

SHEET

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Revision 1.0

Component value change history

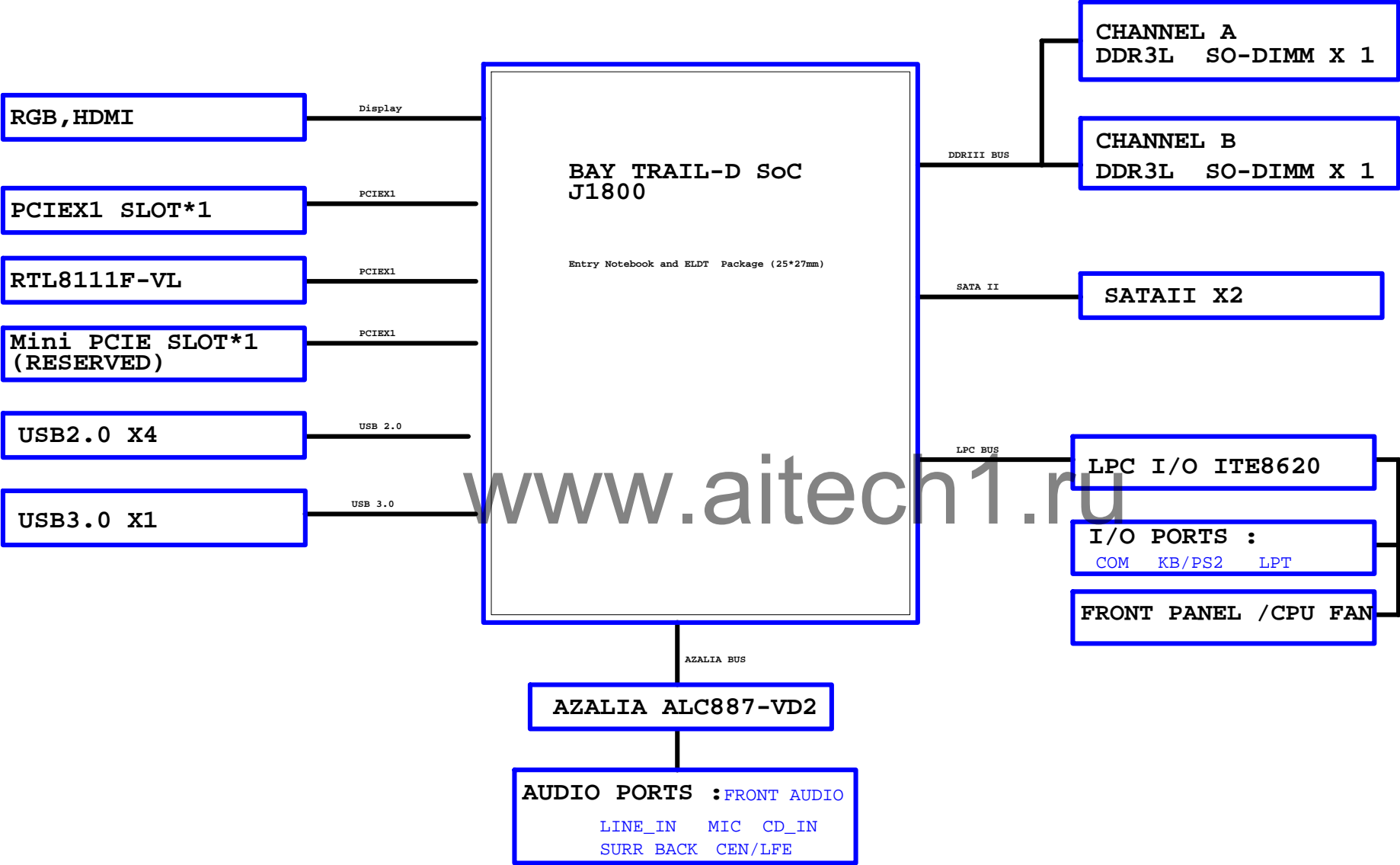
2013/12/12

[illegible]

Circuit or PCB layout change

[illegible]

BLOCK DIAGRAM



DDR0

U1A

MAAA0	K45	DRAM0_MA_0
MAAA1	H47	DRAM0_MA_1
MAAA2	L41	DRAM0_MA_2
MAAA3	H44	DRAM0_MA_3
MAAA4	H50	DRAM0_MA_4
MAAA5	G53	DRAM0_MA_5
MAAA6	H49	DRAM0_MA_6
MAAA7	D50	DRAM0_MA_7
MAAA8	G52	DRAM0_MA_8
MAAA9	E52	DRAM0_MA_9
MAAA10	K48	DRAM0_MA_10
MAAA11	E51	DRAM0_MA_11
MAAA12	F47	DRAM0_MA_12
MAAA13	J51	DRAM0_MA_13
MAAA14	B49	DRAM0_MA_14
MAAA15	B50	DRAM0_MA_15

[9] -SRASA ← -SRASA M45C
[9] -SCASA ← -SCASA M44C
[9] -SWEA ← -SWEA H51C

[9] SBAA0 ← SBAA0 K47
[9] SBAA1 ← SBAA1 K44
[9] SBAA2 ← SBAA2 D52

[9] -CSA0 ← -CSA0 P44C
[9] -CSA2 ← -CSA2 P45C

[9] CKEA0 ← CKEA0 C47
[9] CKEA2 ← CKEA2 X D48
[9] CKEA2 ← CKEA2 F44
[9] CKEA2 ← CKEA2 X E46

[9] MODT_A0 ← MODT_A0 T41
[9] MODT_A2 ← MODT_A2 P42

[9] DCLKA0 ← DCLKA0 M50
[9] -DCLKA0 ← -DCLKA0 M48

[9] DCLKA2 ← DCLKA2 P50
[9] -DCLKA2 ← -DCLKA2 P48

[9] M_DMA0 ← M_DMA0 G36
[9] M_DMA1 ← M_DMA1 B36
[9] M_DMA2 ← M_DMA2 F38
[9] M_DMA3 ← M_DMA3 B42
[9] M_DMA4 ← M_DMA4 P51
[9] M_DMA5 ← M_DMA5 V42
[9] M_DMA6 ← M_DMA6 Y50
[9] M_DMA7 ← M_DMA7 Y52

[9] -DDR3A_RST ← -DDR3A_RST P41C

DDR3_VREF AF44

DRAM_PWROK AD42
[10] DCORE_PWROK ← DCORE_PWROK AB42

R2 23.2/4/1 DDR3_ODTPU AD44
R3 29.4/4/1 DDR3_DQPU AF45
R4 162/4/1 DDR3_CMDPU AD45

R5 100K/4/1 AF42
R6 100K/4/1 AH42

AF40
AF41
AD40
AD41

DRAM0_RAS#
DRAM0_CAS#
DRAM0_WE#

DRAM0_BS_0
DRAM0_BS_1
DRAM0_BS_2

DRAM0_CS_0#
DRAM0_CS_2#

DRAM0_CKE_0
RSVD_D48
DRAM0_CKE_2
RSVD_E46

DRAM0_ODT_0
DRAM0_ODT_2

DRAM0_CKP_0
DRAM0_CKN_0

DRAM0_CKP_2
DRAM0_CKN_2

DRAM0_DM_0
DRAM0_DM_1
DRAM0_DM_2
DRAM0_DM_3
DRAM0_DM_4
DRAM0_DM_5
DRAM0_DM_6
DRAM0_DM_7

DRAM0_DRAMRST#

DRAM_VREF

DRAM_VCC_S3_PWROK
DRAM_CORE_PWROK

DRAM_RCOMP_0
DRAM_RCOMP_1
DRAM_RCOMP_2

ICLK_DRAM_TERM
ICLK_DRAM_TERM

RSVD_AF40
RSVD_AF41
RSVD_AD40
RSVD_AD41

J1800/2.41G/B3/[10HB5-621800-10R]

DRAM0_DQ_0	M36	MDA0
DRAM0_DQ_1	J36	MDA1
DRAM0_DQ_2	P40	MDA2
DRAM0_DQ_3	M40	MDA3
DRAM0_DQ_4	P36	MDA4
DRAM0_DQ_5	N36	MDA5
DRAM0_DQ_6	K40	MDA6
DRAM0_DQ_7	K42	MDA7
DRAM0_DQ_8	B32	MDA8
DRAM0_DQ_9	C32	MDA9
DRAM0_DQ_10	C36	MDA10
DRAM0_DQ_11	A37	MDA11
DRAM0_DQ_12	C33	MDA12
DRAM0_DQ_13	A33	MDA13
DRAM0_DQ_14	C37	MDA14
DRAM0_DQ_15	B38	MDA15
DRAM0_DQ_16	F36	MDA16
DRAM0_DQ_17	G38	MDA17
DRAM0_DQ_18	F42	MDA18
DRAM0_DQ_19	J42	MDA19
DRAM0_DQ_20	G40	MDA20
DRAM0_DQ_21	C38	MDA21
DRAM0_DQ_22	G44	MDA22
DRAM0_DQ_23	D42	MDA23
DRAM0_DQ_24	A41	MDA24
DRAM0_DQ_25	C41	MDA25
DRAM0_DQ_26	A45	MDA26
DRAM0_DQ_27	B46	MDA27
DRAM0_DQ_28	C40	MDA28
DRAM0_DQ_29	B40	MDA29
DRAM0_DQ_30	B48	MDA30
DRAM0_DQ_31	B47	MDA31
DRAM0_DQ_32	K52	MDA32
DRAM0_DQ_33	K51	MDA33
DRAM0_DQ_34	T52	MDA34
DRAM0_DQ_35	T51	MDA35
DRAM0_DQ_36	L51	MDA36
DRAM0_DQ_37	L53	MDA37
DRAM0_DQ_38	R51	MDA38
DRAM0_DQ_39	R53	MDA39
DRAM0_DQ_40	T47	MDA40
DRAM0_DQ_41	T45	MDA41
DRAM0_DQ_42	Y40	MDA42
DRAM0_DQ_43	V41	MDA43
DRAM0_DQ_44	T48	MDA44
DRAM0_DQ_45	T50	MDA45
DRAM0_DQ_46	Y42	MDA46
DRAM0_DQ_47	AB40	MDA47
DRAM0_DQ_48	V45	MDA48
DRAM0_DQ_49	V47	MDA49
DRAM0_DQ_50	AD48	MDA50
DRAM0_DQ_51	AD30	MDA51
DRAM0_DQ_52	V48	MDA52
DRAM0_DQ_53	V50	MDA53
DRAM0_DQ_54	AB44	MDA54
DRAM0_DQ_55	Y45	MDA55
DRAM0_DQ_56	V52	MDA56
DRAM0_DQ_57	W51	MDA57
DRAM0_DQ_58	AC53	MDA58
DRAM0_DQ_59	AC51	MDA59
DRAM0_DQ_60	W53	MDA60
DRAM0_DQ_61	Y51	MDA61
DRAM0_DQ_62	AD52	MDA62
DRAM0_DQ_63	AD51	MDA63

DRAM0_DQSP_0	J38	DQSA0
DRAM0_DQSP_1	C35	DQSA1
DRAM0_DQSP_2	D40	DQSA2
DRAM0_DQSP_3	B44	DQSA3
DRAM0_DQSP_4	N53	DQSA4
DRAM0_DQSP_5	T42	DQSA5
DRAM0_DQSP_6	Y47	DQSA6
DRAM0_DQSP_7	AB52	DQSA7

DRAM0_DQSN_0	K38	-DQSA0
DRAM0_DQSN_1	B34	-DQSA1
DRAM0_DQSN_2	F40	-DQSA2
DRAM0_DQSN_3	C43	-DQSA3
DRAM0_DQSN_4	M52	-DQSA4
DRAM0_DQSN_5	T44	-DQSA5
DRAM0_DQSN_6	Y48	-DQSA6
DRAM0_DQSN_7	AA51	-DQSA7

DDR1

U1B

MAAB0	AY45	DRAM1_MA_0
MAAB1	BB47	DRAM1_MA_1
MAAB2	AW41	DRAM1_MA_2
MAAB3	BB44	DRAM1_MA_3
MAAB4	BB50	DRAM1_MA_4
MAAB5	BC53	DRAM1_MA_5
MAAB6	BB49	DRAM1_MA_6
MAAB7	BF50	DRAM1_MA_7
MAAB8	BC52	DRAM1_MA_8
MAAB9	BE52	DRAM1_MA_9
MAAB10	AY48	DRAM1_MA_10
MAAB11	BE51	DRAM1_MA_11
MAAB12	BD47	DRAM1_MA_12
MAAB13	BA51	DRAM1_MA_13
MAAB14	BH49	DRAM1_MA_14
MAAB15	BH50	DRAM1_MA_15

[9] -SRASB ← -SRASB AV45C
[9] -SCASB ← -SCASB AV44C
[9] -SWEB ← -SWEB BB51C

[9] SBAB0 ← SBAB0 AY47
[9] SBAB1 ← SBAB1 AY44
[9] SBAB2 ← SBAB2 BF52

[9] -CSB0 ← -CSB0 AT44C
[9] -CSB2 ← -CSB2 AT45C

[9] CKEB0 ← CKEB0 BG47
[9] CKEB2 ← CKEB2 X BF46
[9] CKEB2 ← CKEB2 BD44
[9] CKEB2 ← CKEB2 X BF48

[9] MODT_B0 ← MODT_B0 AP41
[9] MODT_B2 ← MODT_B2 AT42

[9] DCLKB0 ← DCLKB0 AV50
[9] -DCLKB0 ← -DCLKB0 AV48

[9] DCLKB2 ← DCLKB2 AT50
[9] -DCLKB2 ← -DCLKB2 AT48

[9] M_DMB0 ← M_DMB0 BD38
[9] M_DMB1 ← M_DMB1 BH38
[9] M_DMB2 ← M_DMB2 BC36
[9] M_DMB3 ← M_DMB3 BH42
[9] M_DMB4 ← M_DMB4 AT51
[9] M_DMB5 ← M_DMB5 AM42
[9] M_DMB6 ← M_DMB6 AK50
[9] M_DMB7 ← M_DMB7 AK52

[9] -DDR3B_RST ← -DDR3B_RST AT41C

DRAM1_RAS#
DRAM1_CAS#
DRAM1_WE#

DRAM1_BS_0
DRAM1_BS_1
DRAM1_BS_2

DRAM1_CS_0#
DRAM1_CS_2#

DRAM1_CKE_0
RSVD_BE46
DRAM1_CKE_2
RSVD_BF48

DRAM1_ODT_0
DRAM1_ODT_2

DRAM1_CKP_0
DRAM1_CKN_0

DRAM1_CKP_2
DRAM1_CKN_2

DRAM1_DM_0
DRAM1_DM_1
DRAM1_DM_2
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DRAM1_DM_4
DRAM1_DM_5
DRAM1_DM_6
DRAM1_DM_7

DRAM1_DRAMRST#

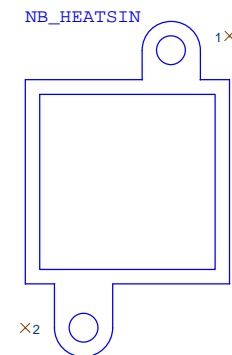
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DRAM1_DQSP_1	BG35	DQSB1
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DRAM1_DQSP_4	AU53	DQSB4
DRAM1_DQSP_5	AP42	DQSB5
DRAM1_DQSP_6	AK47	DQSB6
DRAM1_DQSP_7	AH52	DQSB7

DRAM1_DQSN_0	-BD40	-DQSB0
DRAM1_DQSN_1	BH34	-DQSB1
DRAM1_DQSN_2	AY38	-DQSB2
DRAM1_DQSN_3	BG43	-DQSB3
DRAM1_DQSN_4	AY52	-DQSB4
DRAM1_DQSN_5	AP44	-DQSB5
DRAM1_DQSN_6	AK48	-DQSB6
DRAM1_DQSN_7	AA51	-DQSB7

J1800/2.41G/B3/[10HB5-621800-10R]

HEAT SINK

FANLESS HEATSINK



SOC_HS
CPU_HS[12SP2-SA0601-01R]

[9] MDA[0..63] ↔ MDA[0..63]

[9] MDB[0..63] ↔ MDB[0..63]

[9] DQSA[0..7] ↔ DQSA[0..7]

[9] -DQSA[0..7] ↔ -DQSA[0..7]

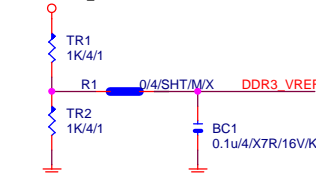
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[9] MAAB[0..15] ↔ MAAB[0..15]

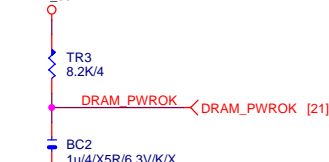
[9] DQSB[0..7] ↔ DQSB[0..7]

[9] -DQSB[0..7] ↔ -DQSB[0..7]

+VCCDDRXXS3_1P35



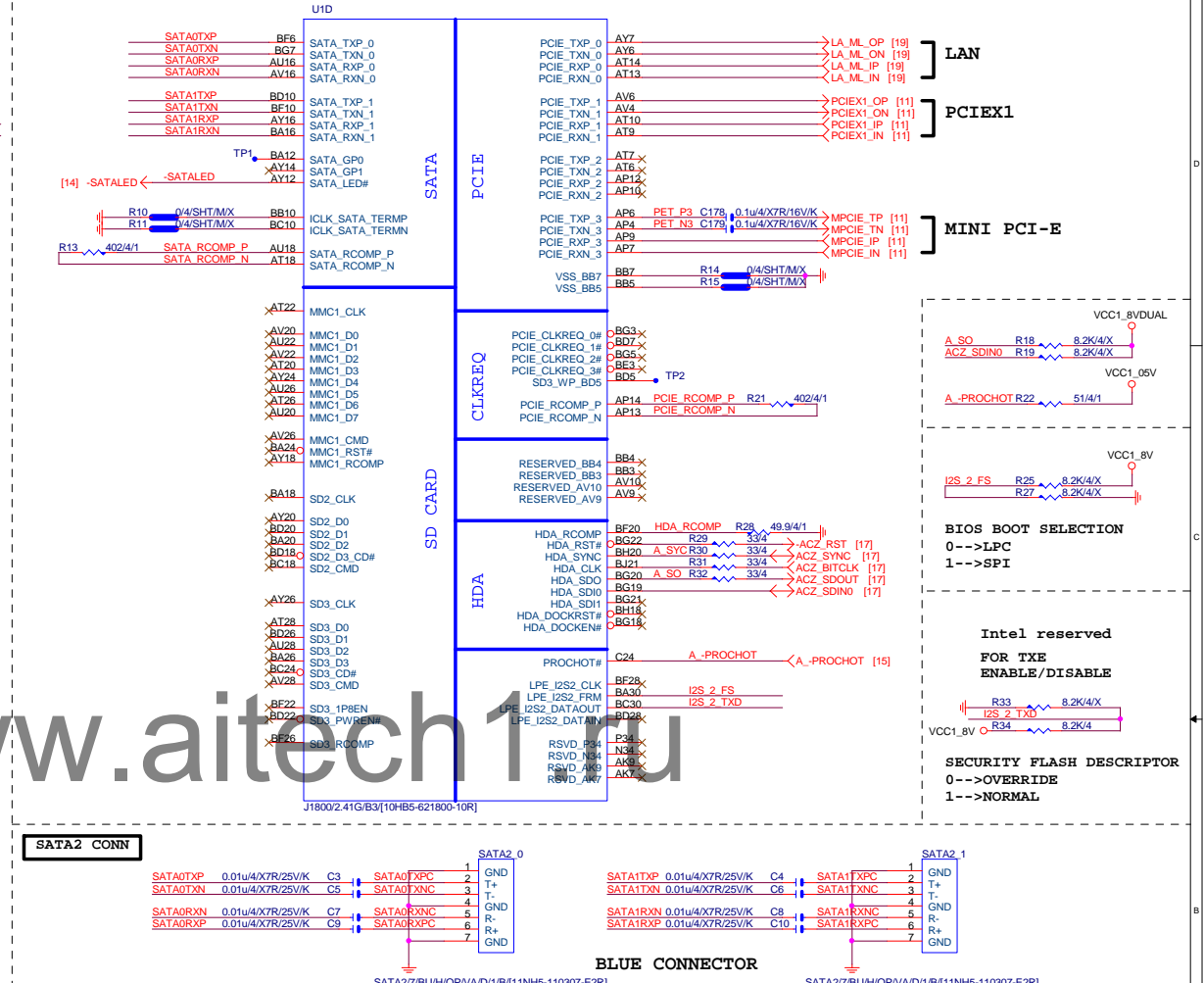
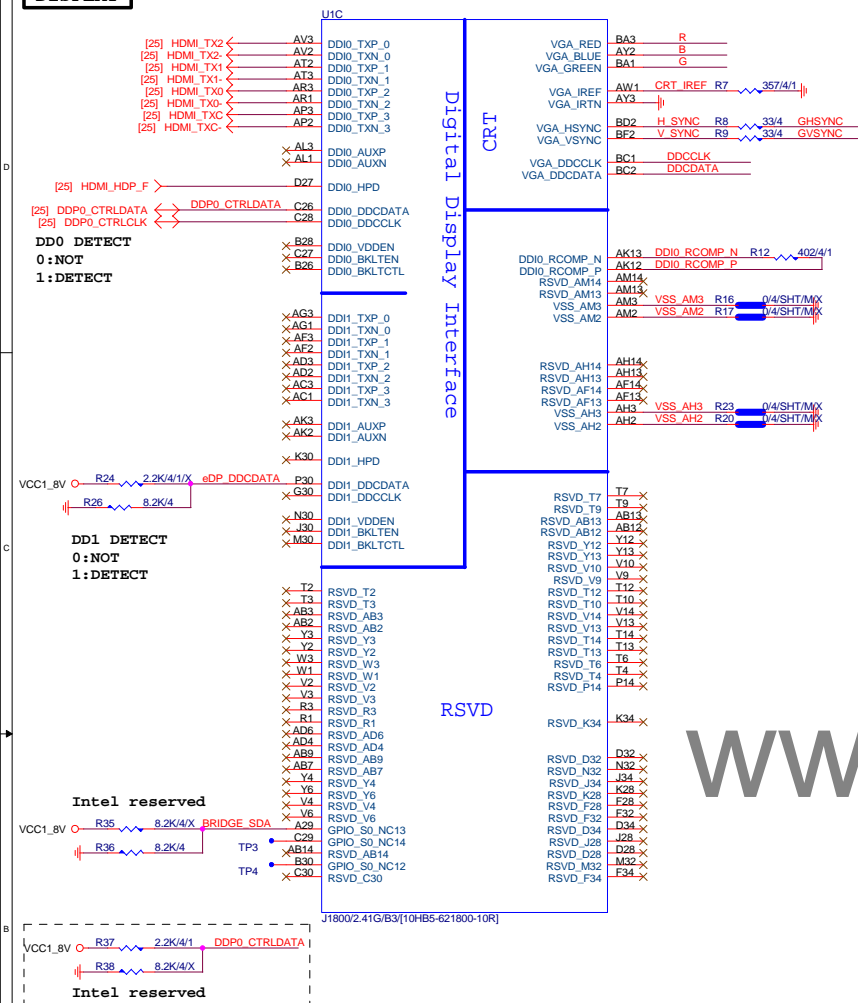
DDR1_35V



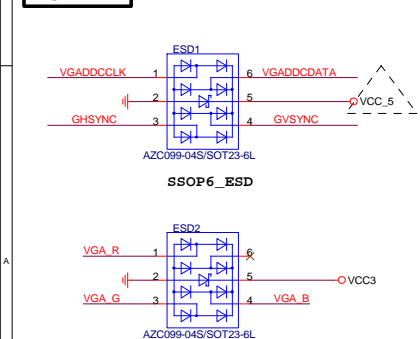
Gigabyte Technology

Title		VLV-M/D MEMROY	
Size B	Document Number	IPX1800G1 (DB)	Rev 1.0
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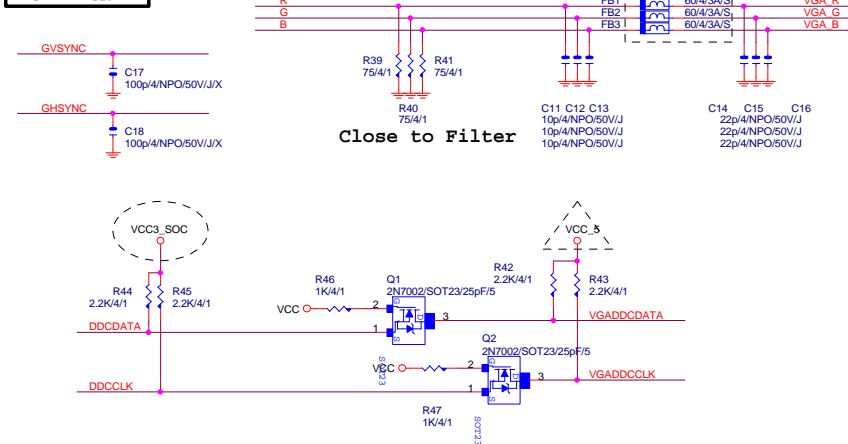
DISPLAY



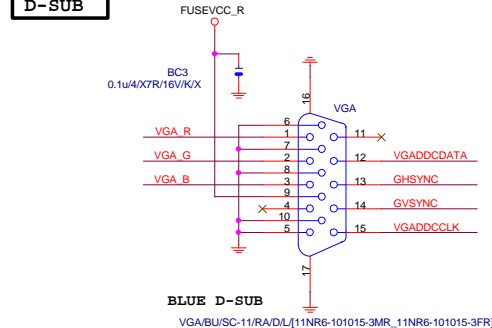
VGA ESD

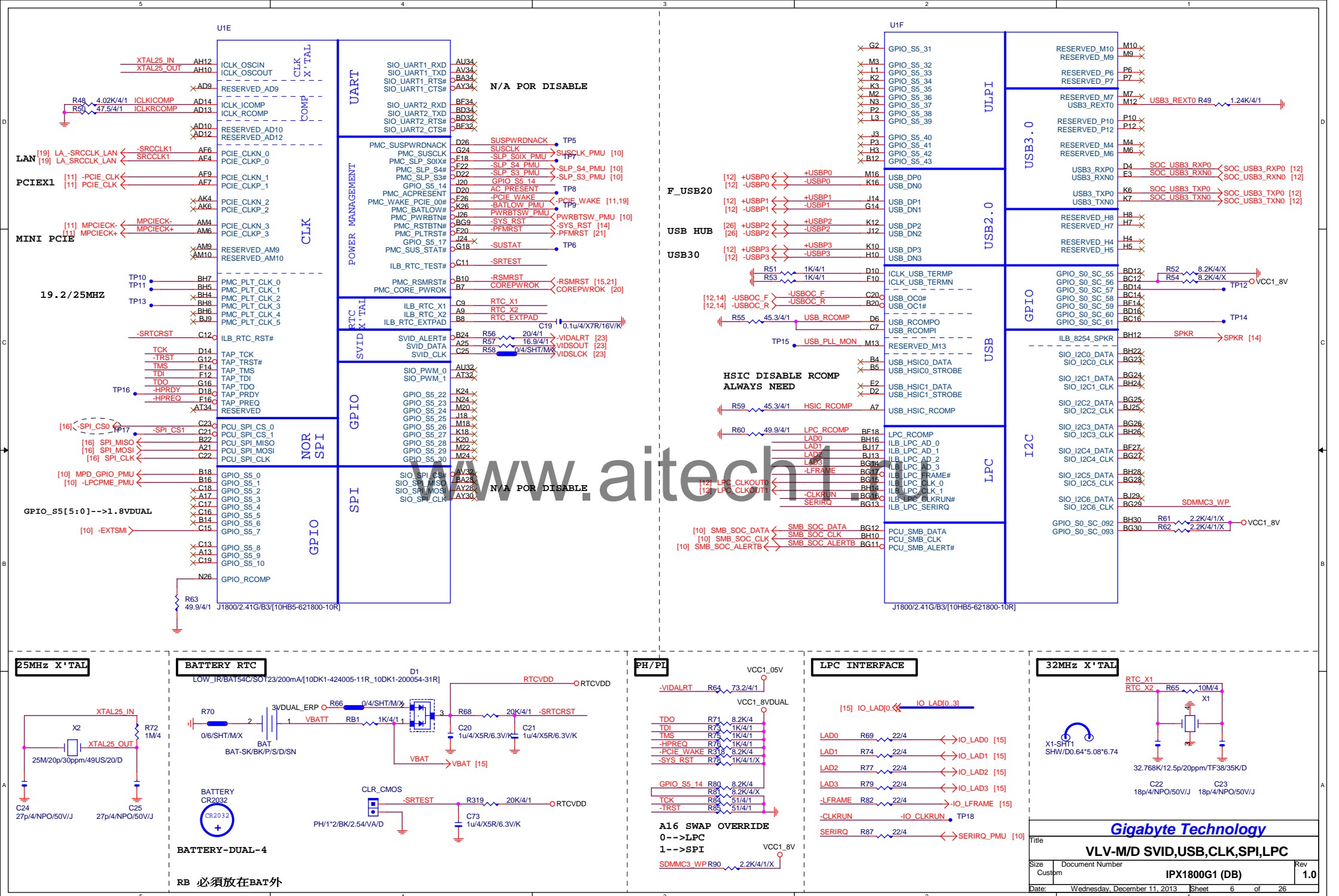


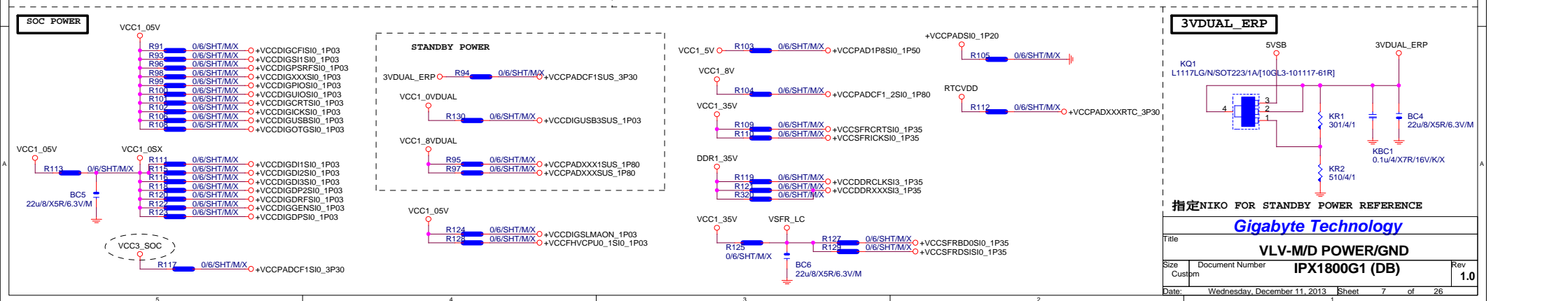
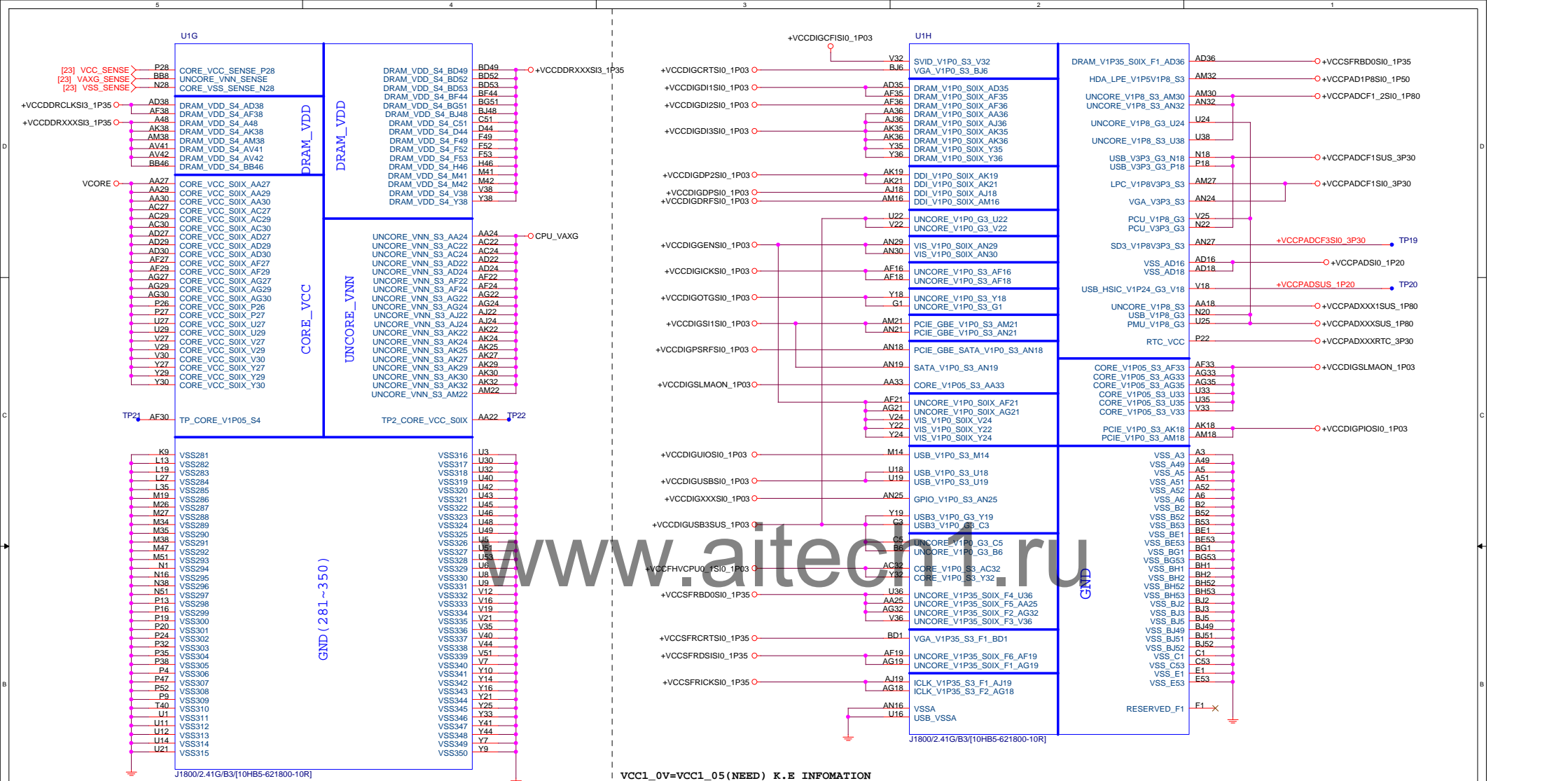
VGA SIGNAL

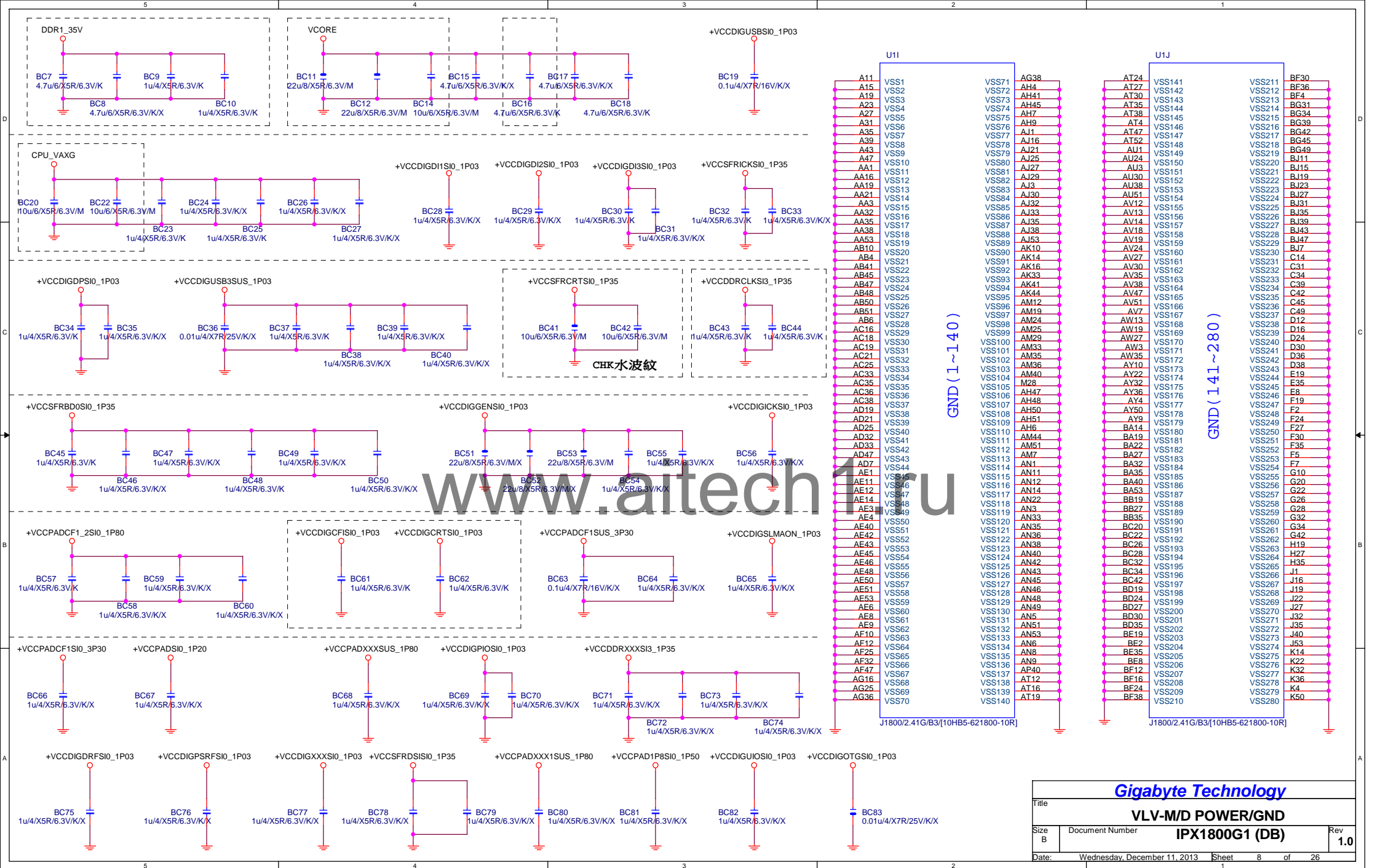


D. GUP



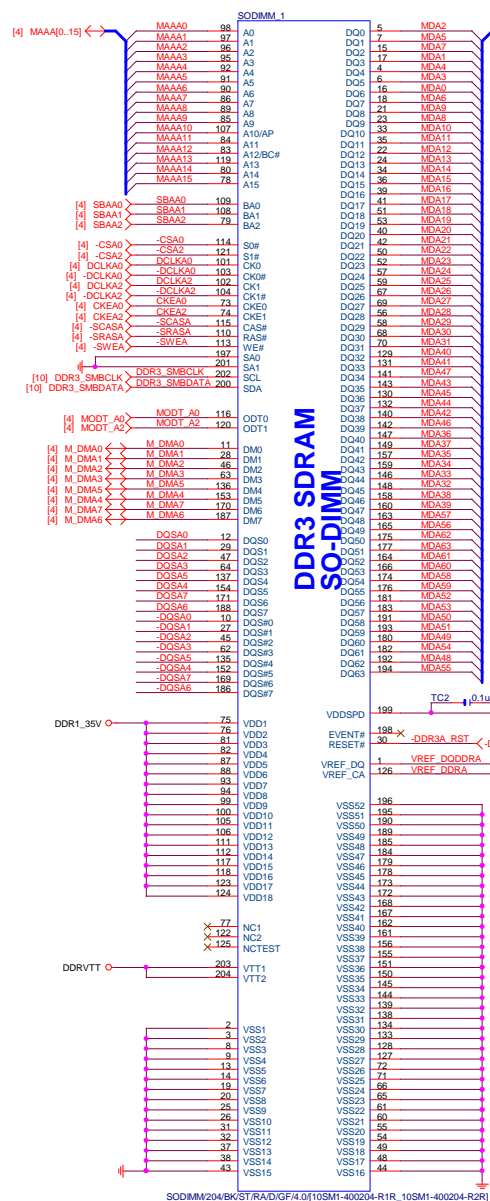






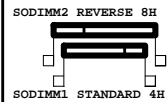
DDR3L A

DUAL CHANNEL

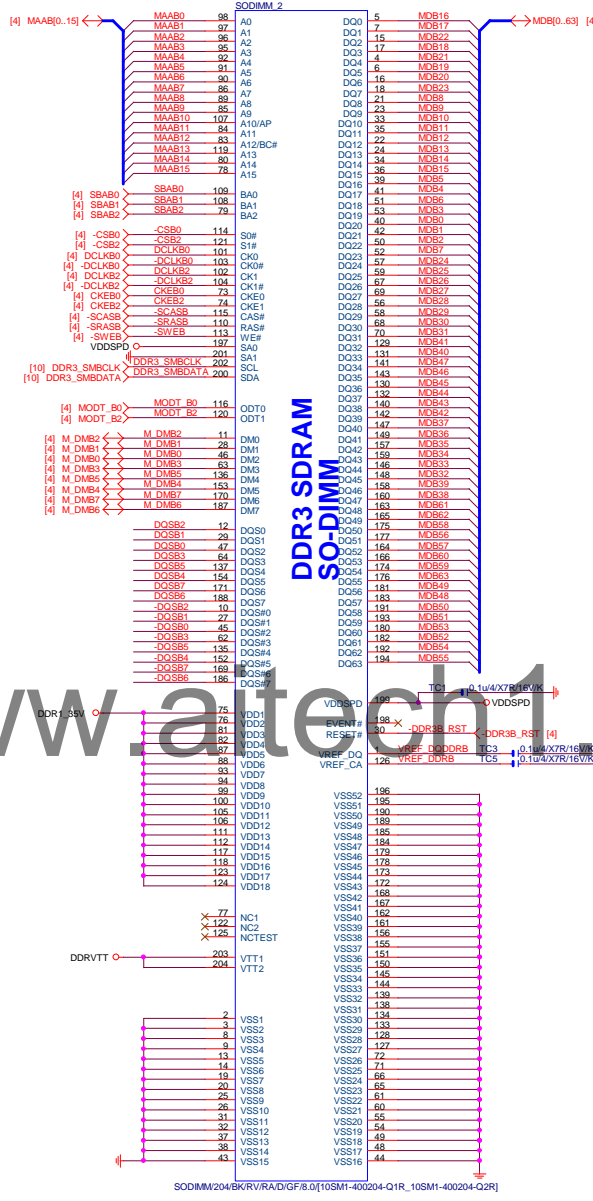


-DQSA0[0..7] [4]

-DQSA0[0..7] [4]



DDR3L B



-DQSB0[0..7] [4]

-DQSB0[0..7] [4]

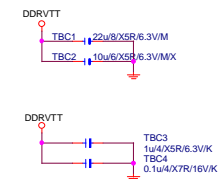
10SM1-400204-Q1R 鸿海 黑色 REVERSE

10SM1-400204-R1R 鸿海 黑色 STANDARD

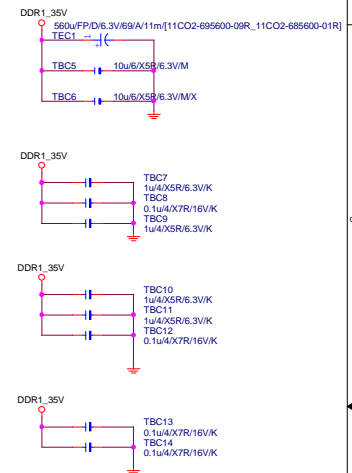
10SM1-400204-Q2R 德测 黑色 REVERSE

10SM1-400204-R2R 德测 黑色 STANDARD

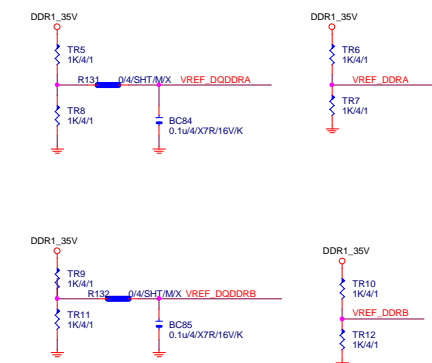
DDRVTT Decouple



DDR15V Decouple



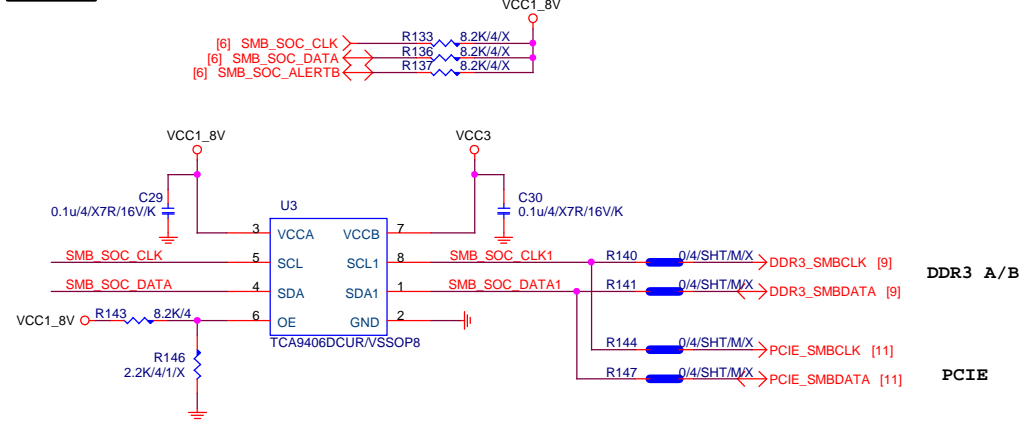
DDR VREF



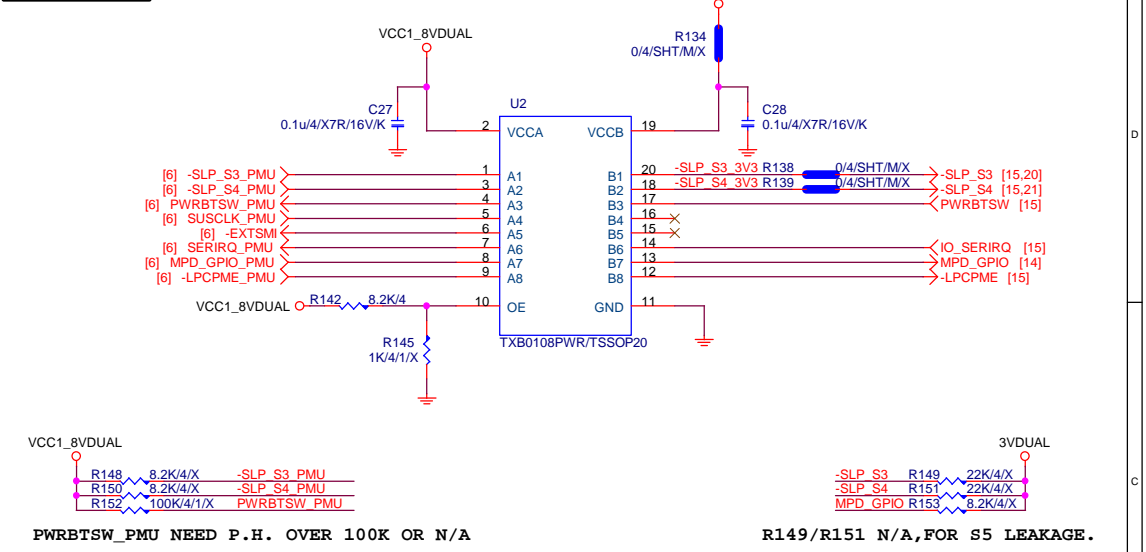
Gigabyte Technology

DDR3L SO-DIMM 1,2			
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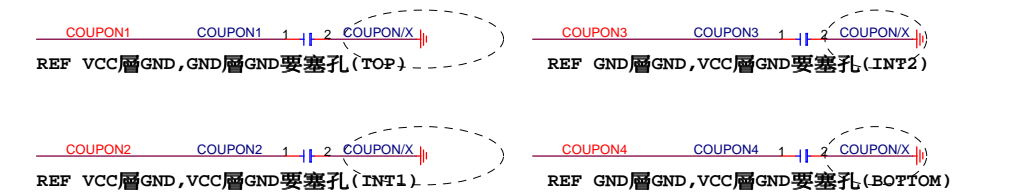
SMBUS



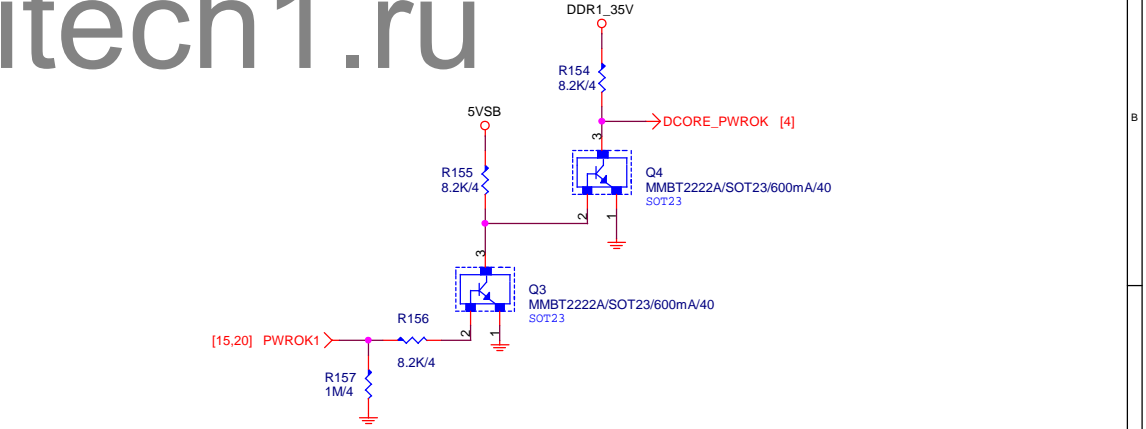
SIGNAL L/S



COUPON

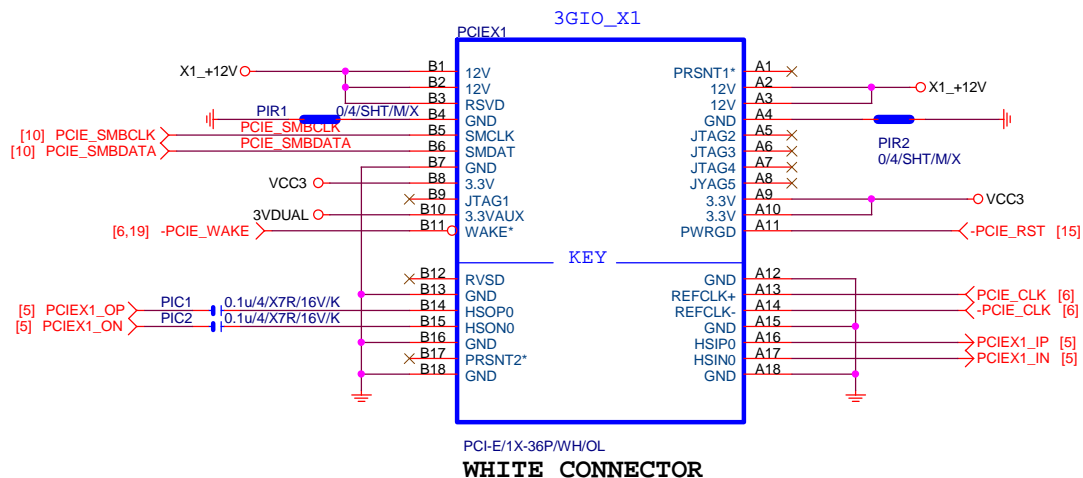


DDR PWROK

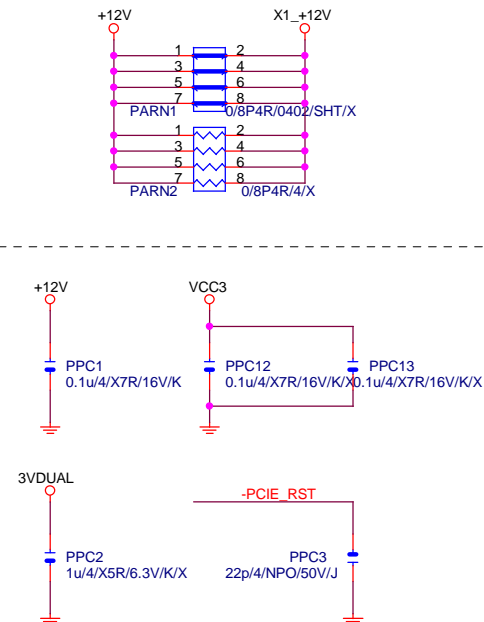


Gigabyte Technology			
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SMBUS,SIGNAL L/S			
Size B	Document Number	IPX1800G1 (DB)	Rev 1.0
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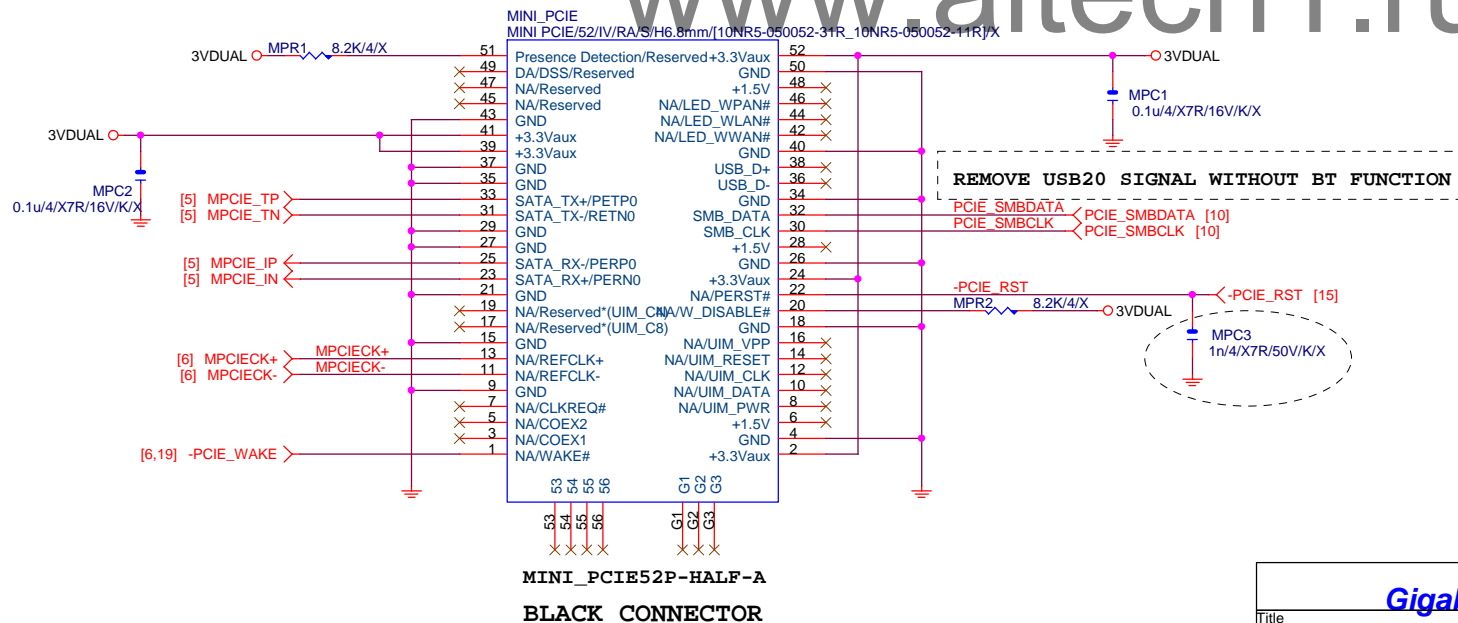
PCIEX1 SLOT



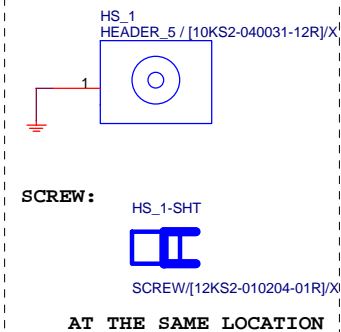
PCIEX16	PROTECT	SHT
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mini PCI-E



SMD HEADER:

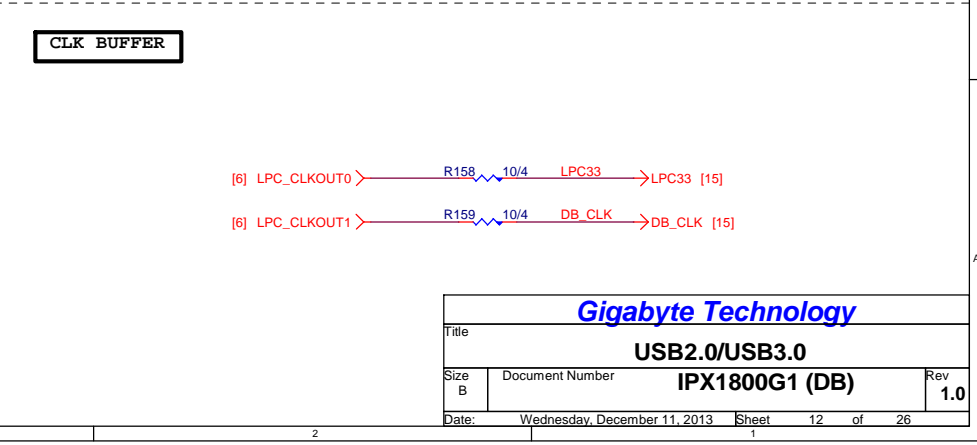
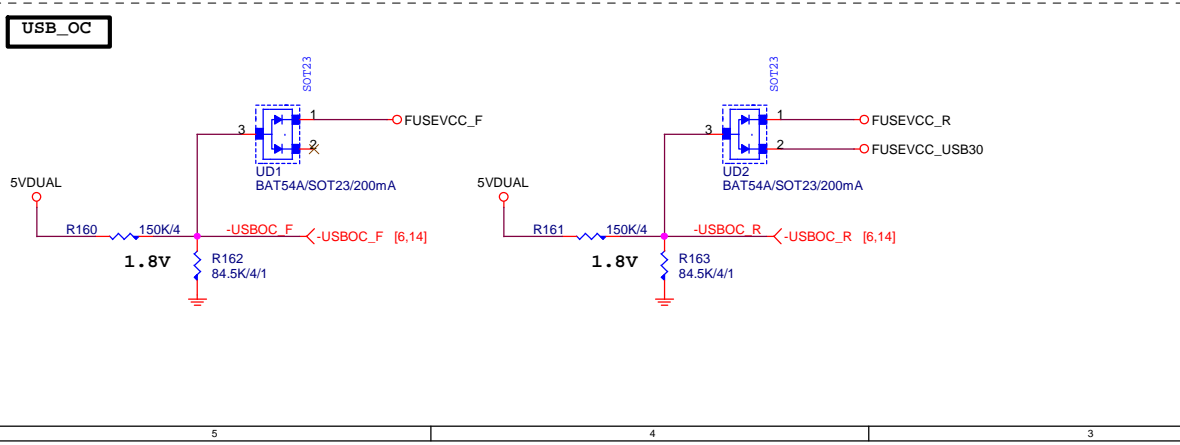
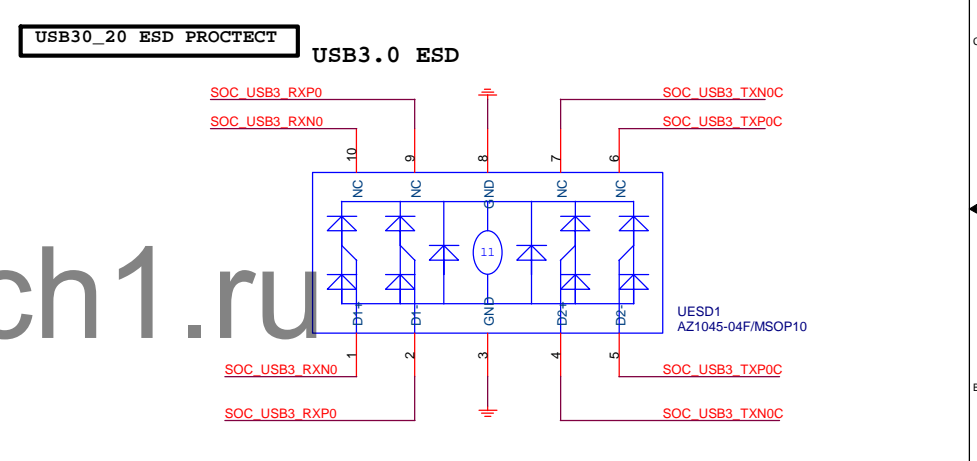
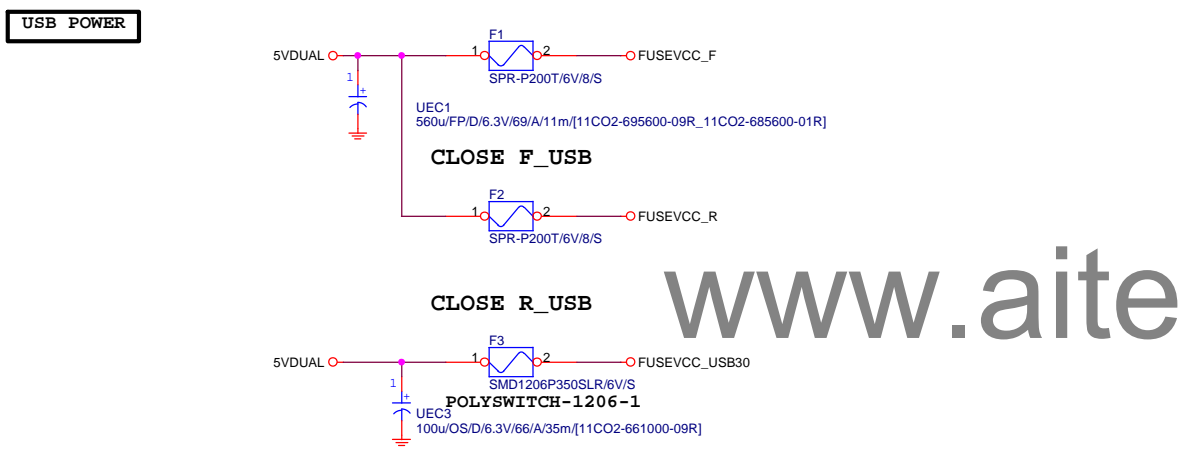
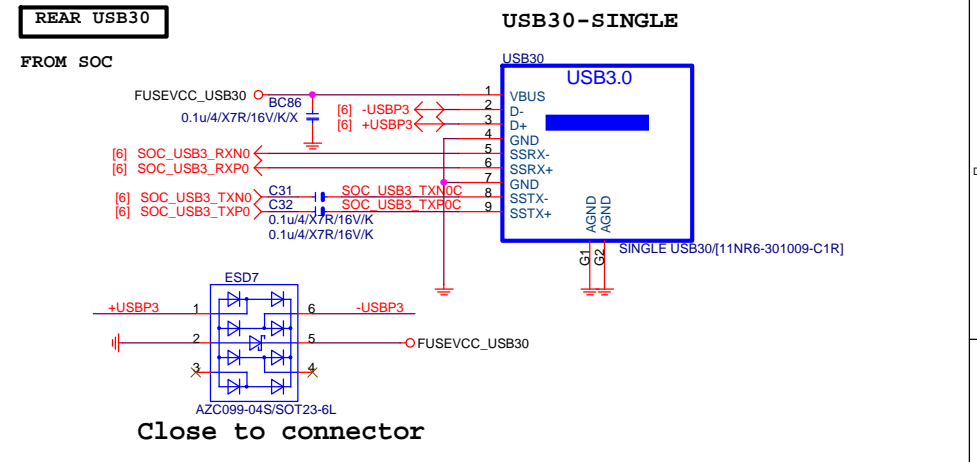
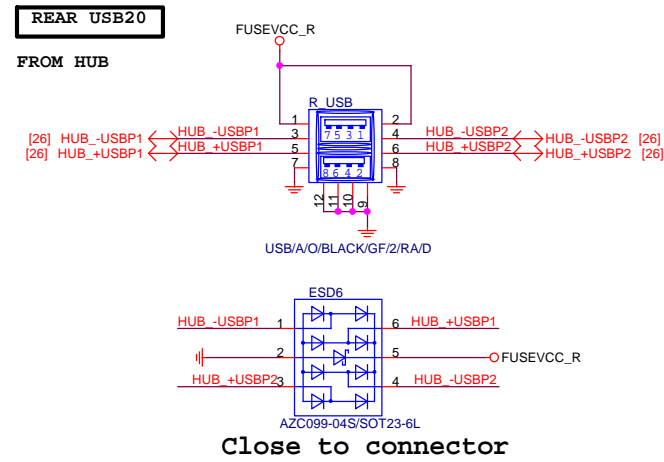
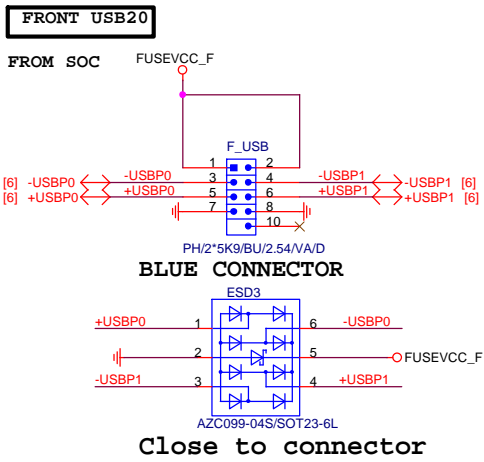


Gigabyte Technology

Title	PCIE*1 SLOT/MINI PCIE
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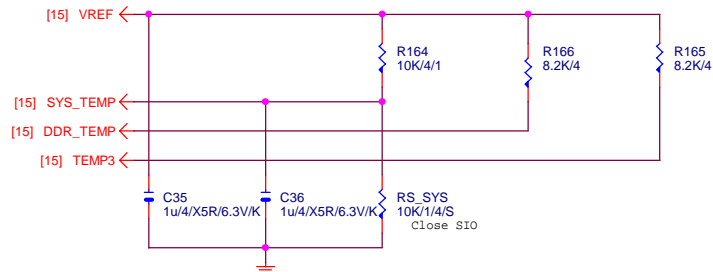
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Custom			1.0

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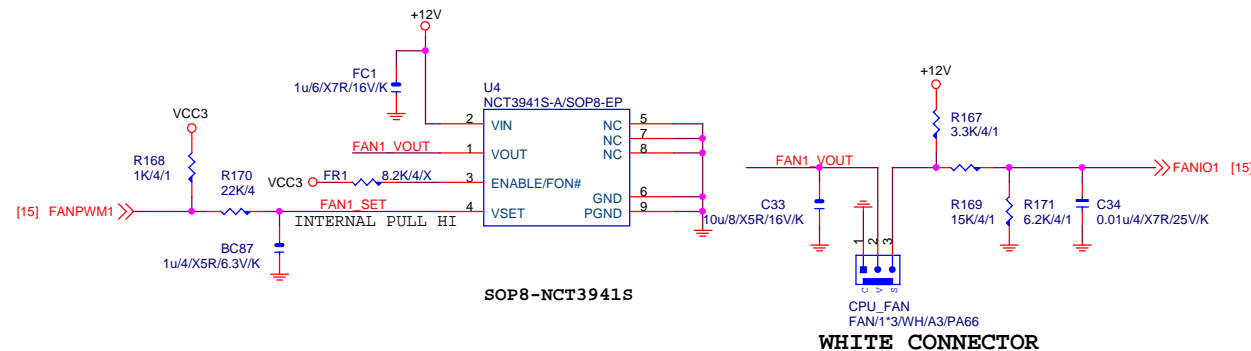


Gigabyte Technology			
Title			
USB2.0/USB3.0			
Size B	Document Number	IPX1800G1 (DB)	
		Rev	1.0
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TEMP H/W MONITOR

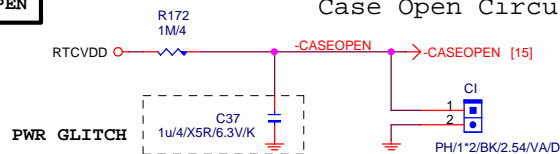


CPU SMART FAN

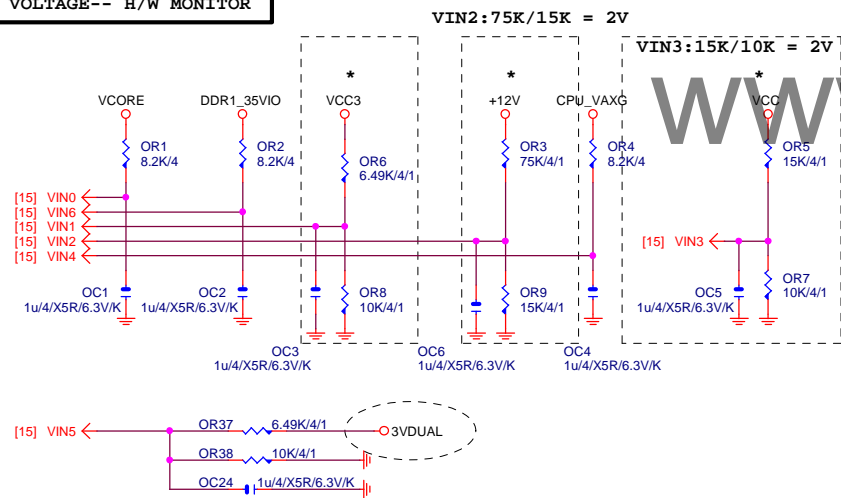


CASE OPEN

Case Open Circuits



VOLTAGE-- H/W MONITOR

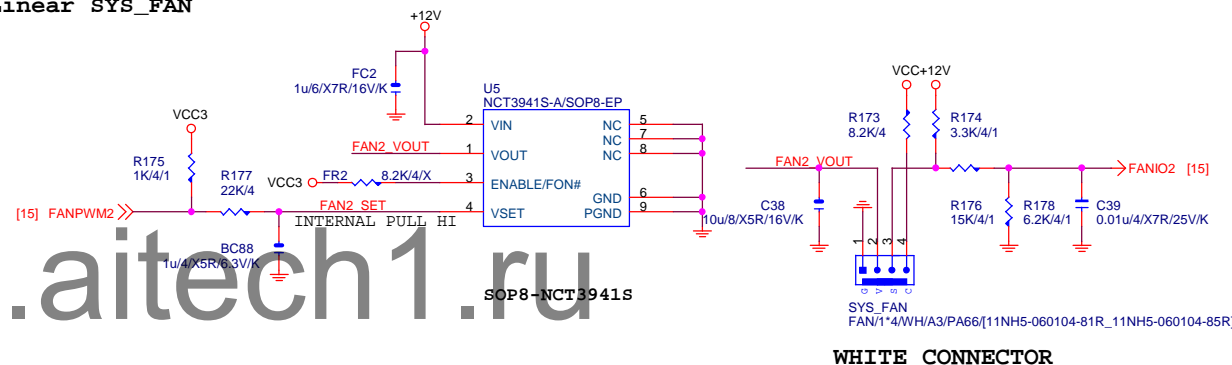


-PROHOT

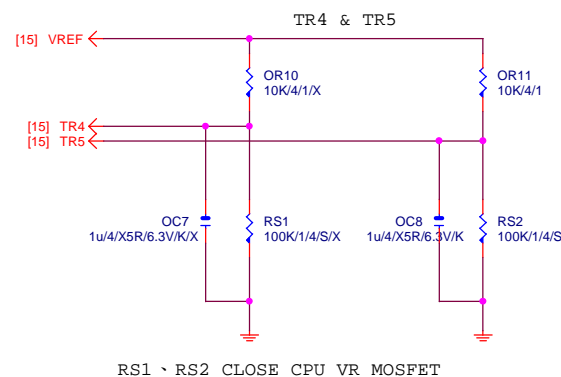
N/A

SYS SMART FAN

Linear SYS_FAN



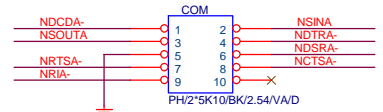
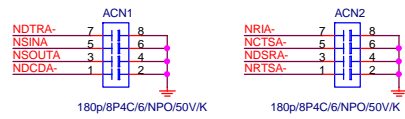
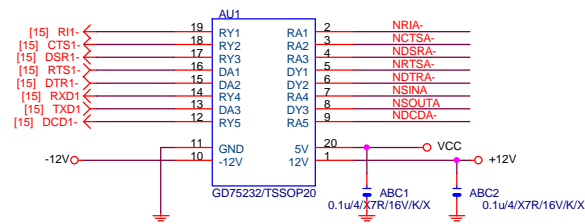
I/O IT8620 THERMAL SENSOR



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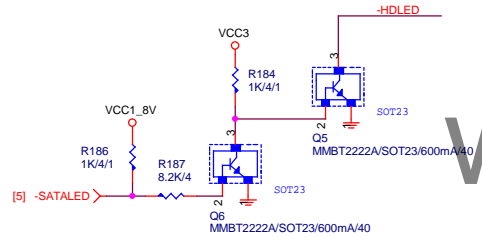
Title			HWM,FAN CTRL_OV
Size	Document Number	IPX1800G1 (DB)	
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COM

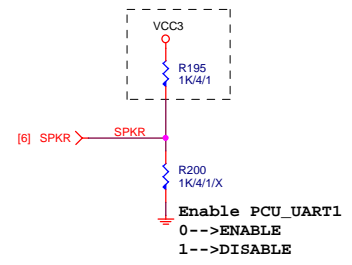


PIN2X5-CUT10-COM
BLACK CONNECTOR

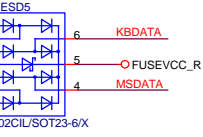
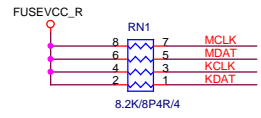
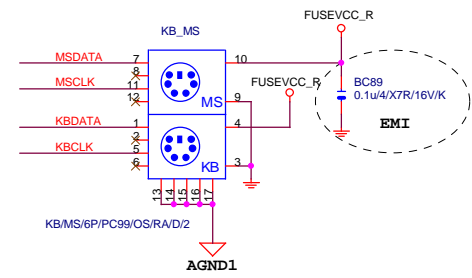
SATA LED



SPKR

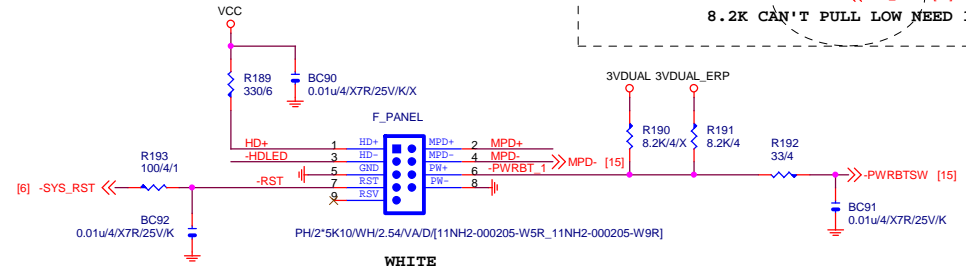


KB/MS

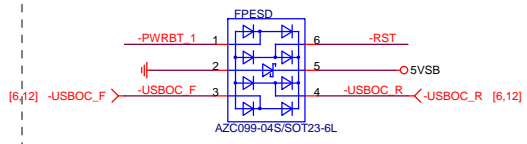


CLOSE KB_MS

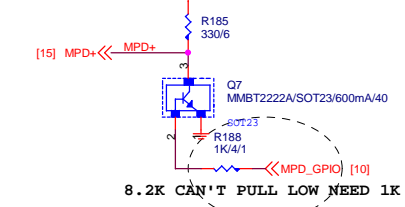
INTEL FRONT PANEL



SYSTEM ESD

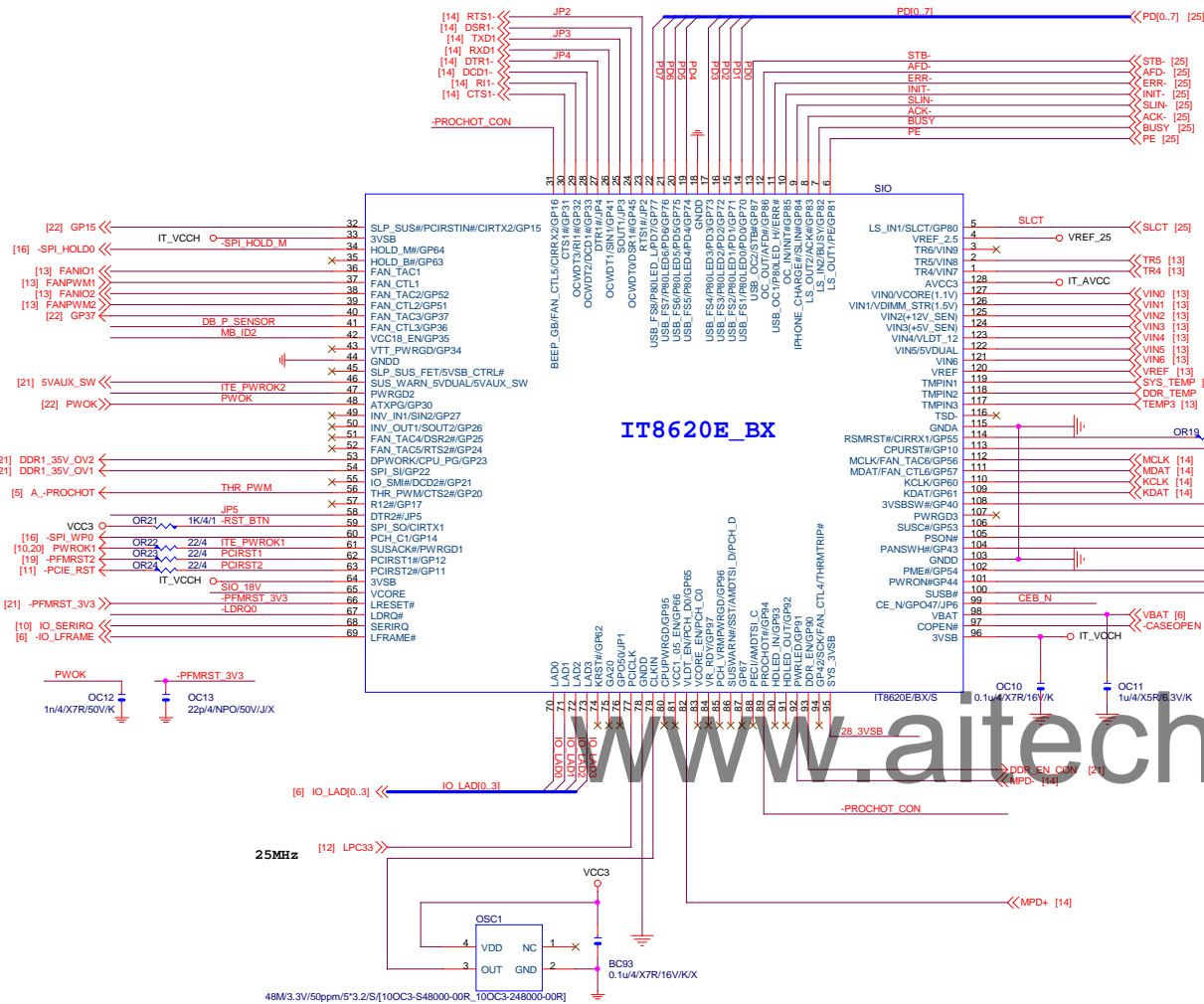


PWR LED CTRL

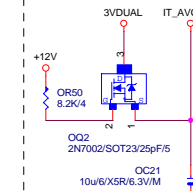


Gigabyte Technology			
Title			
FP,F_USB,USB PWR,SPKR,SATA LED			
Size	Document Number	Rev	
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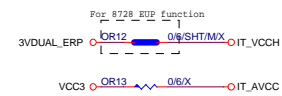
SIO IT8620



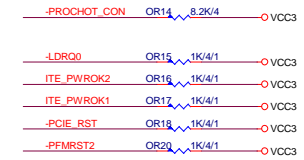
FIX ATX 插拔漏電



PWR SHT



SIO PU



SIO STRAP

H61M-S2 1.1 JP6 stuff
pull down



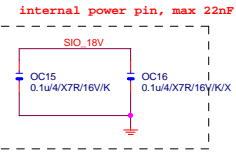
EUP control by PCH
3VDUAL ERP
JP3--- High SPI-Flash Disable
Low SPI-Flash Enable

DUAL BIOS OPT STRAP

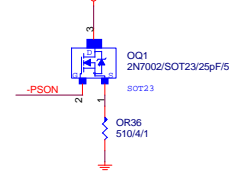
CKD SINGLE BIOS



SIO 18V



Power leakage



For IT8721 Power leakage

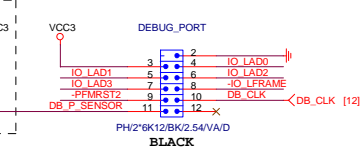
MB ID



SIO CAP

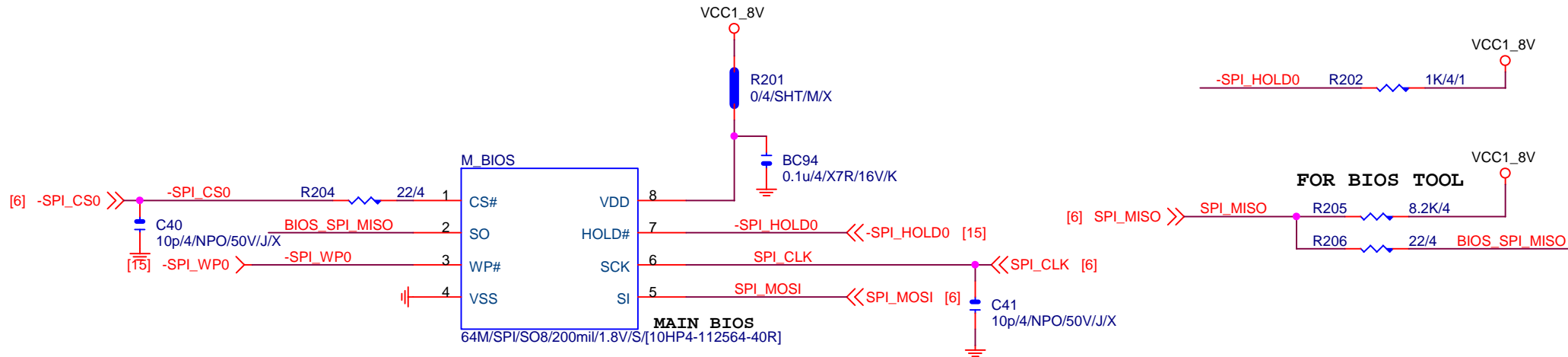


DEBUG PORT



Gigabyte Technology			
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ITE8620/BX			
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IPX1800G1 (DB)			
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MAIN BIOS



SPI ROM(1.8V)

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Title

SPI BIOS

Size
Custom

Document Number

IPX1800G1 (DB)

Rev
1.0

Date:

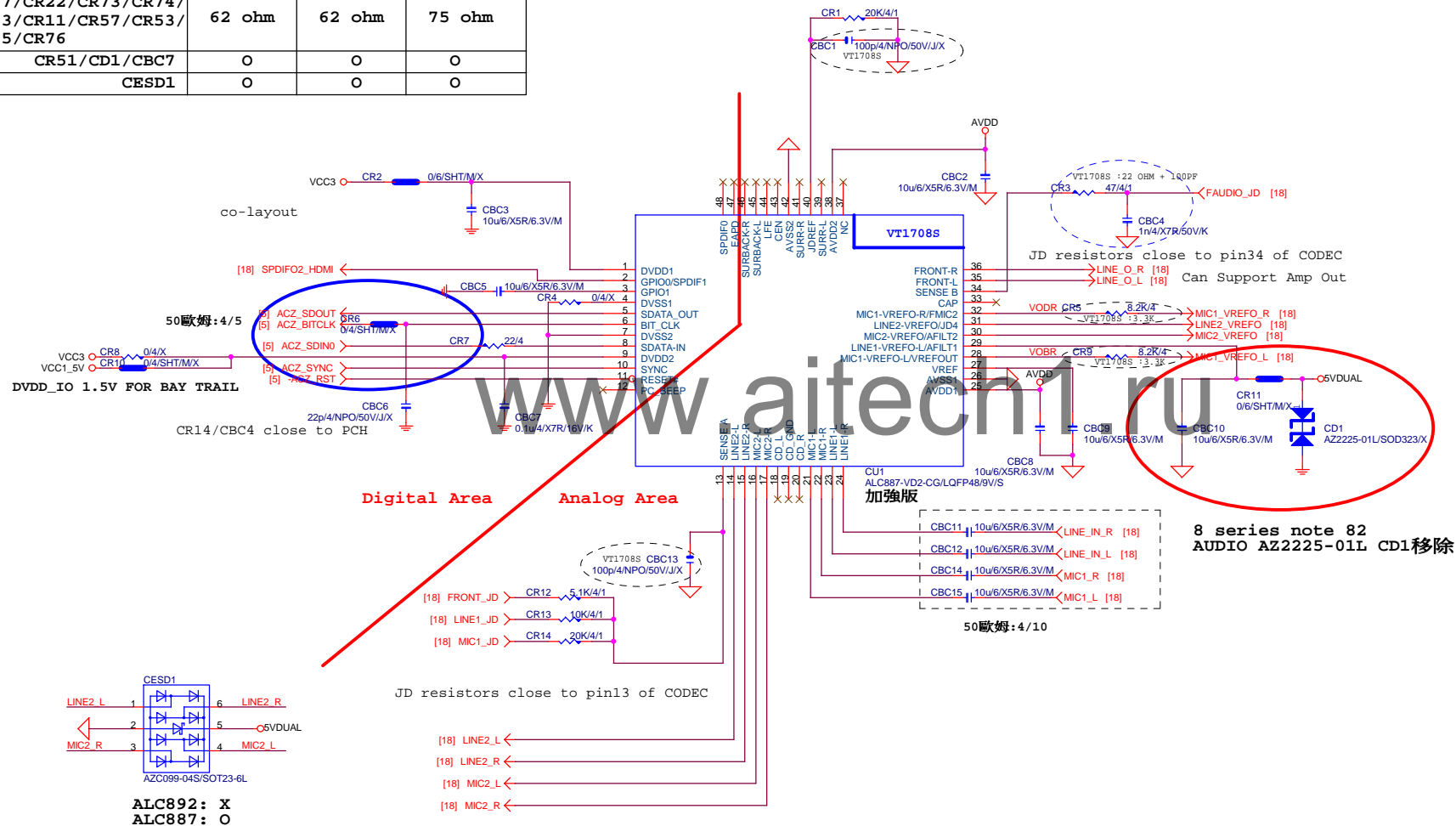
Wednesday, December 11, 2013

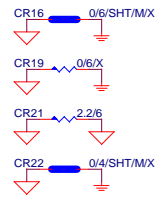
Sheet

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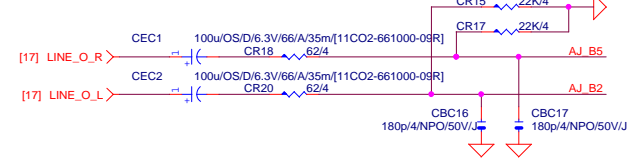
AZALIA CODEC **ALC892/ALC887-VD2/VT1708-CE Colay**

	ALC892	ALC887-VD2	VT1708S-CE
CR44/CBC26	47ohm+1nF	47ohm+1nF	22ohm+100P
CBC42/CBC43	X	X	100P/4
CR6/CR7/CR58/CR54/ CR67/CR68/CR69/CR70	22K/4	22K/4	10K/4/1
CR5/CR8/CR1/CR14/ CR17/CR22/CR73/CR74/ CR13/CR11/CR57/CR53/ CR75/CR76	62 ohm	62 ohm	75 ohm
CR51/CD1/CBC7	O	O	O
CESD1	O	O	O





LINE-OUT



LINE-IN

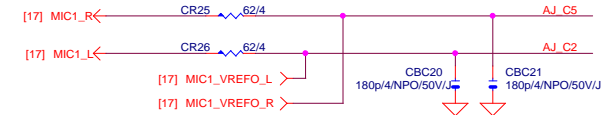
Verify MIC function
in LINE-in

Only reserved for ALC888

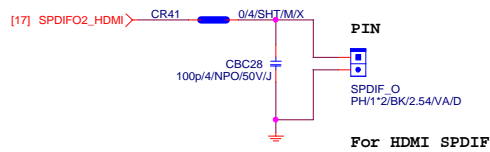


For 889A/888

MIC-IN

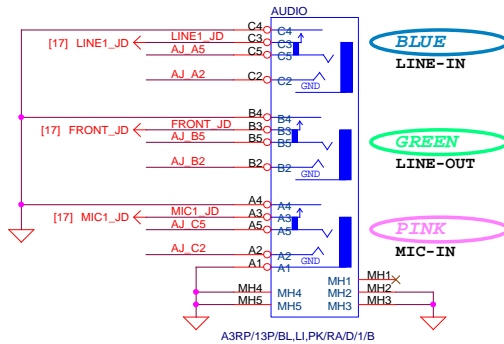


SPDIF_OUT

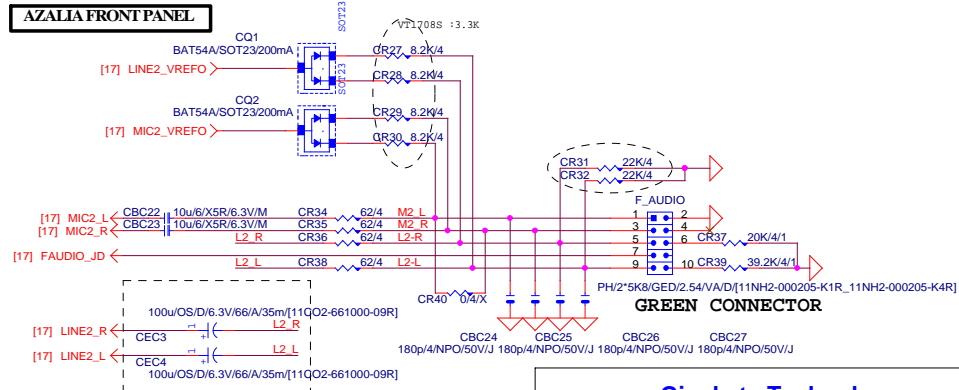


For HDMI SPDIF

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AZALIA FRONT PANEL



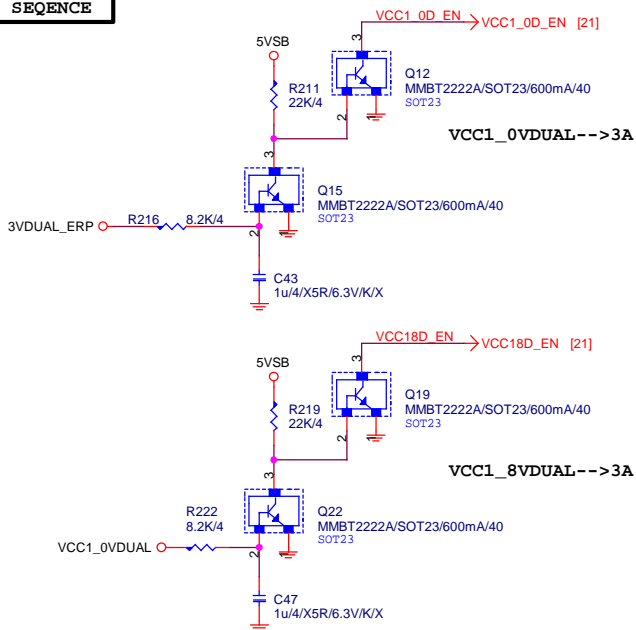
Gigabyte Technology

AUDIO JACK

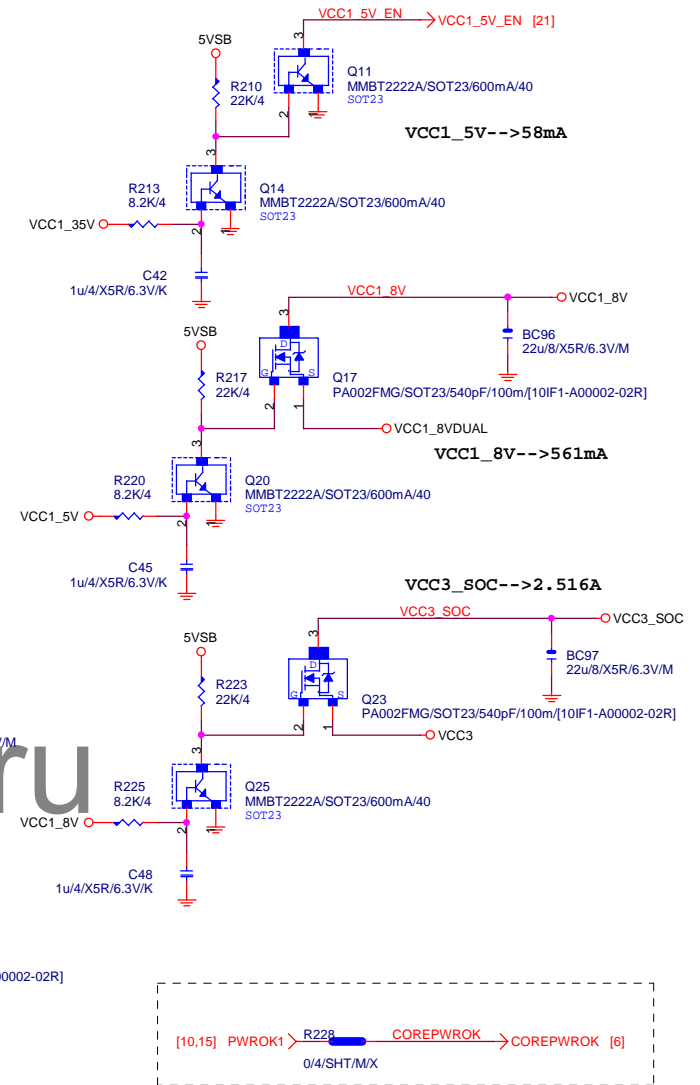
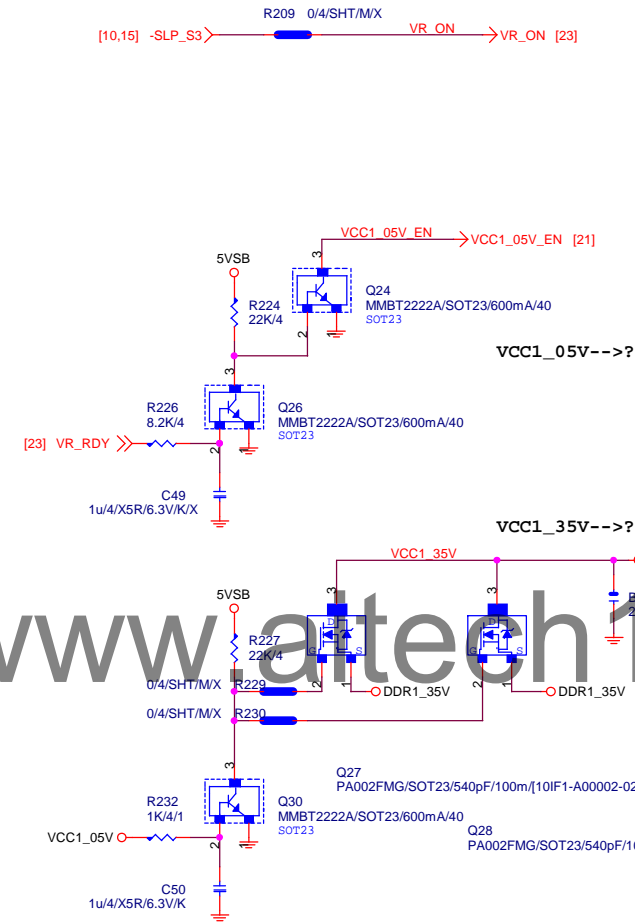
IPX1800G1 (DB)

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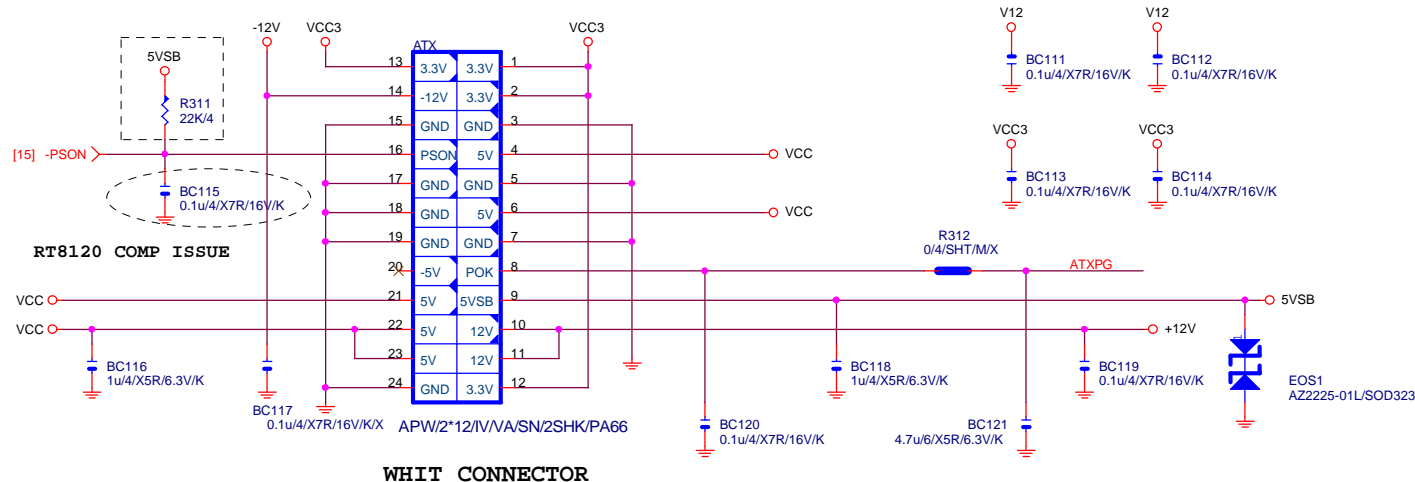
STANDBY
SEQUENCE

MAIN SEQUENCE	
------------------	--



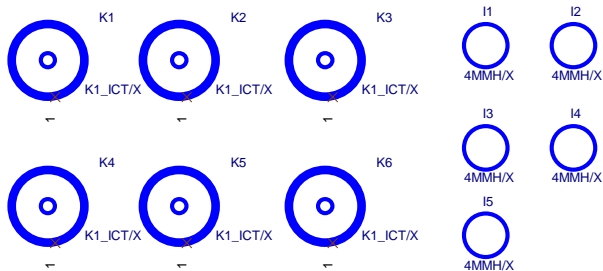
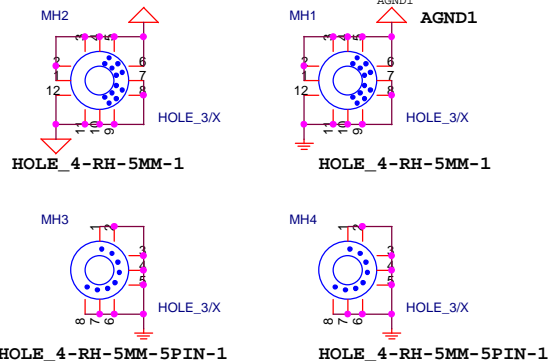
ATXX24 POWER CONNECTOR

【技術通報R&D技術通報155】

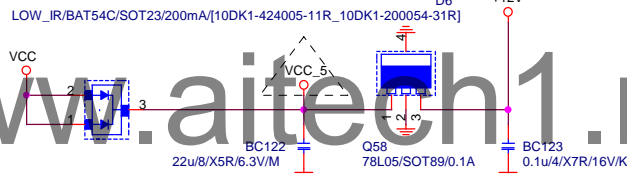


WHIT CONNECTOR

MB LOCATION



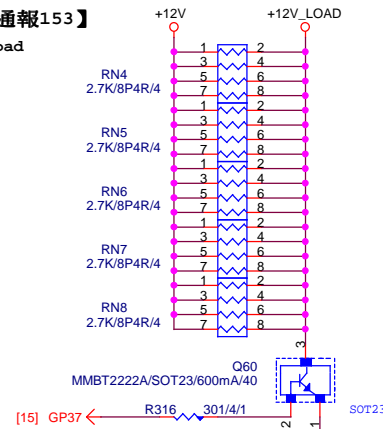
FIX POWER SUPPLY MIN LOAD +5V ISSUE



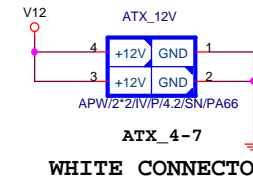
To prevent the 5VSB under loading when boot

【技術通報R&D技術通報153】

To fix 12V light load abnormal issue



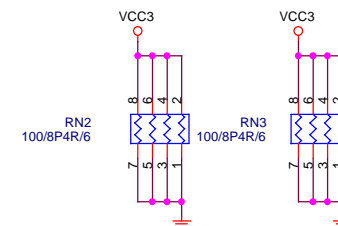
ATXX4 POWER CONNECTOR



WHITE CONNECTOR

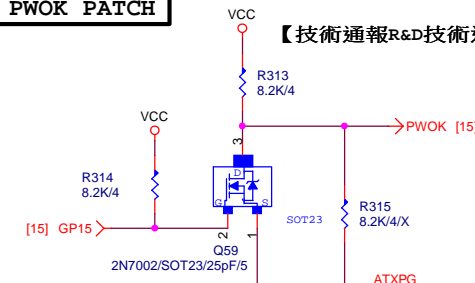
MIN. LOAD

FIX PWR MINMUN LOAD



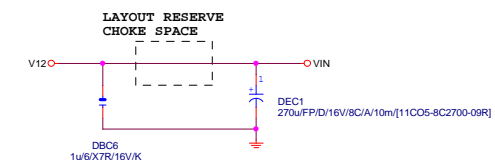
PWOK PATCH

【技術通報R&D技術通報154】

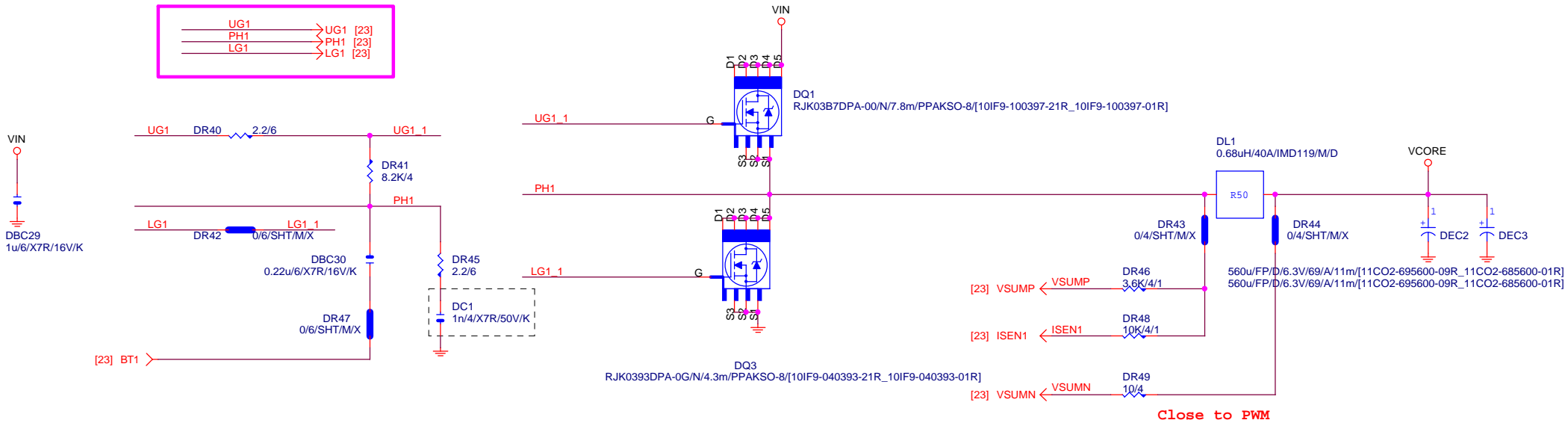


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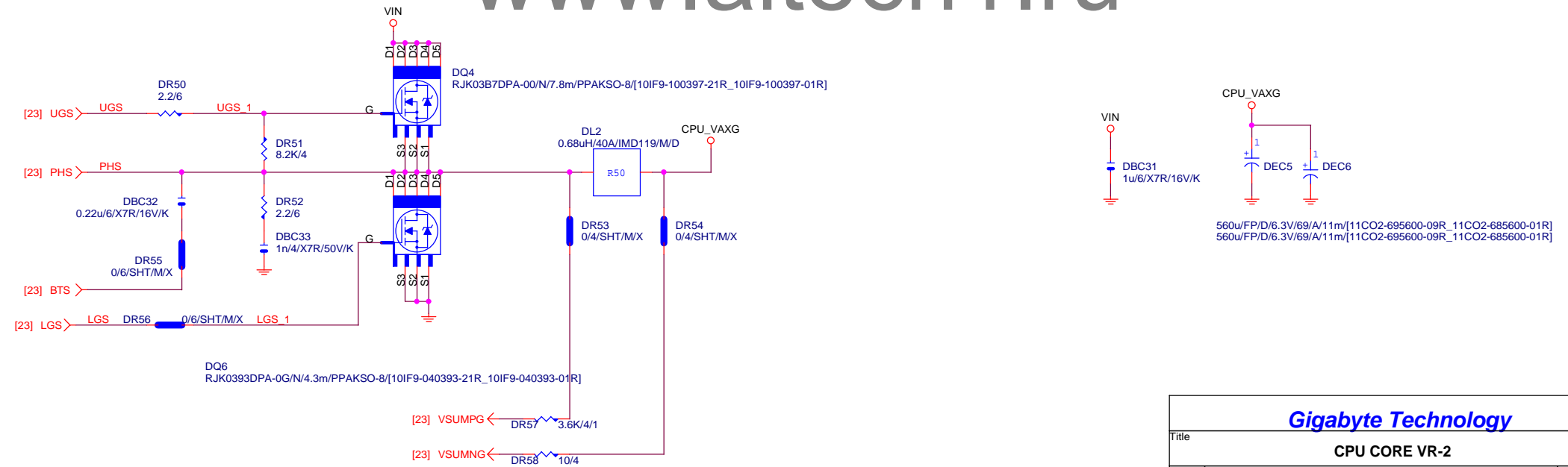
Title		
ATX CONNECTOR		
Size B	Document Number	IPX1800G1 (DB)
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VCORE



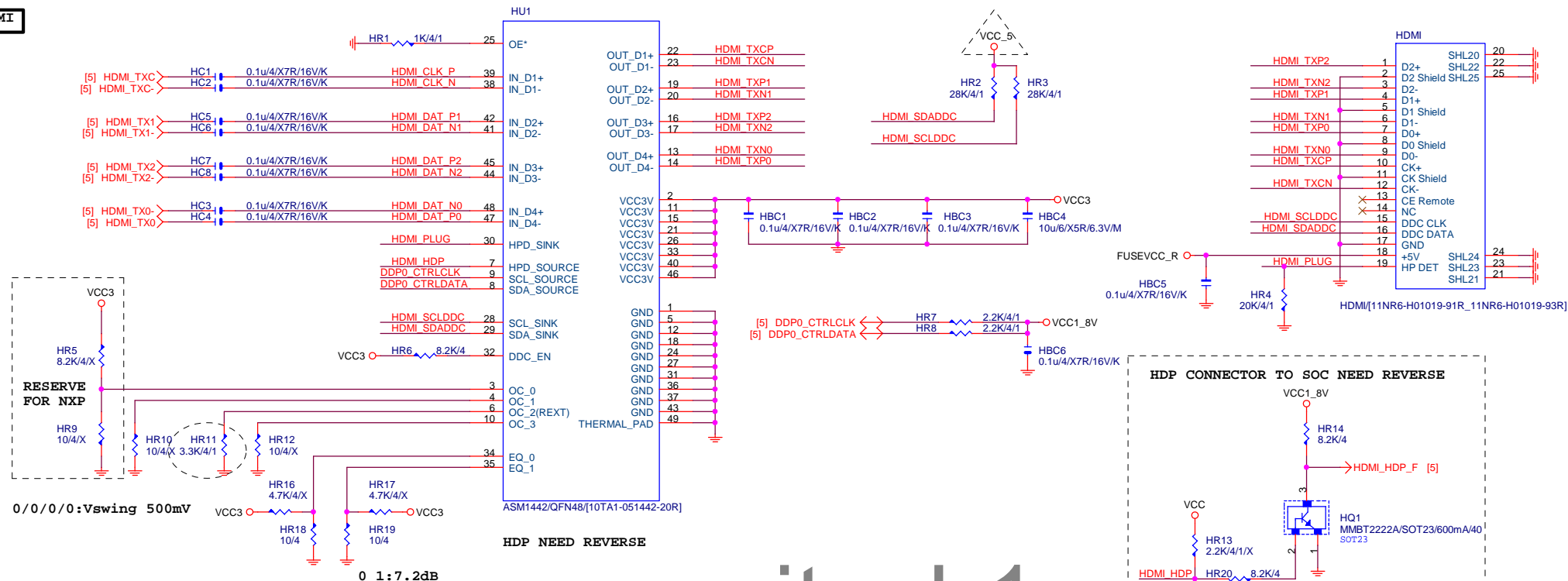
VAXG



Gigabyte Technology

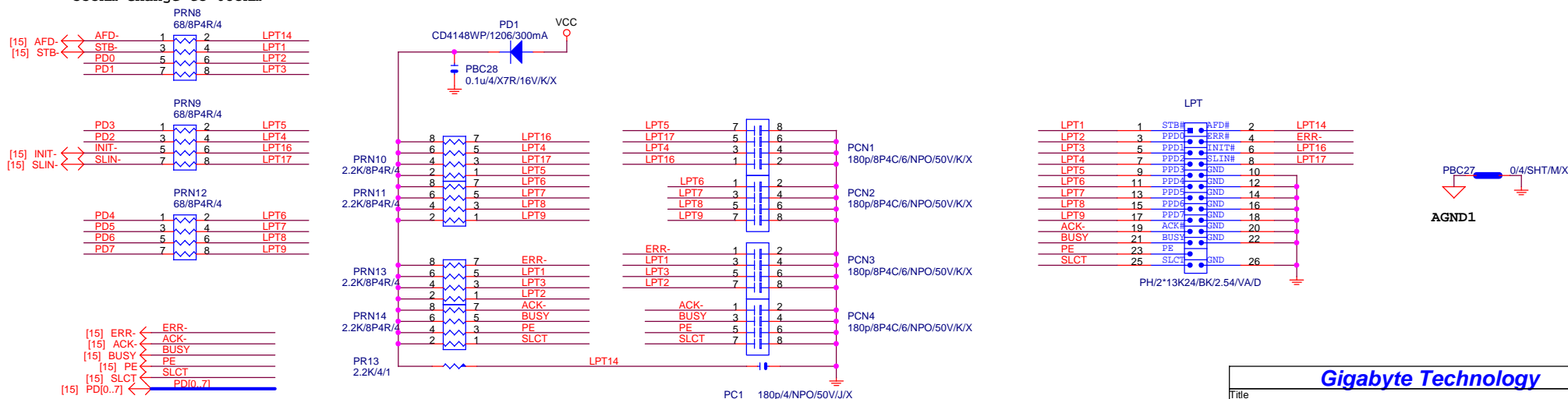
Title			
CPU CORE VR-2			
Size	Document Number	IPX1800G1 (DB)	
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HDMI

LPT PORT

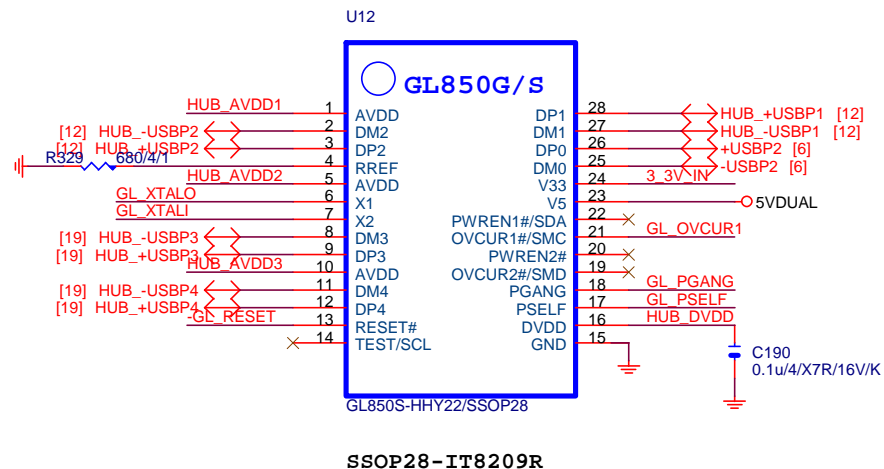
【技術通報R&D技術通報151】
33ohm Change to 68ohm



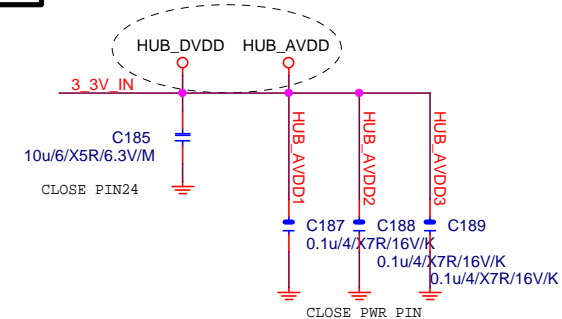
Gigabyte Technology

Title			
HDMI,LPT			
Size	Document Number		Rev
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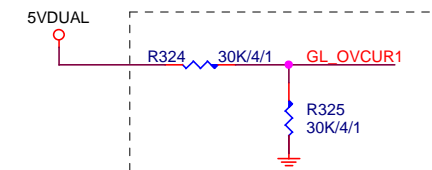
USB20 HUB



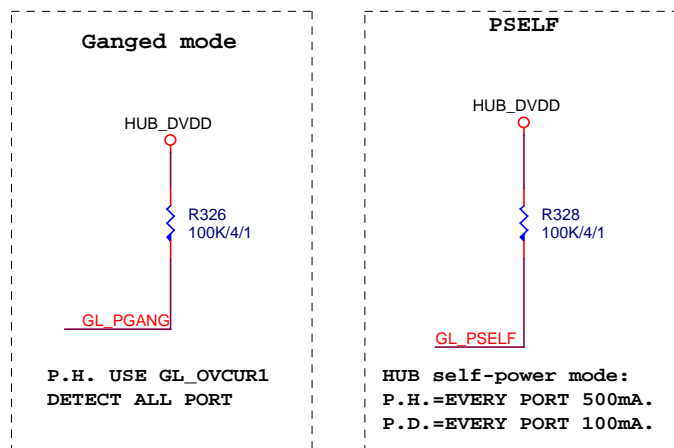
HUB PWR



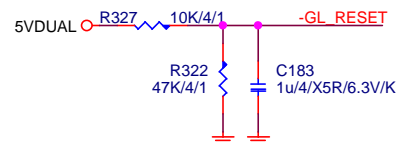
HUB OVER CURRENT SENSE



HUB MODE

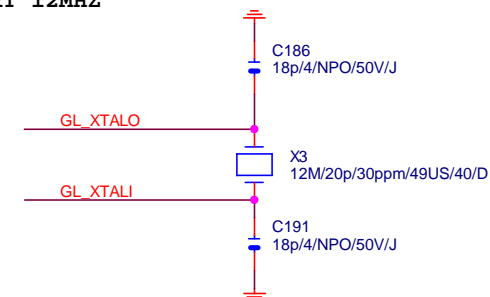


HUB RESET



HUB CRYSTAL

ONLY SUPPORT 12MHZ



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HUB GL850G			
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