VCCPLL_OC:	CPU digital PLL power rails
VCCSTG :	Gated version of VCCST

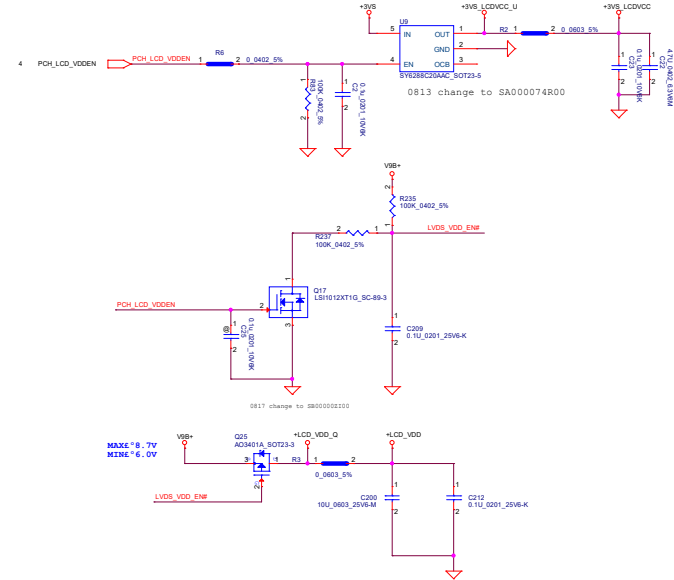






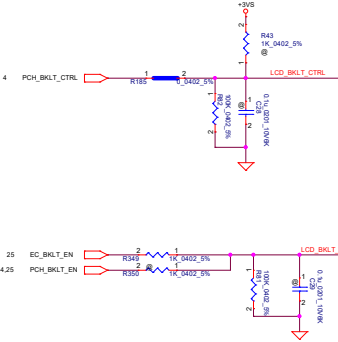


EDP Panel

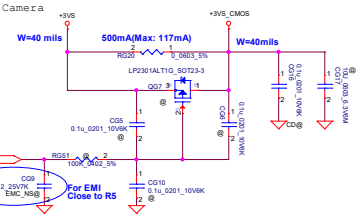
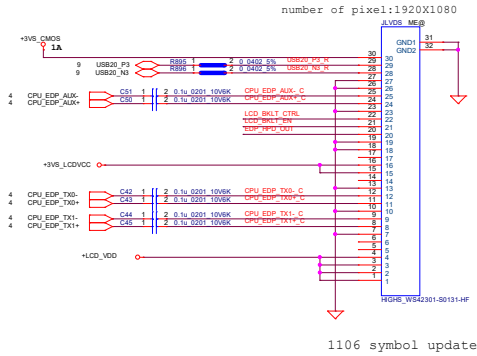
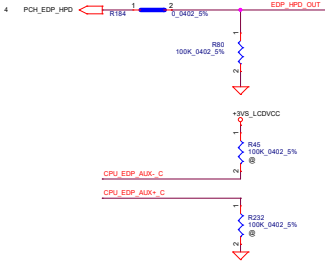


NOTE

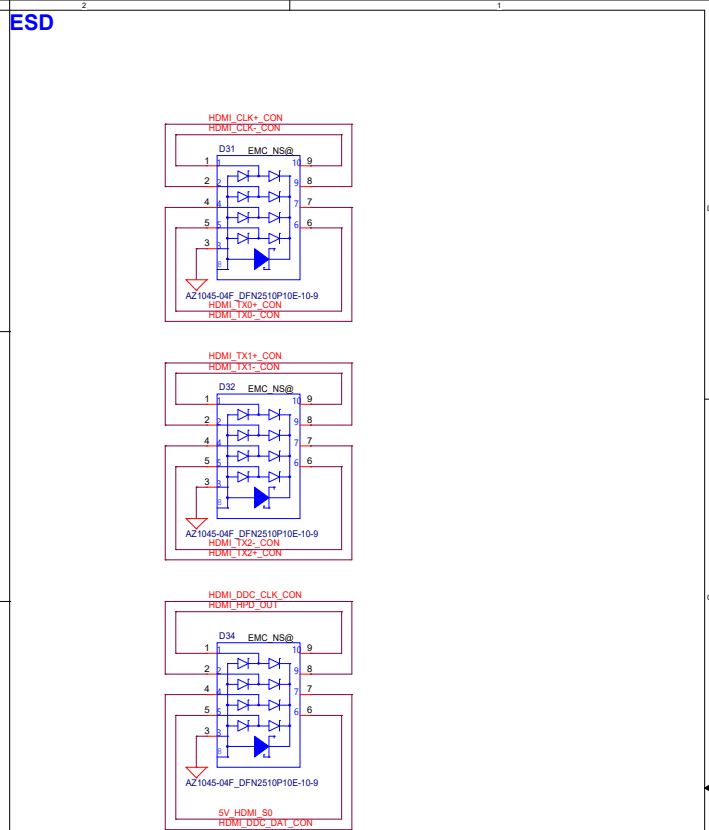
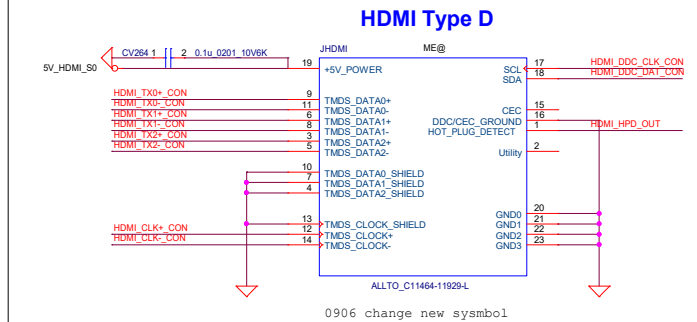
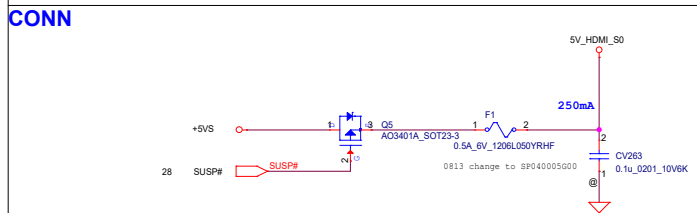
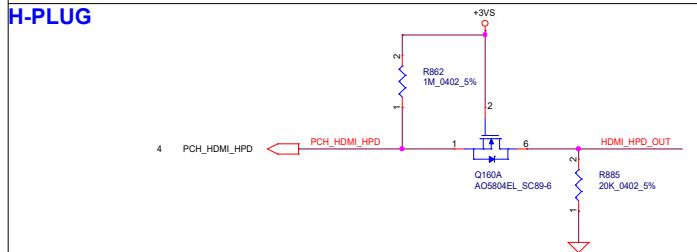
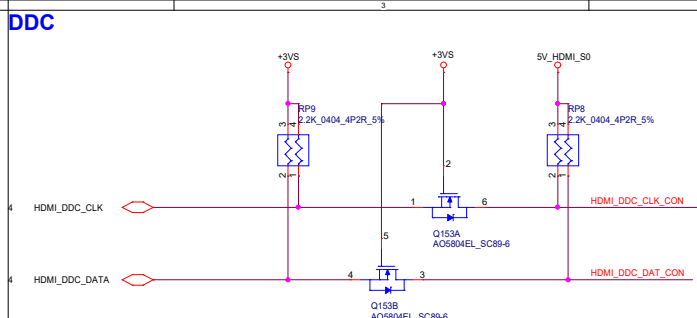
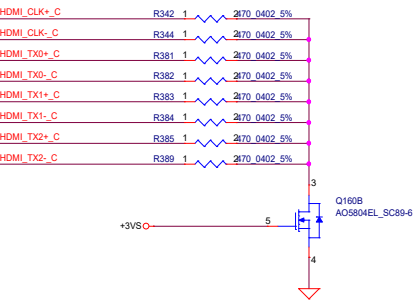
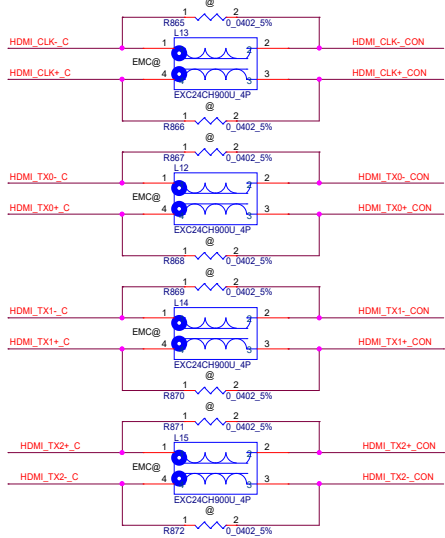
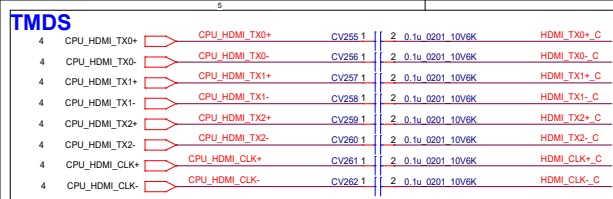
1. AC 13V/DC 8.2V
2. A058006 for VDS concern
3. R235, R237 for VDS concern
4. C200 for voltage concern



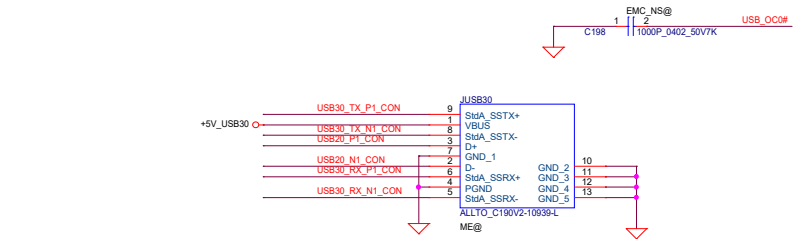
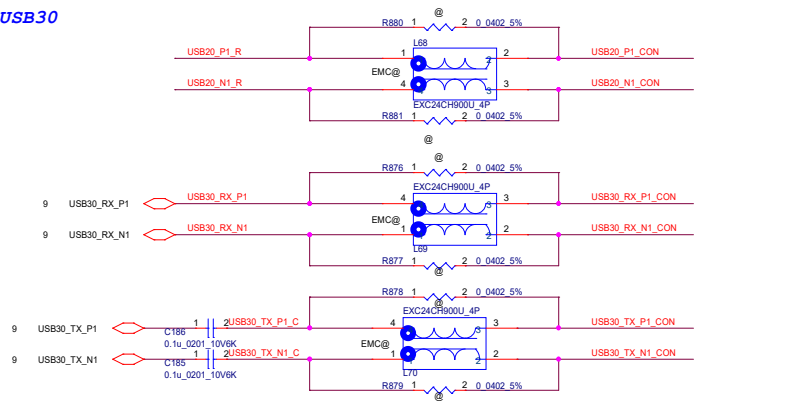
FPC:
1. pin to pin with EDP Panel, check the panel pin definition
2. check the HSYNC for Touch screen board



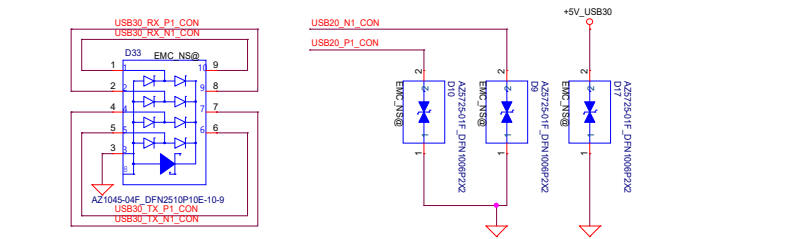
Reserve for other function



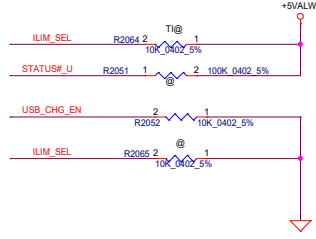
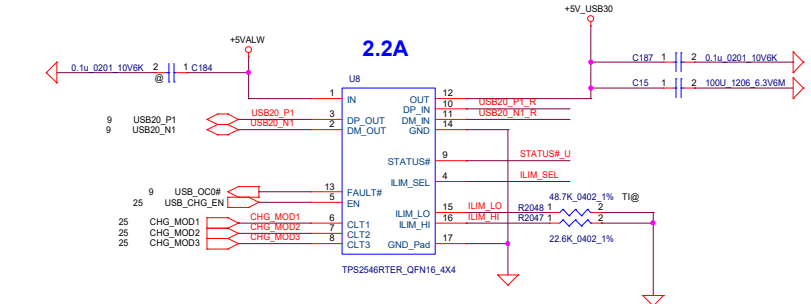
USB30



USB type A



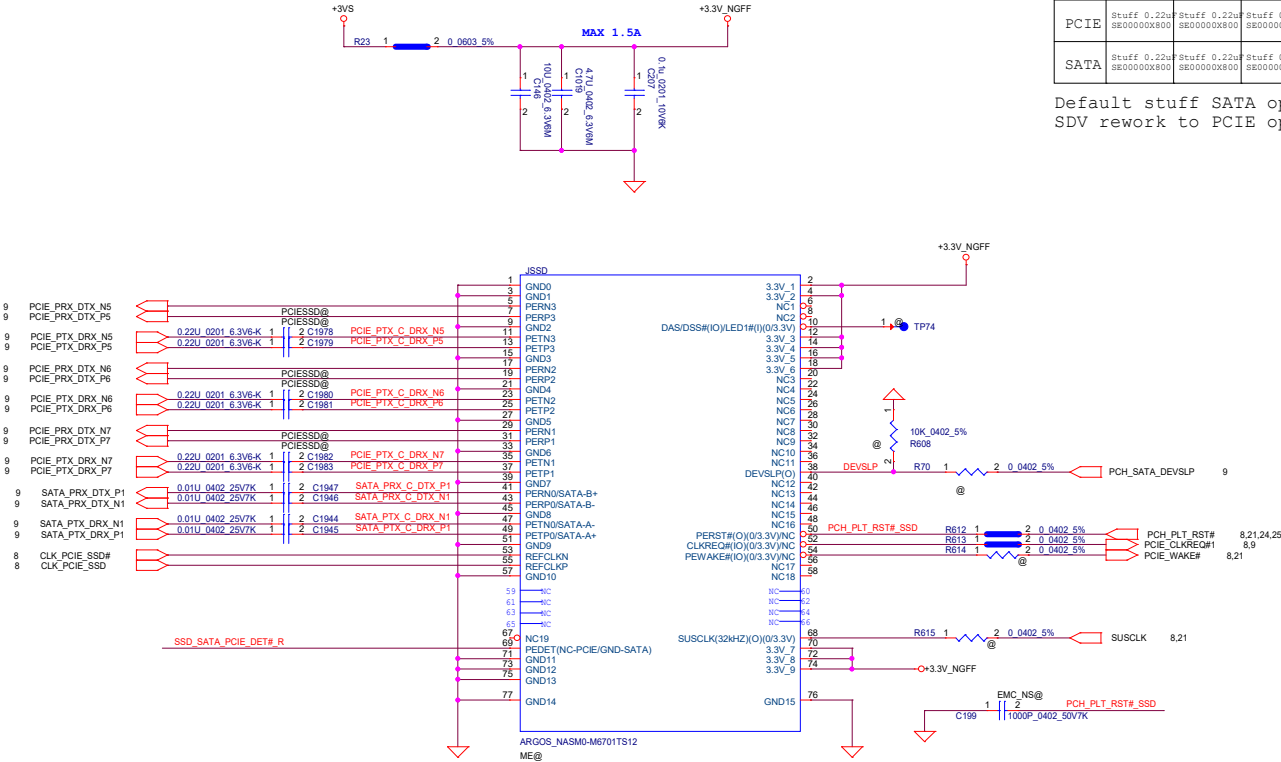
USB charger



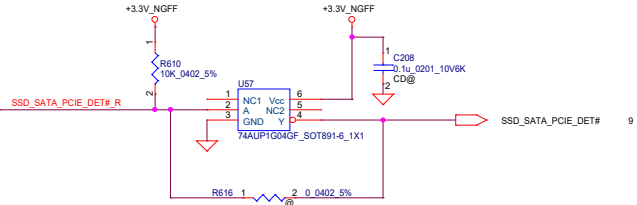
	pin number	6	7	8	4
	pin name	Ctl1	Ctl2	Ctl3	ILM_SEL
Charge port Pin5 Enable H for all	S0 CDP	1	1	1	1
	S3 DCP	0	1	1	0/1
	S4/S5 DCP	0	0	1	0/1
Normal port Pin5 Enable H for S0/S3 L for S4/S5	S0 SDP1	1	1	0	0/1
	S3 SDP1	0	1	0	0/1
	S4/S5 Disable	0	0	0	0/1

SSD	C1978	C1979	C1980	C1981	C1982	C1983	C1947	C1946	C1944	C1945
PCIE	Stuff 0.22uF SE000000X800	Stuff 0.22uF SE000000X800	Stuff 0.22uF SE000000X800	Stuff 0.22uF SE000000X800	Stuff 0.22uF SE000000X800	Stuff 0.22uF SE000000X800	Stuff 0ohm SD02800008J	Stuff 0ohm SD02800008J	Stuff 0.22uF SE000000X800	Stuff 0.22uF SE000000X800
SATA	Stuff 0.22uF SE000000X800	Stuff 0.22uF SE000000X800	Stuff 0.22uF SE000000X800	Stuff 0.22uF SE000000X800	Stuff 0.22uF SE000000X800	Stuff 0.22uF SE000000X800	Stuff 0.01uF SE075103K8J	Stuff 0.01uF SE075103K8J	Stuff 0.01uF SE075103K8J	Stuff 0.01uF SE075103K8J

Default stuff SATA option
SDV rework to PCIE option and test SATA/PCIE signal and SSD



0827 symbol update

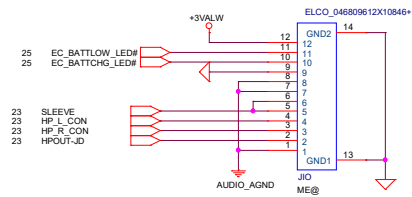


0827 symbol update

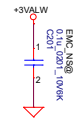
WLAN&BT Combo module circuits

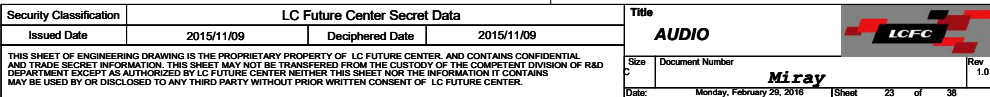
	BT on module Enable	BT on module Disable
* BT_CTRL	H	L
PCH_BT_ON#	L	H

[illegible]



0111 symbol update

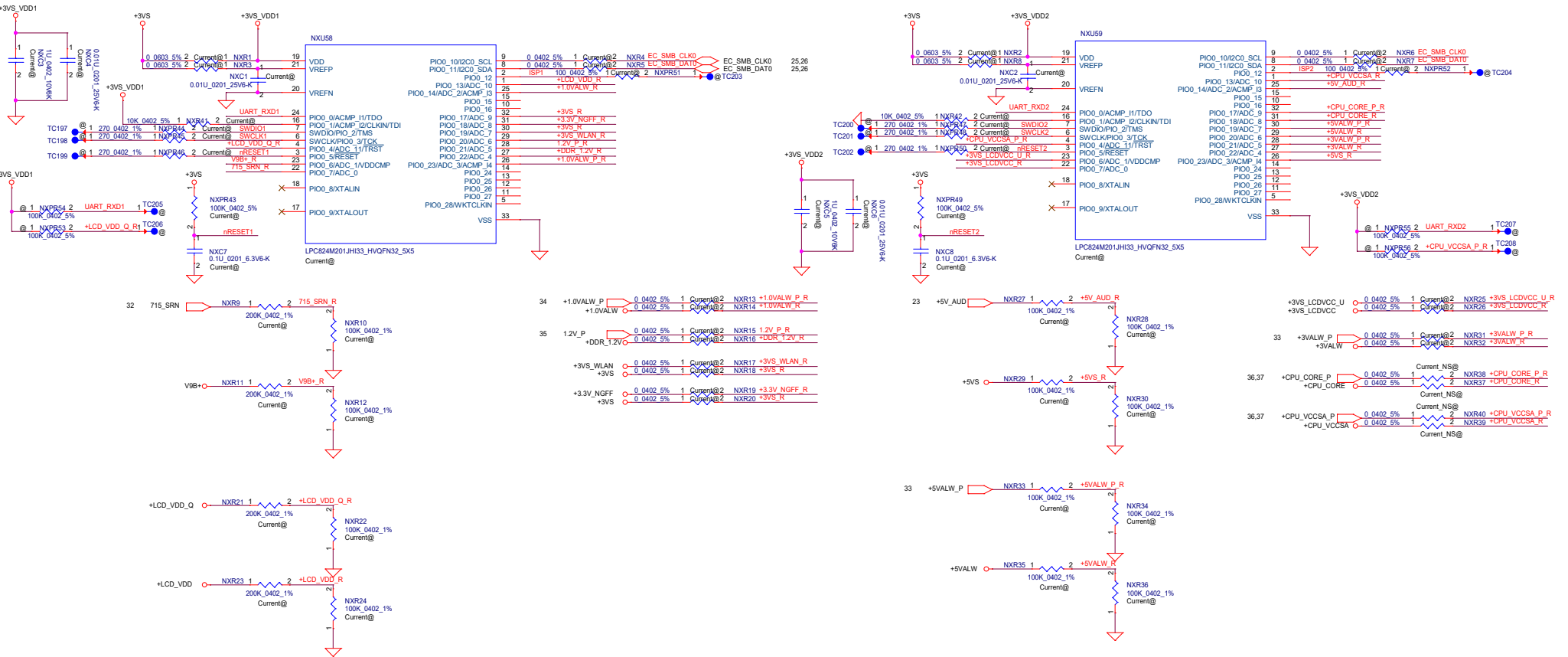
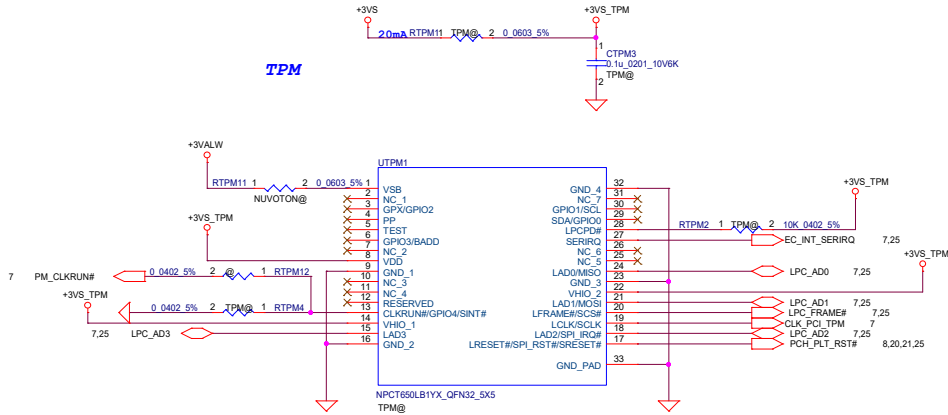


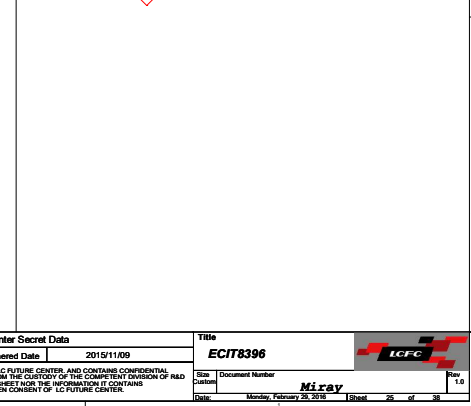
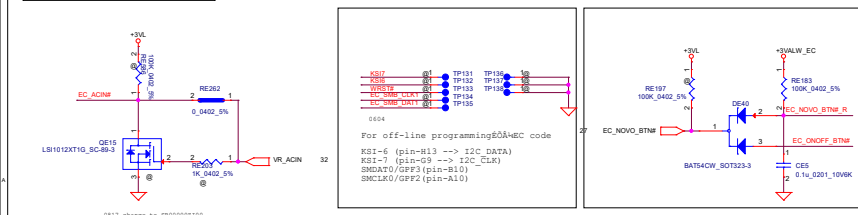


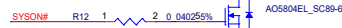
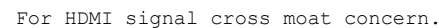
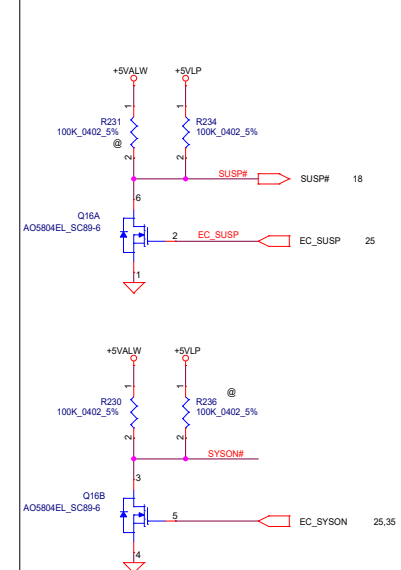
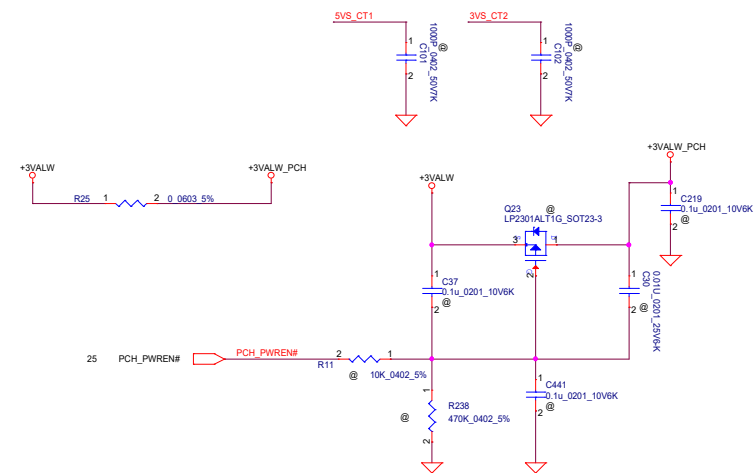
	Vendor	PN	Describe
1	NATIONZ	SA00007G500	IC 232H320TC-LPC-T28-233 TSSOP 28P TPM
WW 1.2	Nuvoton	SA00007RJ00	IC NPCT650L1WX TSSOP 28P TPM1.2
WW 2.0	Nuvoton	SA00007H110	IC NPCT650L1YX QFN 32P DISCRETE TPM
WW 2.0	Nuvoton	SA00007FW00	IC NPCT650LA1WX TSSOP 28P TPM 2.0

SDV Use WW2.0 Nuvoton
SIV need change to WW1.2 QFN

TPM




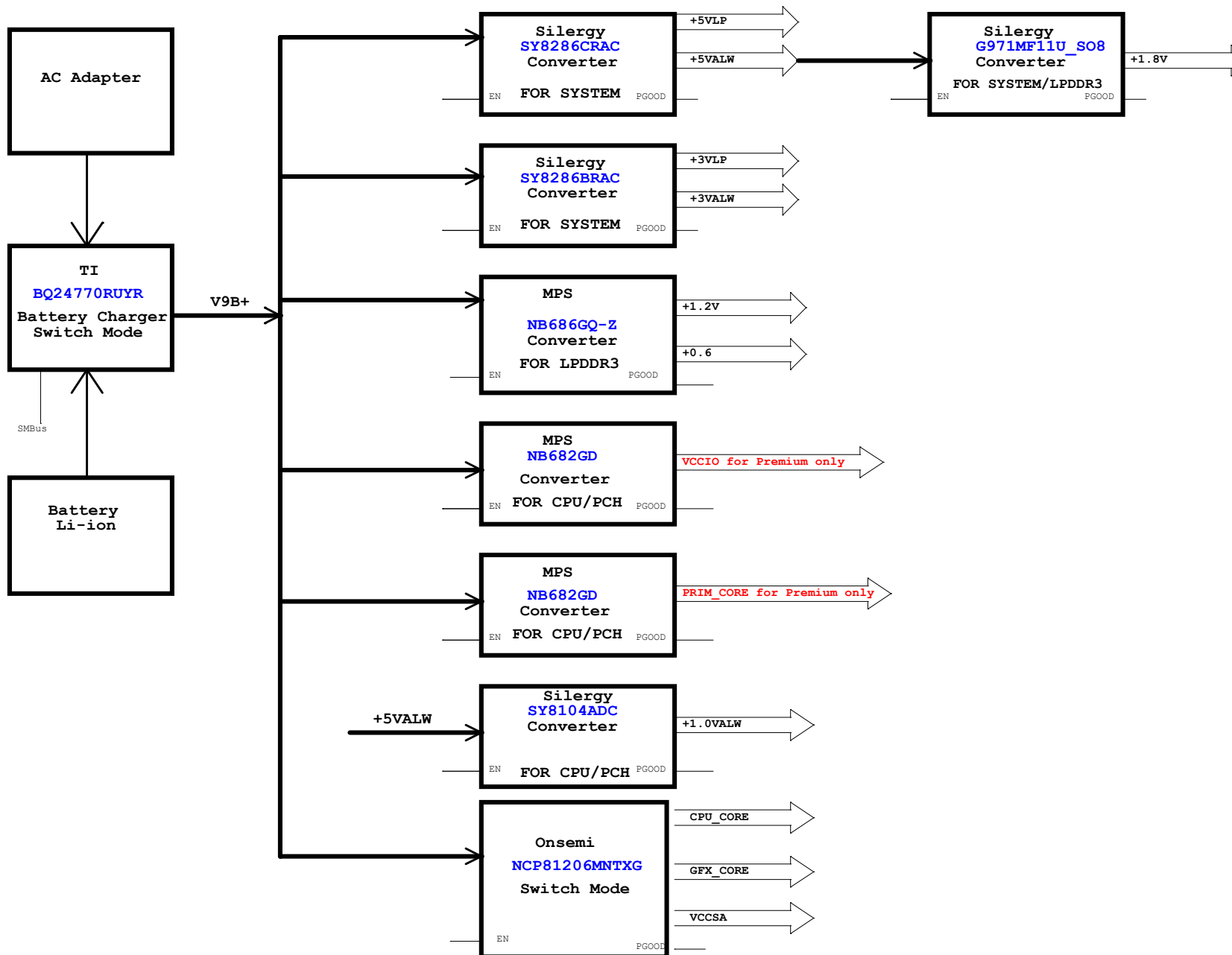


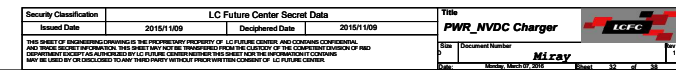


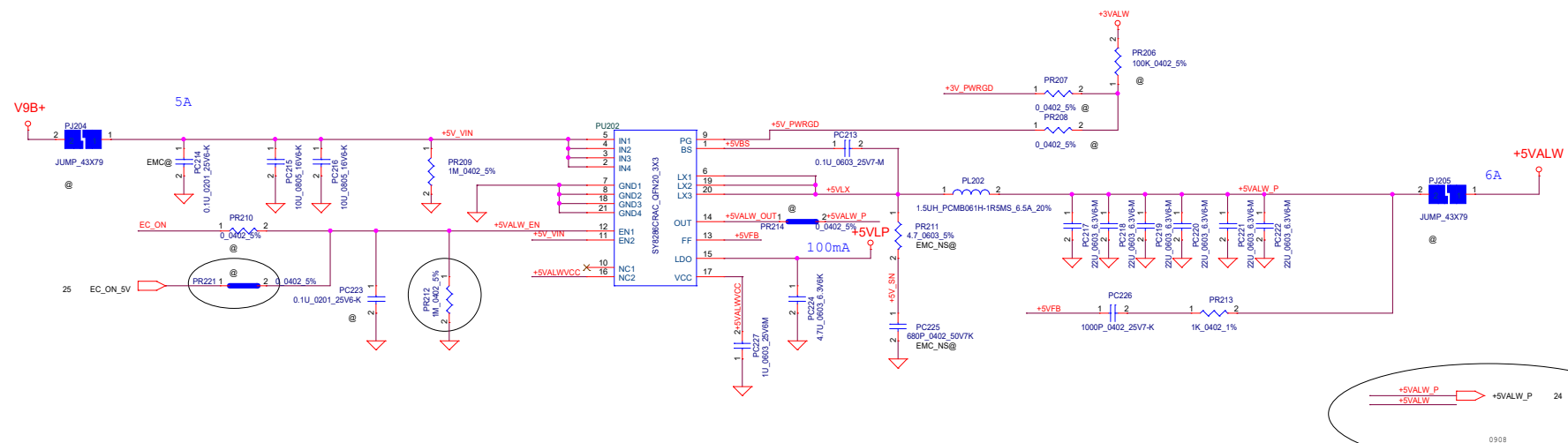
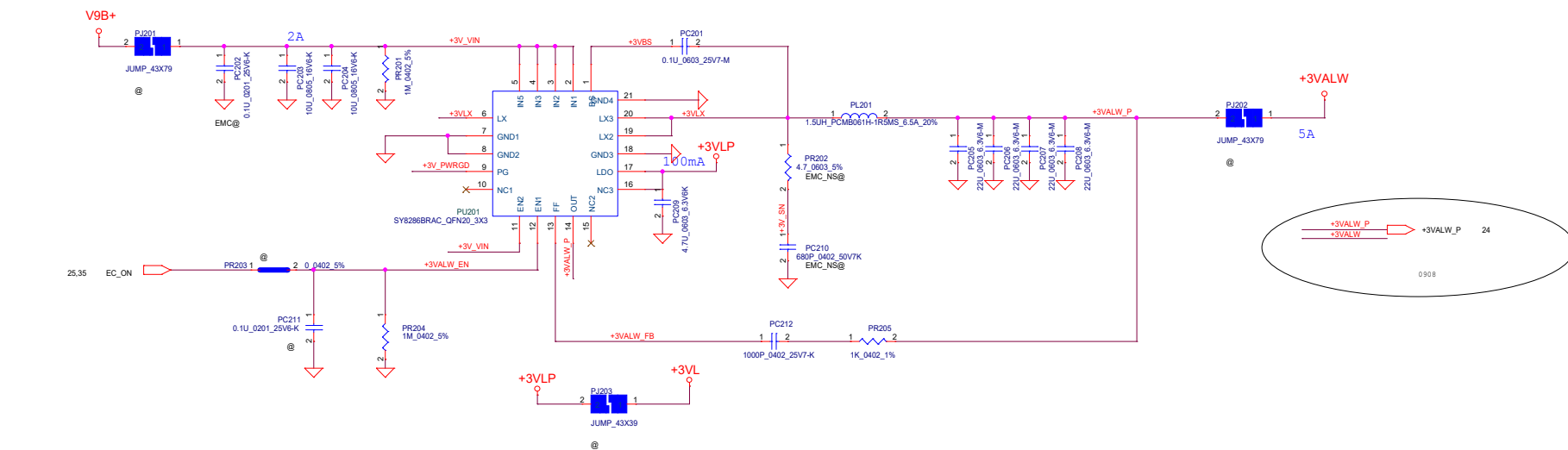



8.31
Follow DXF update Hole

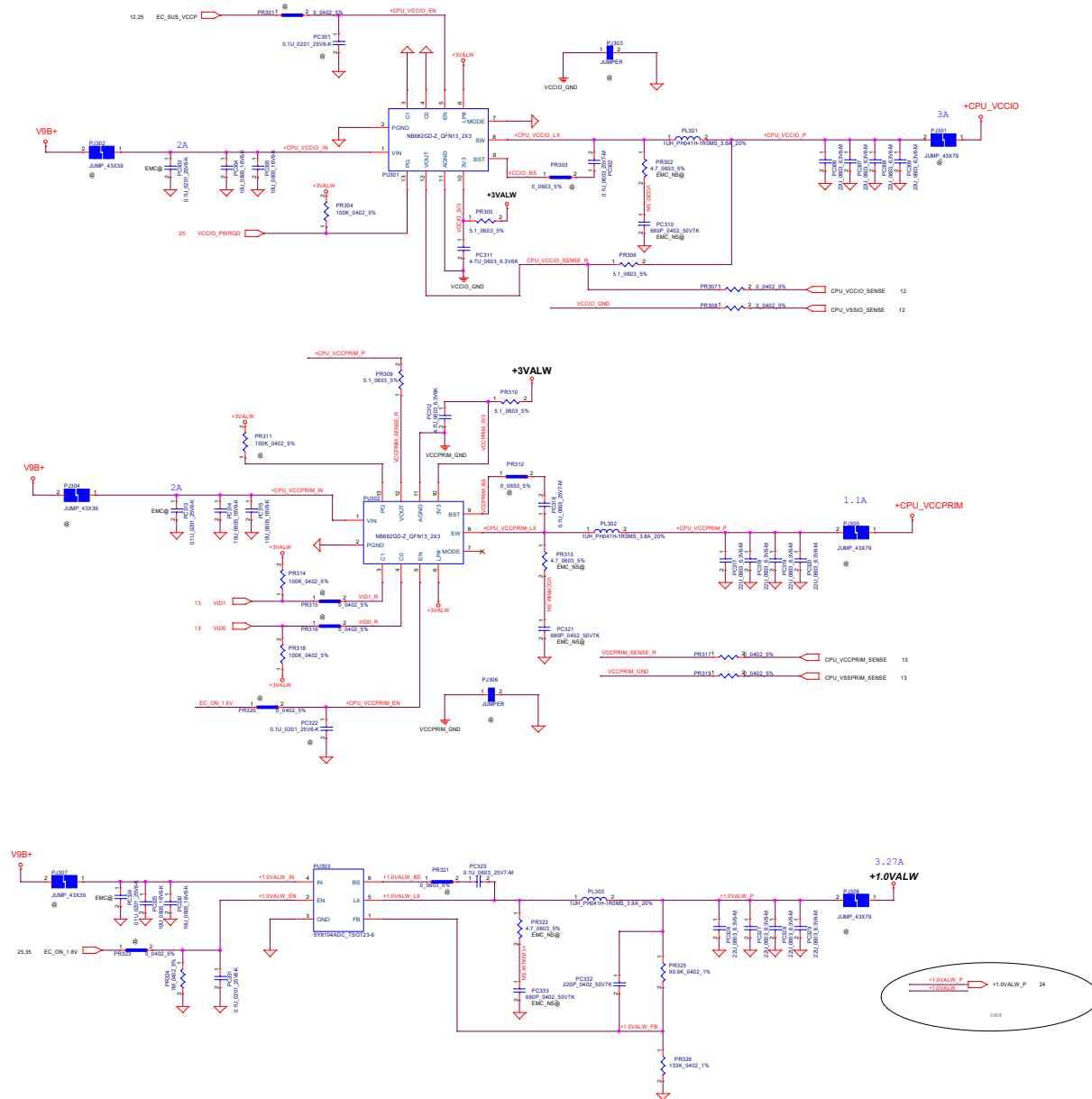
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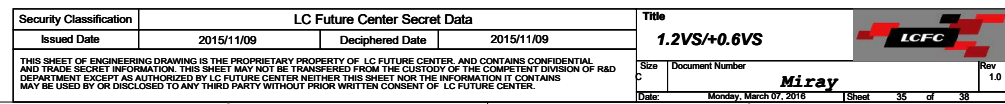
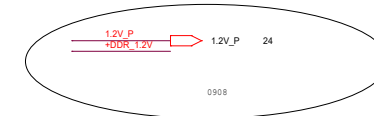




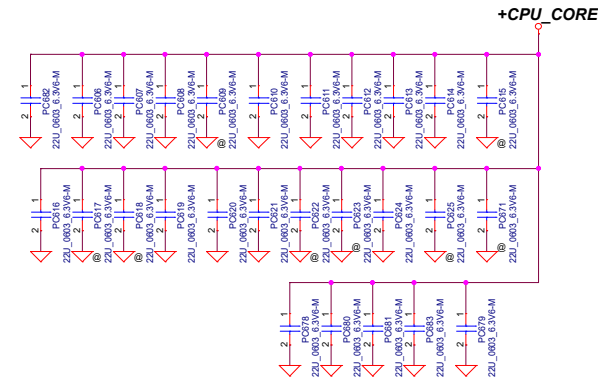
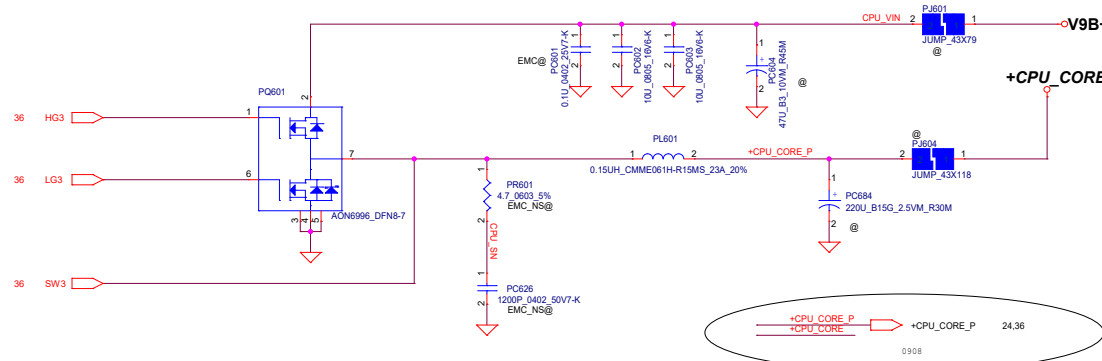


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						<div> <div>Sheet</div> <div>33 of 38</div> </div>	



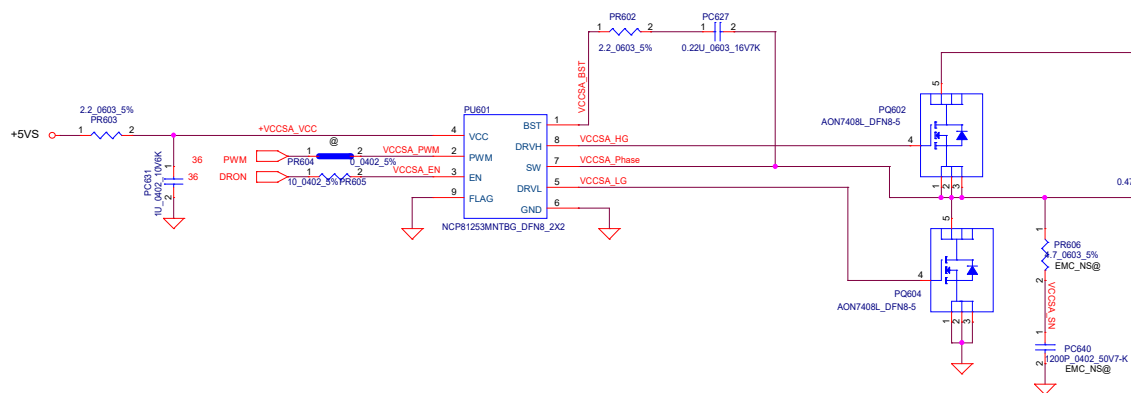


change from B2 size to B3 for R=2 limitation on 7/15



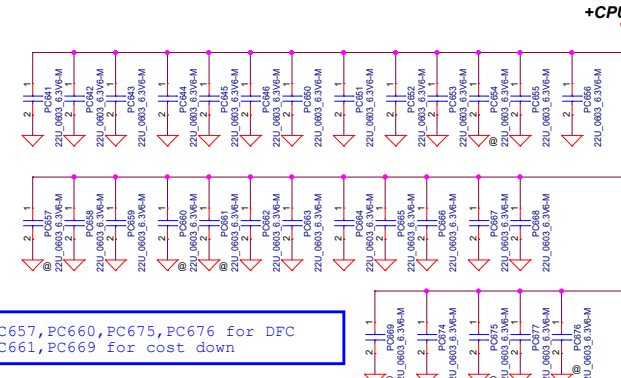
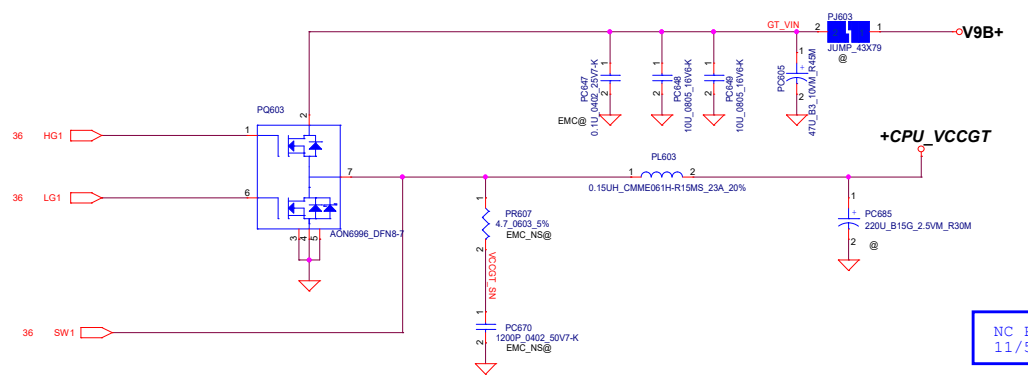
TDC=12A
Imax=24A
LL=4.7mohm
OCP=37A

NC PC609,PC671,PC623,PC618,PC625 for DFC
11/5: NC PC617,PC622,PC615 for cost down



TDC=4A
Imax=4.1A
LL=14mohm
OCP=10A

NC PC632 for DFC
11/5: NC PC633,PC635,PC673 for cost down



TDC=11A
Imax=24A
LL=4.2mohm
OCP=37A

NC PC654,PC657,PC660,PC675,PC676 for DFC
11/5: NC PC661,PC669 for cost down

5

4

3

2

1

D

C

B

A

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