

LCFC Confidential


ACLU9 M/B Schematics Document

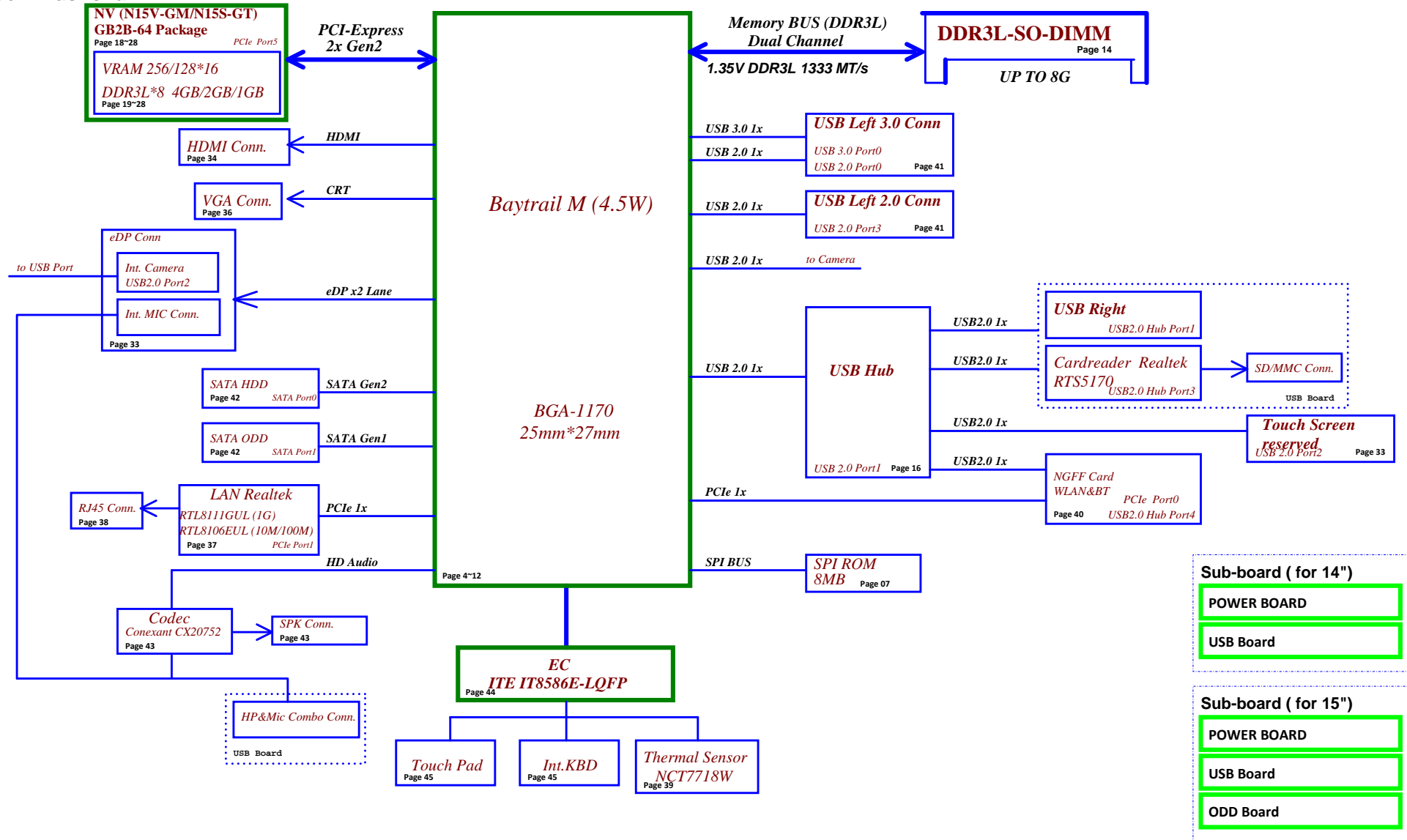
Intel BayTrail M-Processor with DDRIIL + NV (N15V-GM/N15S-GT) GPU

2013-12-22

REV:0.2

Security Classification	LC Future Center Secret Data			Title	
Issued Date	2013/08/08	Deciphered Date	2013/08/05	Cover Page	
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Security Classification	LC Future Center Secret Data			Title	Block Diagram	
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Power Plane State	B+ +3VL	+3VALW +5VALW	+3VALW_SOC +1.0VALW +1.8VALW	+1.35V	+5VS +3VS +1.5VS +1.05VS +0.68VS CPU_CORE GFX_CORE
S0	O	O	O	O	O
S3	O	O	O	O	X
S5 S4/AC Only	O	O	O	X	X
S5 S4 Battery only	O	X	X	X	X
S5 S4 AC & Battery don't exist	X	X	X	X	X

STATE \ SIGNAL	SLP_S1#	SLP_S3#	SLP_S4#	+VALW	+VALW_PCH	+V	+VS	Clock
Full ON	HIGH	HIGH	HIGH	ON	ON	ON	ON	ON
S1(Power On Suspend)	LOW	HIGH	HIGH	ON	ON	ON	ON	LOW
S3 (Suspend to RAM)	LOW	LOW	HIGH	ON	ON	ON	OFF	OFF
S4 (Suspend to Disk)	LOW	LOW	LOW	ON	ON	OFF	OFF	OFF
S5 (Soft OFF)	LOW	LOW	LOW	ON	ON	OFF	OFF	OFF

	SOURCE	VGA	BATT	IT8586E	SODIMM	WLAN WiMAX	Thermal Sensor	PCH	TP Module	charger
EC_SMB_CK1 EC_SMB_DA1	IT8586E +3VALW	X	V	V +3VALW	X	X	X	X	X	V
EC_SMB_CK2 EC_SMB_DA2	IT8586E +3VS	V +3VGS	X	V +3VS	X	X	V +3VS	X	X	X
PCH_SMB_CLK PCH_SMB_DATA	PCH +3VALW_PCH	X	X	X	V +3VS	V +3VS	X	V +3VALW_PCH	X	X

SIGNAL STATE	SLP_S1#	SLP_S3#	SLP_S4#	SLP_S5#	+VALW	+V	+VS	Clock
Full ON	HIGH	HIGH	HIGH	HIGH	ON	ON	ON	ON
S1 (Power On Suspend)	LOW	HIGH	HIGH	HIGH	ON	ON	ON	LOW
S3 (Suspend to RAM)	LOW	LOW	HIGH	HIGH	ON	ON	OFF	OFF
S4 (Suspend to Disk)	LOW	LOW	LOW	HIGH	ON	OFF	OFF	OFF
S5 (Soft OFF)	LOW	LOW	LOW	LOW	ON	OFF	OFF	OFF

USB 2.0	USB 3.0	Port	3 External USB Port
EHCI1	XHCI 1	0	USB Port (Left Side)
		1	USB Port (Right Side)
		2	USB Port (Left Side)
		3	USB HUB
USB HUB		1	Camera
		2	Cardreader
		3	BT(WLAN)
		4	TOUCH PANEL

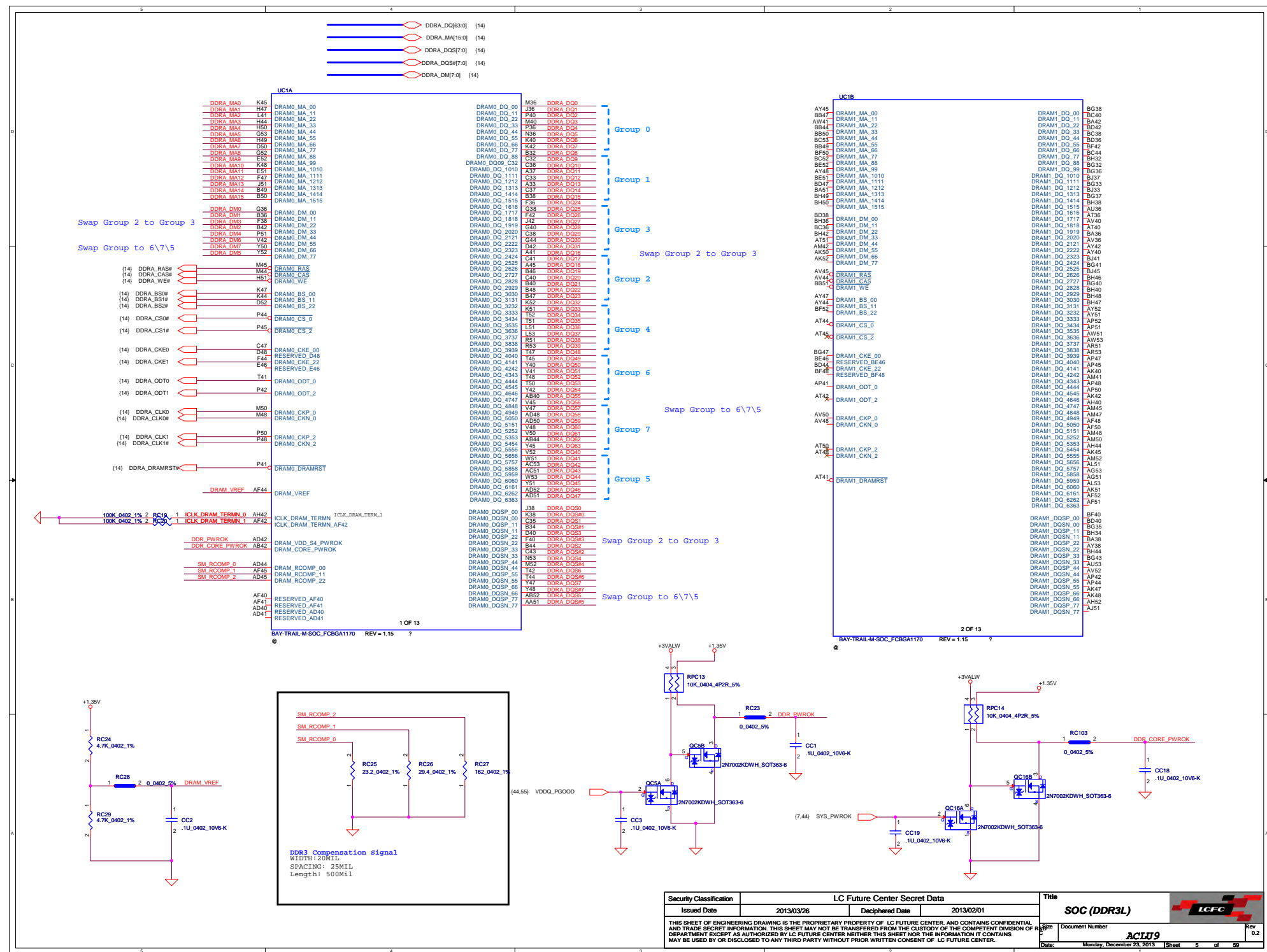
[illegible]

Port	Device
1	Discrete GPU
2	Discrete GPU
3	WLAN
4	LAN
5	
6	
7	
8	

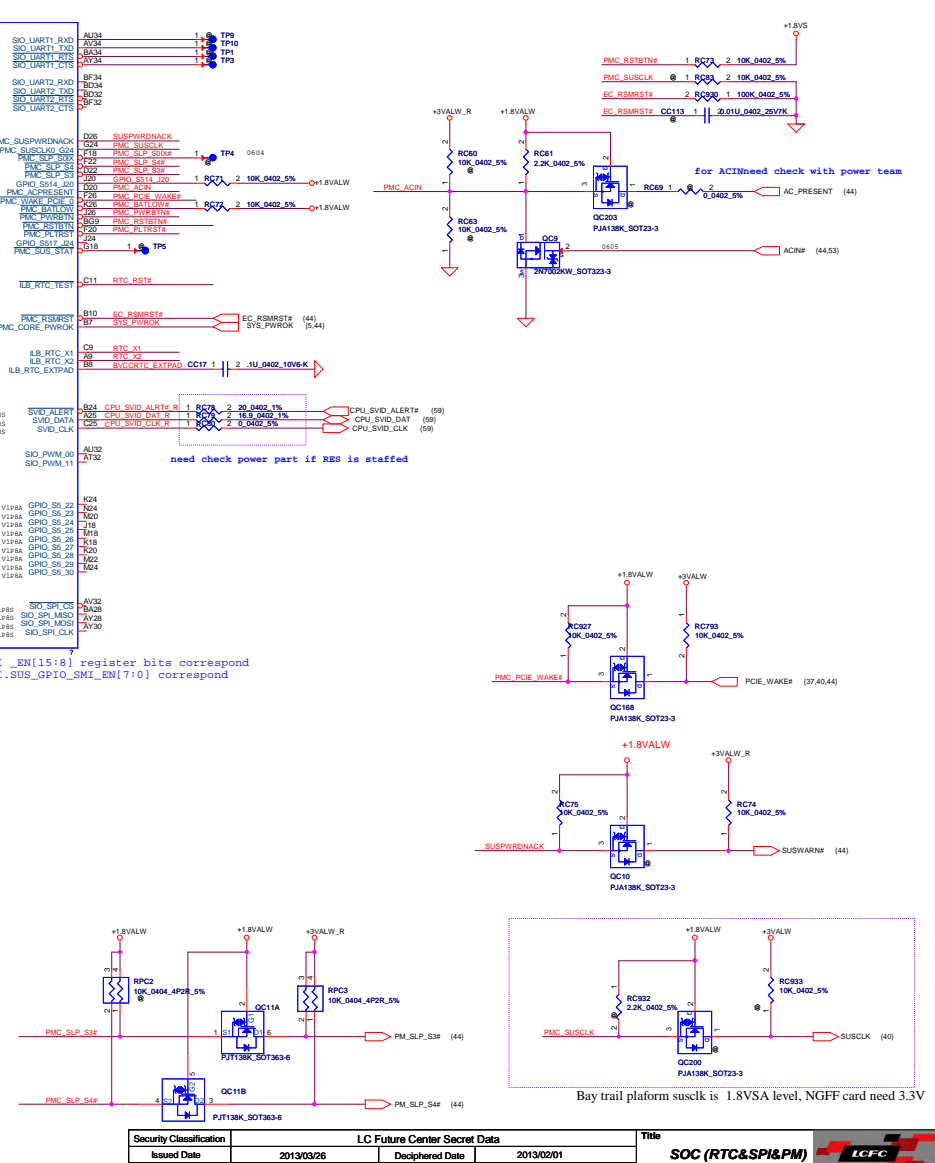
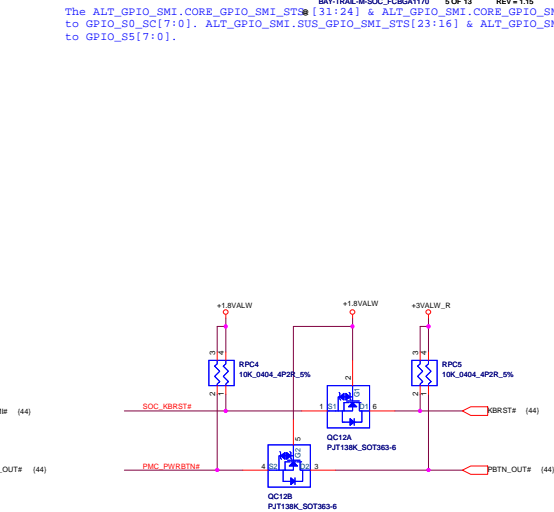
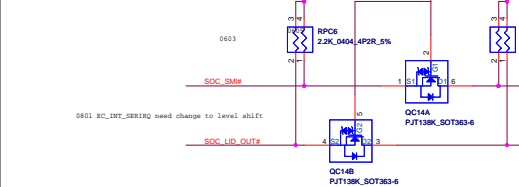
I2C 0m Bus1 address		I2C 0m Bus2 address		I2C 0m Bus address	
Device	Address	Device	Address	Device	Address
Smart Battery	0001 011x b	Thermal Sensor EMC1403-2	1001_100xb	DDR DIMMA	1001 000Xb
Charger	need to update	VGA	0x9E	Wlan	Rsvd
		PCH	0x96	TP	need to update


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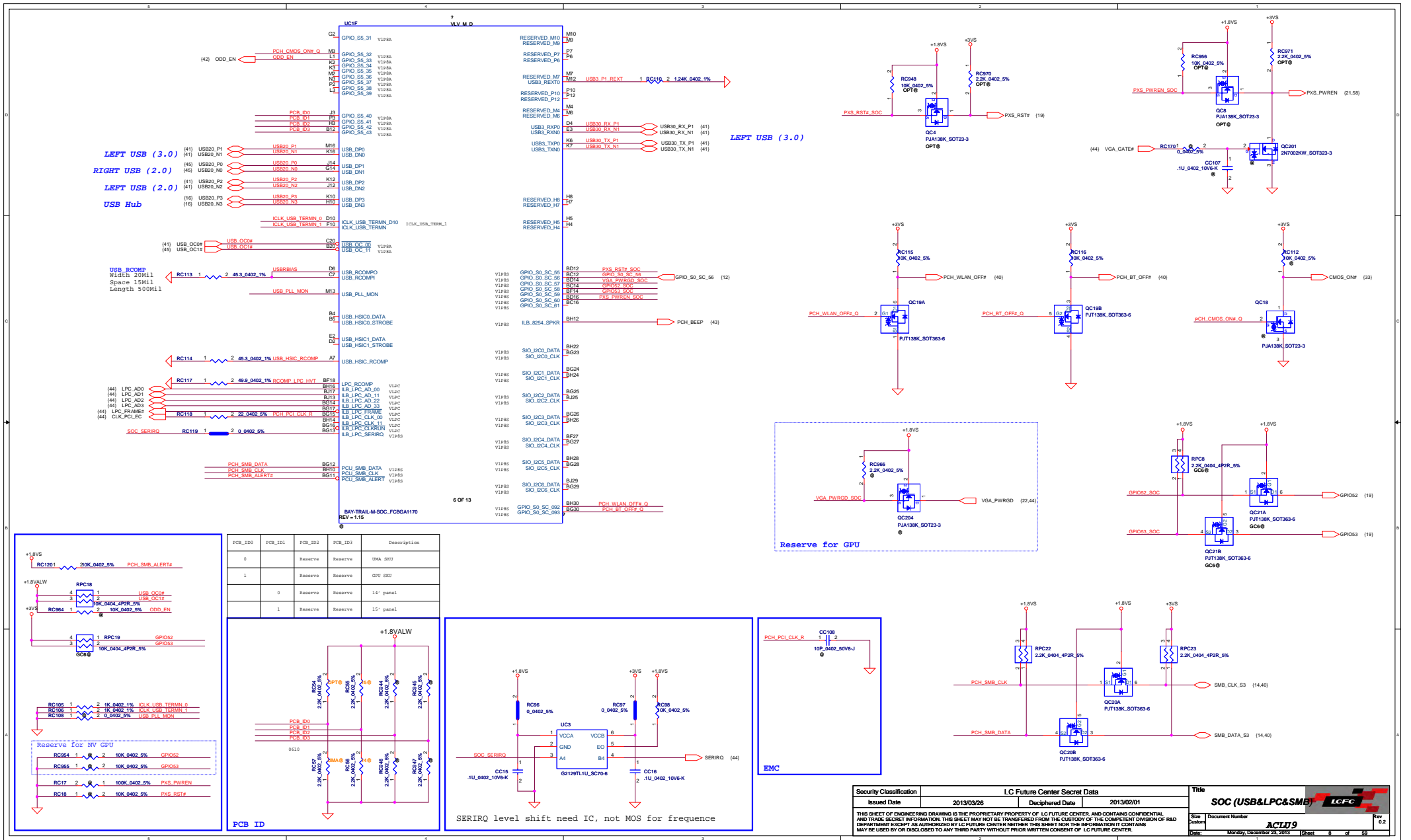
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Notes List			
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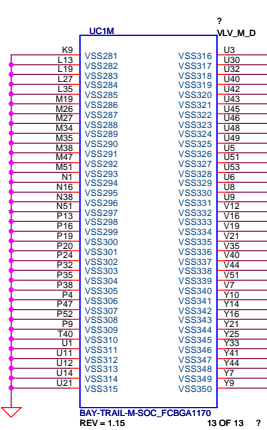
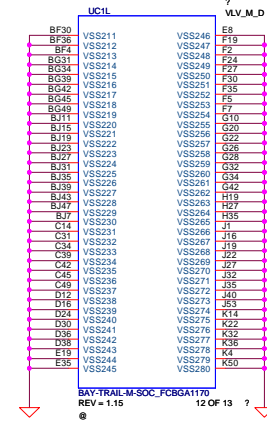
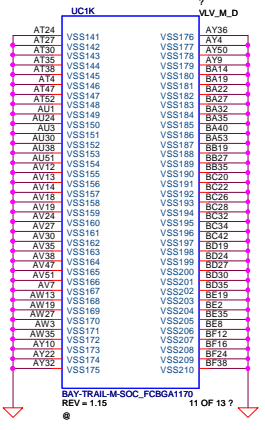
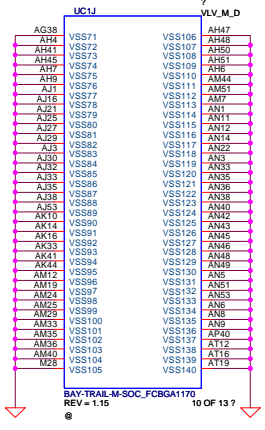
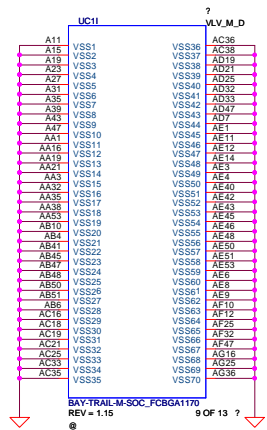






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Hardware STRAPS (Follow up CRB& VIENNA)

GPIO_NC13
GPIO_S0_SC_56
I2S_2_FS
I2S_2_TXD
PCH_HDMI_DDC_DAT
DDI0_DDCDATA

MDSI_DDCDATA(Checklist request 10K pull down)
GPIO_S0_SC_56(Internal Pull-up)
GPIO_S0_SC[063] (Internal Pull-up)
GPIO_S0_SC[065](Internal Pull-up)
DDI1_DDCDATA
DDI0_DDCDATA

GPIO_S0_SC_56:

A16 Top Swap

0=Top address bit is unchanged

1=Top address bit is inverted

GPIO_S0_SC[063]

Multiplexed with Hardware Straps Pin LPE_I2S2_FRM

BIOS Boot selection

0=LPC

1=SPI

GPIO_S0_SC[065]

Multiplexed with LPE_I2S2_DATAOUT

Security Flash Descriptors

0=Override

1=Normal Operation

DDI0_DDCDATA:

DDI0 strap

0=DDI0 not detected

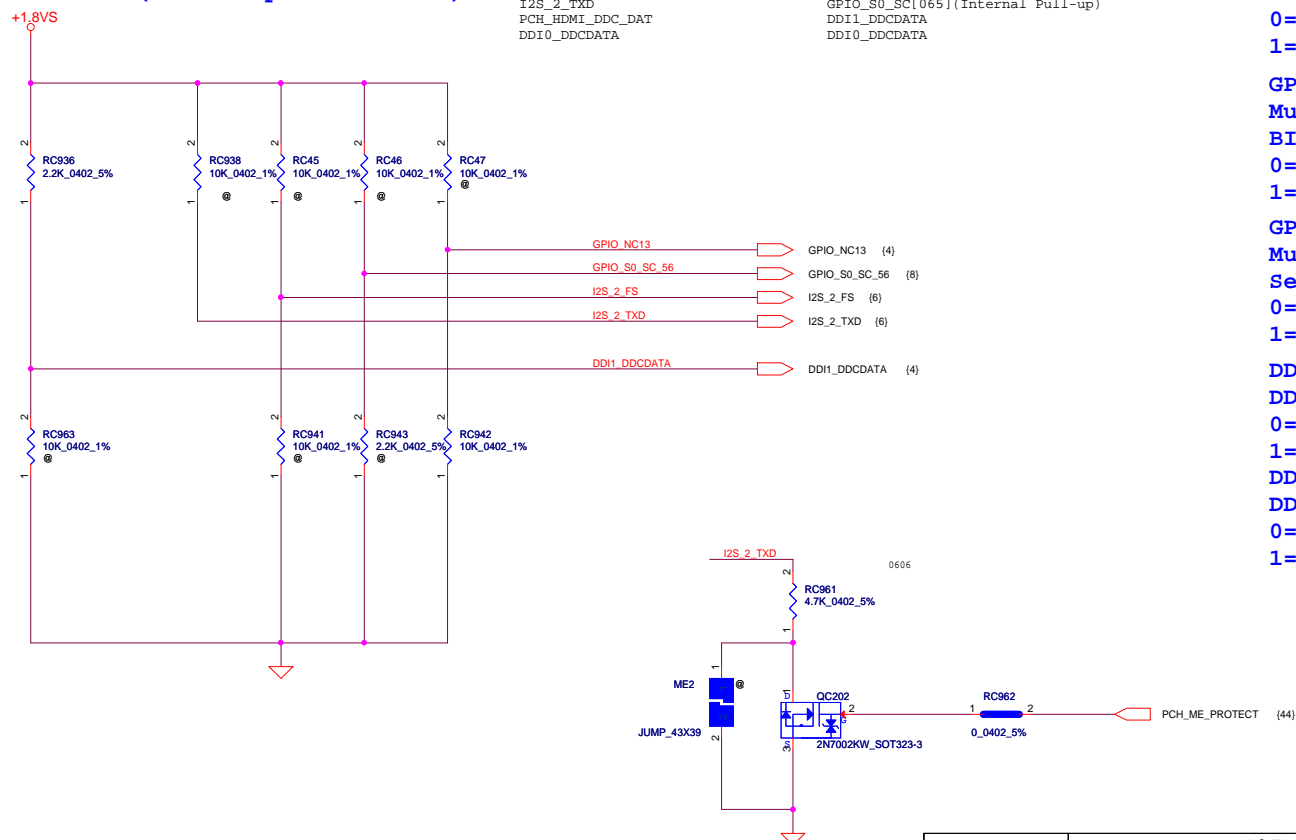
1=DDI0 detected

DDI1_DDCDATA:

DDI1 strap

0=DDI1 not detected

1=DDI1 detected



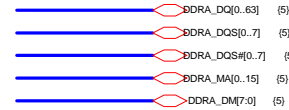
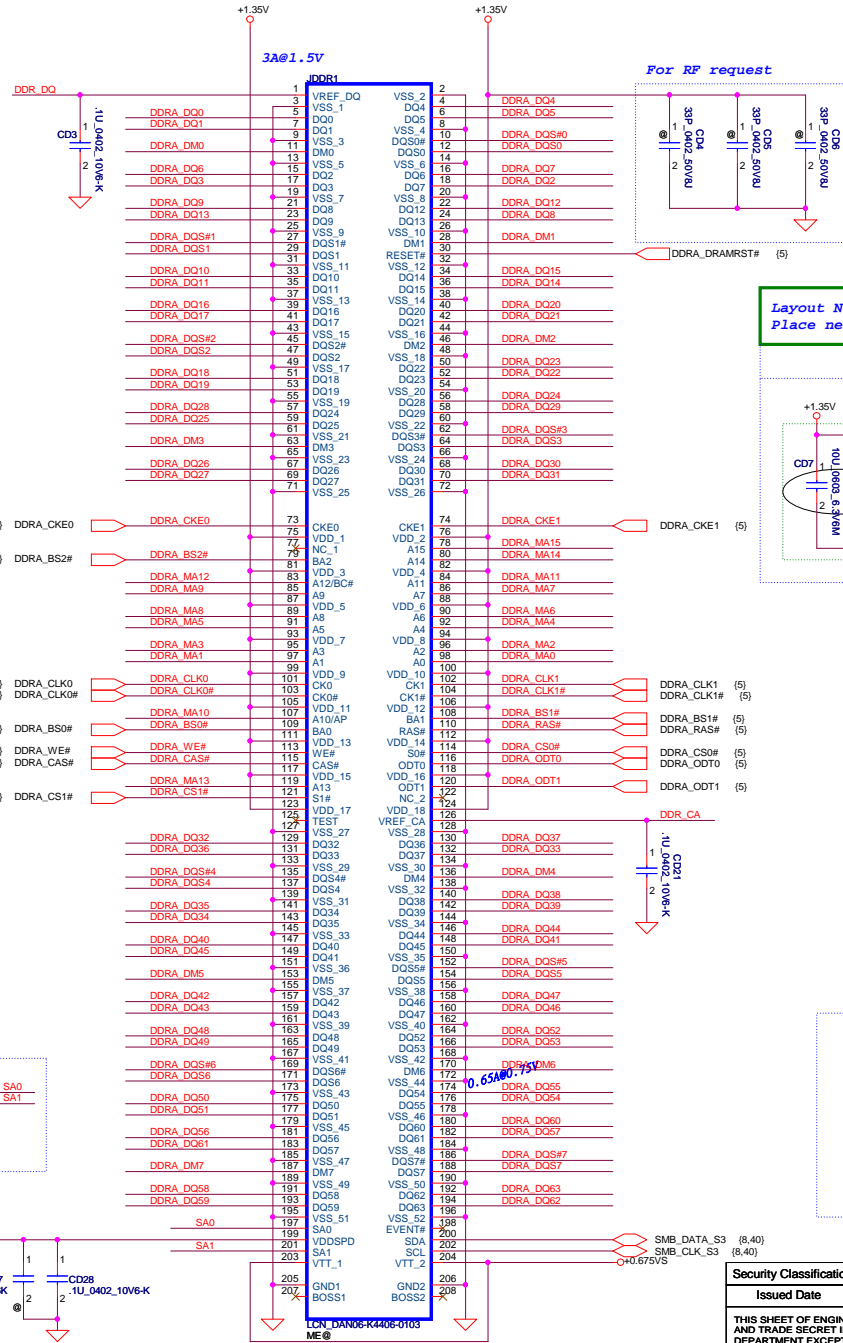
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DDR Mapping table

DDR Mapping table

DDR0_DQ0---DQ0
DDR0_DQ1---DQ1
DDR0_DQ2---DQ2
DDR0_DQ3---DQ3
DDR0_DQ4---DQ4
DDR0_DQ5---DQ5
DDR0_DQ6---DQ6
DDR0_DQ7---DQ7
DDR0_DQ8---DQ8
DDR0_DQ9---DQ9
DDR0_DQ10---DQ10
DDR0_DQ11---DQ11
DDR0_DQ12---DQ12
DDR0_DQ13---DQ13
DDR0_DQ14---DQ14
DDR0_DQ15---DQ15
DDR0_DQ16---DQ16
DDR0_DQ17---DQ17
DDR0_DQ18---DQ18
DDR0_DQ19---DQ19
DDR0_DQ20---DQ20
DDR0_DQ21---DQ21
DDR0_DQ22---DQ22
DDR0_DQ23---DQ23
DDR0_DQ24---DQ24
DDR0_DQ25---DQ25
DDR0_DQ26---DQ26
DDR0_DQ27---DQ27
DDR0_DQ28---DQ28
DDR0_DQ29---DQ29
DDR0_DQ30---DQ30
DDR0_DQ31---DQ31
DDR0_DQ32---DQ32
DDR0_DQ33---DQ33
DDR0_DQ34---DQ34
DDR0_DQ35---DQ35
DDR0_DQ36---DQ36
DDR0_DQ37---DQ37
DDR0_DQ38---DQ38
DDR0_DQ39---DQ39
DDR0_DQ40---DQ40
DDR0_DQ41---DQ41
DDR0_DQ42---DQ42
DDR0_DQ43---DQ43
DDR0_DQ44---DQ44
DDR0_DQ45---DQ45
DDR0_DQ46---DQ46
DDR0_DQ47---DQ47
DDR0_DQ48---DQ48
DDR0_DQ49---DQ49
DDR0_DQ50---DQ50
DDR0_DQ51---DQ51
DDR0_DQ52---DQ52
DDR0_DQ53---DQ53
DDR0_DQ54---DQ54
DDR0_DQ55---DQ55
DDR0_DQ56---DQ56
DDR0_DQ57---DQ57
DDR0_DQ58---DQ58
DDR0_DQ59---DQ59
DDR0_DQ60---DQ60
DDR0_DQ61---DQ61
DDR0_DQ62---DQ62
DDR0_DQ63---DQ63

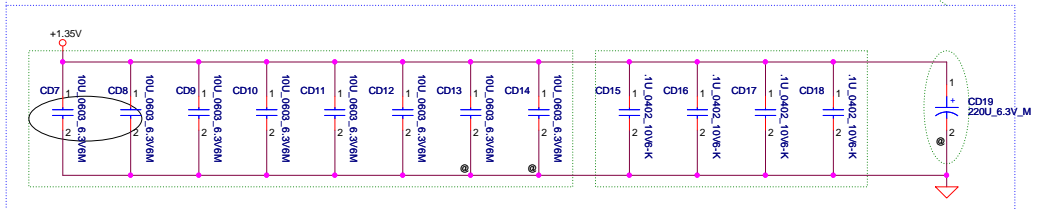
DDR3 SO-DIMM A




OSCON (220uF_6.3V_4.2L_ESR17m)*1=(SF000002Y00)

(10uF_0603_6.3V)*8
(0.1uF_402_10V)*4

Layout Note:
Place near DIMM



5		4		3		2		1	
D									
C									
B									
A									
								</	

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N15x GPIO

GPIO	I/O	ACTIVE	Function Description
GPIO0	OUT	-	FB Enable for GC6 2.0
GPIO1	OUT	N/A	
GPIO2	OUT	N/A	
GPIO3	OUT	N/A	
GPIO4	OUT	N/A	
GPIO5	OUT	N/A	GPU power sequencing---3V3_MAIN_EN
GPIO6	IN	-	GPU wake signal for GC6 2.0
GPIO7	OUT	N/A	
GPIO8	I/O	-	System side PCIe reset Monitor
GPIO9	I/O	N/A	2.2K Pull-up
GPIO10	OUT	N/A	
GPIO11	OUT	-	GPU Core VDD PWM control signal
GPIO12	IN		AC Power Detect Input (10K pull High)
GPIO13	OUT	-	Phase Shedding
GPIO14	IN	N/A	
GPIO15	IN	N/A	
GPIO16		N/A	
GPIO17	IN	N/A	
GPIO18	IN	N/A	
GPIO19	IN	N/A	
GPIO20		N/A	
GPIO21	OUT		GPU PCIe self-reset control
OVERT	OUT		Active Low Thermal Catastrophic Over Temperature

Performance Mode P0 TDP at Tj = 102 C* (DDR3)

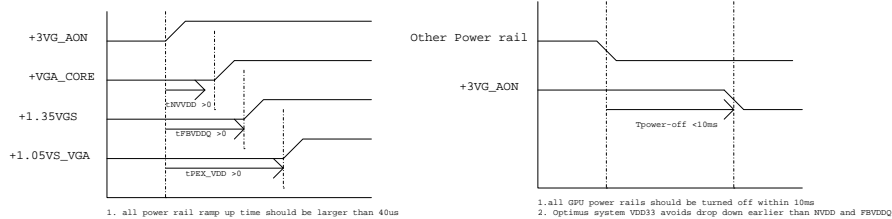
Products	GPU (4)	Mem (1.5)	NVCLK /MCLK (MHz)	NVVDD (V)			FBVDD (1.35V)		FBVDDQ (GPU+Mem) (1.35V)		PCI Express (1.05V) (6)		I/O and PLLVDD (1.05V)		Other (3.3V)	
	(W)	(W)	(MHz)	(V)	(A)	(W)	(A)	(W)	(A)	(W)	(mA)	(W)	(mA)	(W)	(mA)	(W)
N14X 128bit 2GB DDR3	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD

N15x Multi-level Straps

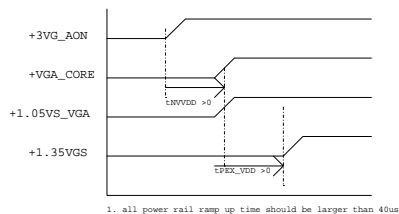
Physical Strapping pin	Power Rail	Logical Strapping Bit3	Logical Strapping Bit2	Logical Strapping Bit1	Logical Strapping Bit0
ROM_SCLK	+3VGS	SOR3_EXPOSED	SOR2_EXPOSED	SOR1_EXPOSED	SOR0_EXPOSED
ROM_SI	+3VGS	RAM_CFG[3]	RAM_CFG[2]	RAM_CFG[1]	RAM_CFG[0]
ROM_SO	+3VGS	DEVID_SEL	PCIE_CFG	SMB_ALT_ADDR	VGA_DEVICE
STRAP0	+3VGS	Reserved(keep pull-up and pull-down footprint and stuff 50Kohm pull-up)			
STRAP1	+3VGS	Reserved(keep pull-up and pull-down footprint and not stuff by default)			
STRAP2	+3VGS				
STRAP3	+3VGS				
STRAP4	+3VGS				

SMBUS_ALT_ADDR	
0	0x9E (Default)
1	0x9C (Multi-GPU usage)

N15V-GM Power Sequence




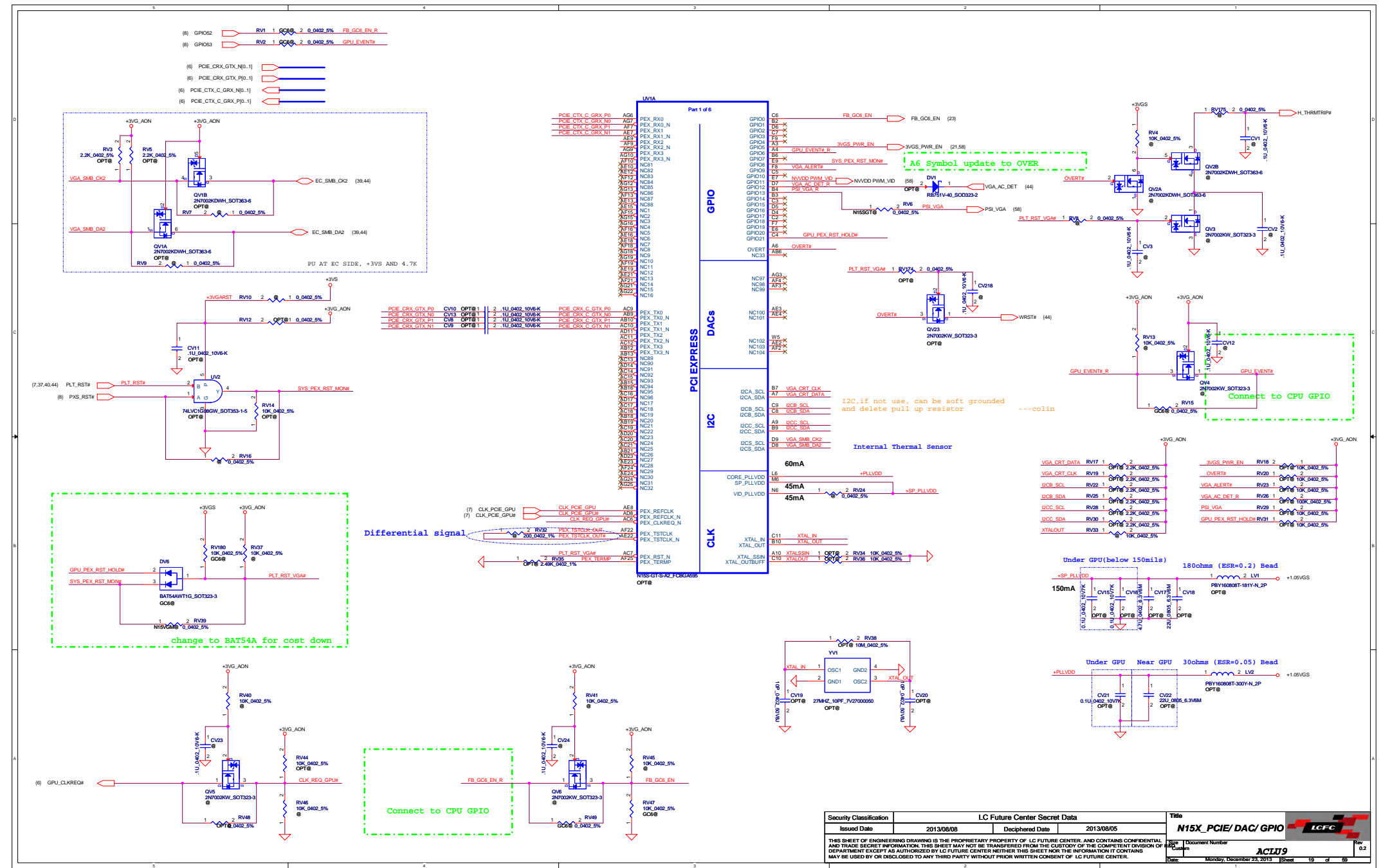
N15S-GT Power Sequence

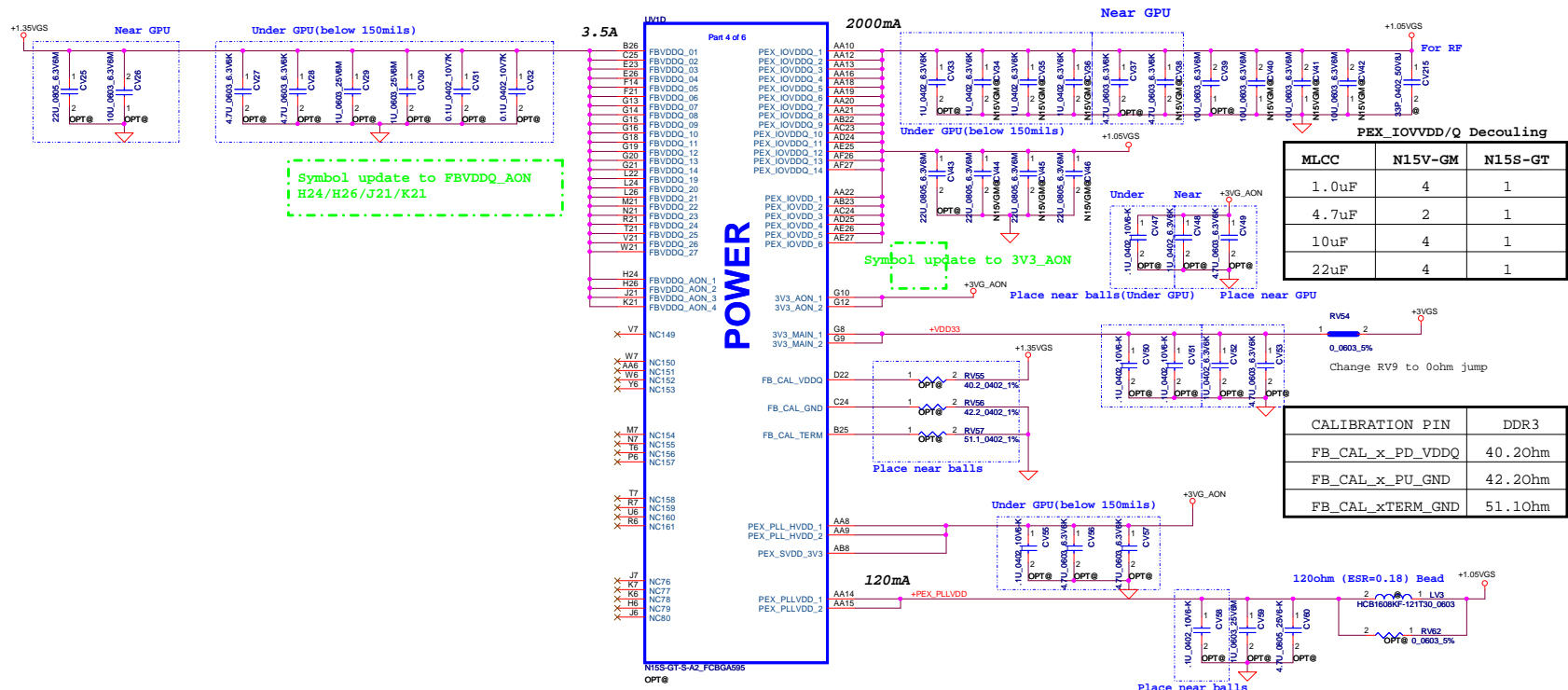


N15x Binary Straps

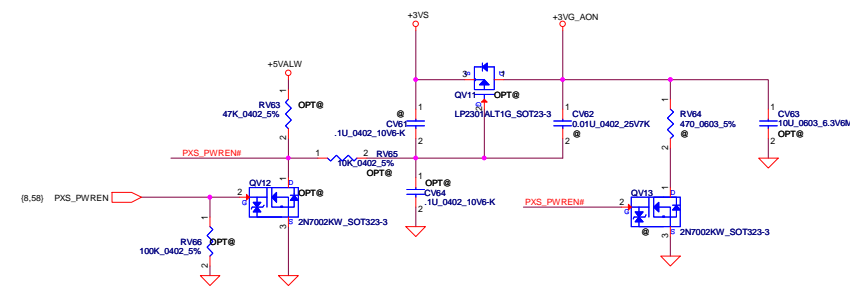
Physical Strapping pin	Power Rail	Strap Mapping
ROM_SCLK	+3VGS	SMB_ALT_ADDR
ROM_SI	+3VGS	SUB_VENDOR
ROM_SO	+3VGS	VGA_DEVICE
STRAP0	+3VGS	RAM_CFG[0]
STRAP1	+3VGS	RAM_CFG[1]
STRAP2	+3VGS	RAM_CFG[2]
STRAP3	+3VGS	RAM_CFG[3]
STRAP4	+3VGS	PCIE_MAX_SPEED

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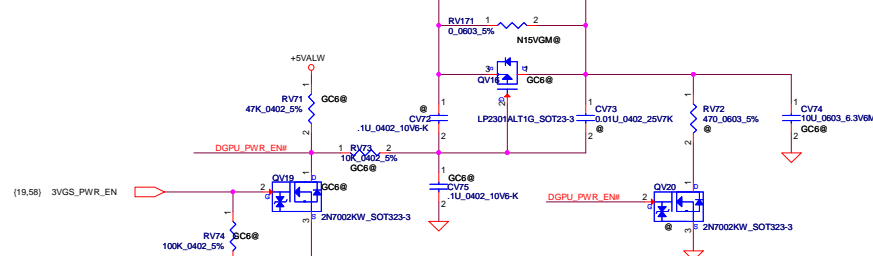




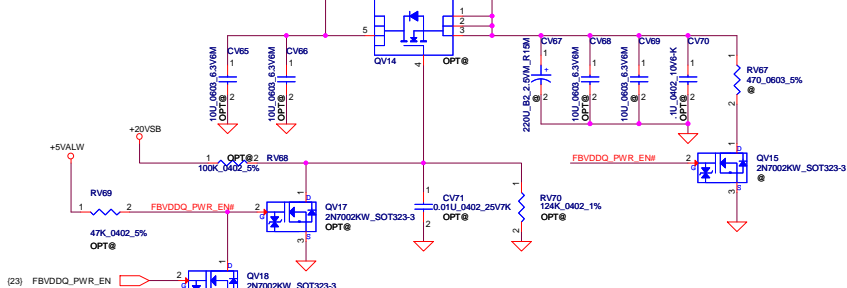
+3.3VS TO +3VG_AON



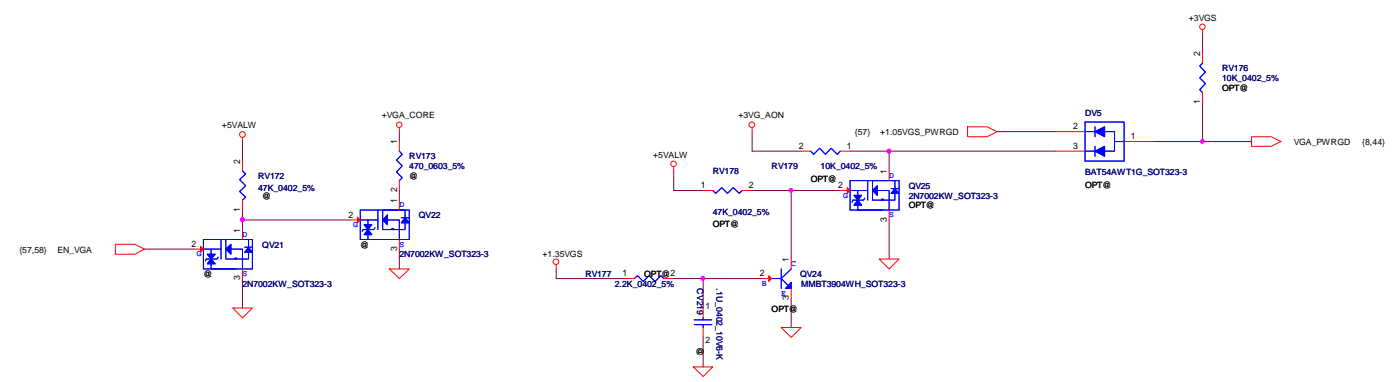
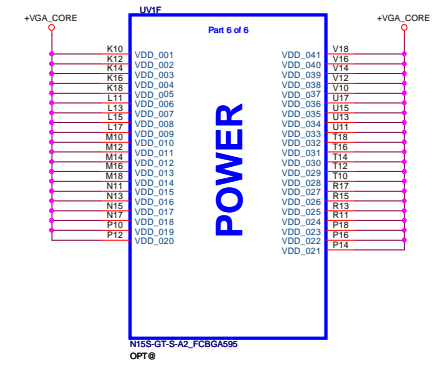
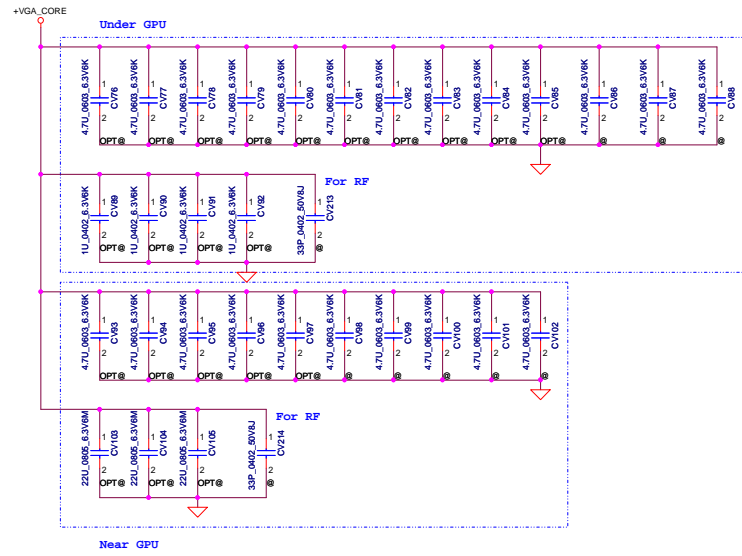
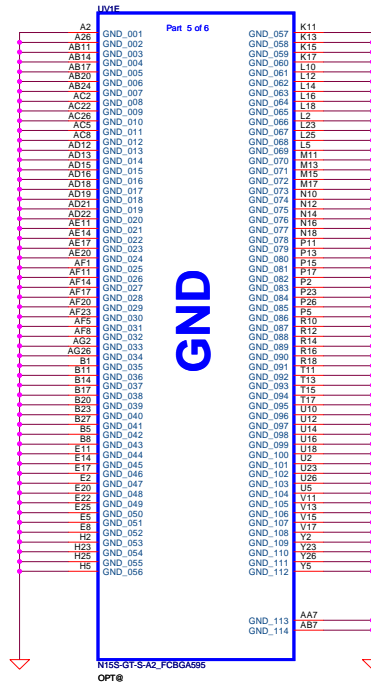
+3.3VS TO +3VGS



+1.35V TO +1.35VGS



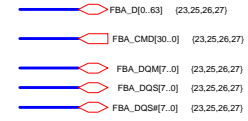
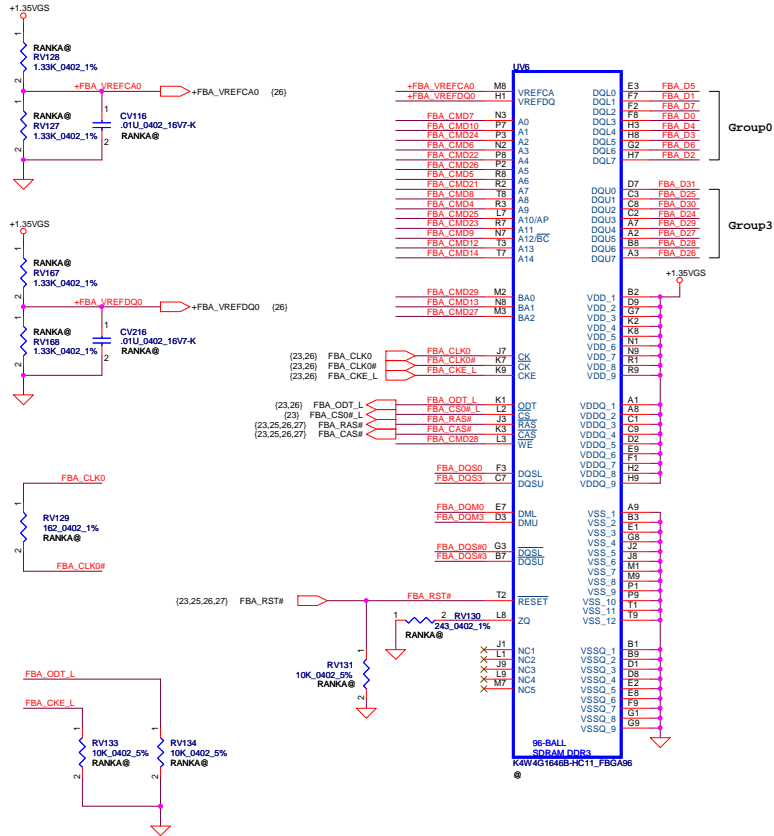
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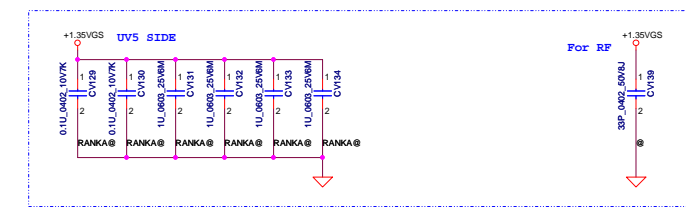
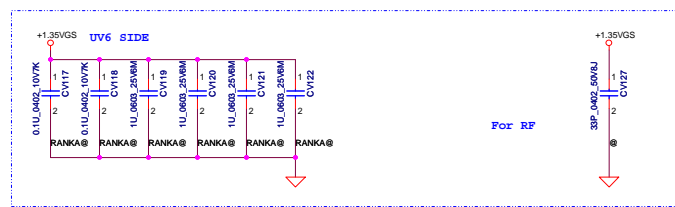


at least 16 mils width(optimal)
20 mils spacing to other signals/planes



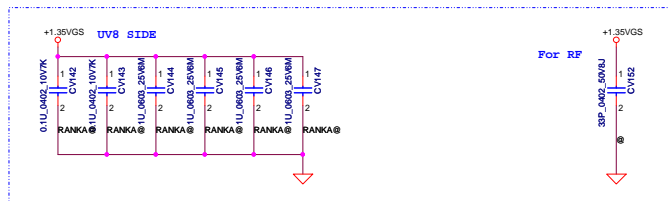
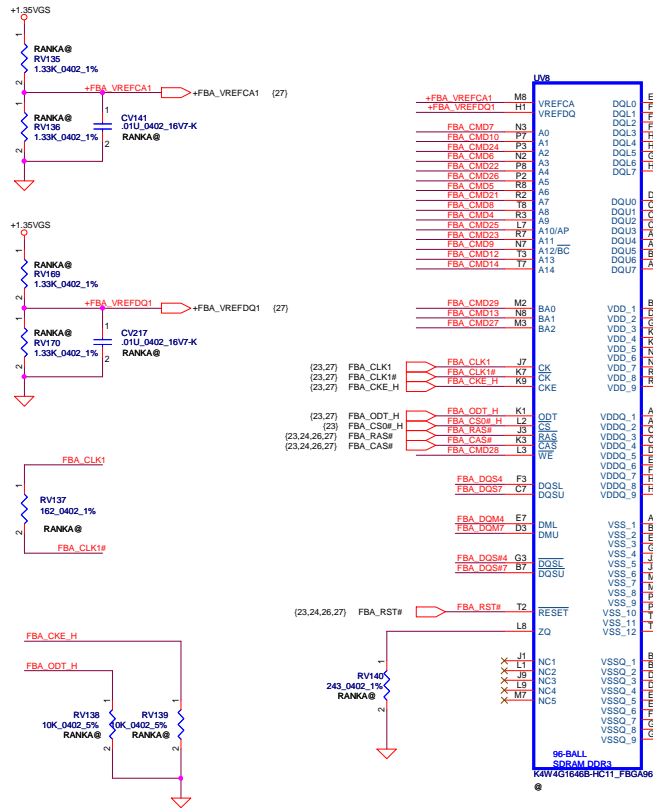
CMD mapping mod Mode E

	Rank0		Rank1	
Address	0...31	32..63	0...31	32..63
FBX_CMD0	ODT_L		ODT_L	
FBX_CMD1			CS1#_L	
FBX_CMD2	CS0#_L			
FBX_CMD3	CKE_L		CKE_L	
FBX_CMD4	A9	A9	A11	A11
FBX_CMD5	A6	A6	A7	A7
FBX_CMD6	A3	A3	BA1	BA1
FBX_CMD7	A0	A0	A12	A12
FBX_CMD8	A8	A8	A8	A8
FBX_CMD9	A12	A12	A0	A0
FBX_CMD10	A1	A1	A2	A2
FBX_CMD11	RAS#	RAS#	RAS#	RAS#
FBX_CMD12	A13	A13	A14	A14
FBX_CMD13	BA1	BA1	A3	A3
FBX_CMD14	A14	A14	A13	A13
FBX_CMD15	CAS#	CAS#	CAS#	CAS#
FBX_CMD16		ODT_H		ODT_H
FBX_CMD17			CS1#_H	
FBX_CMD18		CS0#_H		
FBX_CMD19		CKE_H		CKE_H
FBX_CMD20	RST	RST	RST	RST
FBX_CMD21	A7	A7	A6	A6
FBX_CMD22	A4	A4	A5	A5
FBX_CMD23	A11	A11	A9	A9
FBX_CMD24	A2	A2	A1	A1
FBX_CMD25	A10	A10	WE#	WE#
FBX_CMD26	A5	A5	A4	A4
FBX_CMD27	BA2	BA2		
FBX_CMD28	WE#	WE#	A10	A10
FBX_CMD29	BA0	BA0	BA0	BA0
FBX_CMD30			BA2	BA2

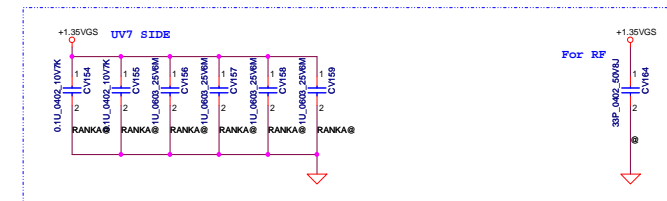


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2013/08/08		2013/08/05			
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Rev	Document Number	Rev			
C	ACLU9	0.2			
Date	Monday, December 23, 2013	Sheet	24	of	59

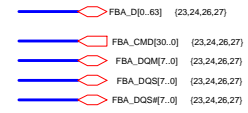
at least 16 mils width(optimal)
20 mils spacing to other signals/planes



For RF



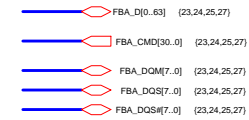
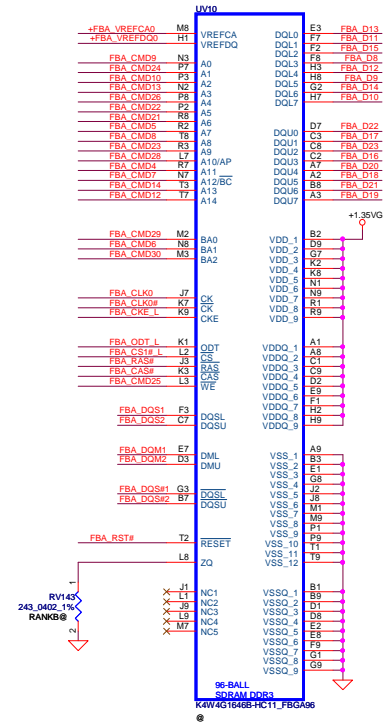
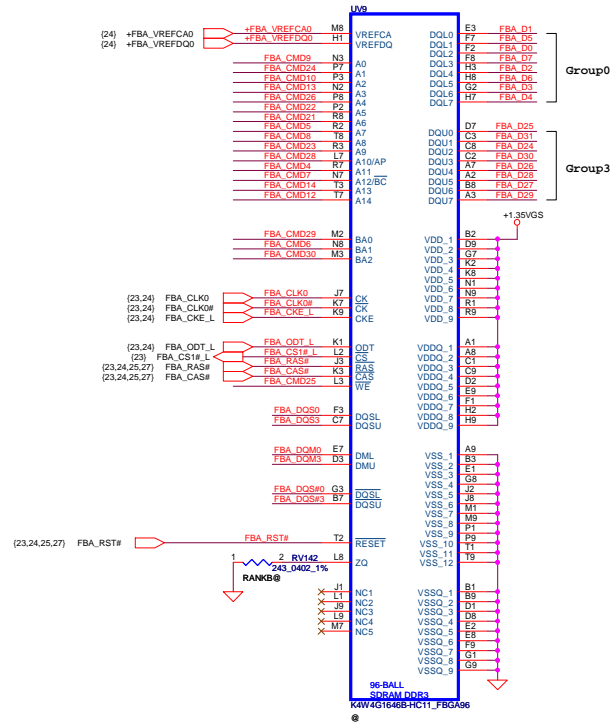
For RF



CMD mapping mod Mode E

Address	Rank0	Rank1
FbX_CMD0	0..31	32..63
FbX_CMD1	ODT_L	ODT_L
FbX_CMD2	CS0#_L	CS1#_L
FbX_CMD3	CKE_L	CKE_L
FbX_CMD4	A9	A11
FbX_CMD5	A6	A7
FbX_CMD6	A3	BA1
FbX_CMD7	A0	A12
FbX_CMD8	A8	A8
FbX_CMD9	A12	A0
FbX_CMD10	A1	A2
FbX_CMD11	RAS#	RAS#
FbX_CMD12	A13	A14
FbX_CMD13	BA1	A3
FbX_CMD14	A14	A13
FbX_CMD15	CAS#	CAS#
FbX_CMD16	ODT_H	ODT_H
FbX_CMD17		CS1#_H
FbX_CMD18	CS0#_H	
FbX_CMD19	CKE_H	CKE_H
FbX_CMD20	RST	RST
FbX_CMD21	A7	A6
FbX_CMD22	A4	A5
FbX_CMD23	A11	A9
FbX_CMD24	A2	A1
FbX_CMD25	A10	WE#
FbX_CMD26	A5	A4
FbX_CMD27	BA2	
FbX_CMD28	WE#	A10
FbX_CMD29	BA0	BA0
FbX_CMD30		BA2

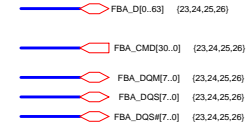
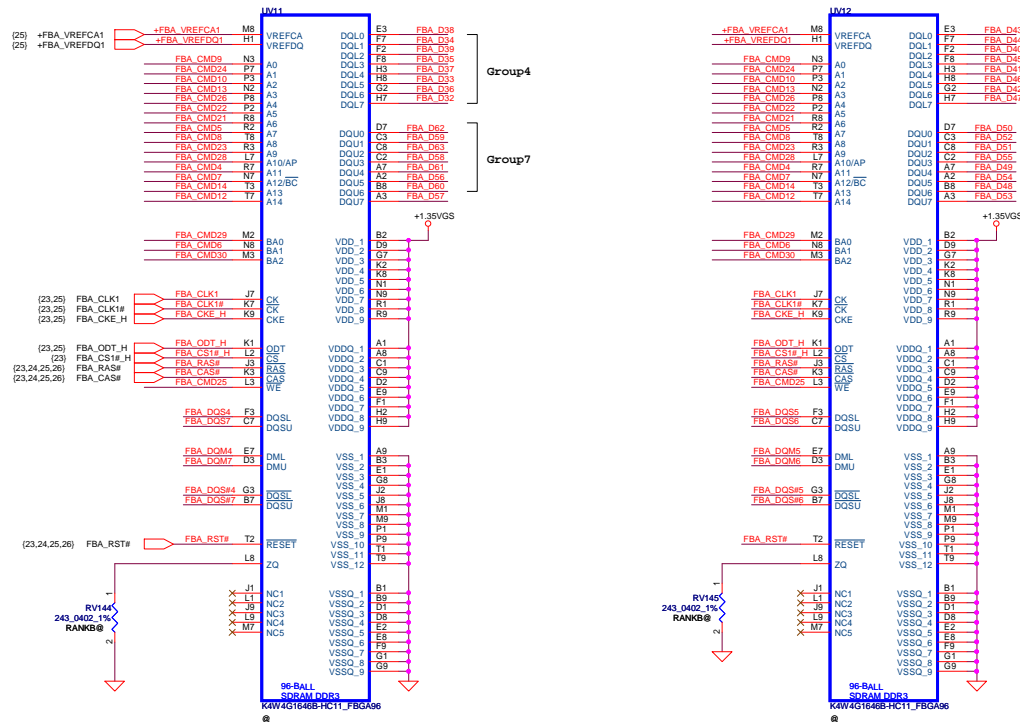
at least 16 mils width (optimal)
20 mils spacing to other signals / planes



CMD mapping mod Mode E

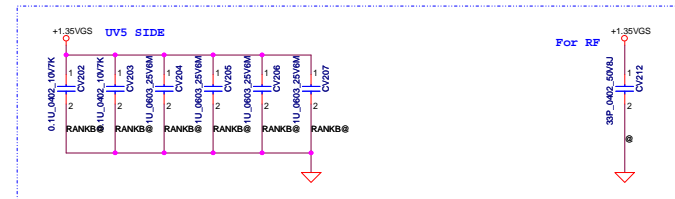
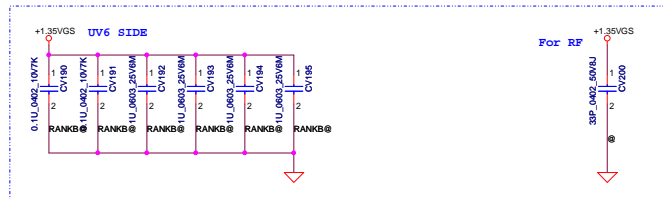
	Rank0	Rank1
Addresses	0..31 32..63	0..31 32..63
FBx_CMD0	ODT_L	ODT_L
FBx_CMD1		CS1#_L
FBx_CMD2	CS0#_L	
FBx_CMD3	CKE_L	CKE_L
FBx_CMD4	A9	A11
FBx_CMD5	A6	A7
FBx_CMD6	A3	BA1
FBx_CMD7	A0	A12
FBx_CMD8	A8	A8
FBx_CMD9	A12	A0
FBx_CMD10	A1	A2
FBx_CMD11	RAS#	RAS#
FBx_CMD12	A13	A14
FBx_CMD13	BA1	A3
FBx_CMD14	A14	A13
FBx_CMD15	CAS#	CAS#
FBx_CMD16	ODT_H	ODT_H
FBx_CMD17		CS1#_H
FBx_CMD18	CS0#_H	
FBx_CMD19	CKE_H	CKE_H
FBx_CMD20	RST	RST
FBx_CMD21	A7	A6
FBx_CMD22	A4	A5
FBx_CMD23	A11	A9
FBx_CMD24	A2	A1
FBx_CMD25	A10	WE#
FBx_CMD26	A5	A4
FBx_CMD27	BA2	BA2
FBx_CMD28	WE#	A10
FBx_CMD29	BA0	BA0
FBx_CMD30		BA2

at least 16 mils width(optimal)
20 mils spacing to other signals/planes

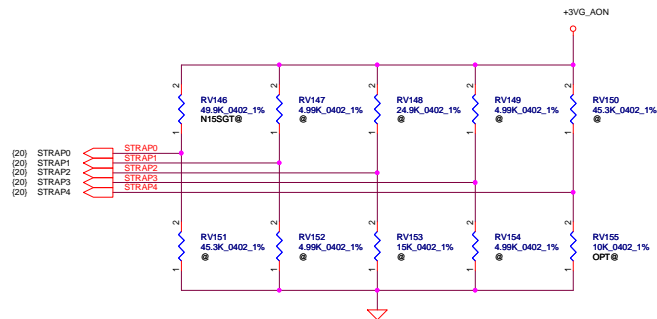


CMD mapping mod Mode E

Address	Rank0	Rank1
FBx_CMD0	0..31	32..63
FBx_CMD1	ODT_L	ODT_L
FBx_CMD2	CS0#_L	CS1#_L
FBx_CMD3	CKE_L	CKE_L
FBx_CMD4	A9	A11
FBx_CMD5	A6	A7
FBx_CMD6	A3	BA1
FBx_CMD7	A0	A12
FBx_CMD8	A8	A8
FBx_CMD9	A12	A0
FBx_CMD10	A1	A2
FBx_CMD11	RAS#	RAS#
FBx_CMD12	A13	A14
FBx_CMD13	BA1	A3
FBx_CMD14	A14	A13
FBx_CMD15	CAS#	CAS#
FBx_CMD16	ODT_H	ODT_H
FBx_CMD17		CS1#_H
FBx_CMD18	CS0#_H	
FBx_CMD19	CKE_H	CKE_H
FBx_CMD20	RST	RST
FBx_CMD21	A7	A6
FBx_CMD22	A4	A5
FBx_CMD23	A11	A9
FBx_CMD24	A2	A1
FBx_CMD25	A10	WE#
FBx_CMD26	A5	A4
FBx_CMD27	BA2	BA2
FBx_CMD28	WE#	A10
FBx_CMD29	BA0	BA0
FBx_CMD30		BA2



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Rev C				Document Number	
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Physical Strapping pin	Power Rail	Logical Strapping Bit3	Logical Strapping Bit2	Logical Strapping Bit1	Logical Strapping Bit0
ROM_SCLK	+3VGS	SOR3_EXPOSED	SOR2_EXPOSED	SOR1_EXPOSED	SOR0_EXPOSED
ROM_SI	+3VGS	RAM_CFG[3]	RAM_CFG[2]	RAM_CFG[1]	RAM_CFG[0]
ROM_SO	+3VGS	DEVID_SEL	PCIE_CFG	SMB_ALT_ADDR	VGA_DEVICE
STRAP0	+3VGS	Reserved(keep pull-up and pull-down footprint and stuff 50Kohm pull-up)			
STRAP1	+3VGS	Reserved(keep pull-up and pull-down footprint and not stuff by default)			
STRAP2	+3VGS				
STRAP3	+3VGS				
STRAP4	+3VGS				

Resistor Values	Pull-up to +3VGS	Pull-down to Gnd
4.99K SD03445918J	1000	0000
10K	1001	0001
15K	1010	0010
20K	1011	0011
24.9K SD03445282J	1100	0100
30.1K SD03440128J	1101	0101
34.8K SD03434828J	1110	0110
45.3K SD03445328J	1111	0111

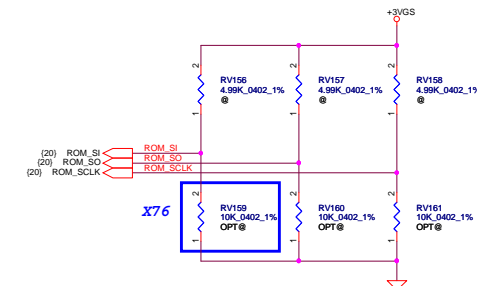
DEVID_SEL	
0	(Default)
1	

PCIE_CFG	
0	(Default)
1	

SMBUS_ALT_ADDR	
0	0x9E (Default)
1	0x9C (Multi-GPU usage)

VGA_DEVICE	
0	3D Device (Class Code 302h)
1	VGA Device (Default)

Physical Strapping pin	Power Rail	Strap Mapping
ROM_SCLK	+3VGS	SMB_ALT_ADDR
ROM_SI	+3VGS	SUB_VENDOR
ROM_SO	+3VGS	VGA_DEVICE
STRAP0	+3VGS	RAM_CFG[0]
STRAP1	+3VGS	RAM_CFG[1]
STRAP2	+3VGS	RAM_CFG[2]
STRAP3	+3VGS	RAM_CFG[3]
STRAP4	+3VGS	PCIE_MAX_SPEED




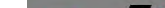
X76										
GPU	FB Memory (DDR3)		ROM_SI	ROM_SO	ROM_SCLK	STRAP0	STRAP1	STRAP2	STRAP3	STRAP4
N15S-GT	Hynix 900MHz	H5TC4G63AFR-11C	0x3	PD 4.99K	PD 4.99K	PU 49.9K	Un-stuff	Un-stuff	Un-stuff	Un-stuff
		256M x 16	PD 20K							
	Micron 900MHz	MT41J256M16HA-093G:E	0x4							
		256M x 16	PD 24.9K							
	Samsung 900MHz	K4W4G1646D-BC1A	0x5							
		256M x 16	PD 30.1K							


GPU	FB Memory (DDR3)		STRAP3	STRAP2	STRAP1	STRAP0	STRAP4	ROM_SI	ROM_SO	ROM_SCLK
N15V-QM	Hynix 900MHz	H5TC4G63AFR-11C	PD 10K	PU 10K	PD 10K	PD 10K	PD 10K	PD 10K	PD 10K	PD 10K
		256M x 160x4								
	Micron 900MHz	MT41J256M16HA-093G:E	PU 10K	PU 10K	PD 10K	PU 10K				
		256M x 160xD								
	Hynix 900MHz	H5TC2G63FFR-11C	PU 10K	PU 10K	PD 10K	PD 10K				
		128M x 160xC								
	Micron 900MHz	MT41J128M16JT-093G	PD 10K	PD 10K	PD 10K	PU 10K				
		128M x 160x1								
Samsung 900MHz	K4W2G1646Q-BC1A	PU 10K	PU 10K	PU 10K	PD 10K					
	128M x 160xE									

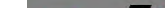
VRAM	X76	VRAM P/N
Samsung	X7604112001	SA00005SH40
Micron	X7604012002	SA00005M120
Hynix	X7604012001	SA00005VS00

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Rev	C	Document Number	ACLU9		Rev 0.2
Date	Monday, December 23, 2013	Sheet	28	of	59

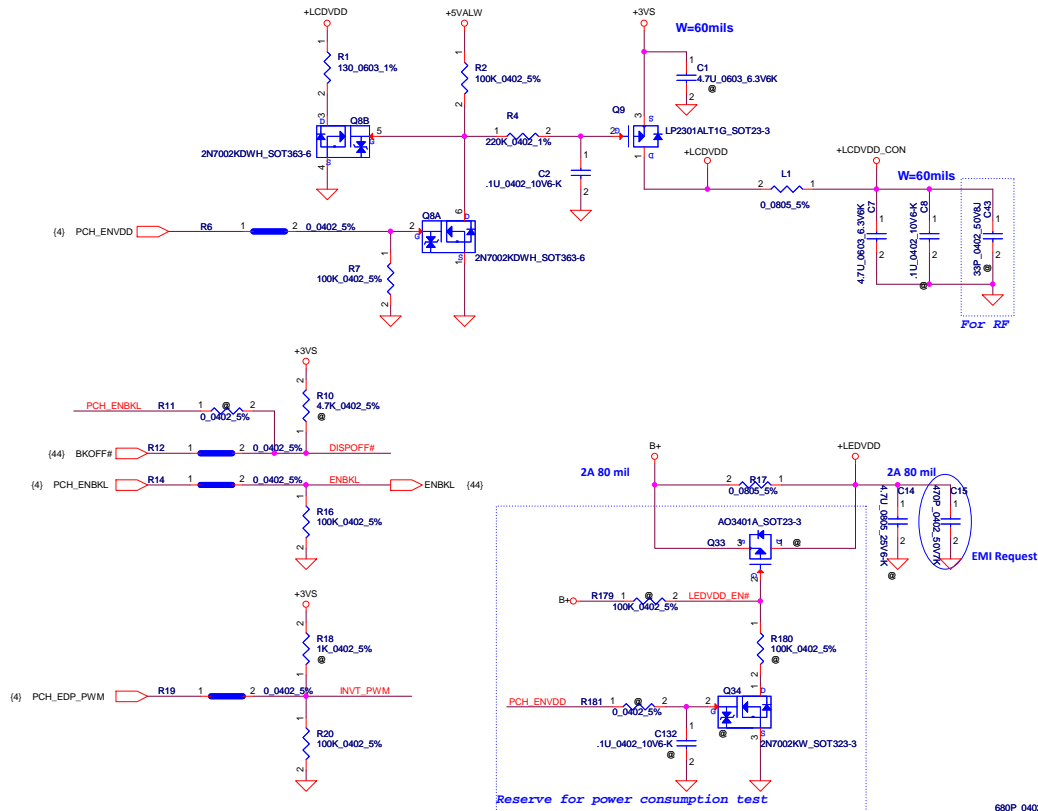
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Issued Date	2013/08/08	Deciphered Date	2013/08/05	Blank			
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				Custom	ACLU9	0.2	
Date:				Monday, December 23, 2013	Sheet	30 of 59	

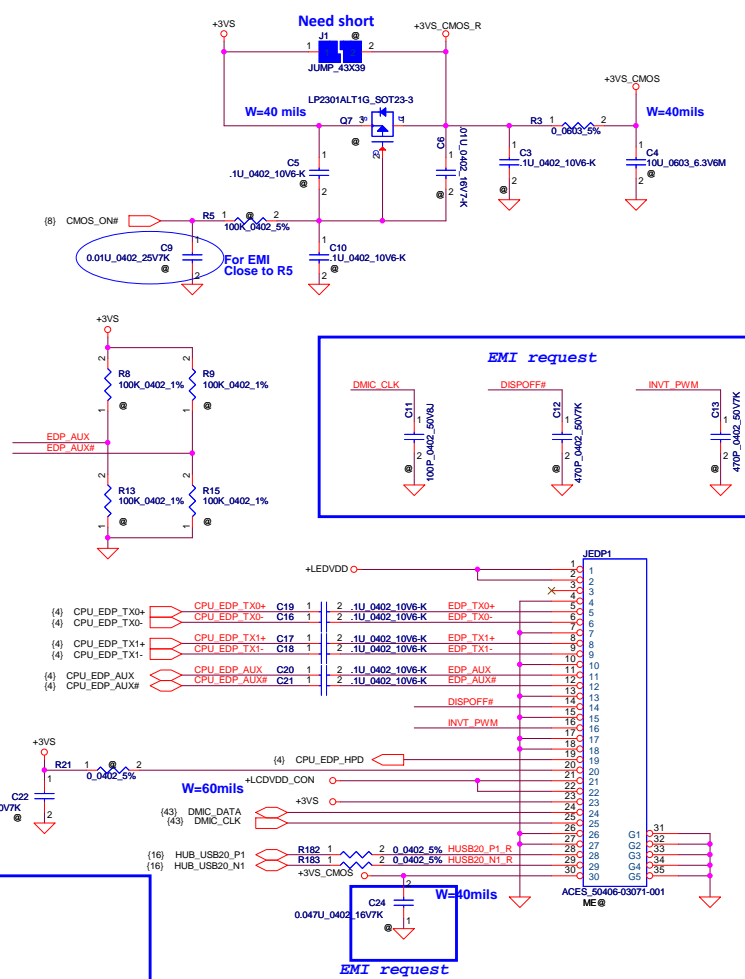
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				Custom		ACLU9		0.2	
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				Custom	ACLU9	0.2	
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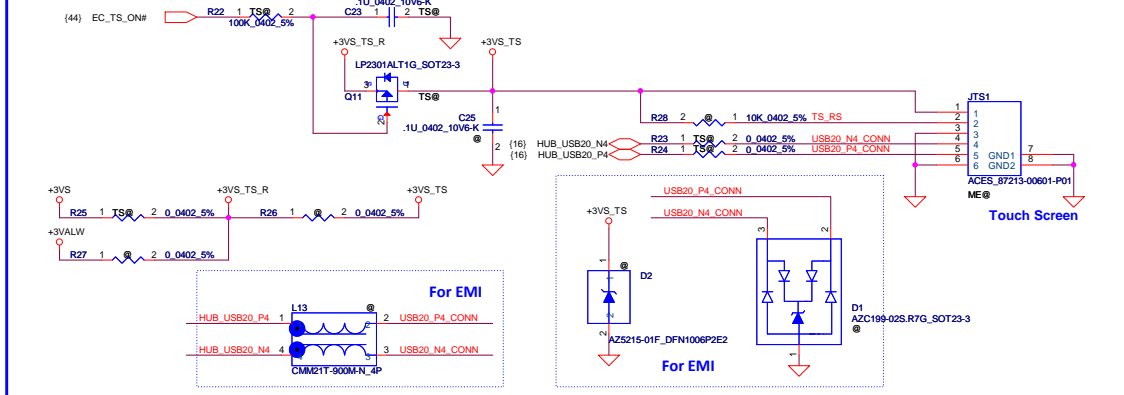
LCD POWER CIRCUIT



CMOS Camera



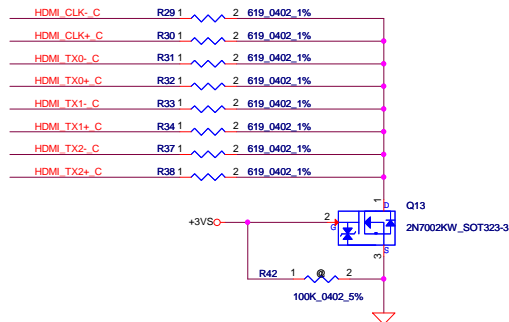
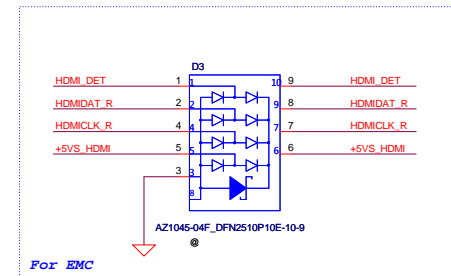
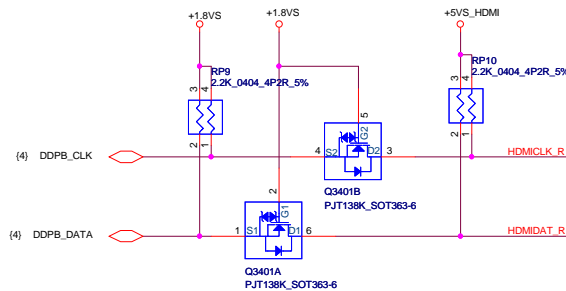
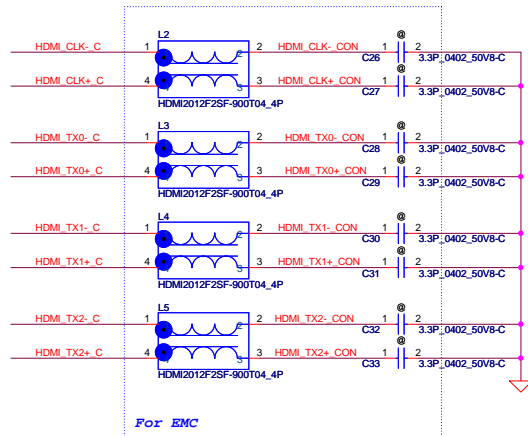
Touch Screen



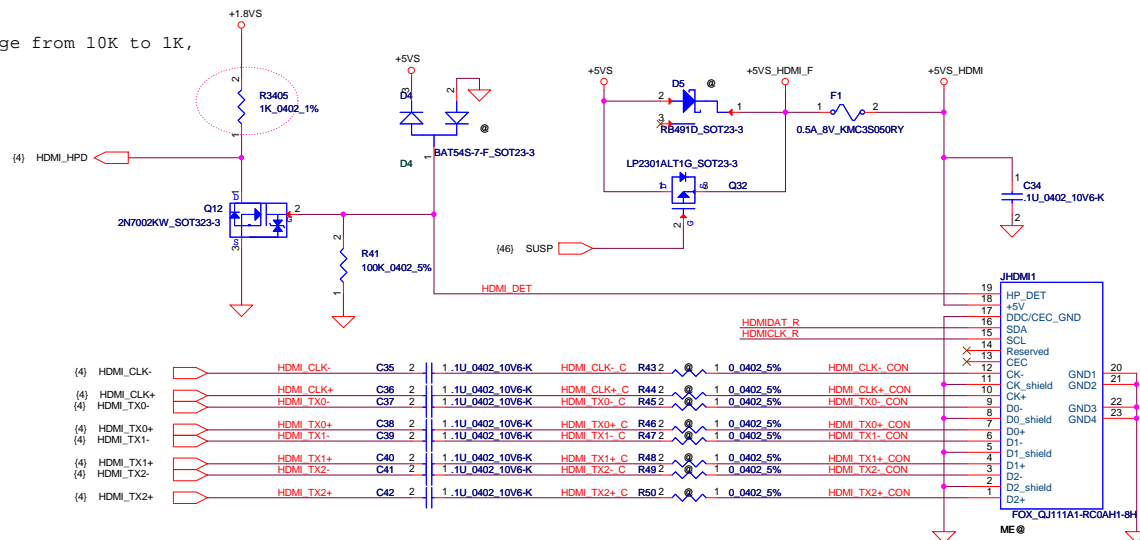
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Issued Date				Deciphered Date				eDP/CMOS/Touch screen		0.2	
2013/08/08				2013/08/05				ACLU9		Monday, December 23, 2013	
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								Date			



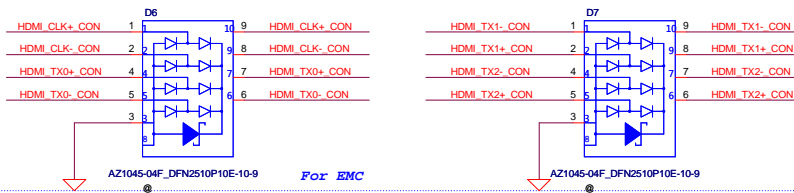
ACLU9



R4602 change from 10K to 1K, as Vienna



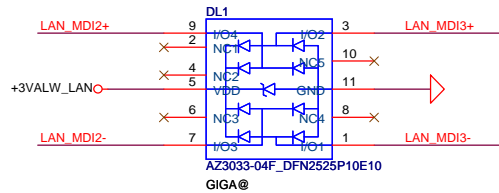
Close to JHDMI1



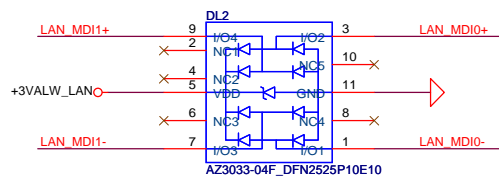
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Issued Date	2013/08/08	Deciphered Date	2013/08/05	Size	Document Number	Rev
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C									
B									
A									
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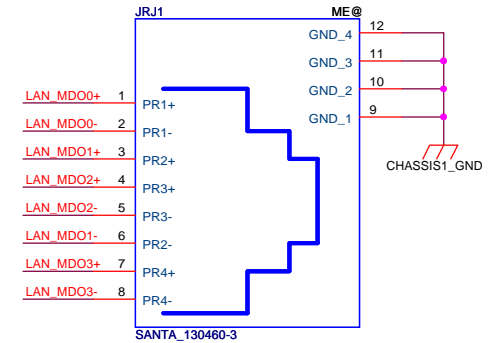
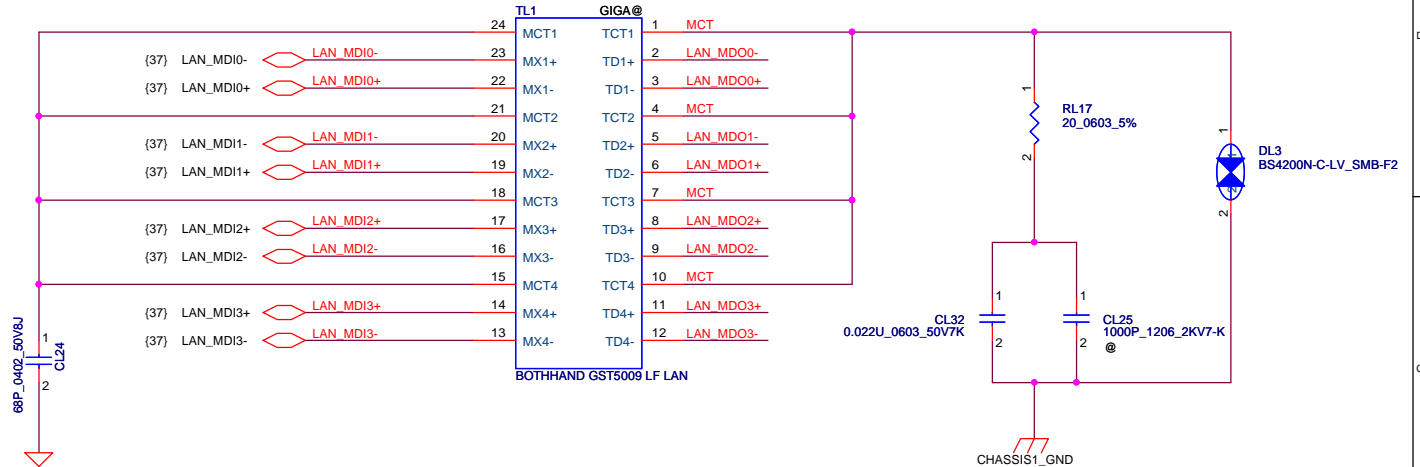
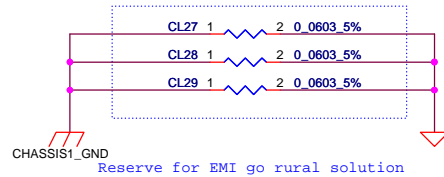
DL1/DL2
1'S PN:SC300003M00



Place Close to TL1



Place Close to TL2

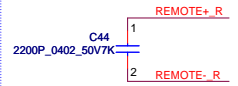


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				Rev	0.2

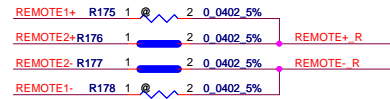
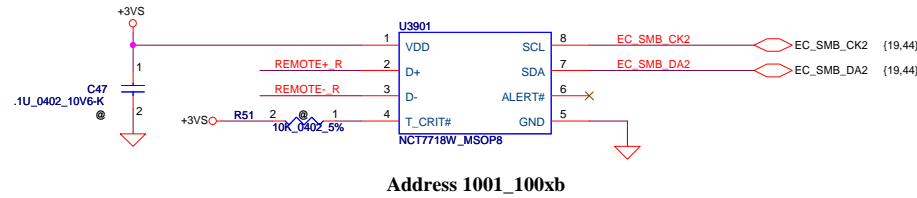


ACLJ9

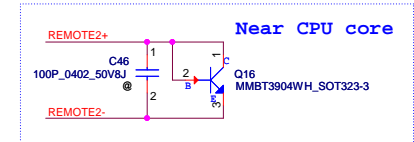
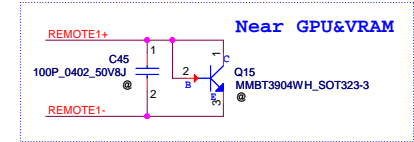
Close to U3901



SMSC thermal sensor placed near DIMM

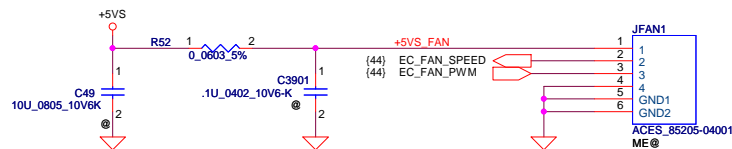


REMOTE+/-_R, REMOTE1+/-, REMOTE2+/-:
Trace width/space:10/10 mil
Trace length:<8"



Baytrail SOC use thermal sensor to read the thermal,
Baytrail don't has PECI signal

FAN Conn

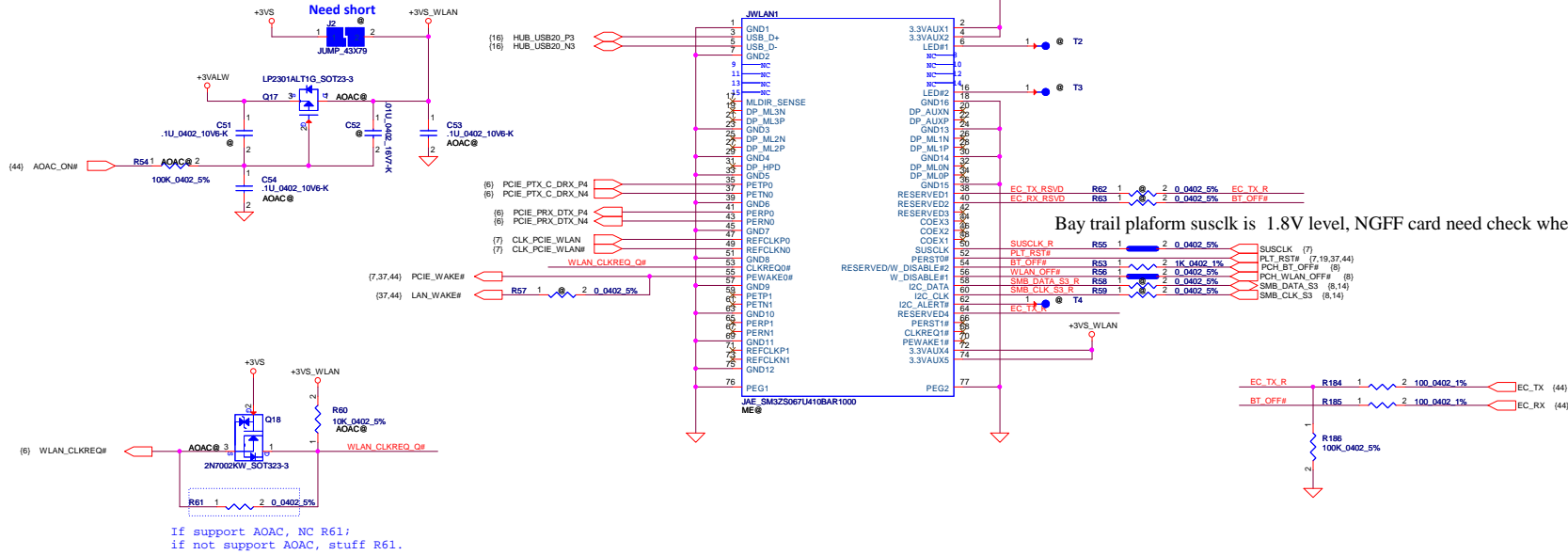


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				Sheet	39 of 59



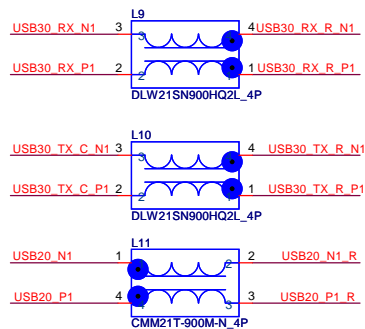
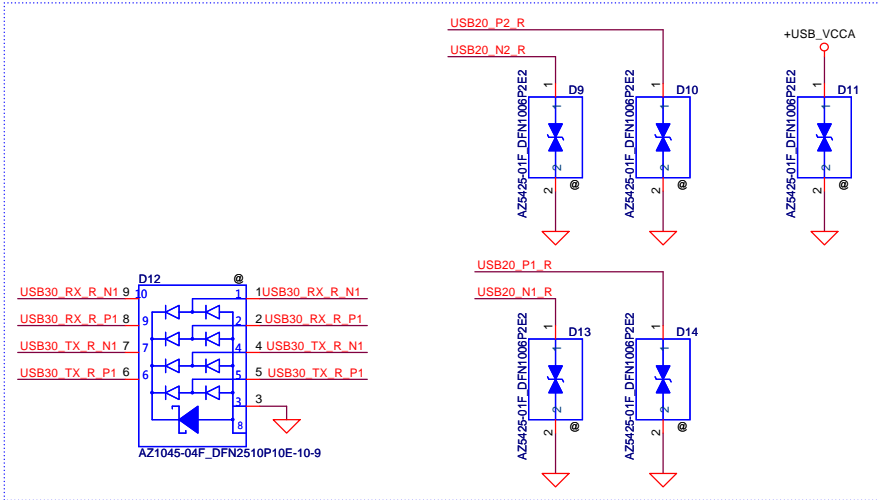
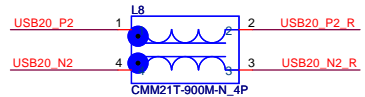
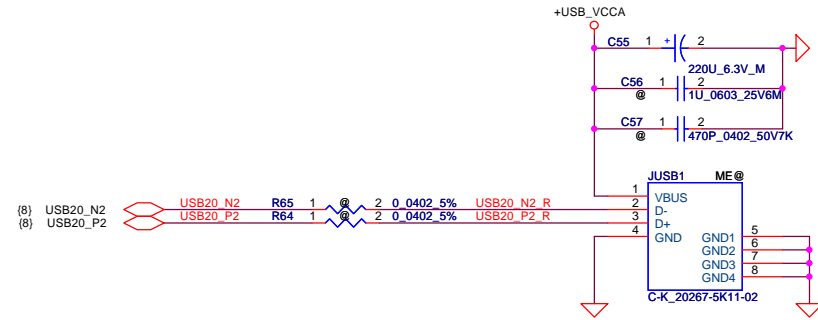
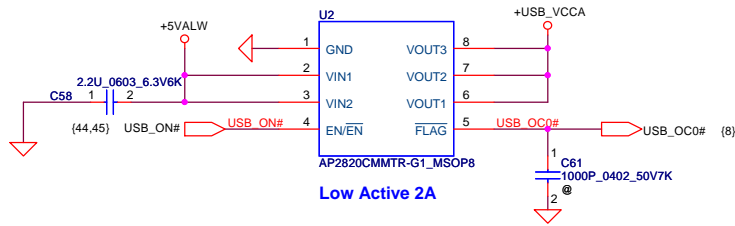
ACLU9

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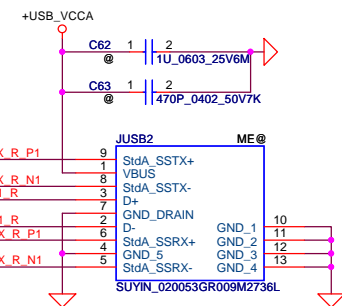
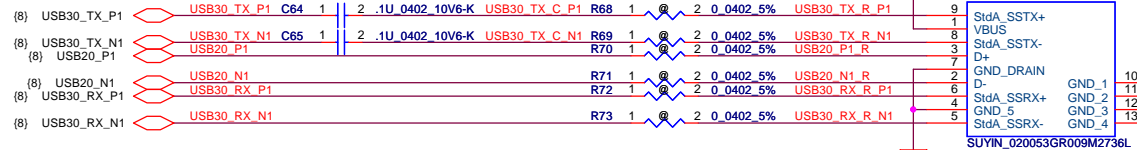



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				Date: Monday, December 23, 2013 Sheet 40 of 59	

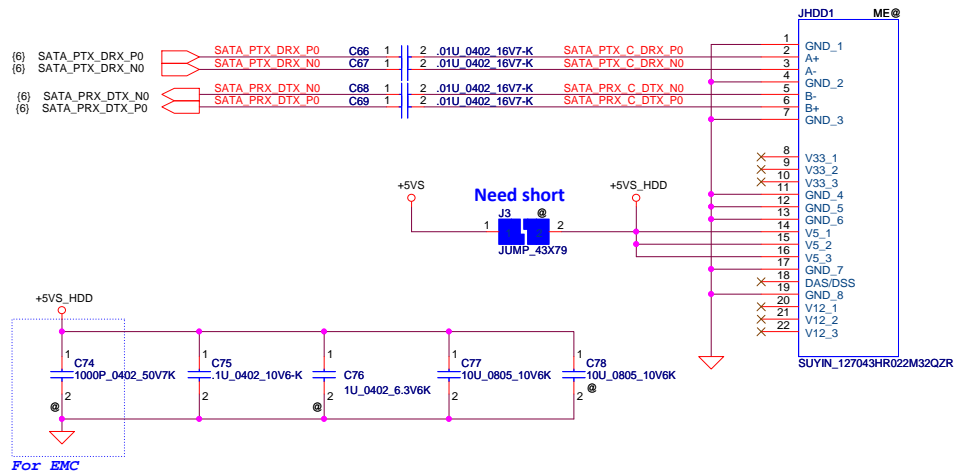
LEFT SIDE USB3.0 PORT X2



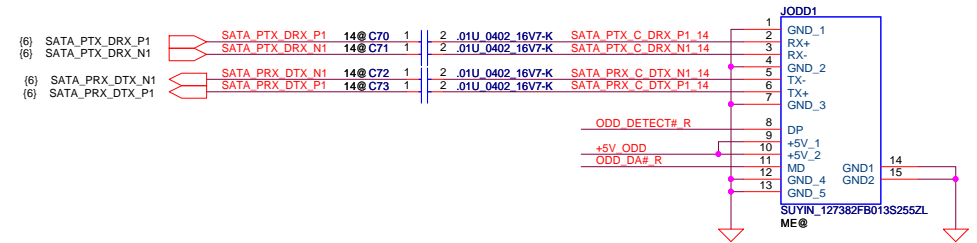
For EMC



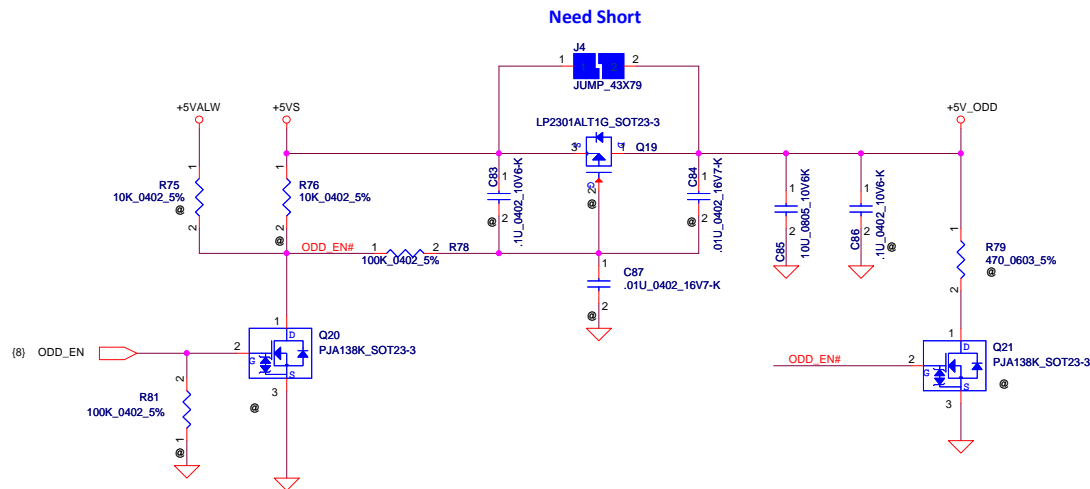
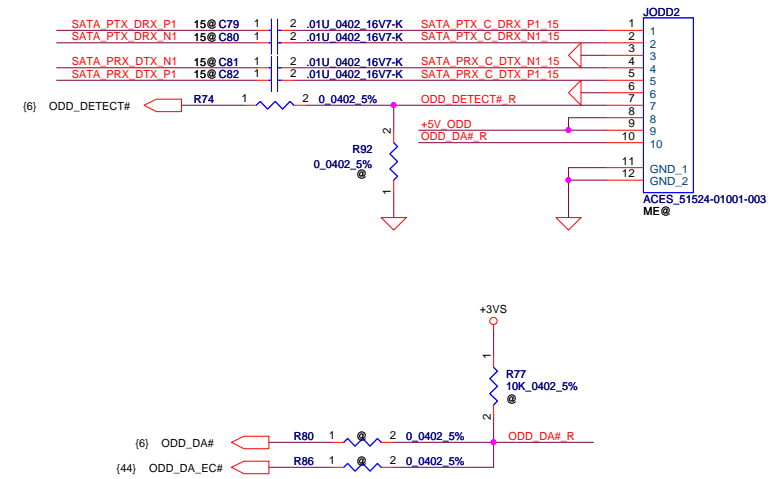
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Customer		ACLU9							
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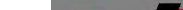
SATA HDD Conn.

FOR 14"
SATA ODD Conn.

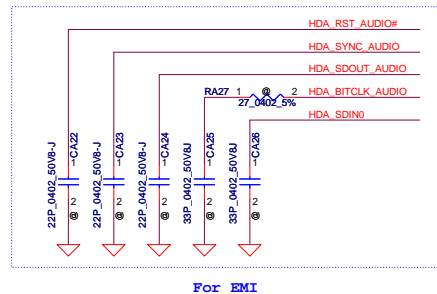
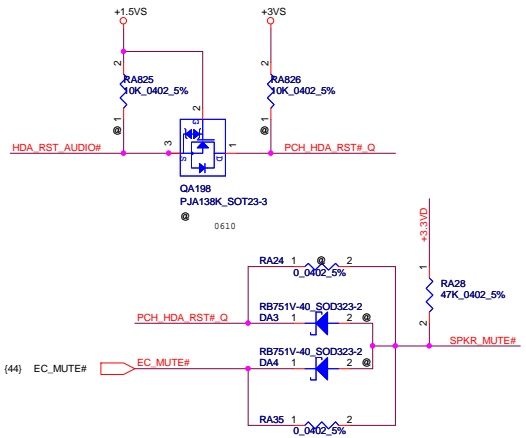
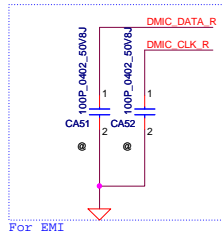
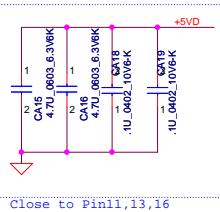
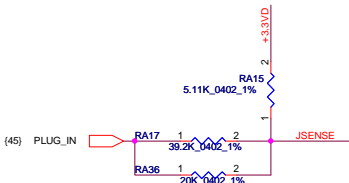
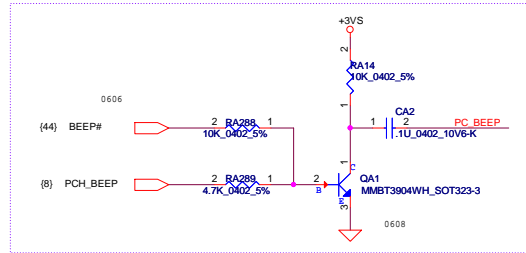


FOR 15"
SATA ODD FFC Conn

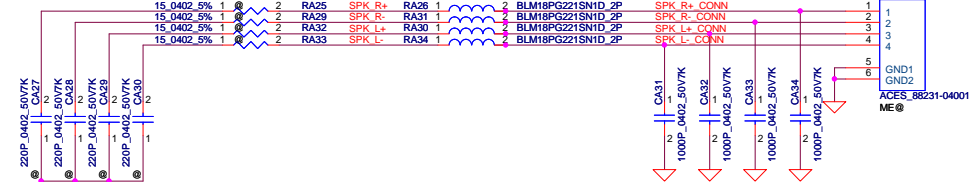



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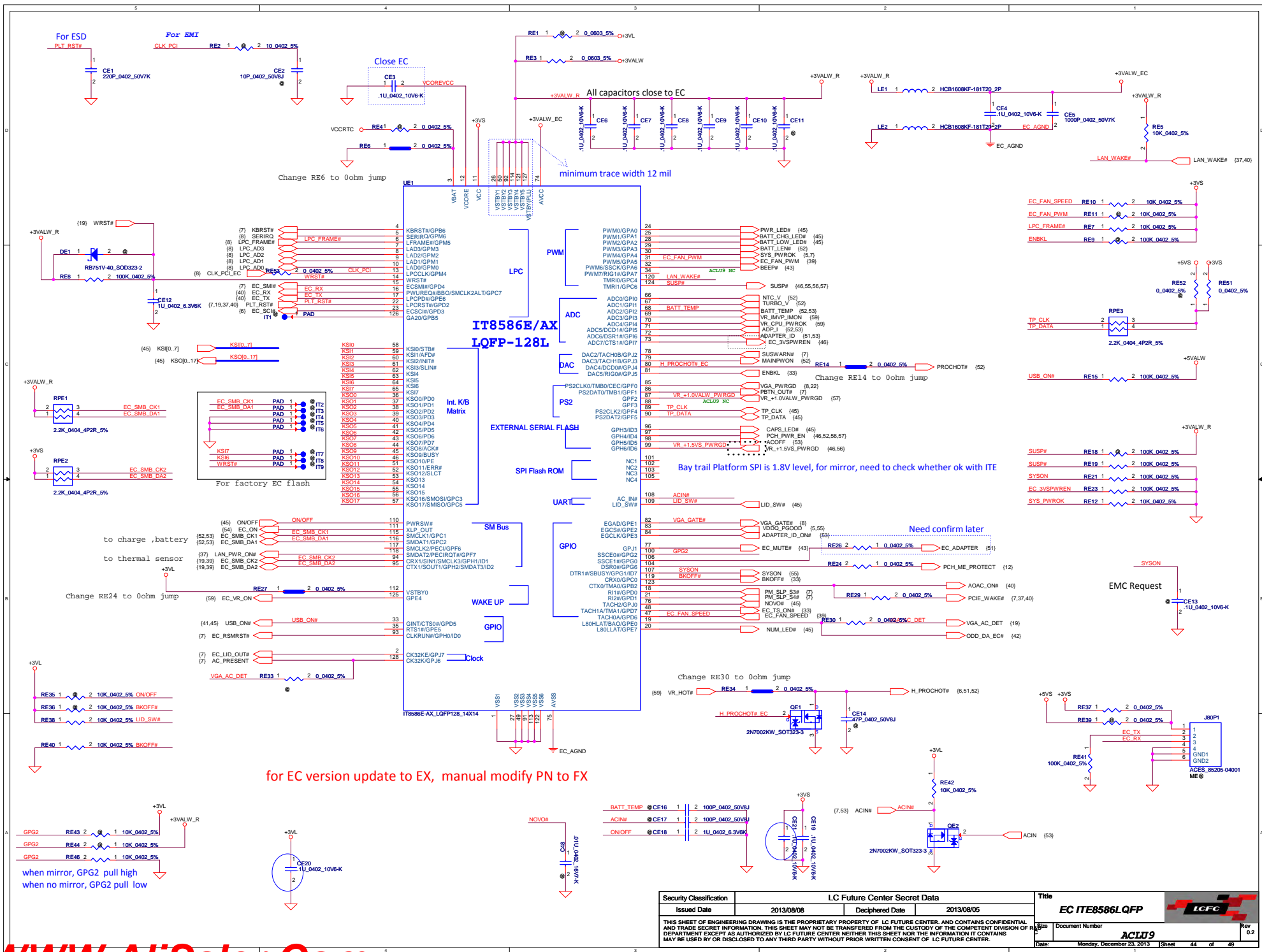
Same as Vienna



For EMI

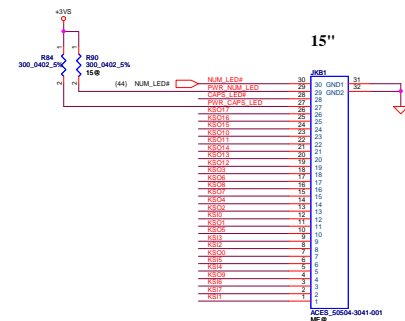
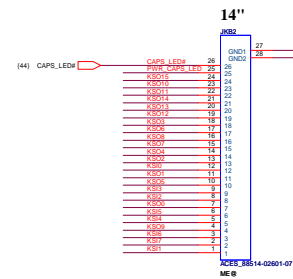
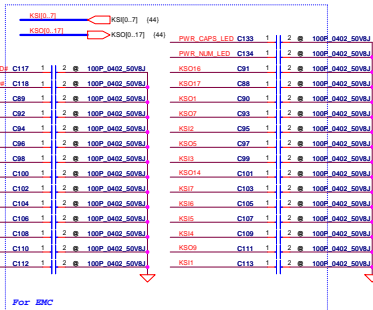


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Date		Monday, December 23, 2013		Sheet		43		of 59	

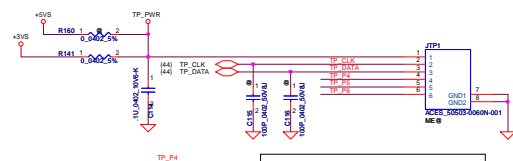


The schematic diagram illustrates the output stage of the 6502 microprocessor. It features a PMOS transistor (R82, 100K_0402_5%) and an NMOS transistor (R83, 100K_0402_5%) connected in a common-source configuration. The PMOS gate is connected to +3V_L and its source to ground. The NMOS gate is connected to +3V_L and its source to ground. The drains of both transistors are connected to the output node, which is labeled D15. The output node is connected to the input of a 6502 microprocessor (BAT54CW_S07323.3). The output of the 6502 is connected to the input of a 6502 microprocessor (BAT54CW_S07323.3). The output of the 6502 is connected to the input of a 6502 microprocessor (BAT54CW_S07323.3). The output of the 6502 is connected to the input of a 6502 microprocessor (BAT54CW_S07323.3).

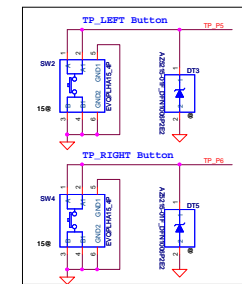
K/B Connector



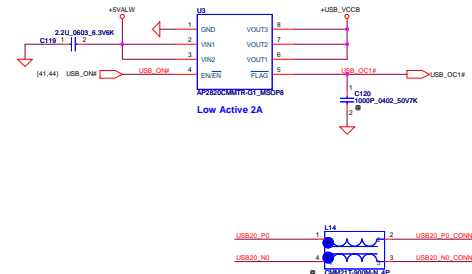
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HR_2_0317_14	K812_15		
HR_3_0316_14	K813_15		
HR_4_0309_14	K814_15		
HR_5_0314_14	K815_15		
HR_6_0315_14	K816_15		
HR_7_0300_14	K820_15		
HR_8_0312_14	K824_15		
HR_9_0313_14	K827_15		
HR_10_0305_14	K830_15		
HR_11_0301_14	K836_15		
HR_12_0302_14	K837_15		
HR_13_0302_14	K837a_15		
HR_14_0304_14	K831.1_15		
HR_15_0307_14	K831.2_15		
HR_16_0308_14	K831.1_14		
HR_17_0306_14	K830.1_15		
HR_18_0303_14	K830.15_15		
HR_19_0302_14	K834_15		
HR_20_0302_14	K835_15		
HR_21_0313_14	K838_PWB_15		
HR_22_0301_14	CASP_15ED_15		
HR_23_0310_14	VSD_15		
HR_24_0301_14	NOR_LED9_15		



For 14"		For 15"	
1	VDD	1	VDD
2	CLK	2	CLK
3	DAT	3	DAT
4	GND	4	GND
5	TP-L	5	TP-L
6	TP-R	6	TP-R



Right Side USB2.0 Port X 1 (USB/B)



[44] PWR_LED

LED1 1 2 140

R142 1 2 15K 0402 5%

LED1 1 2 150

LTV-1078S

LTV-1078S

74VHC125

74VHC125

5V

5V

0V

[44] BATT_LOW_LED

LED2 1 2 140

R143 1 2 15K 0402 5%

LED2 1 2 150

LTV-1078S

LTV-1078S

74VHC125

74VHC125

5V

5V

0V

[44] BATT_CHG_LED

LED3 1 2 140

R144 1 2 15K 0402 5%

LED3 1 2 150

LTV-1078S

LTV-1078S



74VHC125

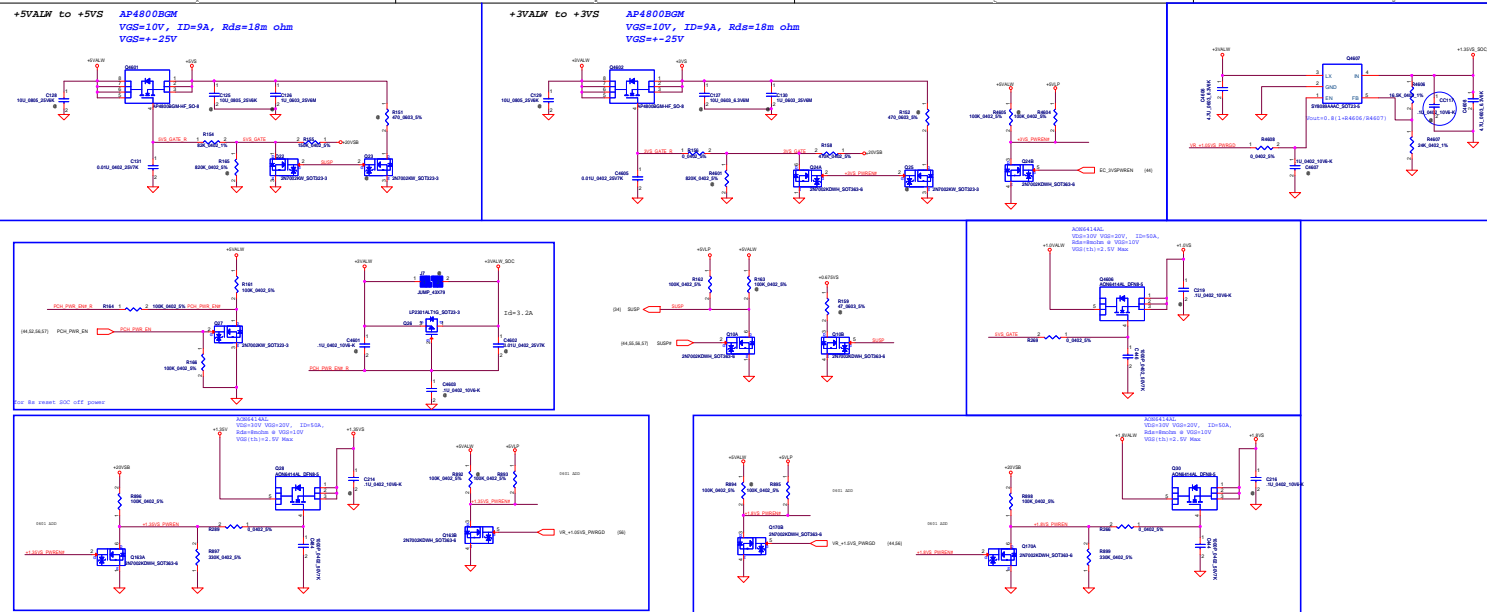
74VHC125

5V

5V

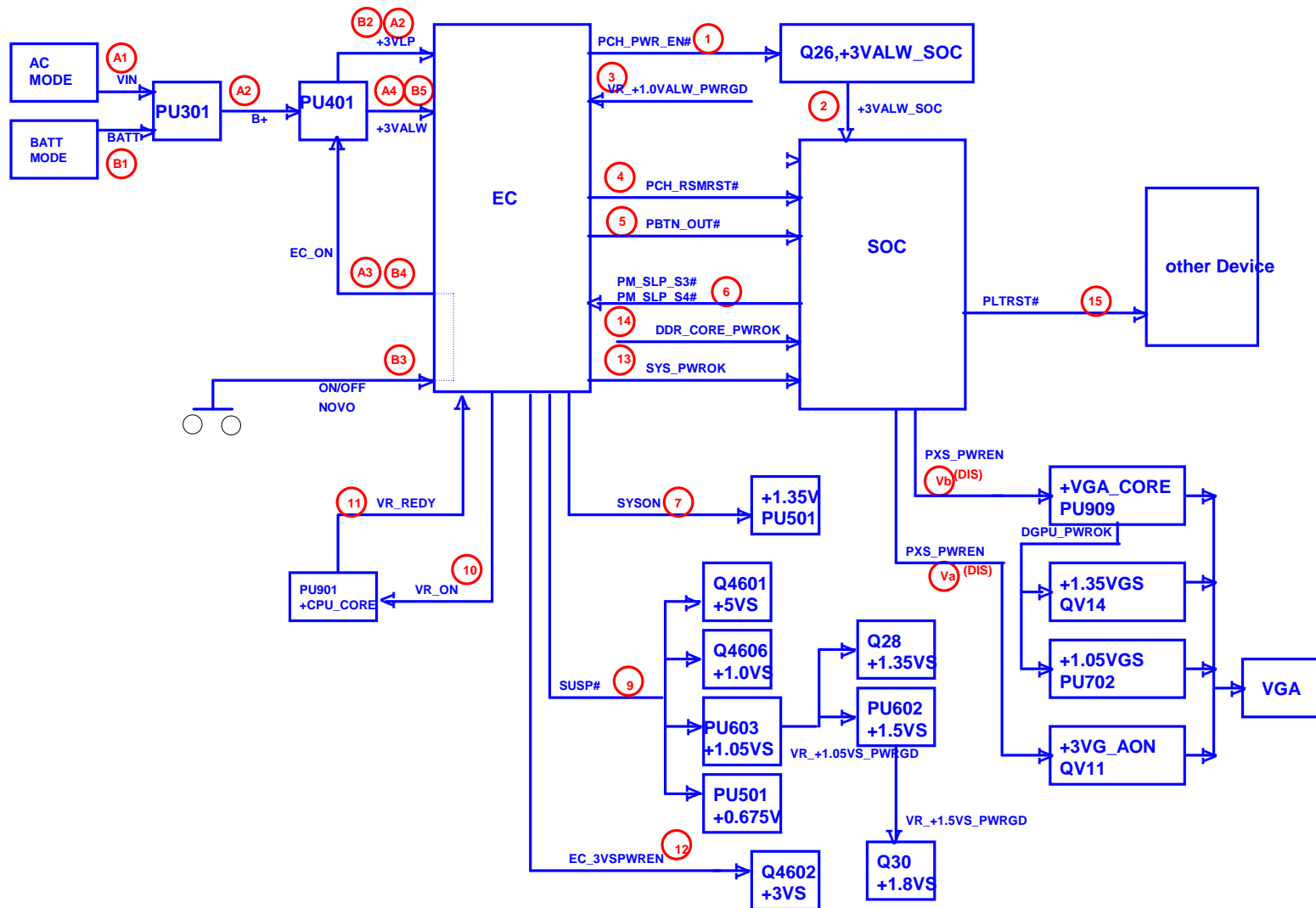
0V

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			KBD/PWR/AO/LED/TP Conn. 	Rev 02
<div style="text-align: right;"> JUNE 2013 MONTH DEPARTMENT YEAR DAY HOUR MINUTE SECOND </div>				



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Comp		Revised Date	

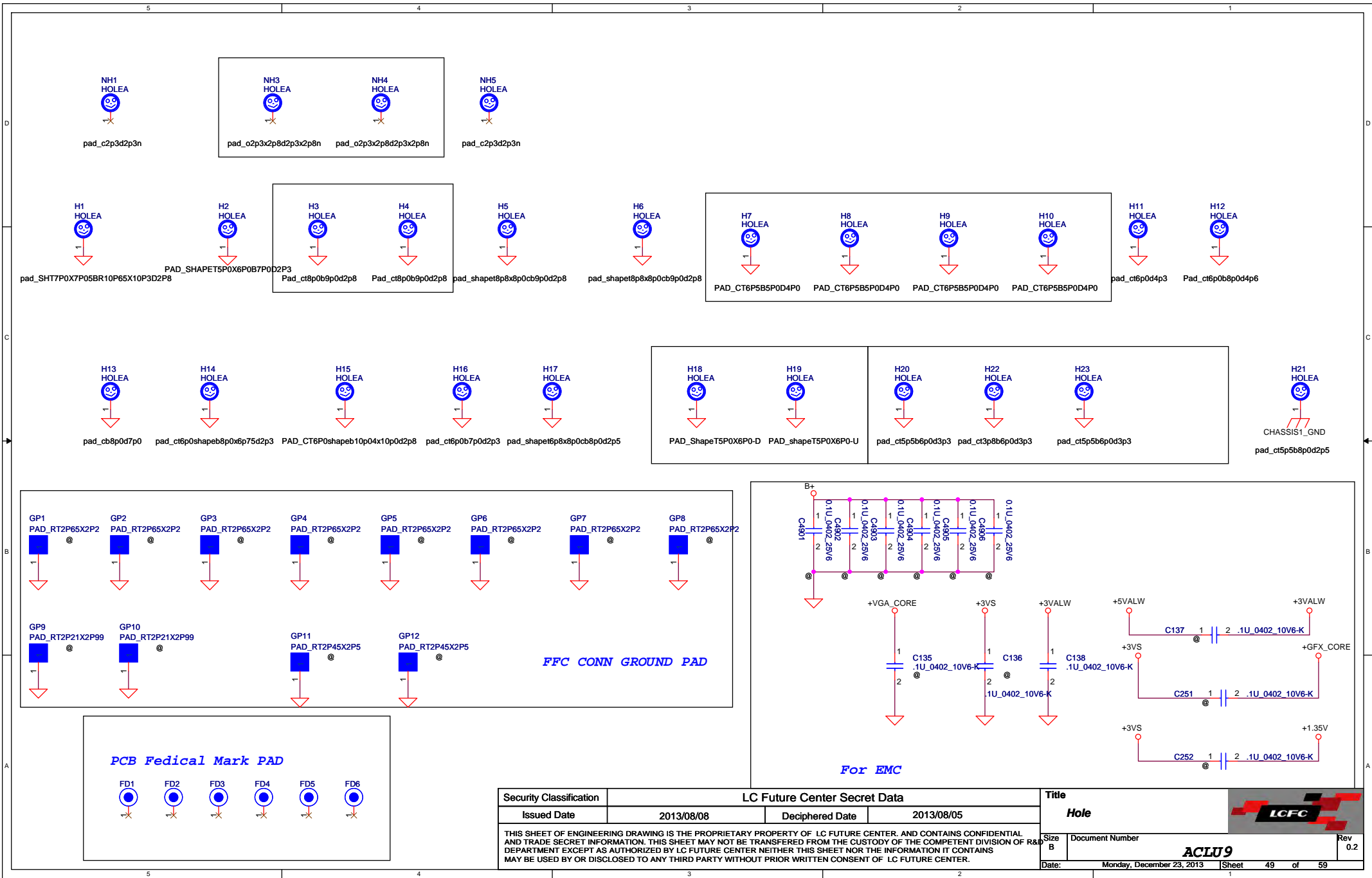


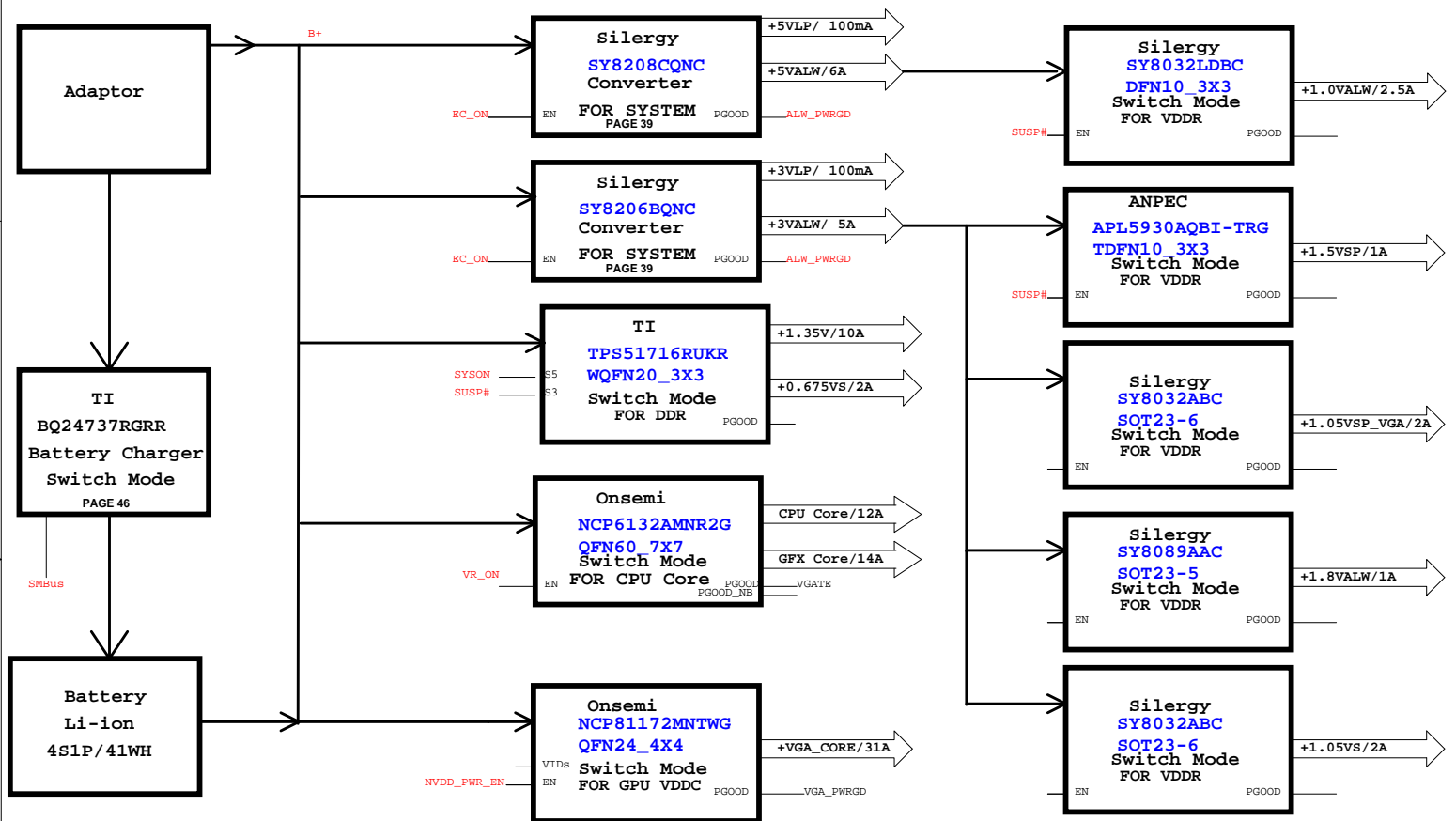


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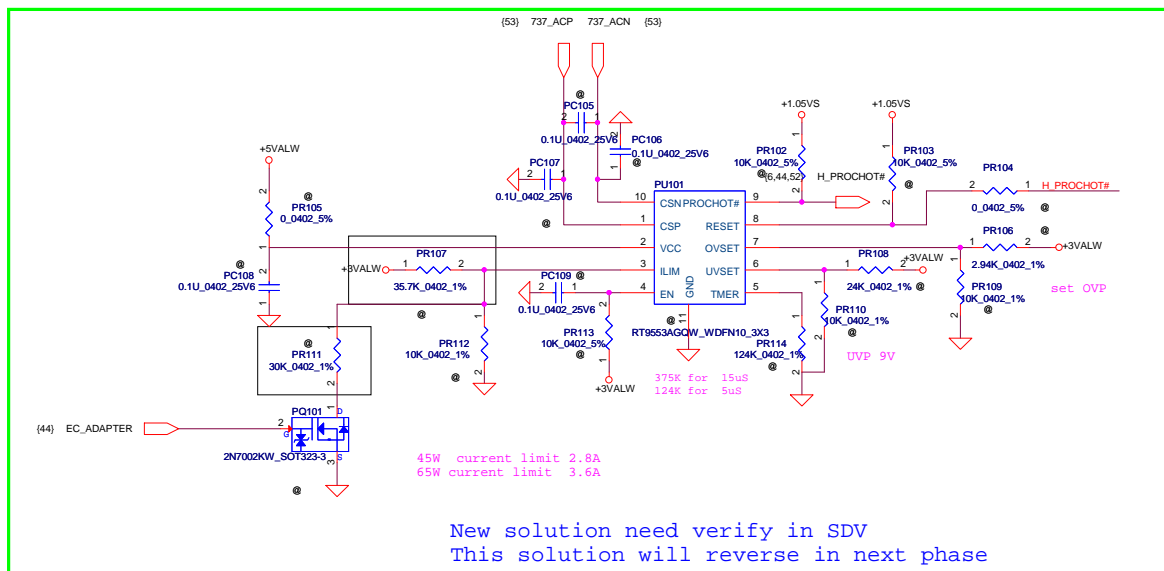
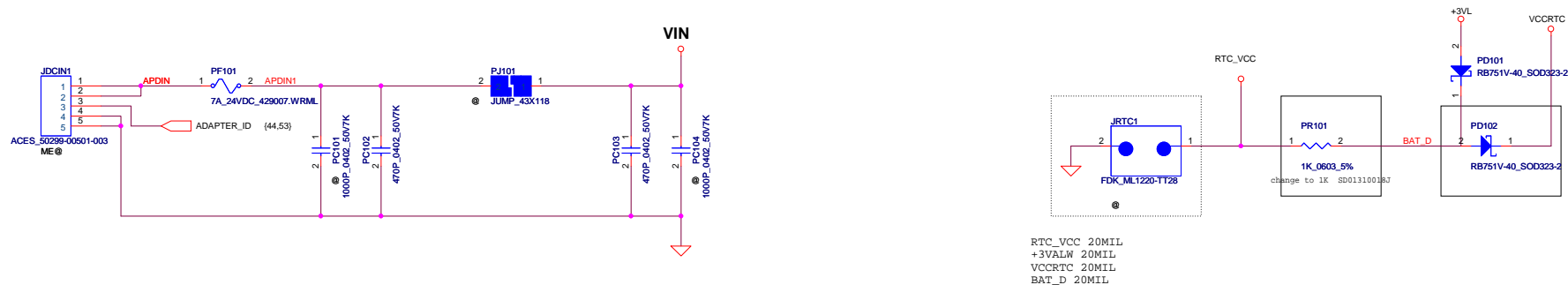
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Size	Document Number	Rev	0.2
Custom	ACU9		
Date:	Monday, December 23, 2013	Sheet	47 of 59







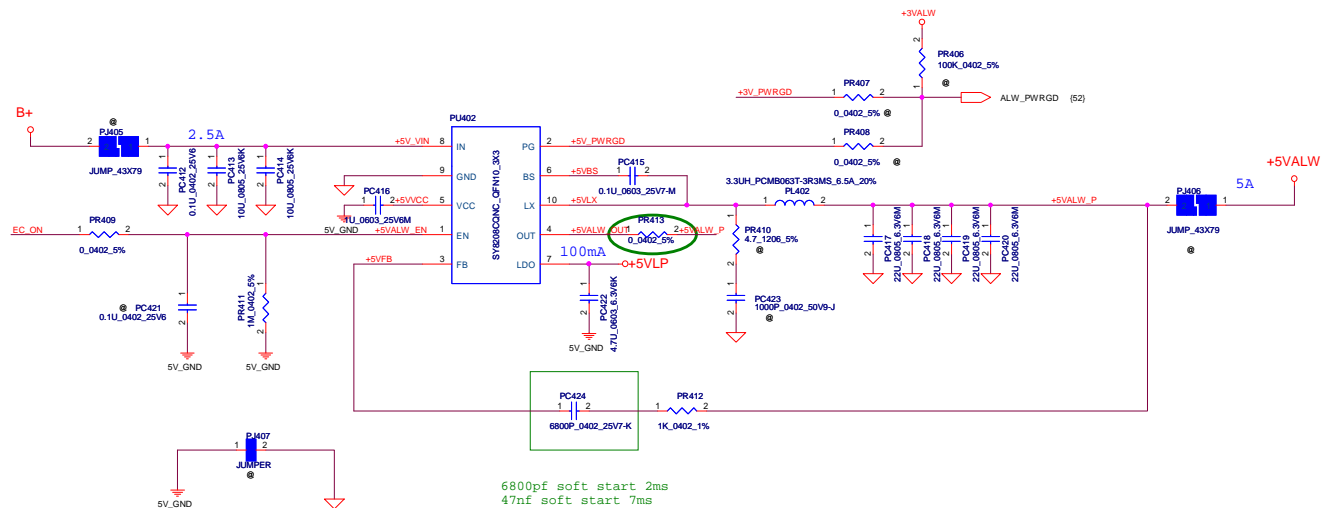
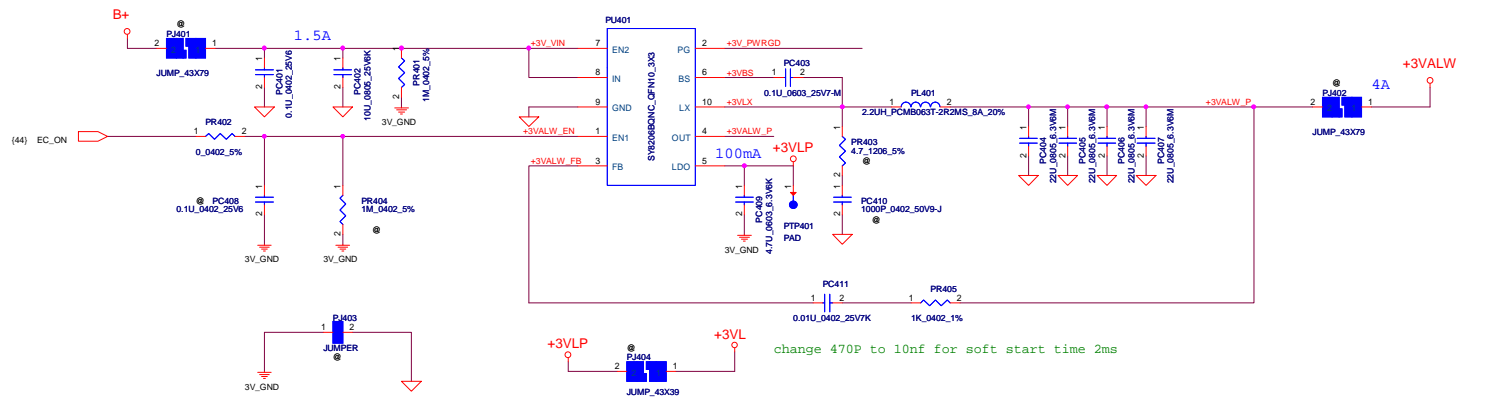
Security Classification	LC Future Center Secret Data			Title	
Issued Date	2013/08/08	Deciphered Date	2013/08/05	Power Diagram	
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				Date:	Monday, December 23, 2013	Sheet 51 of 59

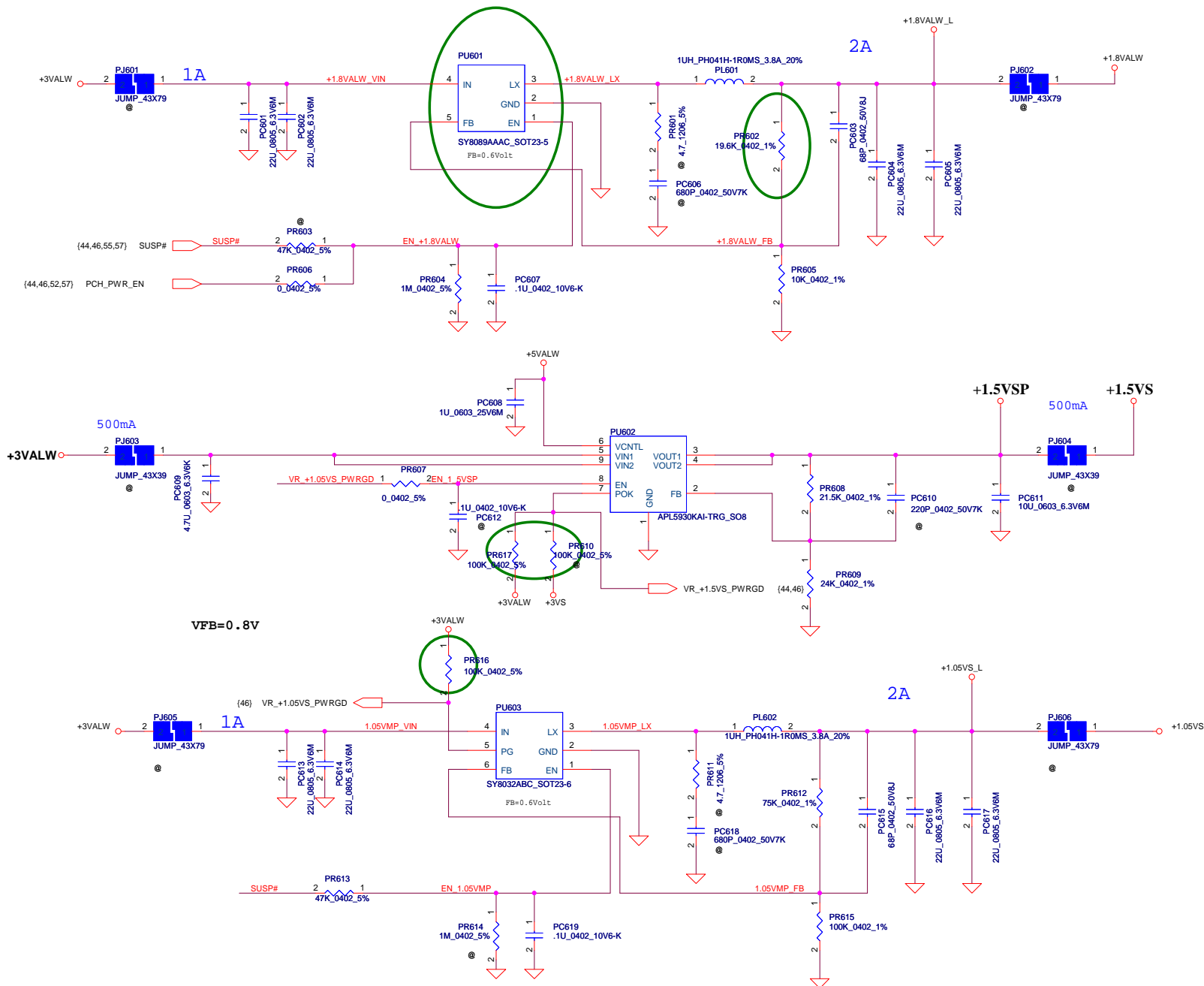






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		0.2	
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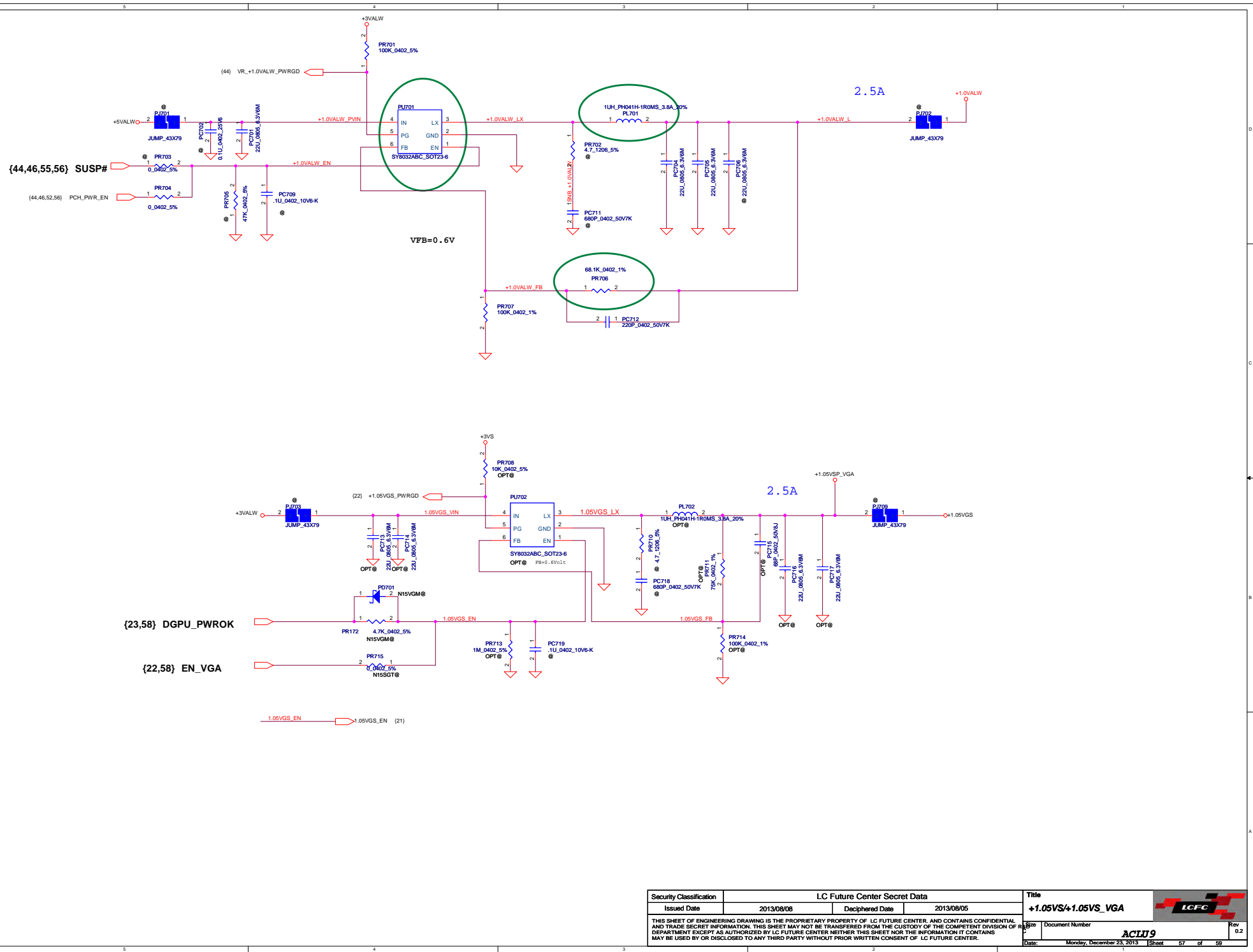
PWR_3VALW/5VALW		LCFC	
ACTU9			



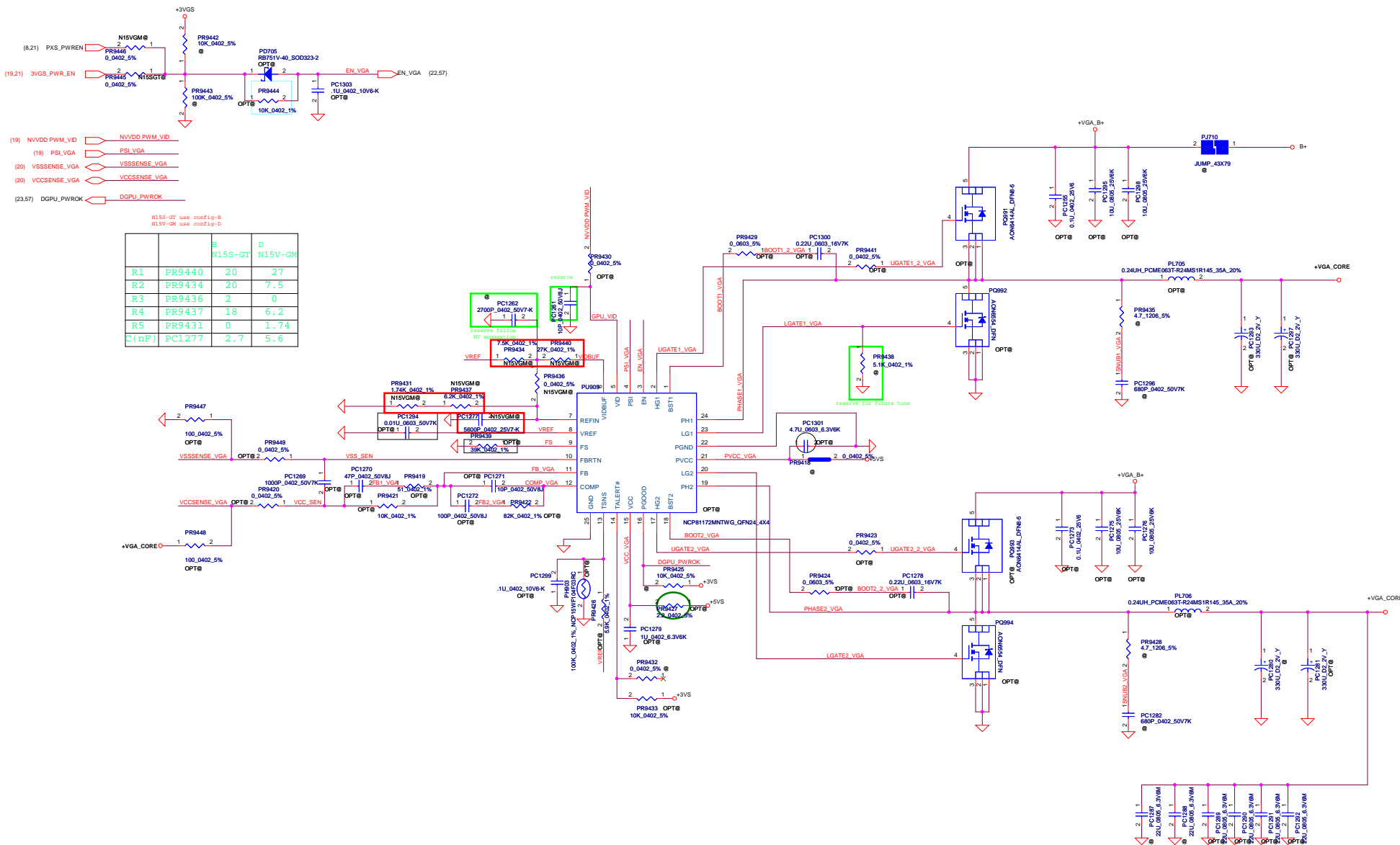
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Size	Document Number	ACLU9	
Custom		Rev 0.2	
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Date	Monday, December 23, 2013		Sheet	68 of 69	

