

V:1.1

**ECS**  
**CONFIDENTIAL**

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## HSIO Lane Assignments by SKU (Lanes 1-14)

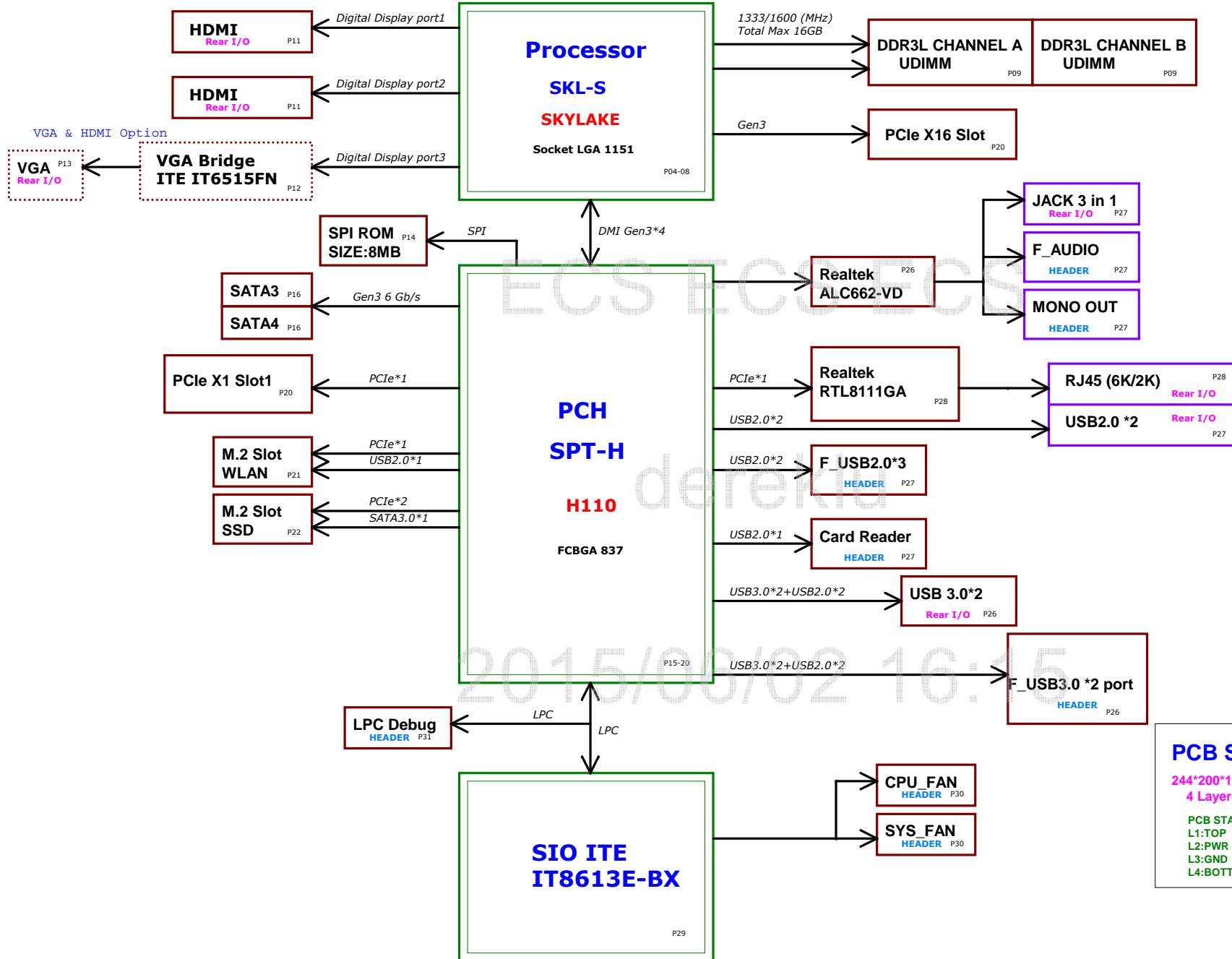
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	USB3 #1 (Dual-Mode)	USB3 #2	USB3 #3 SSIC #2	USB3 #4	USB3 #5	USB3 #6	USB3 #7 PCIe #1	USB3 #8 PCIe #2	USB3 #9 PCIe #3	USB3 #10 PCIe #4 CoE	PCIe #5 CoE	PCIe #6	PCIe #7	PCIe #8
								X4				X4		
							X2		X2			X2		X2
										N/A				
sku	1	2	3	4	5	6	7	8	9	10	11	12	13	14
H110	USB3/ OTG	USB3/ SSIC	USB3/ SSIC	USB3	N/A	N/A	N/A	N/A	N/A	LAN Only	PCIe/ LAN	PCIe	PCIe	PCIe
B150	USB3/ OTG	USB3/ SSIC	USB3/ SSIC	USB3	USB3	USB3	N/A	N/A	N/A	LAN Only	PCIe/ LAN	PCIe	PCIe	PCIe
Q150	USB3/ OTG	USB3/ SSIC	USB3/ SSIC	USB3	USB3	USB3	USB3	USB3	N/A	LAN Only	PCIe/ LAN	PCIe	PCIe	PCIe
H170	USB3/ OTG	USB3/ SSIC	USB3/ SSIC	USB3	USB3	USB3	USB3	USB3	PCIe	PCIe/ LAN	PCIe/ LAN	PCIe	PCIe	PCIe
Z170	USB3/ OTG	USB3/ SSIC	USB3/ SSIC	USB3	USB3	USB3	USB3/ PCIe	USB3/ PCIe	USB3/ PCIe	USB3/ PCIe	PCIe/ LAN	PCIe	PCIe	PCIe
Q170	USB3/ OTG	USB3/ SSIC	USB3/ SSIC	USB3	USB3	USB3	USB3/ PCIe	USB3/ PCIe	USB3/ PCIe	USB3/ PCIe	PCIe/ LAN	PCIe	PCIe	PCIe

## HSIO Lane Assignments by SKU (Lanes 15-26)

	15	16	17	18	19	20	21	22	23	24	25	26
	PCle #9	PCle #10	PCle #11	PCle #12	PCle #13	PCle #14	PCle #15	PCle #16	PCle #17	PCle #18	PCle #19	PCle #20
	SATA #0	SATA #1			SATA #0**	SATA #1**	SATA #2	SATA #3	SATA #4	SATA #5		
	ChE			ChE								
	X4				X4				X4			
	X2		X2		X2		X2		X2		X2	
	Intel® RST for PCIe Storage				Intel® RST for PCIe Storage				Intel® RST for PCIe Storage			

Sku	15	16	17	18	19	20	21	22	23	24	25	26	RST for PCIe Ports
H110	PCle/LAN	PCle	N/A	LAN Only	SATA*/LAN	SATA*	SATA	SATA	N/A	N/A	N/A	N/A	
B150	PCle/LAN/SATA*	PCle/SATA*	PCle	LAN	SATA*/LAN	SATA*	SATA	SATA	SATA	SATA	N/A	N/A	
Q150	PCle/LAN/SATA	PCle/SATA	PCle	LAN	PCle/LAN/SATA	PCle/SATA	SATA	SATA	SATA	SATA	N/A	N/A	
H170	PCle/LAN/SATA	PCle/SATA	PCle	LAN	PCle/LAN/SATA	PCle/SATA	PCle/SATA	PCle/SATA	SATA	SATA	PCle	PCle	
Z170	PCle/LAN/SATA	PCle/SATA	PCle	LAN	PCle/LAN/SATA	PCle/SATA	PCle/SATA	PCle/SATA	SATA	SATA	PCle	PCle	
Q170	PCle/LAN/SATA	PCle/SATA	PCle	LAN	PCle/LAN/SATA	PCle/SATA	PCle/SATA	PCle/SATA	SATA	SATA	PCle	PCle	

## Skylake-S Desktop Platform



### PCB SIZE

244\*200\*1.6mm  
4 Layers

PCB STACK:  
L1:TOP  
L2:PWR  
L3:GND  
L4:BOTTOM

PCH-GPIO function

Data:2014/11/28

Pin Name	Power Well	Usage	Boot Set
GPP_F17	3VSB	LPC_PME_L	PME#
GPD10	ATX_3VSB	GPD10_DIS_ME	GPO
GPP_B13	N/A	PCH_PLTRST_L	PLTRST#
GPP_G16	3VSB	IOAC	GPO
GPP_G13	VCC3	HDPANEL_DETECT	GPI
GPP_E7	VCC3	THERMAL_SD	GPI
GPP_B3	3VSB	BT_DIS_L_R	GPO
GPP_H18	3VSB	GPP_H18	GPI
GPP_H17	3VSB	GPP_H17	GPI
GPP_H16	3VSB	GPP_H16	GPI
GPP_H15	3VSB	GPP_H15	For Acer Reserve
GPP_H14	3VSB	GPP_H14	For Acer Reserve
GPP_B14	+VCC3	PCH_SPKR	SPKR
GPP_A14	3VSB	LPCPD_L	SUS_STAT#
GPP_C6	3VSB	SML1_CLK	SML1CLK
GPP_C7	3VSB	SML1_DATA	SML1DATA
GPP_E8	VCC3	SATALED_L	SATALED#
GPP_E0	VCC3	SSD_DETECT_L	GPI
GPP_E4	VCC3	DEVSLP0	SATA_DEVSLP0
GPP_F22	VCC3	PCIE16RST	GPO
GPP_F14	3VSB	H_SKT0CC_L	GPI
GPP_B17	3VSB	M2_DIS_L_R	GPO
GPP_B6	VCC3	CLK_REQ1_M2_WLAN_L	SRCLKREQ1#
GPP_B8	VCC3	CLKREQ3_SSD_L	SRCLKREQ3#

SIO-GPIO function

Data:2014/11/28

Pin Name	Power Well	Usage	Default SET
PCH_D0B/GP22	+ATX3VSB	Front Panel LED contral (SIO_LED1)	GPO
GP21	+ATX3VSB	Front Panel LED contral (SIO_LED0)	GPO
PCIRST1#(PCH_COA/GP12	3VSB	SML1_CLK	PCH_COA
VCORE_EN/GP42/	3VSB	SUSWARN_R	SUSWARN
PCH_C0B/SUSWARN#			
DSR1#/GP45/PCH_D0A	3VSB	SML1_DATA	PCH_D0A
CTS1#/GP31/FAN_TAC5	VCC3	THERMAL_SD	
VLDT_EN/SLP_SUS#/GP63	+ATX3VSB	SLPSUS_L	SLP_SUS#
SUSACK#/PWGRGD1	3VSB	SUSACK_R	SUSACK#

Interrupt mapping

Data:2014/11/28

Function	INT# port	PCle*1 port	Device
M_2 ( WLAN )	INTB#	Port 10	Wireless LAN
LAN	INTB#	Port 6	RTL8111GA
SATA	INTA#	NA	SATA3.0
M_2 ( SSD )	INTC#	Port 7	SSD
PCIeX1	INTB#	Port 8	
	INTA#	Port 5	PCIeX1

Strap Setting

Data:2014/11/28

Schematics Version History Table:

Data:2014/11/28

Rev.	Date	Page	Change list	Remark
B	20150121	7,38	C312,C301,C313,C302 ->DelC39, 33U-10VX7-06 -> 22U-25VX7-06 R122 27.4K-1-04 -> 47.5K-1-04;R117 3.74K-1-04 ->4.99K-1-04 R111 56K-04 ->88.7K-1-04;C72 1200P-50VX7-04 -> 3300P-50VX7-04 C644 220P-50VX7-04 -> 330P-50VX7-04;R67 1K-1-04 -> 510-1-04	Vcore power solution.
	20150121	38,40	R165 11K-1-04 -> 15K-1-04; R175 7.5K-04 -> 36K-04 C175 1200P-50VX7-04 -> 560P-50VX7-04; R204 3.6K-04 -> 1K-04 C187 680P-50VX7-04->1800P-50VX7-04; R194 1K-04 -> 200-04 Del: SC35	VGT power solution.
	20150121	38,40	R196 3.3K-1-04 -> 4.99K-1-04; Del:SC22	VSA power solution.
	20150121	38	R165 11K-1-04 -> 15K-1-04; R175 7.5K-04 -> 36K-04 C175 1200P-50VX7-04 -> 560P-50VX7-04; R204 3.6K-04 -> 1K-04 C187 680P-50VX7-04->1800P-50VX7-04; R194 1K-04 -> 200-04	VCC leakage issue in sleep S3.
	20150121	38,41	R143 22K-04 -> unstuff; R323 unstuff -> 20K-04	VR_Ready sequence issue in Power on.
	20150121	41	R704 10K-04->4.99K-1-04; R693 4.7K-04->20K-1-04 R666 8.2K-04 -> 8.2K-1-04; R667 750-1-04 ->2.4K-1-04	VCCIO POWER Sequence issue.
	20150121	41	L19 footprint CHOKE_1R5_SMD_2P change to CHOKE_PT5D45MM_SMD	NPI issue
	20150121	42	R398 unstuff->100K; R688 4.7K-> unstuff	VDIMM Power sequence issue
	20150121	42	L22,L23 BOM change from INC0809-1ROM-JY1YW to INC0809-1ROM-JY1YW	Power issue
	20150121	32	Add circuit for DPWROK & +ATX_3VSB power down sequence timing issue.	
	20150121	32	Add circuit for RSMRST & +V1P0A power down sequence timing issue.	
	20150121	11	Add C428,C398,C436 (22U-6V3X5-08)	VRFF DC noise.
	20150121	12	Add C47,C46,C31,C12 unstuff -> 470P-50VX7-04 Add reserve C56,C77,C95,C87	Solve DDC signal test fail.
	20150121	13,14,27 ,29,30	C14 unstuff -> 1U-6V3X5-04; C4 unstuff -> 4.7U-6V3X5-06 C14 - SC9 - SC7 - C3 - C468 - C629 - C122 - C284 - C120 - C97 - C117 unstuff -> .1U; C8 - C7 unstuff -> 27P-04; C51 unstuff -> 1U-6V3X5-04 C139-C146 unstuff -> 2.7P-04 L8 - L7 unstuff ->CMK-90-08-MUT1-TAITECH; C105,C118,C119Unstuff -> 470P-50VX7-04	EMI solution.
	20150121	26	U33 - U15 change from UP7556 to UP7537	Safety solution
	20150121	33	Q38 Pin change from LAN_LED0 to LAN_LED2.	Solve Front LAN LED issue
	20150121	33	C554 - C599 unstuff -> .1U-16VX7-04	Acer PUS AVLC request.
	20150121	39	Minimun Load circuit modify	
	20150121	21	Remove WLAN LED BOM	
	20150121	17,18	SC43,SC42 22P->15P; Add SR36 0-04 C588,C592 18P->15P; R662 22-04 -> 33-1-04 R722 22-04 -> 47.5-1-04	CLK solution
	20150121	15	R610 unstuff -> 1K-04 R597 1.2K-1-04 -> unstuff	MOW 04 Update
	20150302	6	R273 22-04 ->20-04	Follow PDG
	20150302	12,14	C77 - C86 - C87 - C85 unstuff -> 10P-04;C16 unstuff -> 1000P-50VX7-04 C30 unstuff -> .1U-25VX5-04; C8 - C7 unstuff -> 27P-04;R722 47.5-1-04 -> 56-1-04	EMI solution.
	20150302	14		SI solution.
	20150302	16,24	Add PCIeX16/X1 PRSNT# circuit	CLK Auto detect
	20150302	22	PCIe Port 7 - 8 Sawp for PCI Express Controller Lane Reversal	Follow PDG1.5 Update
	20150302	22	Remove LAN Power circuit.	By EuP test PASS
	20150302	37	Add C558,C645 10U	220W PSU noise solution
	20150310	7,38-42	Power cost down	
	20150302	43	R440 4.7K-04 -> unstuff for +3VSB leakage solution in EuP mode .	

Schematics Version History Table:

Data:2014/11/28

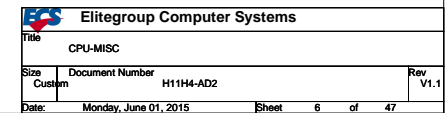
Rev.	Date	Page	Change list	Remark
1.0	20150518	13,14	VGA change to Reserve	
	20150518	12	C31,C12,C46,C47 unstuff -> 470P-50VX7-04	HDMI DDC sloution for SI test.
	20150518	15	R610 1K-04->unstuff;R597 unstuff -> 1.21K-1-04	For PCH QS pull-down 1.21K
	20150518	17,32	R662 33-1-04 -> 56-1-04;C613 unstuff -> 10P-04	24M CLK solution for SI test.
	20150518	32	Reserve RSMRST& Power down sequence circuit.	For iPCH21 power sequence pass.
	20150518	21	R357 unstuff ->10K-04;R432 unstuff->0-04 R426 unstuff->0-04	Auto control CLK
	20150518	15	ME test - SPI_Debug - LPC_Debug header change to Reserve.	MP request
	20150518	37	C598 unstuff -> .1U-16VX7-04;C531 unstuff-> 22-16VX5-04 C596 unstuff -> .1U16VX7-04	EMC solution
	20150518	39	Z2,Z3 footprint change to short pad.	
	20150518	32	R639 change from 4.7k to 510 for iPCH16 of B BOM issue.	

Elitegroup Computer Systems				
GPIO Function/INT# Mapping				
Doc	Document Number	H11144-AD2	Rev	V1.1
Date	Monday, June 01, 2016	Sheet	3	of 47

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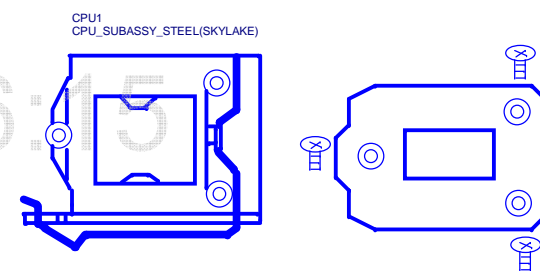
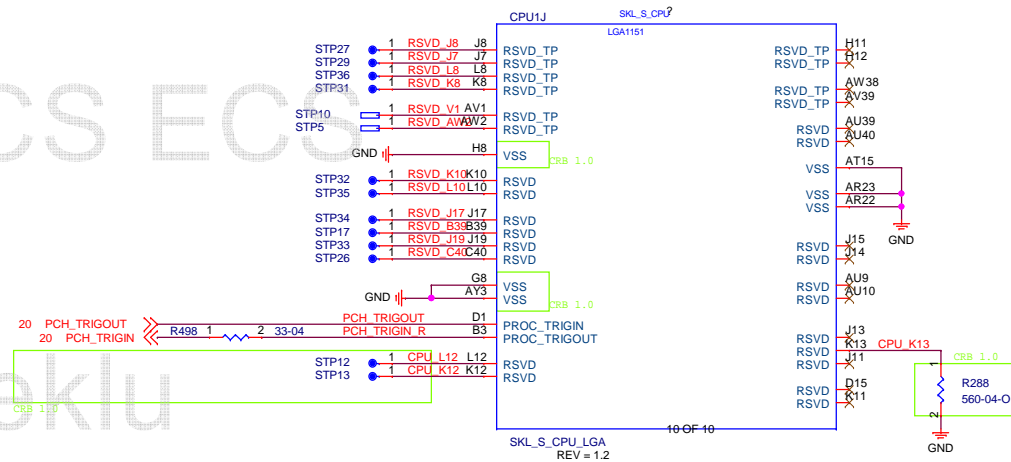
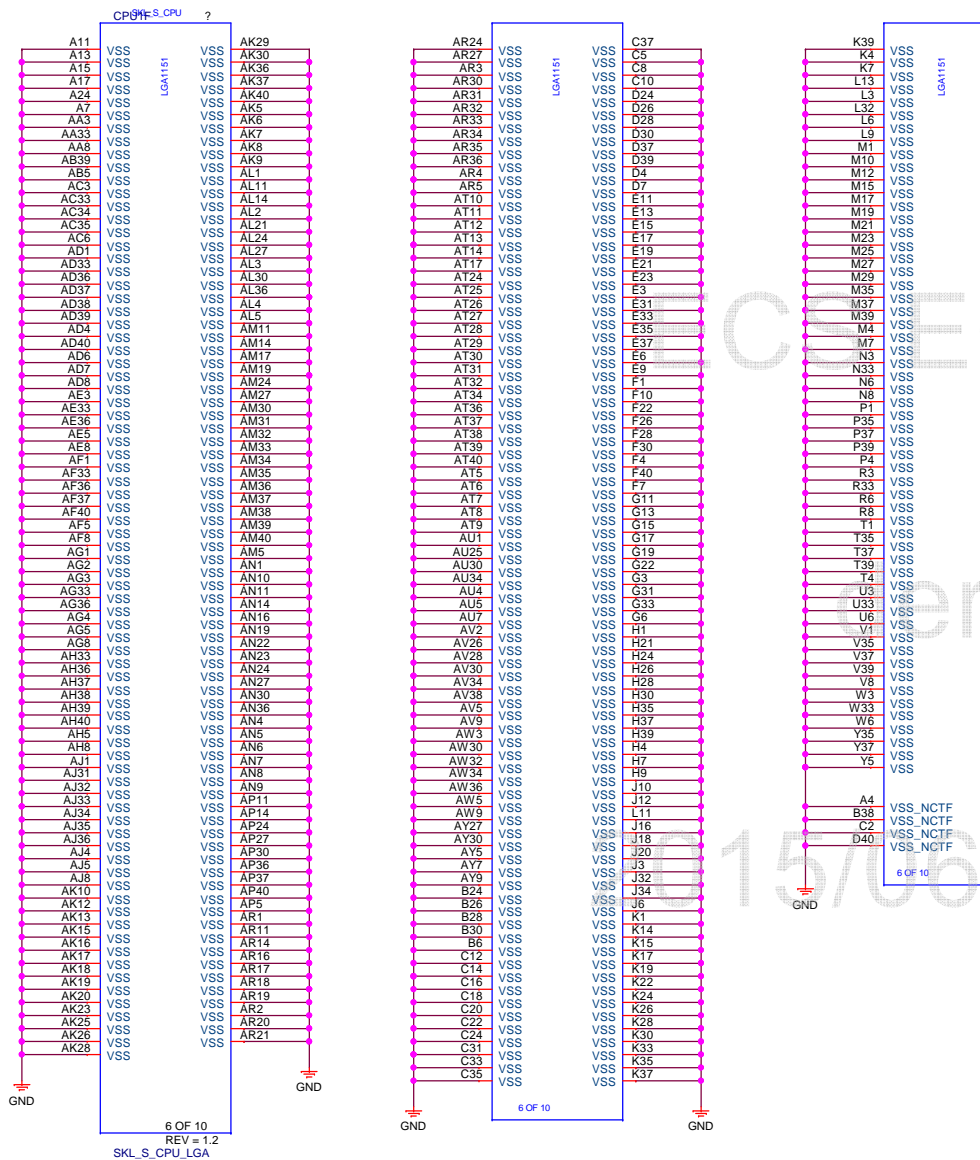








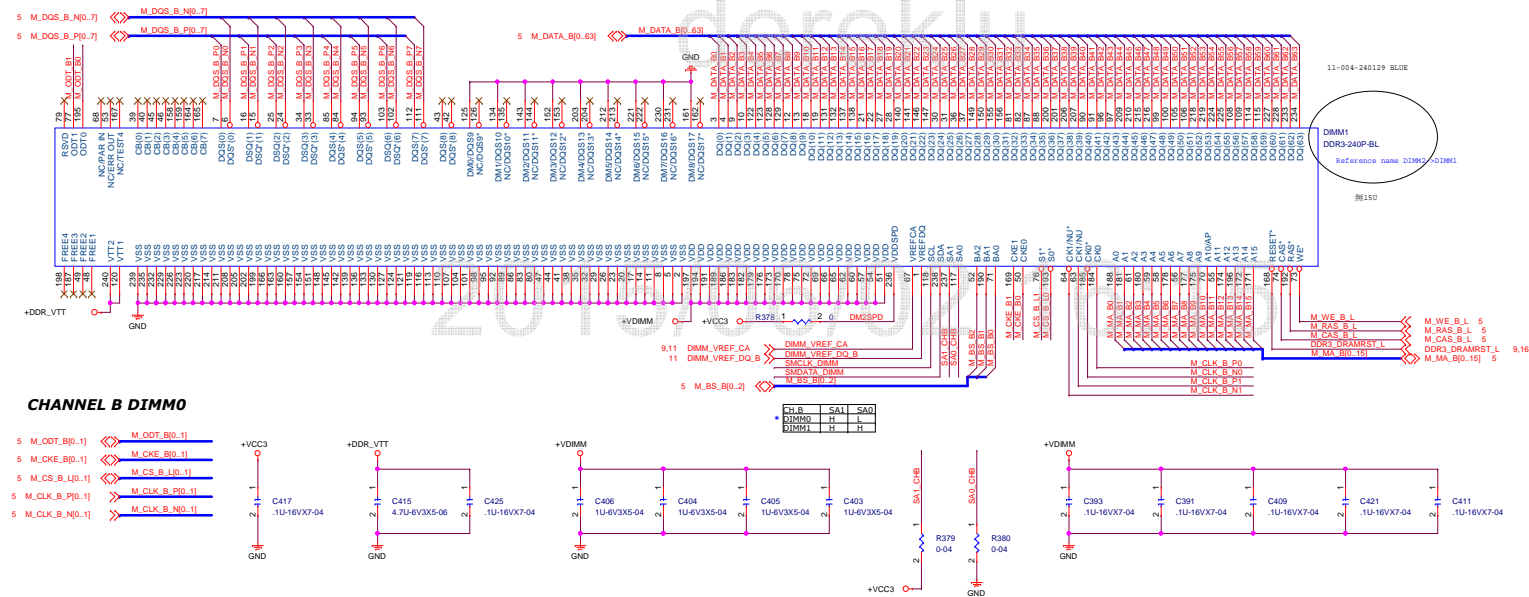




CPU Steel (T/U pahse)  
 PN:20-800-005911 SUBASSY.STEEL....LGA 1155/1156P.W/BACK PLATE.....  
 ACA-ZIF-082-P38....LEAD-FREE(RoHS/HF).LOTES

CPU Socket (SMD phase)  
 PN:11-018-115133 SOCKET.CPU..LGA 1151P SMD..G/F...  
 BLACK.AZIF0049-P002C...HF.LEAD-FREE.LOTES



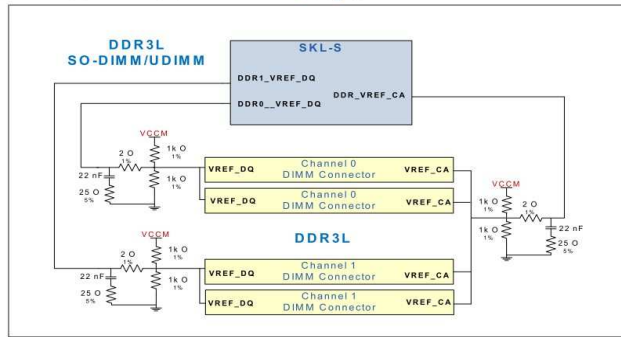


ECS ECS ECS

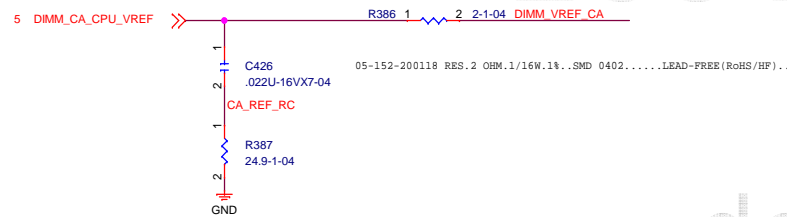
dereklu

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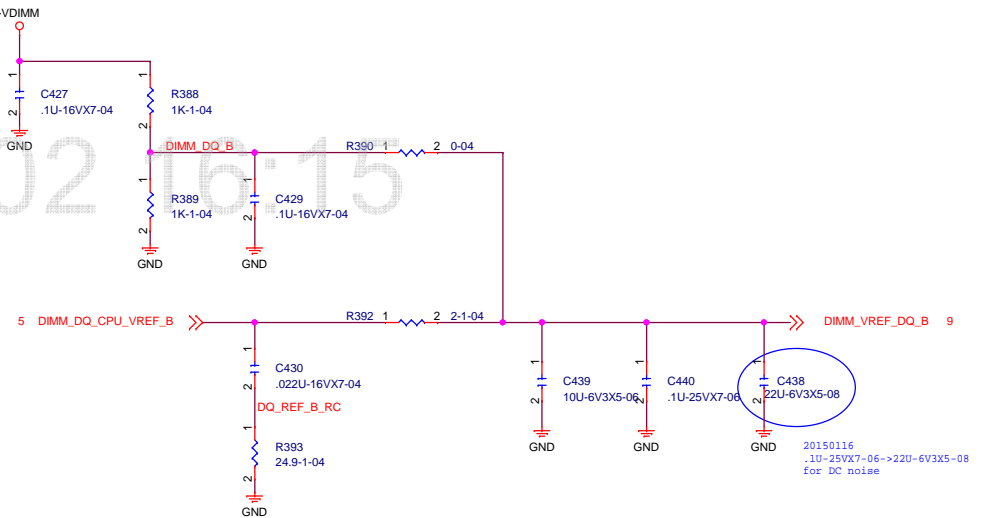
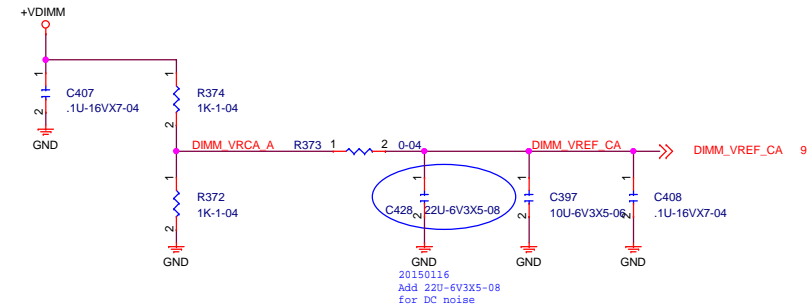
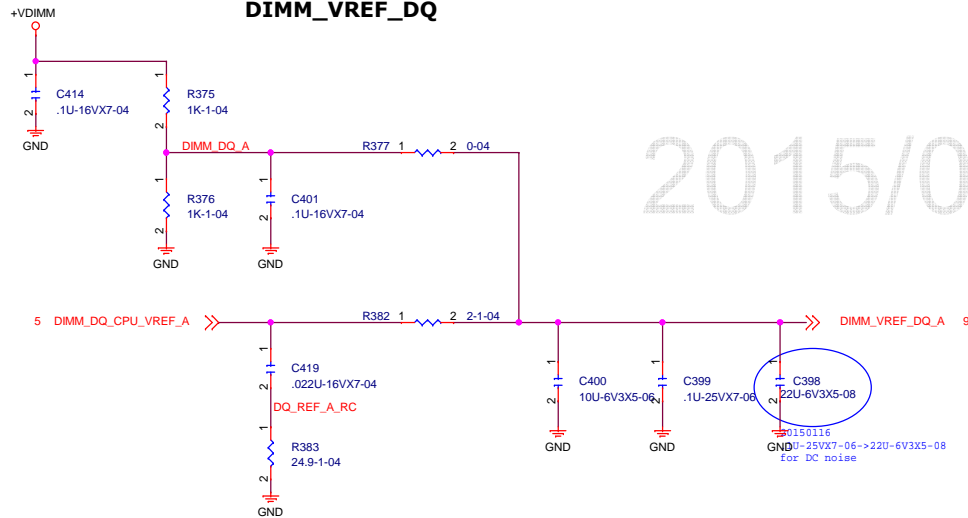
Figure 4-12. DDR3L SODIMM and UDIMM VREF Topologies



### DIMM\_VREF\_CA



### DIMM\_VREF\_DQ

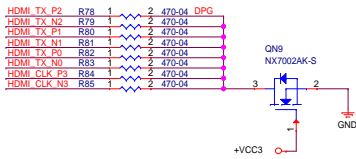


Port 2	DDI1_TXP[0]	DDI2_LANE0_DP	HDMIx_TX2_DP
	DDI2_TXN[0]	DDI2_LANE0_DN	HDMIx_TX2_DN
	DDI2_TXP[1]	DDI2_LANE1_DP	HDMIx_TX1_DP
	DDI2_TXN[1]	DDI2_LANE1_DN	HDMIx_TX1_DN
	DDI2_TXP[2]	DDI2_LANE2_DP	HDMIx_TX0_DP
	DDI2_TXN[2]	DDI2_LANE2_DN	HDMIx_TX0_DN
	DDI2_TXP[3]	DDI2_LANE3_DP	HDMIx_CLK_DP
	DDI2_TXN[3]	DDI2_LANE3_DN	HDMIx_CLK_DN

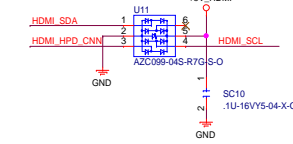
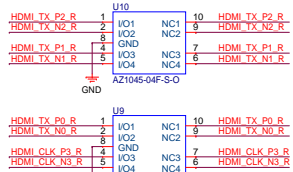
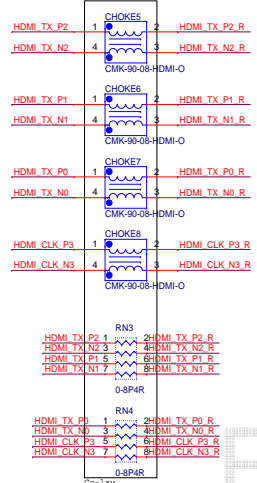
## HDMI

HDMI的DDI1\_TX信號\_TX0到TX2必須交換1次

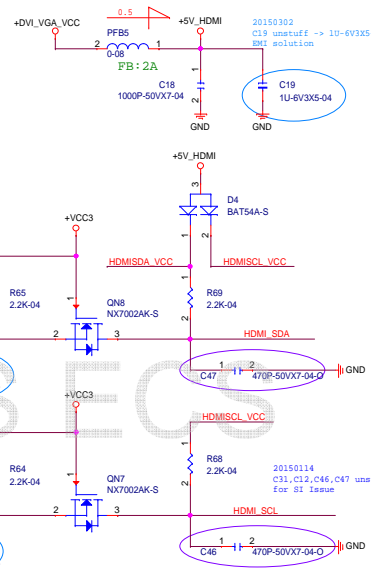
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4	DDI2_TX_P1	C78	1	2	1U-16VX7-04	HDMI TX P1
4	DDI2_TX_N1	C79	1	2	1U-16VX7-04	HDMI TX N1
4	DDI2_TX_P2	C80	1	2	1U-16VX7-04	HDMI TX P0
4	DDI2_TX_N2	C81	1	2	1U-16VX7-04	HDMI TX N0
4	DDI2_TX_P3	C82	1	2	1U-16VX7-04	HDMI CLK P3
4	DDI2_TX_N3	C83	1	2	1U-16VX7-04	HDMI CLK N3



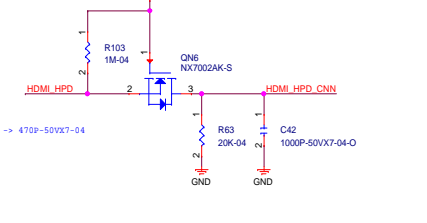
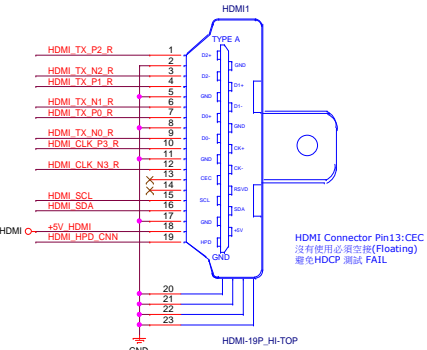
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COMMON CHOKES 90 OHM .SMD  
0805...HDMI2012P28P-900T04.400mA...HF LEAD-FREE  
(RoHS) .TAI-TECH



CRLS Support max data rate of 1.65 Gb/s



PN:10-083-019701  
CONN:HDMI A-TYPE...19P 90D SMD  
...G/F...W/SCREW HOLE...1HD01911-51213...  
HF LEAD-FREE HI-TOP



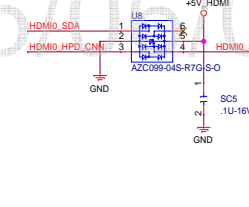
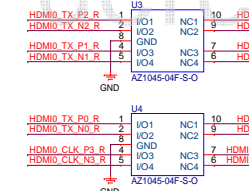
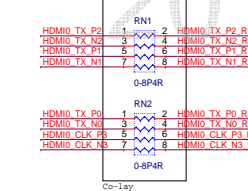
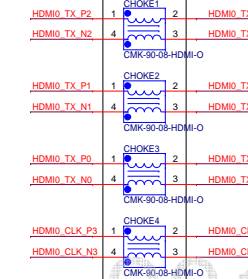
## HDMI

(HDMI& VGA Option)

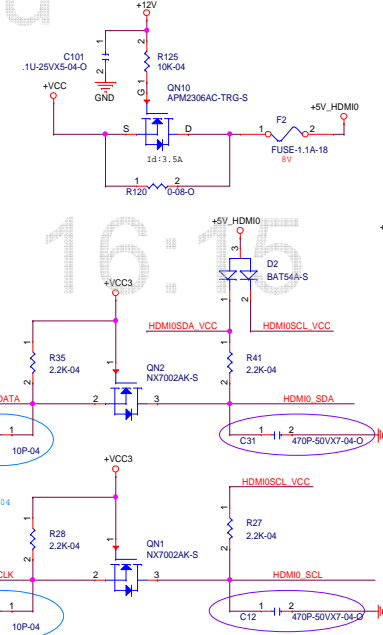
4	DDI1_TX_P0	C56	1	2	1U-16VX7-04	HDMI0 TX P2
4	DDI1_TX_N0	C57	1	2	1U-16VX7-04	HDMI0 TX N2
4	DDI1_TX_P1	C58	1	2	1U-16VX7-04	HDMI0 TX P1
4	DDI1_TX_N1	C59	1	2	1U-16VX7-04	HDMI0 TX N1
4	DDI1_TX_P2	C60	1	2	1U-16VX7-04	HDMI0 TX P0
4	DDI1_TX_N2	C61	1	2	1U-16VX7-04	HDMI0 TX N0
4	DDI1_TX_P3	C62	1	2	1U-16VX7-04	HDMI0 CLK P3
4	DDI1_TX_N3	C63	1	2	1U-16VX7-04	HDMI0 CLK N3



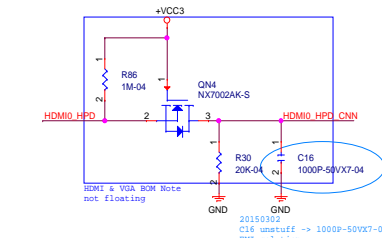
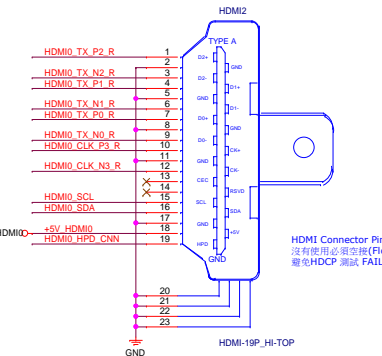
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0805...HDMI2012P28P-900T04.400mA...HF LEAD-FREE  
(RoHS) .TAI-TECH



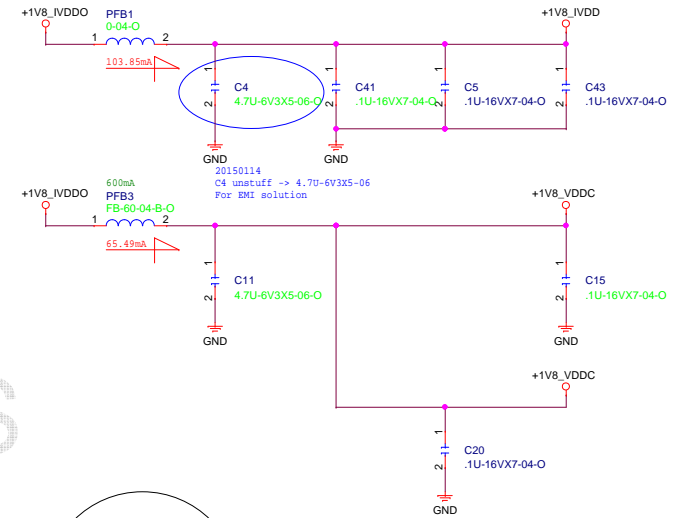
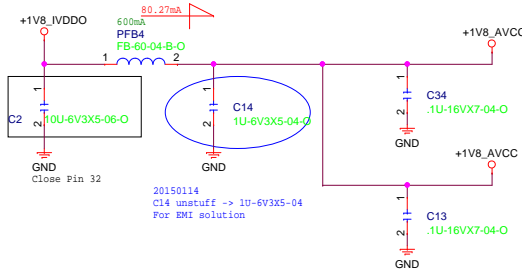
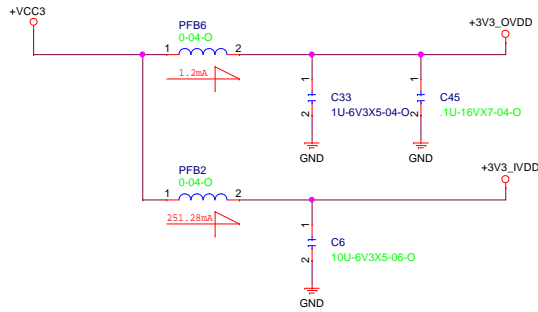
CRLS Support max data rate of 1.65 Gb/s



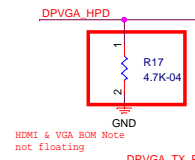
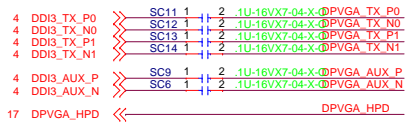
PN:10-083-019701  
CONN:HDMI A-TYPE...19P 90D SMD  
...G/F...W/SCREW HOLE...1HD01911-51213...  
HF LEAD-FREE HI-TOP



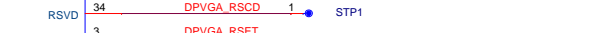
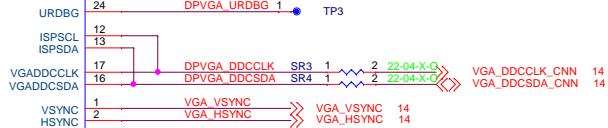
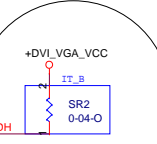
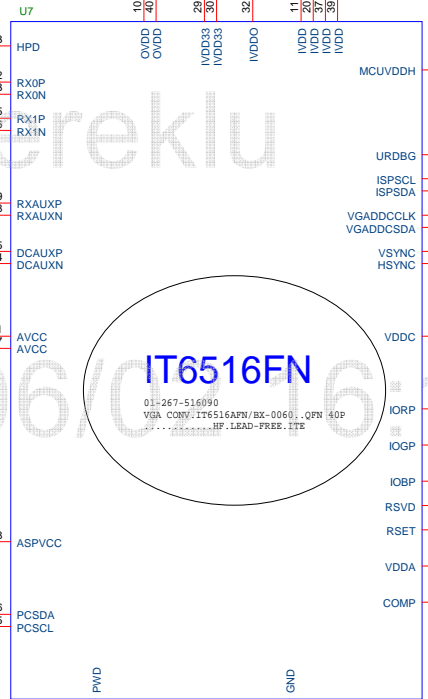
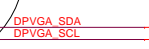
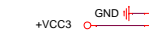
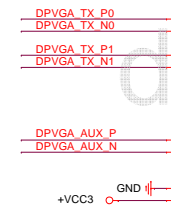
Elitegroup Computer Systems			
File	HDMI2		
Size	Document Number	H11H4-AD2	Rev V1.1
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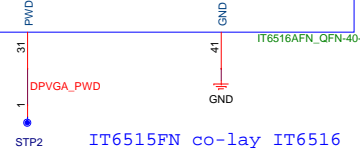
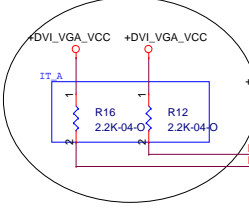
### DisplayPort to VGA



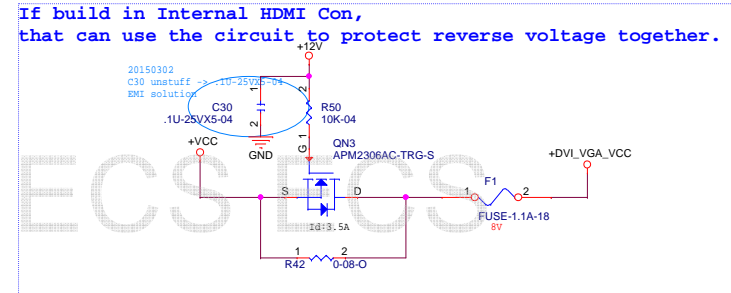
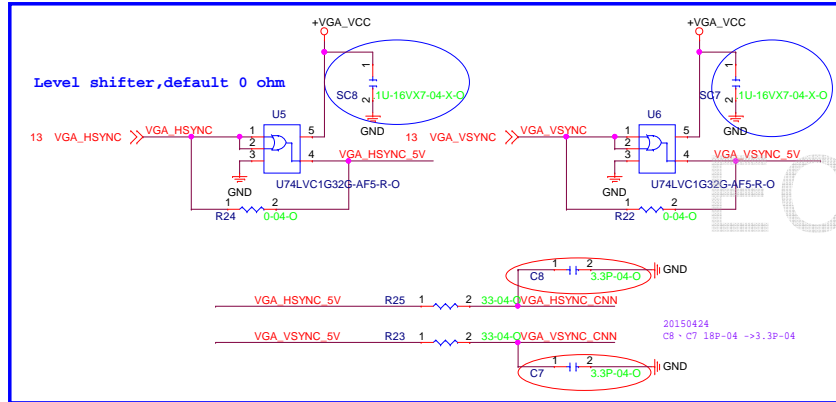
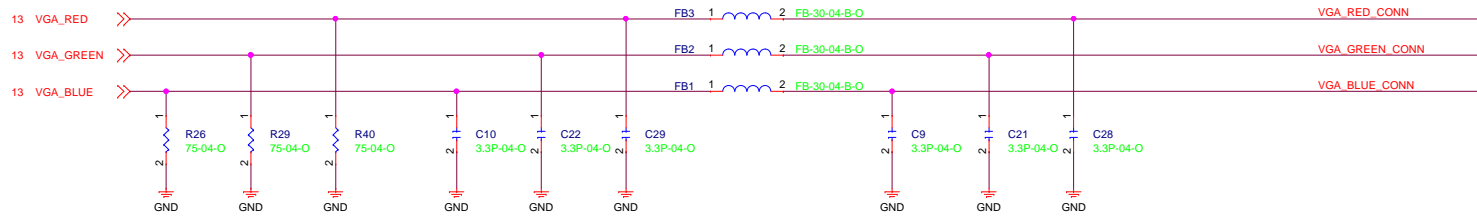
HDMI & VGA BOM Note  
not floating



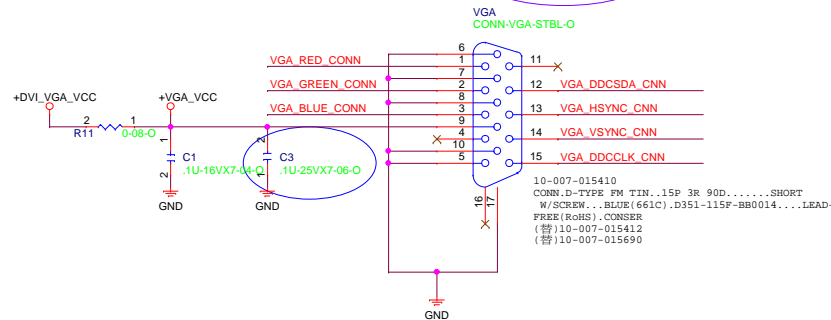
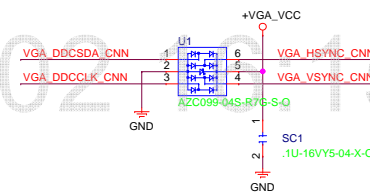
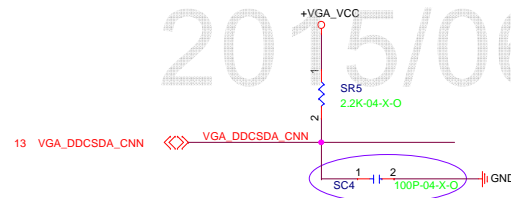
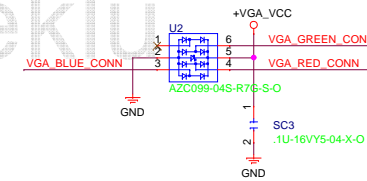
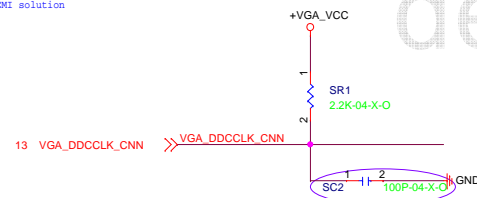
	IT_A	IT_B
IT6515	2.2K	0 Ohm
IT6516	NC	NC



# VGA (VGA & DP Option)

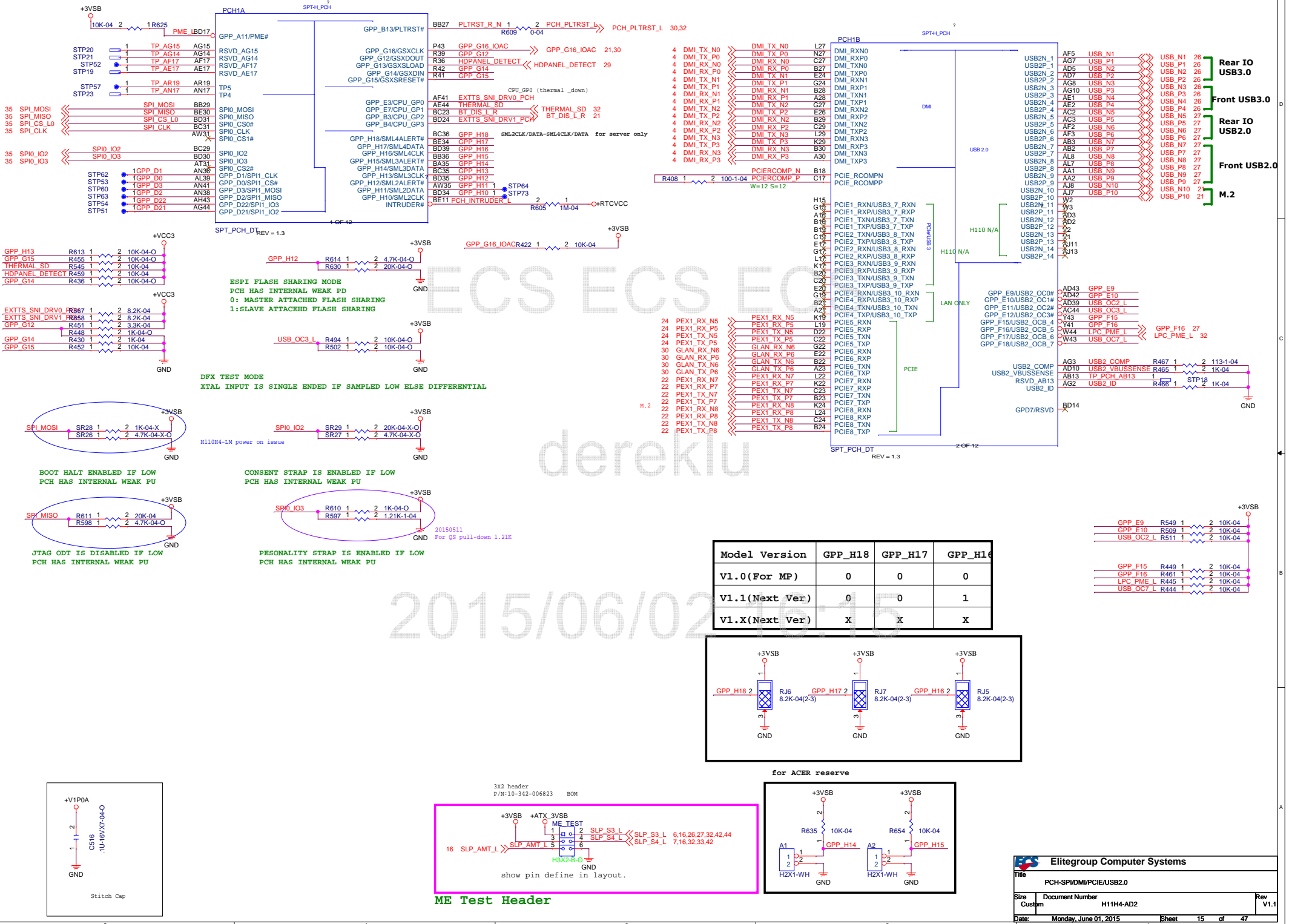


20150112  
SC8 - SC7 - C3 unstuff -> .10  
EMI solution

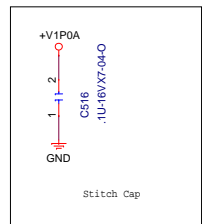
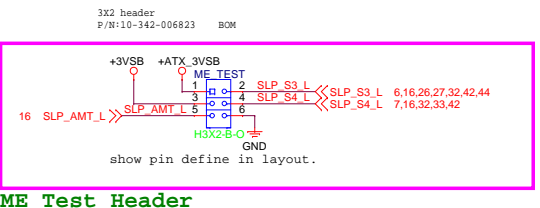
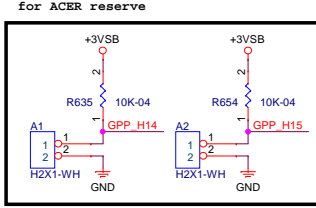
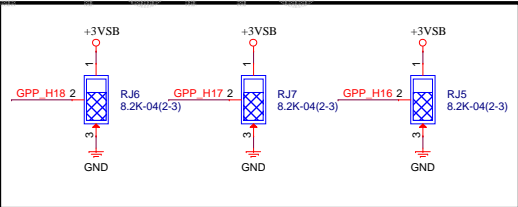


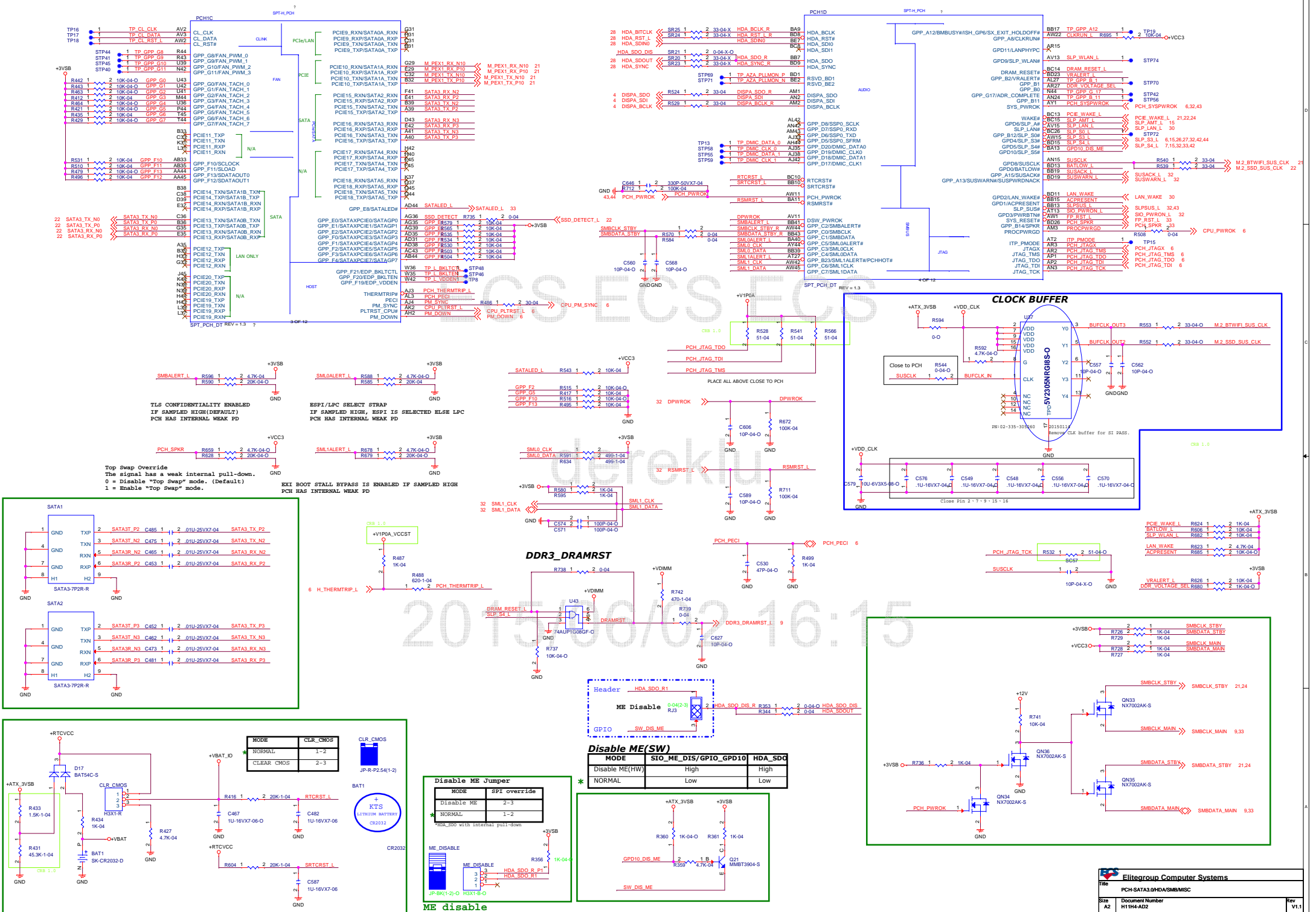
Elitegroup Computer Systems			
Title			
VGA			
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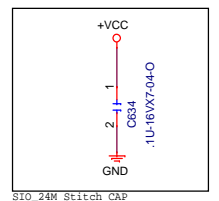
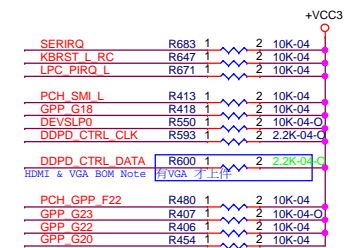





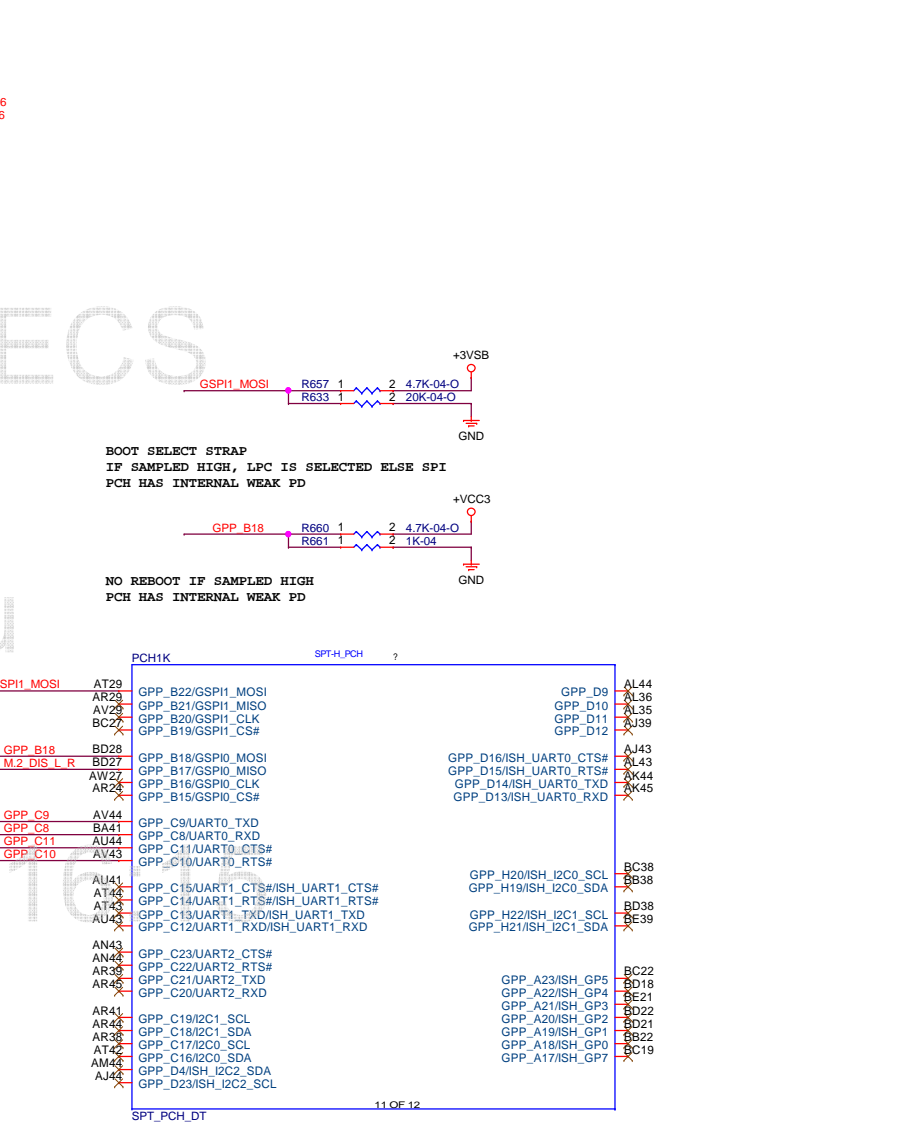
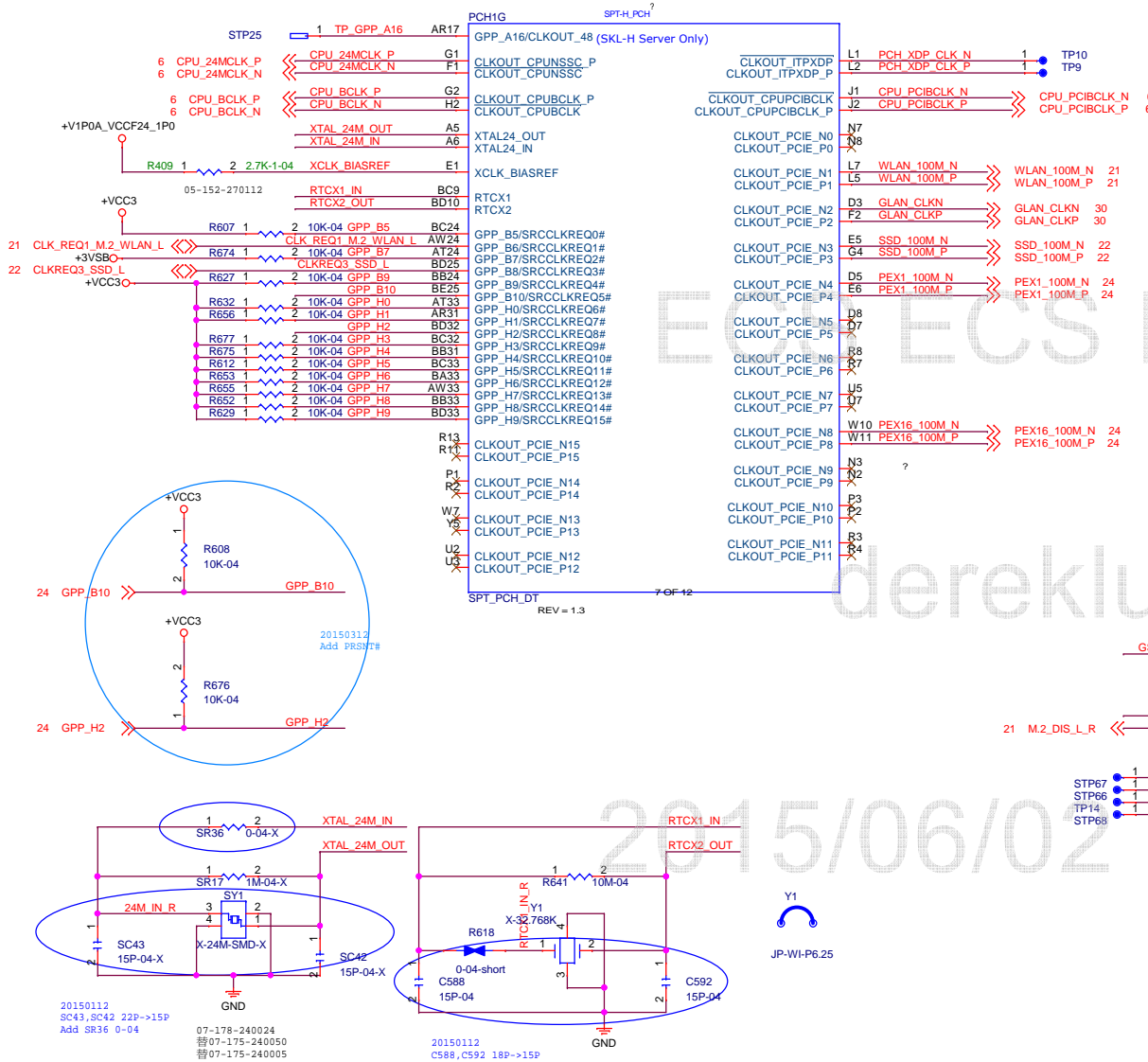
Model Version	GPP_H18	GPP_H17	GPP_H16
V1.0(For MP)	0	0	0
V1.1(Next Ver)	0	0	1
V1.X(Next Ver)	X	X	X



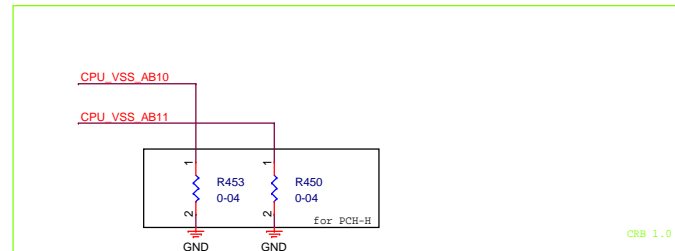
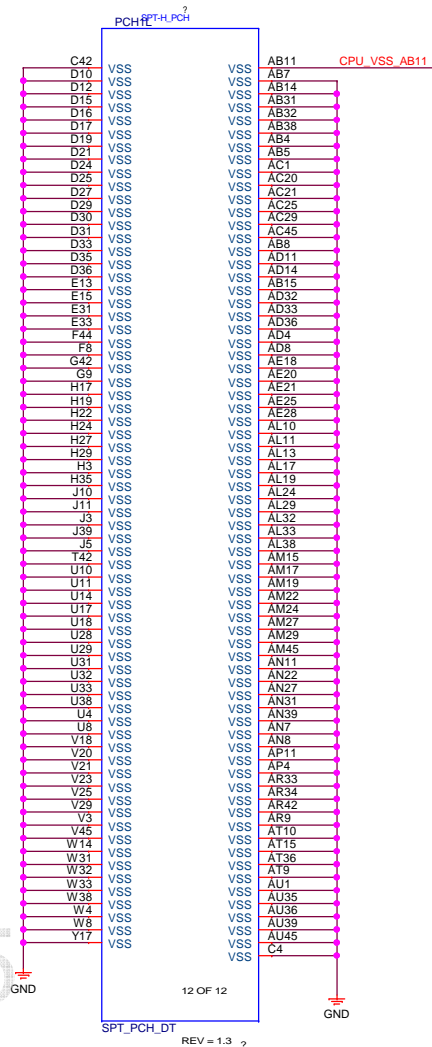
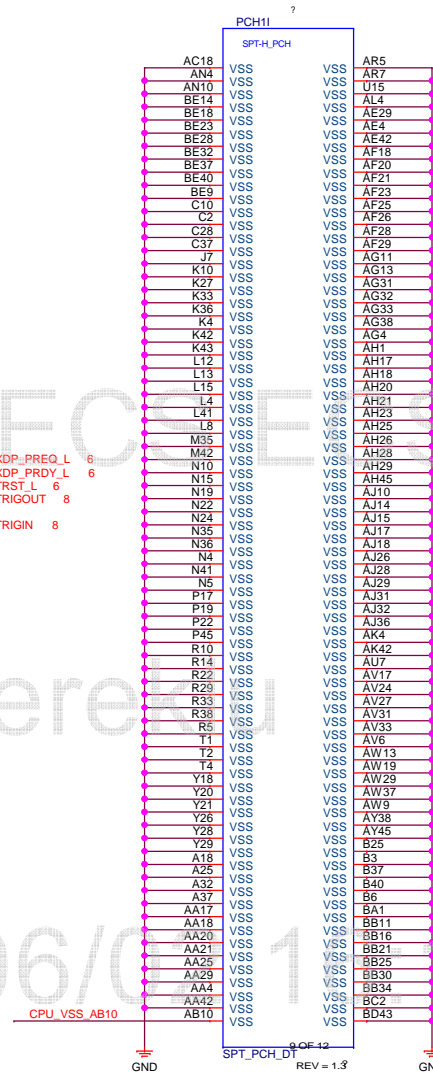
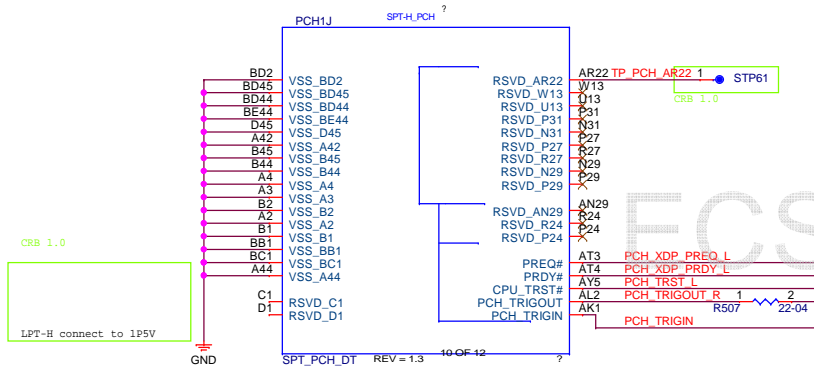




 <b>Elitegroup Computer Systems</b>			
Title			
PCH-USB3.0/LPC			
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IRST for IOAC

所有的IOAC GPO 需要3V58 power well  
Default GPI  
50/455: HIGH  
53: LOW

15.30 GPP\_G18\_IOAC\_

24.32.33 PCIRST3\_L

1 2 3

B2  
BATS45-SO

R367 0-04

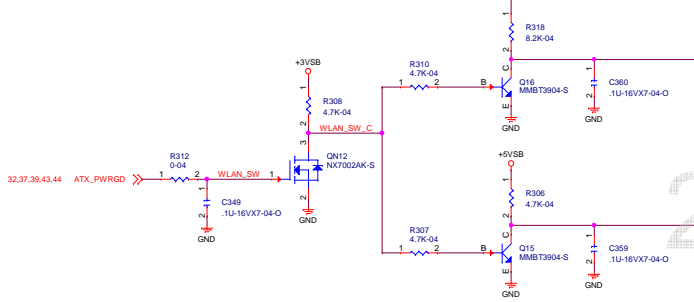
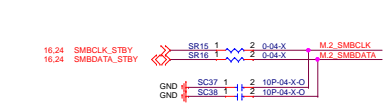
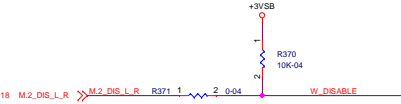
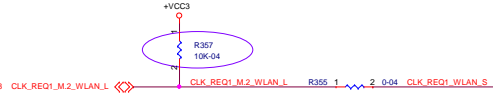
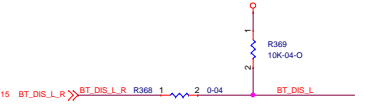
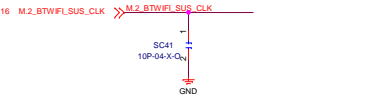
R366 3.3K-Q4-0

+VCC3

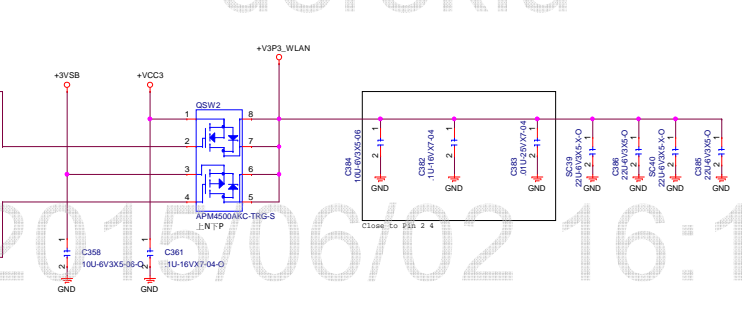
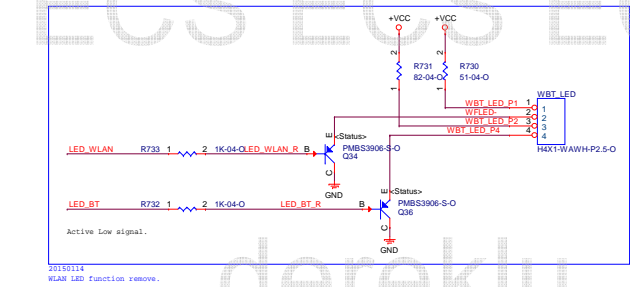
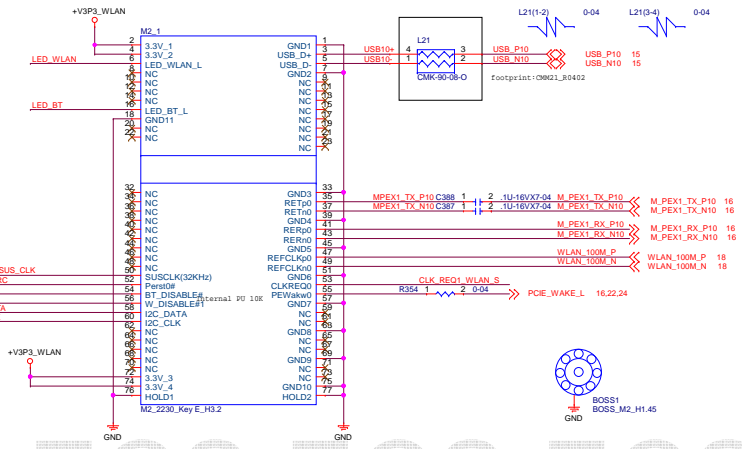
M.2\_RST\_L\_RC

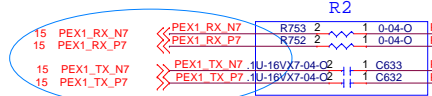
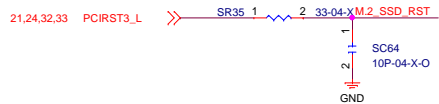
C396 10P-04-0

GND



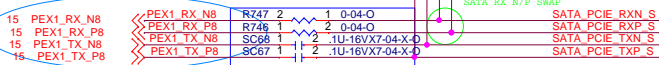
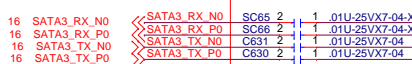
	ATX_PWRGD	+V3P3_WLAN
S0	1	+VCC3
S3/S4/S5	0	+3VSB



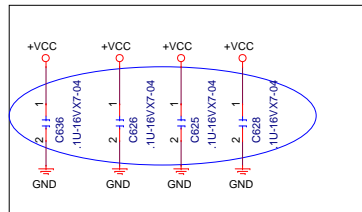


20150312  
PCIe Port 7-8 Swap for PCI Express Controller Lane Reversal

## SATA PCIe Co-lay



20150312  
PCIe Port 7-8 Swap for PCI Express Controller Lane Reversal



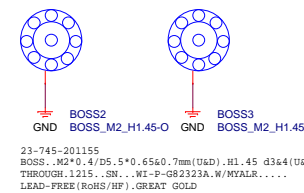
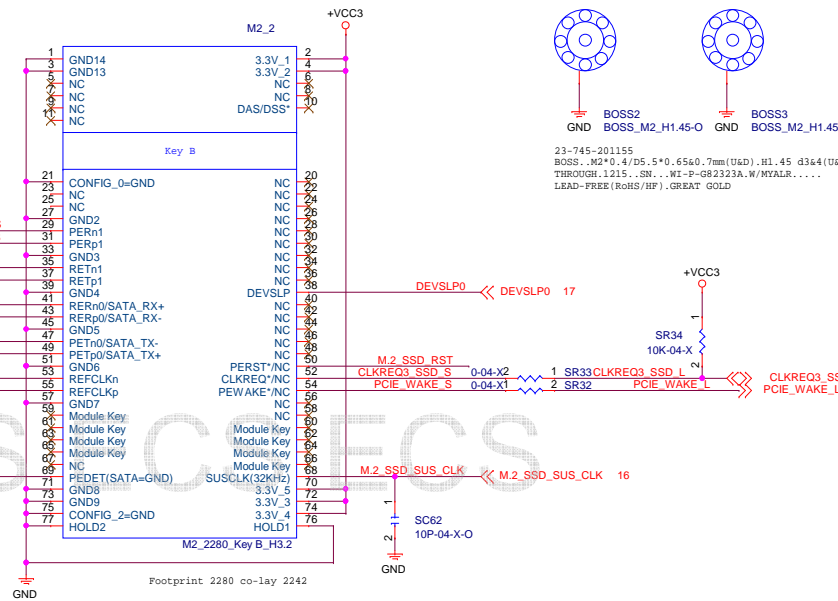
20150119  
C636,C626,C625,C628 unstuff -> 1U-16VX7-04  
for SI solution.

	R1	R2
SATA	V	
PCIe		V

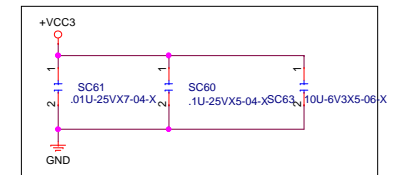
## Truth Table

SEL	Function
L	N_in+ to N_outa+ & N_in- to N_outa- N_in+ to N_outb+ & N_in- to N_outb-
H	

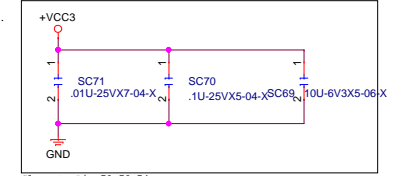
10-456-067068  
SLOT.WGP# M.2..67P 2P 90D SMD..P.0.5mm  
....G/F..KEY B.H3.2..BLACK.APC10018-P002A....LEAD-FREE(RoHS/HP)..LOTES  
(替)10-456-067083



23-745-201155  
BOSS..M2\*0.4/D5.5\*0.65±0.7mm(U&D)..H1.45 d3±4(U&D).  
THROUGH.1215..SN..WI-P-G82123A.W/MYALR.....  
LEAD-FREE(RoHS/HP)..GREAT GOLD



Close to Pin 2 4



Close to Pin 70 72 74


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M.2 Slot(SSD)			
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ECS ECS ECS

dereklu

2015/06/02 16:15

		
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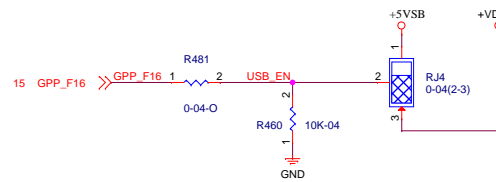
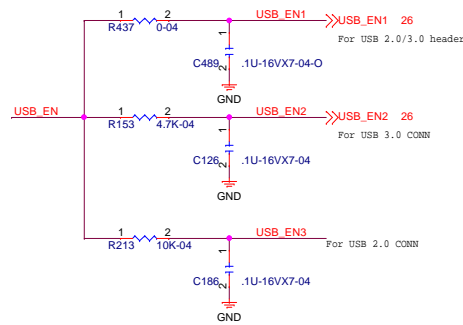
ECS ECS ECS

dereklu

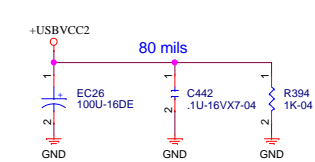
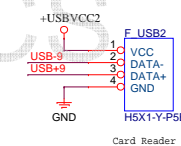
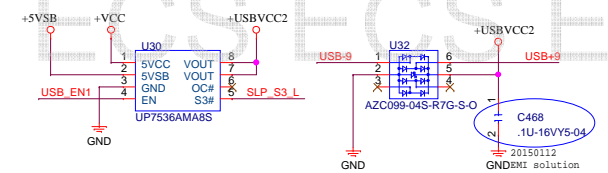
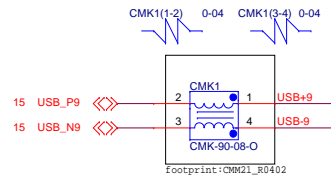
2015/06/02 16:15



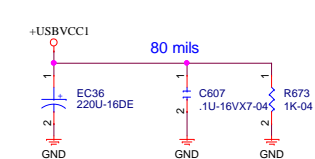
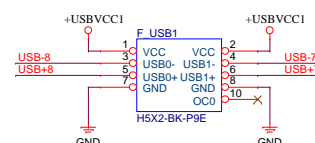
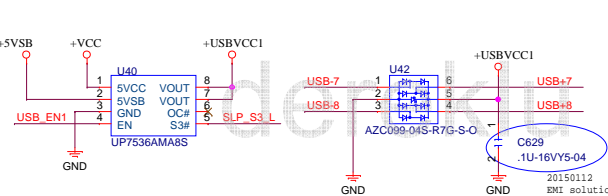
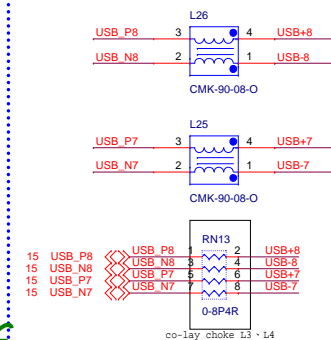




uP7536 Enable use	RJ?	RJ?	S4/S5 USB_5V_DUAL	Customer
★ VDIMM	0ohm (1-2)	NA	0 Volt	Acer S4 w/o S5 w/ USB_5VDUAL
5VSB	0ohm (2-3)	NA	5 Volt	
GPIO	NA	0 ohm	S4 : 0 Volt S5 : 5 Volt	



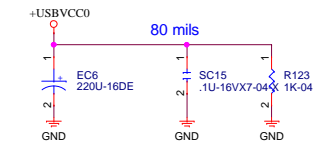
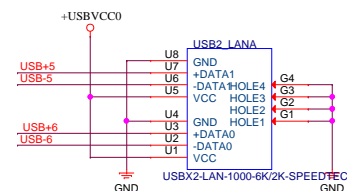
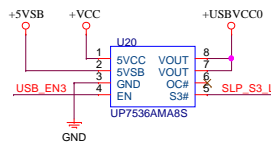
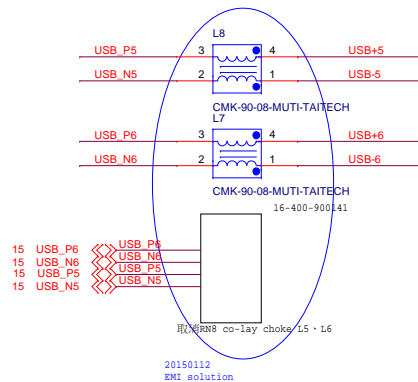
6,15,16,26,32,42,44 SLP\_S3\_L SLP\_S3\_L



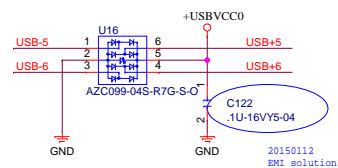
USB2.0 header

USB2.0 connector

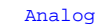
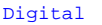
USB2.0 header reserve



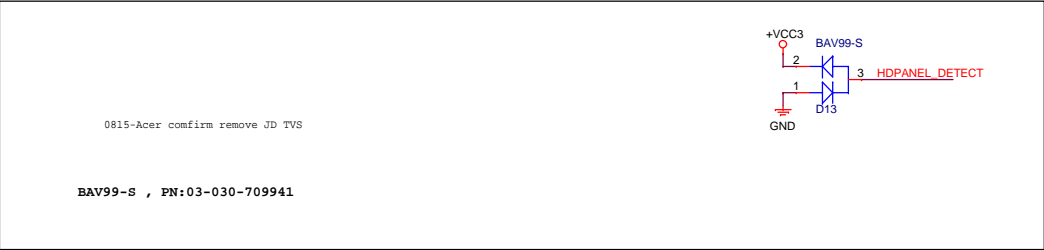
Lan + USB2.0



Elitegroup Computer Systems			
Title USB2.0 Connector/Header			
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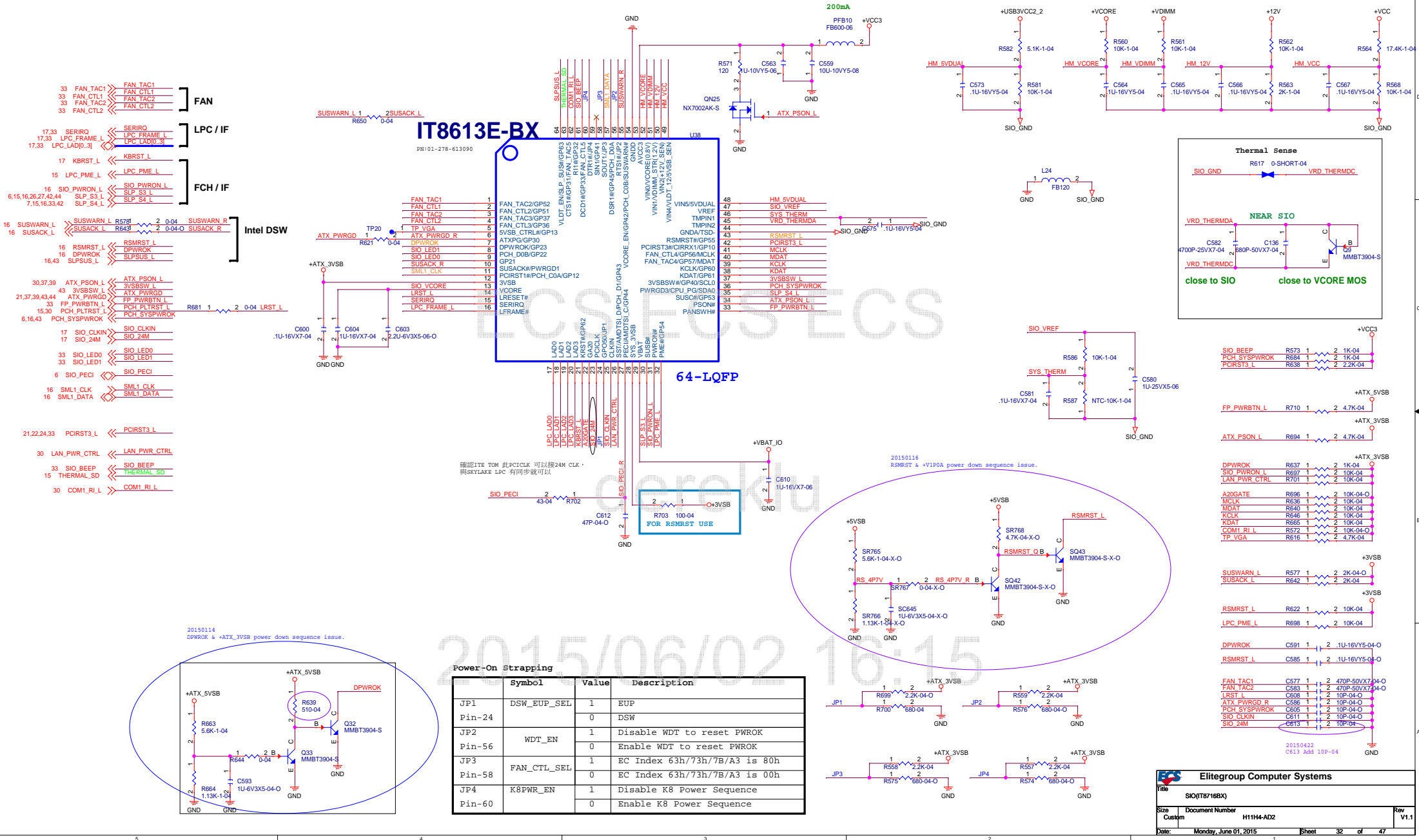


ECS ECS ECS

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 Elitegroup Computer Systems			
Title Reserve			
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Power-On Strapping

	Symbol	Value	Description
JP1	DSW_EUP_SEL	1	EUP
		0	DSW
JP2	WDT_EN	1	Disable WDT to reset PWROK
		0	Enable WDT to reset PWROK
JP3	FAN_CTL_SEL	1	EC Index 63h/73h/7B/A3 is 80h
Pin-58		0	EC Index 63h/73h/7B/A3 is 00h
JP4	K8PWR_EN	1	Disable K8 Power Sequence
Pin-60		0	Enable K8 Power Sequence






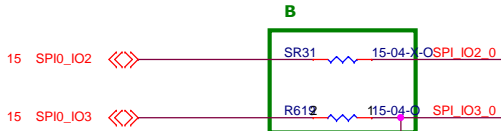
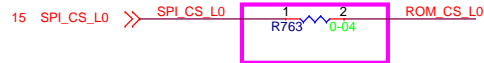
ECS ECS ECS

dereklu

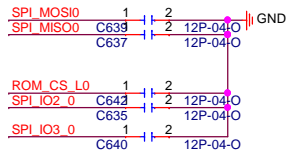
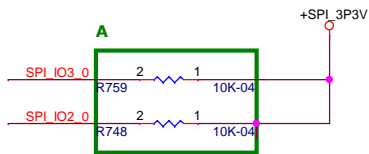
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 Elitegroup Computer Systems			
Title Reserve			
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# SPI ROM



R758 2 11K-04-0 GND  
SKL Platforms - SPI0\_IO3 Signal Implementation Requirement for ES or pre-ES1/ES1 Samples



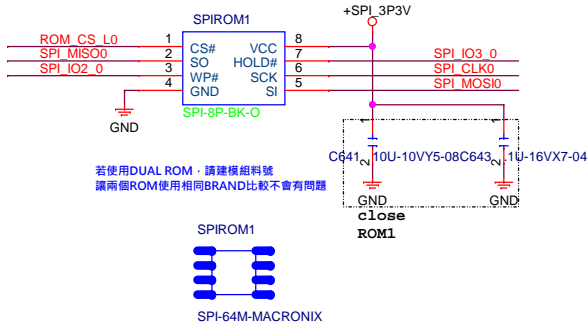
## SPI mode selection:

MODE \ BIOS WP	A	B
Standard/Dual	NA	10K
Quad	NA	1K

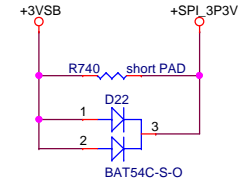
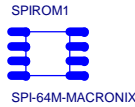
Note. Quad SPI not support WP



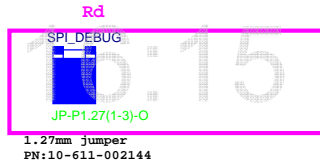
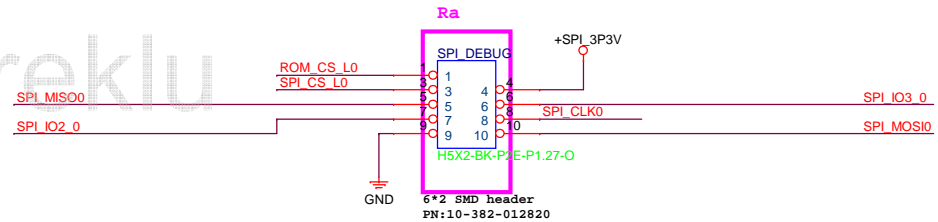
BIOS WP



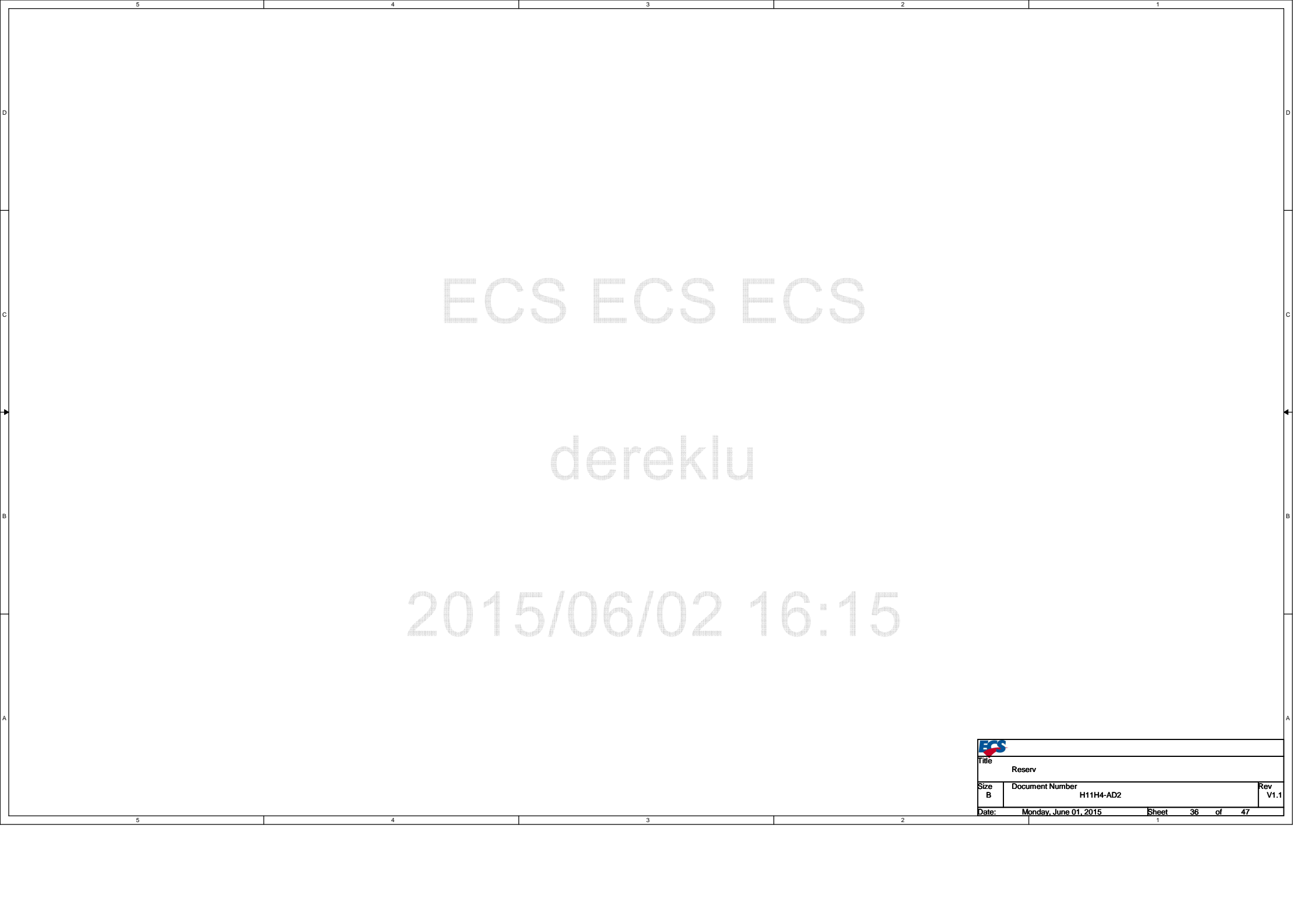
若使用DUAL ROM，請建模組料號  
讓兩個ROM使用相同BRAND比較不會有問題



A3 stuff BAT54C for debug and reserve 0 ohm  
A4 0 ohm change to SH



	Ra	Rd	Re
A3~A5	O	O	X
MP	X	X	O




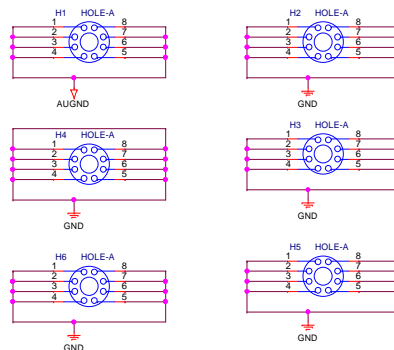
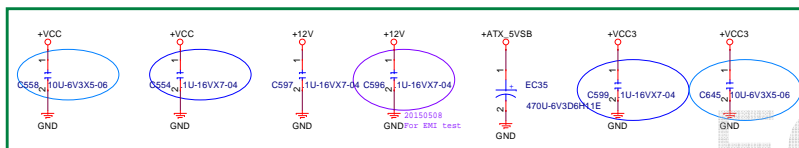
Reserv

ECS ECS ECS

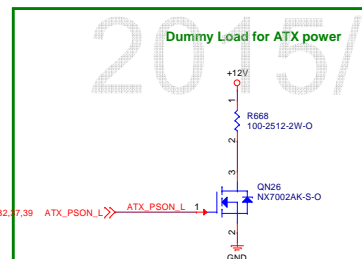
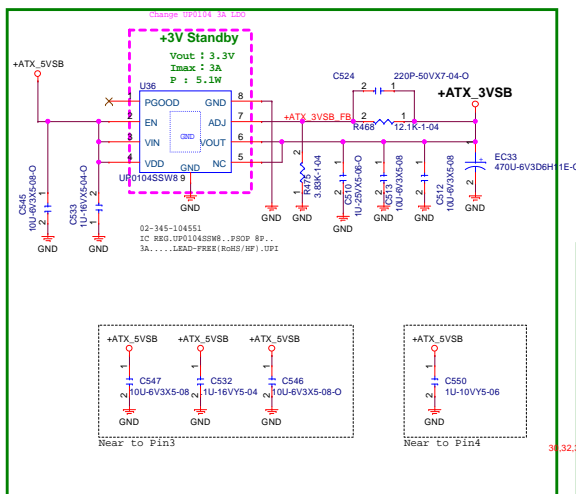
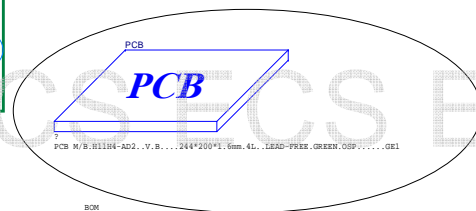
dereklu

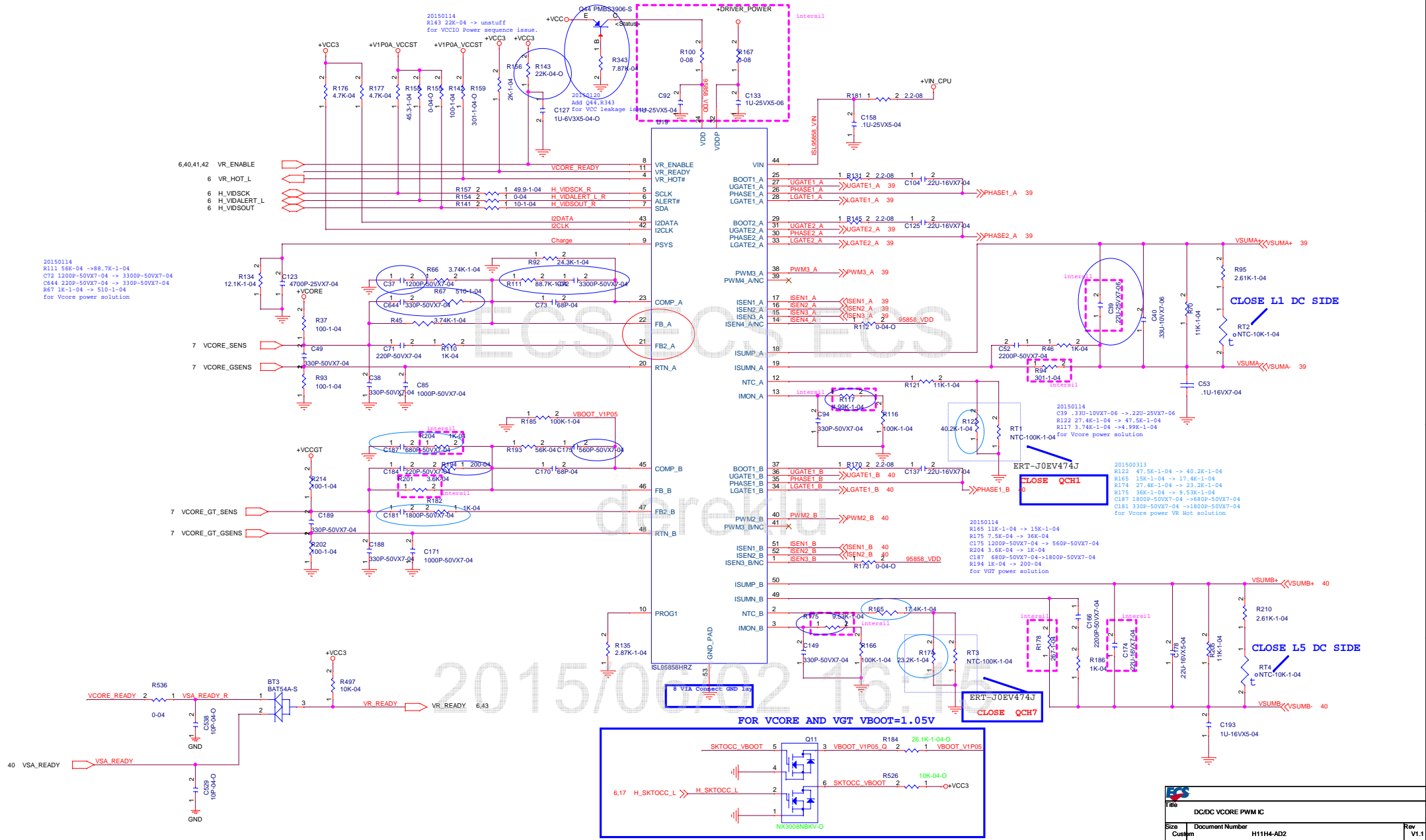
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Reserv			
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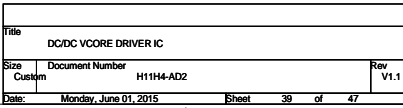


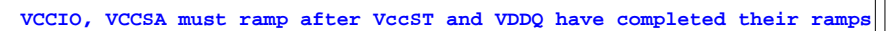
Derek Lu 9/12 Del VCC3 &amp; VCC DC/DC switching





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DC/DC VCORE PWM IC			
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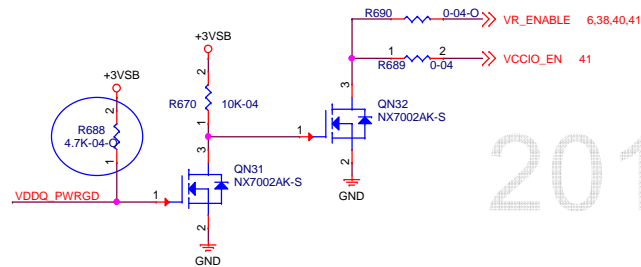
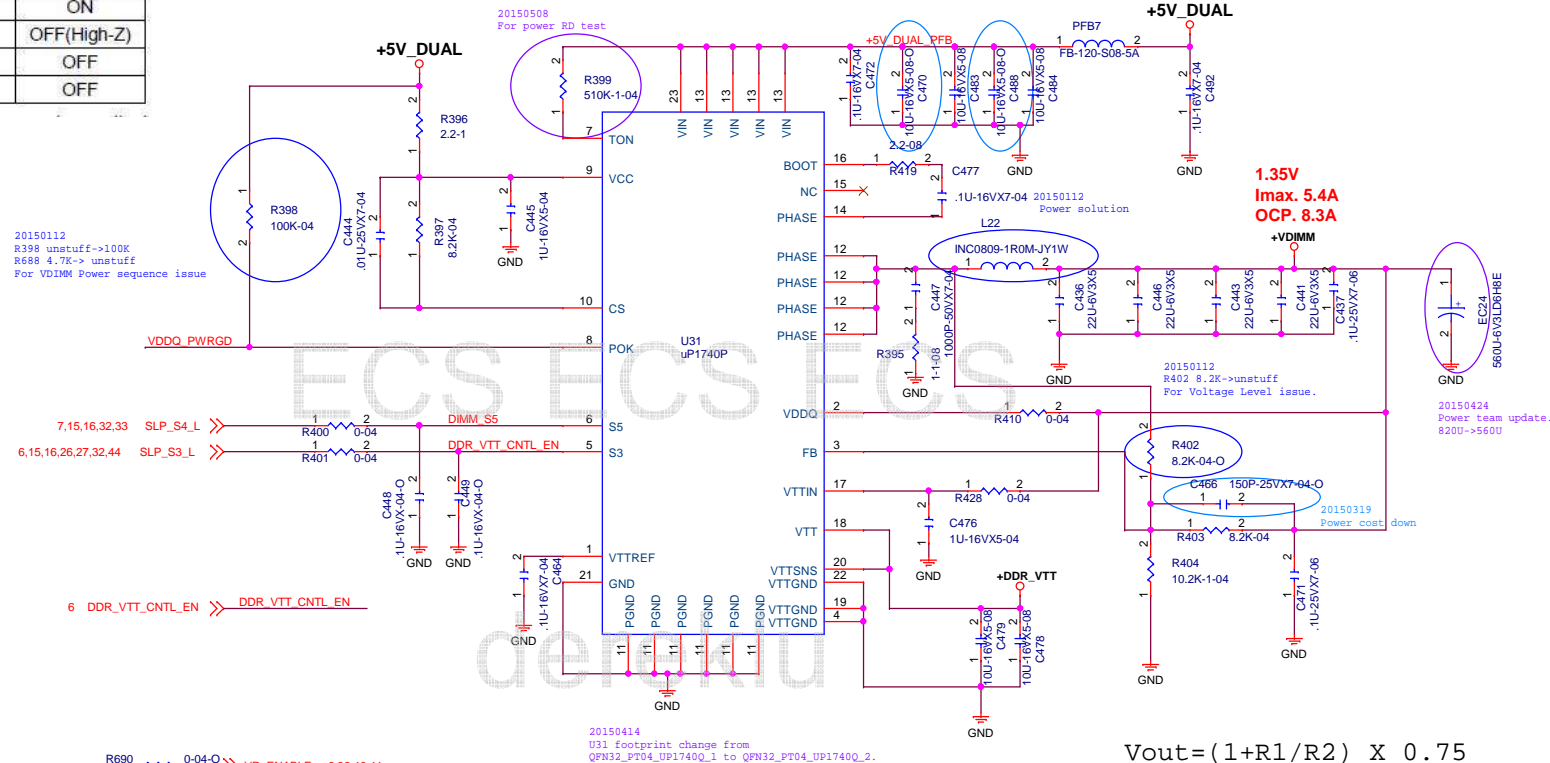
## VDIMM

### Table 1—EN1/EN2 Control

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

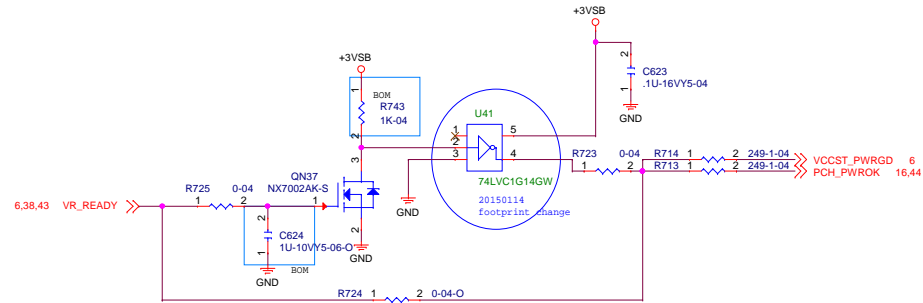
PARAMETER	SPECIFICATION
L0	1.0 ± 20% uH
DCR	10 max mohm
I-sat	16.0 (min) Amps
I rms	11.0(min) Amps

```
20150112
R398 unstuff->100K
R688 4.7K-> unstuff
For VDIMM Power sequence issue
```

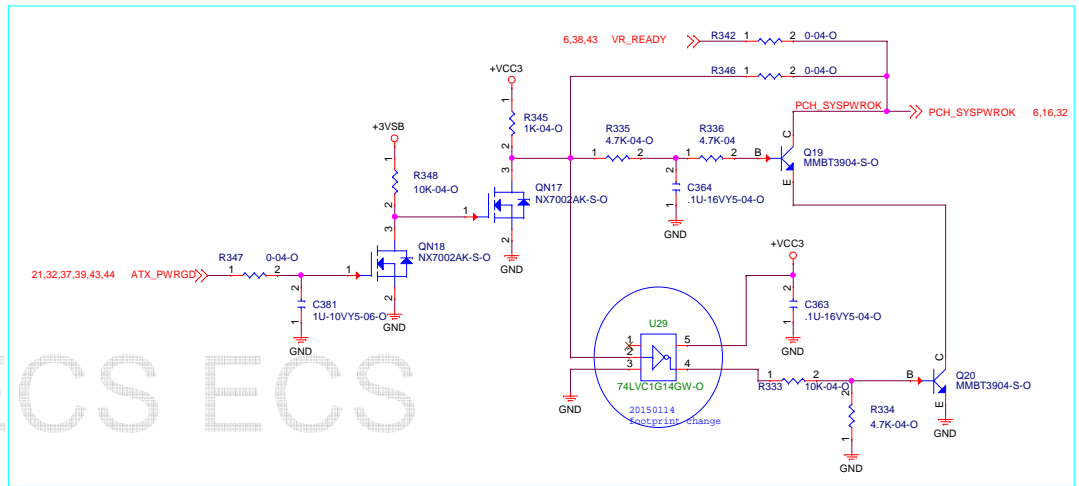


$$V_{out} = (1 + R1/R2) \times 0.75$$

## PCH & VCCST PWROK

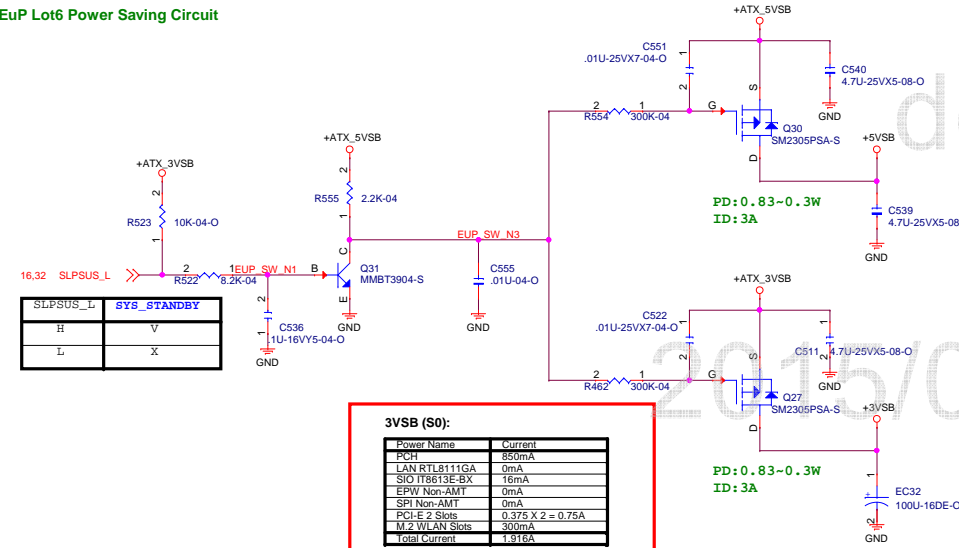


## SYS\_PWROK SURPRISE POWER DOWN TRIGGERED BY PWRGD\_PS

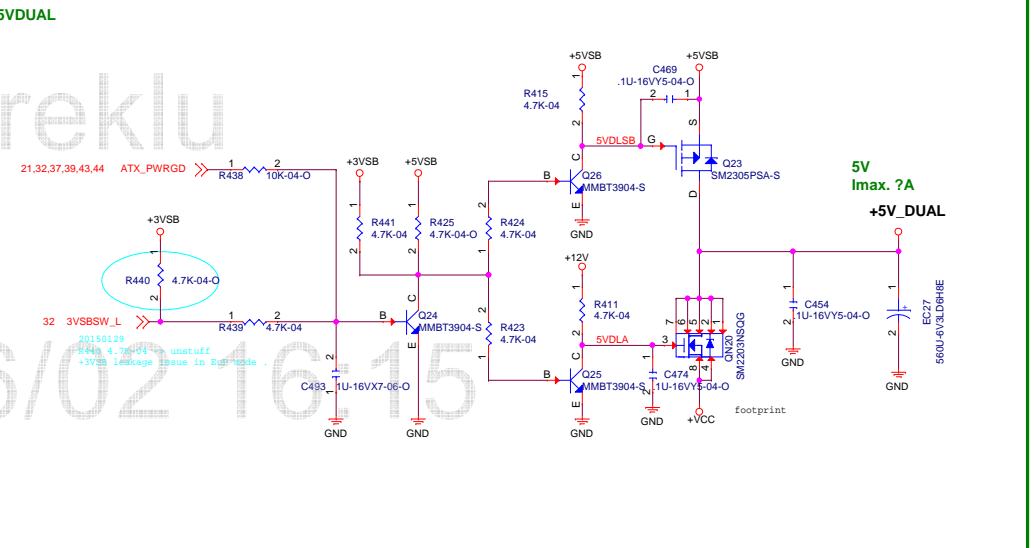


20150129  
此線路可以省略,因810有此功能

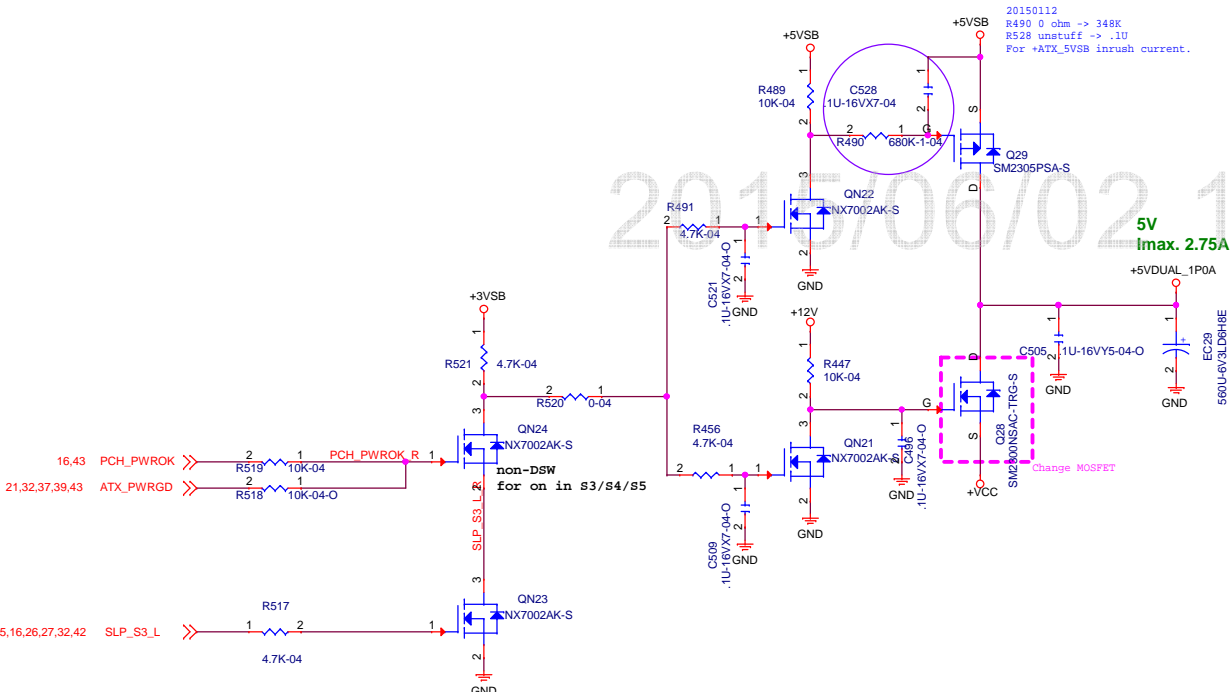
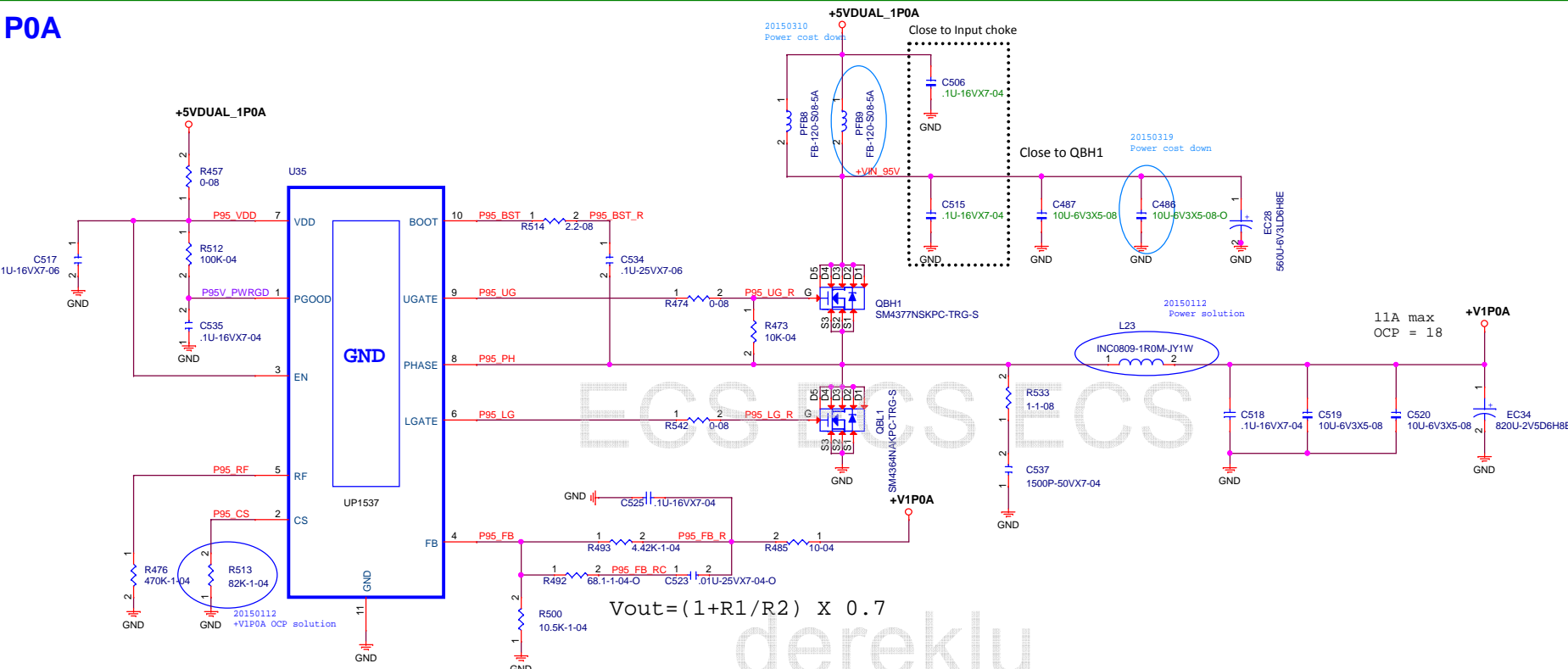
## EuP Lot6 Power Saving Circuit



## 5VDUAL



# V1P0A



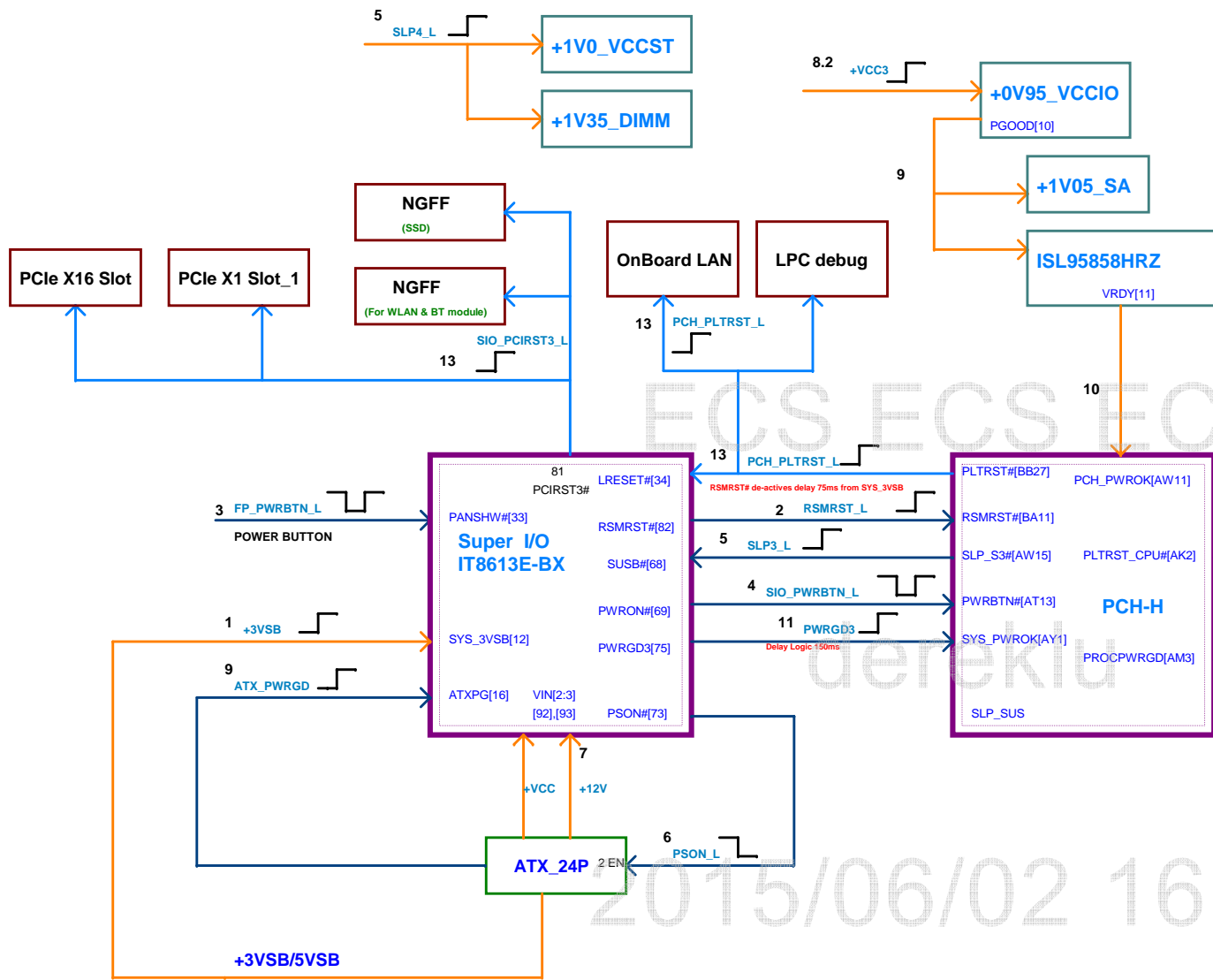


Figure 41-1. SKL S Flow Diagram for SYS\_PWROK/PCH\_PWROK Generation

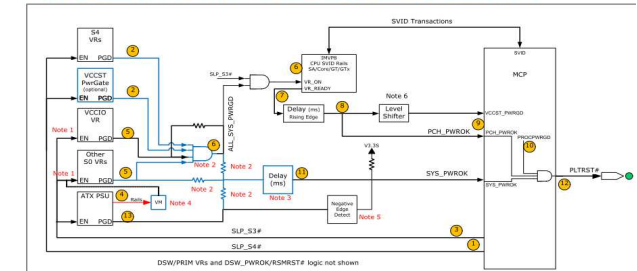


Figure 41-2. SKL S Flow Diagram for RSMRST\_PWRGD# Generation

