

GA-A75M-DS2

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06	APU UMI, GFX, GPP	
07	APU POWER & GND	
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09	HUDSON UMI, PCIE, PCI, CPU, LPC	
10	HUDSON ACPI, GPIO, USB, AUDIO	
11	HUDSON SATA,SPI,HWM	
12	HUDSON POWER & GND	
13	PCIE x16 , x1	
14	PCI SLOT	
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23	DDR POWER, VCC18 , EUP	
24	RTL8111F-VL	

PAGE	TITLE
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APU_VDDIO_SUS=DDR15V
APU_VTT_SUS=DDRVTT
APU_VDDP_RUN=APU_VDDR_RUN=APU_VDDP
+1.1V_RUN=FCH_VDD_11_RUN=VCC_SB
+3.3V_RUN=VCC3
+3.3V_ALW=3VDUAL
```

Model Name:GA-A75M-DS2

Component value change history

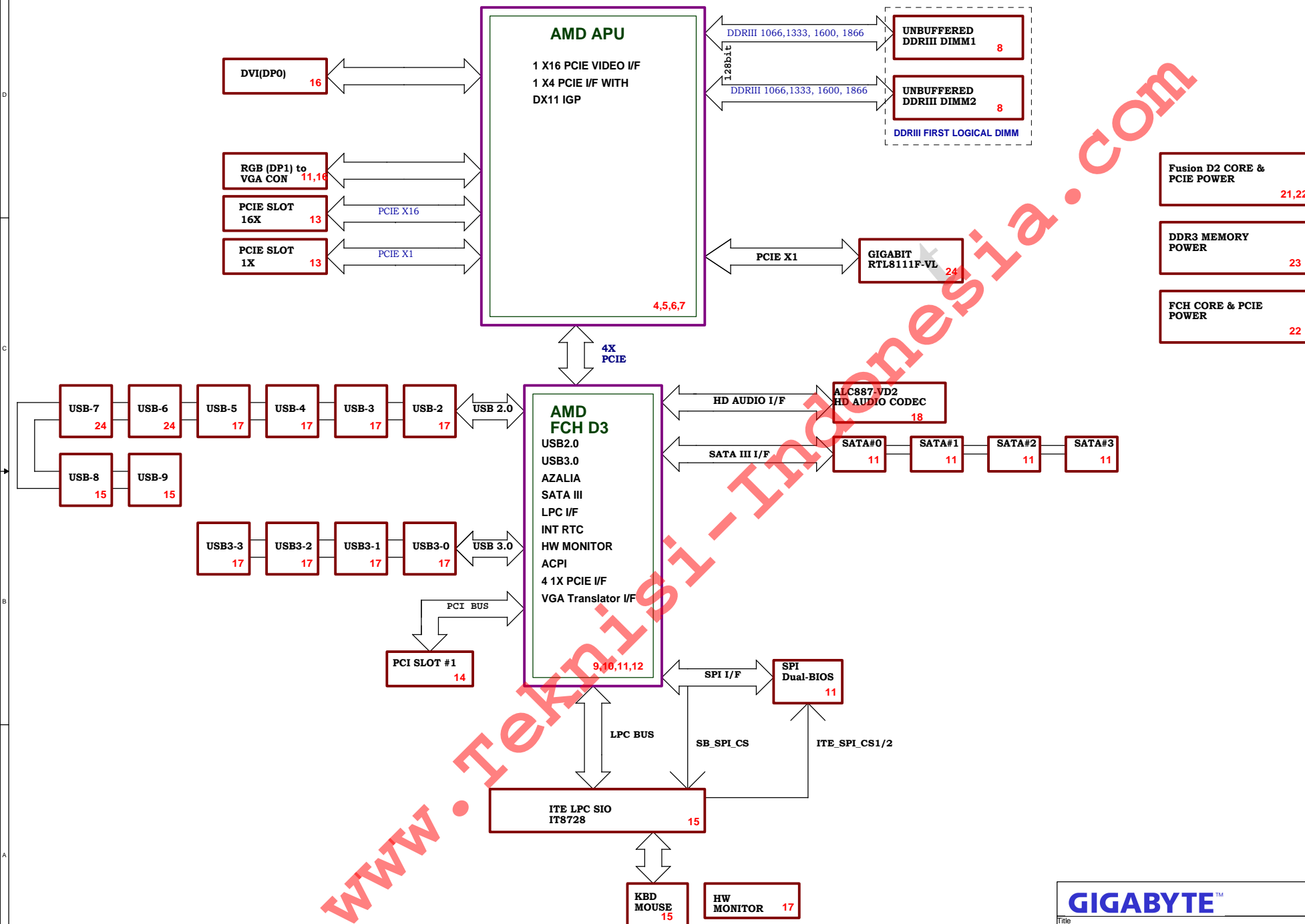
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P-Code: U98126-0

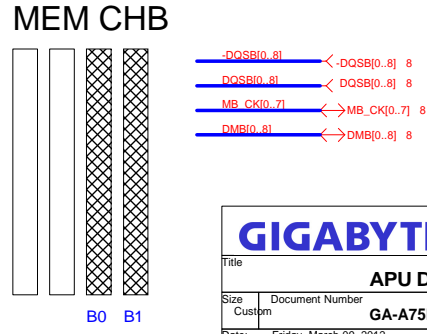
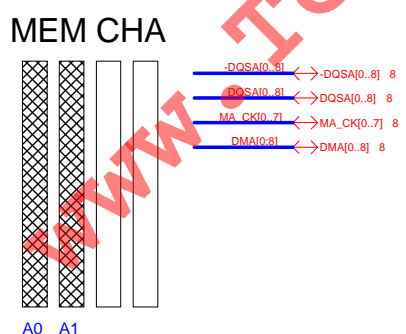
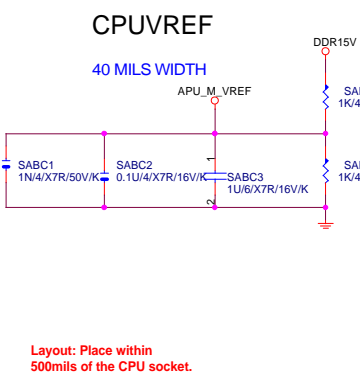
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Circuit or PCB layout change for next version

[illegible]

AMD Fusion Hudson CUSTOMER DESKTOP REFERENCE DESIGN





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Title: **APU DDRIII MEMORY**

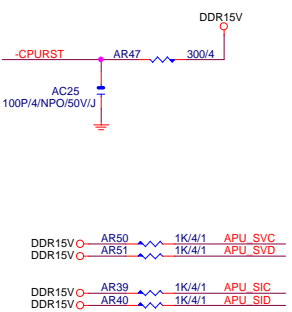
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Document Number: **GA-A75M-DS2**

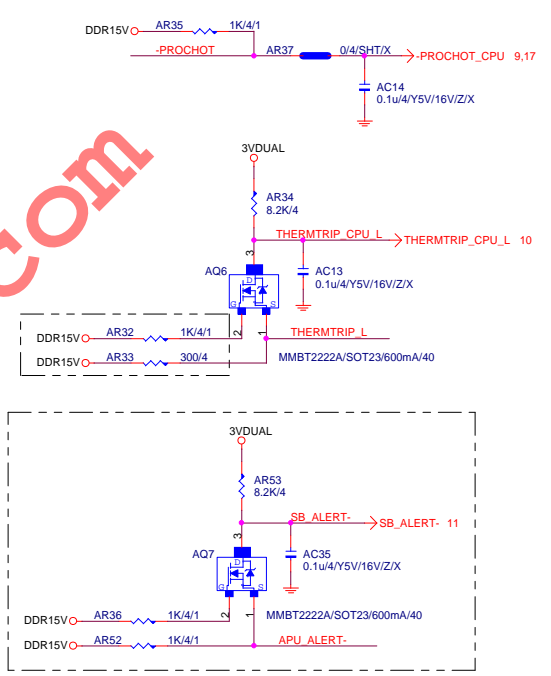
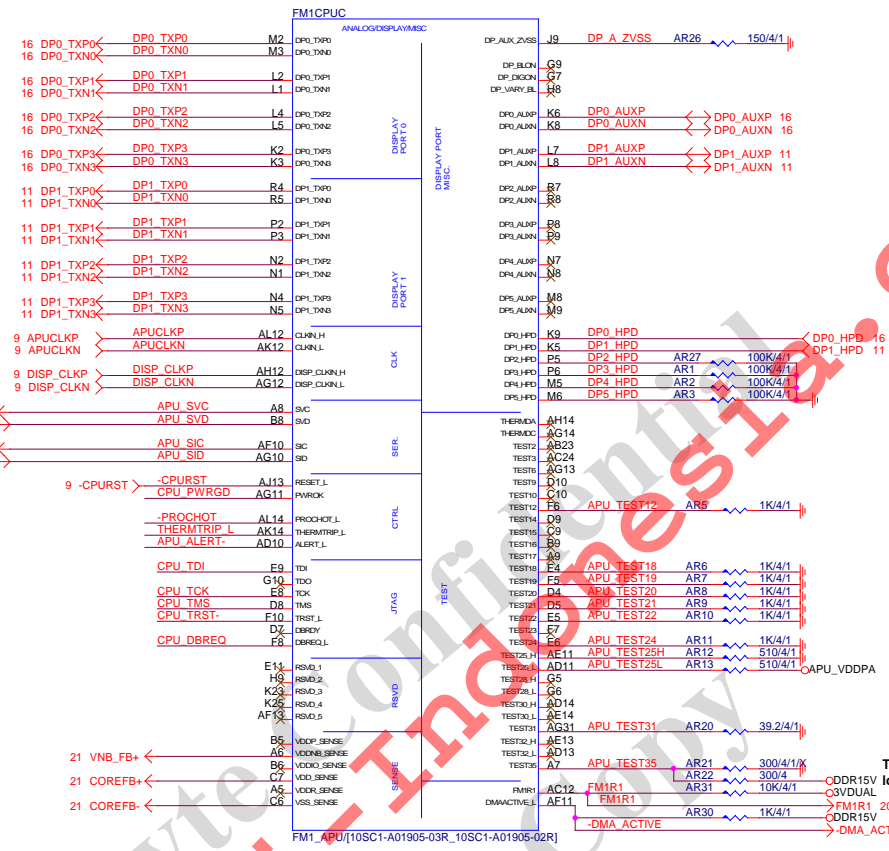
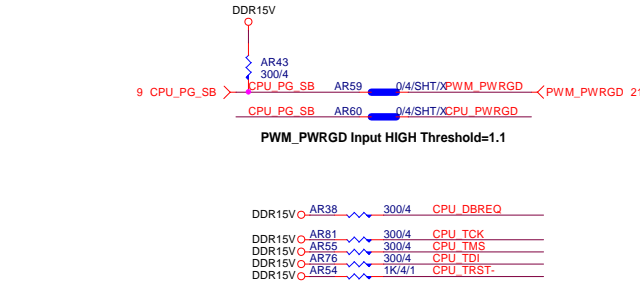
Rev: **2.0**

Date: **Friday, March 09, 2012**

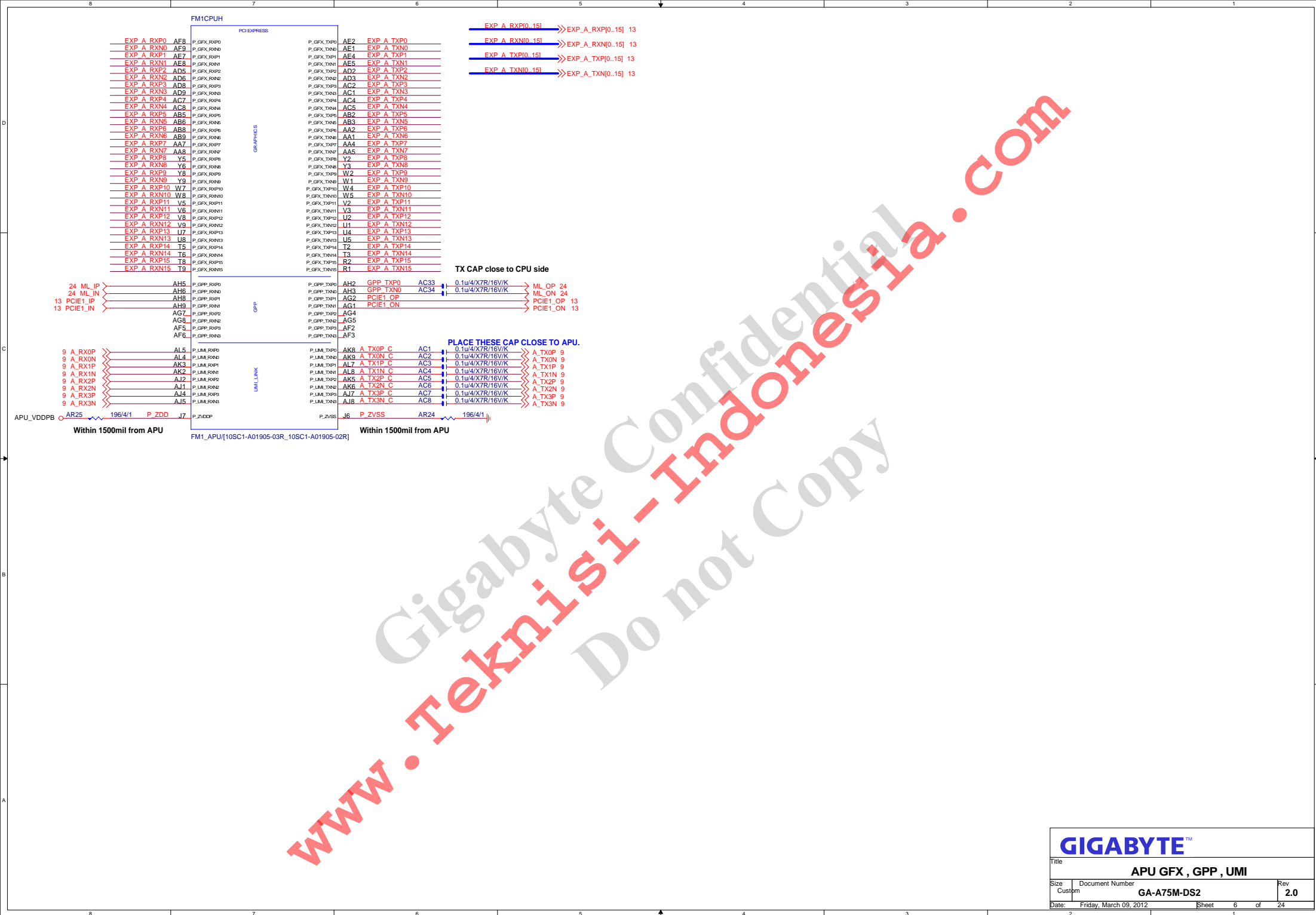
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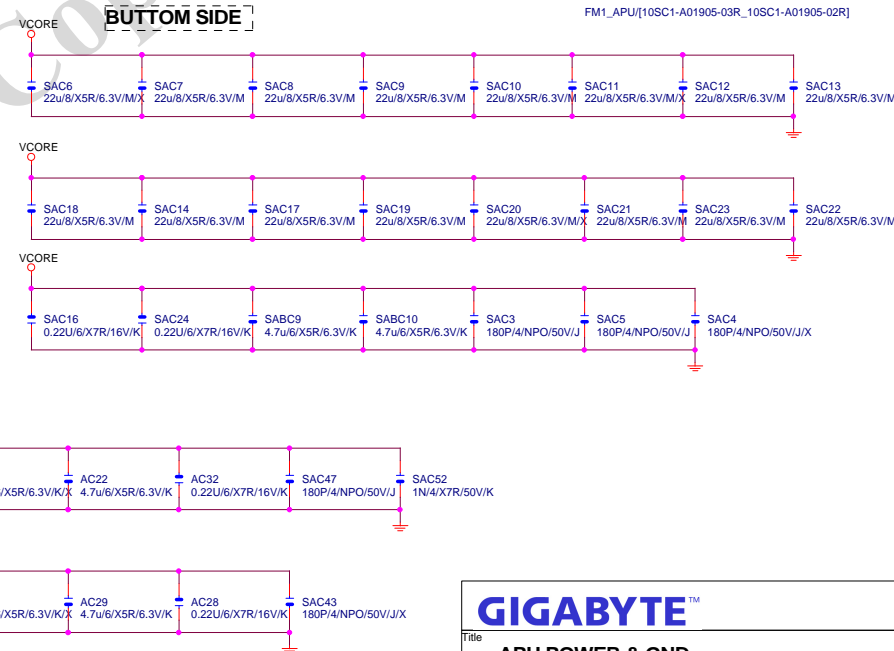
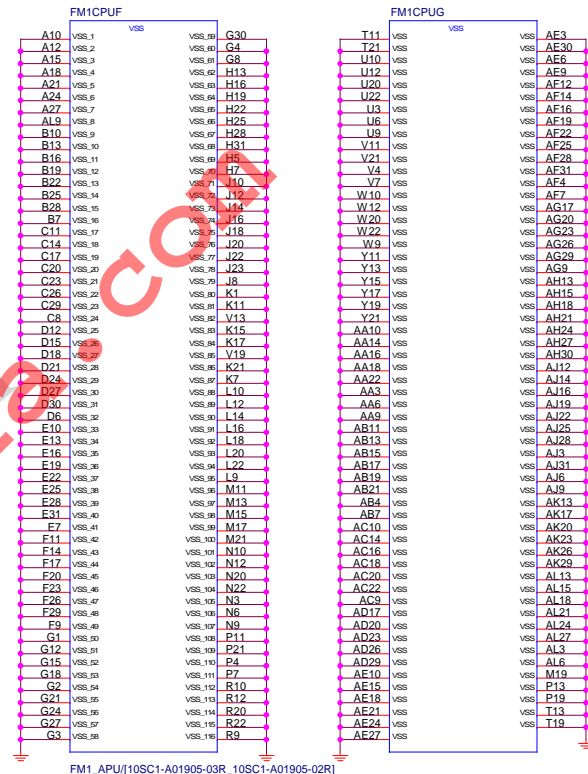


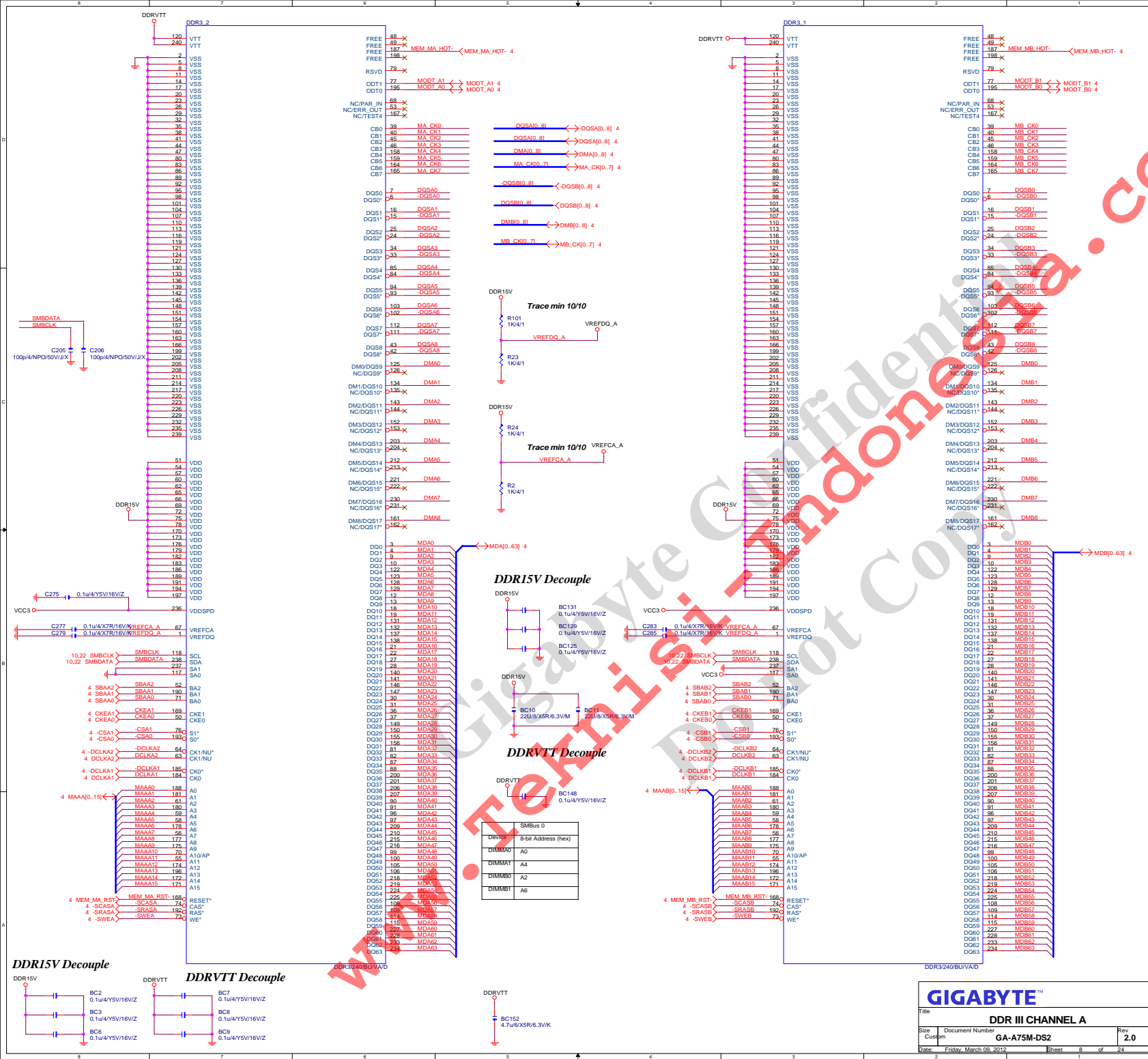
APU Spread 100Mhz clock
DP Non-Spread 100Mhz clock



TEST35: high=>HDMI enable,
low=>HDMI disable.



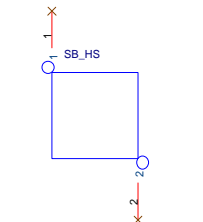




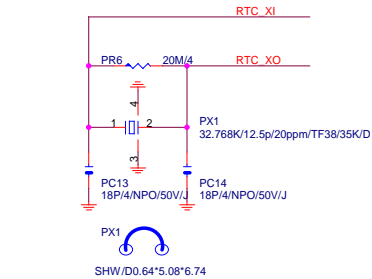


PLACE THESE PCIE AC COUPLING CAPS CLOSE TO SB850

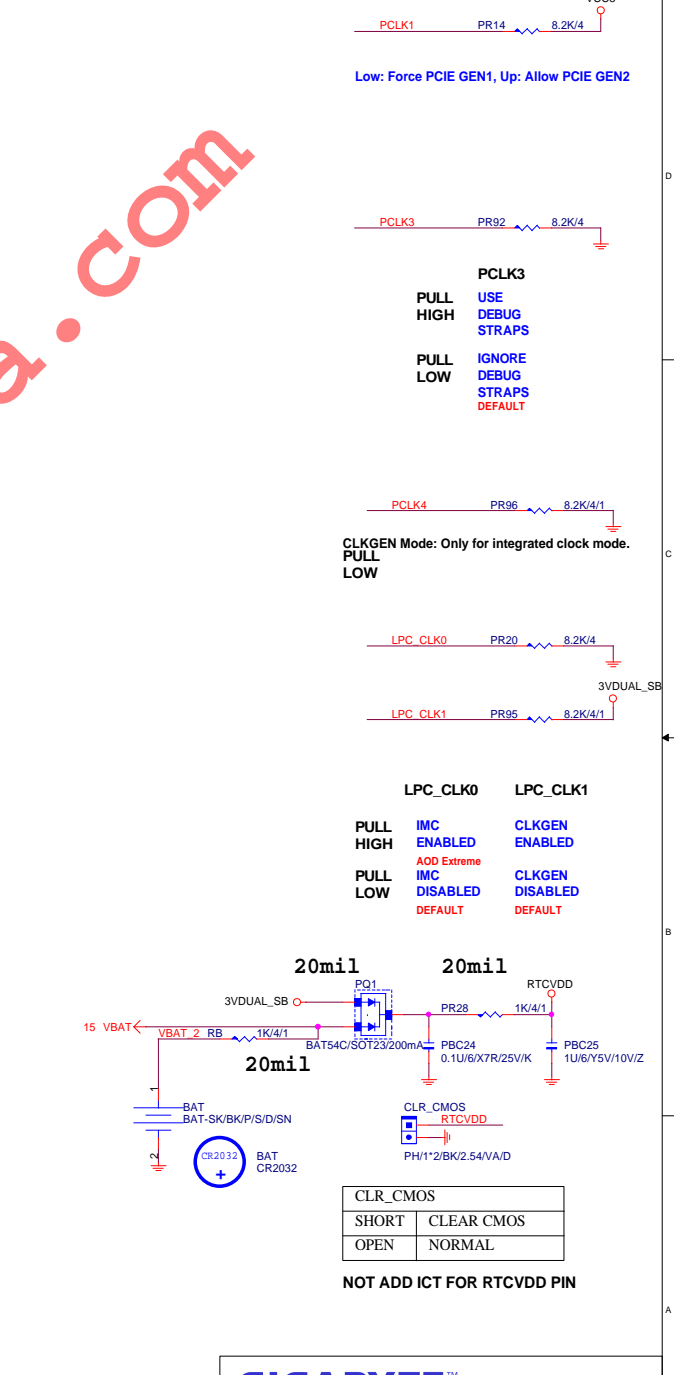
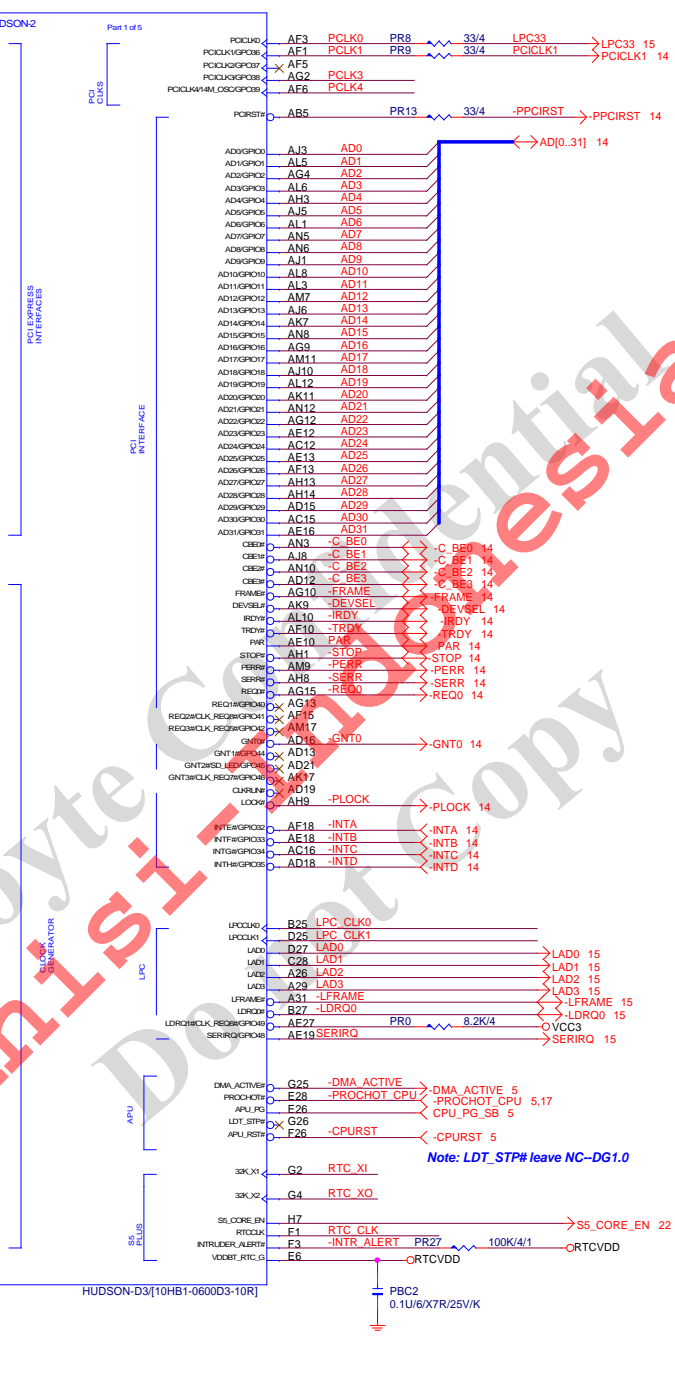
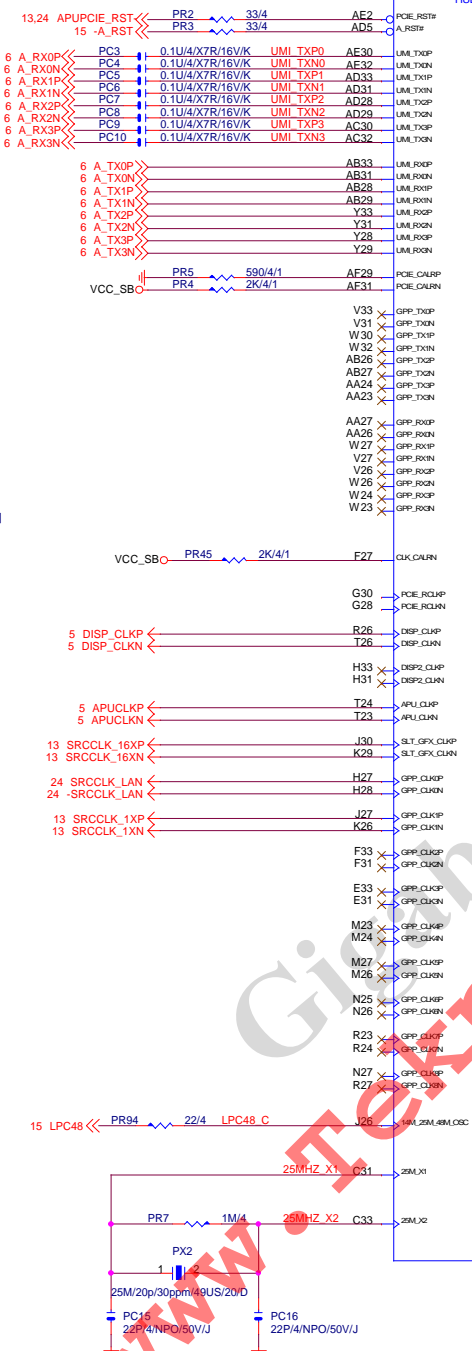
S.B HEATSINK



SB_HS[12SP2-SA0301-01R_12SP2-SA0301-02R_12SP2-SA0301-03R]



For APU PCI_E devices.



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Title
Hudson D3 PCIE/PCI/CPU/LPC

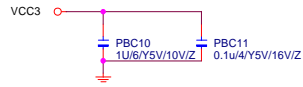
Size
Document Number
GA-A75M-DS2

Rev
2.0

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SP TX0P C AK19 SATA_TX0P
SP TX0M C AM19 SATA_TX0N
SP RX0M C AL20 SATA_RX0N
SP RX0P C AN20 SATA_RX0P
SP TX1P C AN22 SATA_TX1P
SP TX1M C AL22 SATA_TX1N
SP RX1M C AH20 SATA_RX1N
SP RX1P C AJ20 SATA_RX1P
SP TX2P C AJ22 SATA_TX2P
SP TX2M C AH22 SATA_TX2N
SP RX2M C AM23 SATA_RX2N
SP RX2P C AK23 SATA_RX2P
SP TX3P C AH24 SATA_TX3P
SP TX3M C AJ24 SATA_TX3N
SP RX3M C AN24 SATA_RX3N
SP RX3P C AL24 SATA_RX3P

SATA 6-7 for Hudson D4.

PLACE SATA_CAL RES VERY CLOSE TO BALL OF U1

VCC_SB0 PR75 1K/4/1 SATA_CALRP AF28
PR74 931/4/1 SATA_CALRN AF27

19 -SATA_LED -SATA_LED AD22 SATA_ACT#GPI067

AF21 SATA_X1

AG21 SATA_X2

AH16 FANOUT#GPI063

AM15 FANOUT#GPI063

AJ16 FANOUT#GPI064

AK15 FANNING#GPI066

AN16 FANNING#GPI067

AL16 FANNING#GPI068

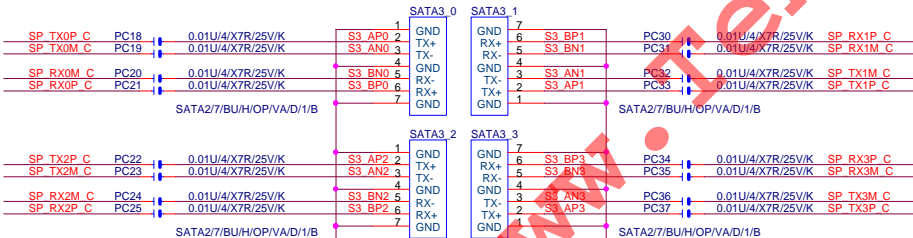
K6 TEMPRIN#GPI071

K5 TEMPRIN#GPI072

K3 TEMPRIN#GPI073

M6 TEMPRIN#ALERT#GPI074

HUDSON-D3(10HB1-0600D3-10R)



AL14 SD_CLK#GCLK_2GPI079
AN14 SD_CLK#GCLK_2GPI079
AJ12 SD_CLK#GCLK_2GPI079
AH12 SD_CLK#GCLK_2GPI079
AK13 SD_DATA#DATA1_2GPI077
AM13 SD_DATA#DATA1_2GPI077
AH15 SD_DATA#DATA1_2GPI077
AJ14 SD_DATA#DATA1_2GPI077

AC4 GBE_COL_0
AD3 GBE_COL_0
AD9 GBE_MDC0
W10 GBE_MDC0
AB8 GBE_PHY#_P0
AH7 GBE_PHY#_P0
AF7 GBE_PHY#_P0
AE7 GBE_PHY#_P0
AD7 GBE_PHY#_P0
AG8 GBE_PHY#_P0
AD1 GBE_PHY#_P0
AB7 GBE_PHY#_P0
AF9 GBE_PHY#_P0
AG6 GBE_PHY#_P0
AE8 GBE_PHY#_P0
AD8 GBE_PHY#_P0
AB9 GBE_PHY#_P0
AC2 GBE_PHY#_P0
AA7 GBE_PHY#_P0
W3 GBE_INTR PR43 8.2K/4

RGMI NOT SUPPORT. DG:1.20

V6 SB_SPL_DI_R PR70 22/4 SB_SPL_DI

V5 SB_SPL_DO_R PR71 22/4 SB_SPL_DO

V3 SB_SPL_CLK_R PR72 22/4 SB_SPL_CLK

T6 SB_SPL_CS- PR73 22/4 SB_SPL_CS_ITE

V1 ROM_RST#SPL_W#GPI081

L30 VGA_RED PR44 150/4/1 DAC_RED 16

L32 VGA_GREEN PR12 150/4/1 DAC_GREEN 16

M29 VGA_BLUE PR10 150/4/1 DAC_BLUE 16

M28 DAC_HSYNC PR71 16 DAC_HSYNC 16

N30 DAC_VSYNC PR71 16 DAC_VSYNC 16

M33 DDCDATA PR71 16 DDCDATA 16

N32 DDCCLK PR71 16 DDCCLK 16

K31 DAC_RSET PR87 715/4/1

V28 VGA_CHP PR11 0.1U/4/X7R/16V/K DP1_AUXP 5

V29 VGA_CHN PR12 0.1U/4/X7R/16V/K DP1_AUXN 5

U28 AUX_CAL PR99 100/4/1 VCC_SB

T31 SW_VGA_TXD0+ HC19 0.1U/4/X7R/16V/K DP1_TXP0 5

T33 SW_VGA_TXD0- HC20 0.1U/4/X7R/16V/K DP1_TXN0 5

T29 SW_VGA_TXD1+ HC15 0.1U/4/X7R/16V/K DP1_TXP1 5

T28 SW_VGA_TXD1- HC16 0.1U/4/X7R/16V/K DP1_TXN1 5

R32 SW_VGA_TXD2+ HC17 0.1U/4/X7R/16V/K DP1_TXP2 5

R30 SW_VGA_TXD2- HC18 0.1U/4/X7R/16V/K DP1_TXN2 5

P29 SW_VGA_TXD3+ HC21 0.1U/4/X7R/16V/K DP1_TXP3 5

P28 SW_VGA_TXD3- HC22 0.1U/4/X7R/16V/K DP1_TXN3 5

C29 VGA_HPD

N2 VIN#GPI075

M3 SB_VIN1 PR53 8.2K/4

L2 VIN#GPI077

N4 VIN#GPI079

P1 SB_VIN4 PR100 8.2K/4

P3 SB_VIN5 PR101 8.2K/4

M1 VIN#GPI081

M5 VIN#GPI082

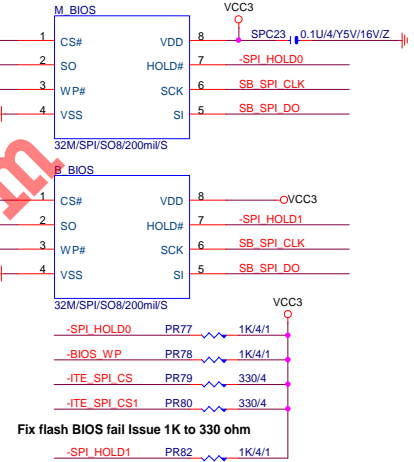
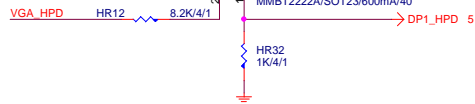
NC1 AG16

NC2 AH10

NC3 A28

NC4 G27

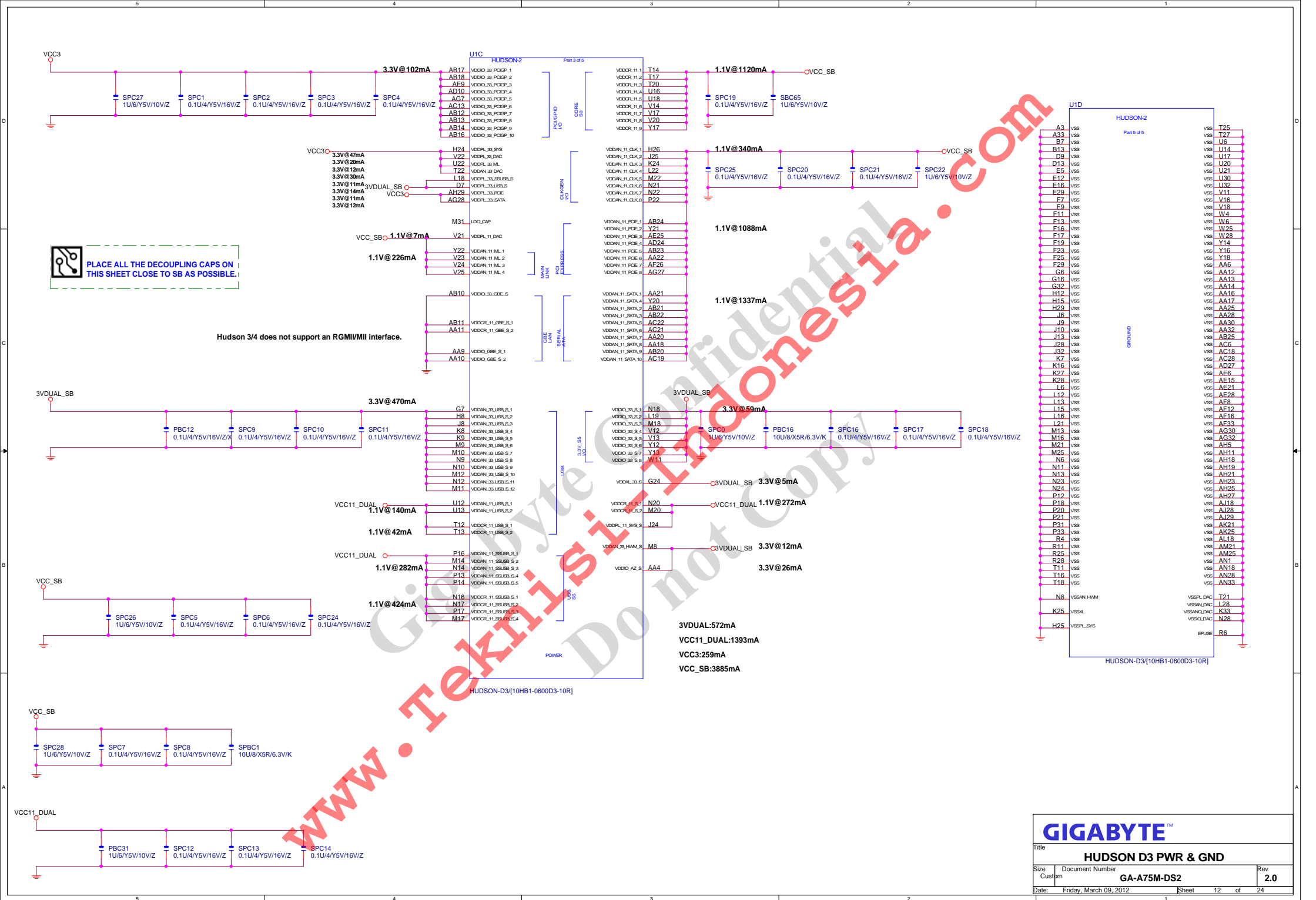
NC5 L4

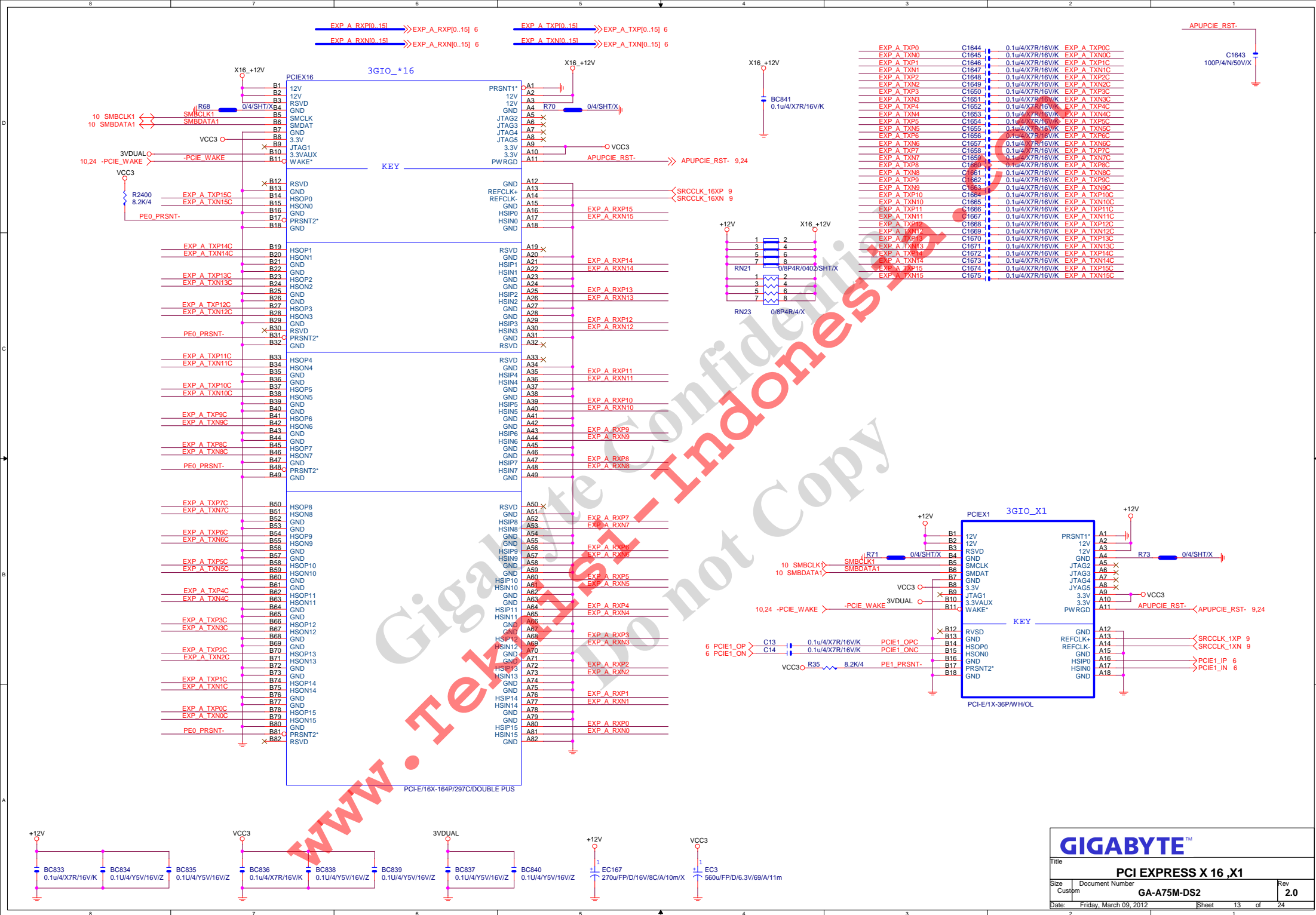


Fix flash BIOS fail Issue 1K to 330 ohm

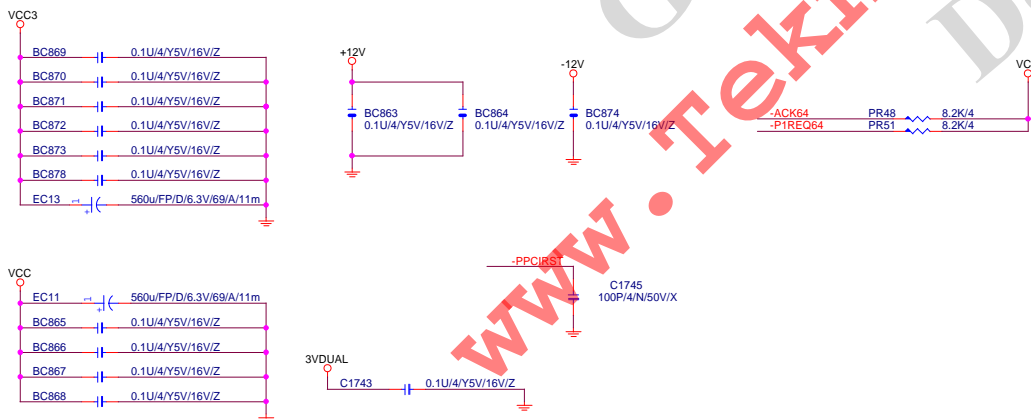
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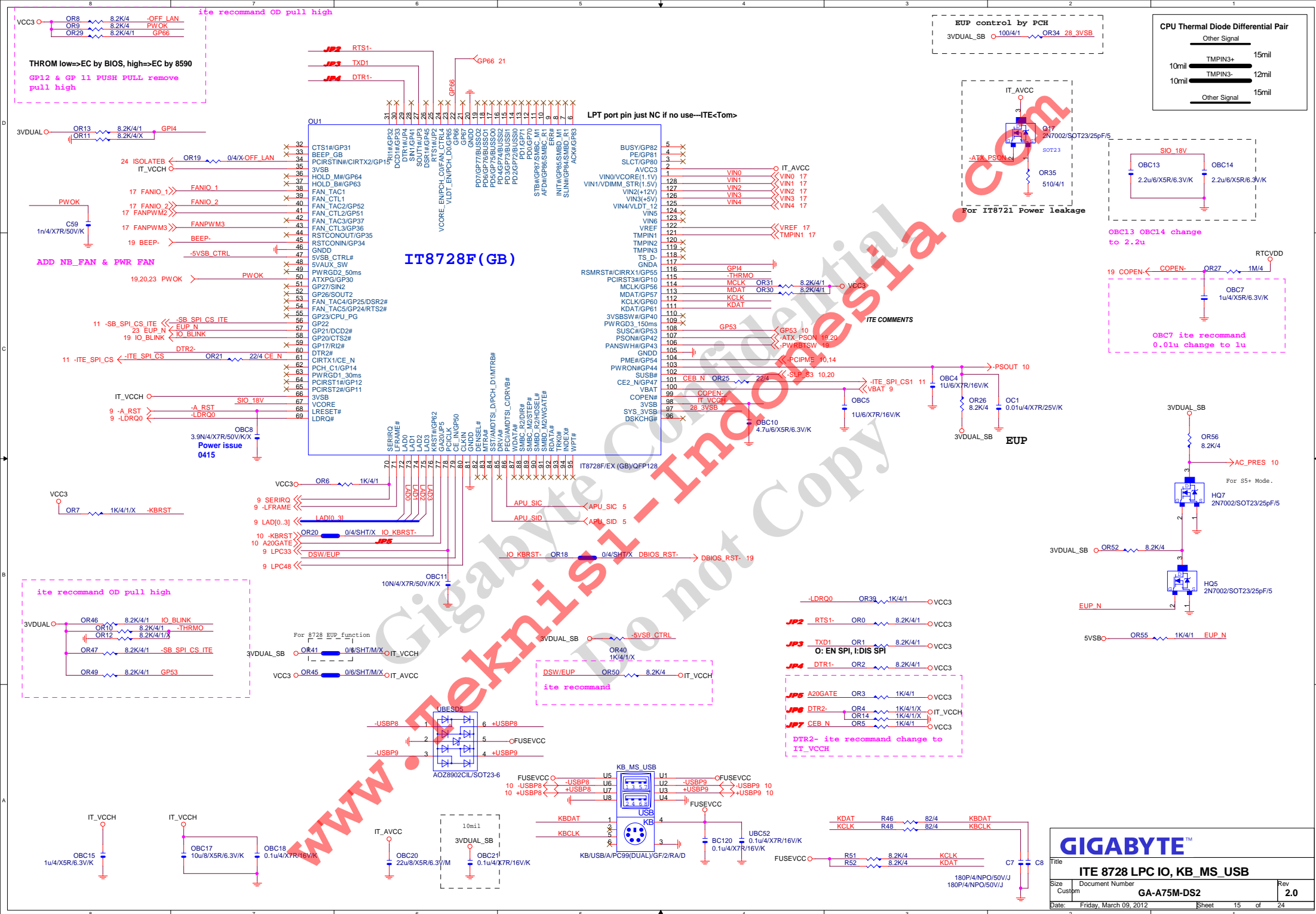
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Size	Document Number	Rev	
Custom	GA-A75M-DS2	2.0	
Date:	Friday, March 09, 2012	Sheet	11 of 24

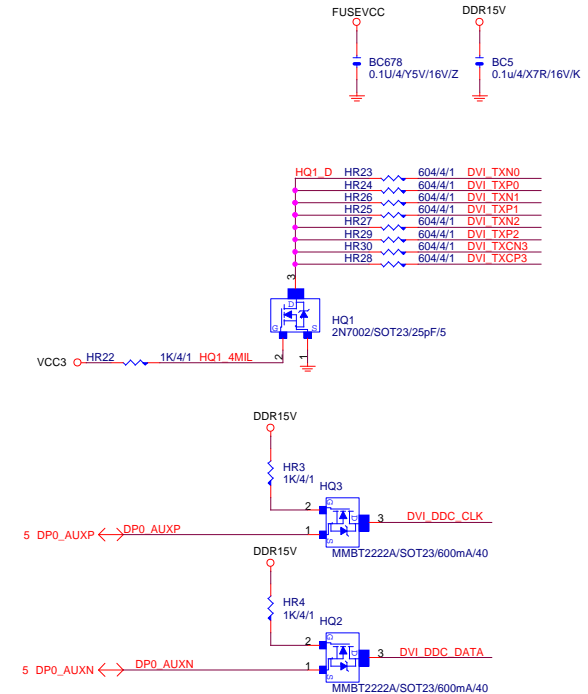
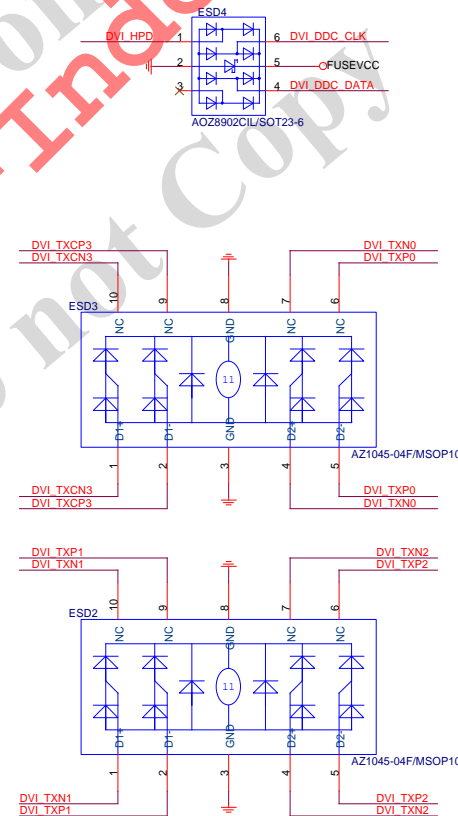
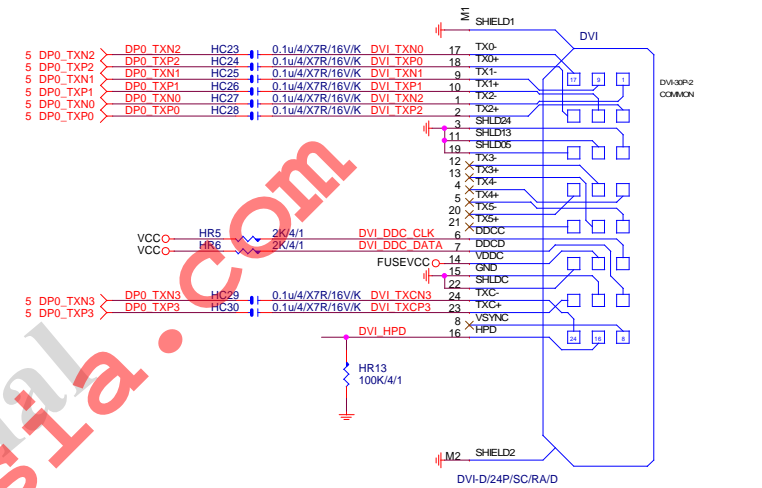
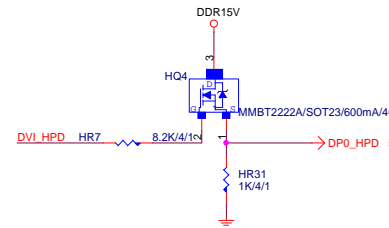




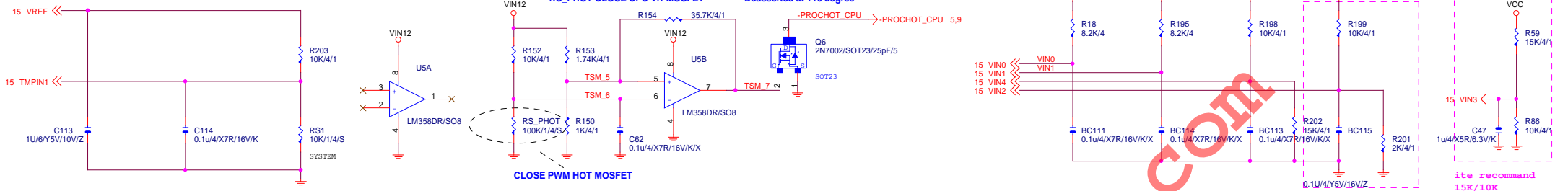
9 AD[0..31] \longleftrightarrow AD[0..31]



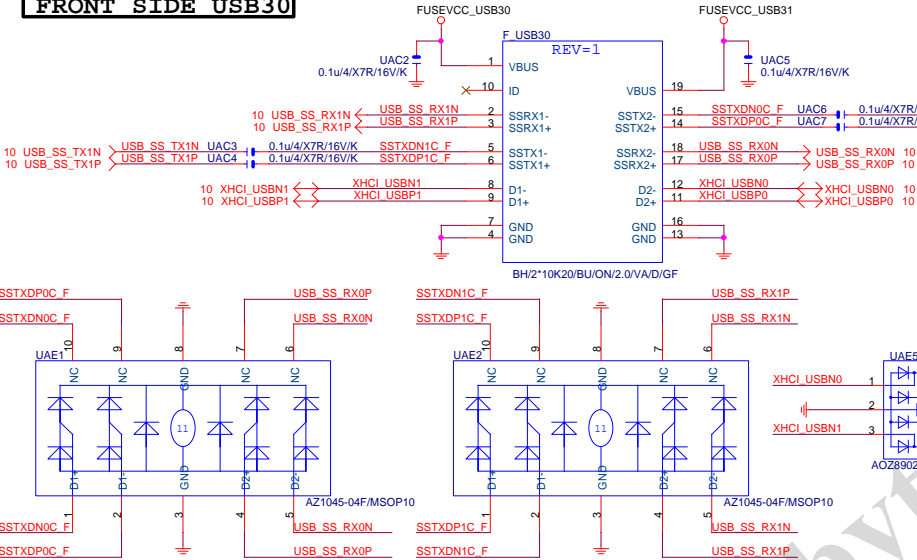




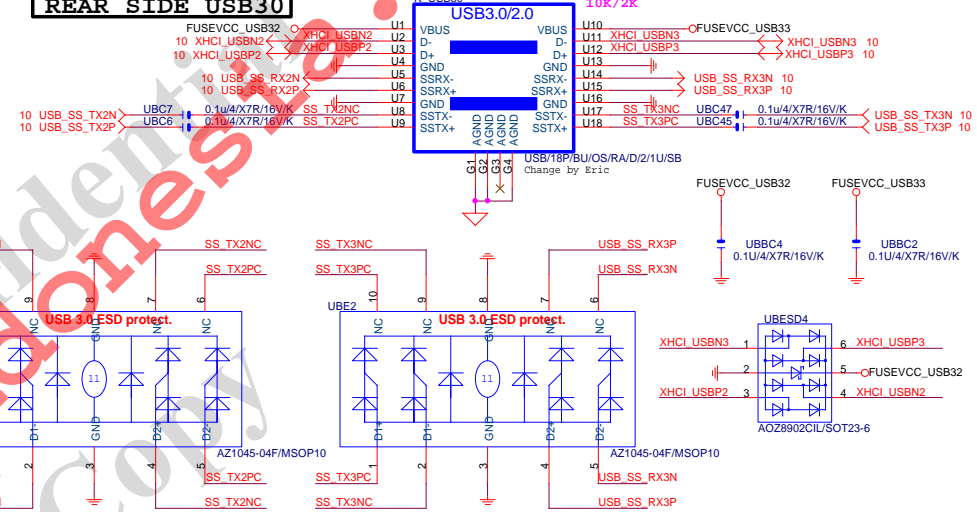
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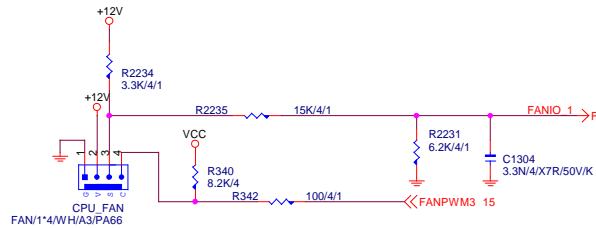
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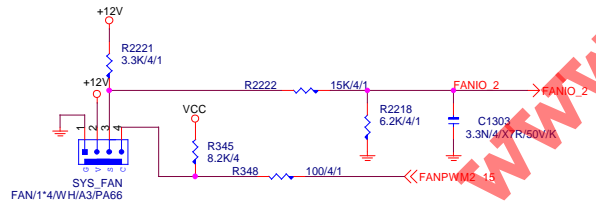
REAR SIDE USB30



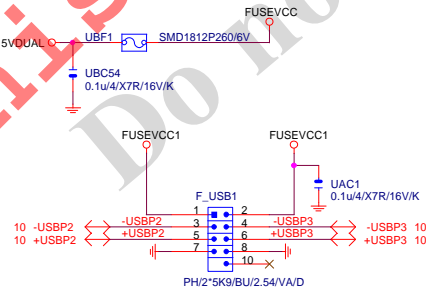
CPU FAN



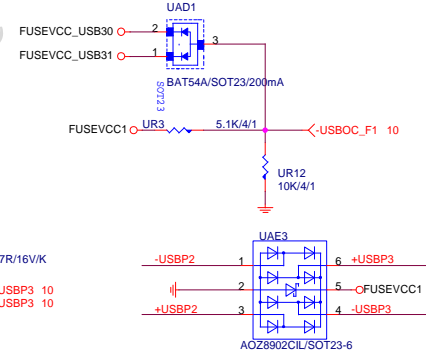
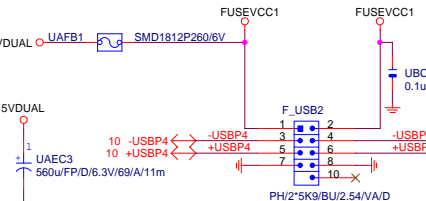
SYSTEM FAN



FRONT SIDE USB1



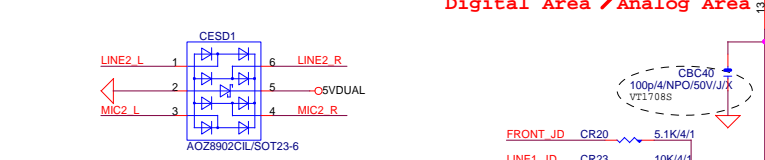
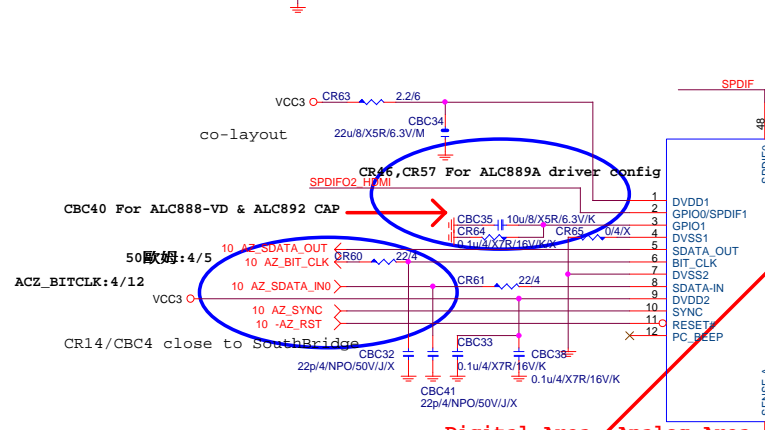
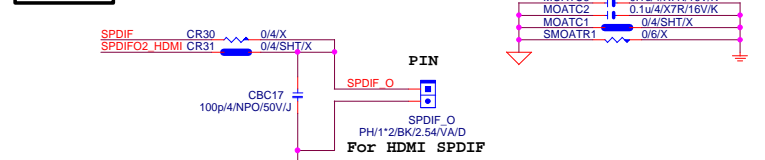
FRONT SIDE USB2



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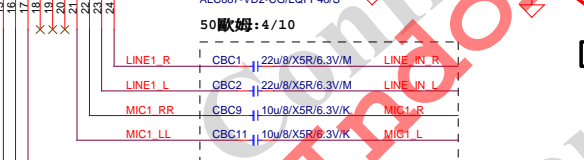
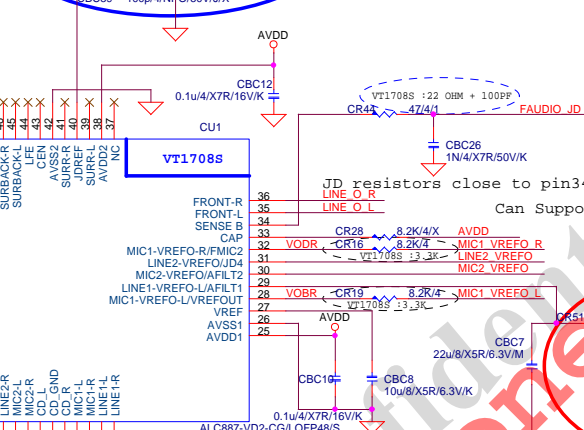
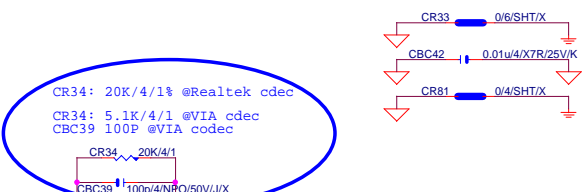
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Size	Document Number	Rev	
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SPDIF OUT

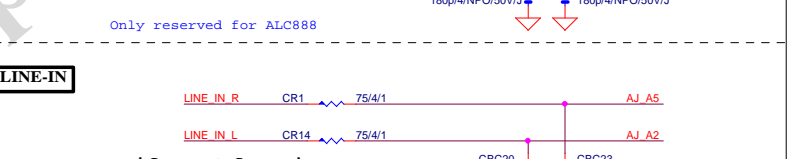
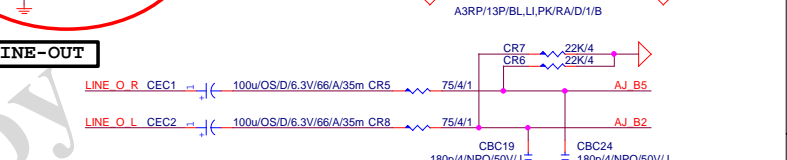
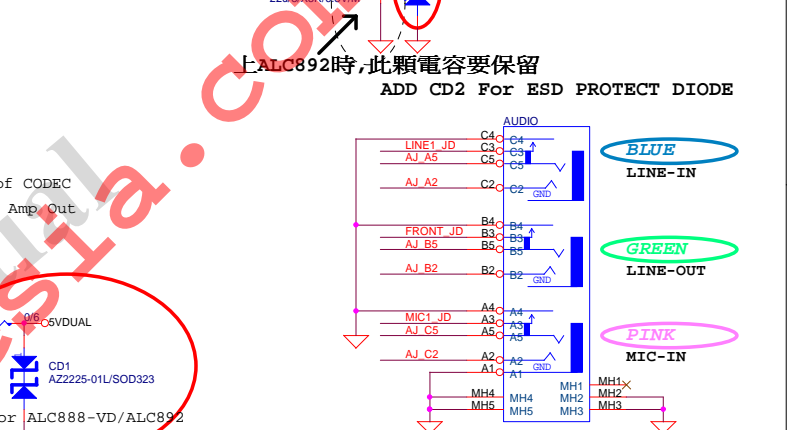
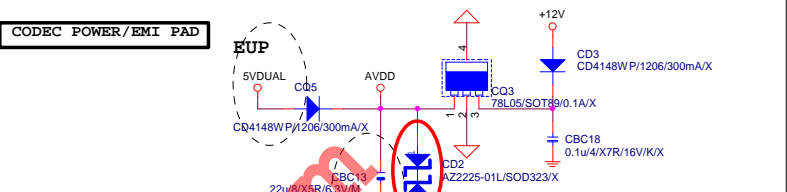
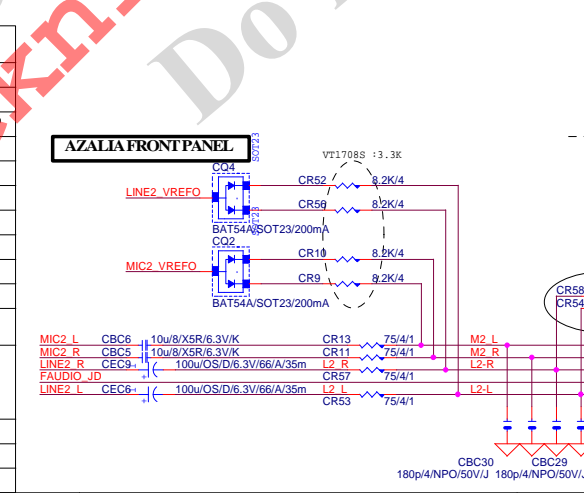


AZALIA CODEC ALC887-VD2/ALC889/VT1708S/VT1708SCE Colay

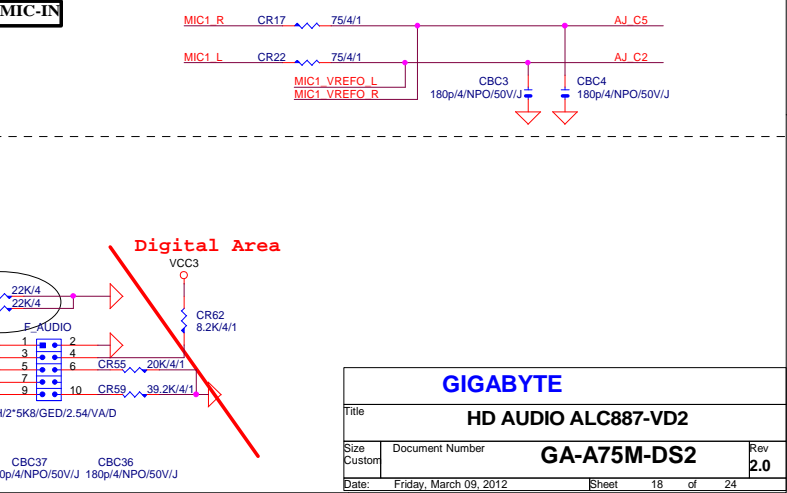
	ALC887-VD2	ALC889	VT1708S	VT1708SCE
CR65	X	O	O	X
CR64	X	X	X	O
CR44/CBC26	47ohm+1nF	47ohm+1nF	22ohm+100P	22ohm+100P
CR34	20K/1%	20K/1%	5.1K/1%	20K/1%
CR31	O	O	O	O
CR30	X	X	X	X
CBC1/CBC2	22uF/X5R	22uF/X5R	22uF/X5R	22uF/X5R
CR20	5.11K/4/1	5.11K/4/1	5.1K/4/1	5.1K/4/1
CBC35	O	X	X	O
CBC39/CBC40	N/A	N/A	100P/4	100P/4
CR6/CR7/CR54/CR58	22K/4	22K/4	10K/4	10K/4
CR5/CR8/CR13/CR11/CR57/CR53	75 ohm	62 ohm	75 ohm	75 ohm
CR51/CD1/CBC7	O	X	X	O
CD2/CD3/CQ3/CQ5	X	O	O	X
CR1/CR14/CR17/CR22	75 ohm	62 ohm	1K ohm	1K ohm



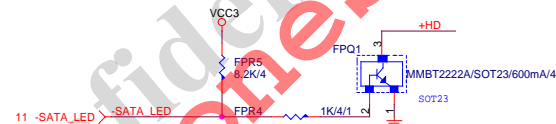
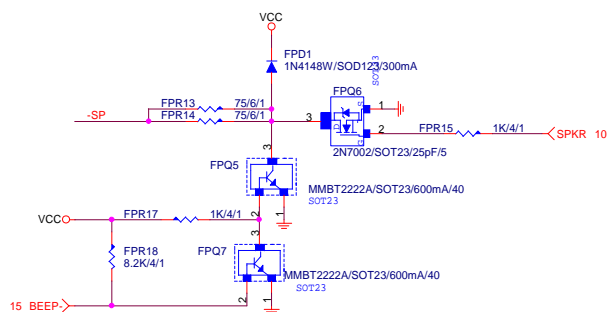
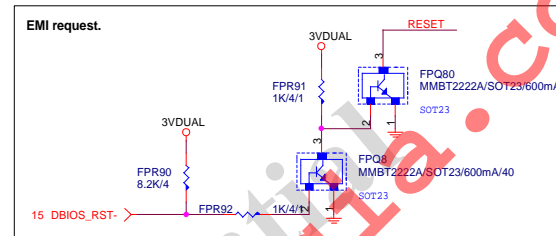
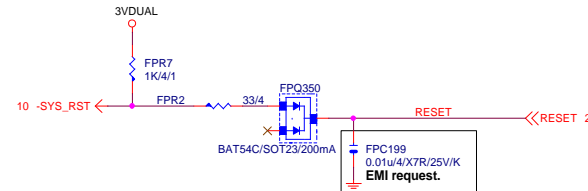
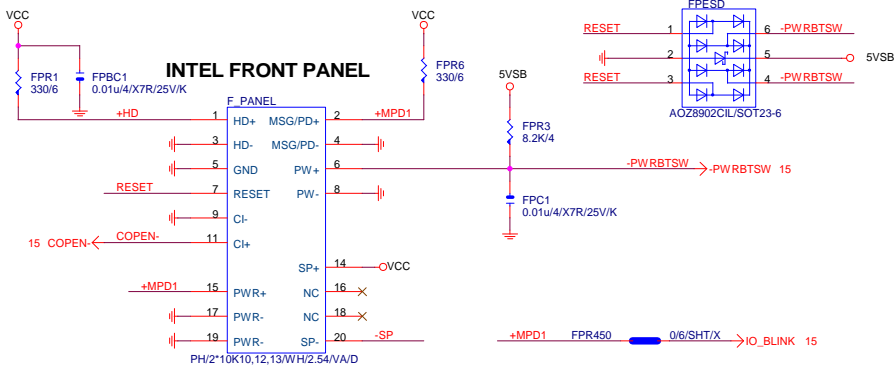
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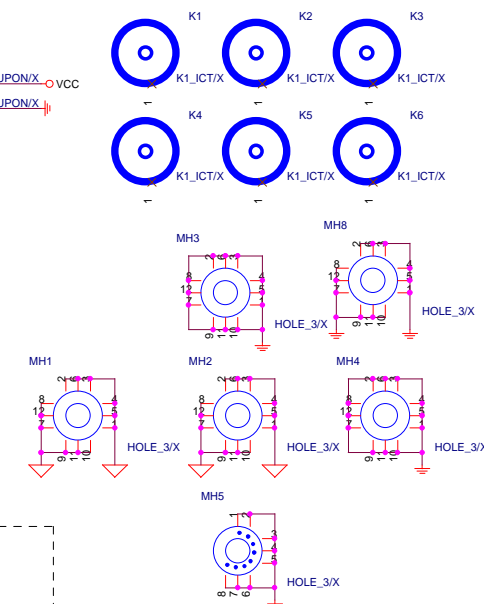
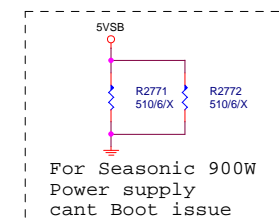
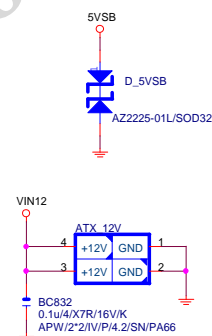
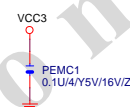
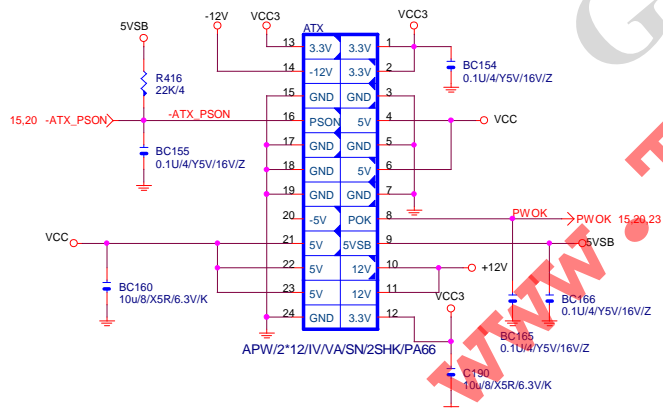
AZALIA FRONT PANEL



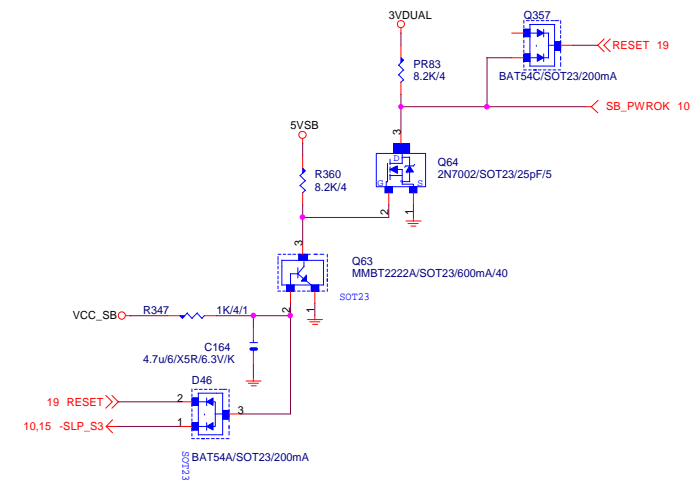
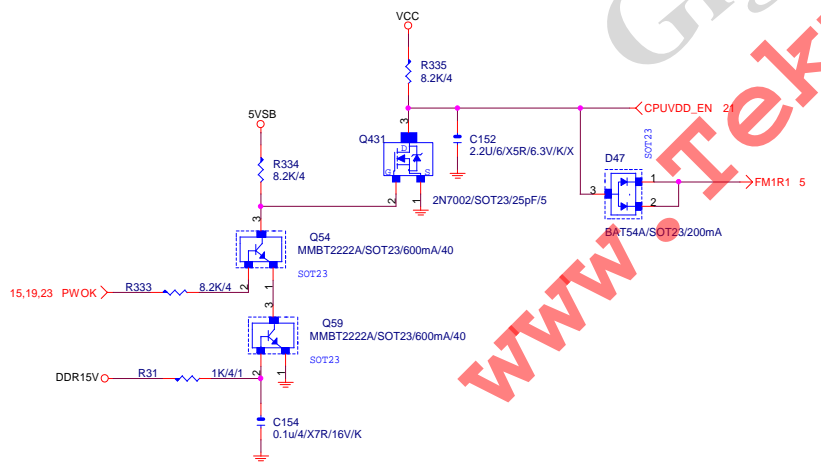
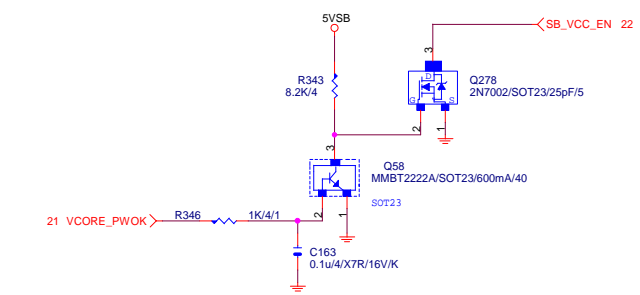
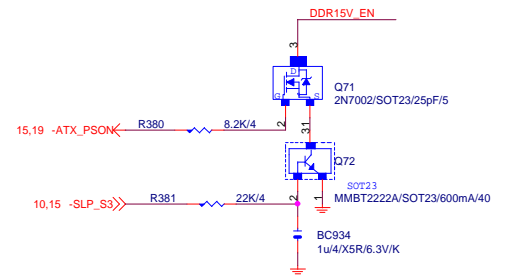
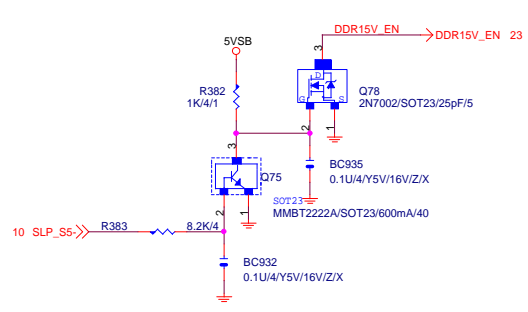
GIGABYTE			
HD AUDIO ALC887-VD2			
Title	GA-A75M-DS2		
Size	Document Number	Rev	2.0
Custom	GA-A75M-DS2		
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ATX POWER CONNECTOR

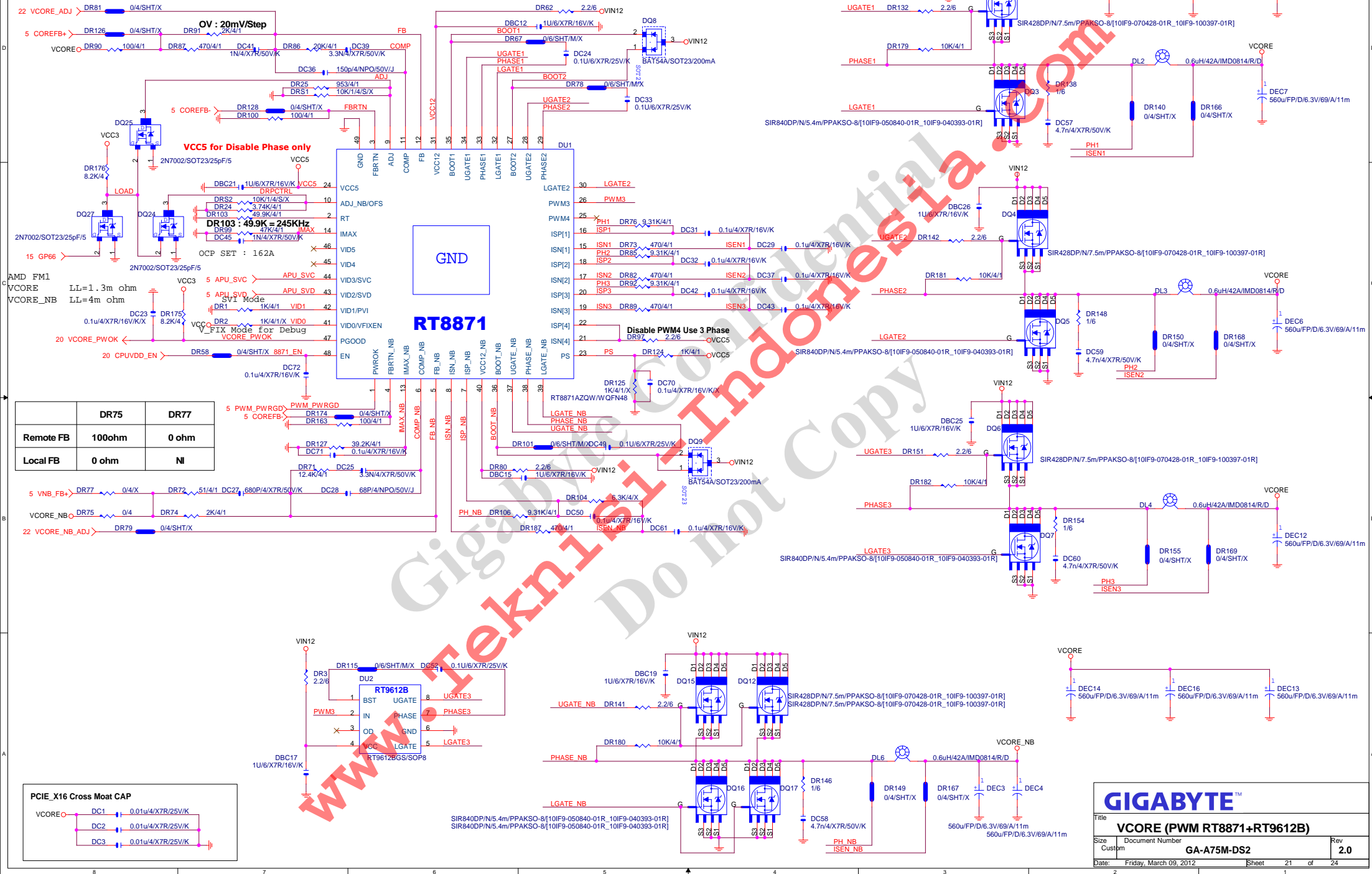


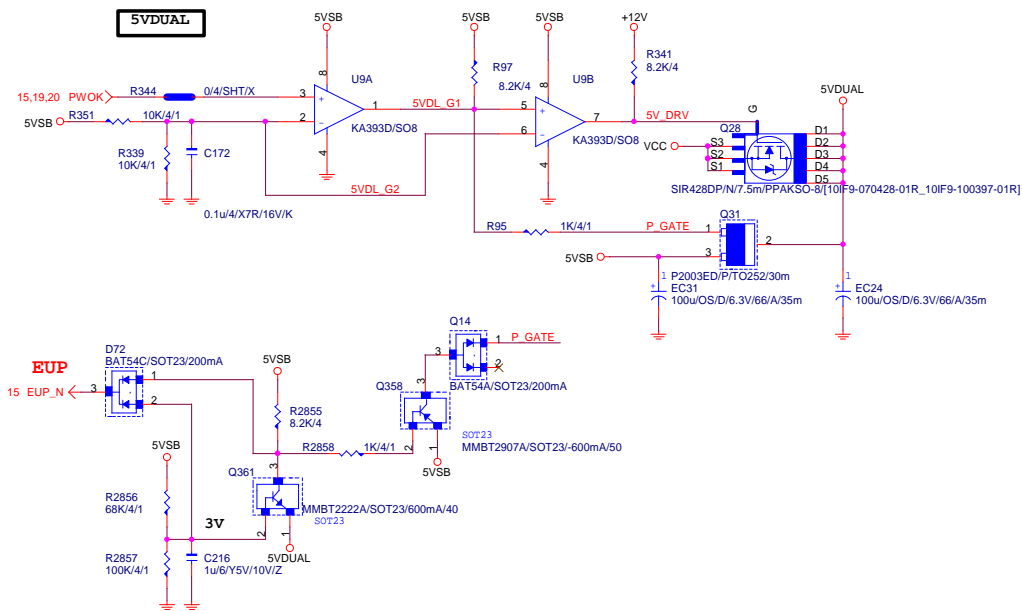
GIGABYTE™		
Title		
ATX, FRONT PANEL		
Size	Document Number	Rev
Custm	GA-A75M-DS2	2.0
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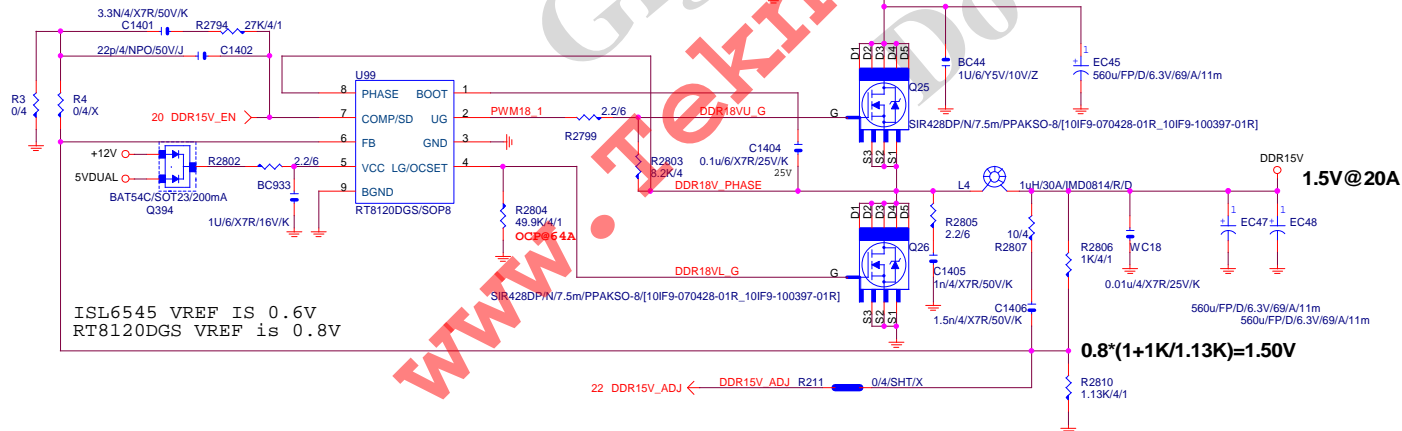
Note :
Phase disable pull Hi, Connect to Pin 24 VCC5,
Phase Drop Pin24 don't use PSU VCC

- Richtek Recommend
 1. snubber DC57、DC59、DC60、DC58 4.7nF , DR138、DR148、DR154、DR146=1R
 2. DR103 49.9K ohm, typ 250KHz
 3. DR91、DR74 2K ohm - 'for 超壓線路用
 4. DR67、DR78、DR101、DR174、DR116、DR115 可以改由0 ohm to short pad

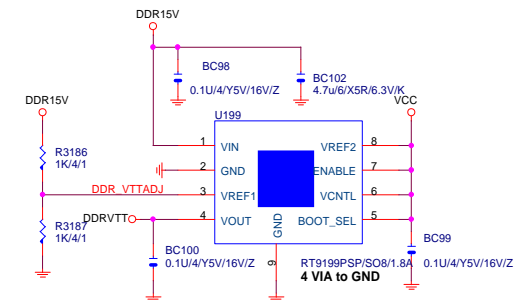
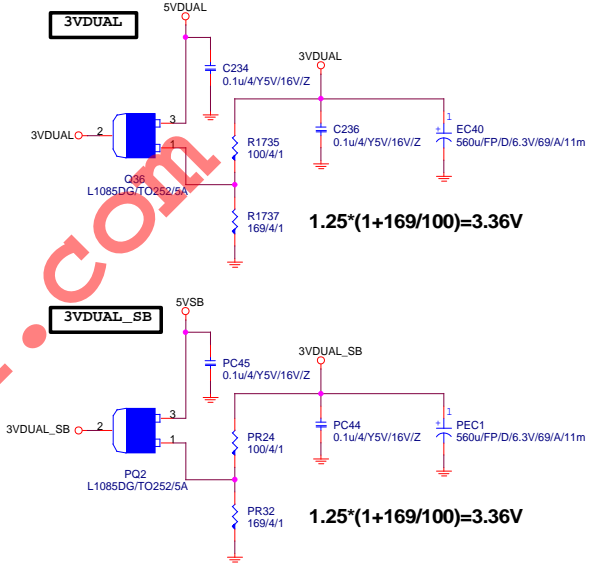




ISL6545 R4=> 0 , R3=>NC
RT8120 R4=>NC , R3=>0



ISL6545 VREF IS 0.6V
RT8120DGS VREF is 0.8V



GIGABYTE™			
Title DDR15 POWER , VCC18 , ErP			
Size Custom	Document Number GA-A75M-DS2		Rev 2.0
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