Compal Confidential

Model Name : ZIPS1 File Name : LA-A341P

BOM P/N:



Compal Confidential

Stella M/B Schematics Document

Intel Shark Bay ULT Processor with DDR3L

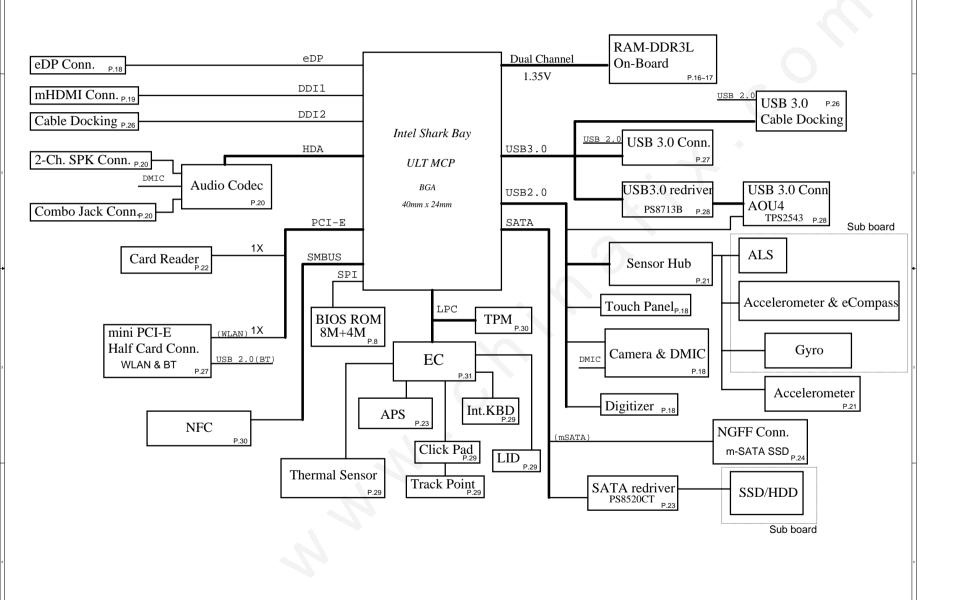
Rev. 1A_20130902A

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Date: Friday, March 07, 2014 Sheet 1 of 42		DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS INC.				Custom	Document Number 4019P2				tev C

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Model Name : ST-Note File Name : Block Diagram





Security Classification

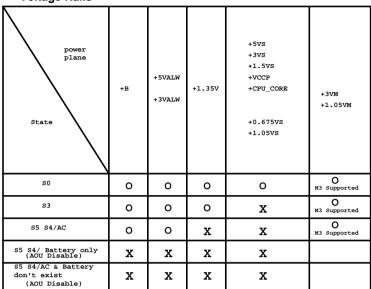
Compal Secret Data

Deciphered Date

Compal Electronics, Inc.

SCHEMATIC, MB AA341

Voltage Rails



EC SM Bus1 address

Device	Address	HEX
Smart Battery	0001 011X b	16H
Charger	0001 011X b	12H

EC SM Bus2 address

Device	Address	HEX
Thermal Sensor Fintek F75303M	1001_101xb	9AH
Synaptics Inter Touch Click Pad	0010_110xb	2CH

PCH SM Bus address

Device	Address	HEX
Security Rom	1010 100xb	A8H

STATE	SLP_S1#	SLP_S3#	SLP_S4#	SLP_S5#	+VALW	+V	+VS	Clock
Full ON	HIGH	HIGH	HIGH	HIGH	ON	ON	ON	ON
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

BOARD ID Table

Board ID	PCB Revision
0	0.1
1	
2	
3	
4	
5	
6	
7	

BOM Structure Table

BTO Item	BOM Structure
Connector	ME@
EMI Mount	EMI@
dGPU	DIS@
Intel UMA	UMA@
AOAC	AOAC@
TPM	TPM@
SBA	SBA@
Non-SBA	NOSBA@
DRAM Option	DDR1@
Unpop	@
EMI Un-Mount	@EMI@

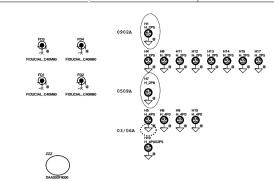
USB 2.0 Port Table

USB 2.0	Port	3 External USB Port
	0	USB 3.0 Port + AOU (Left)
	1	USB 3.0 Port (Right)
	2	USB 3.0 Port (Docking)
	3	Mini Card (WLAN/BT)
	4	Touch Screen
	5	Camera
	6	Sensor Hub
	7	Digitizer

USB 3.0 Port Table

	Port			PCII	E Port	Table
	1 2	USB 3.0 Port (Left) USB 3.0 Port (Right)		Port	Lane	
V.	3	USB 3.0 Port (Docking)		1	7	
L	4			2		
				3		WLAN
				4		Cardreader
	CATA	Dow Toble			0	
	SAIA	Port Table		5	1	
	Port				2	
	1010		L.		3	
- i	0	HDD	ı - '	I	0	
-	1	NGFF SSD		6	1	
-	2			ľ	2	
į	3		_		3	

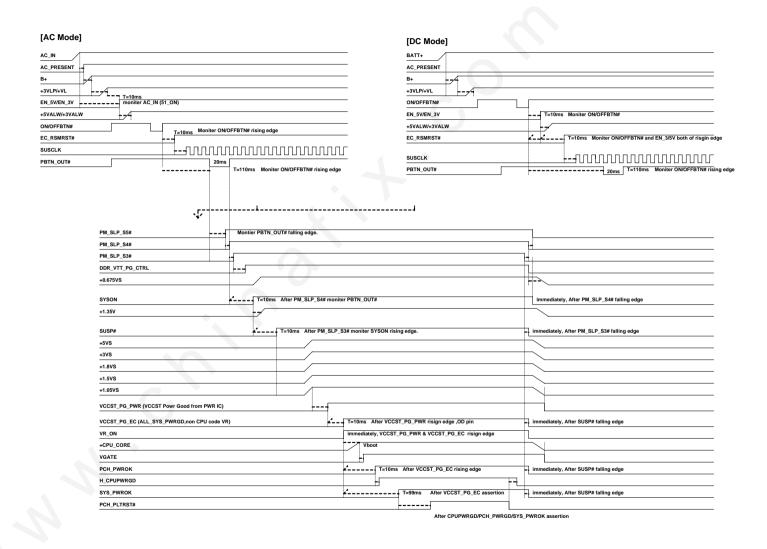
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RAM_ID3 GPIO46	RAM_ID2 GPIO47	RAM_ID1 GPI048	RAM_ID0 GPIO49	RAM
0	0	0	0	HYNIX 4GB
0	0	0	1	SAMSUNG 4GB
0	0	1	0	MICRON 4GB
0	0	1	1	ELPIDA 4GB
0	1	0	0	SAMSUNG 8GB
0	1	0	1	ELPIDA 8GB
0	1	1	0	MICRON 8GB
0	1	1	1	HYNIX 8GB
1	0	0	0	TBD
1	0	0	1	TBD
1	0	1	0	TBD
1	0	1	1	TBD
1	1	0	0	TBD
1	1	0	1	TBD
1	1	1	0	TBD
1	1	1	1	TBD



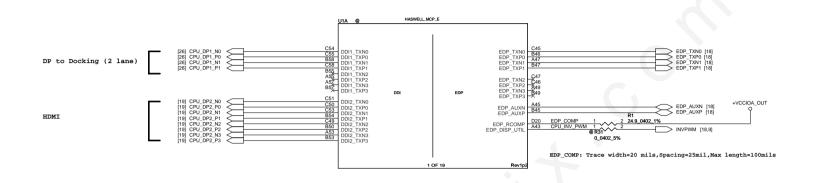


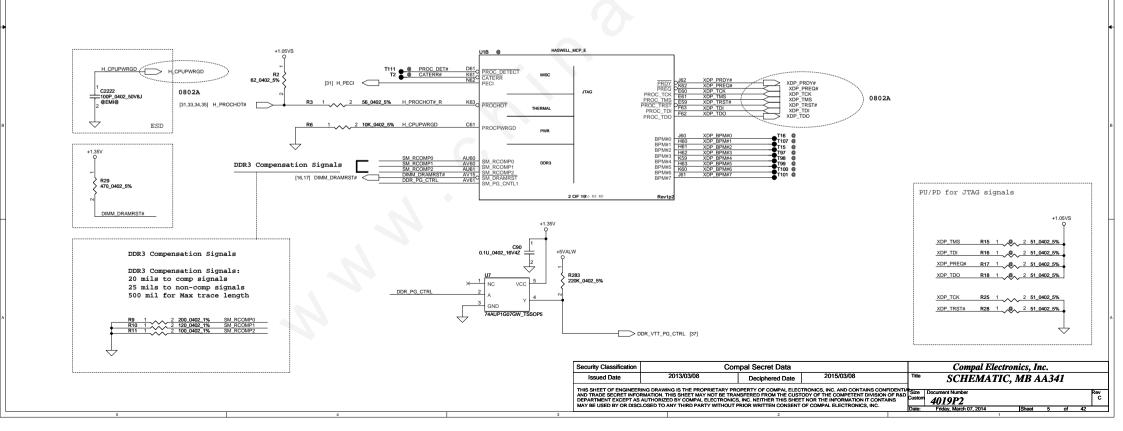


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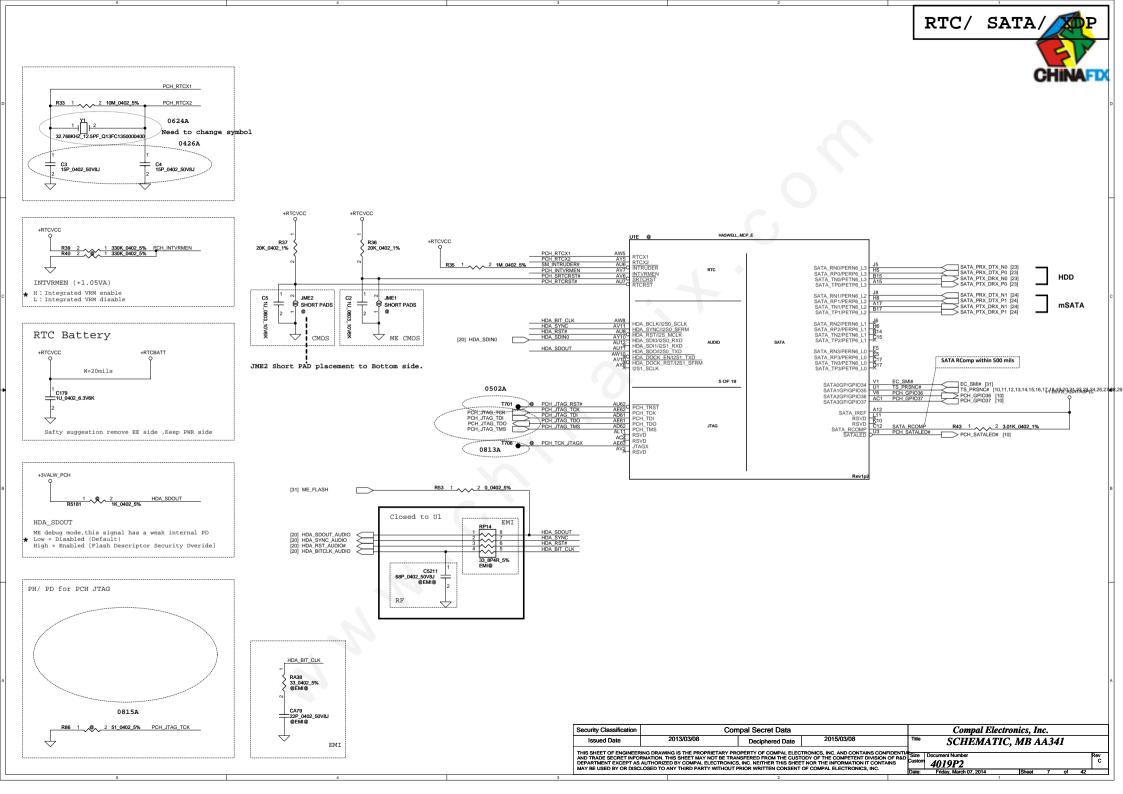


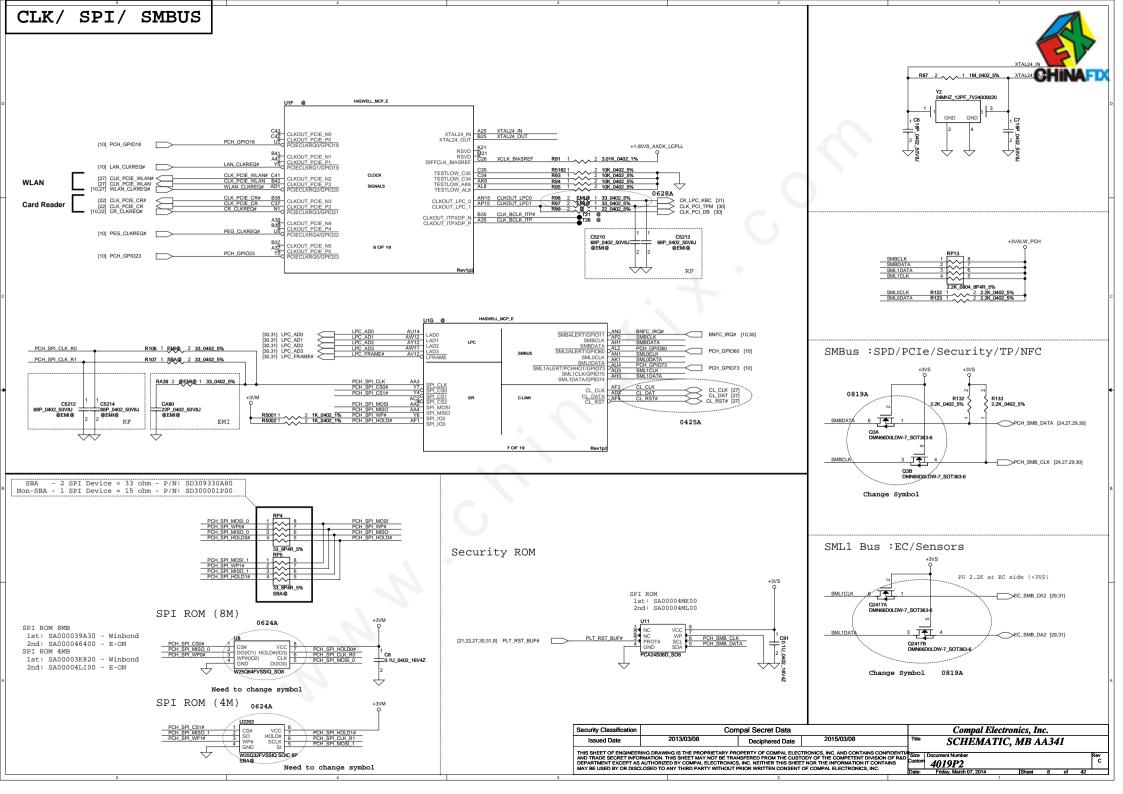
Memory I/F

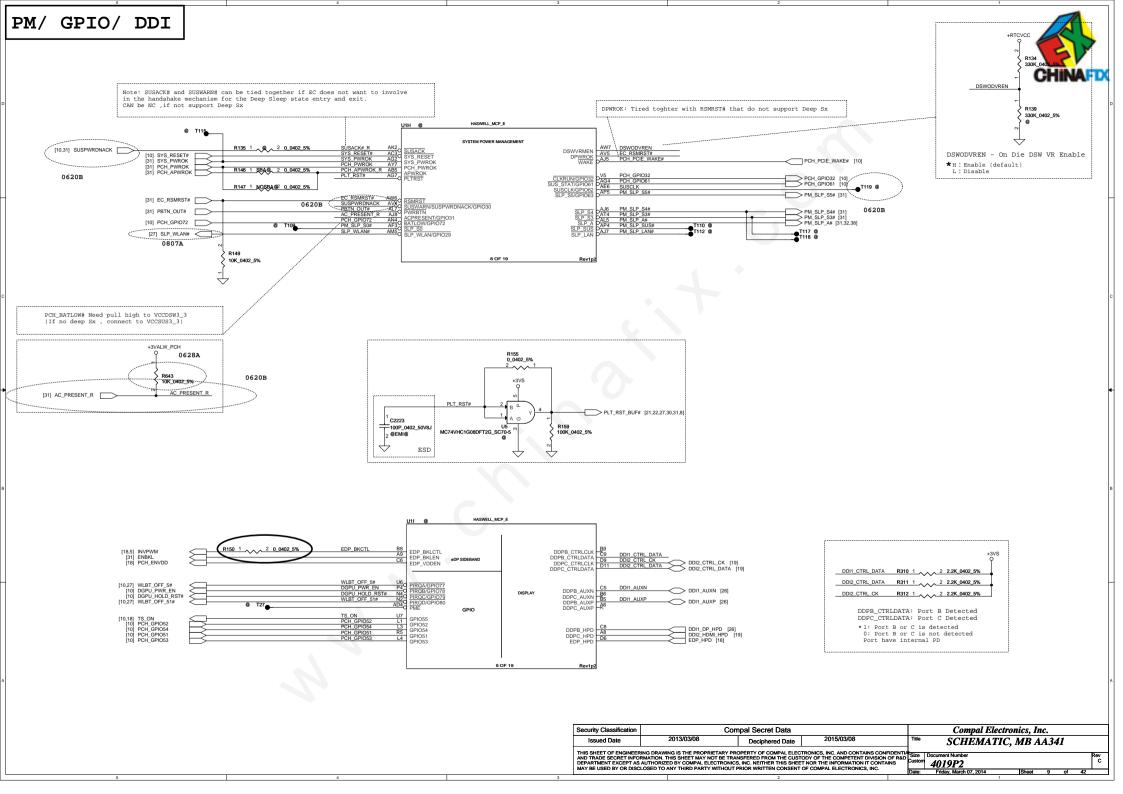


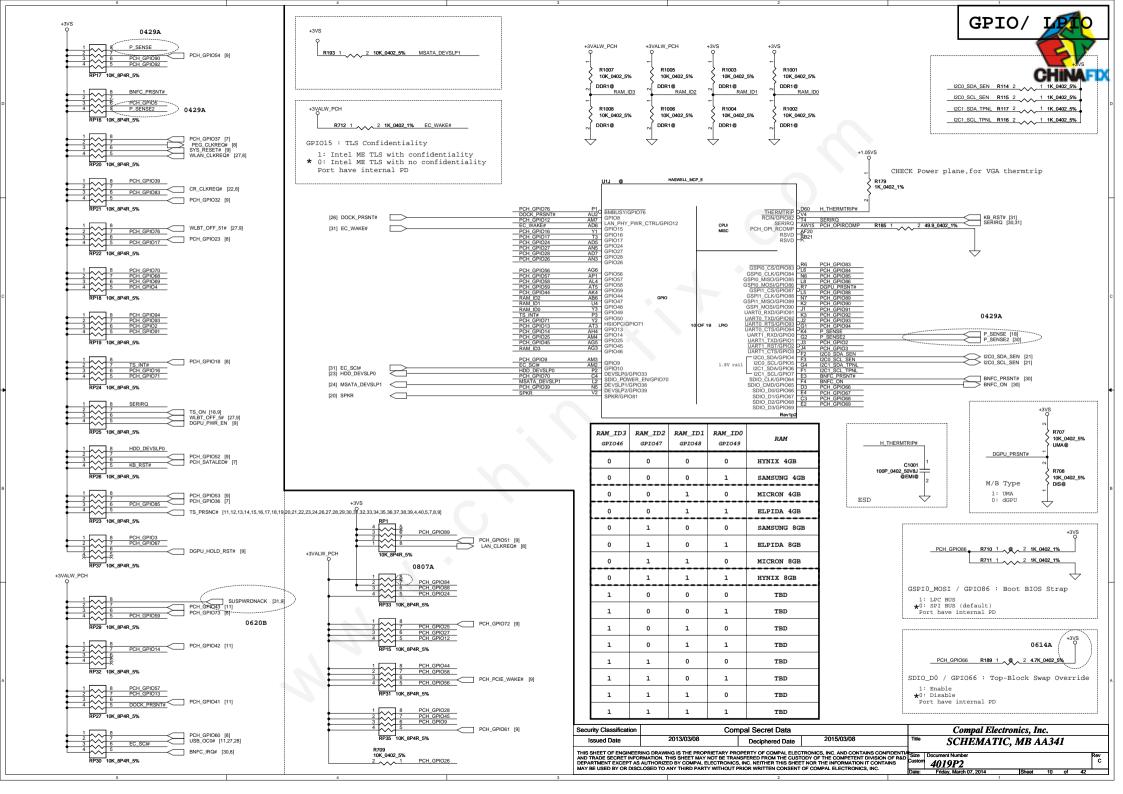
[16] DDR_A_D[0.63] [16] DDR_A_MA(0.15] [16] DDR_A_DGS(0.7] [16] DDR_A_DGS(0.7]	79.E	[17] DDR_B_D(0.63) [17] DDR_B_DQS#(0.7) [17] DDR_B_DQS(0.7) [17] DDR_B_DQS(0.7) U1D @ MASWELL_MCP_E	
UIC	SA_CLK91	DDE B D0	SB_CK#0 SB_CK0 SB_CK0 SB_CK1 SB_CK1 SB_CK1 SB_CK1 SB_CK1 SB_CK1 SB_CK2 SB_CK2 SB_CK2 SB_CK2 SB_CK2 SB_CK2 SB_CK2 SB_CK2 SB_CK2 SB_CK3 S

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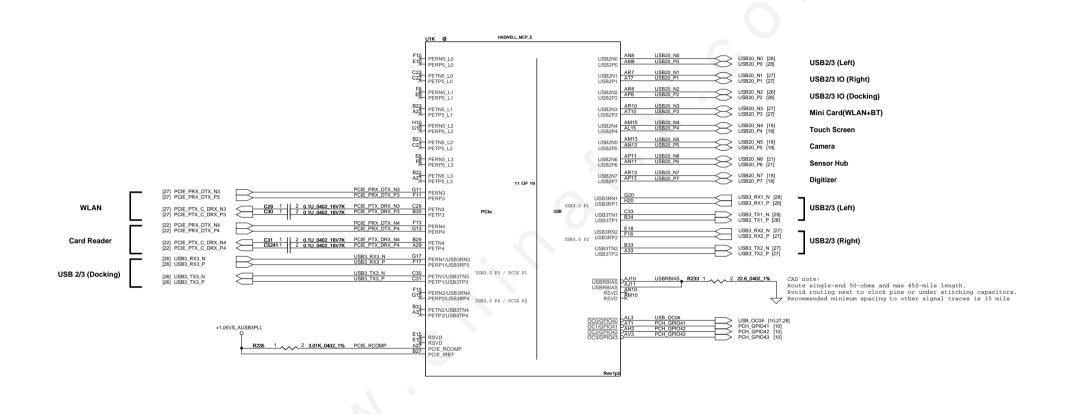






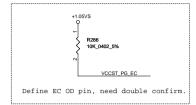


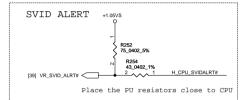


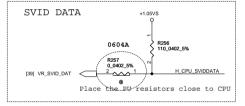


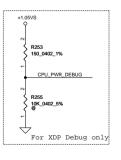
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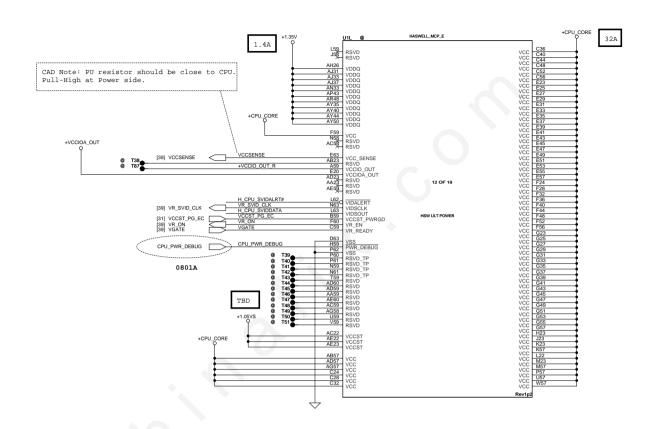


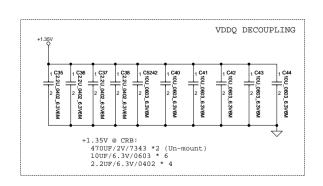






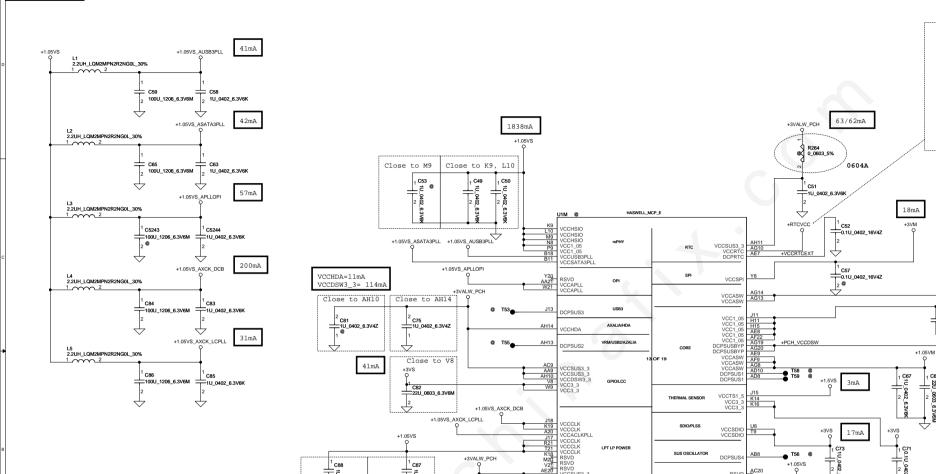






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Power



1 C78 =22U_0603_6.3V6N

Close to AC9,AA9, AE20,AE21

♦

Close to R21

Close to J17

Only availible on External Suspend VR powered.

VCC1_05 VCC1_05

DcpSus1= 109mA

DcpSus2= 25mA

DcpSus3= 10mA

DcpSus4= 1mA

<1mA

658mA

C62 1U_0402_6.3V6K 1741/1632mA

1 C5245 10U_0603_6.3V6M

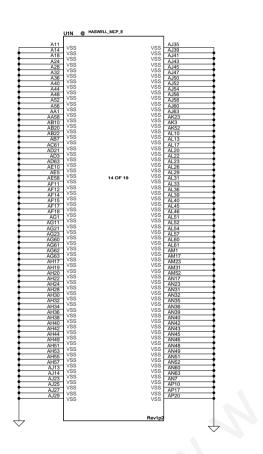
C61 1U_0402_6.3V6K

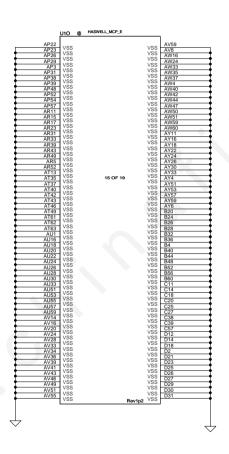
C64 1U_0402_6.3V6K

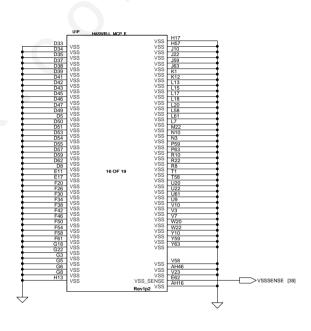
+1.05VM

GND



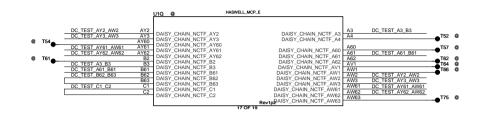


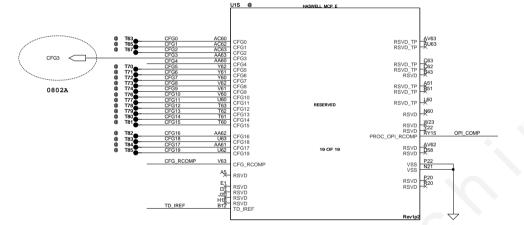


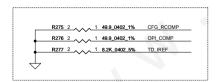


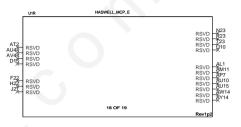
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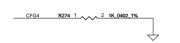






CFG Straps for Processor

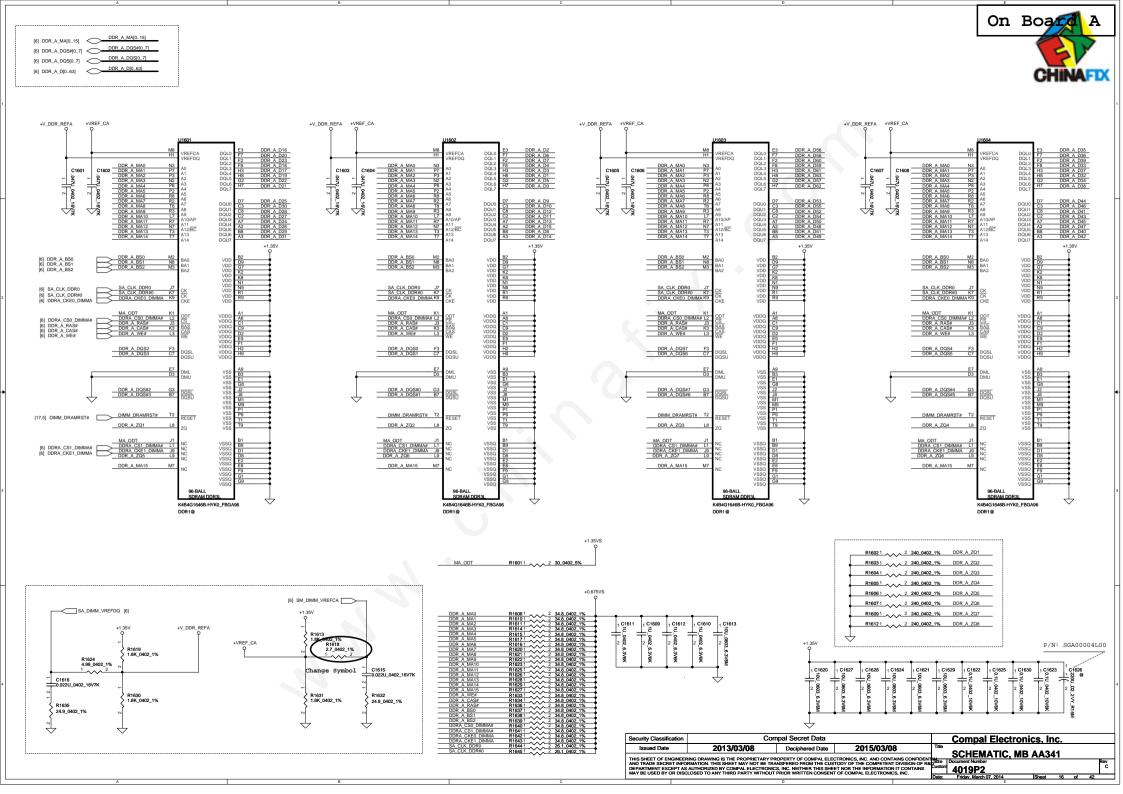


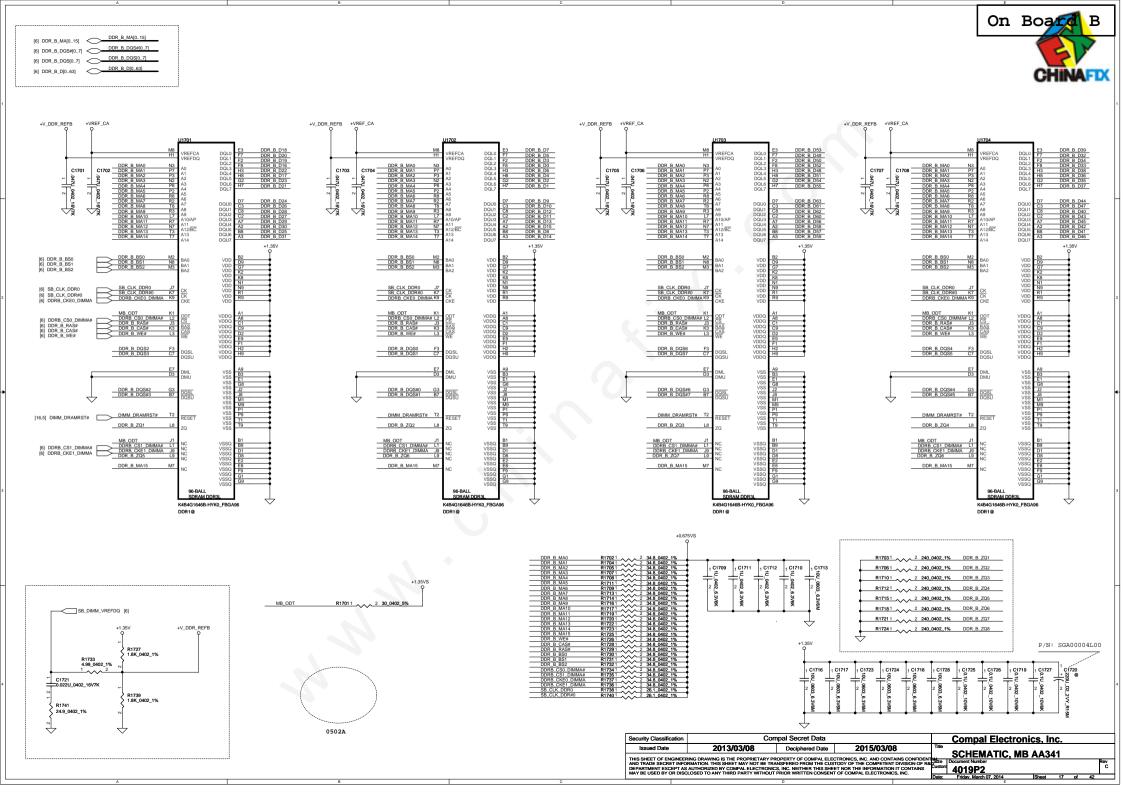


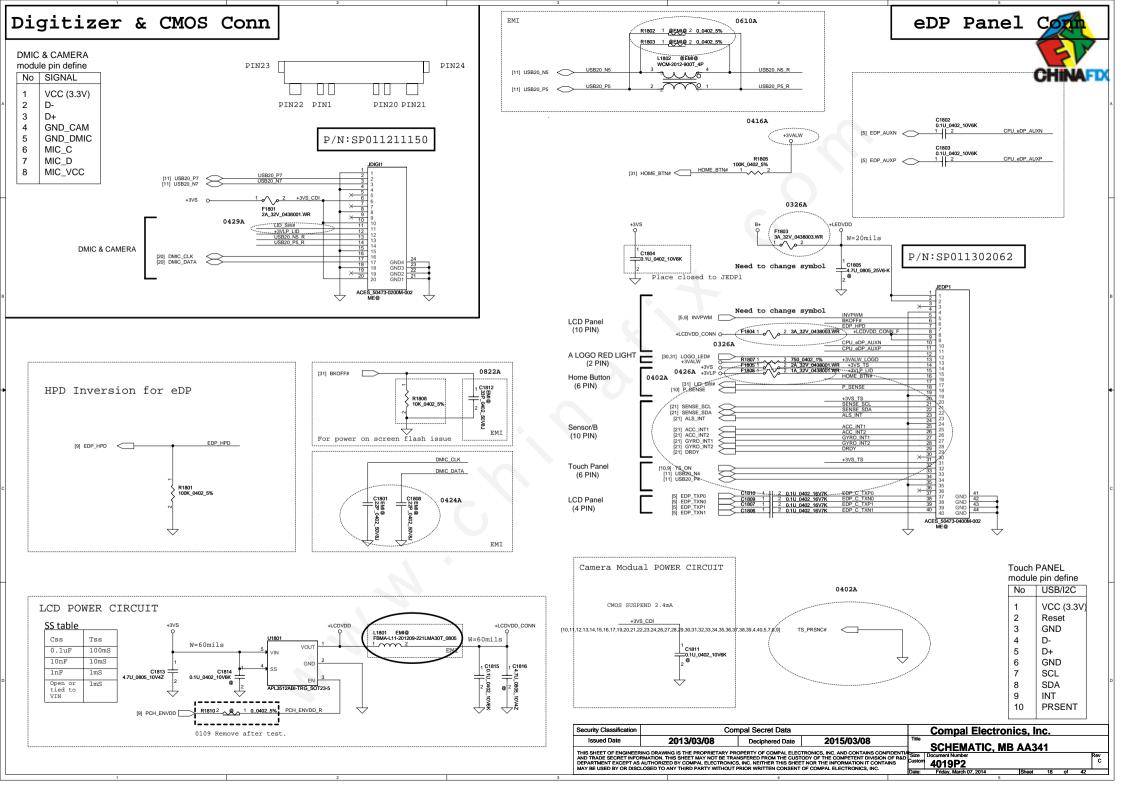
CFG4 - Display Port Presence Strap

- 1 : Disabled; No Physical Display Port attached
- Disabled, No Physical Display Port attached to Embedded Display Port
 Enabled; An external Display Port device is connected to the Embedded Display Port
 CFG4 have internal PH.

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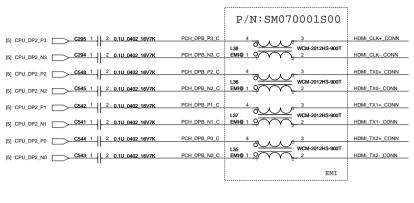


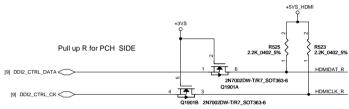


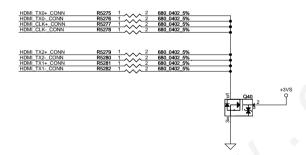


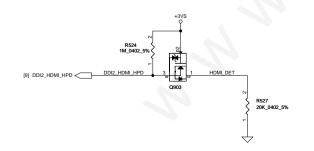
HDMI

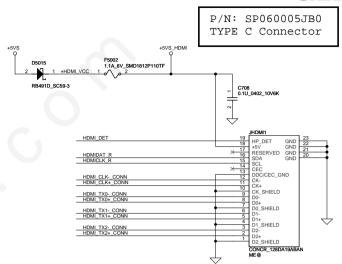


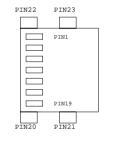


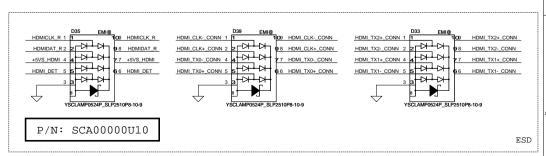




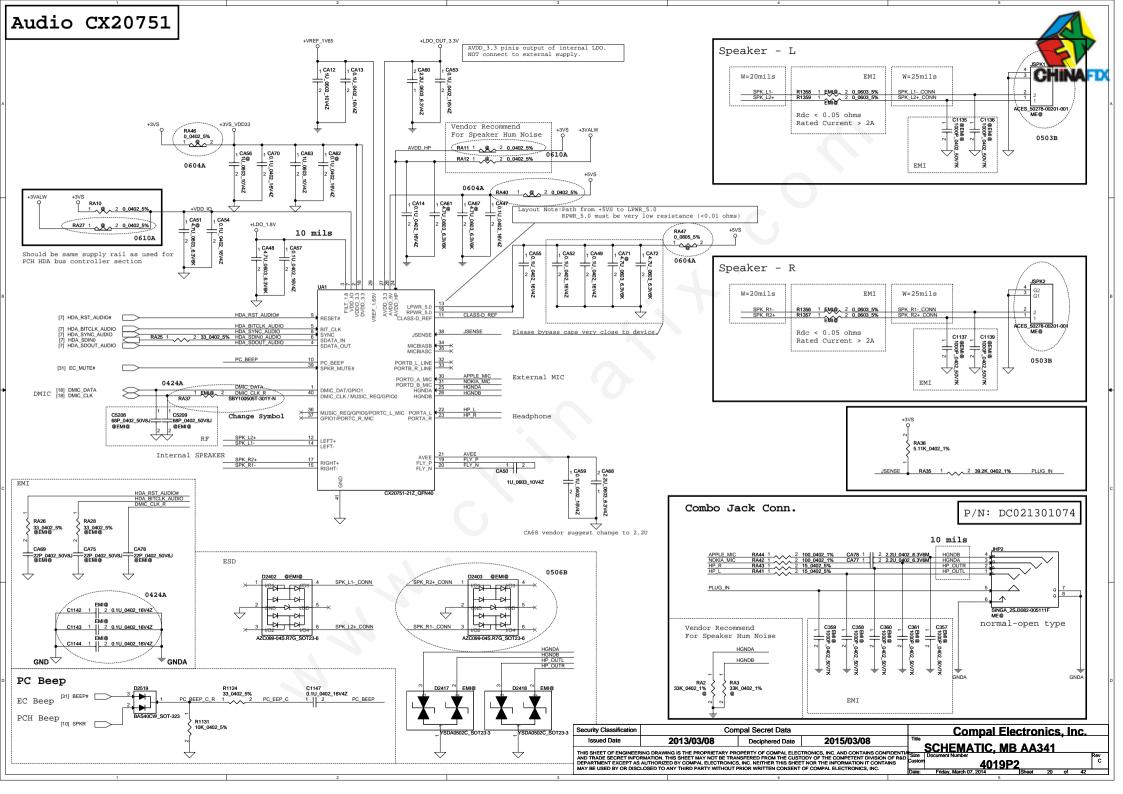


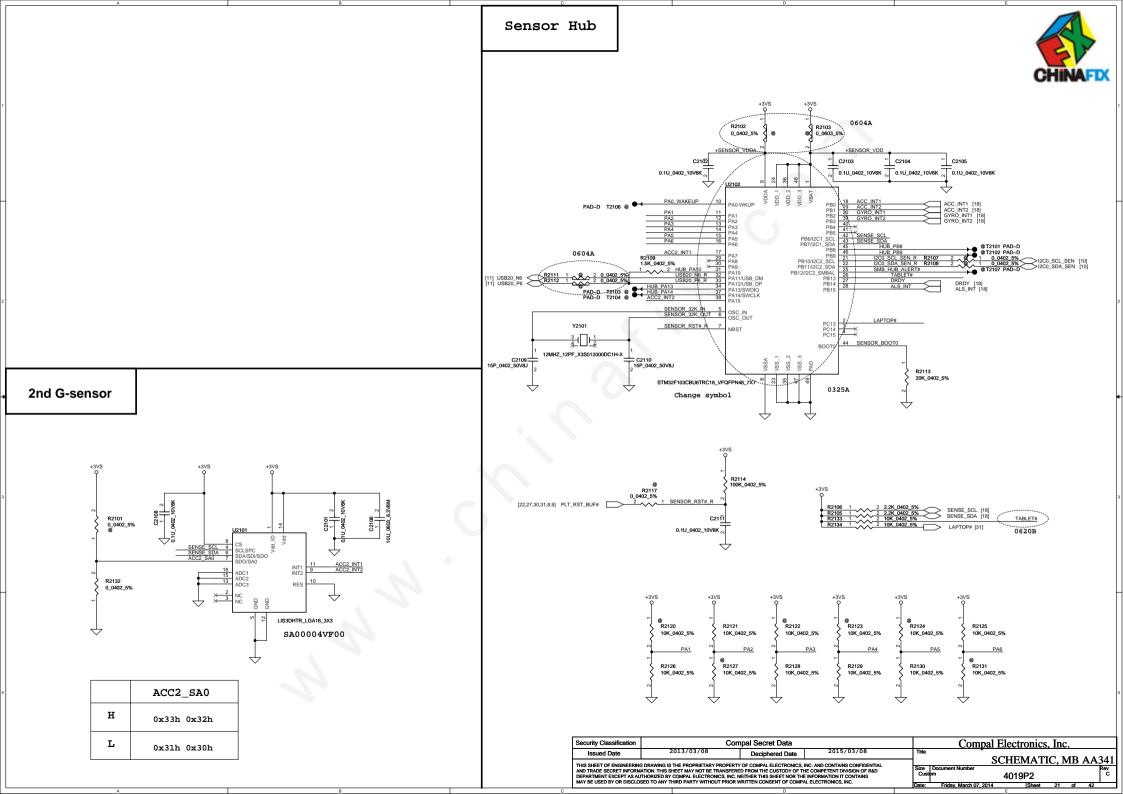




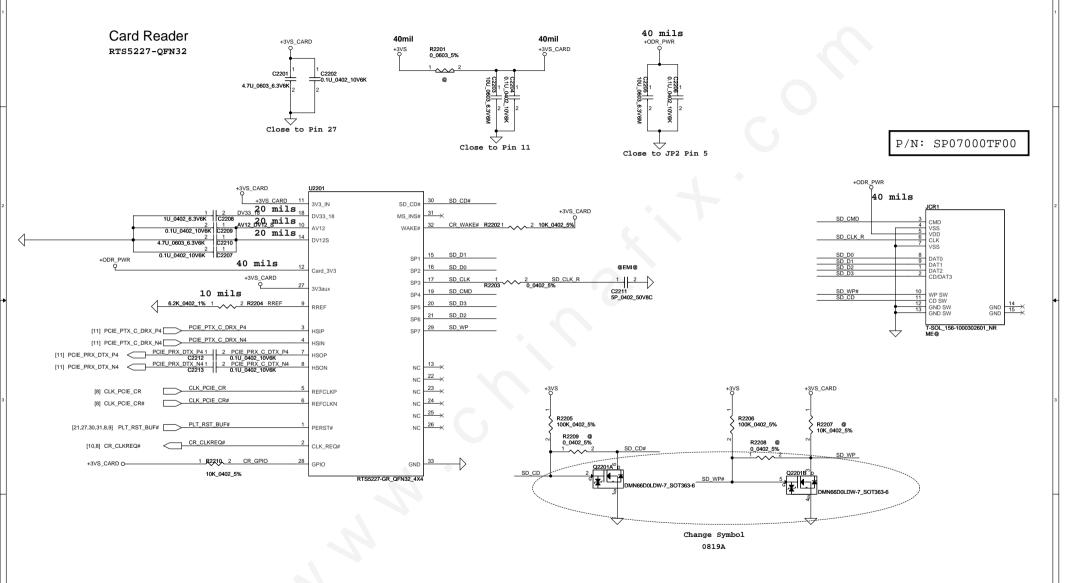


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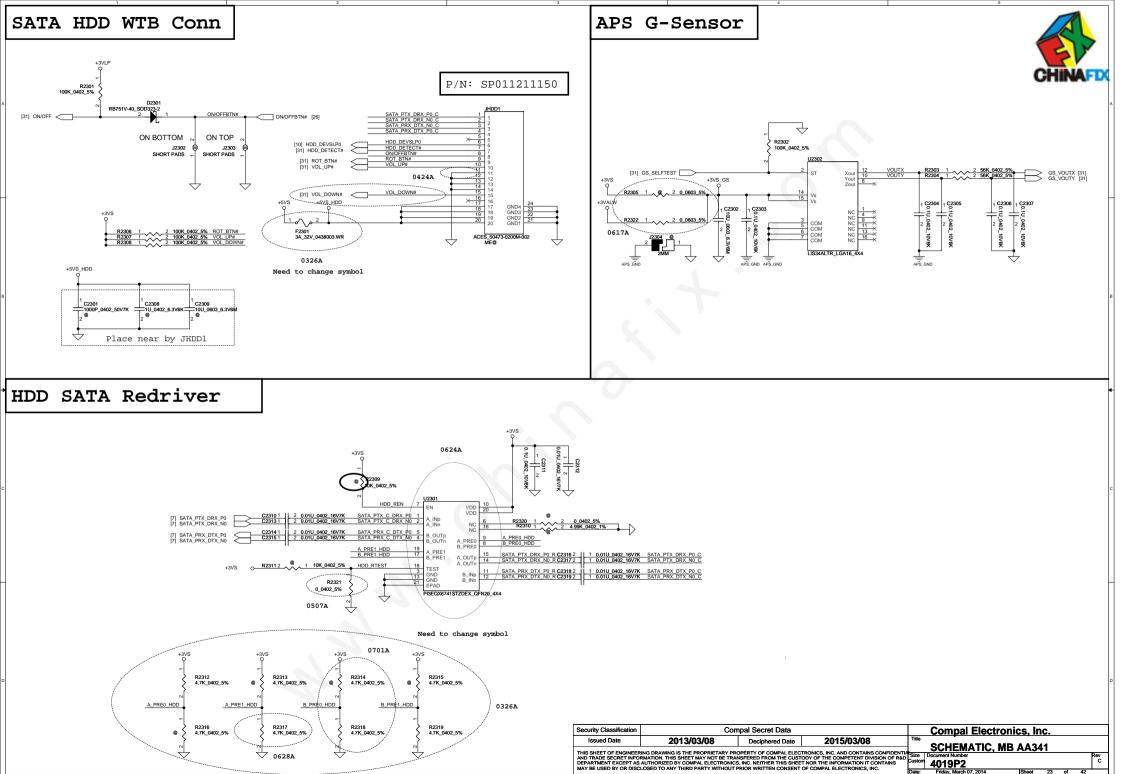


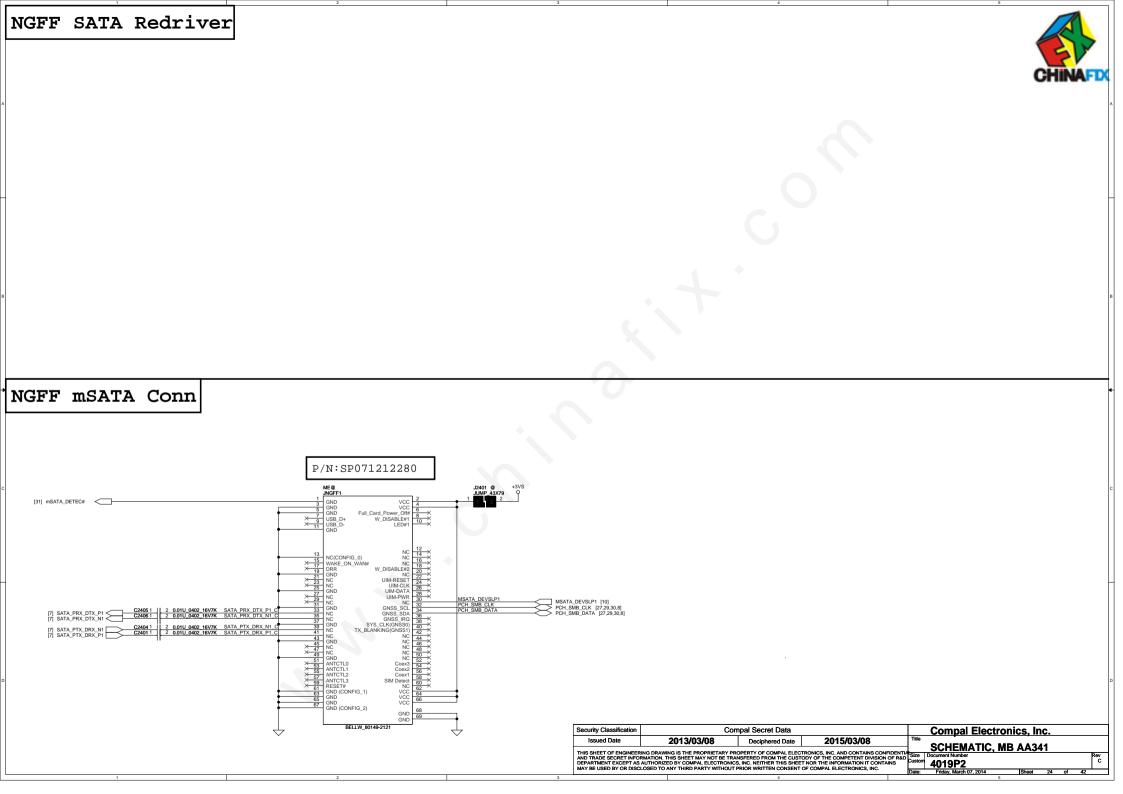


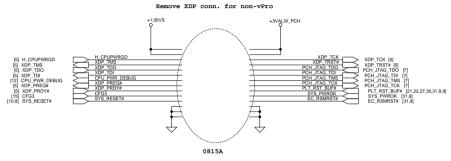




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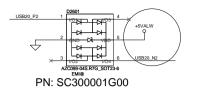






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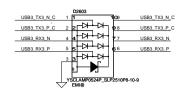


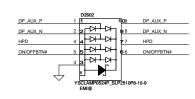
R2512 100K_0402_5%

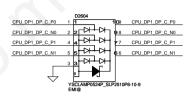
R2517 100K_0402_5%

C2520 1 2 0.1U_0402_10V6K N C2521 1 2 0.1U_0402_10V6K

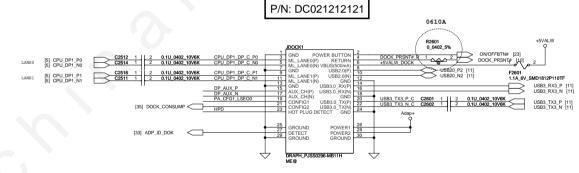
> Q2501 2N7002K_SOT23-3



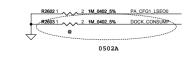




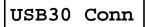
Docking (Display Port)

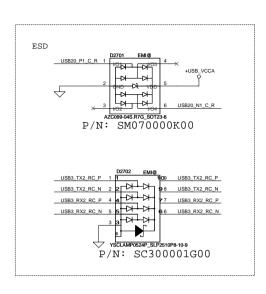


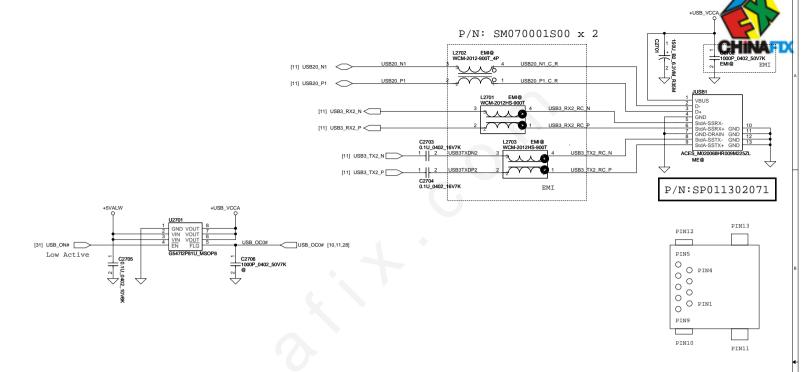
Footprint: DRAPH_PJSS0296-MB11H_24P-T



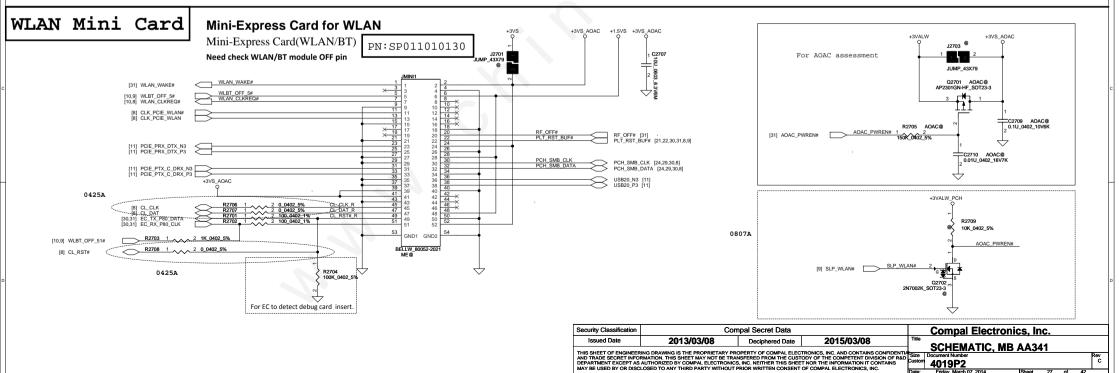
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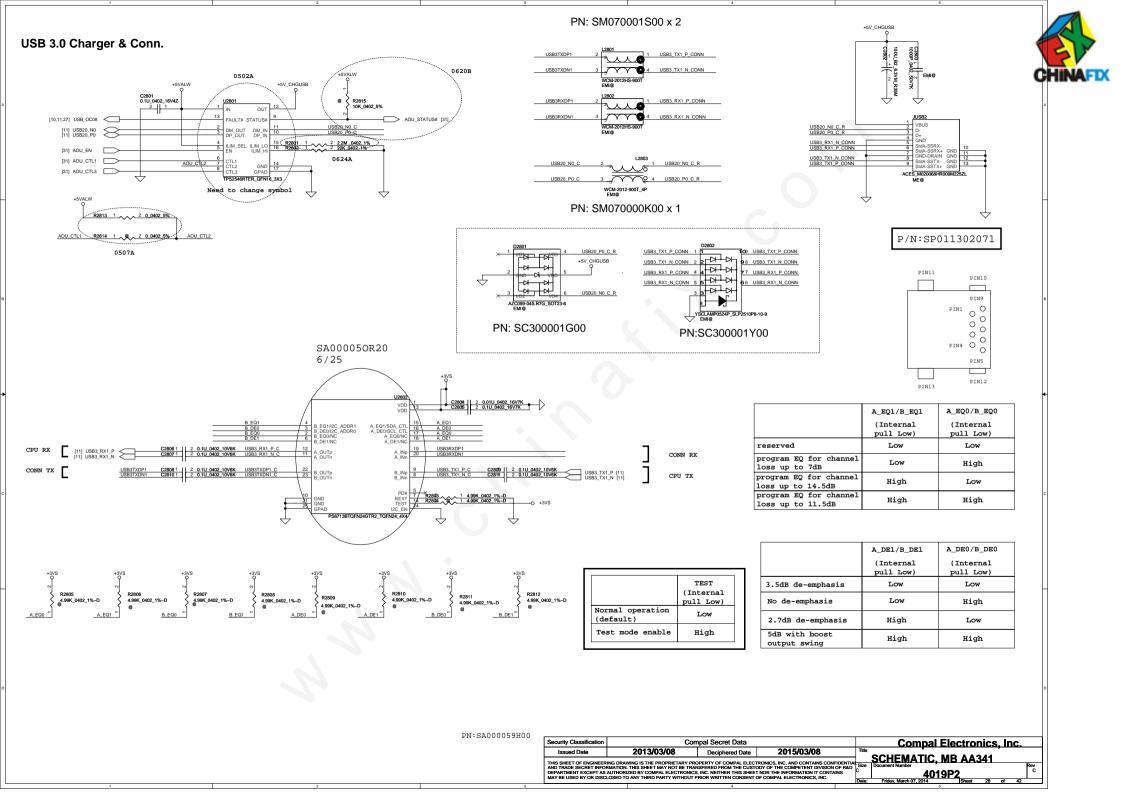


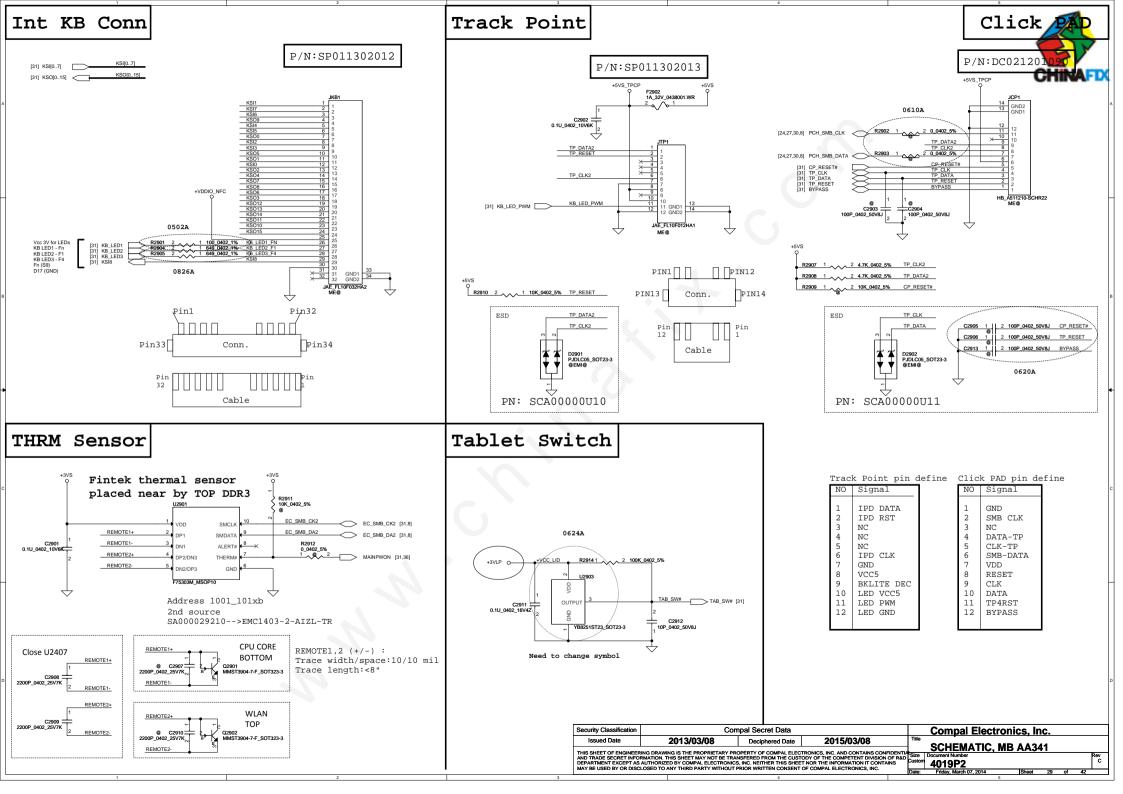


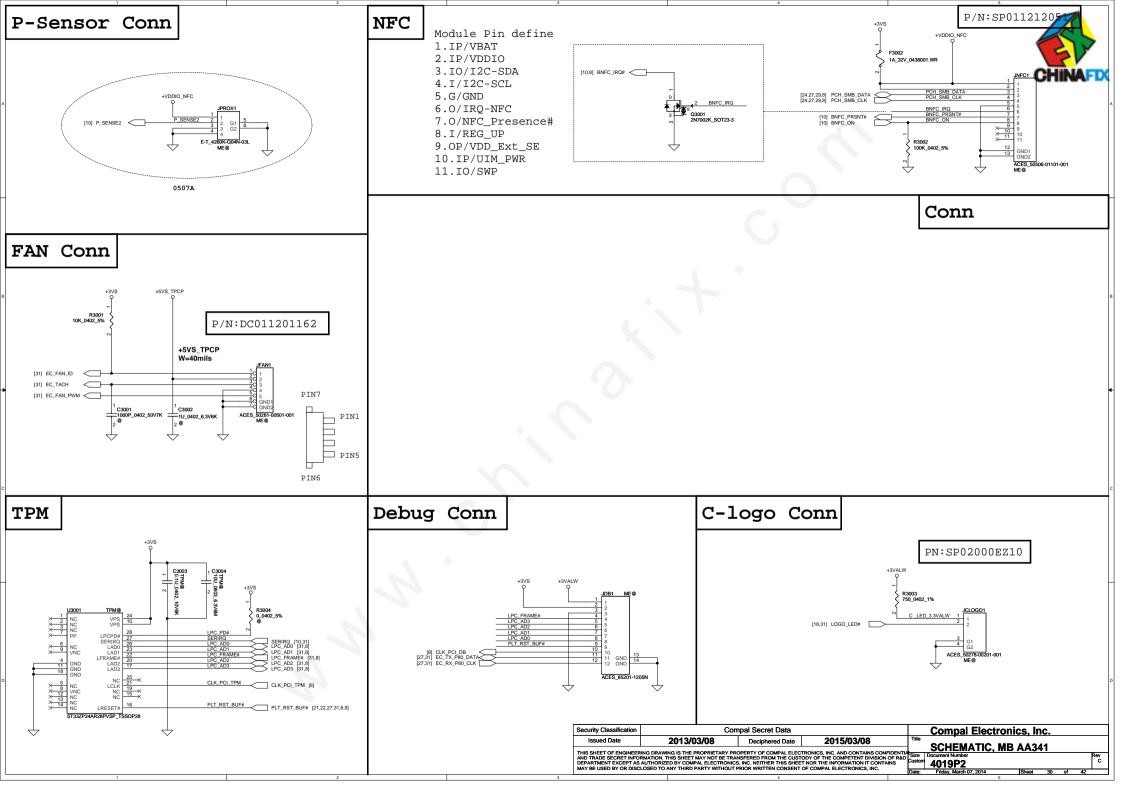


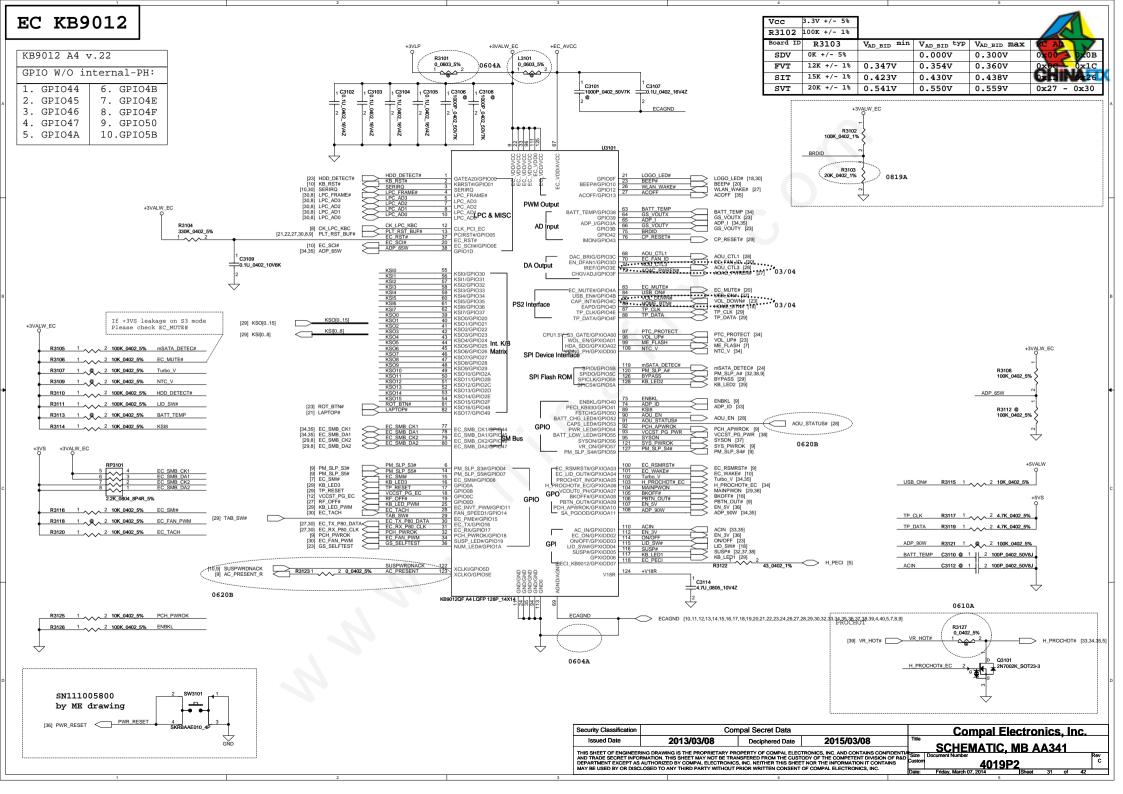
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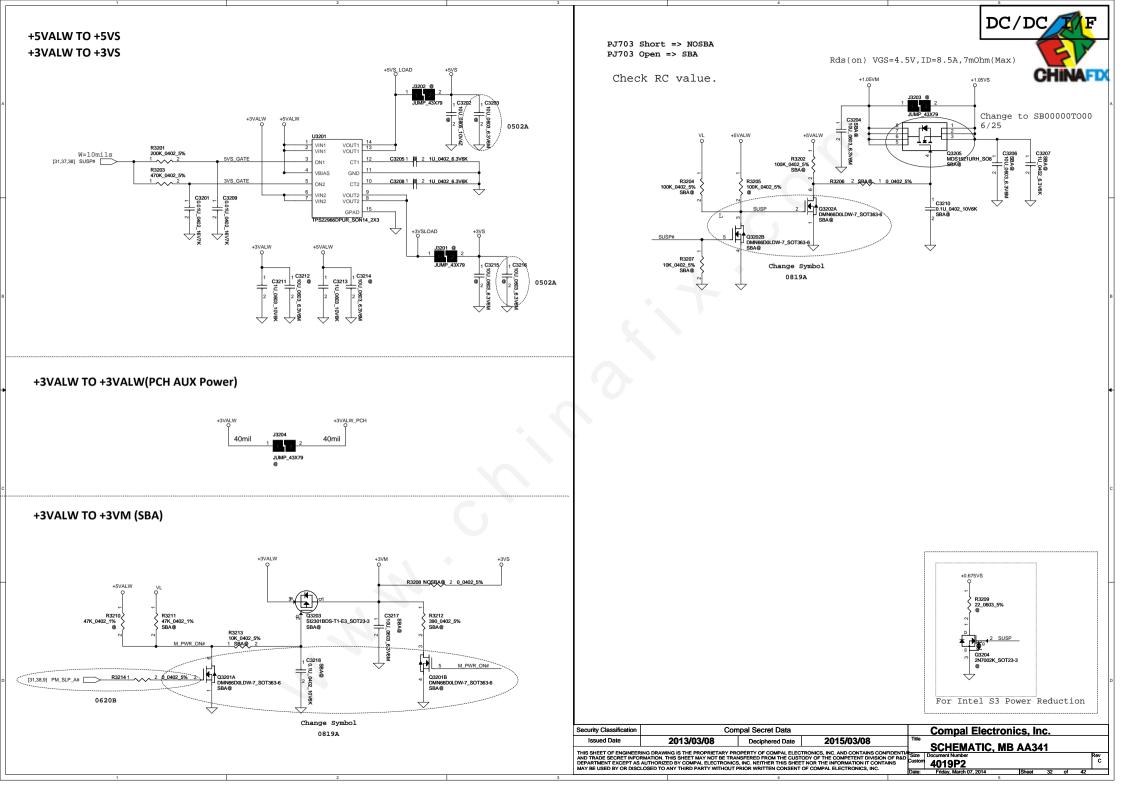


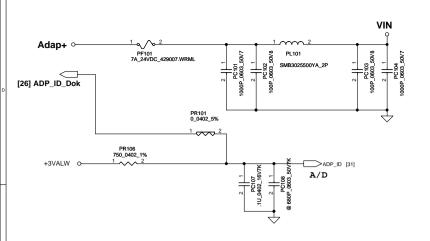








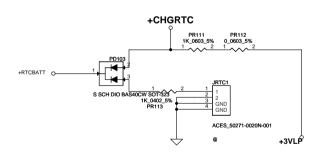


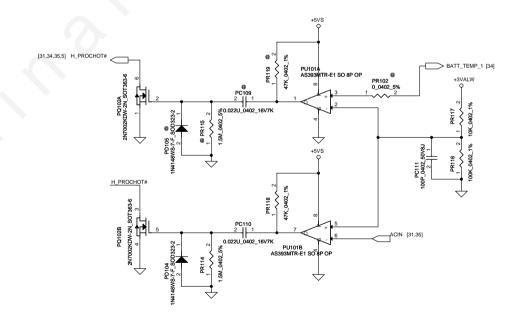




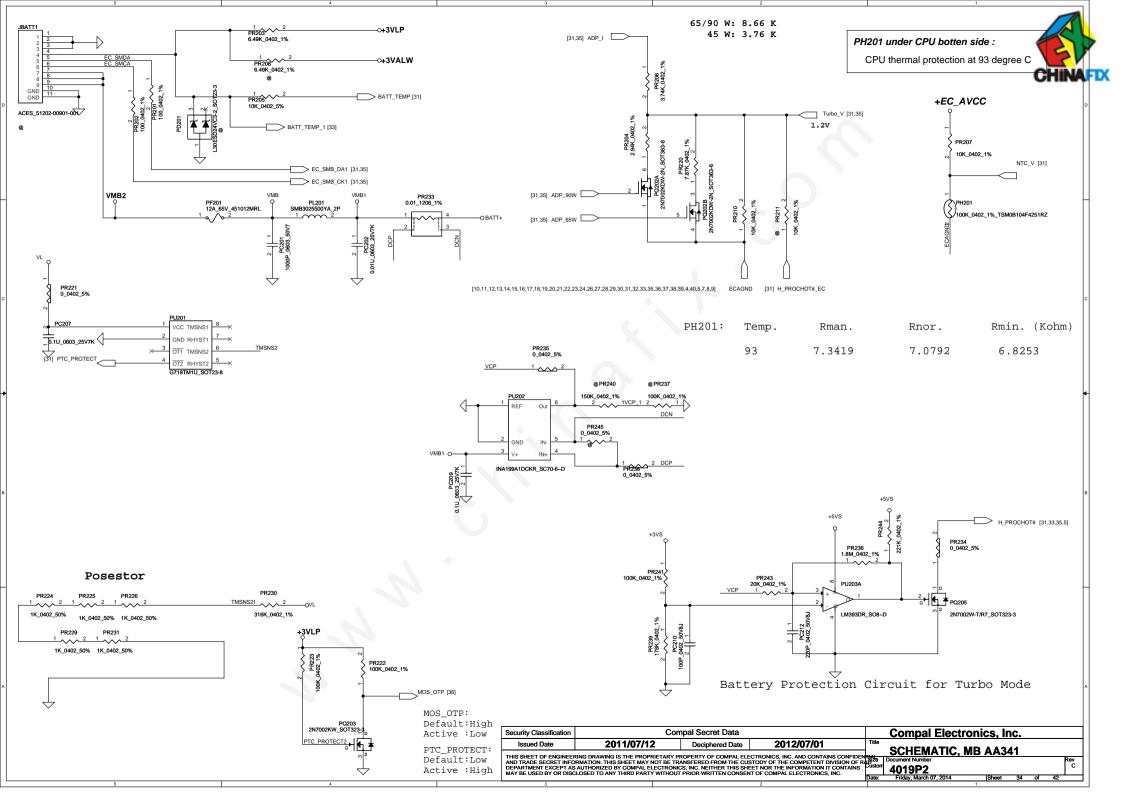
AC Adapter	45W	65W	90W
R(ohm)	118	287	549
ADP_ID(V)	0.449	0.913	1.395
Detection	<=0.663,	<=1.134,	<=1.618
-Voltage(V)	>0.234	>0.693	>1.172

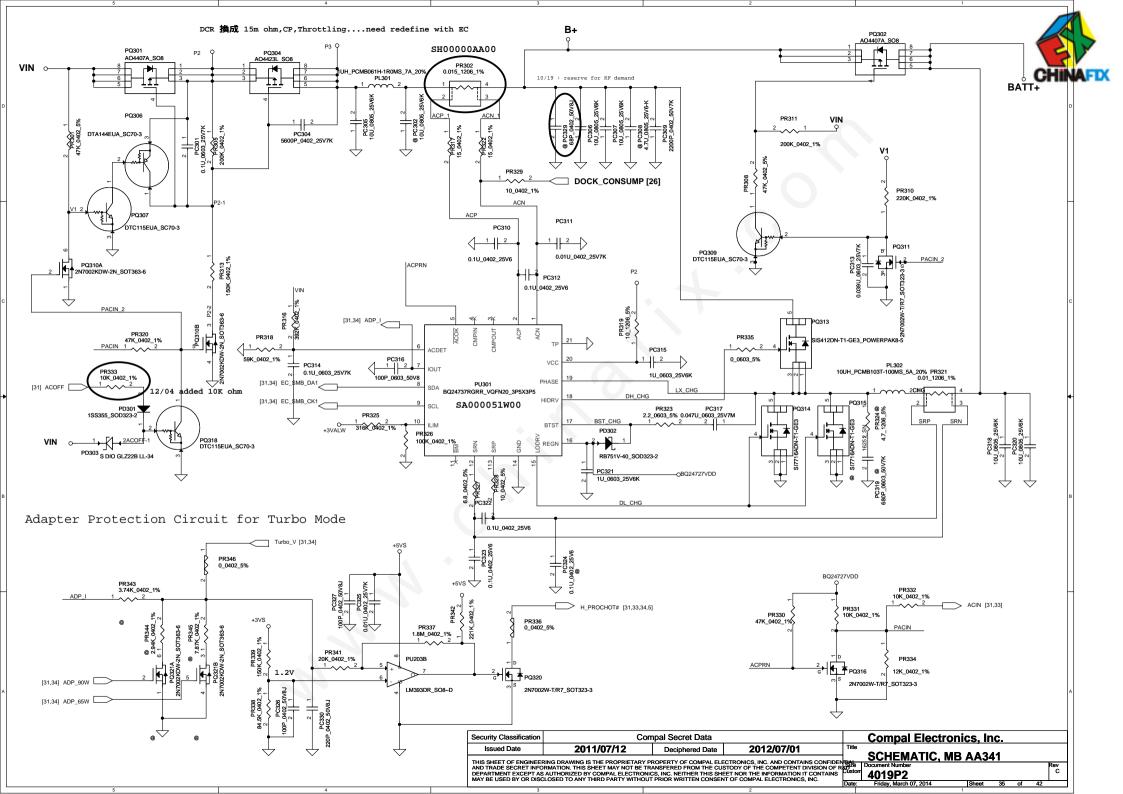


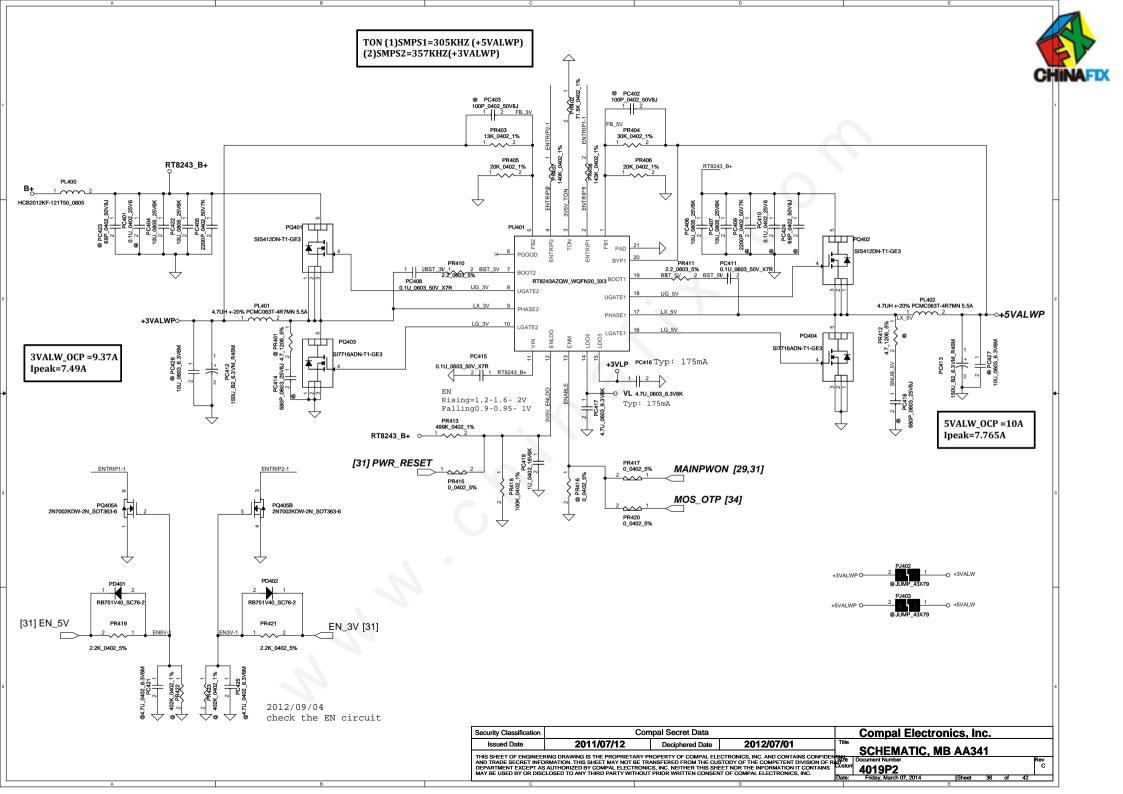


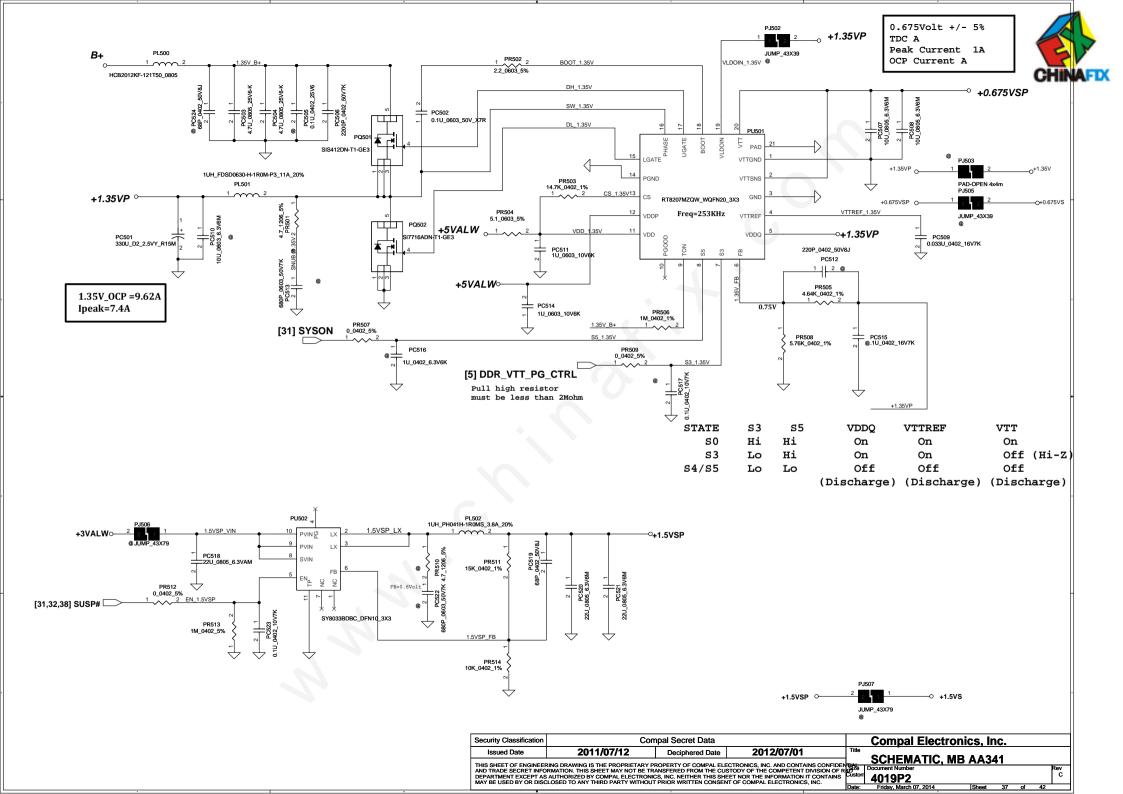


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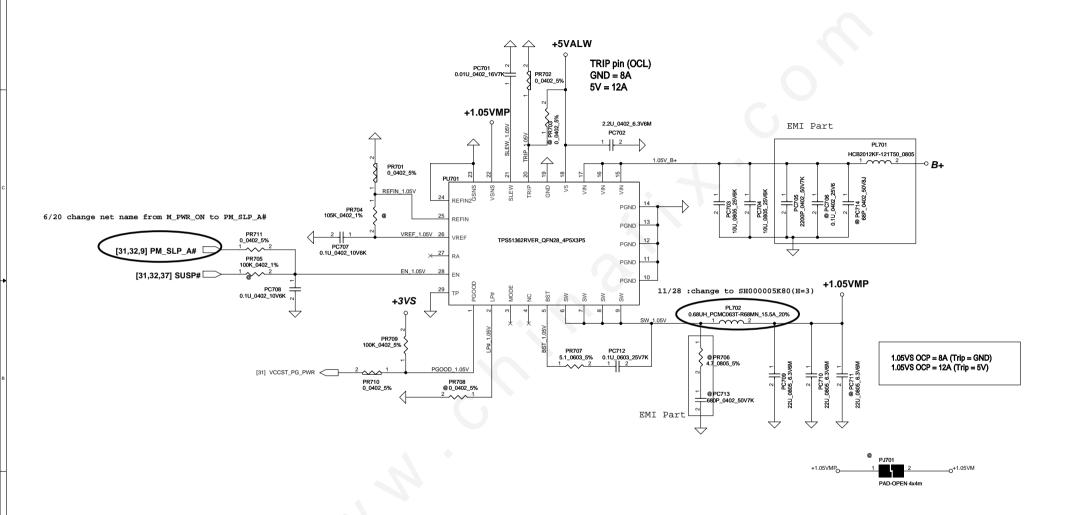




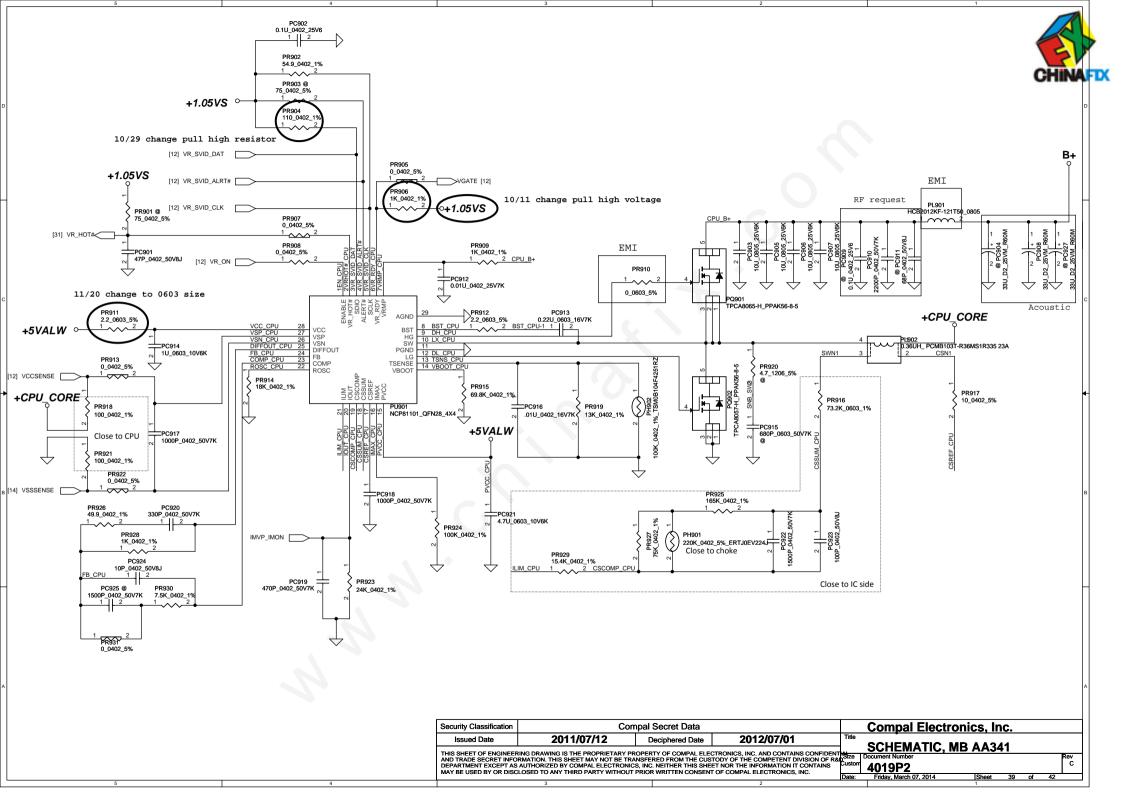




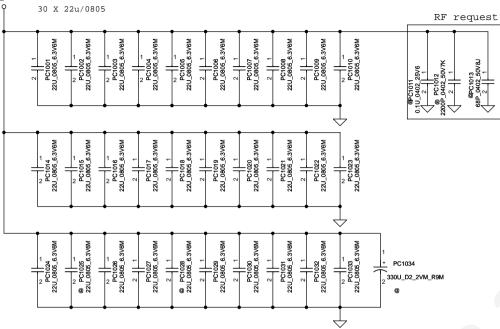




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+CPU_CORE



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Version change list (P.I.R. List)

Page 1 of 1 for PWR

Item	,	PG#	Modify List	Date	Phase
1	We just have adpter over-load protection circuit to replace the one-shot circuit, so we can reserve the one-shot circuit.	P33	Un-mount PR119, PC109, PR115, PD105.		SDV
	We want to tune the switching ring to meet the derating spec.	P37	Change PC502 from 0.22u to 0.1u.		SDV
3	For fine tune LL & trainsient of CPU core, we must to change R/C value to meet Intel's spec.	P39	Change PR916 from 47k to 73.2k and PC923 from 560p to 100p, PC1025, PC1028, PC1034 to un-mount.	2013.04.24	SDV
4	For aviod EMI/EMI to damage OP or other components through the loop of BATT_TEMP.	P34	Reserve PD201	2013.04.30	SDV
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