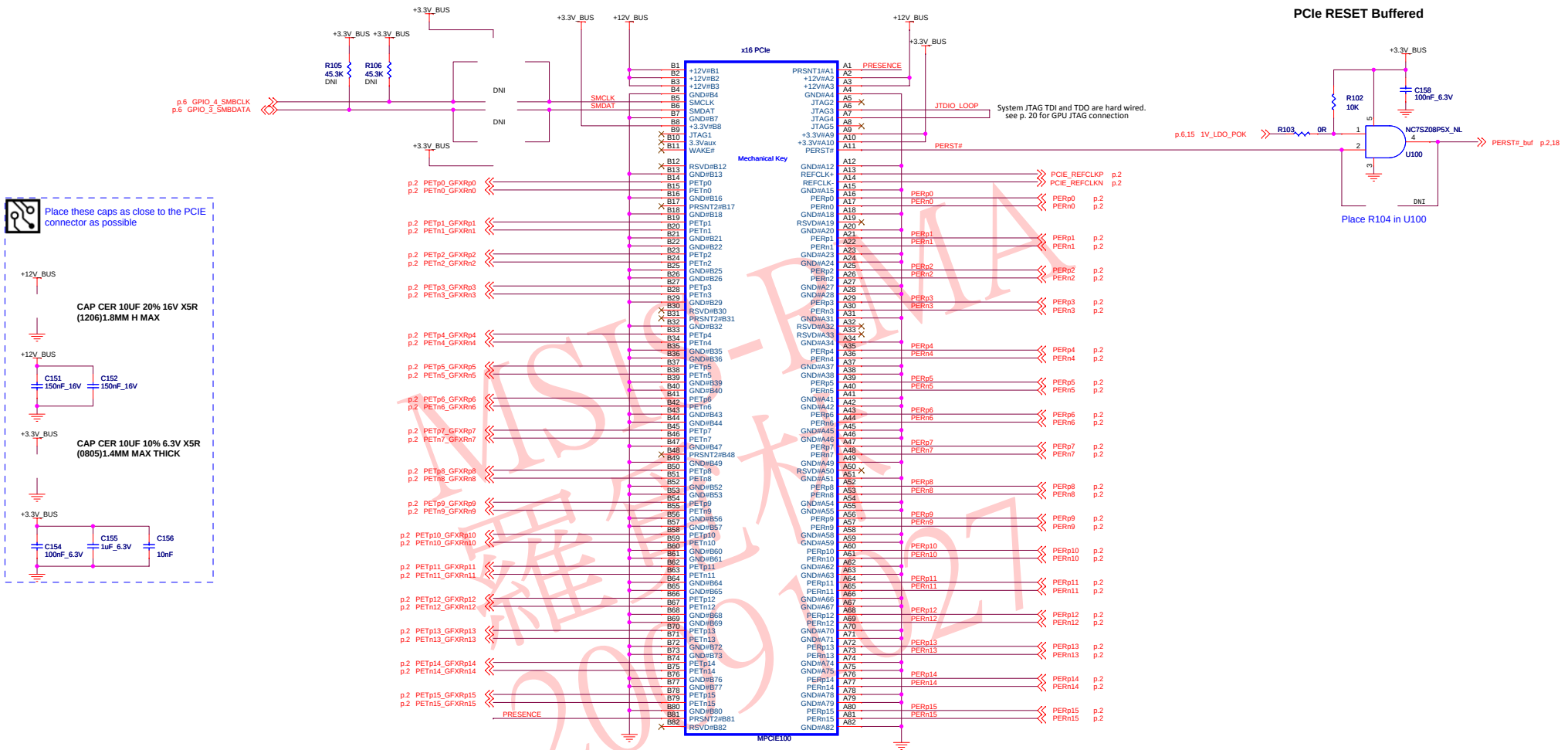
PCI-EXPRESS EDGE CONNECTOR



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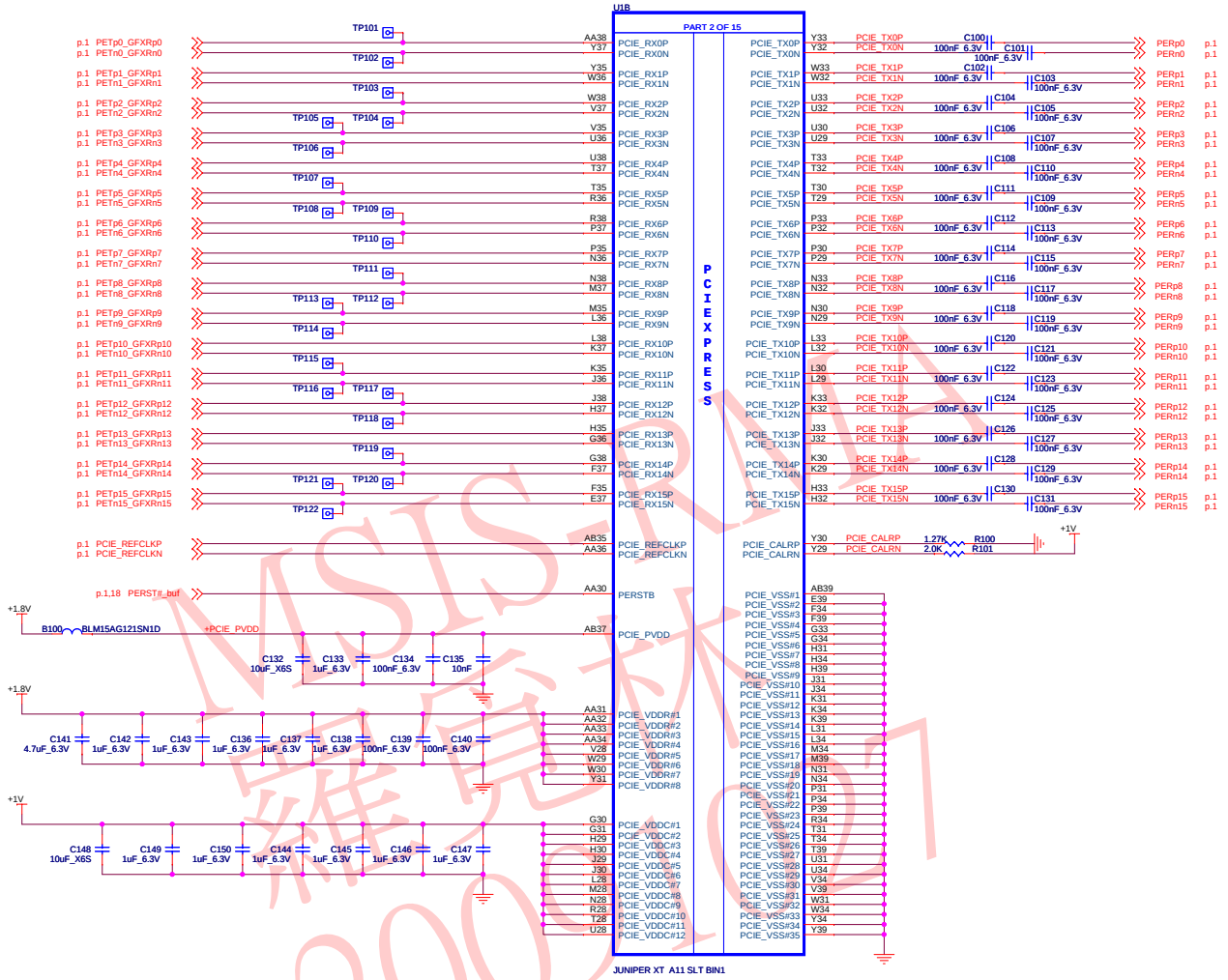
(2) JUNIPER PCIe Interface

NOTE: Some of the PCIE testpoints will be available through vias on traces.



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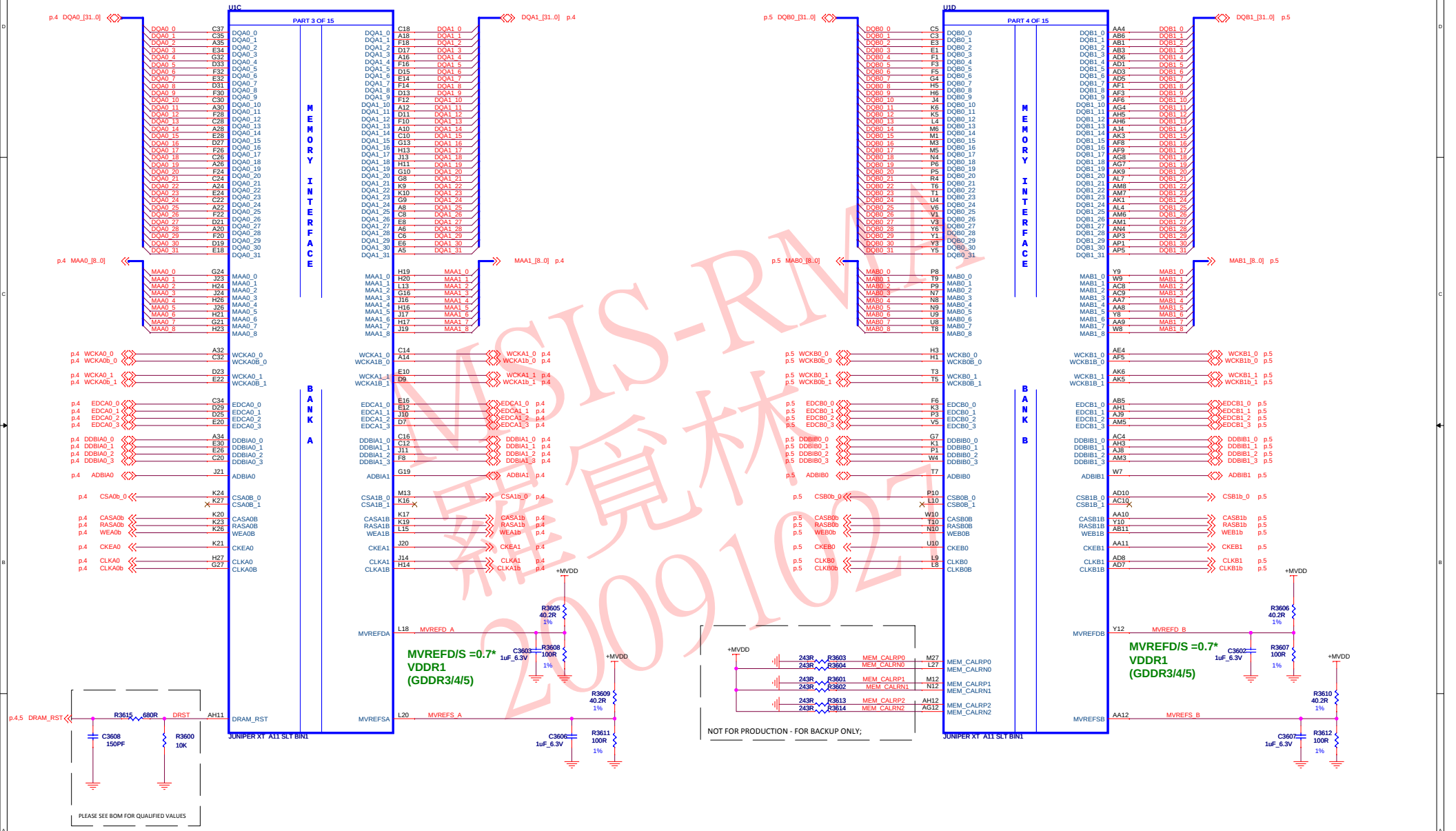
(3) JUNIPER MEM Interface Ch A&B



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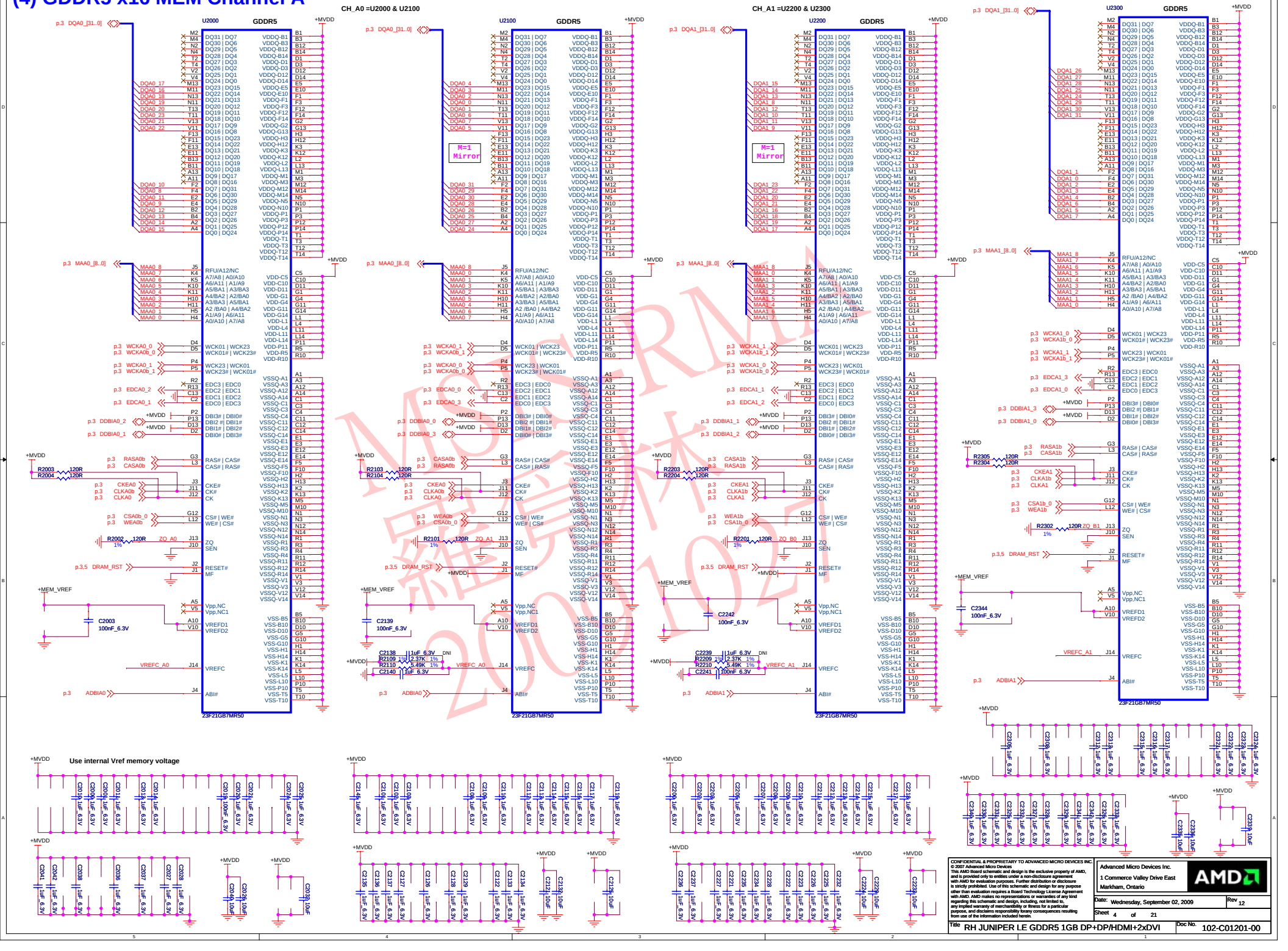
(4) GDDR5 x16 MEM Channel A



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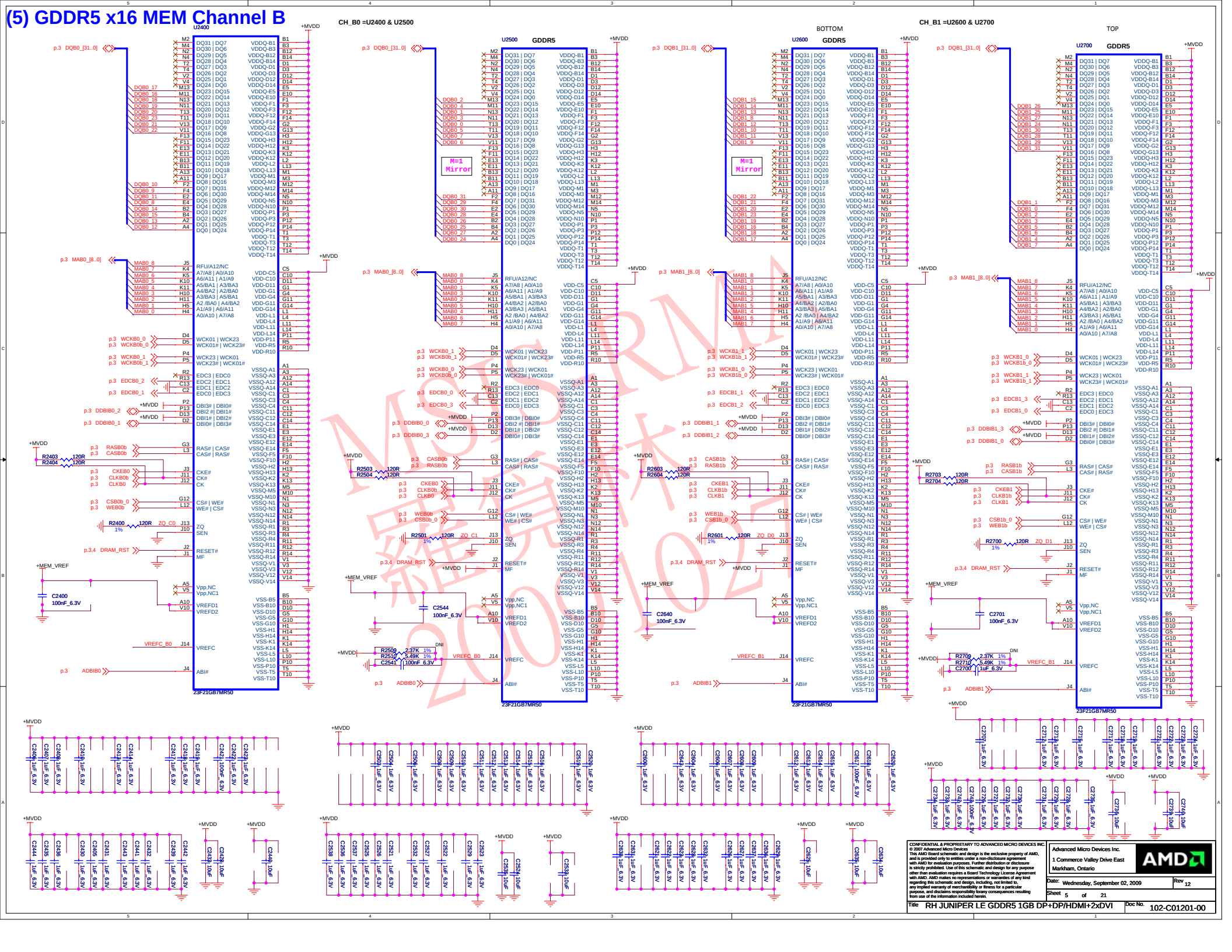
(5) GDDR5 x16 MEM Channel B

CH_B0 =U2400 & U2500

CH_B1 =U2600 & U2700

BOTTOM

TOP



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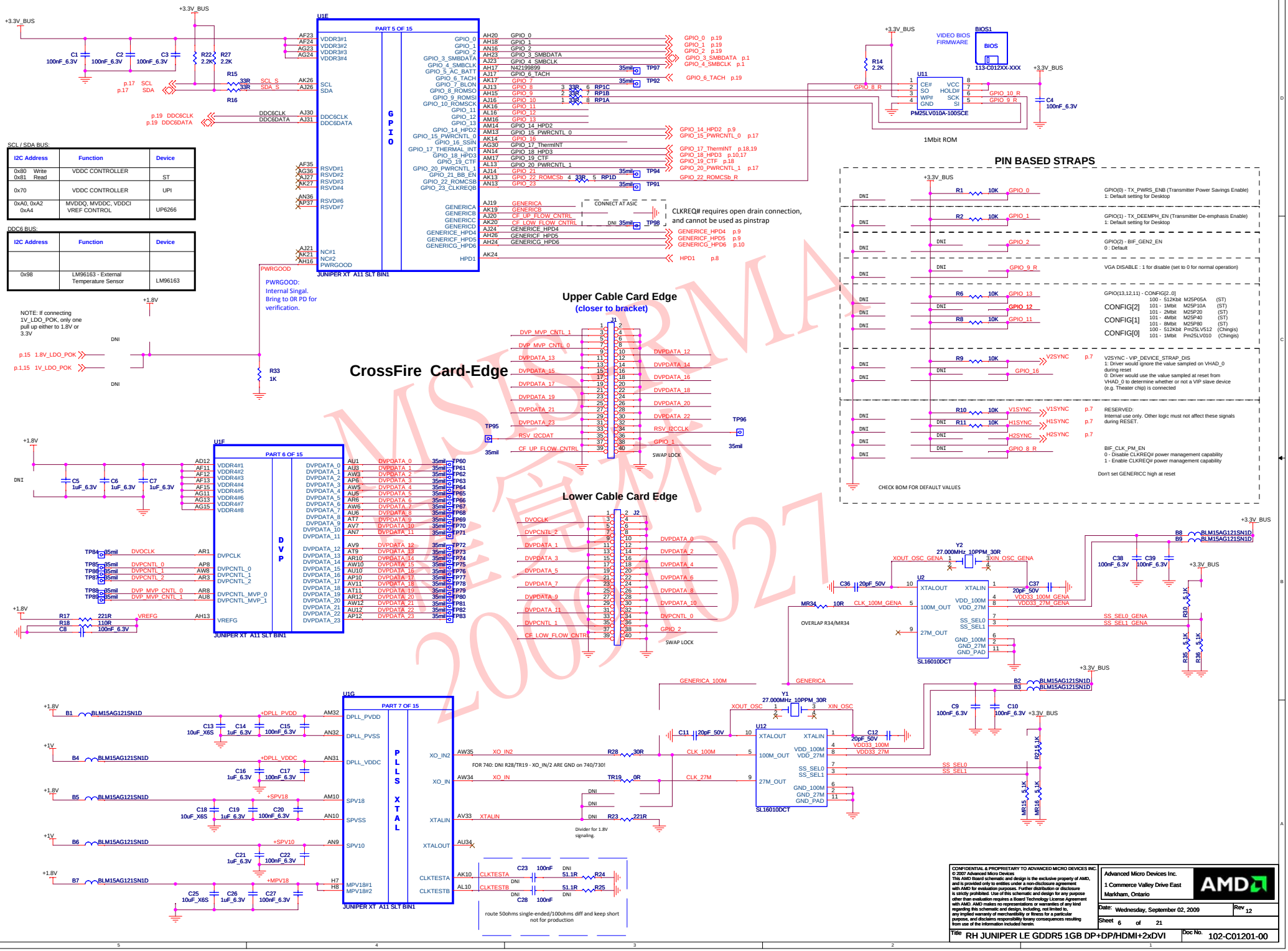
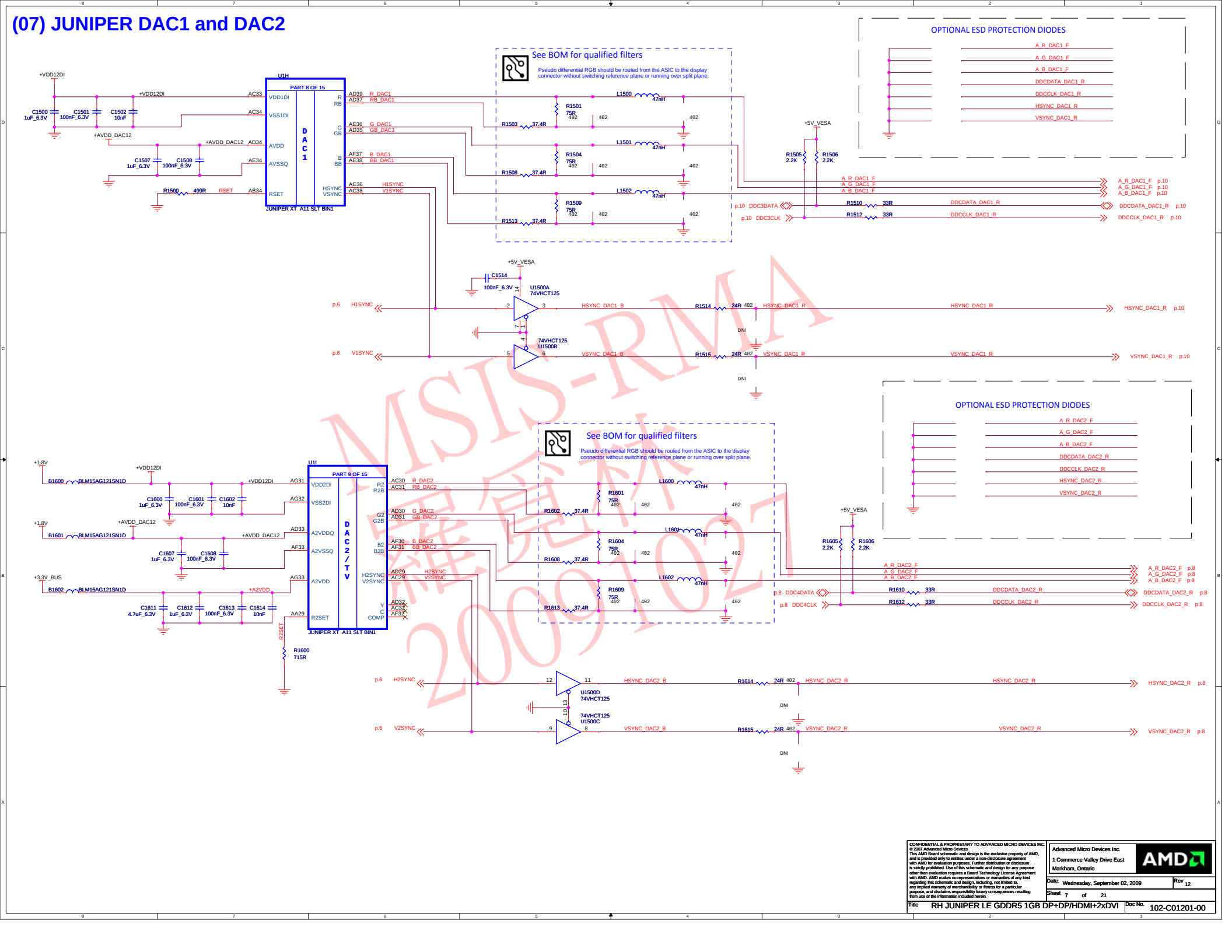
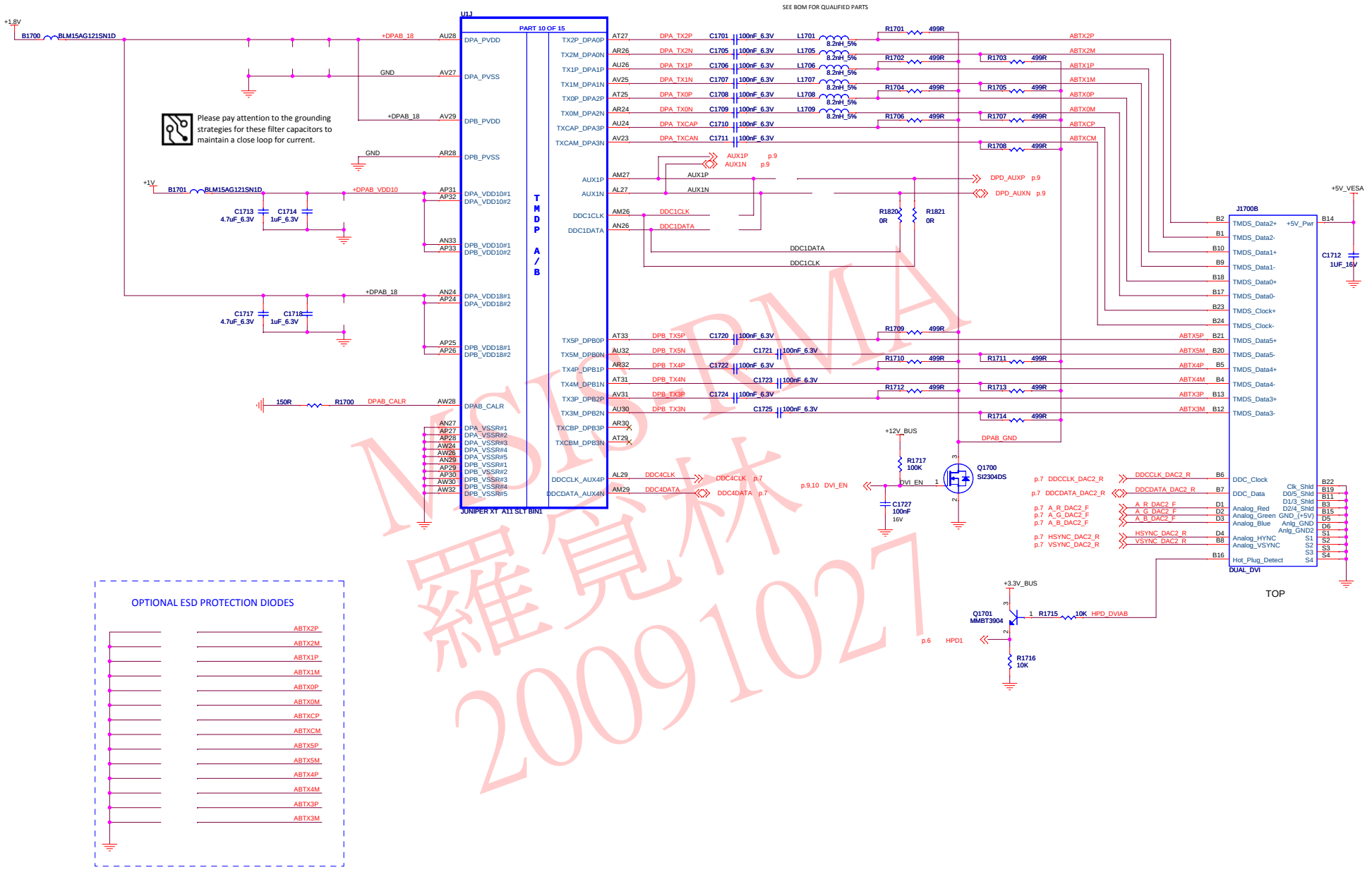
(06) JUNIPER GPIOs Strap CF XTAL OSC



(07) JUNIPER DAC1 and DAC2



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



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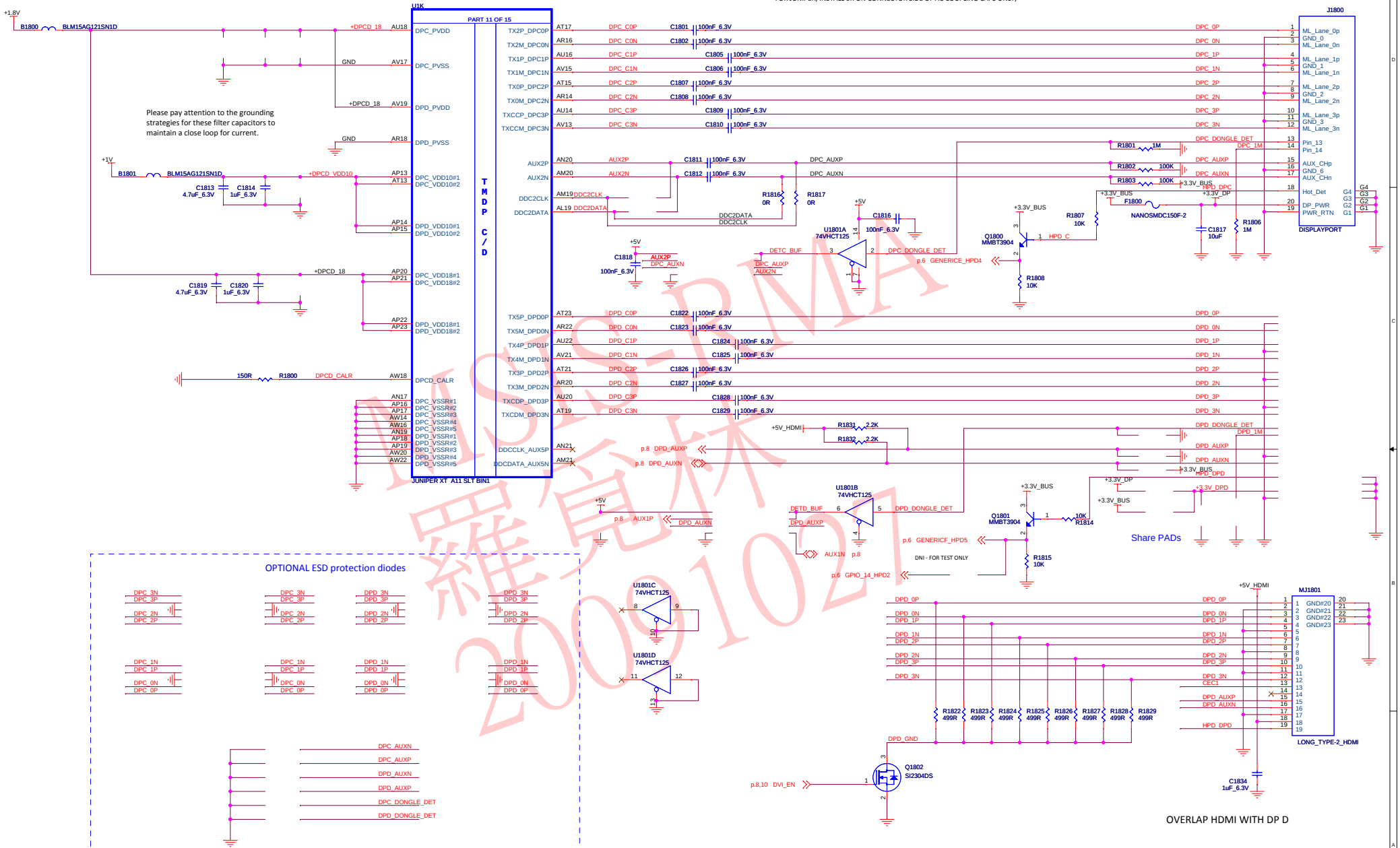
(09) JUNIPER Display Port C & Display Port/HDMI D



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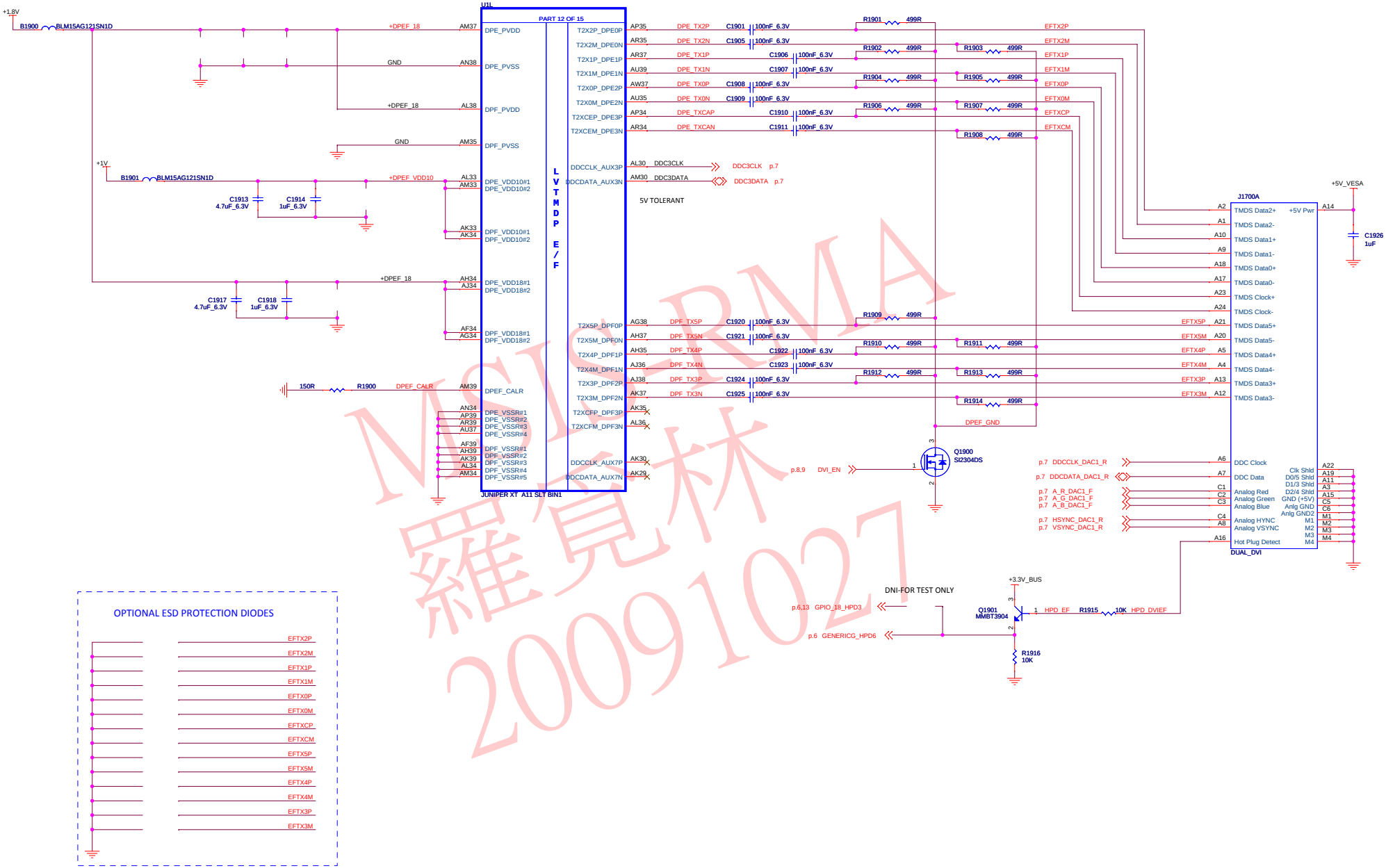
(10) JUNIPER LVTMDP E&F dDVI-I BOTTOM



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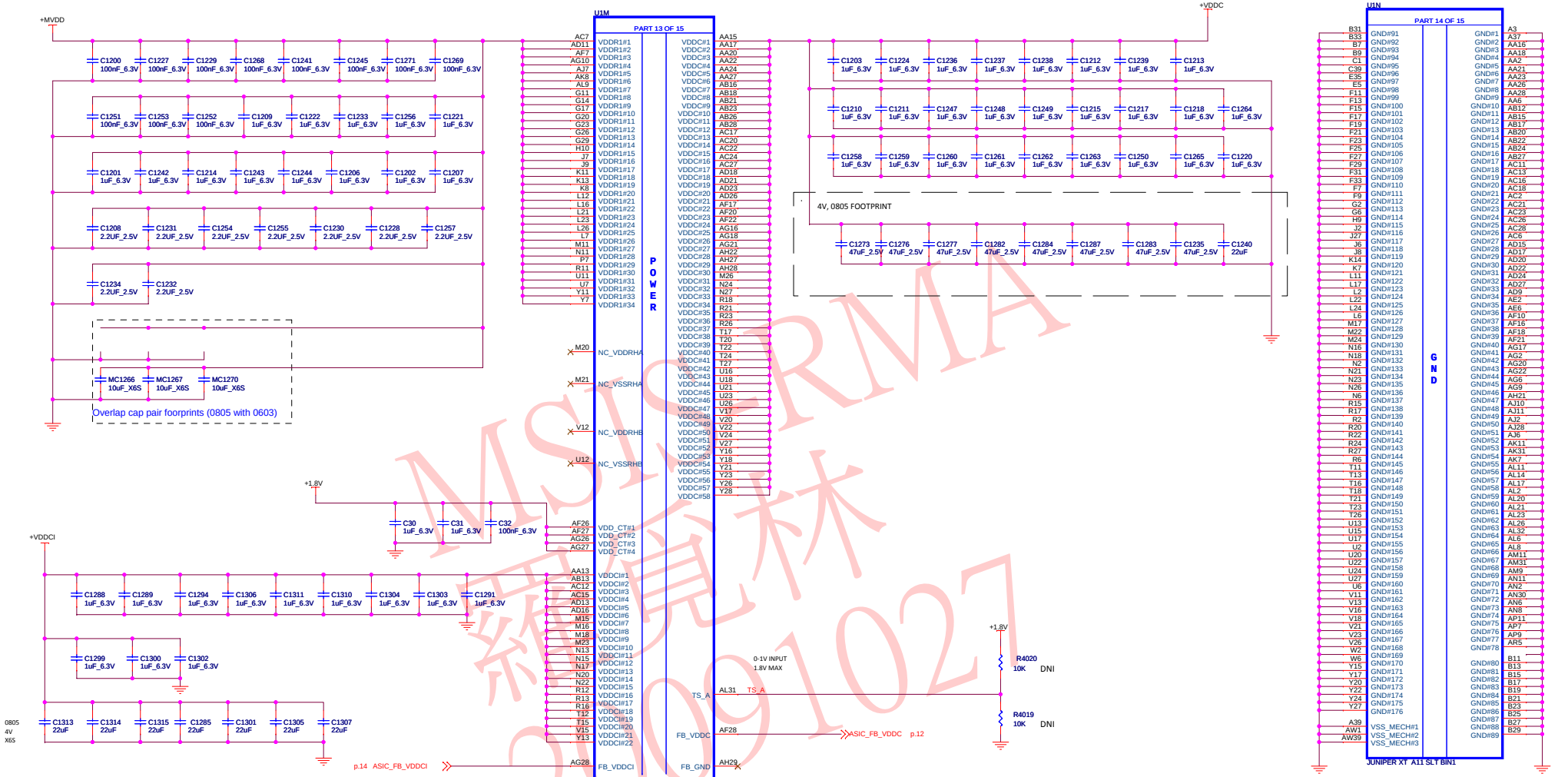
(11) JUNIPER Power & GND



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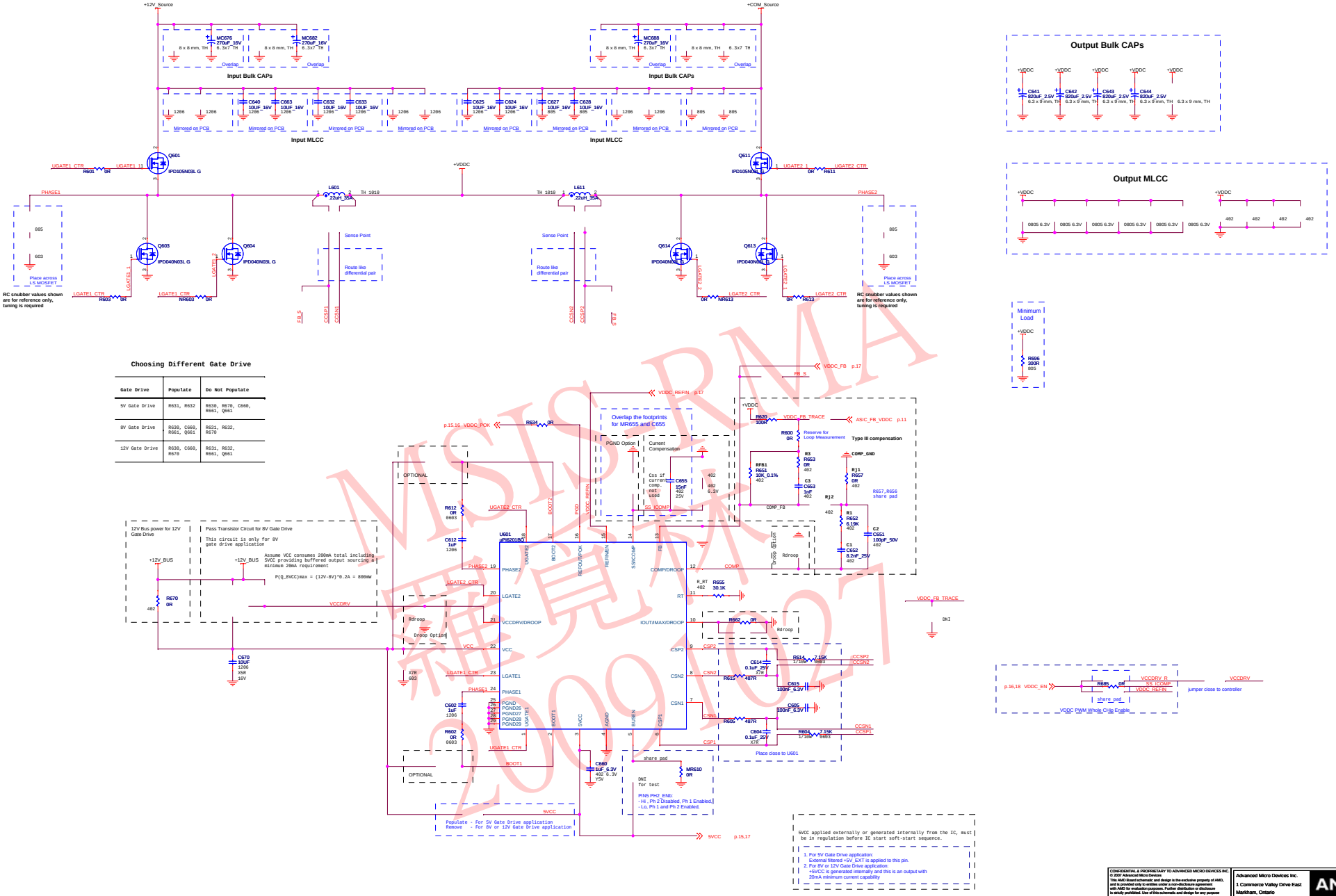

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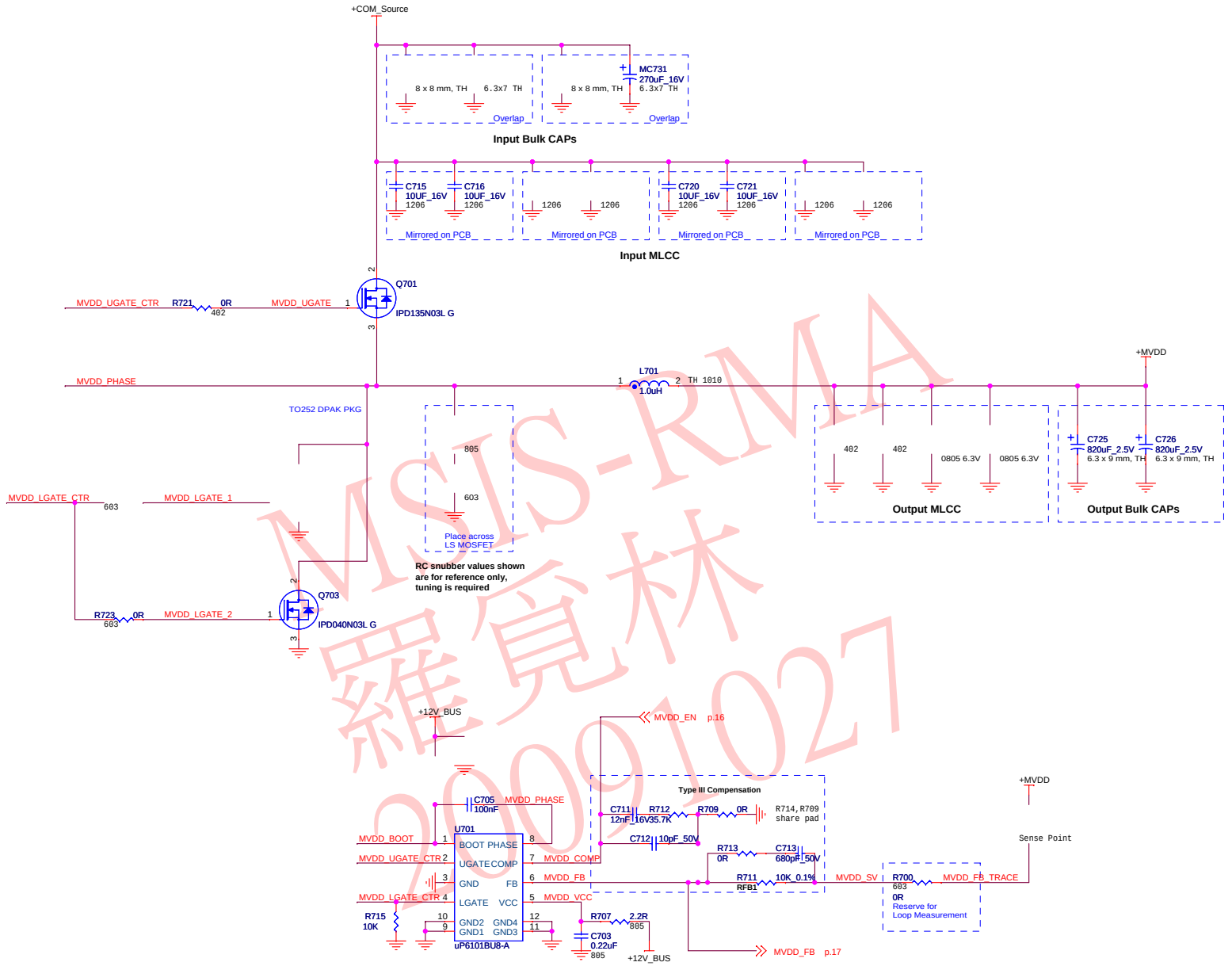

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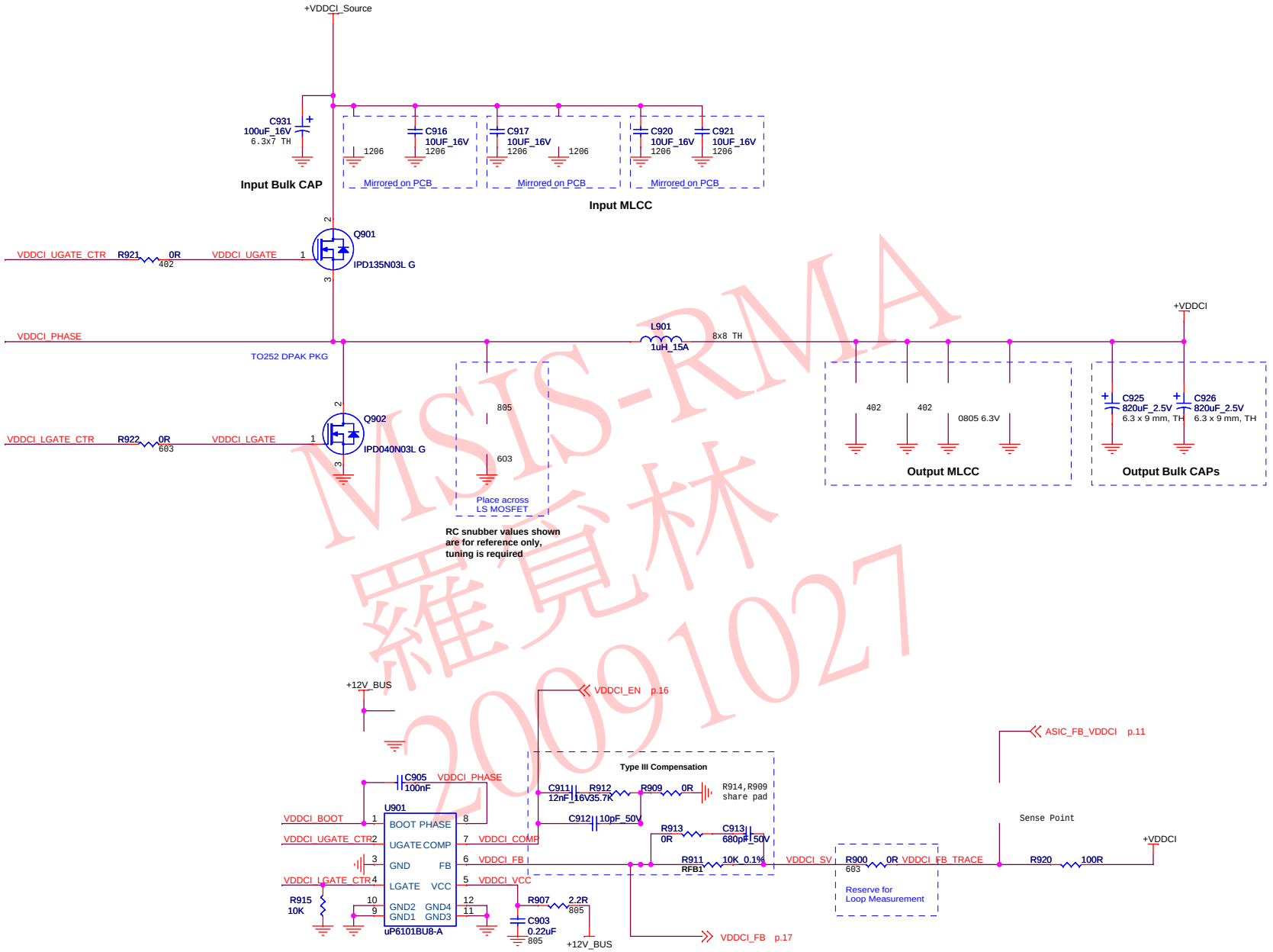

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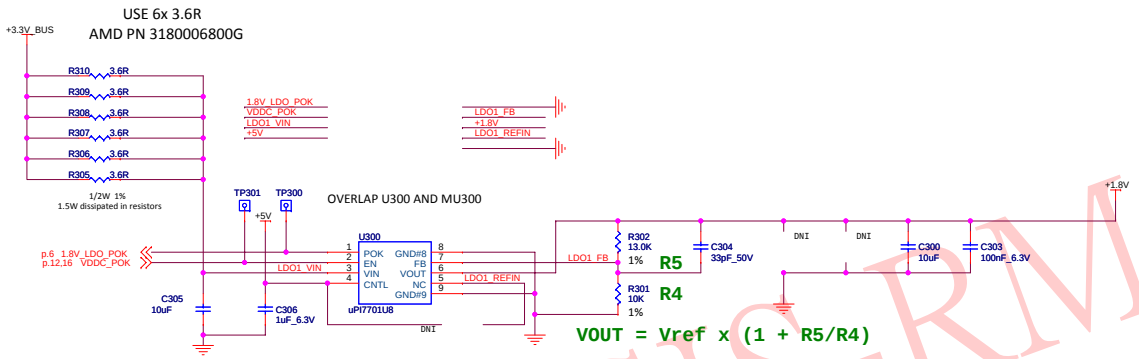
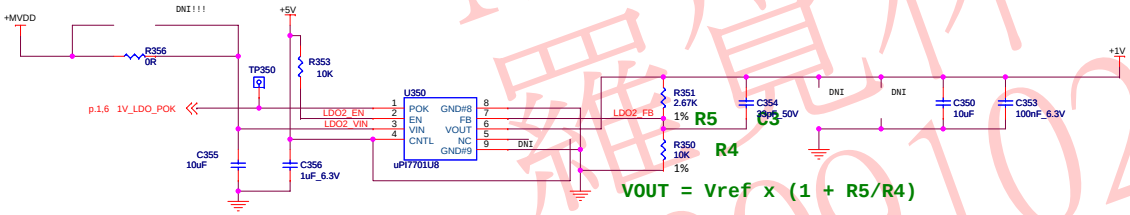
(15) Linear Regulators

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

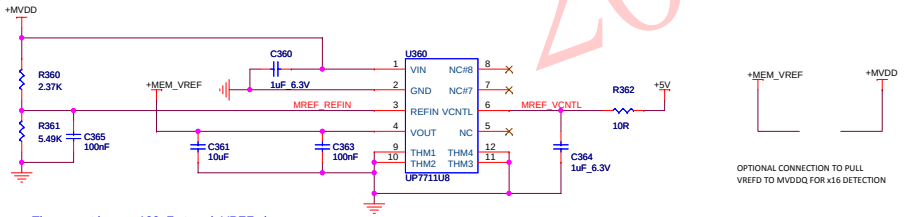
LDO #1: Vin = 3.00V to 3.60V (3.3V +/- 9%) Vout = +1.8V +/- 2%; Iout = 1.6A (TBV) RMS MAX
PCB: 50 to 70mm sq. copper area for cooling



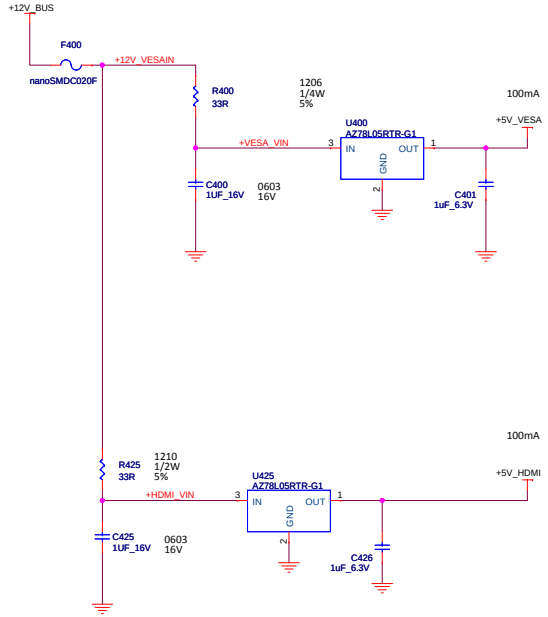
LDO #2: Vin = +1.32V to 1.84VMAX Vout = +1.01V +/- 2% Iout = 1.7A (TBV) RMS MAX
PCB: 50 to 70mm sq. copper area for cooling

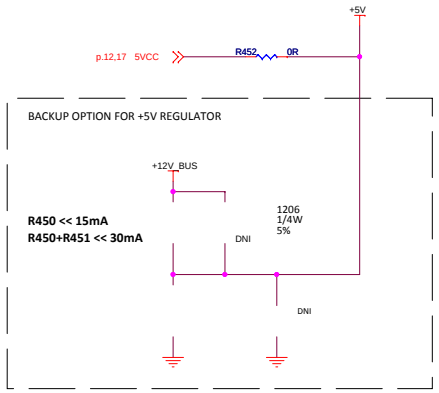


Memory VREF: Vin = MVDDQ Vout = 0.7xMVDDQ



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





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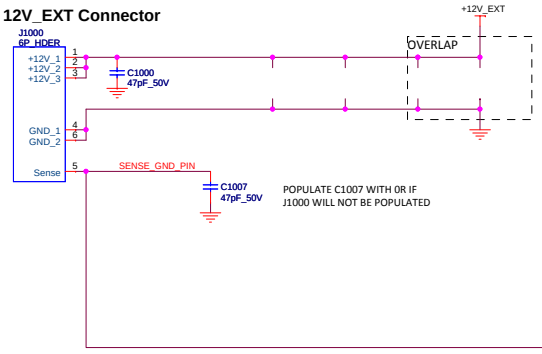
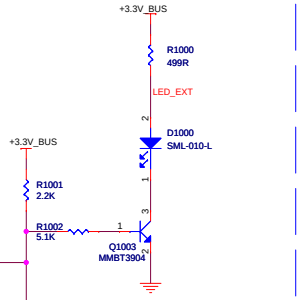
(16) Power Management - Power Gating and External Power Detect

12V_EXT Connector

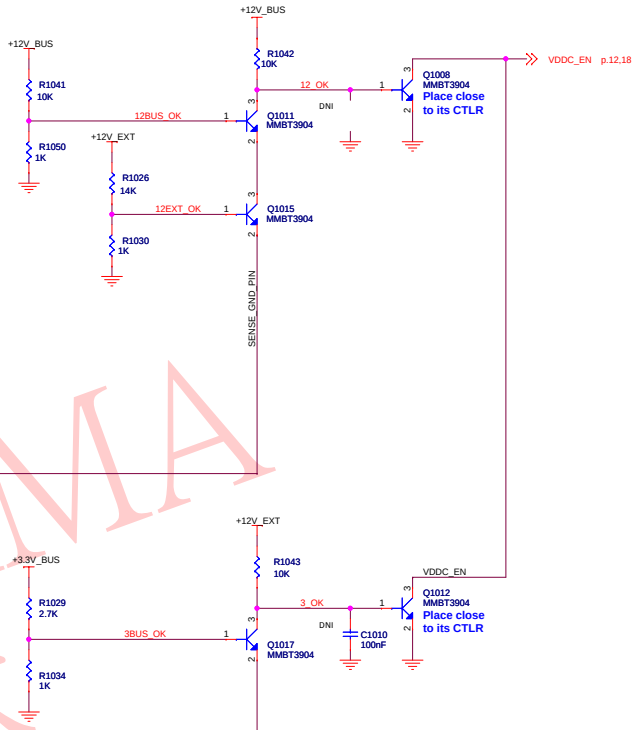


OPTIONAL LED

(LED " ON" indicates 12V_EXT power is not connected)
(client request only)

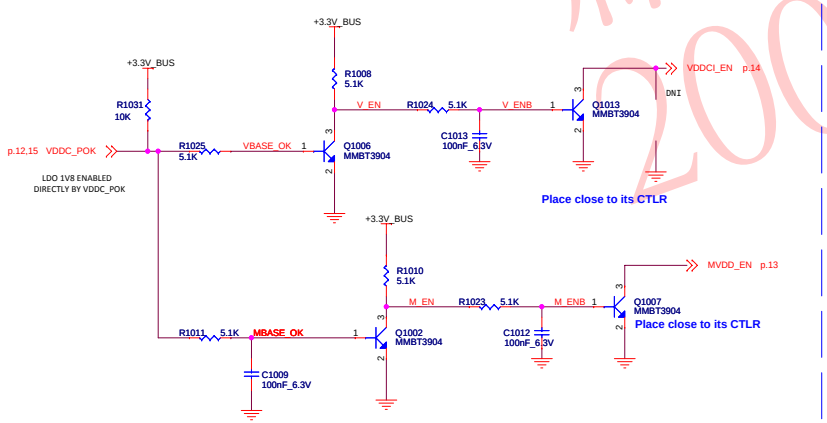


12V_BUS, 12V_EXT & 3V3_BUS POWER SEQUENCING



POWER SEQUENCING CIRCUIT

FOR MVDD & VDDCI
(ENABLES CANNOT BE SHARED SINCE IT IS ALSO THE COMPENSATION PIN OF THE SMPS REGULATOR)



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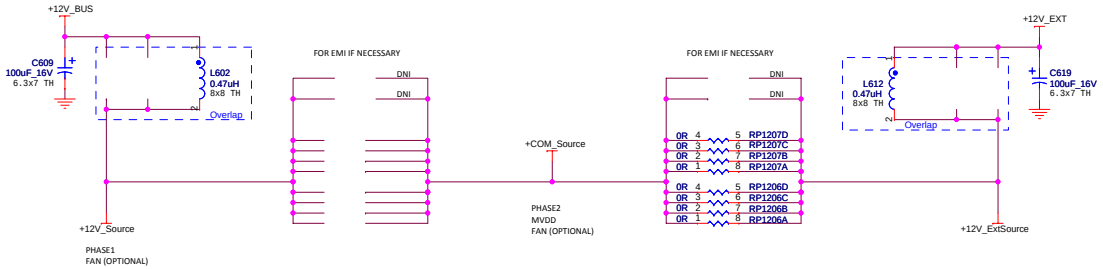
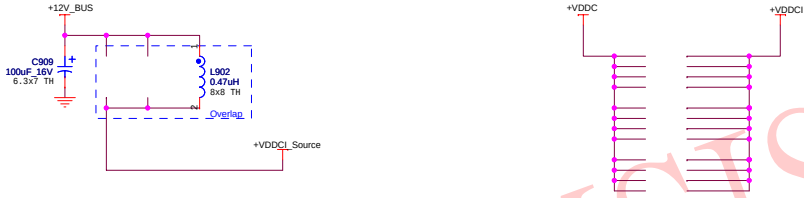
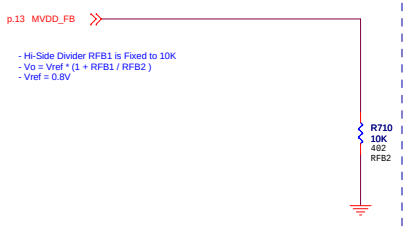
(18) Power Management 2

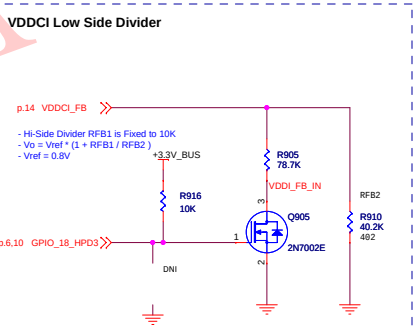




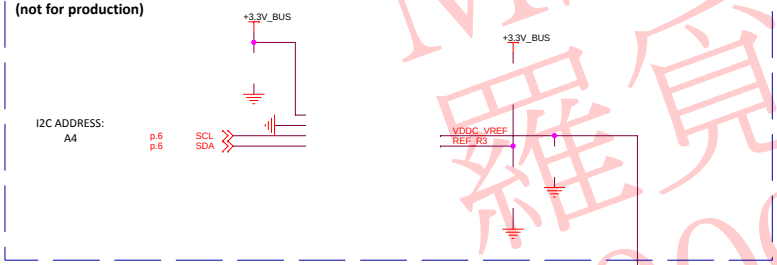
MVDD Low Side Divider



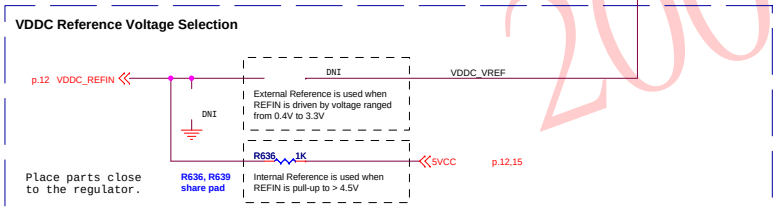
VDDCI Low Side Divider



I2C VOLTAGE REFERENCE FOR VDDC (not for production)



VDDC Reference Voltage Selection

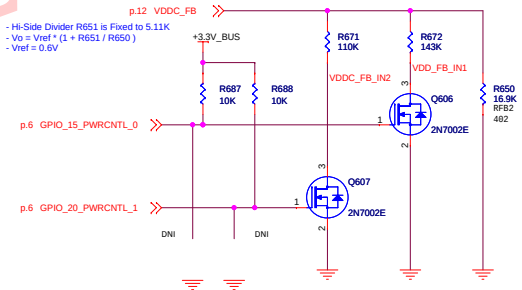


VDDC Vref Mode Selection

Vref Mode	R636	R639/C689	Vref (V)
Internal	Populate	DNI	0.6
External	DNI	Populate	set by VID IC

VDDC Low Side Divider

R650 must be pouplated only if VID is not used and VDDC VREFIN is pulled high to >4.5V. Then this will set VDDC to a fixed value.



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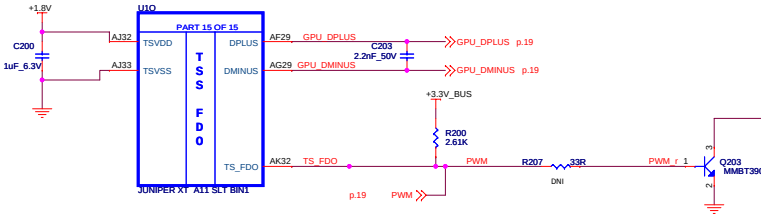
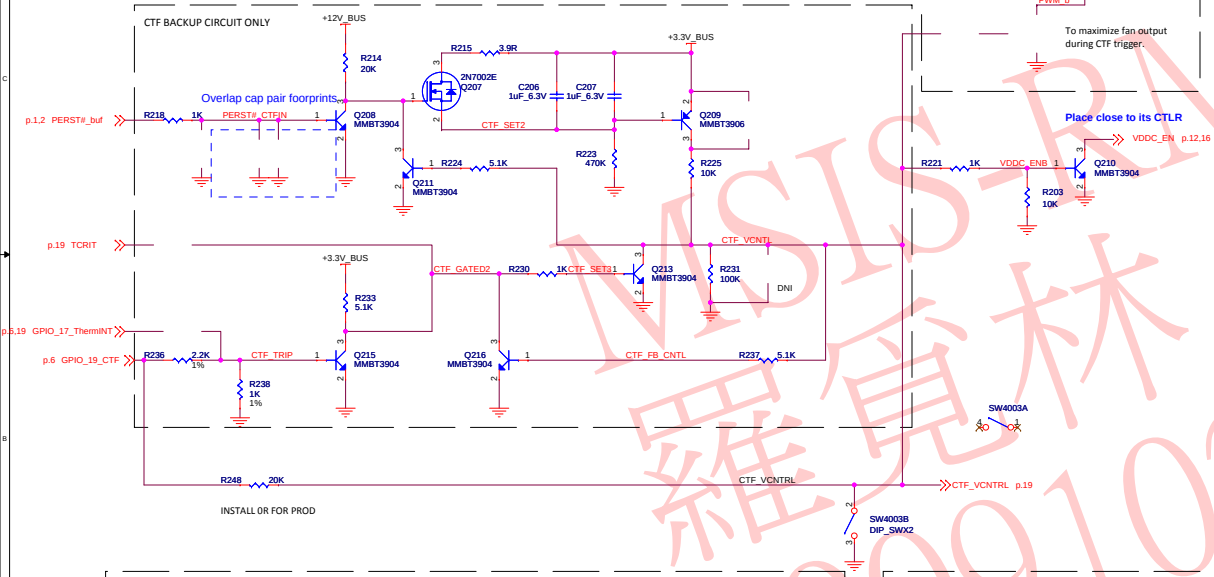
(19) Mechanical and Thermal Management



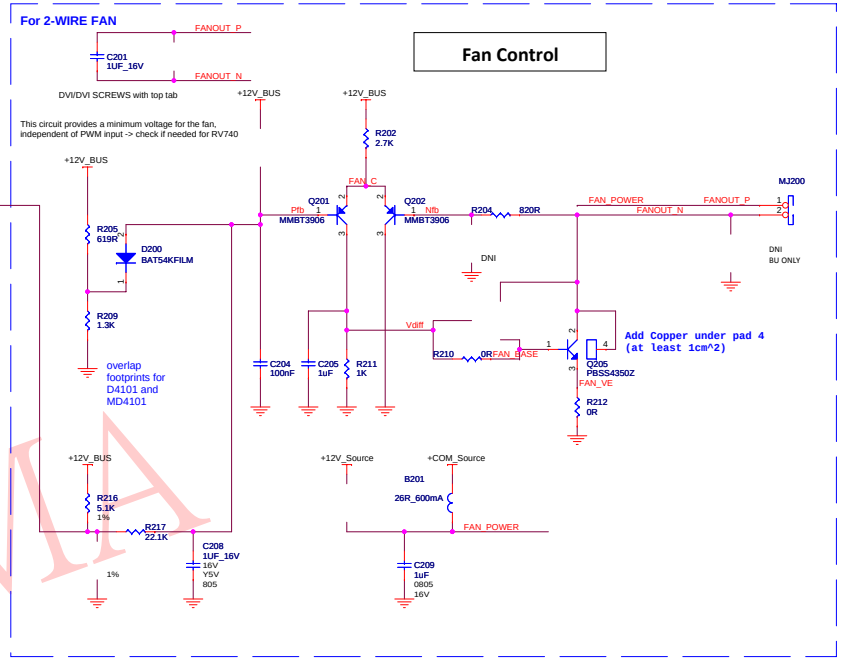
Warning: TS_FDO is not 5V tolerant. MAX sink current 1.65mA

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.

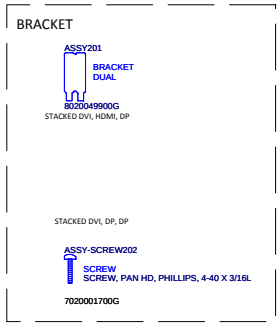
Critial Temperature Fault



Fan Control

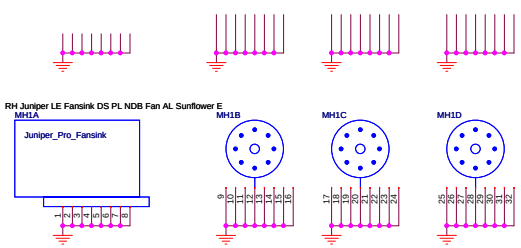


BRACKET

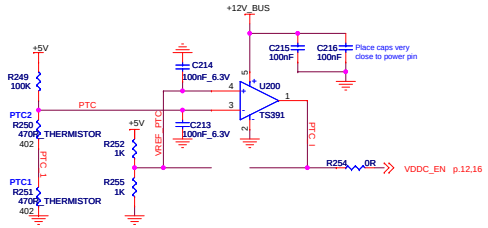


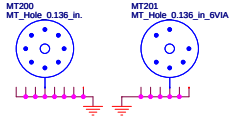
HEATSINK

7120574000G
7120674000G
7120384000G



VDDC Thermal Protection





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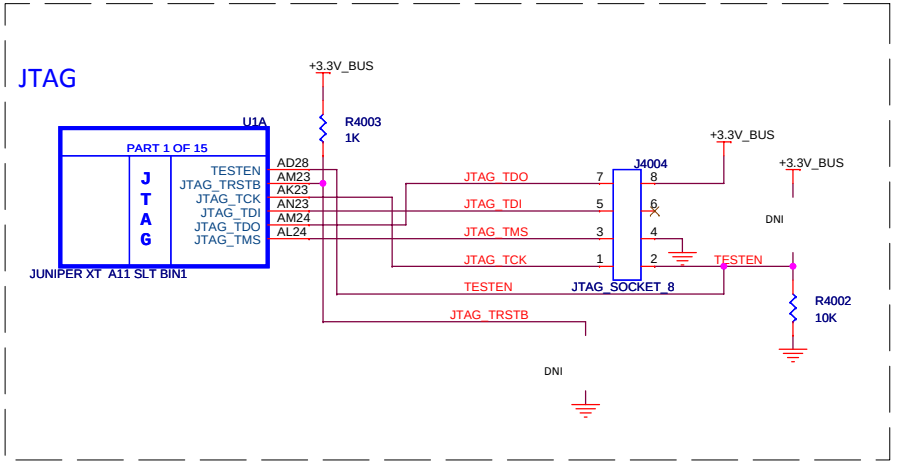
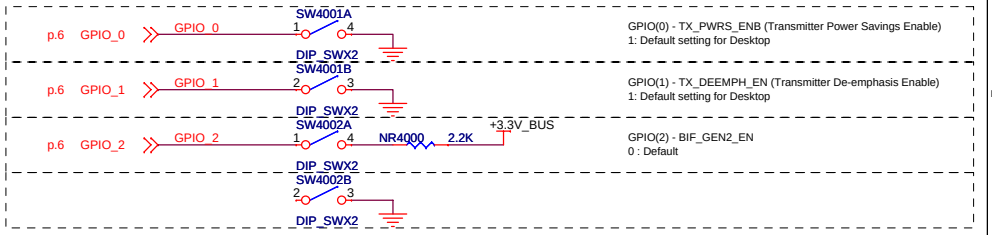
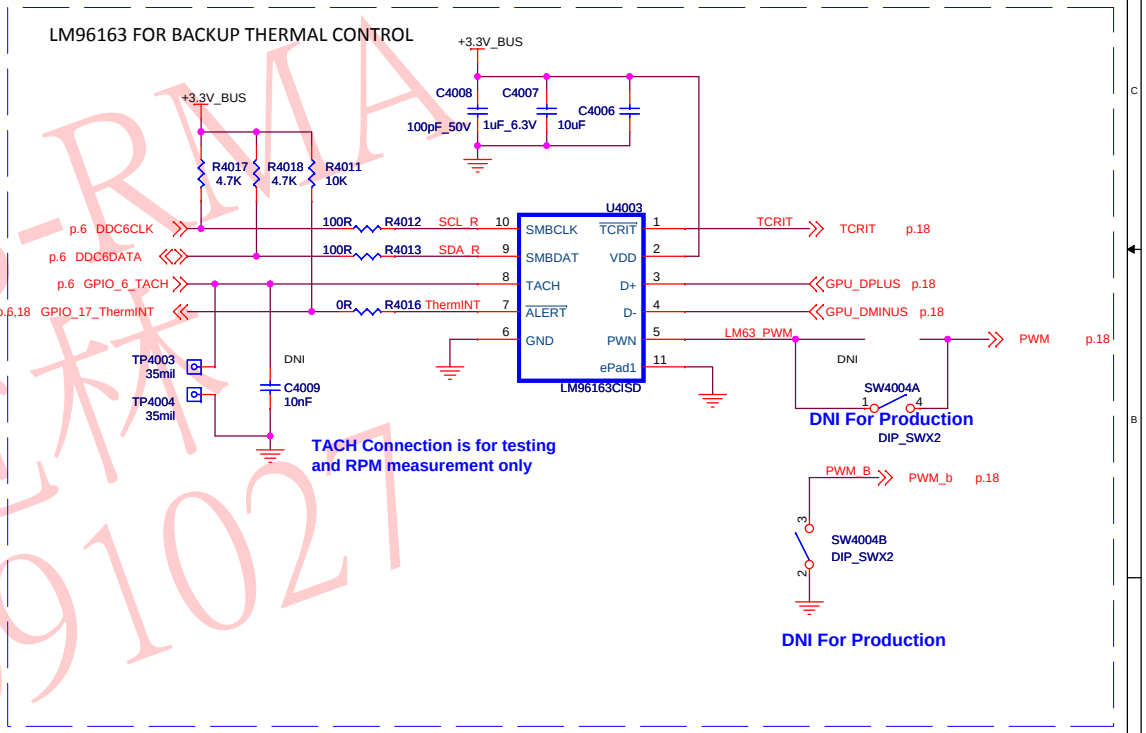
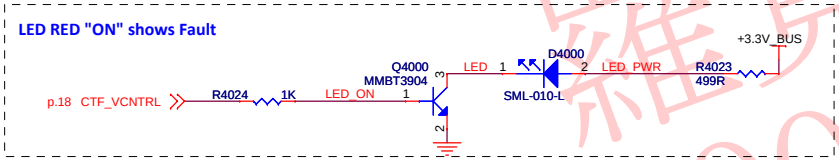
(19) Debug Circuits



SWITCH CONNECTIONS TO PINSTRAPS







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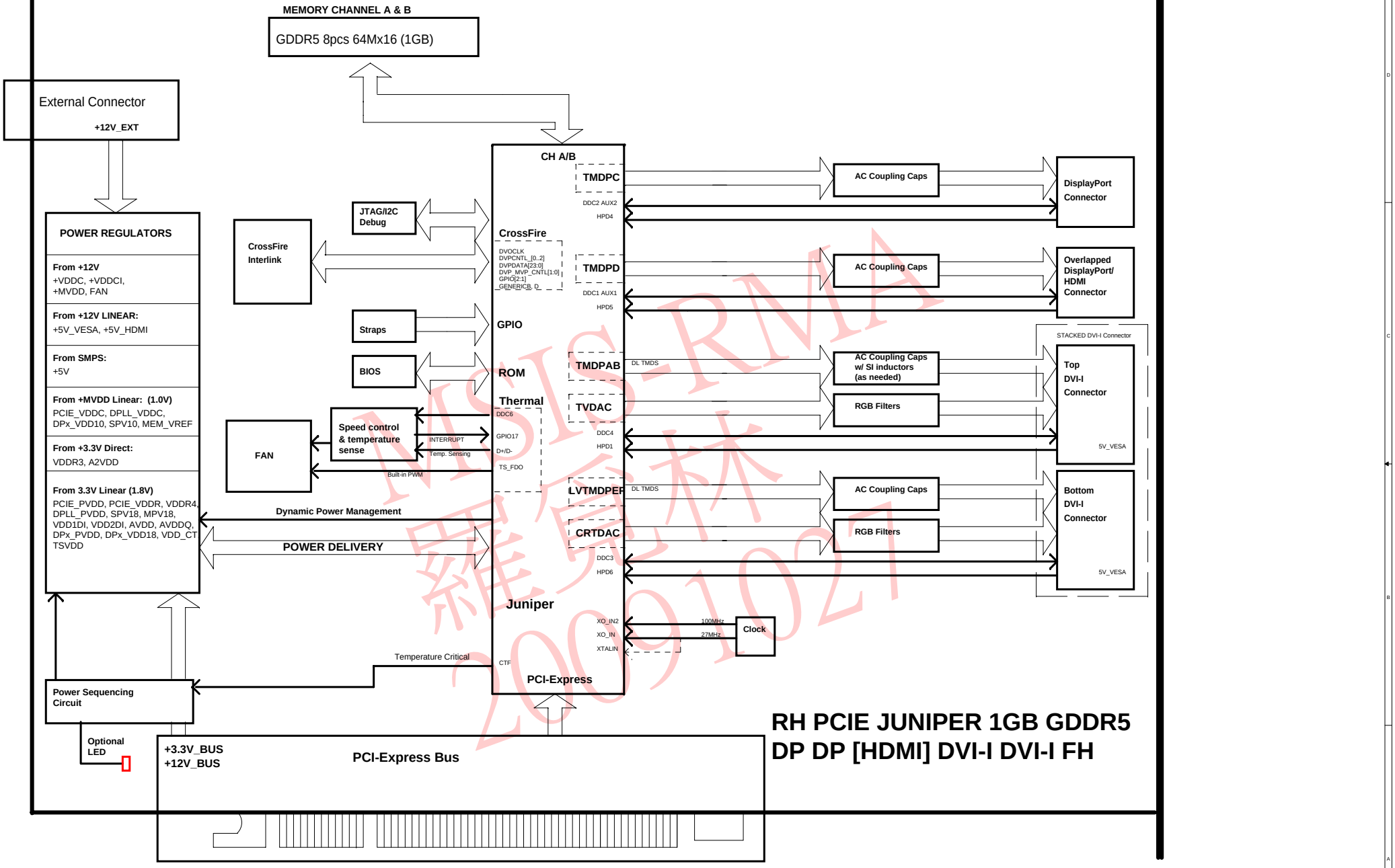

RH PCIE JUNIPER 1GB GDDR5
DP DP [HDMI] DVI-I DVI-I FH

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Title	Schematic No.	Date:
RH JUNIPER LE GDDR5 1GB DP+DP/HDMI+2xDVI	102-C01201-00	Wednesday, September 02, 2009

REVISION HISTORY

NOTE: **This schematic represents the PCB, it does not represent any specific SKU.**
For Stuffing options (component values, DNI's, ...) please consult the product specific BOM.
Please contact AMD representative to obtain latest BOM closest to the application desired.

Rev 12

Sch Rev	PCB Rev	Date	REVISION DESCRIPTION
00	00A	2009/03/23	INITIAL -00A RELEASE
01	00B	2009/07/13	INITIAL -00B RELEASE