

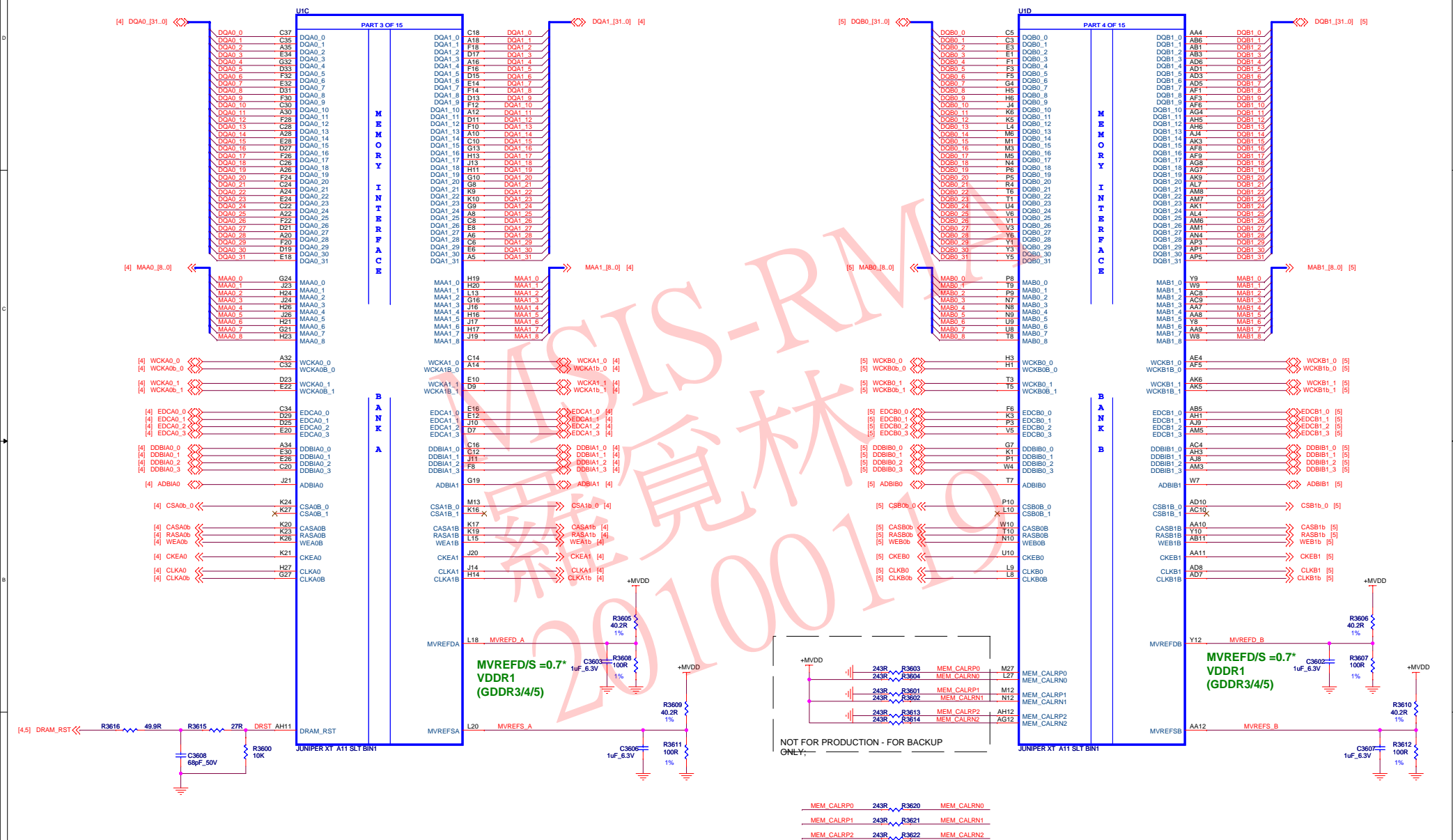


SYMBOL LEGEND	
DNI	DO NOT INSTALL
#	ACTIVE LOW
	DIGITAL GROUND
	ANALOG GROUND
BUO	BRING UP ONLY

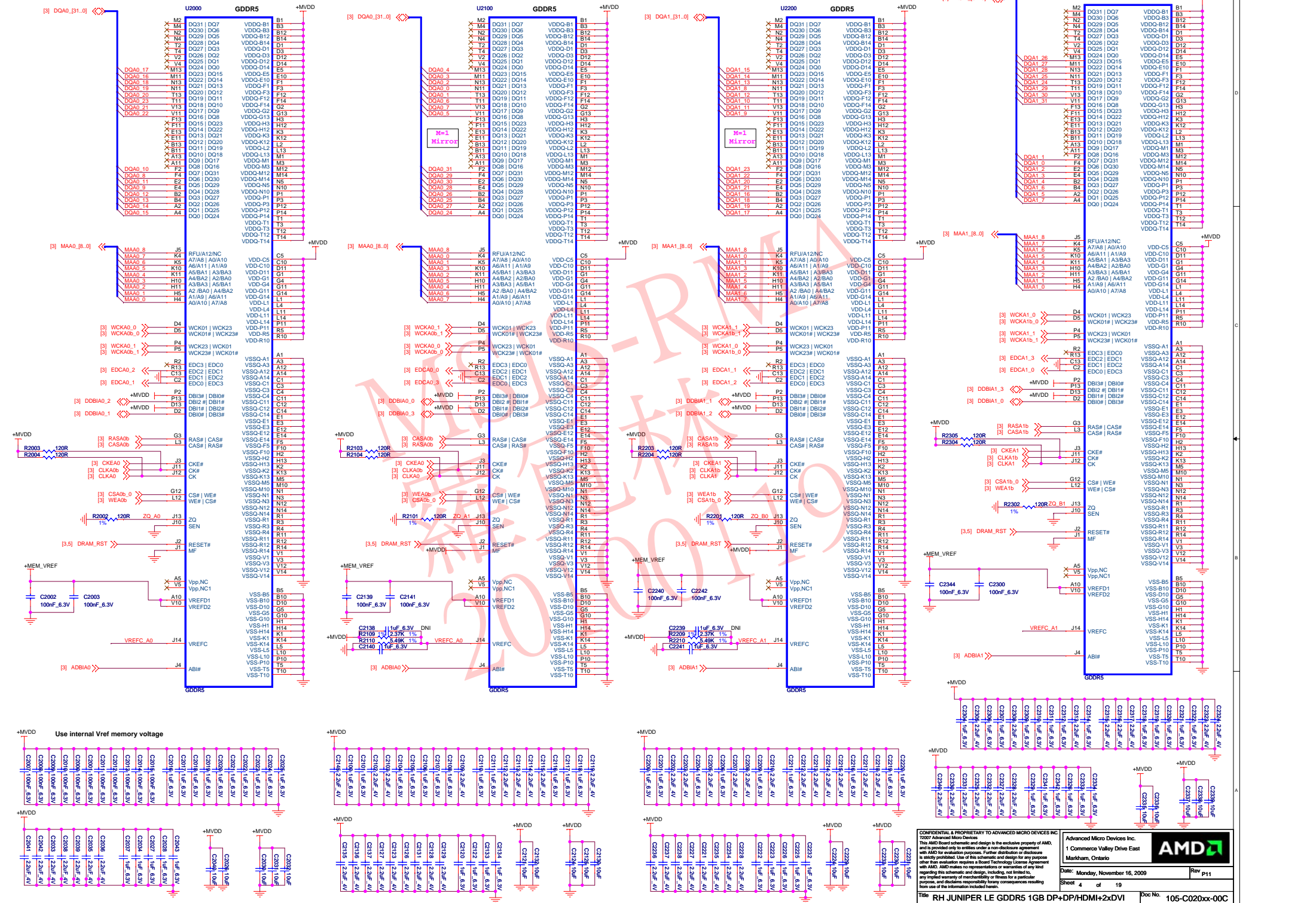


Title	RH REDWOOD GDDR5 1GB VGA/DP+HDMI/DP+DVI	Doc No.	105-C020xx-00C
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(3) REDWOOD MEM Interface Ch A&B



(4) GDDR5 x16 MEM Channel A



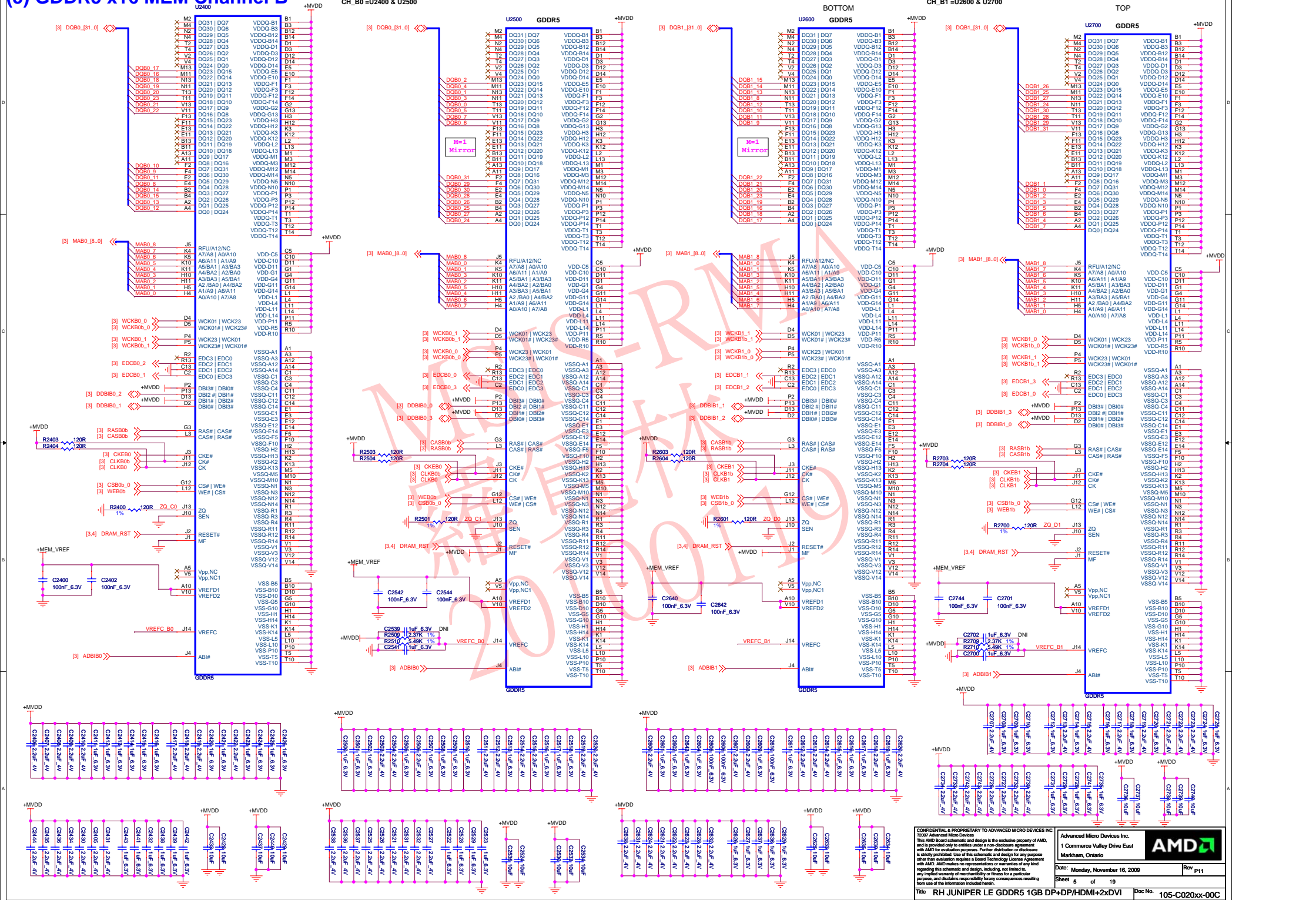
5	
(5) GDDR5 x16 MEM Channel F	

CH_B0 =U2400 & U2500

BOTTOM

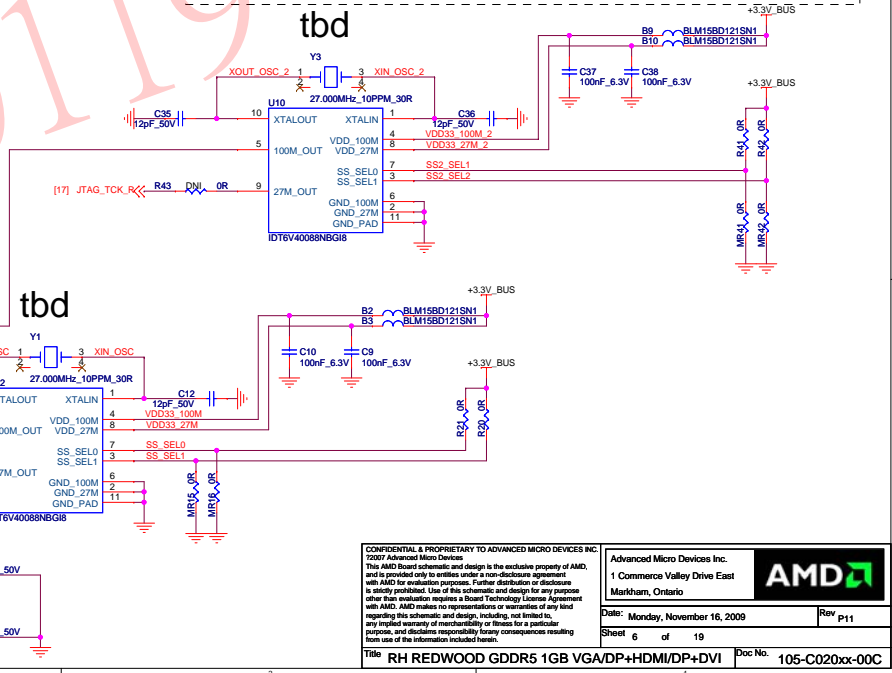
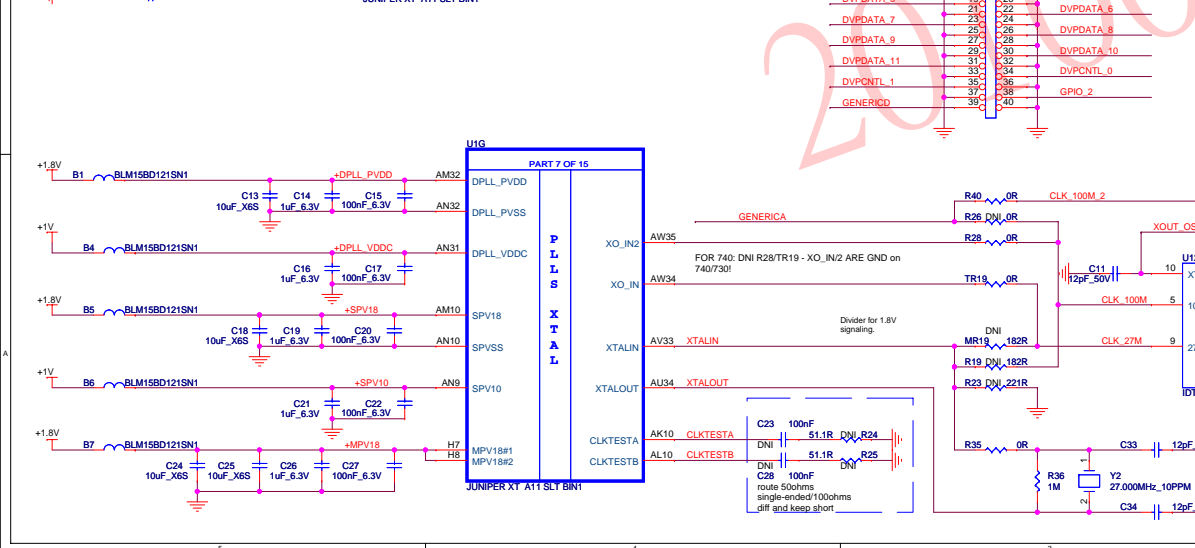
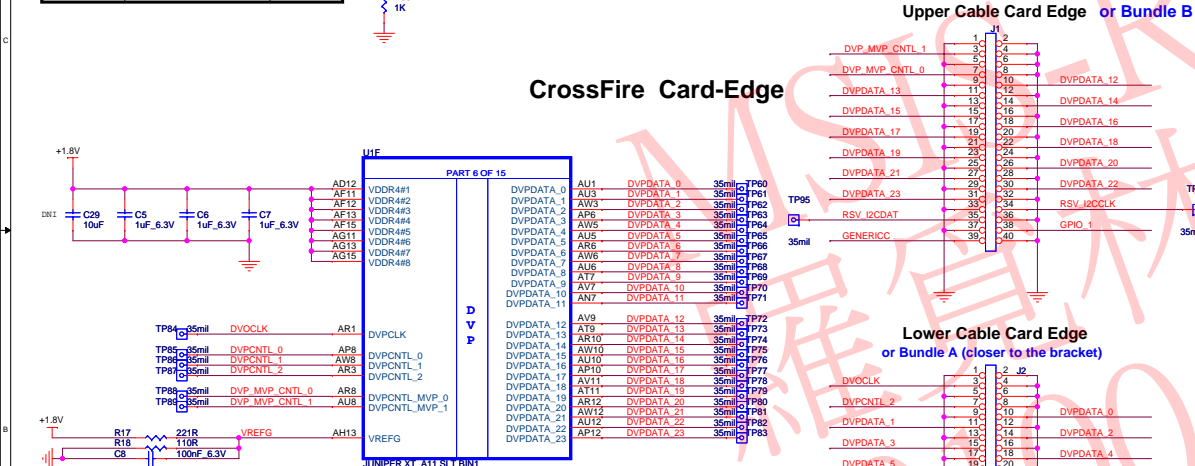
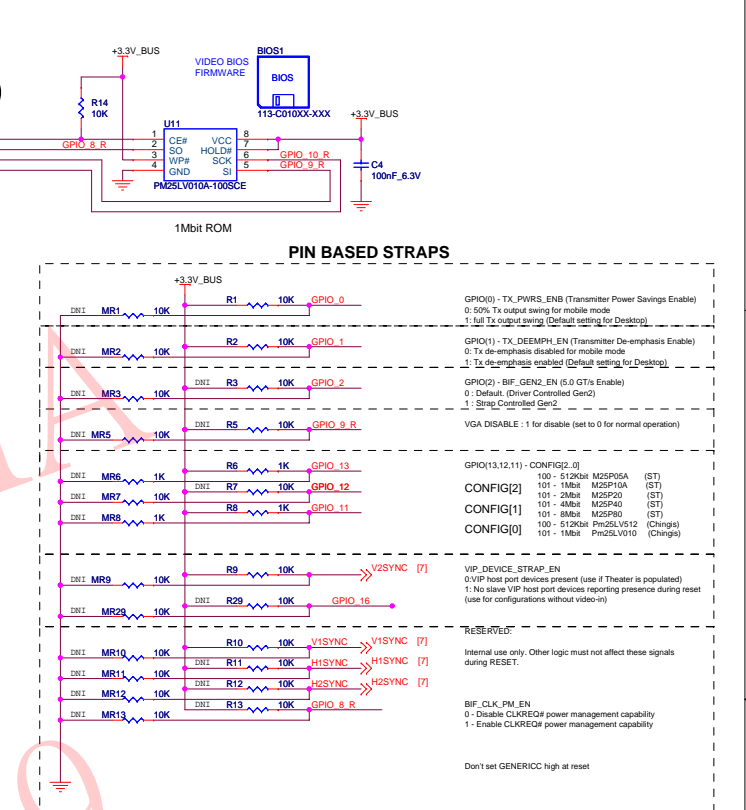
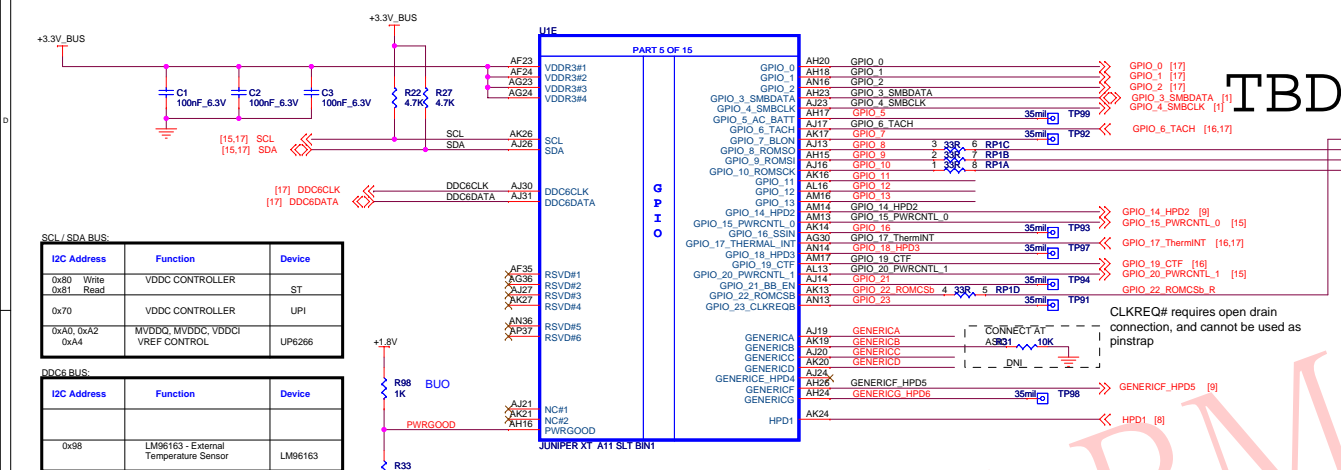
CH_B1 =U2600 & U2700

TOP

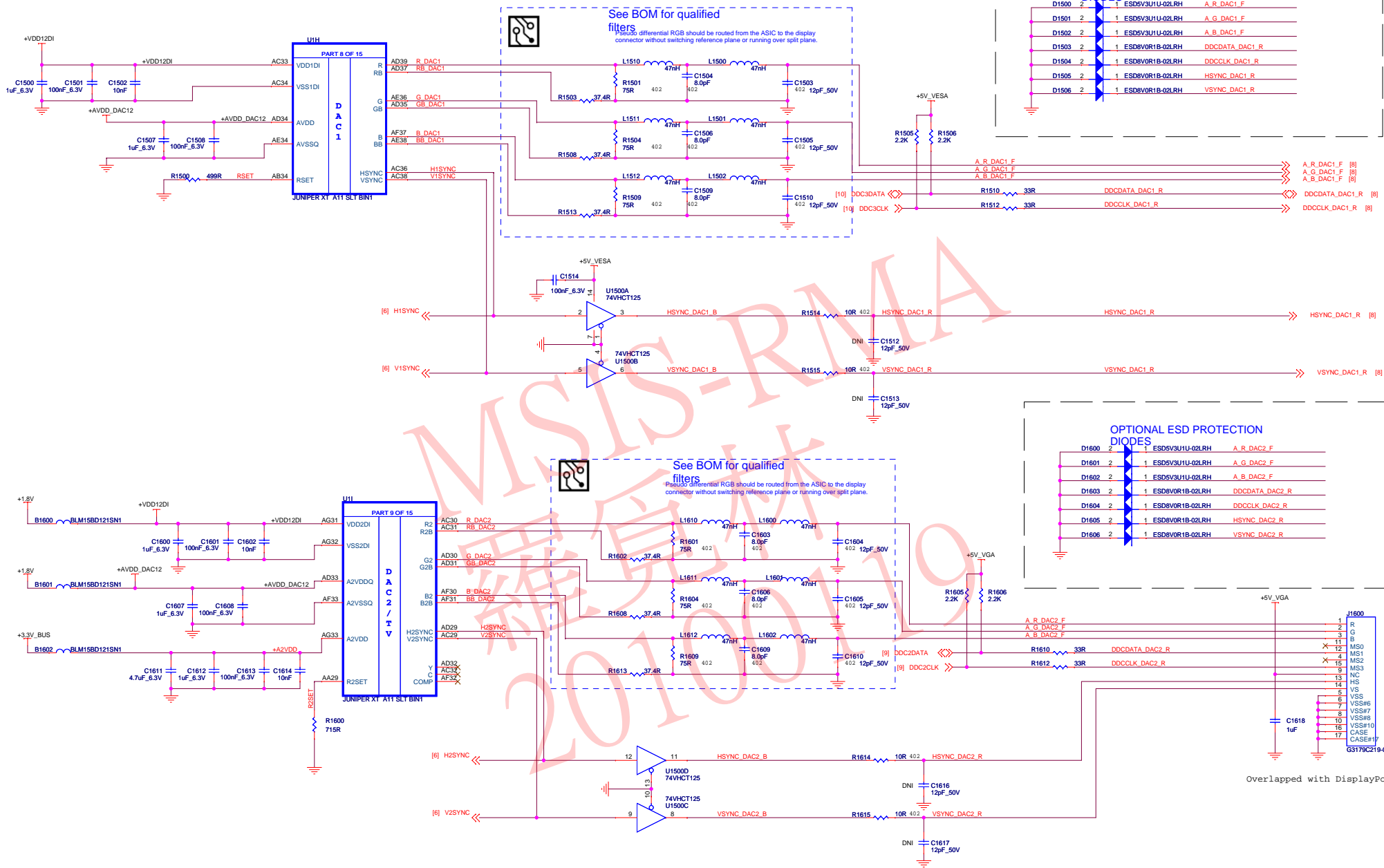


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<p>Title RH JNUNPER LE GDDR5 1GB DP+DP/HDMI/x2xDVI</p>	<p>Doc No. 105-C020xx-00C</p>

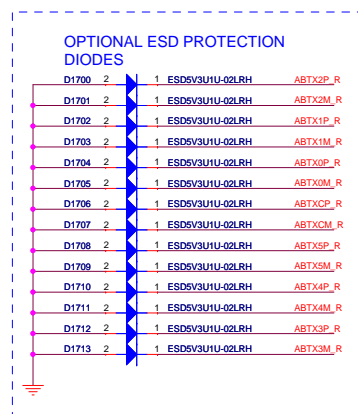
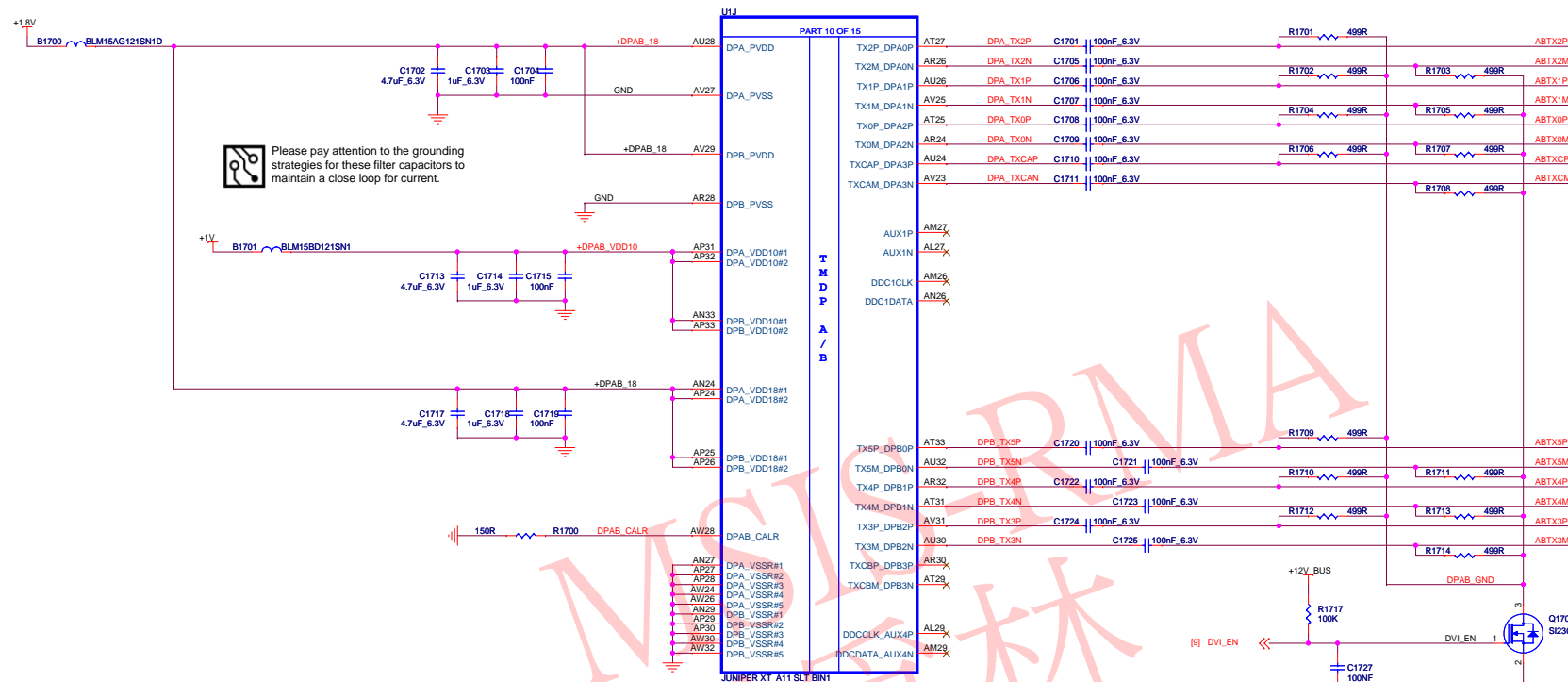
5	4
(06) REDWOOD GPIOs Strap CF XTAL OSC	



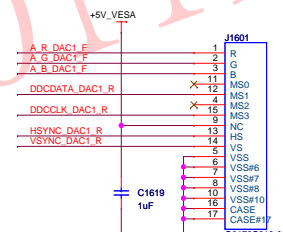
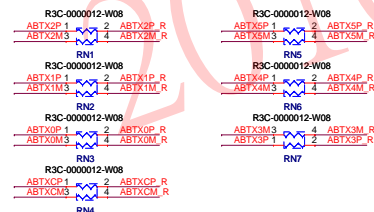
(07) REDWOOD DAC1 and DAC2



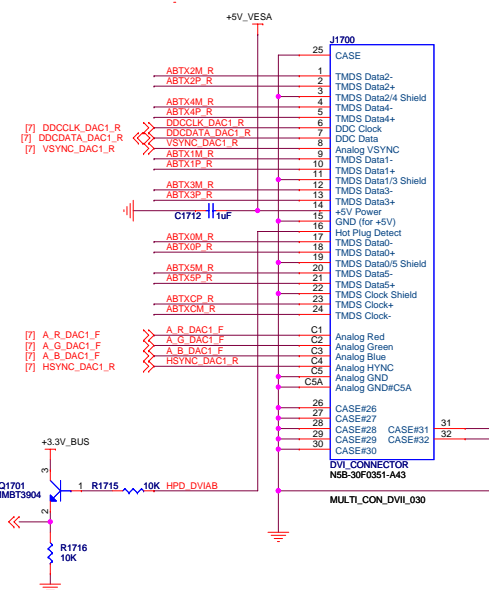
(08) REDWOOD TMDP A&B dDVI-I TOP



Reserve EMI solution common
choke



Overlapped with DVI



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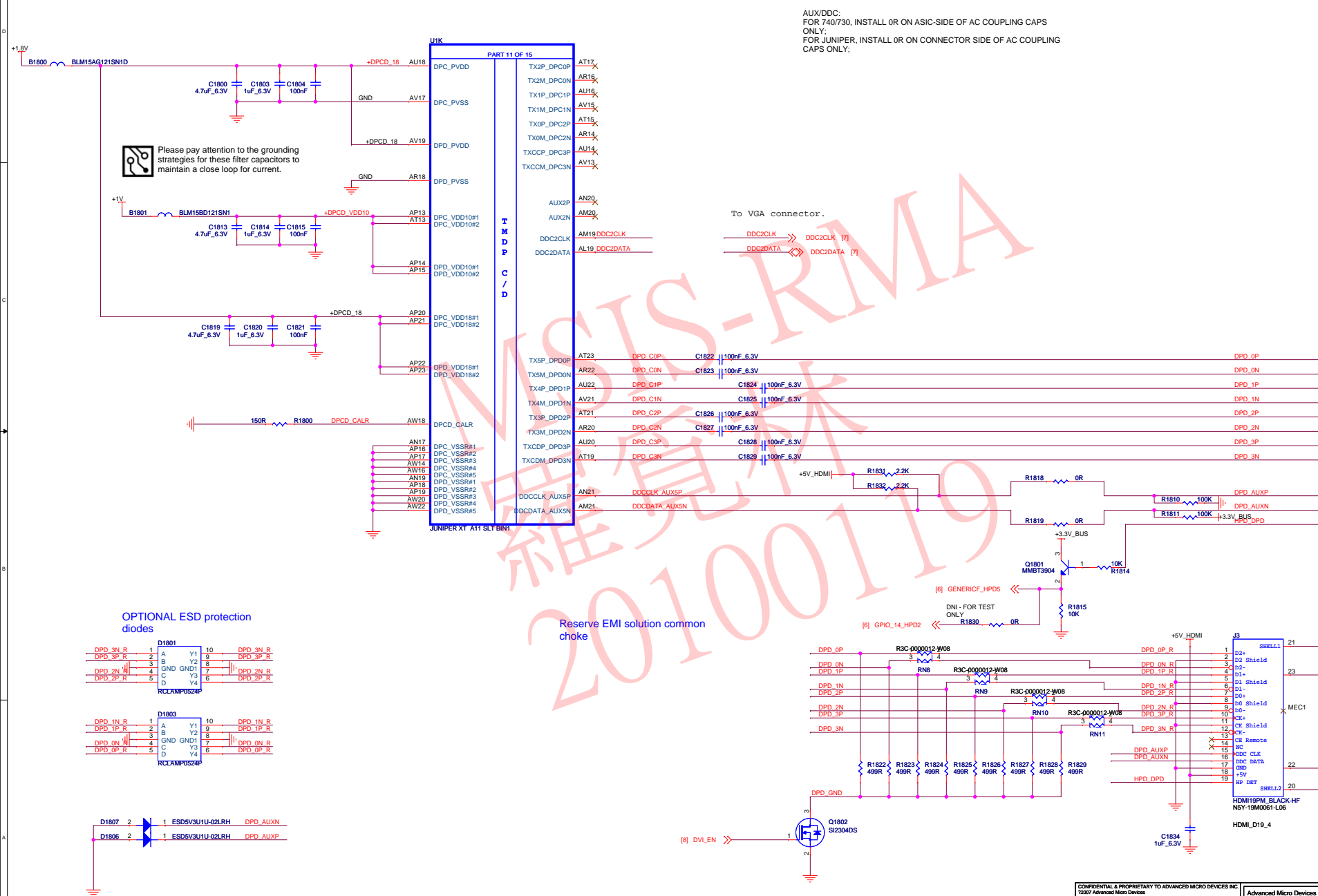
Date: Tuesday, November 17, 2009

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Title	BH REDWOOD GDDR5 1GB VGA /DP/HDMI/DP+DVI
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(09) REDWOOD Display Port C & Display Port/HDMI D




AUX/DDC:
FOR 740/730, INSTALL 0R ON ASIC-SIDE OF AC COUPLING CAPS
ONLY;
FOR JUNIPER, INSTALL 0R ON CONNECTOR SIDE OF AC COUPLING
CAPS ONLY:

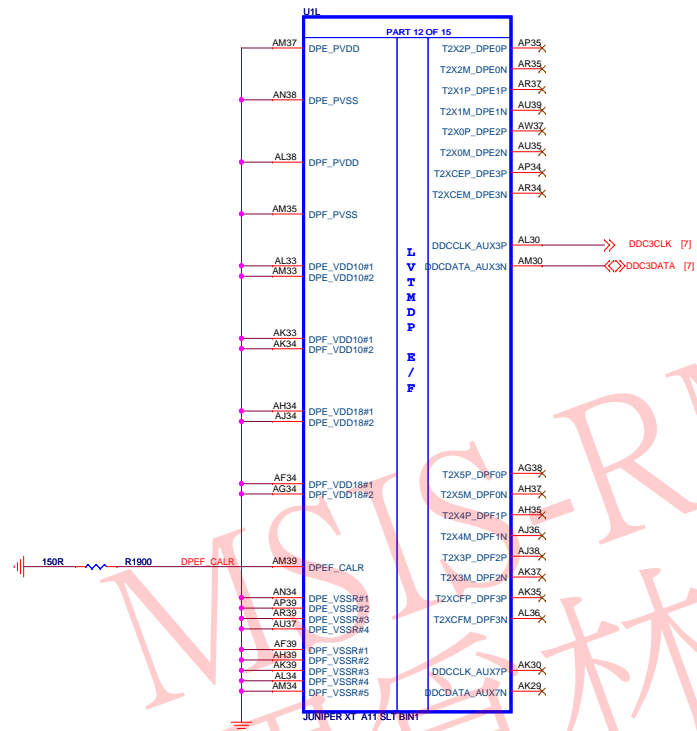
To VGA connector.

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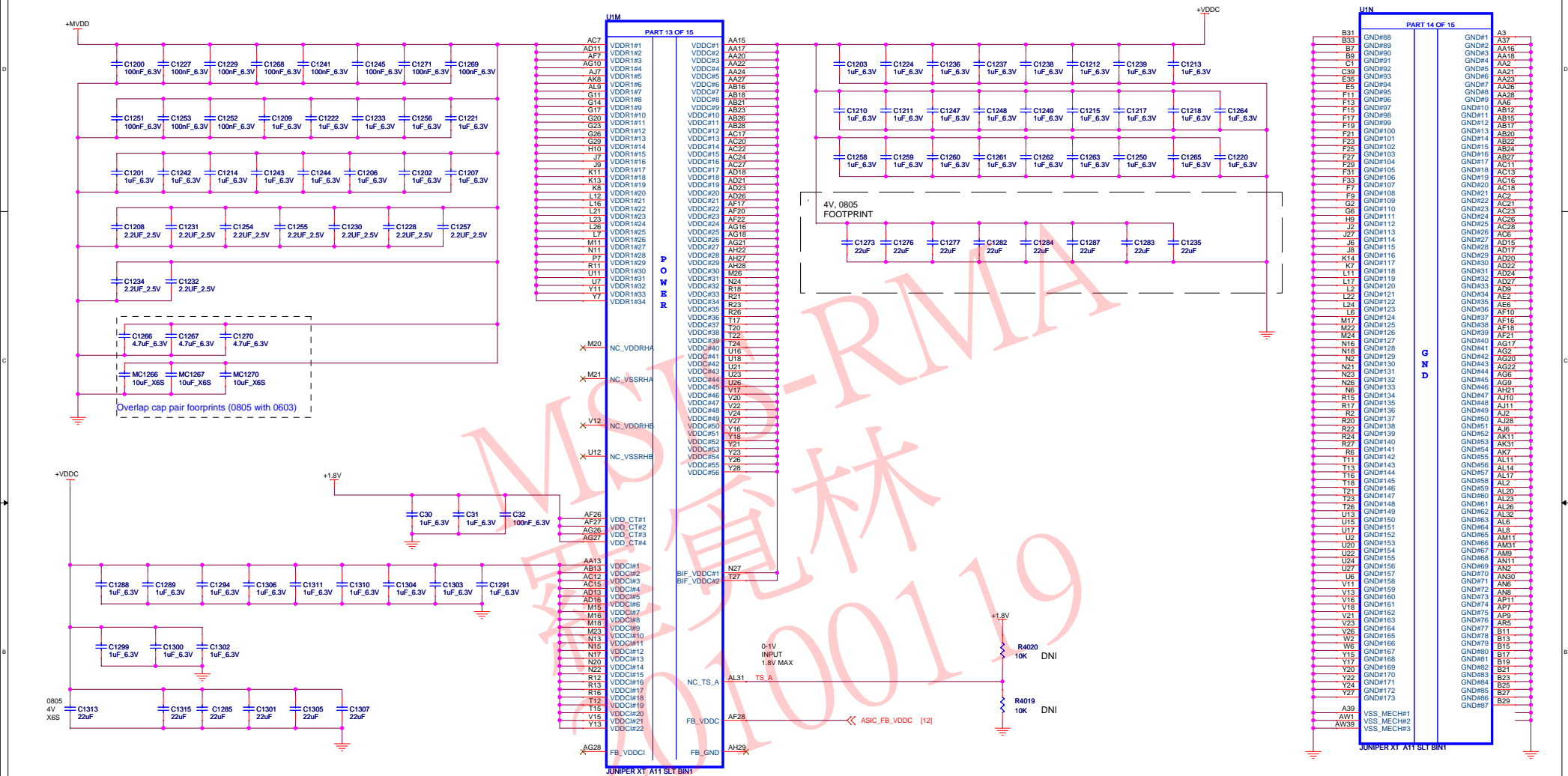
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Date: Thursday, November 19, 2009		Rev P11	
Sheet 9 of 19			

(10) REDWOOD LVTMDP E&F



(11) REDWOOD Power & GND



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Title: **PLD5EDWOOD-CDPDE-162-V0**

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Markham, Ontario



Date: Monday, November 16, 2009

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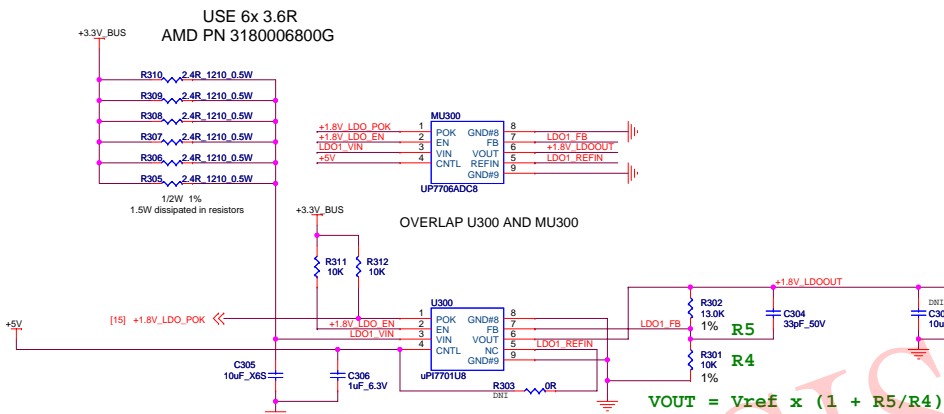
Rev P11

Title **RH REDWOOD GDDR5 1GB VGA/DP+HDMI/DP+DVI**

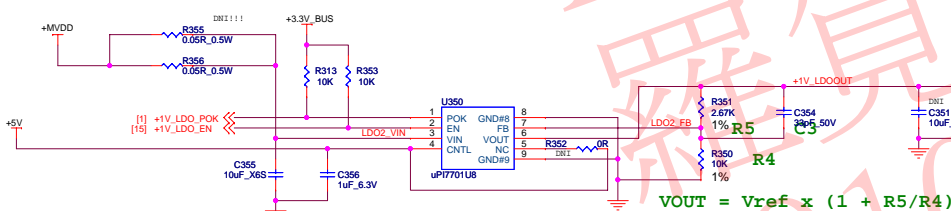
Doc No.	105-C020xx-00C
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(15) Linear Regulators

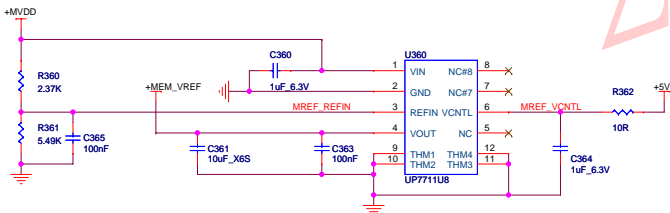
LDO #1: Vin = 3.00V to 3.60V (3.3V +/- 9%) Vout = +1.8V +/- 2%; Iout = 1.6A (TBV) RMS MAX
PCB: 50 to 70mm sq. copper area for cooling



LDO #2: Vin = +1.32V to 1.84VMAX Vout = +1.01V +/- 2% Iout = 1.7A (TBV) RMS MAX
PCB: 50 to 70mm sq. copper area for cooling



Memory VREF: Vin = MVDDQ Vout = 0.7xMVDDQ



There must be one 100nF at each VREF pin
Place U360 (VIN - PIN#1) close to 10uF on MVDDQ in the middle point of memory devices

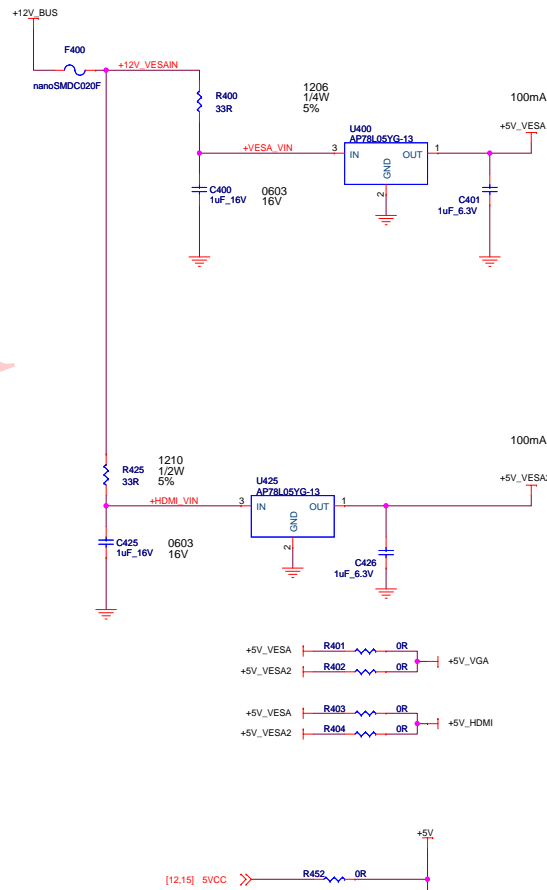
1.8V WORST-CASE REQUIREMENT

Display Config	Est. Current
DVI+HDMI+DP	1330mA

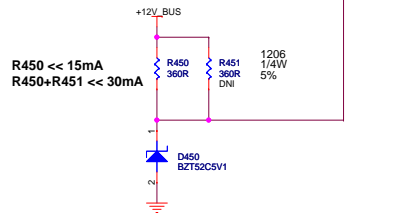
1.0V WORST-CASE REQUIREMENT

Display Config	Est. Current
DVI+HDMI+DP	1560mA

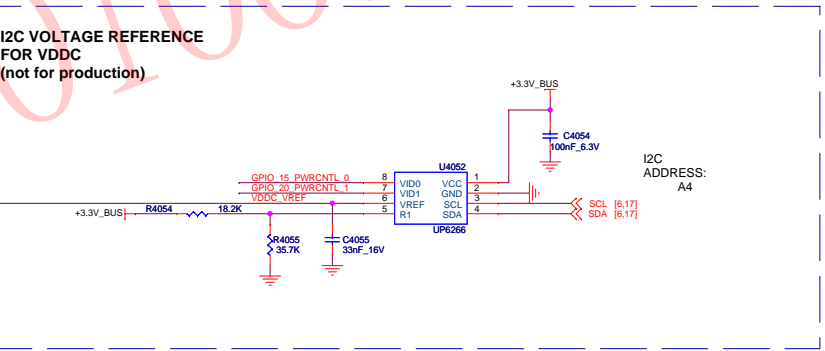
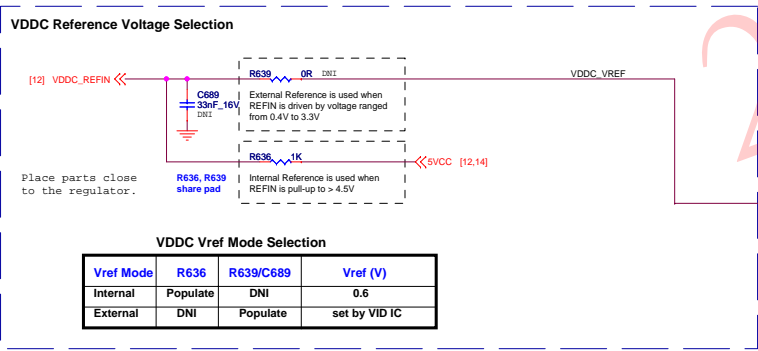
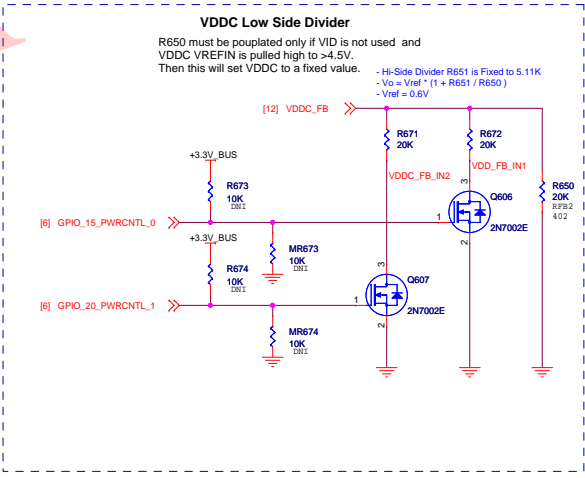
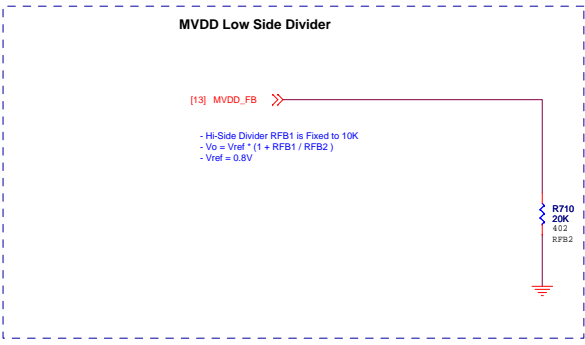
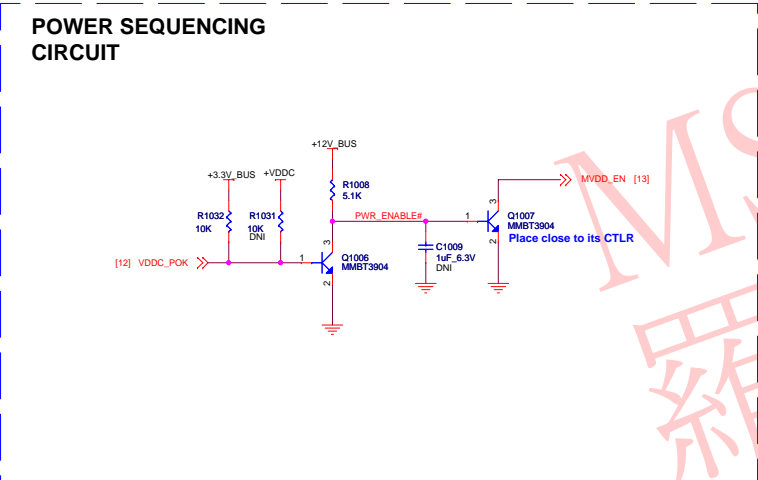
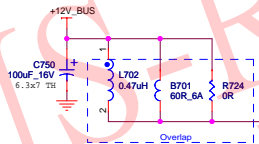
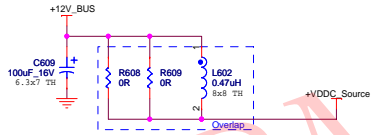
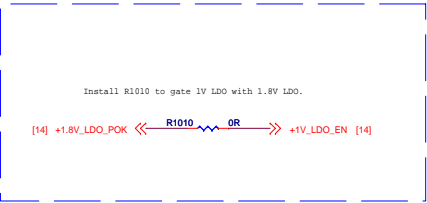
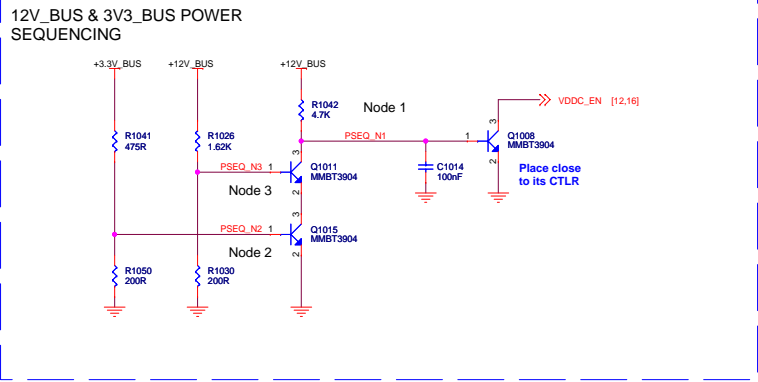
Regulators for +5V, +5V_VESA and +5V_HDMI



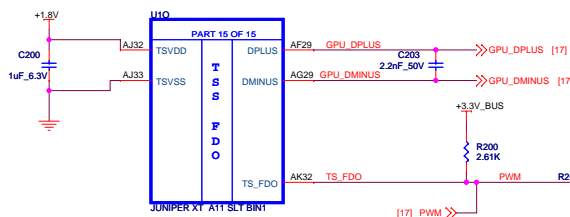
BACKUP OPTION FOR +5V REGULATOR



(16) Power Management - Power Gating and Dynamic Voltage Control

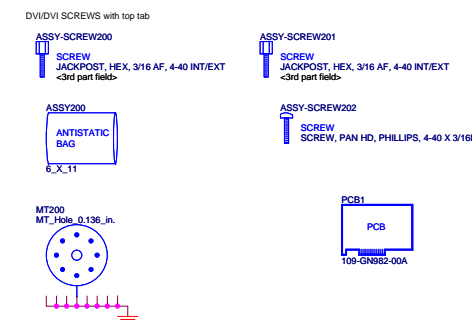
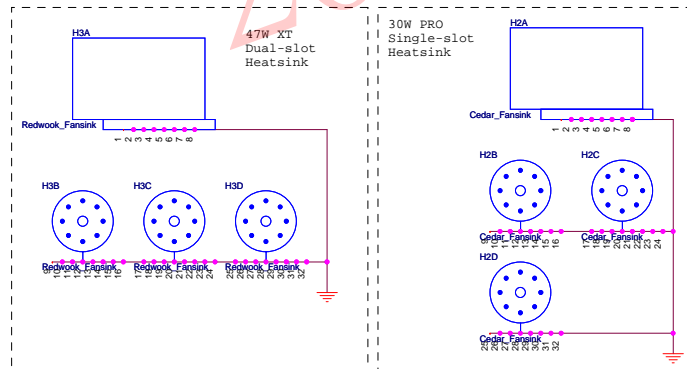
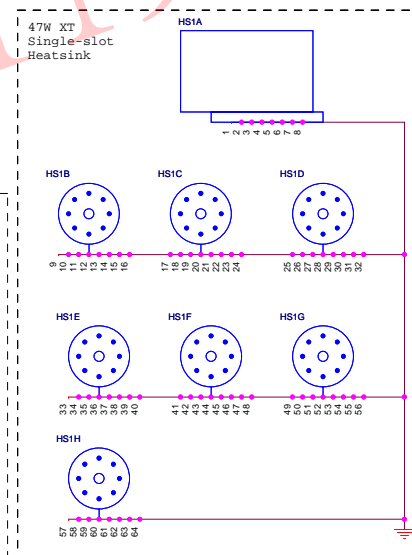
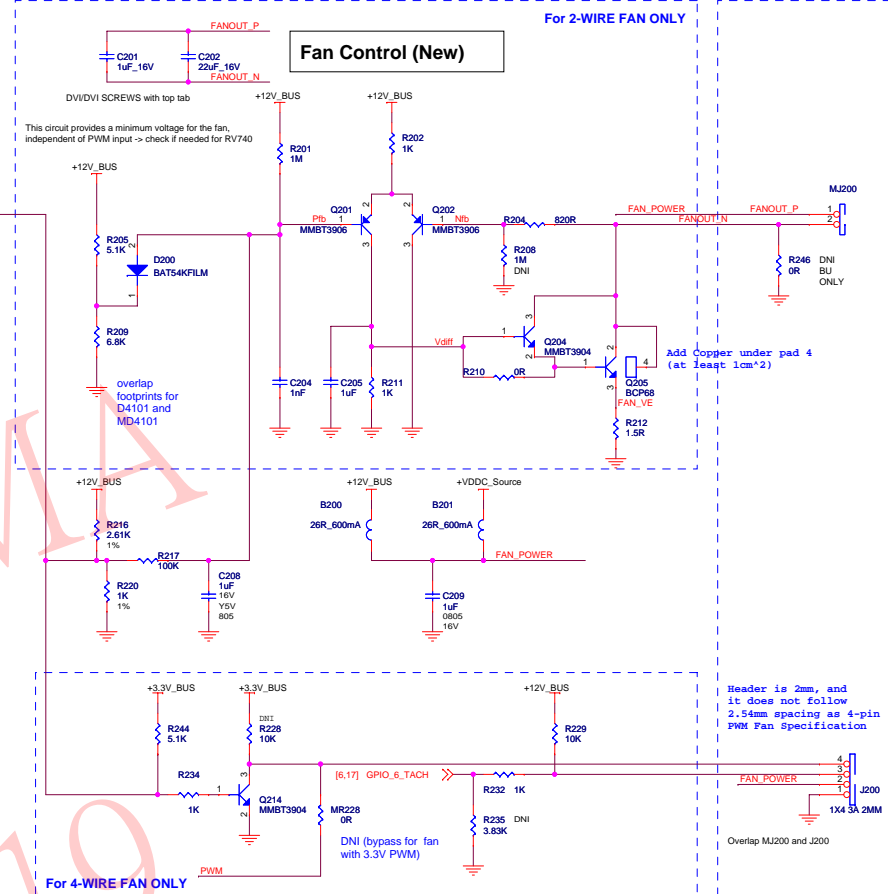
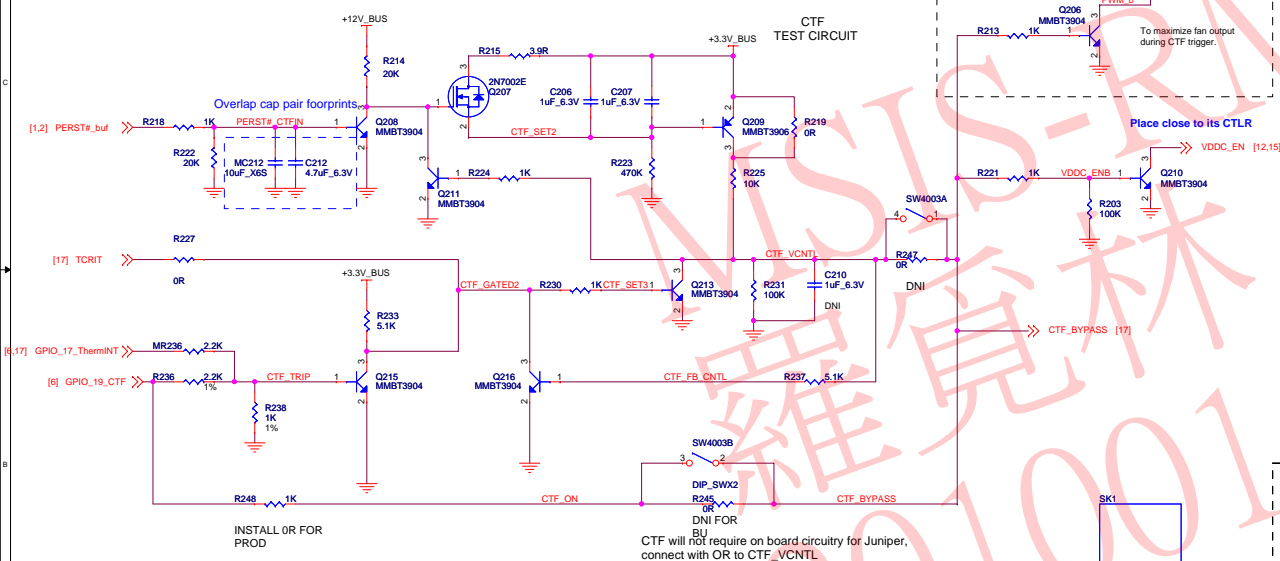


(19) Mechanical and Thermal Management



Warning: TS_FDO is not 5V tolerant. MAX sink current 1.65mA

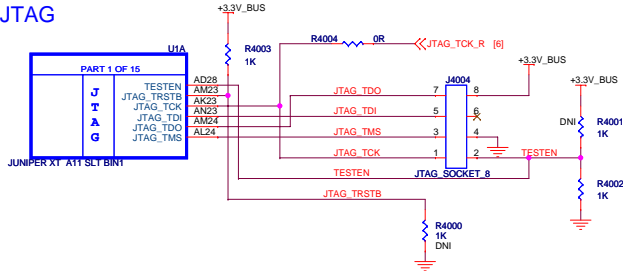
If Critical Temperature is reached this will force the fan to run at full speed while power is removed from GPU & rest of the board. This is an open collector signal. Active level is hard pull down to ground.



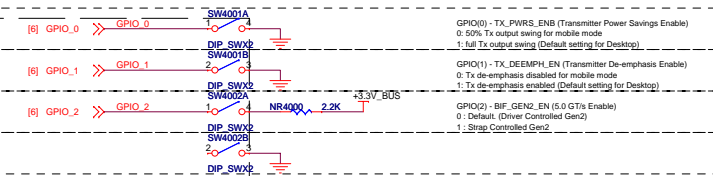
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<p>Date: Friday, November 20, 2009</p>		<p>Rev p11</p>	
<p>Sheet 16 of 19</p>		<p>Doc No. 105-020xx-00C</p>	
<p>Title RH REDWOOD QGGRS 1GB VGA/DP+HDMI/DP+DV</p>			

(19) Debug Circuits

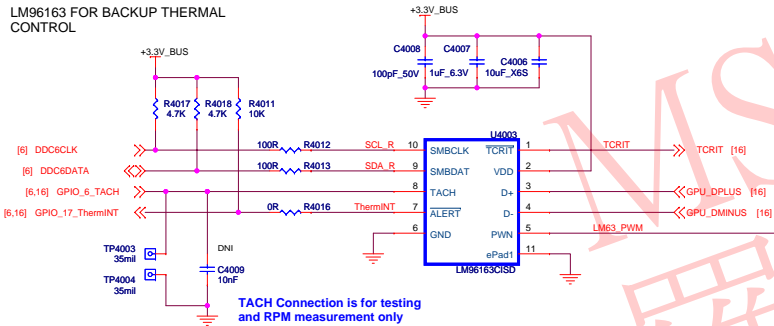
JTAG



SWITCH CONNECTIONS TO PINSTRAPS

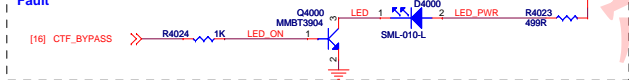


LM96163 FOR BACKUP THERMAL CONTROL



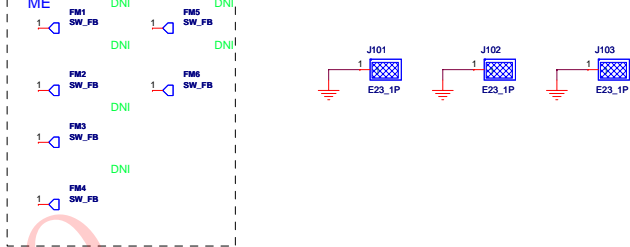
TACH Connection is for testing and RPM measurement only

LED RED "ON" shows Fault

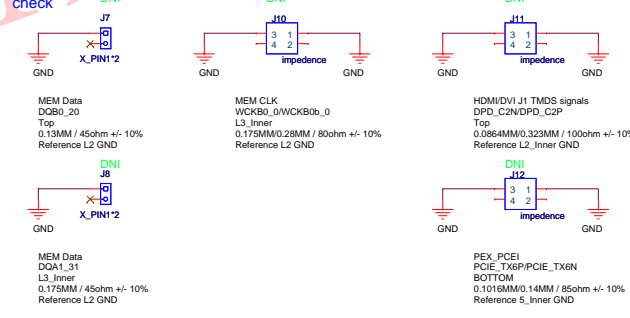


DNI For Production

Reserve FM1-FM6 for PCB ME

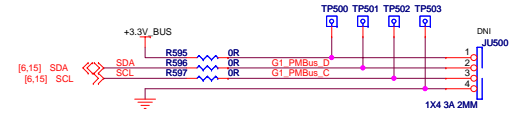


Reserve J7 - J12 for Impedance check



SCL/SDA PORT DEBUG ACCESS

Place connector on the back side (easily accessible and not blocked by the heatsink).



<div>AMD</div>			Title		Schematic No.		Date:				
			RH REDWOOD GDDR5 1GB VGA/DP+HDMI/DP+DVI		105-C020xx-00C		Monday, November 16, 2009				
			REVISION HISTORY					NOTE: This schematic represents the PCB, it does not represent any specific SKU. For Stuffing options (component values, DNI , ? please consult the product specific BOM. Please contact AMD representative to obtain latest BOM closest to the application desired.		Rev P11	
Sch Rev	PCB Rev	Date	REVISION DESCRIPTION								
00	00A	2009/05/08									
01	00B	2009/08/20									
02	00C	2009/09/28	REDWOOD XT GDDR5 1GB - Initial Release								

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