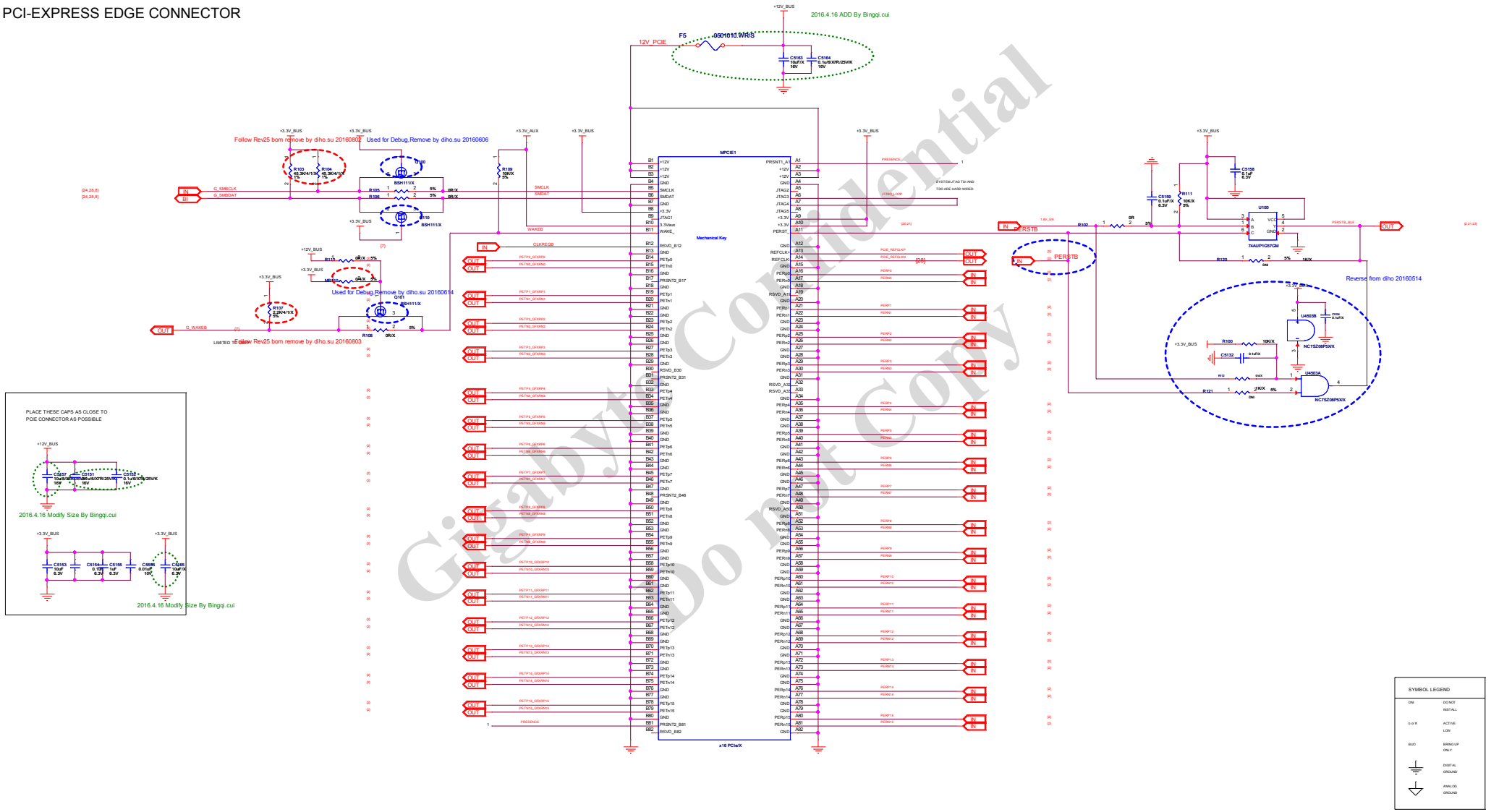
(1) PCI-EXPRESS EDGE CONNECTOR



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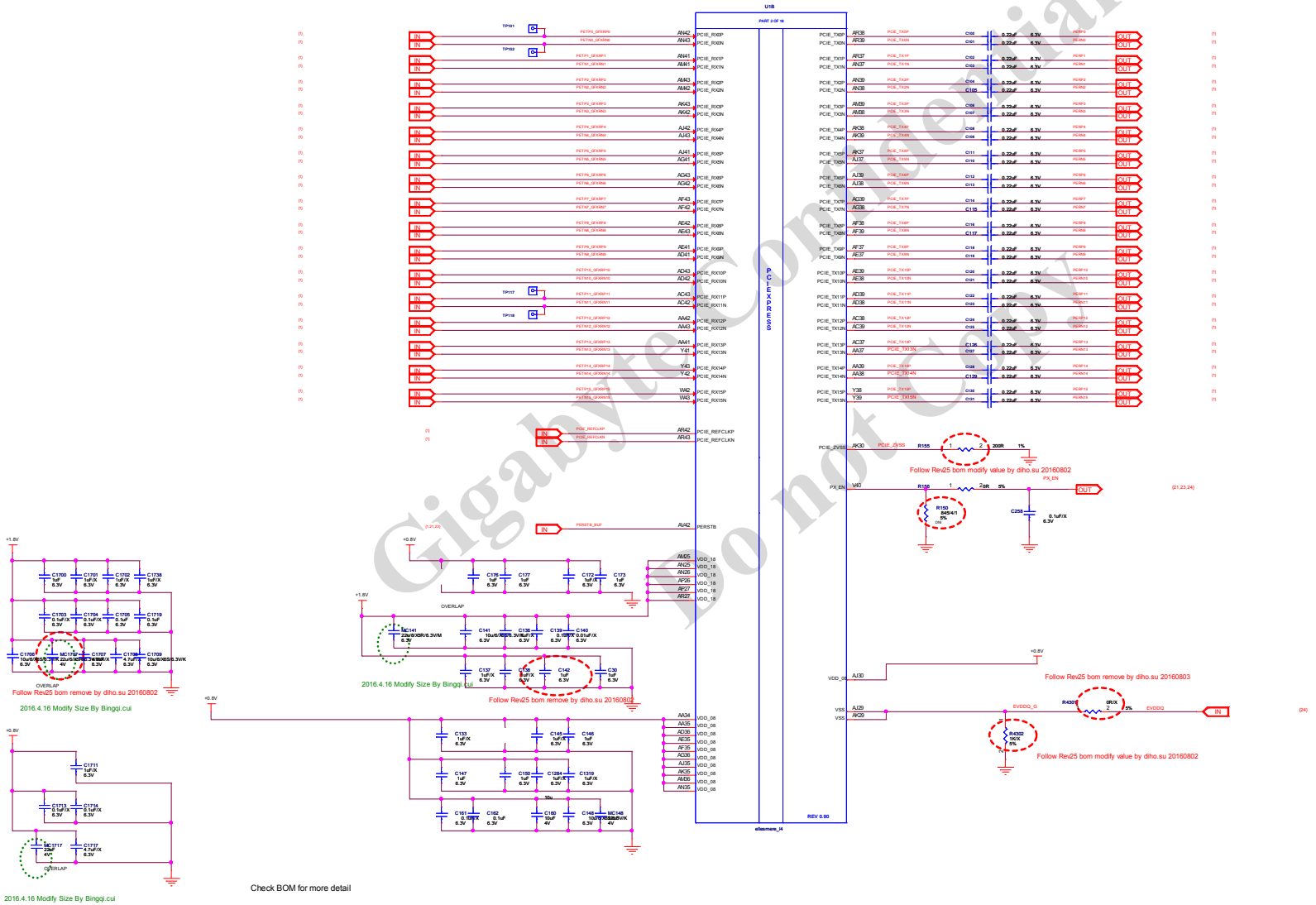
GIGABYTE		
Title	PCI Express	
Size: Custom	Document Number: GV-RX570GAMING-4GD	Rev: 1.0
Date: Wednesday, March 01, 2017	Sheet 1 of 29	

(2) ELLESMERE PCIE INTERFACE



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GIGABYTE		
Title	ELLESMERE PCIE INTERFACE	
Size	Document Number	Rev
Custom	GV-RX570GAMING-4GD	1.0
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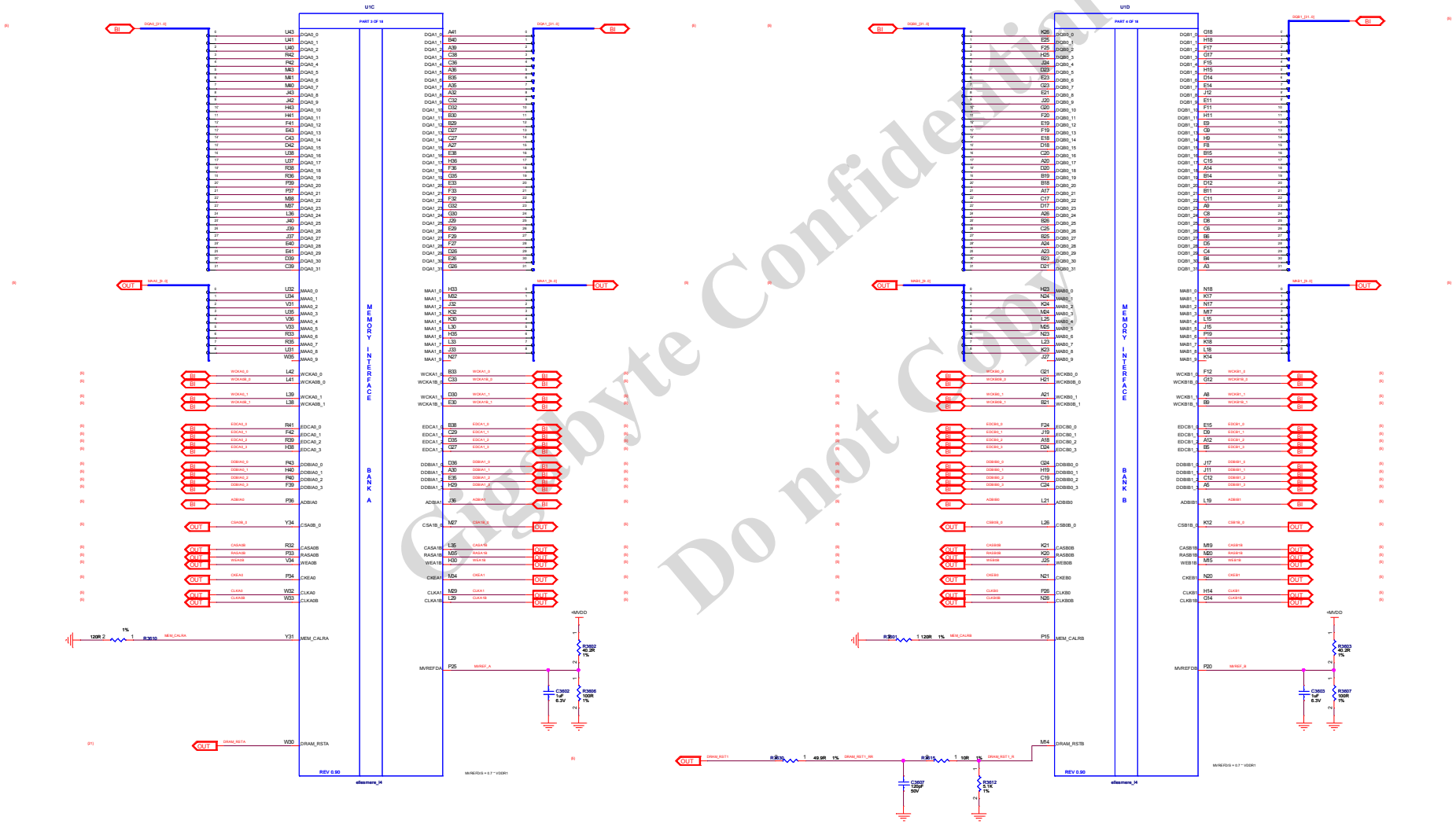
(3) ELLESMERE MEM INTERFACE CH A/B



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Title: ELLESMERE MEM INTERFACE CH A/B		
Size: Custom	Document Number: GV-RX570GAMING-4GD	Rev: 1.0
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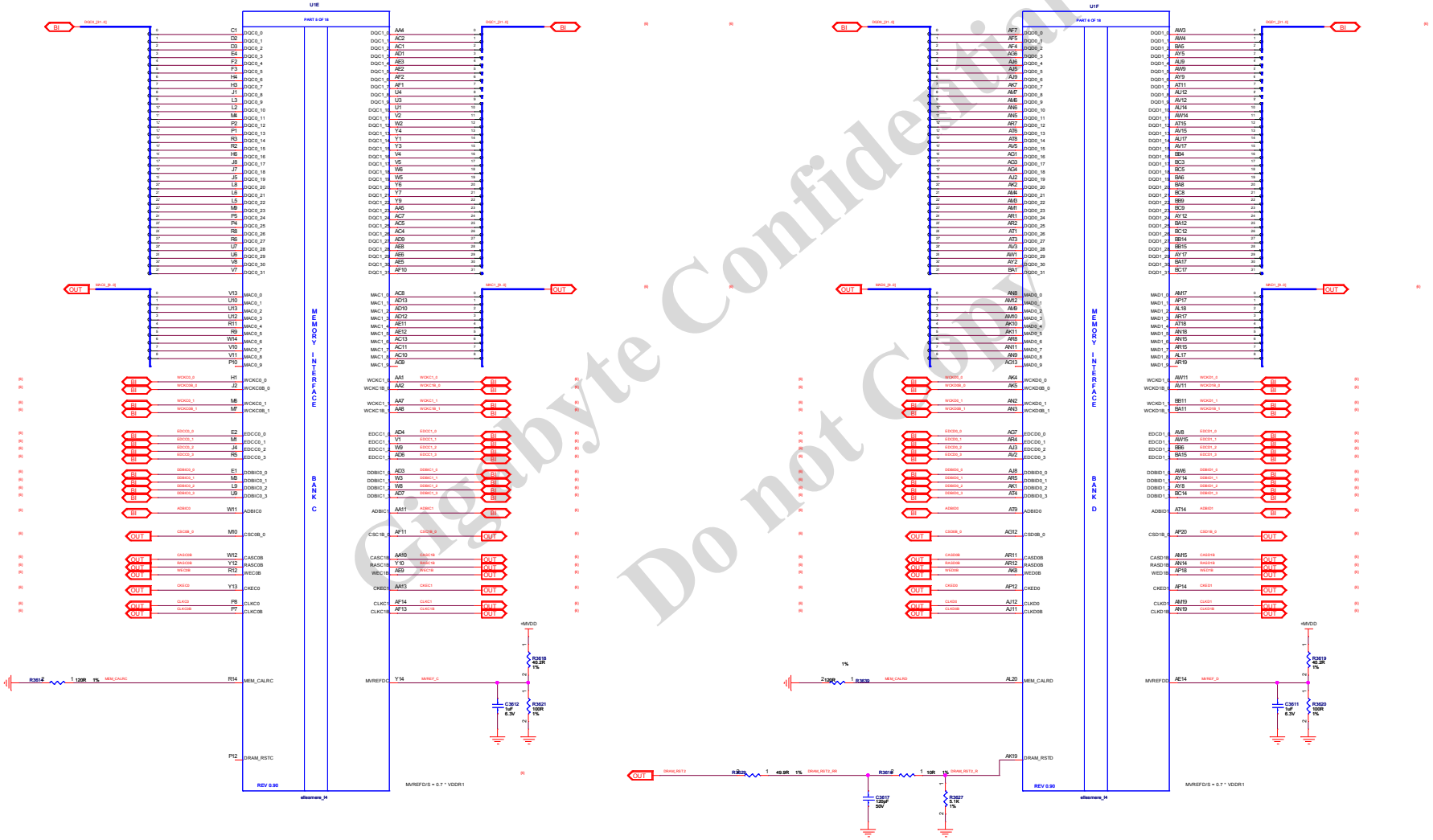
(4) ELLESMERE MEM INTERFACE CH C/D



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Title: ELLESMERE MEM INTERFACE CH C/D		
Size: Custom	Document Number: GV-RX570GAMING-4GD	Rev: 1.0
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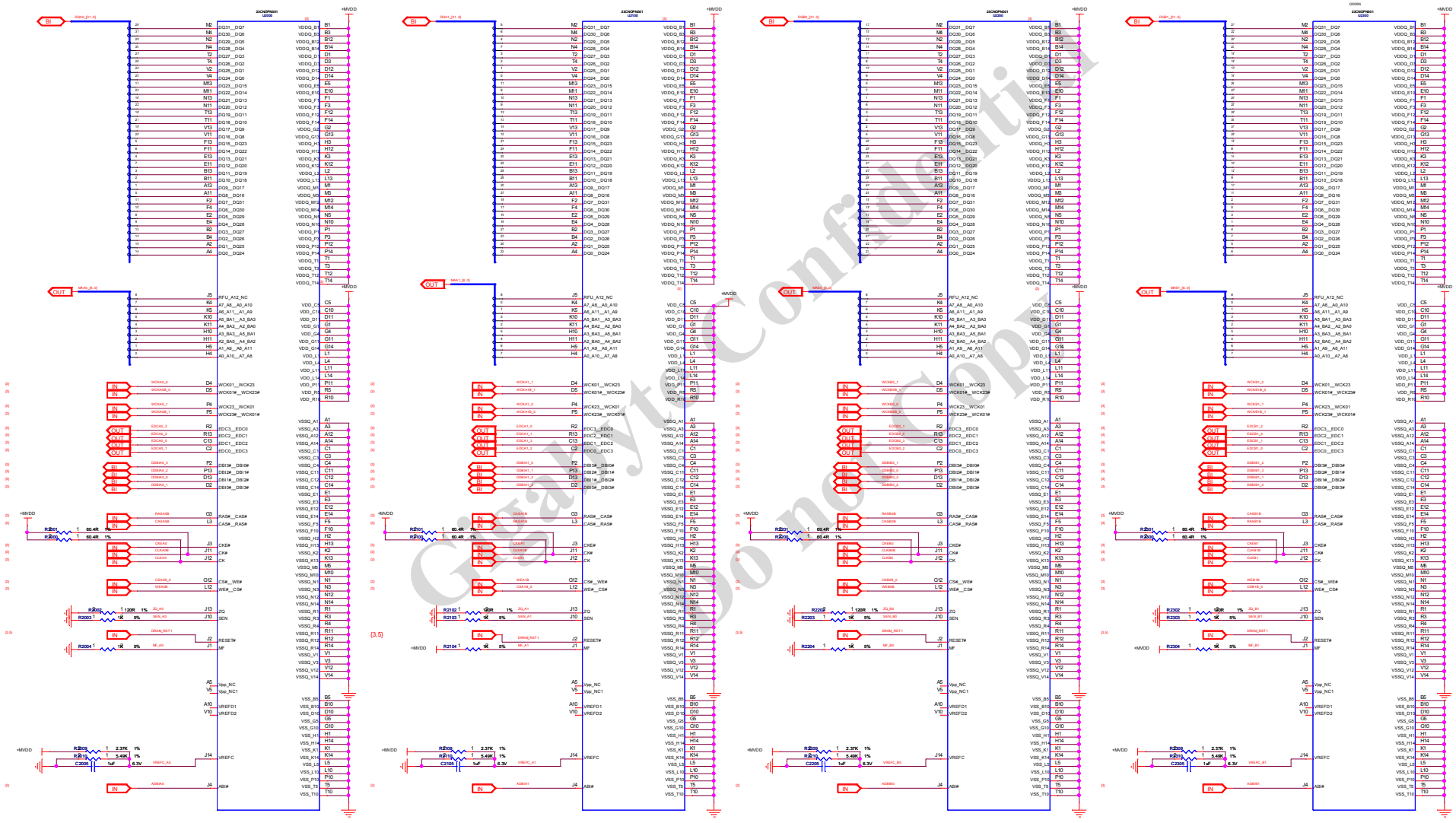
(5) GDDR5 MEMORY CH A/B



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GIGABYTE			
Title	(5) GDDR5 MEMORY CH A/B		
Size: Custom	Document Number: GV-RX570GAMING-4GD		Rev: 1.0
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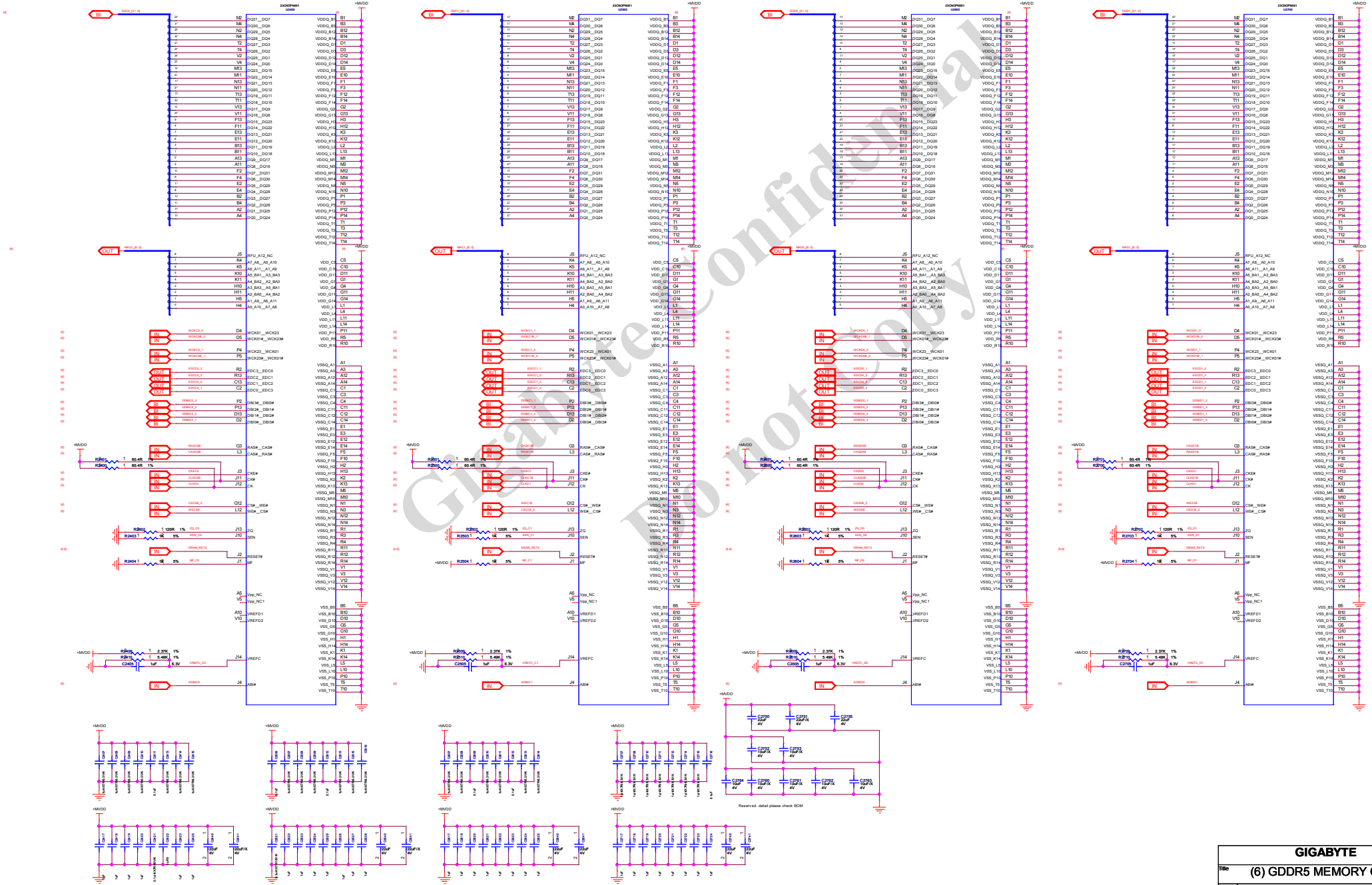
(6) GDDR5 MEMORY CH C/D



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Reserved. detail please check BOM

GIGABYTE			
Title	(6) GDDR5 MEMORY CH C/D		
Size	Document Number		Rev
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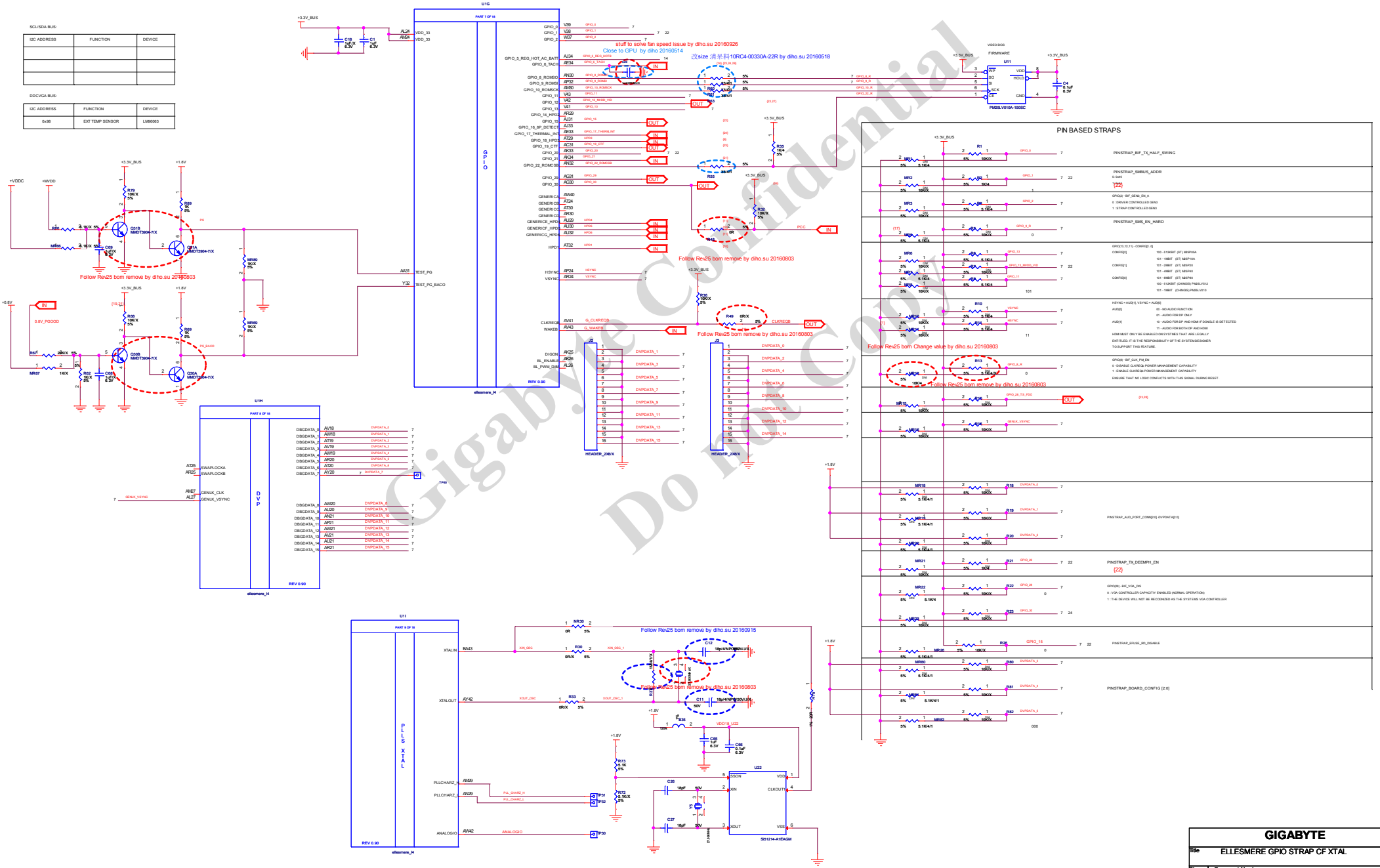
(7) ELLESMERE GPIO STRAP CF XTAL

SCL/SDA BUS:

I2C ADDRESS	FUNCTION	DEVICE

DDCVGA BUS:

I2C ADDRESS	FUNCTION	DEVICE
0x98	EXT TEMP SENSOR	LM96063



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Title	ELLESMERE GPIO STRAP CF XTAL	
Size: Custom	Document Number: GV-RX570GAMING-4GD	Rev: 1.0
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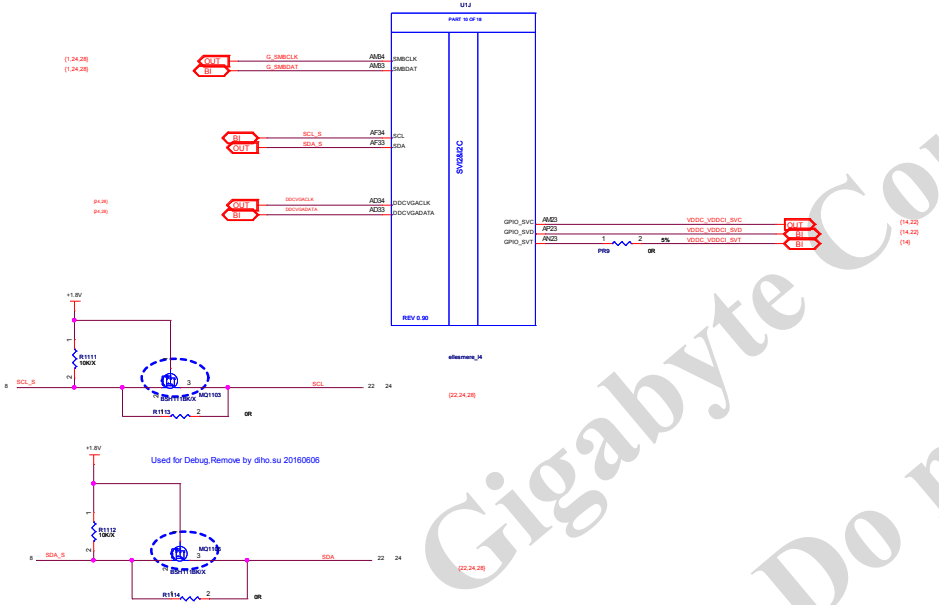
(8) ELLESMERE DAC1 LOCK



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Title	ELLESMERE DAC1 LOCK		
Size	Document Number		Rev
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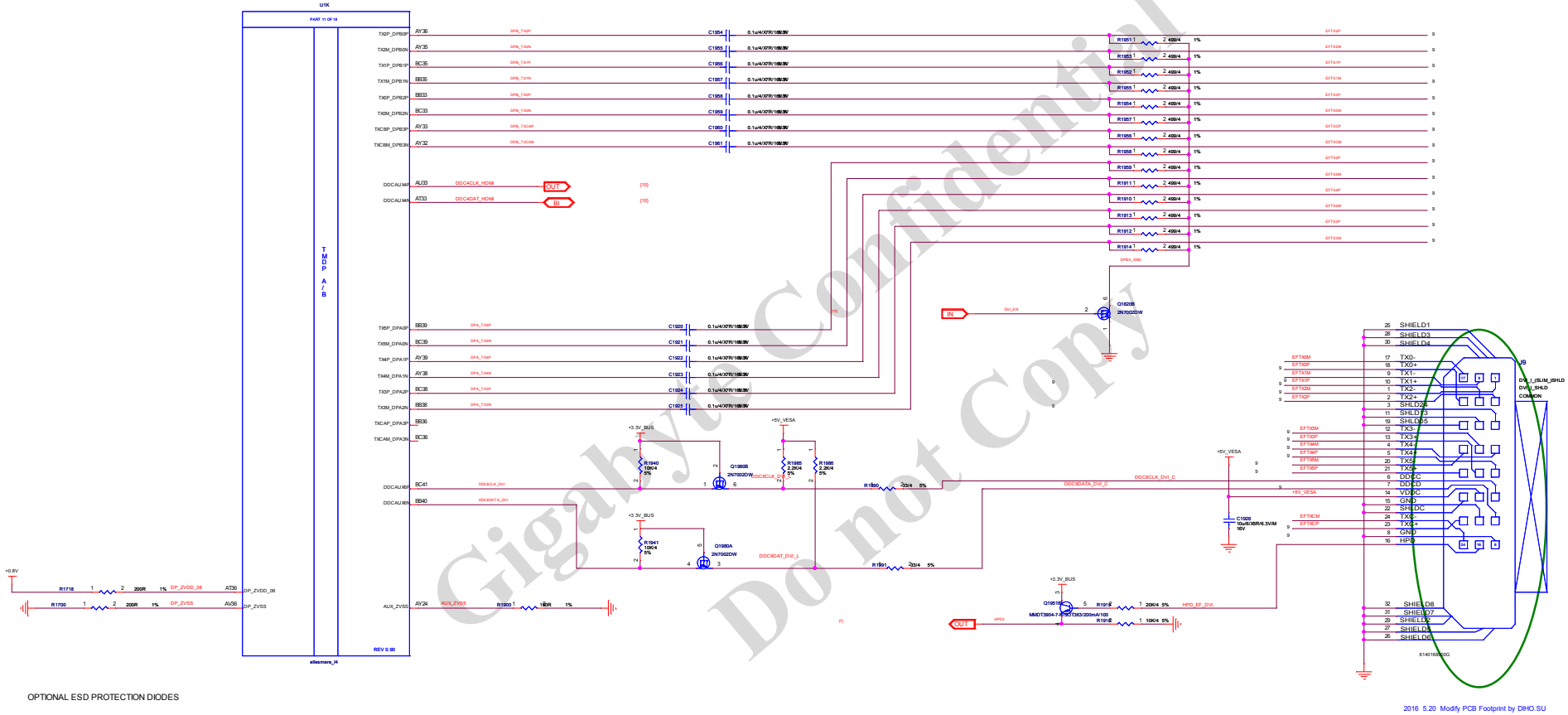
(9) ELLESMERE TMDP A/B



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GIGABYTE		
Title: ELLESMERE TMDP A/B		
Size: Custom	Document Number: GV-RX570GAMING-4GD	Rev: 1.0
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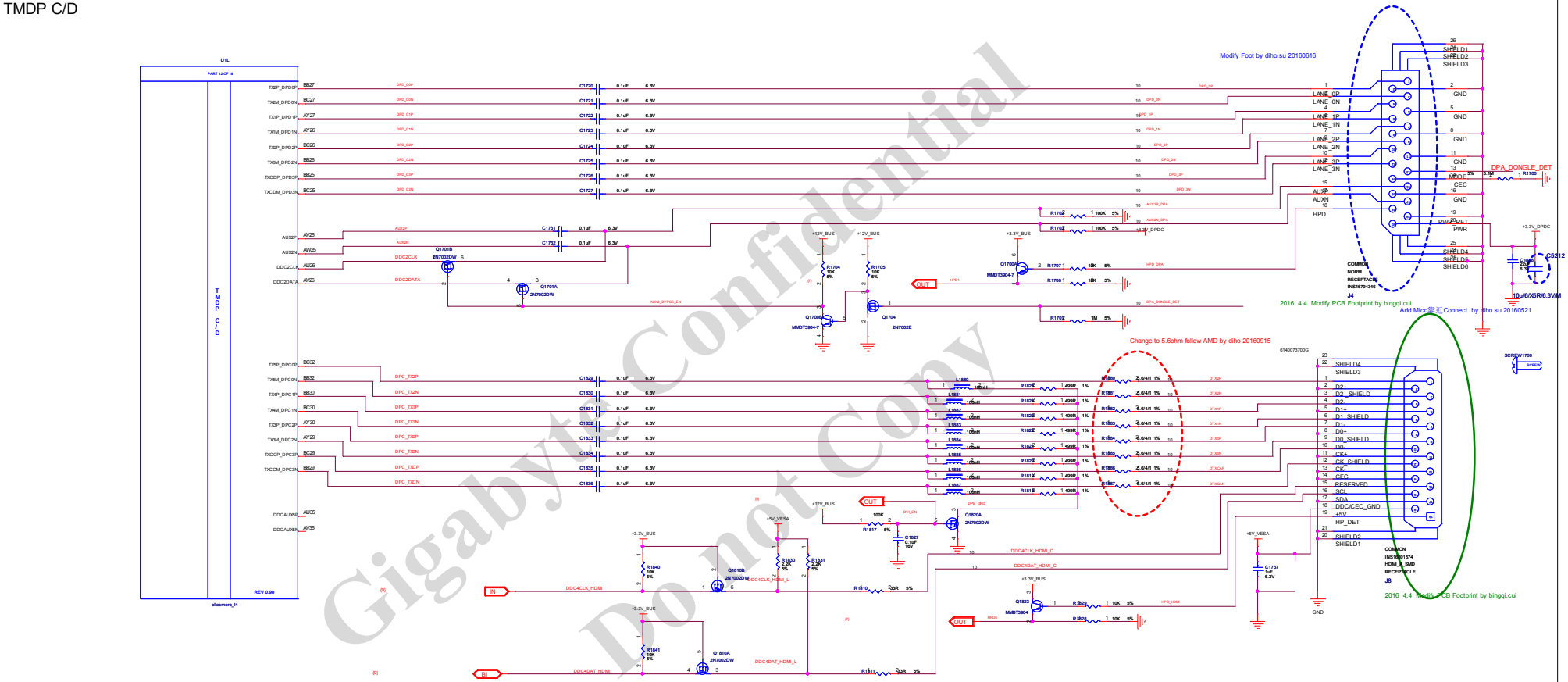
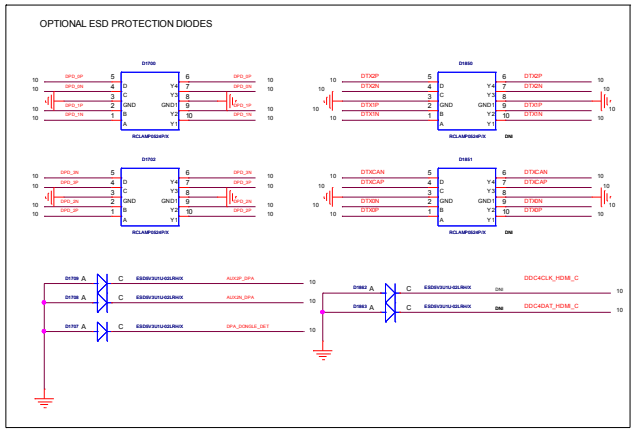
(10) ELLESMERE TMDP C/D





GIGABYTE		
Title: ELLESMERE TMDP C/D		
Size: Custom	Document Number: GV-RX570GAMING-4GD	Rev: 1.0
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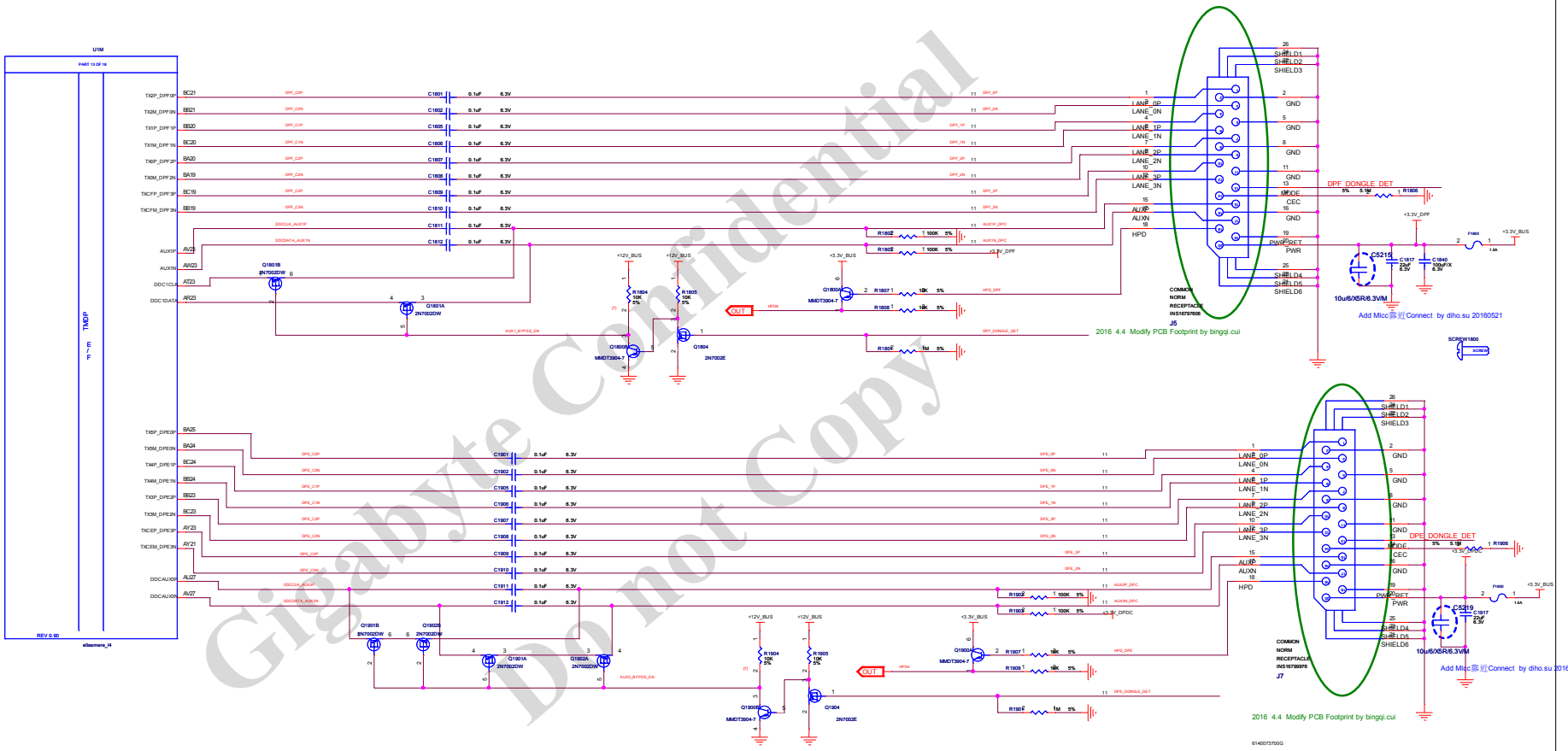
(11) ELLESMERE LVTMDP E/F



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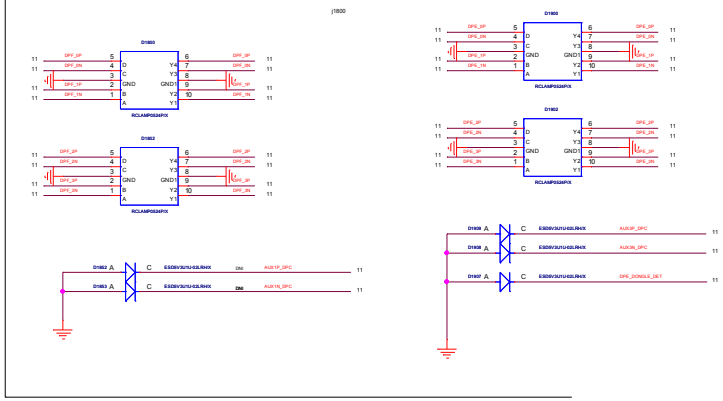
OPTIONAL ESD PROTECTION DIODES



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Title: ELLESMERE LVTMDP E/F		
Size: Custom	Document Number: GV-RX570GAMING-4GD	Rev: 1.0
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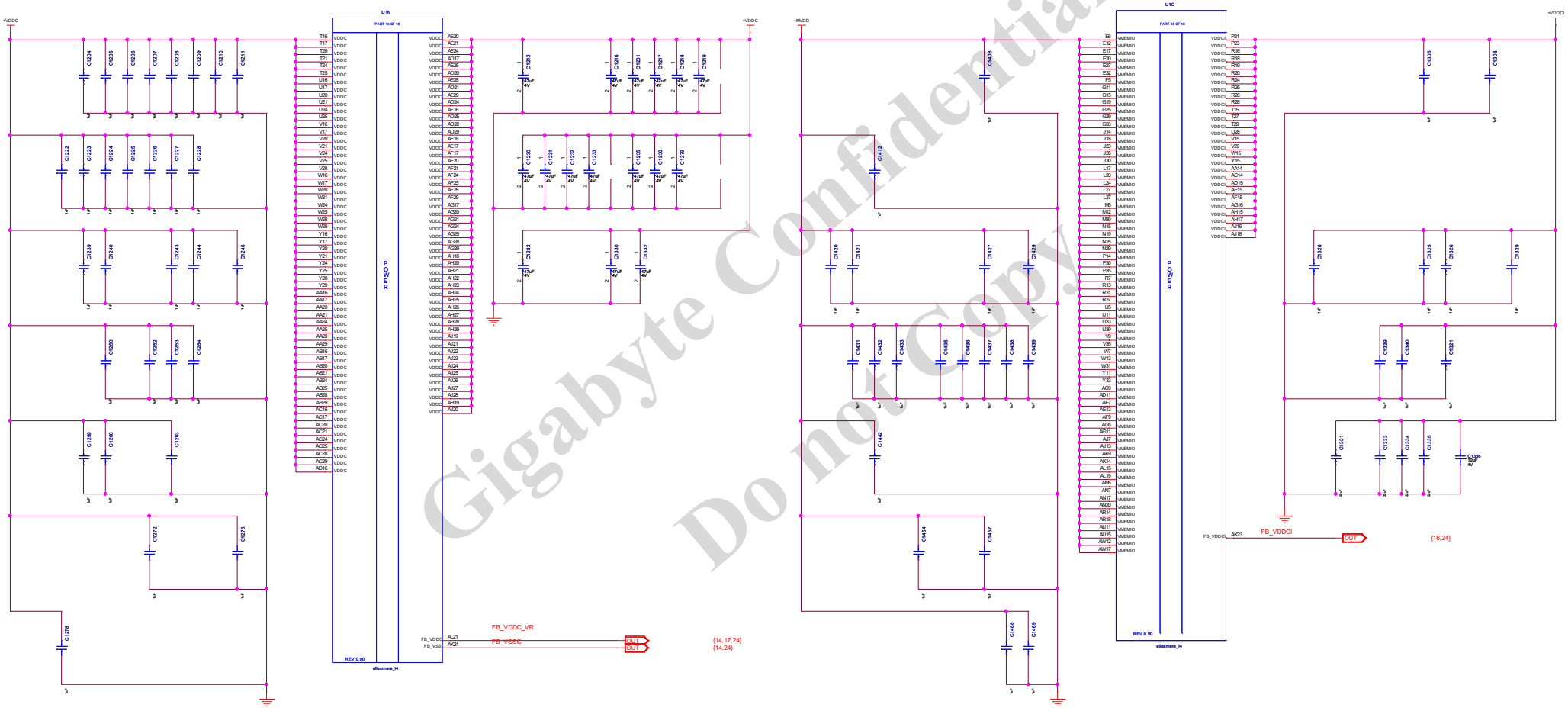
(12) ELLESMERE POWER



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Title: PCI Express			
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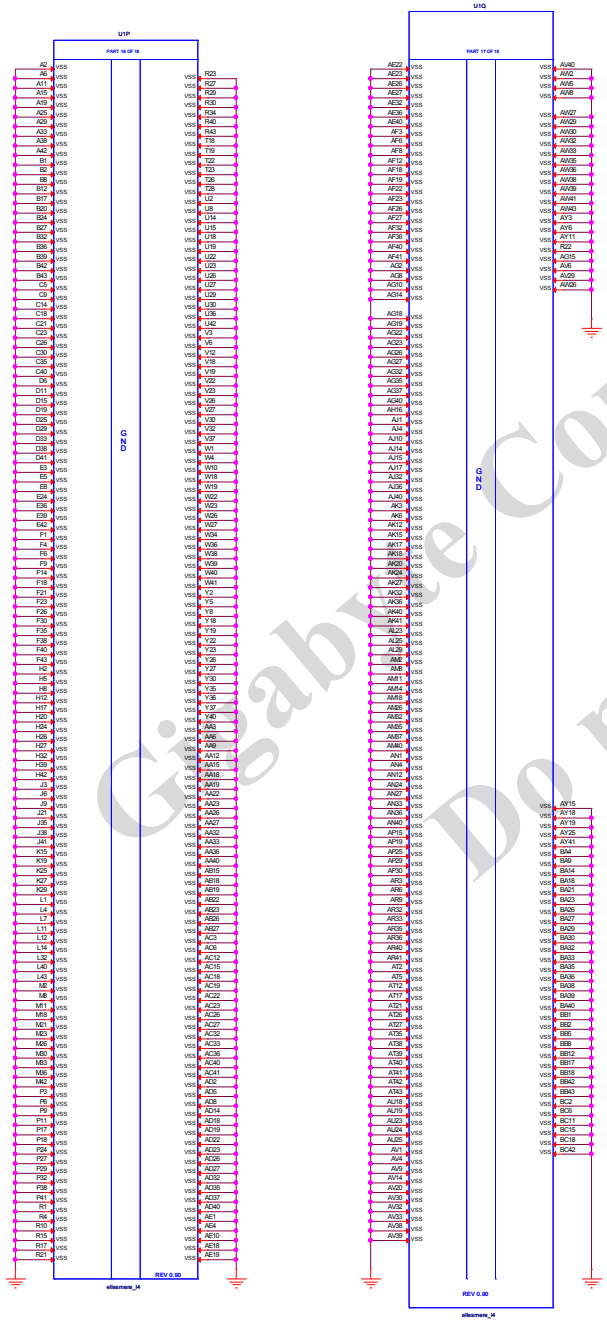
(13) ELLESMERE GROUND



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Size: Custom	Document Number: GV-RX570GAMING-4GD	Rev: 1.0
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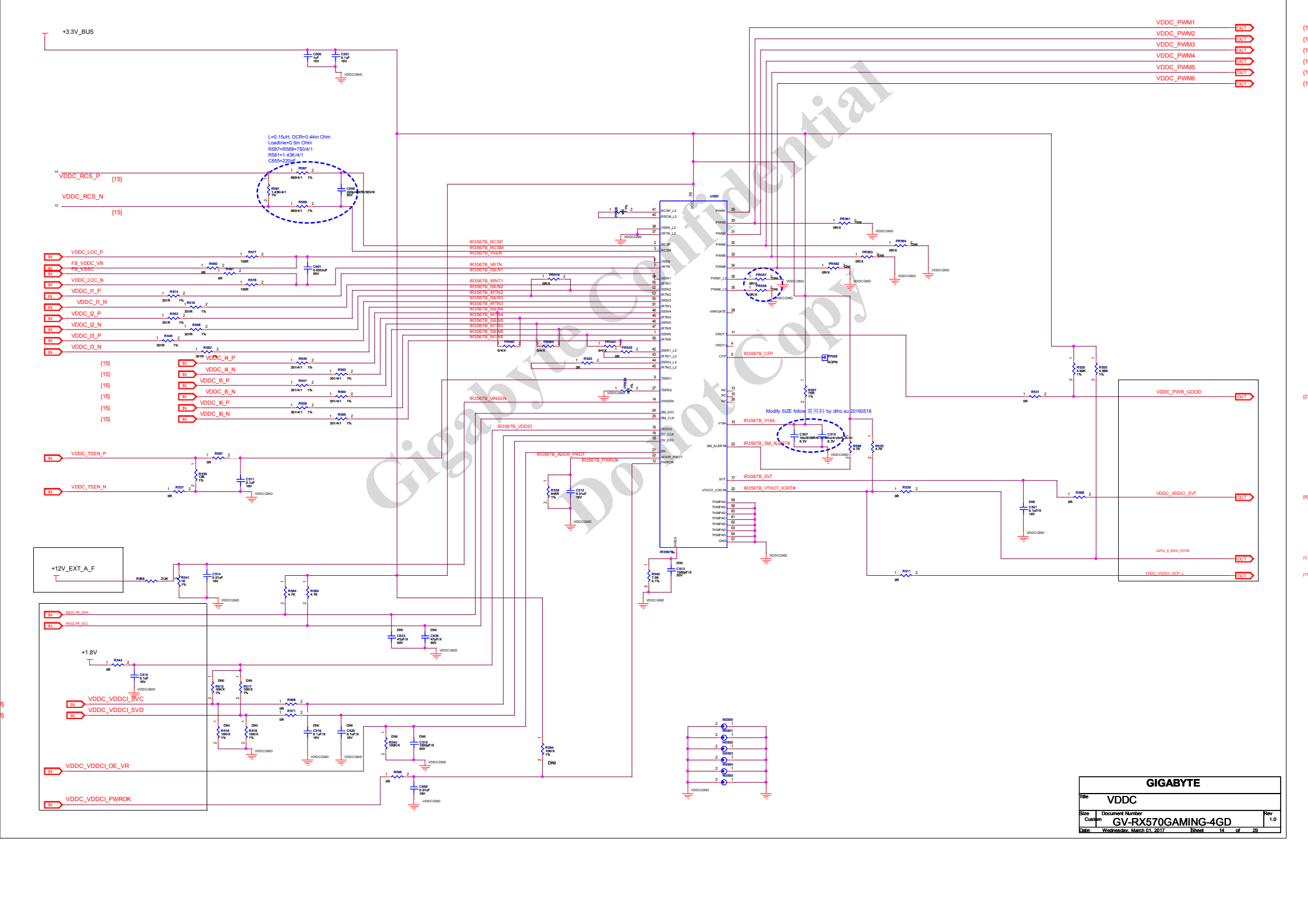

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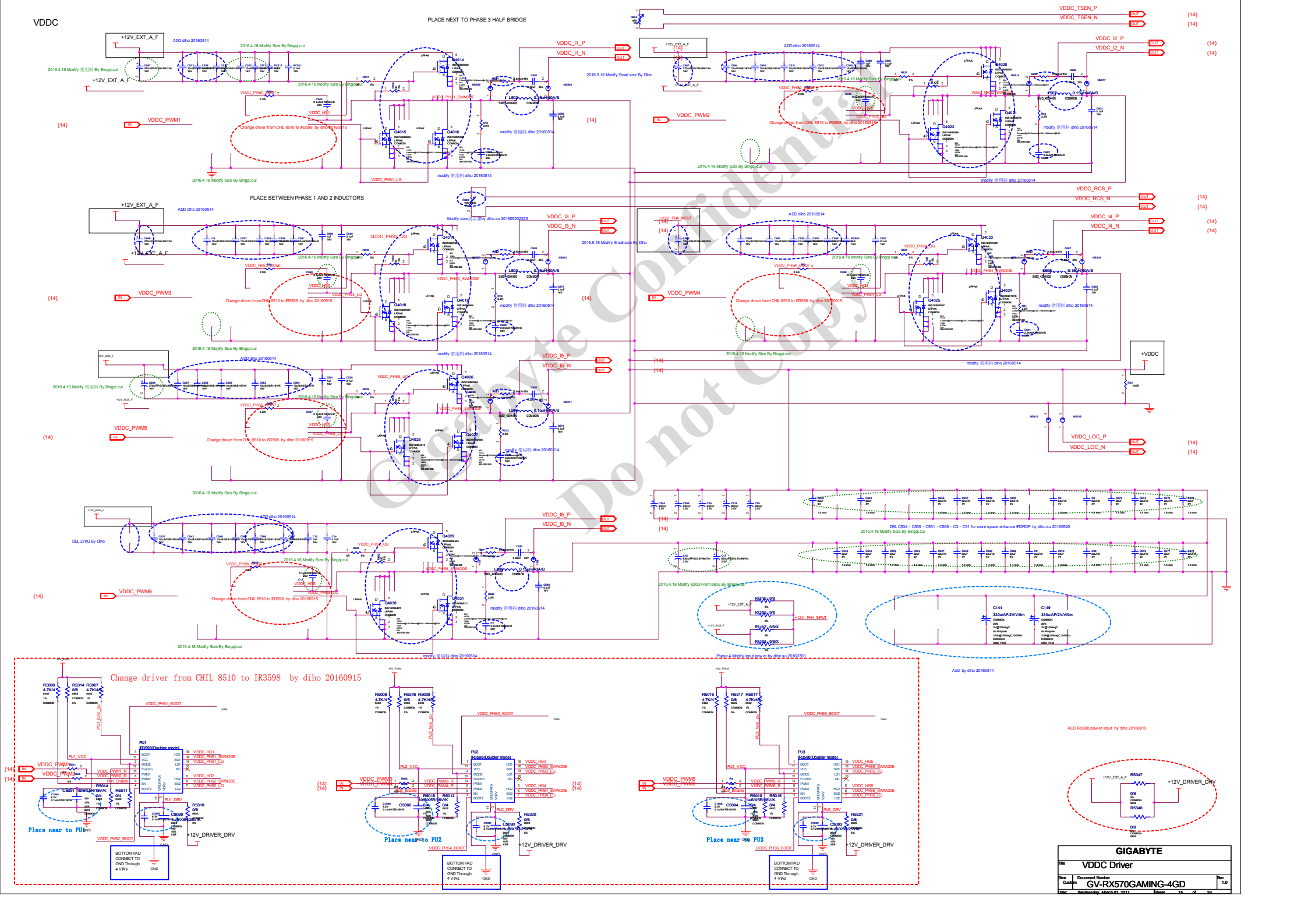

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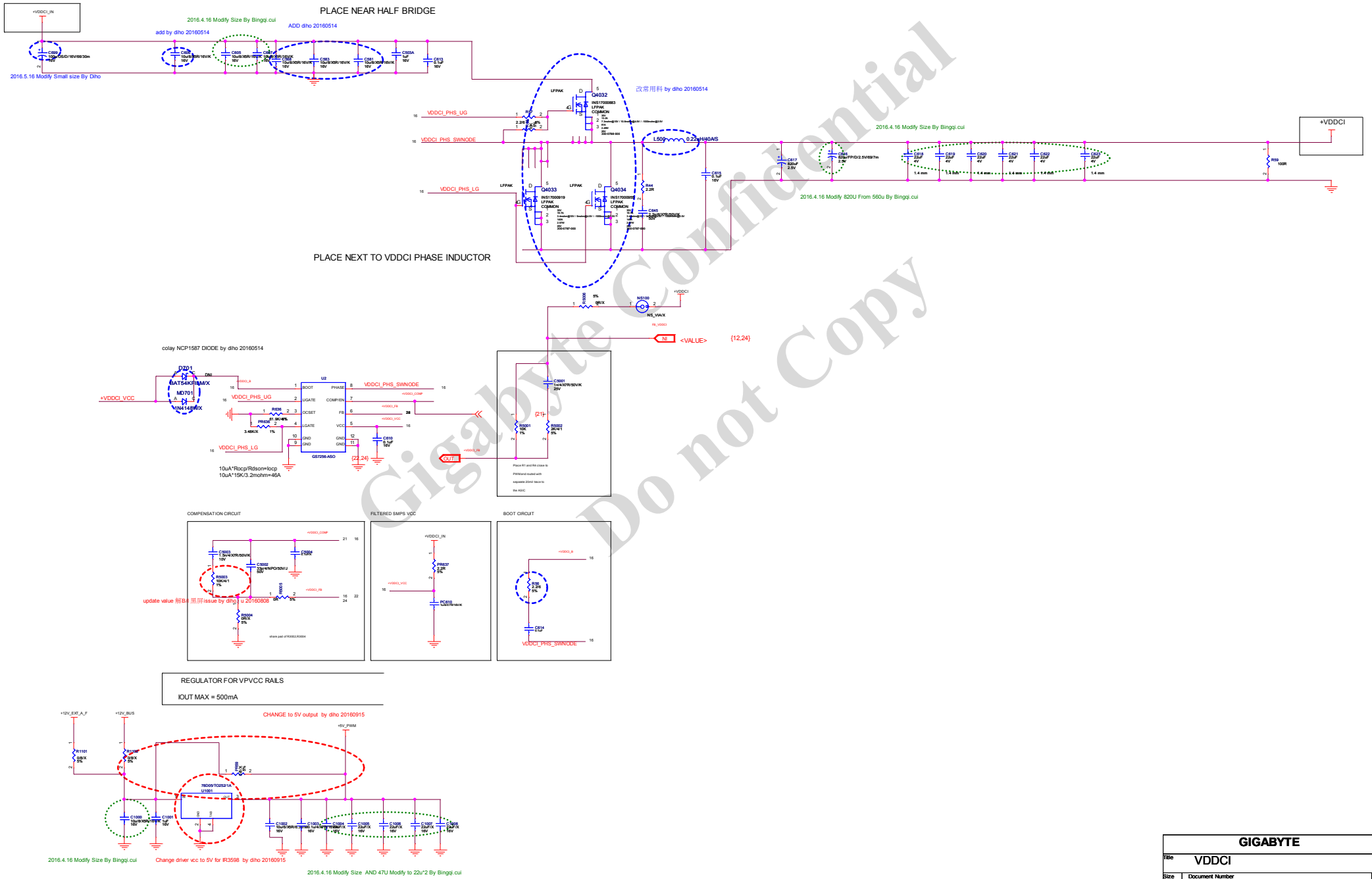

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Size: Custom	Document Number: GV-RX570GAMING-4GD	Rev: 1.0
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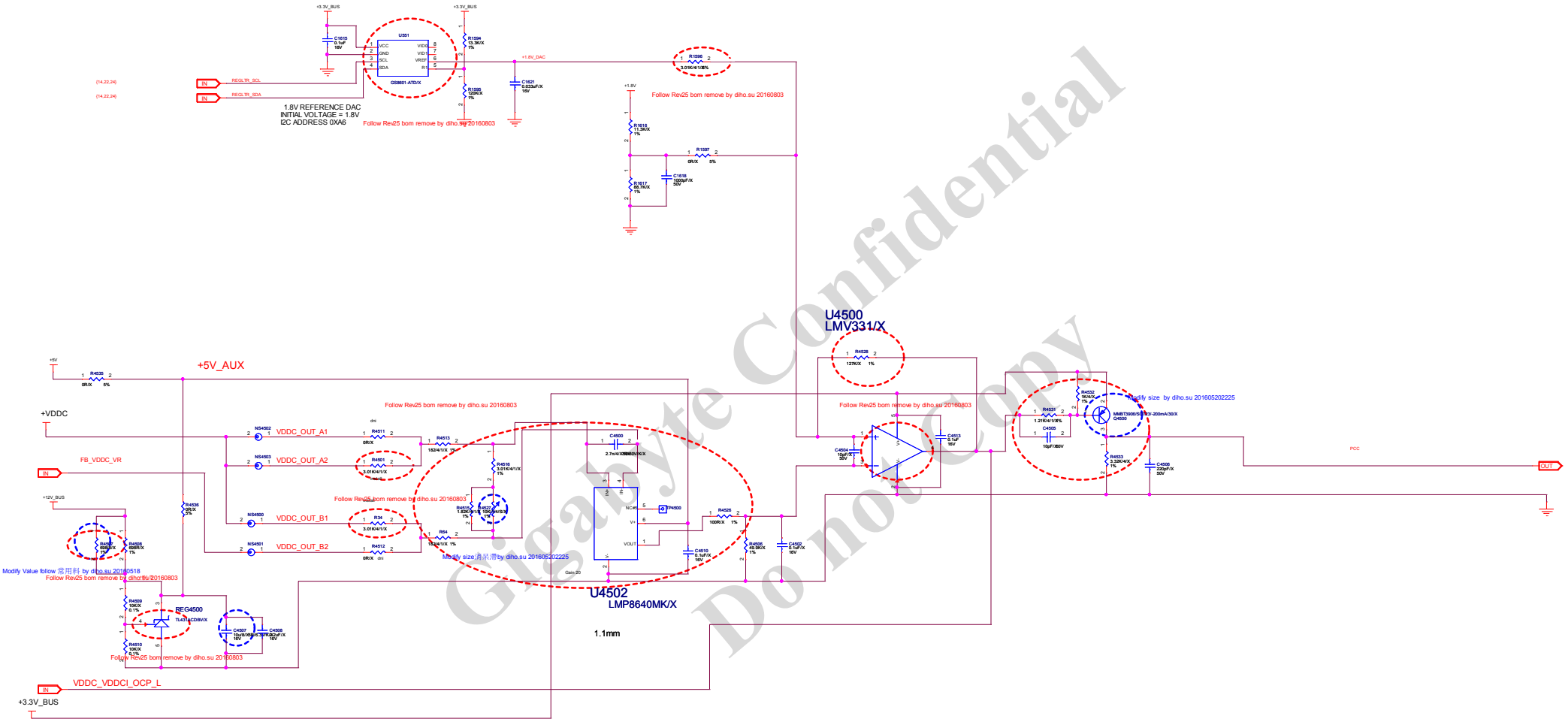

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Title: PCC VDDC		
Size: Custom	Document Number: GV-RX570GAMING-4GD	Rev: 1.0
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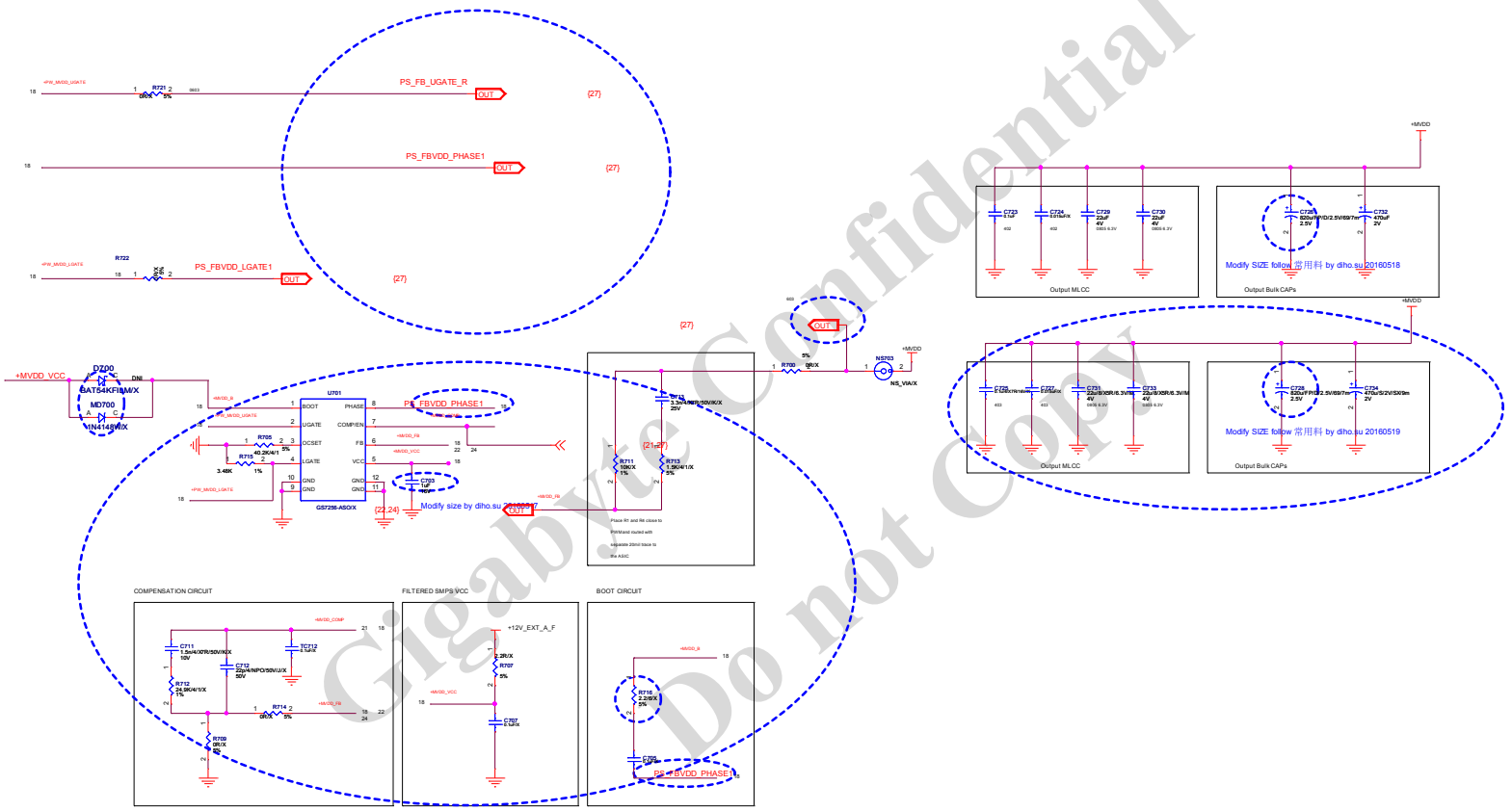
CHANGE POWER PHASE TO PAGE26 by diho 20160514



/X Single phase power by diho.su 20160517

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GIGABYTE		
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Size: Custom	Document Number: GV-RX570GAMING-4GD	Rev: 1.0
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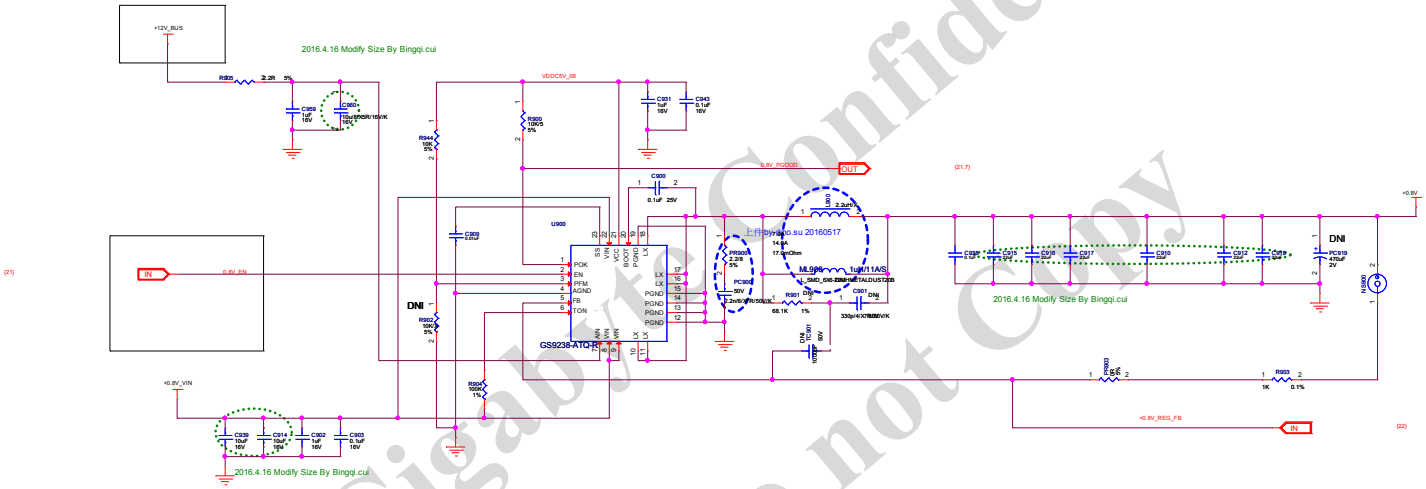
(17) 0.95V



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GIGABYTE		
Title: 0.95V		
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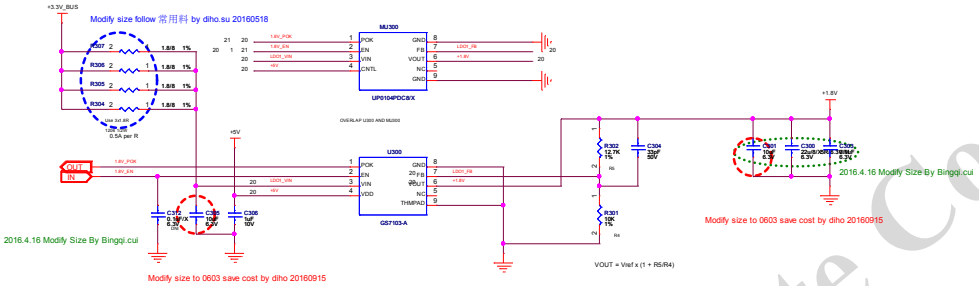
(18) SMALL RAIL REGULATORS

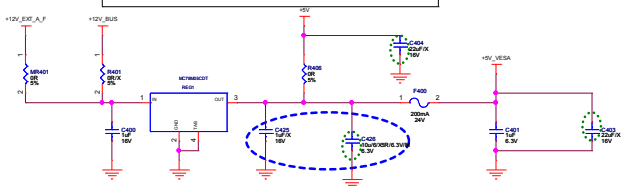
LDO #1: VIN = 3.0V TO 3.6V MAX VOUT = +1.8V +/- 2% IOUT = 1.3A RMS MAX

PCB: 50 TO 70mm SQ. COPPER AREA FOR COOLING



REGULATOR FOR +5V RAILS

IOUT MAX = 150mA



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GIGABYTE		
Title: SMALL RAIL REGULATORS		
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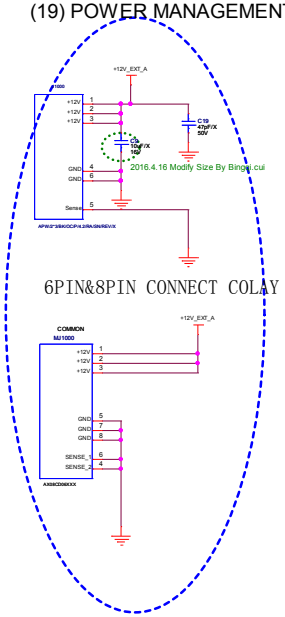
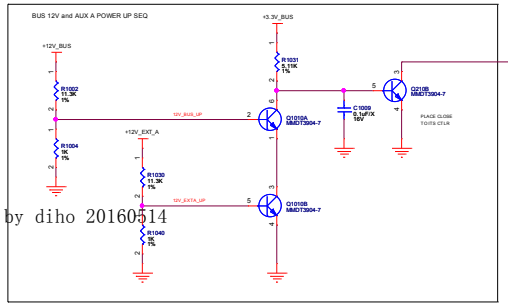
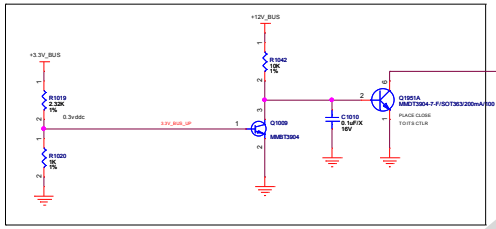
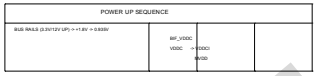
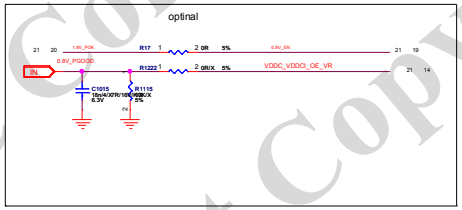
(19) POWER MANAGEMENT

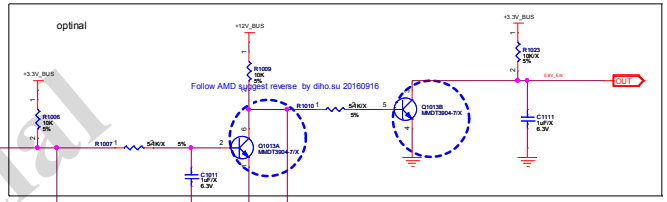


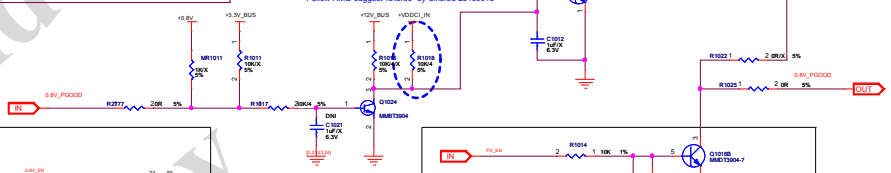


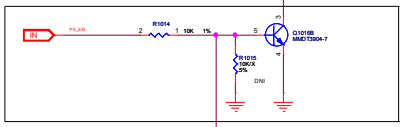


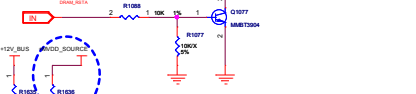


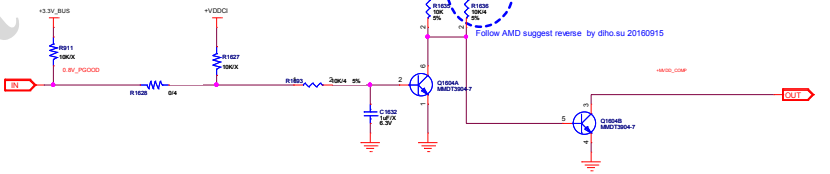


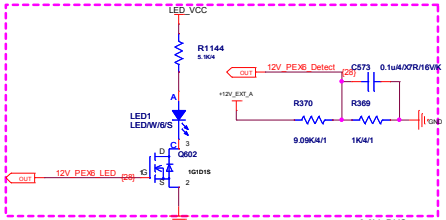


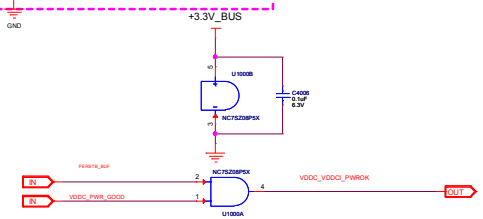


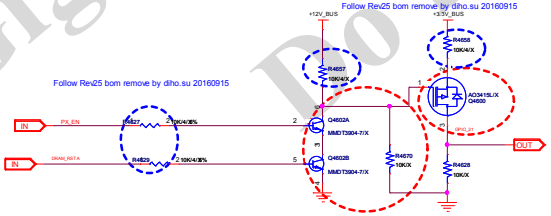


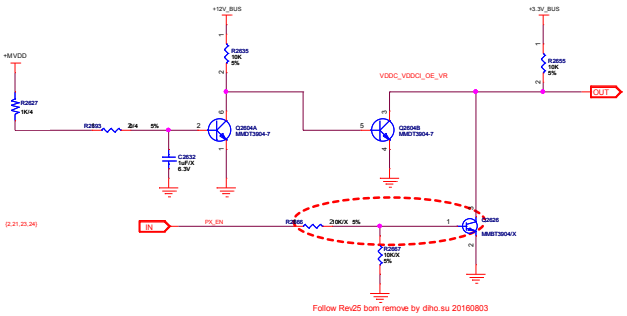












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Title	POWER MANAGEMENT1
Size: Custom	Document Number: GV-RX570GAMING-4GD
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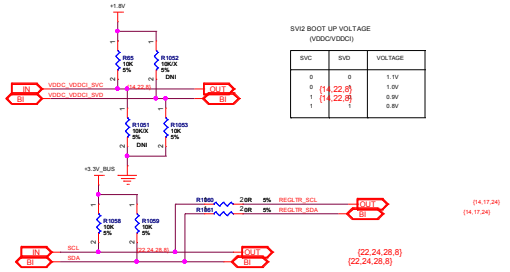
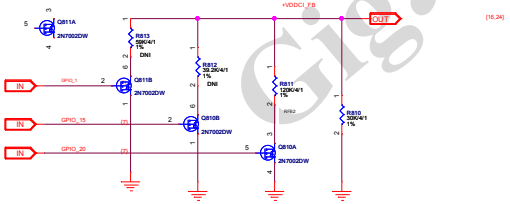
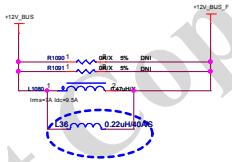


SVI2 BOOT UP VOLTAGE
(VDDC/VDDCI)

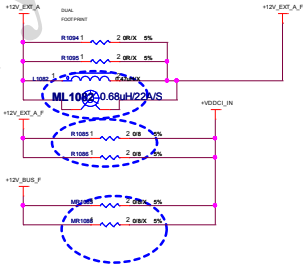
SVC	SVD	VOLTAGE
0	0	1.1V
0	1	1.0V
1	0	0.9V
1	1	0.8V



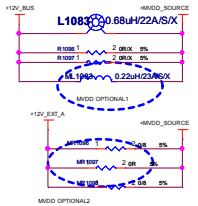
+12V_BUS INPUT



+12V_EXT_A INPUT



Modify size follow 常用料 by diho.su 20160519



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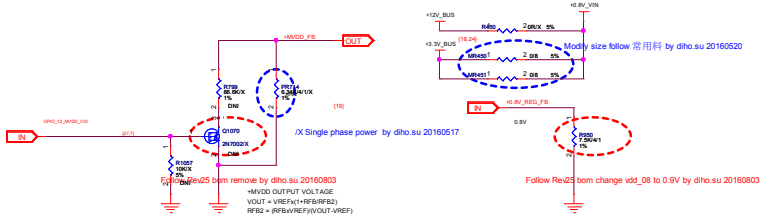

/X Single phase power by diho.su 20160517

Modify size follow 常用料 by diho.su 20160520

Follow Rev25 bom remove by diho.su 20160803

+MVDD OUTPUT VOLTAGE
VOUT = VREFx(1+RFB/RFB2)
RFB2 = (RFBxVREF)/(VOUT-VREF)

Follow Rev25 bom change vdd_08 to 0.9V by diho.su 20160803

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Title: POWER MANAGEMENT2		
Size: Custom	Document Number: GV-RX570GAMING-4GD	Rev: 1.0
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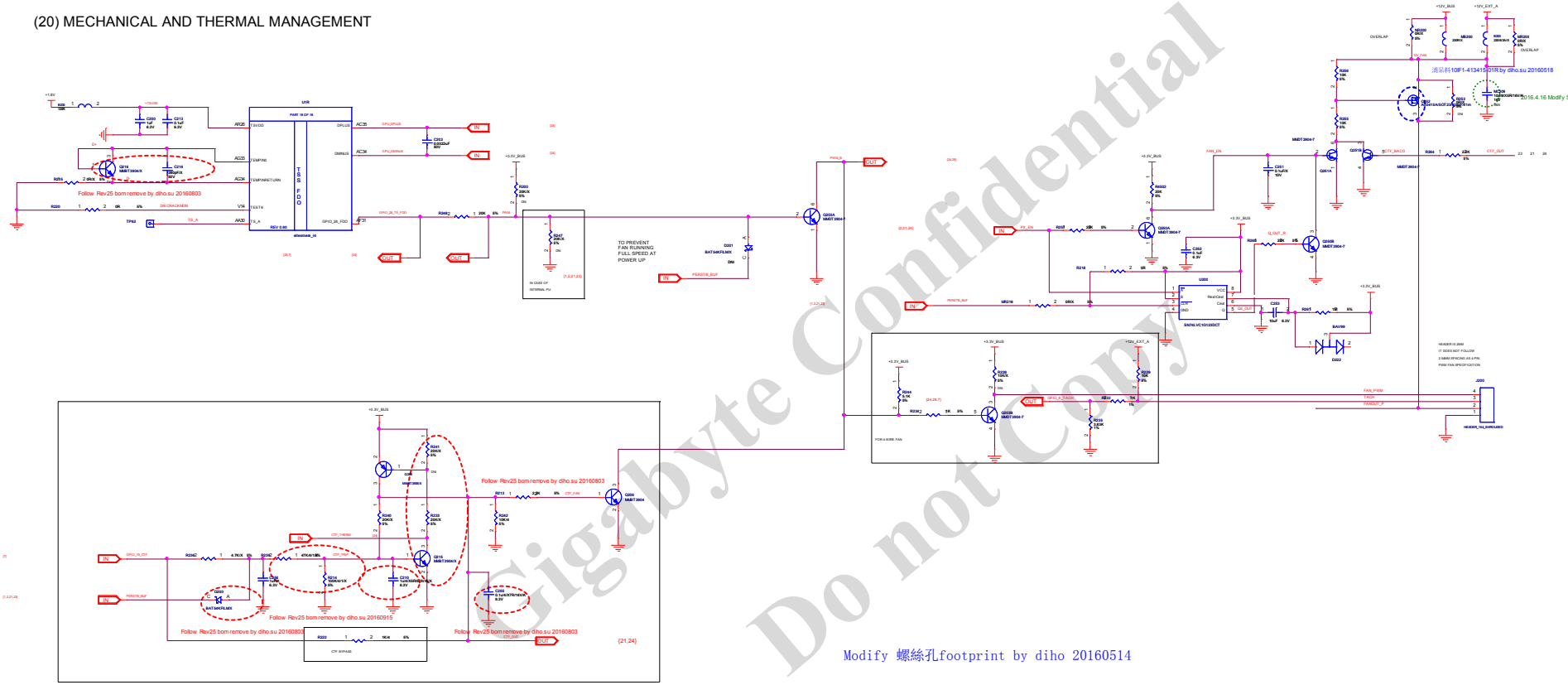
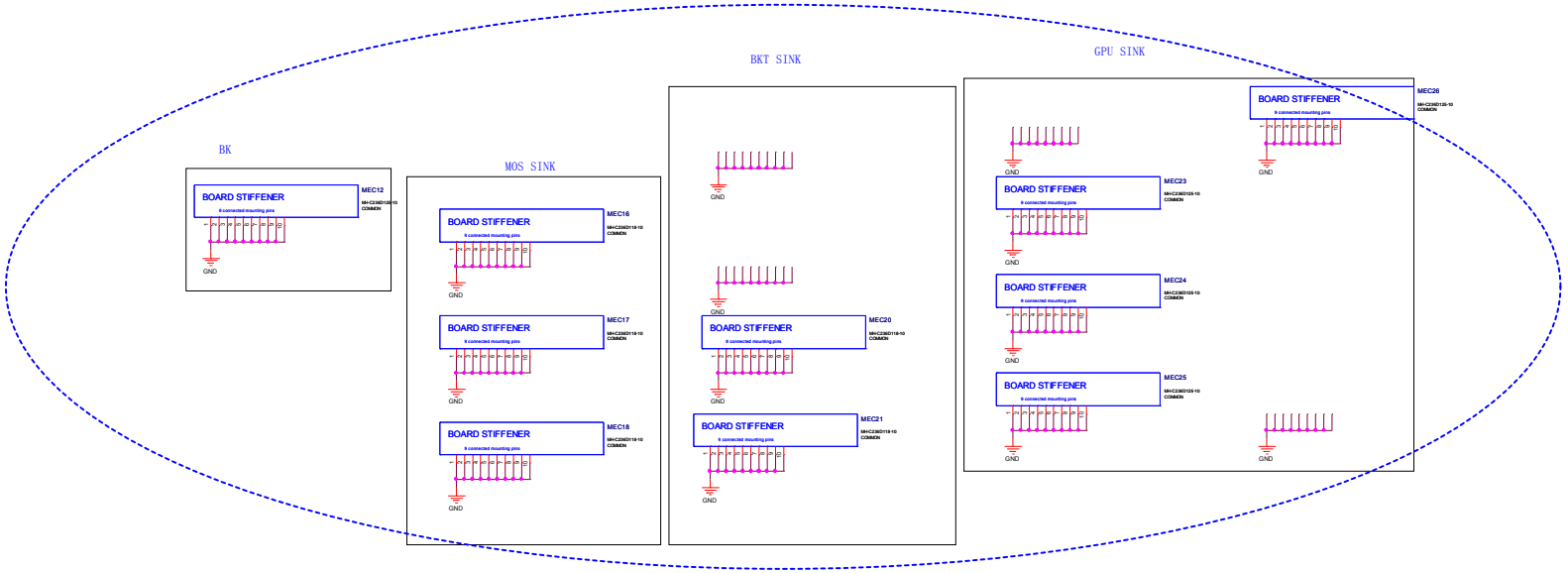
(20) MECHANICAL AND THERMAL MANAGEMENT





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Title: MECHANICAL AND THERMAL MANAGEMENT		
Size: Custom	Document Number: GV-RX570GAMING-4GD	Rev: 1.0
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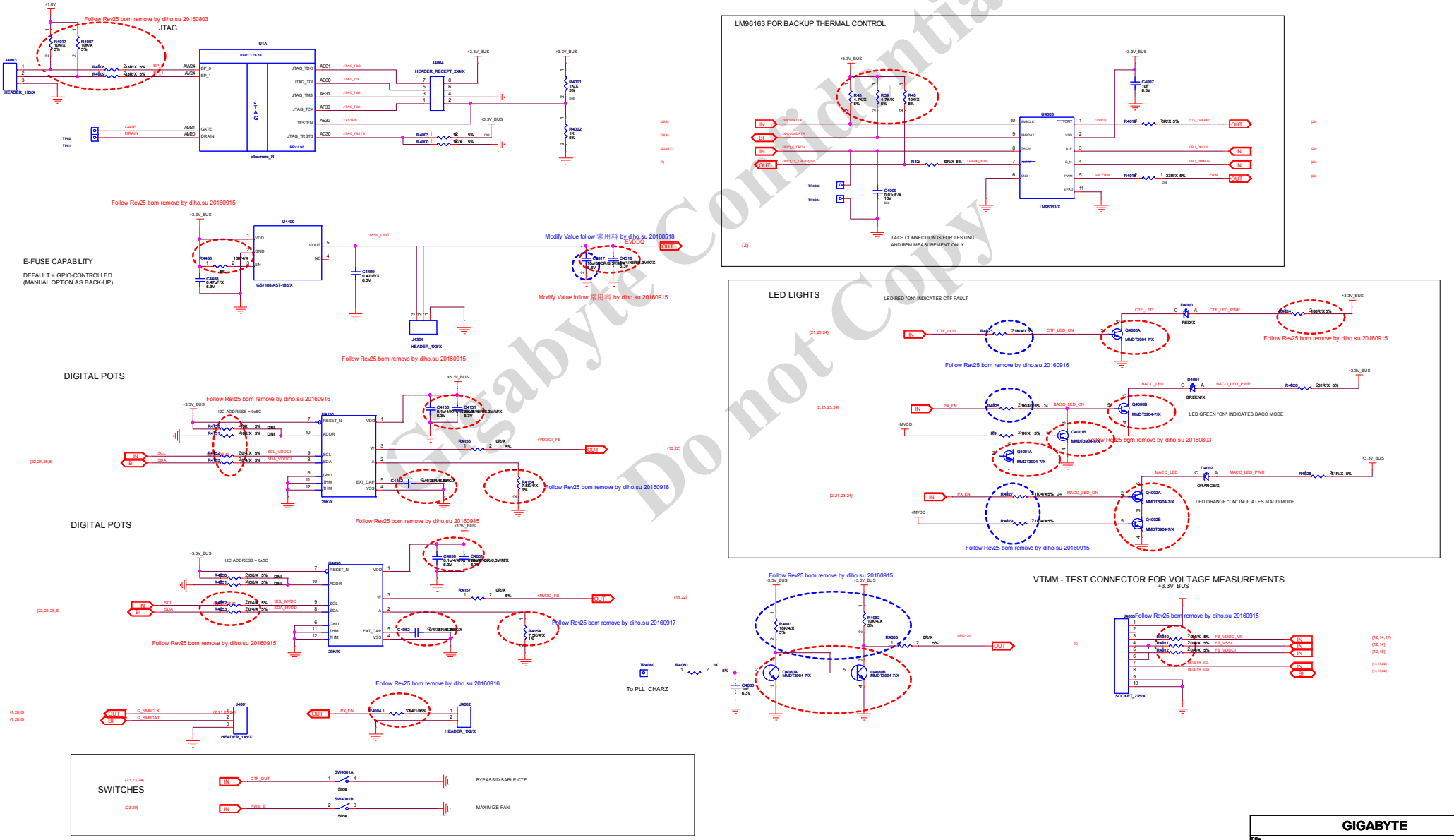
(21) DEBUG CIRCUITS



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Title: DEBUG CIRCUITS		
Size: Custom	Document Number: GV-RX570GAMING-4GD	Rev: 1.0
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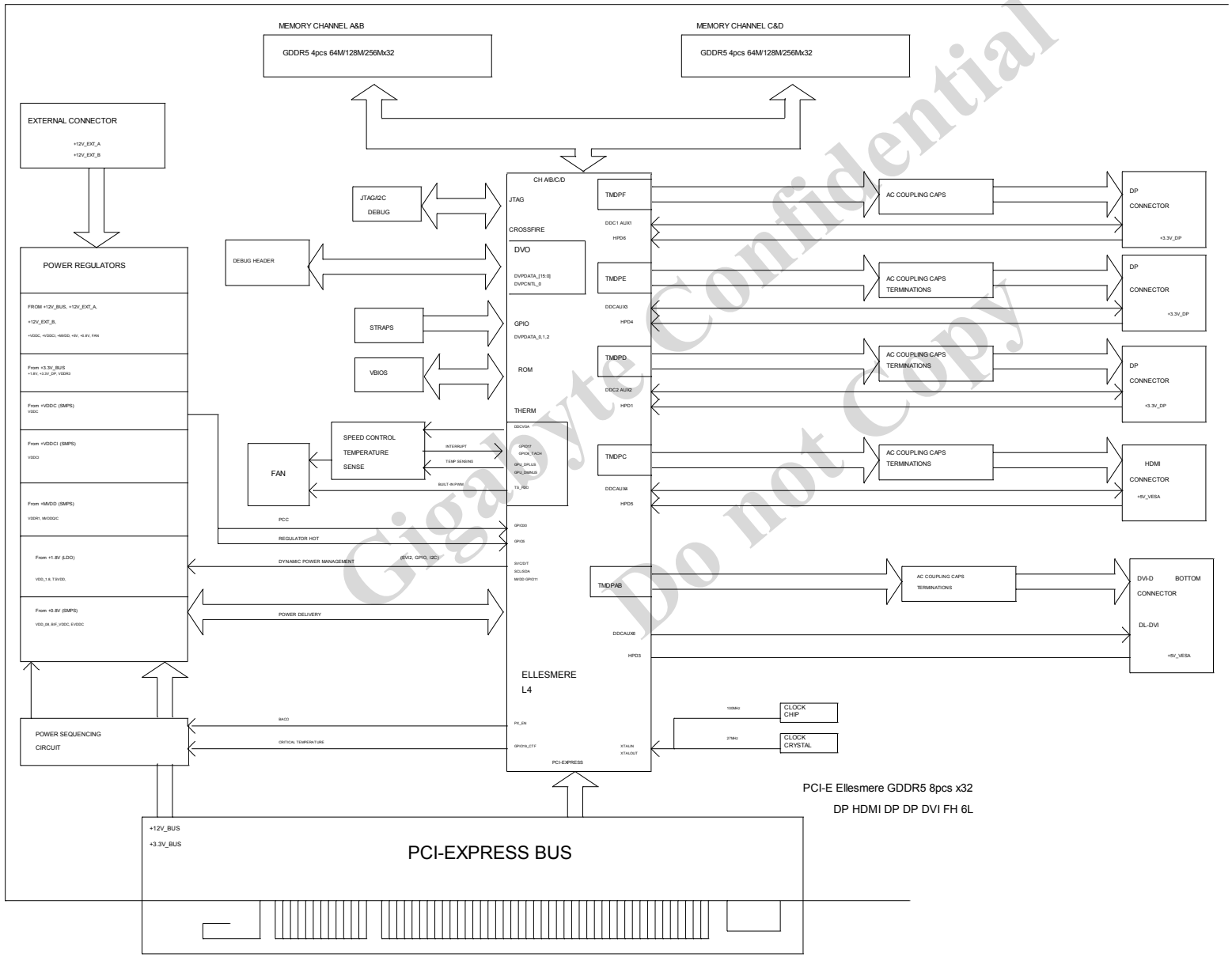

PCI-E Ellesmere GDDR5 8pcs x32

DP HDMI DP DP DVI FH 6L

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Title: BLOCK DIAGRAM		
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0	00A	08/26/2016	
1	00B	10/19/2016	1. Add GPIO1 for dynamic VDDCI 2. update VDDC drive sequence
2	00C	03/23/2016	HDMI: - add series resistor R1880 ~R1887 - add pull down inductor L1880 ~L1887 remove C405, C403, VR400,C410,C414,R405
3	00D	04/18/2016	Modify GBT Design

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Title: BLOCK DIAGRAM		
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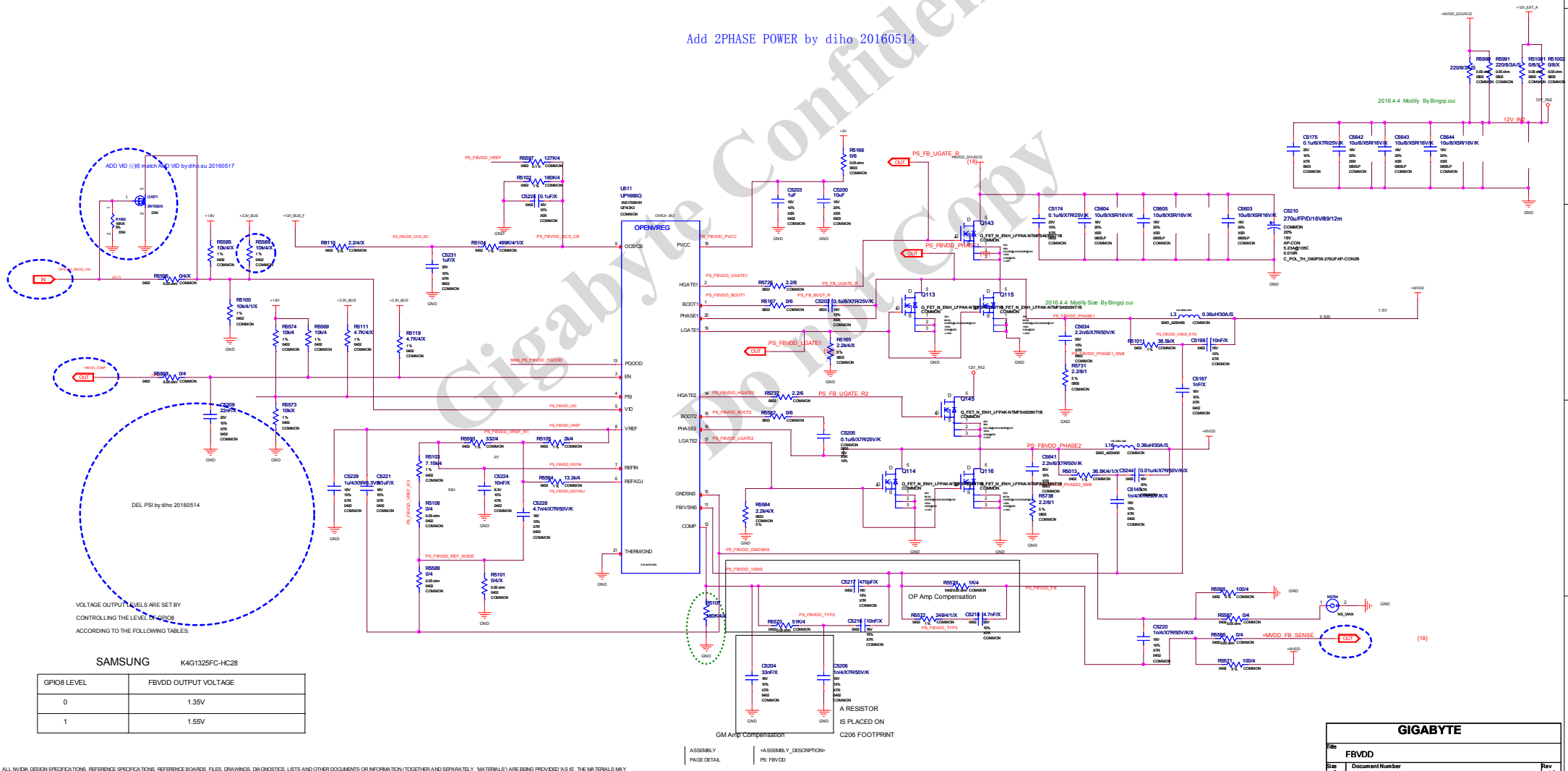

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GIGABYTE		
Title: FBVDD		
Size: Custom	Document Number: GV-RX570GAMING-4GD	Rev: 1.0
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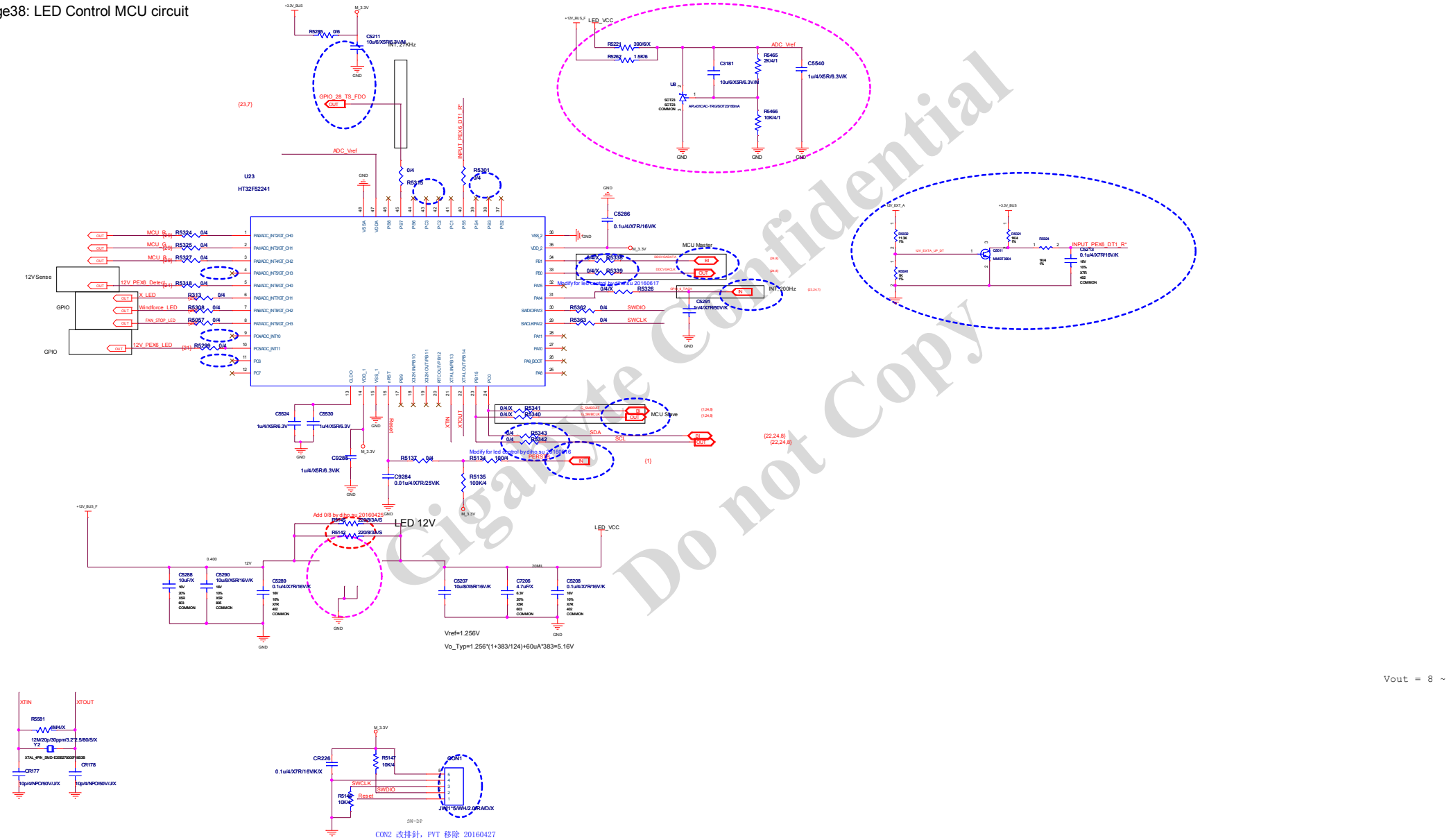
Page38: LED Control MCU circuit



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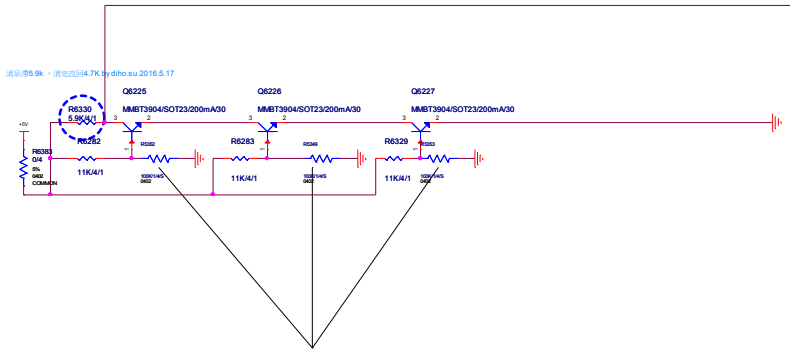
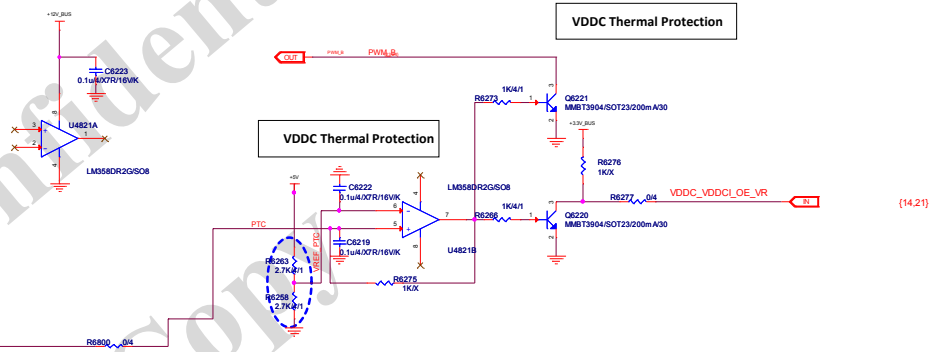
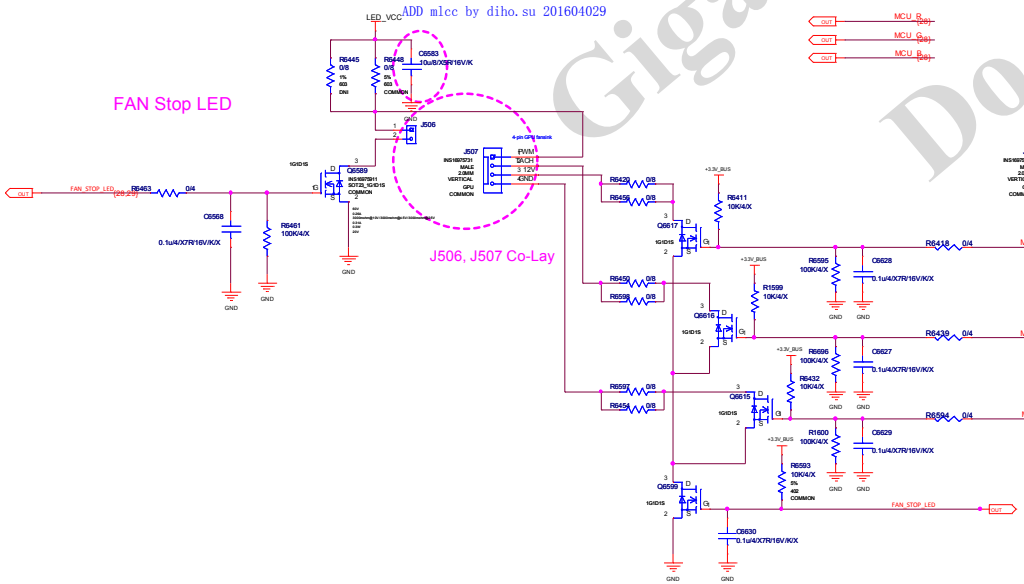
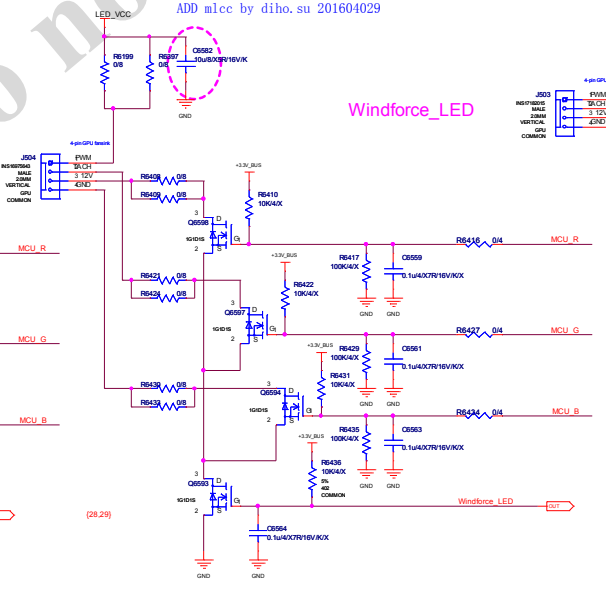
Add MOS VRHOT CIRCUIT

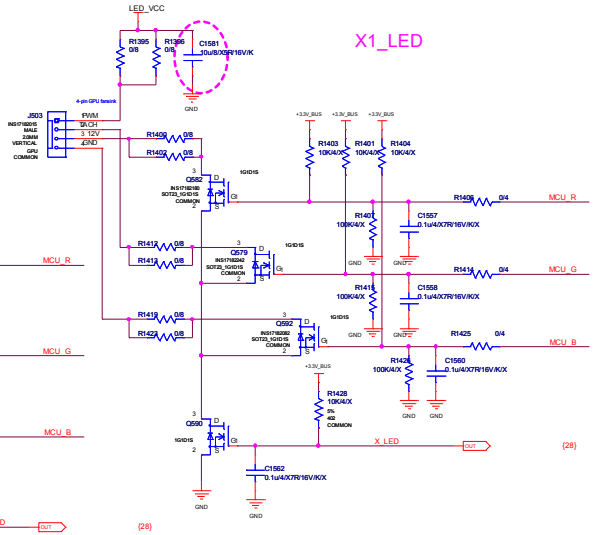


Near VDDC each high side MOS









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