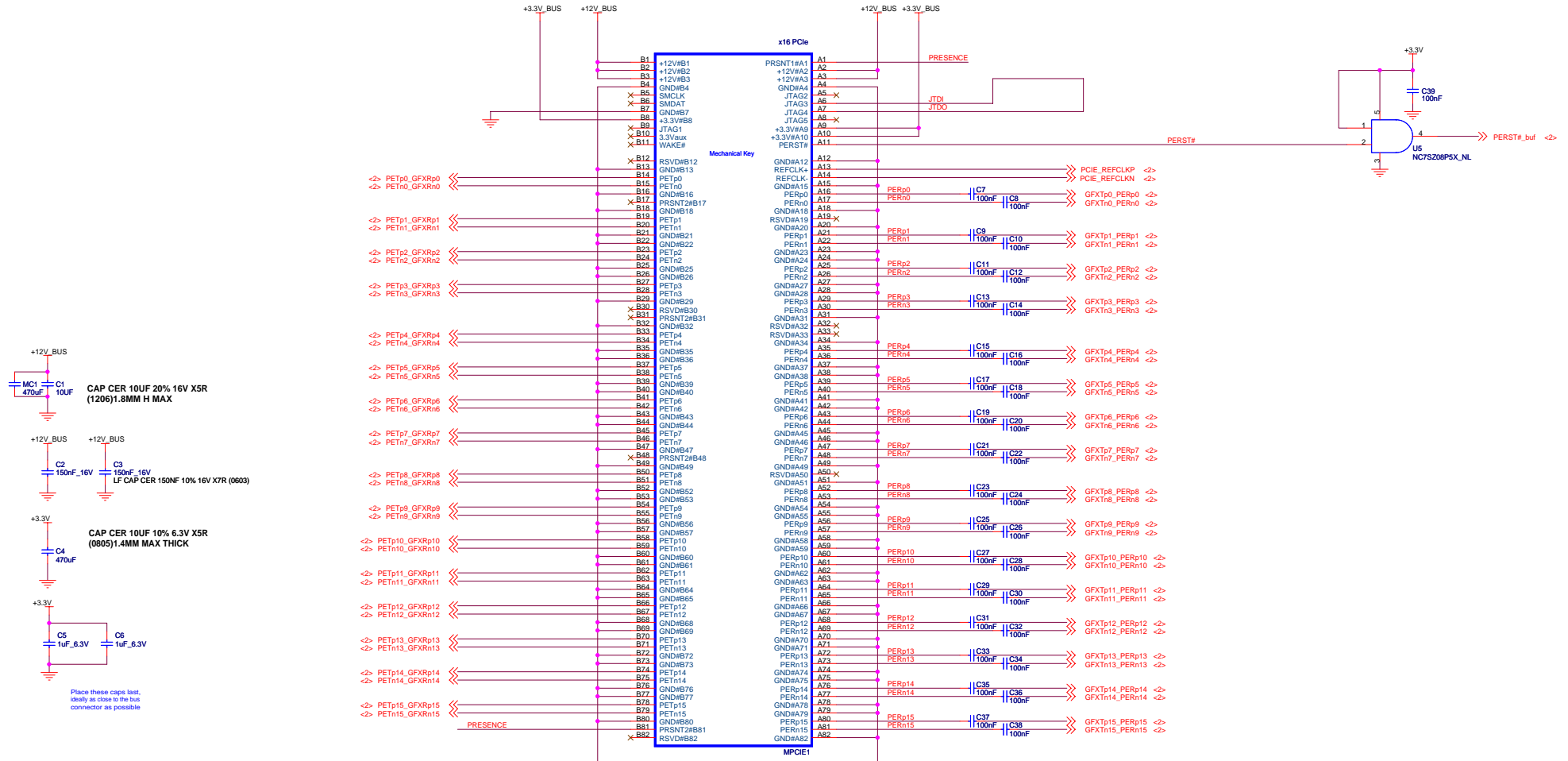


PCI-EXPRESS EDGE CONNECTOR



SYMBOL LEGEND	
DNI	DO NOT INSTALL
#	ACTIVE LOW
	DIGITAL GROUND
	ANALOG GROUND

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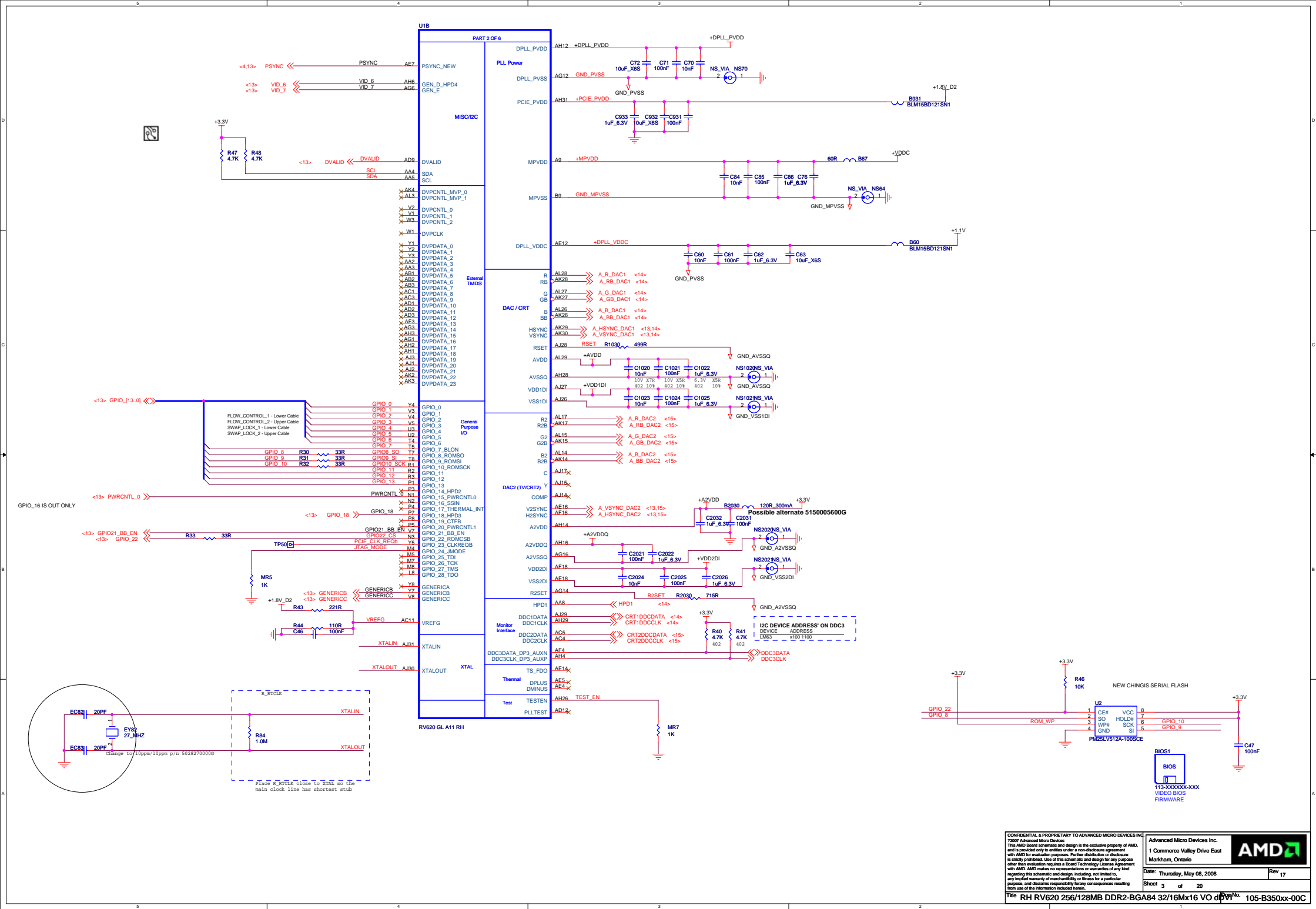


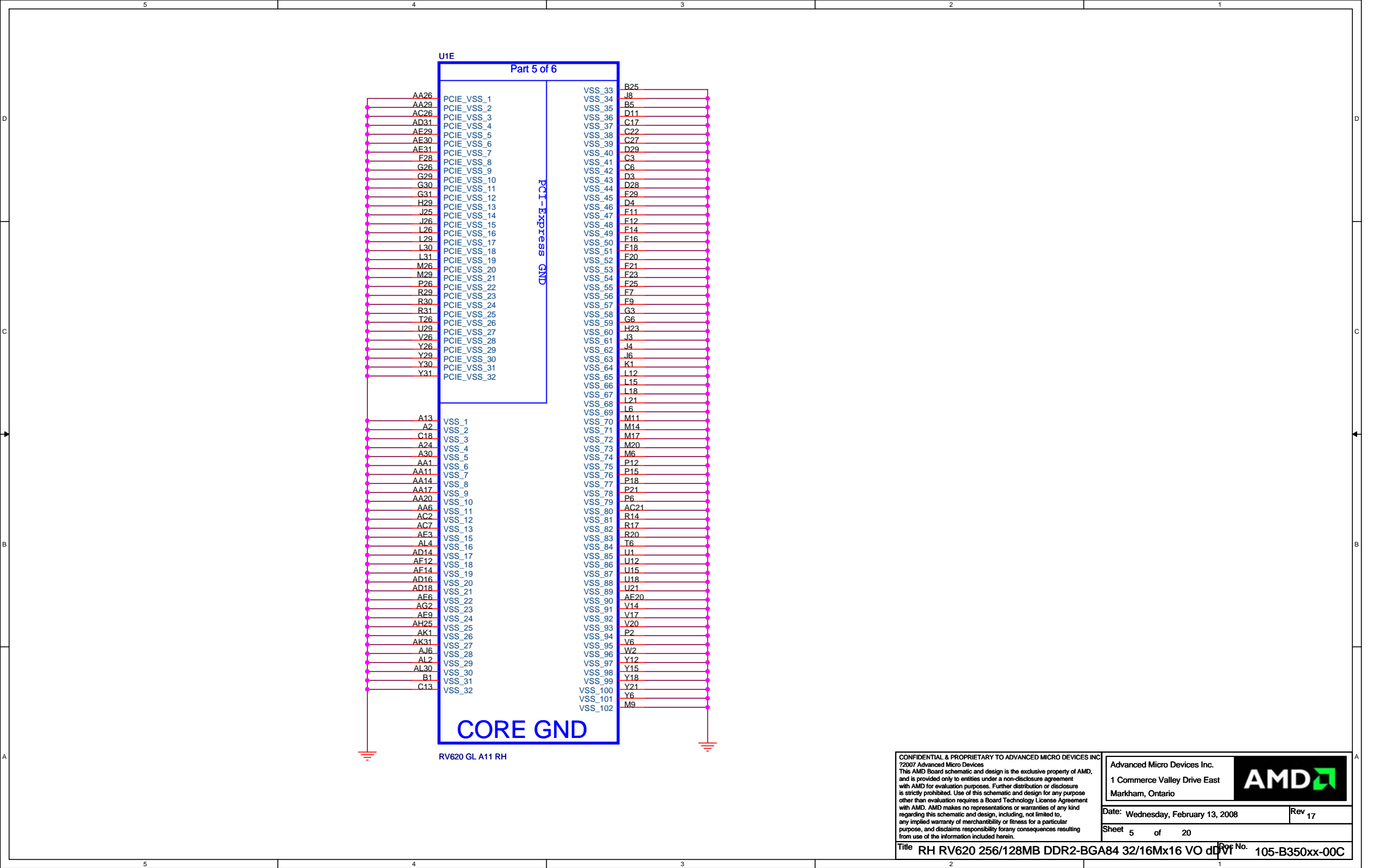
Date: Thursday, May 06, 2008

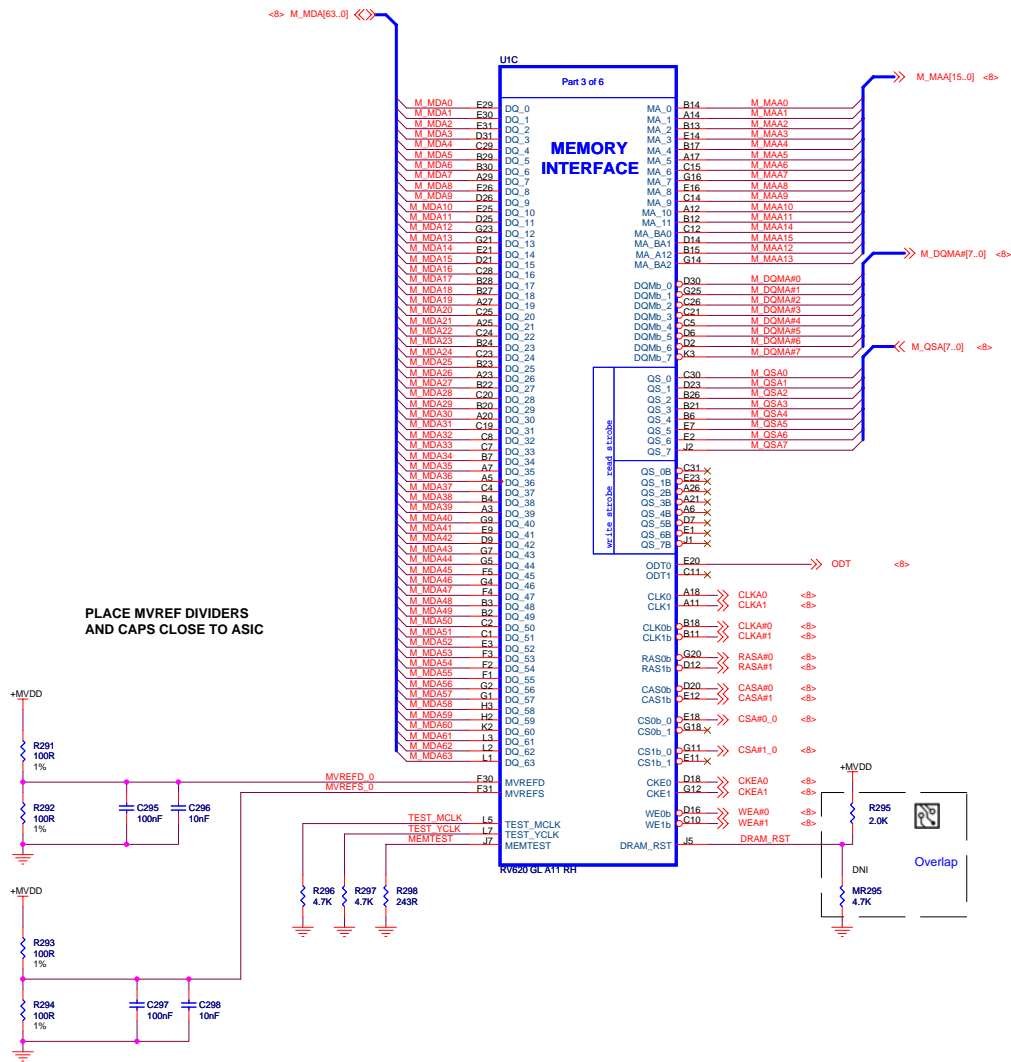
Rev 17

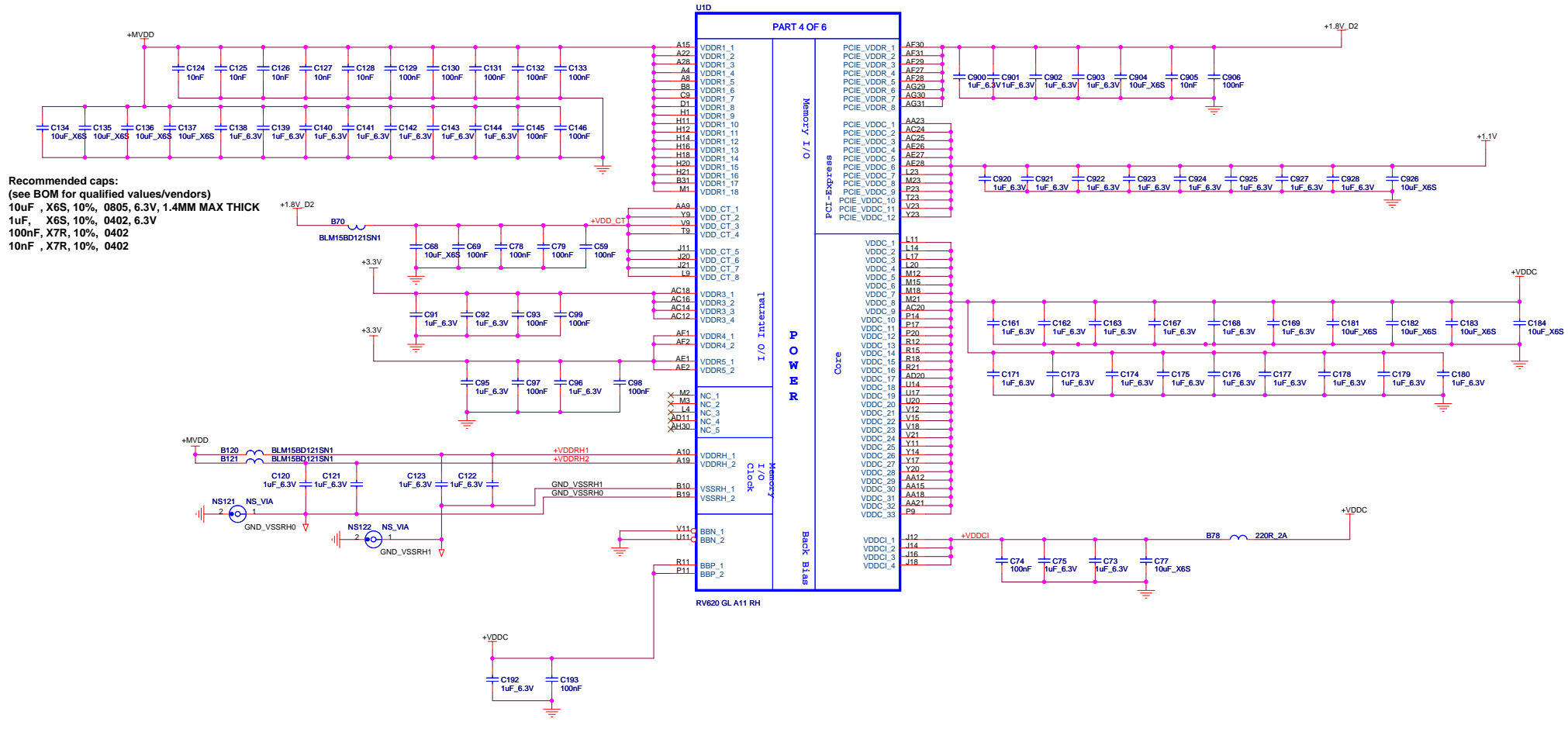
Sheet 1 of 20

Title RH RV620 256/128MB DDR2-BGA84 32/16Mx16 VO dDVT No. 105-B350xx-00C





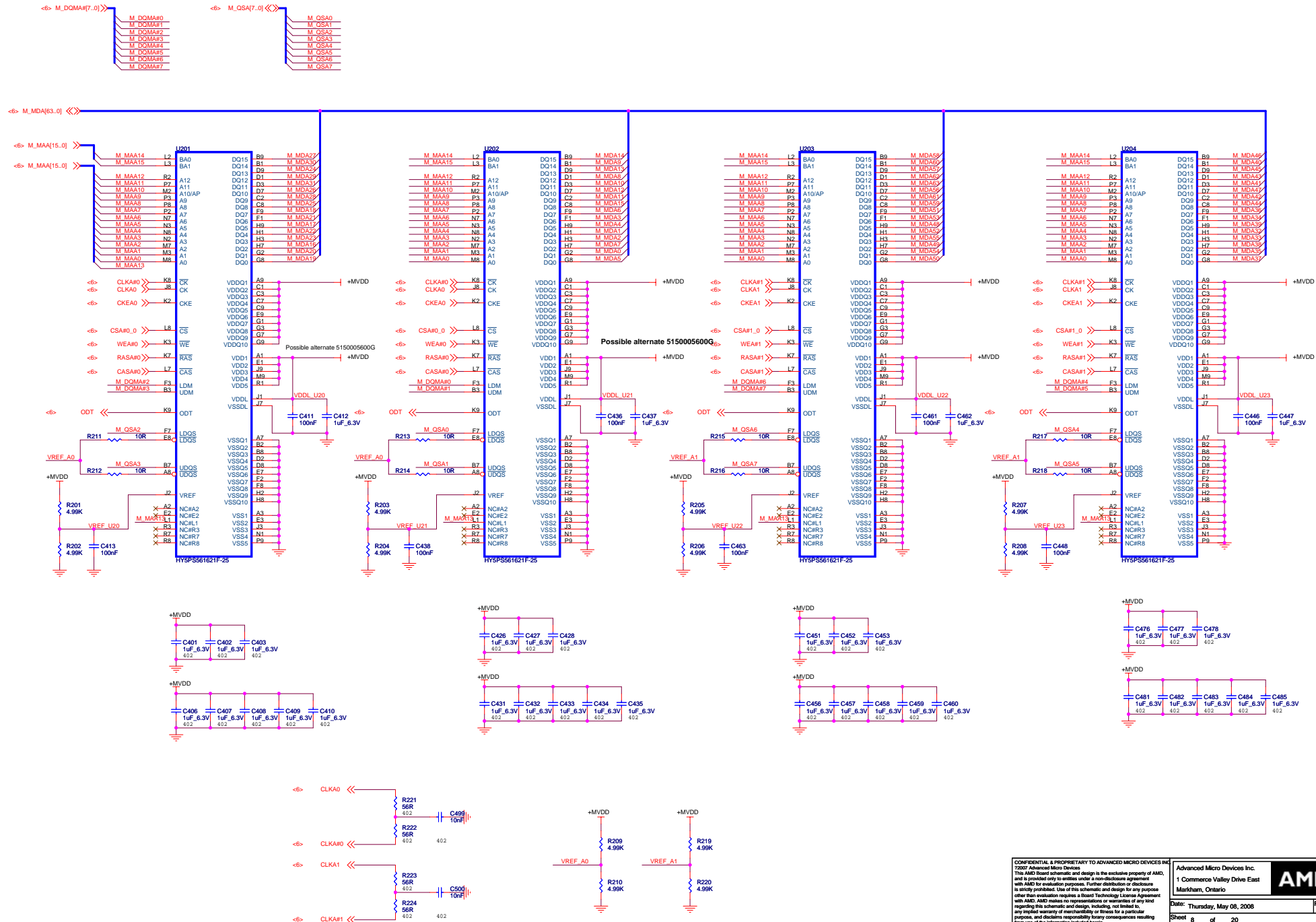


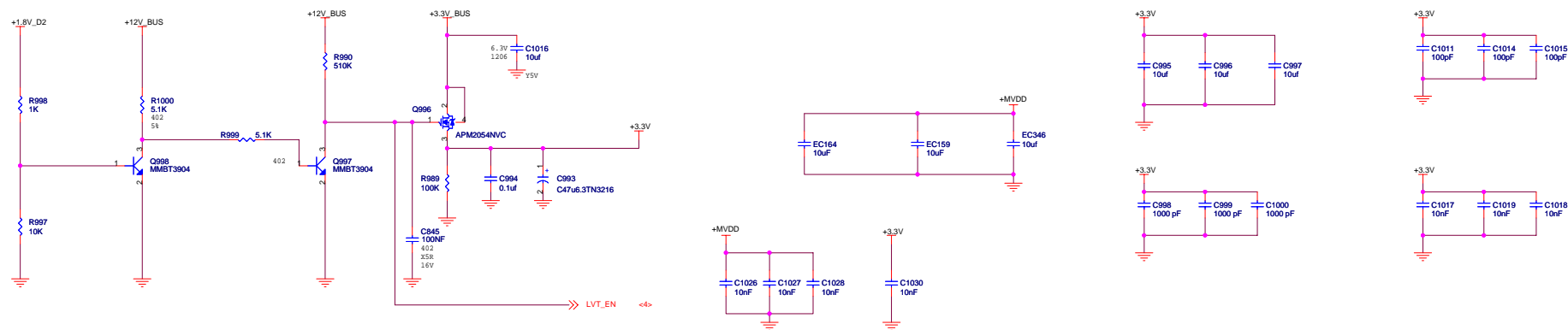
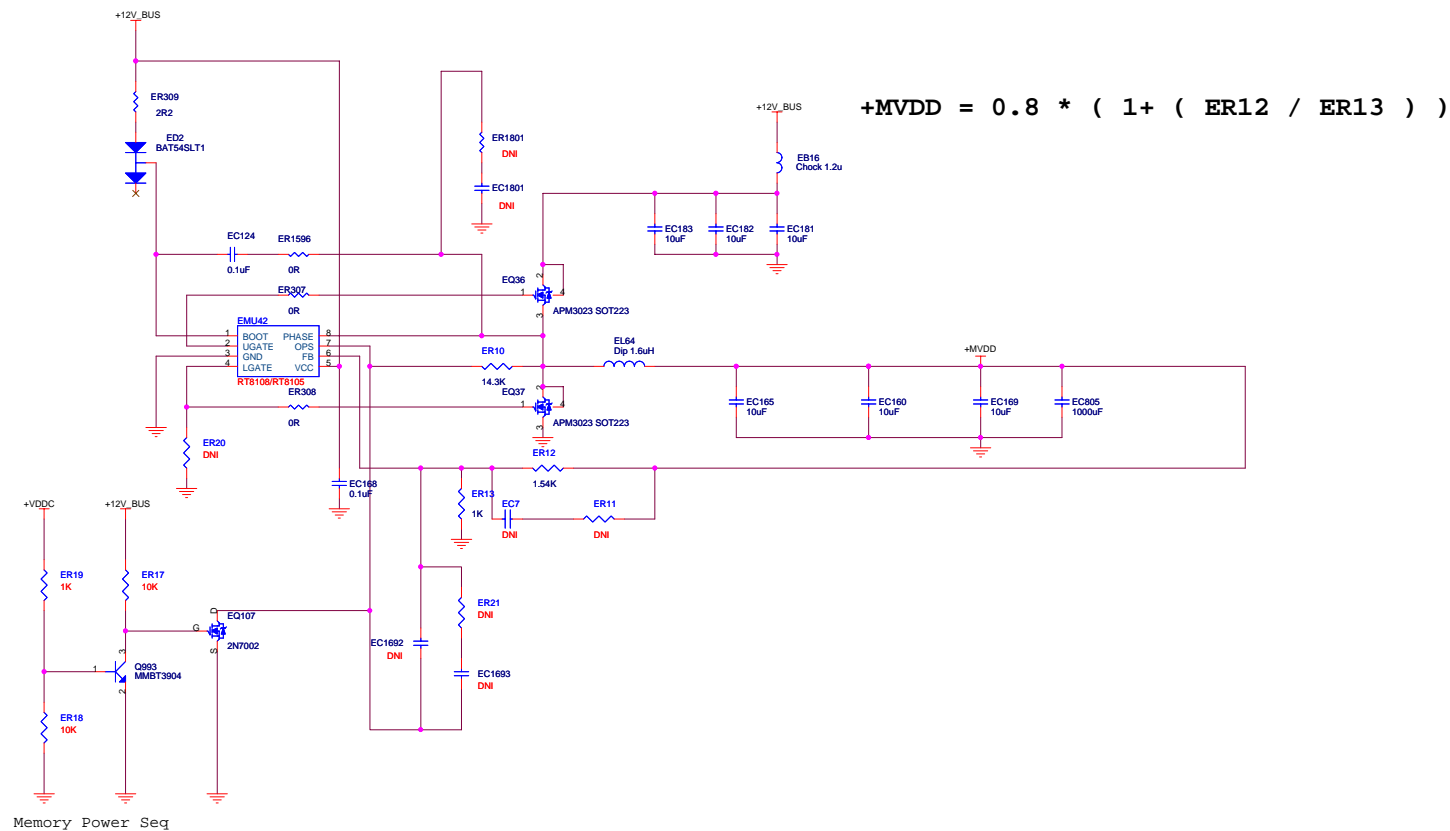


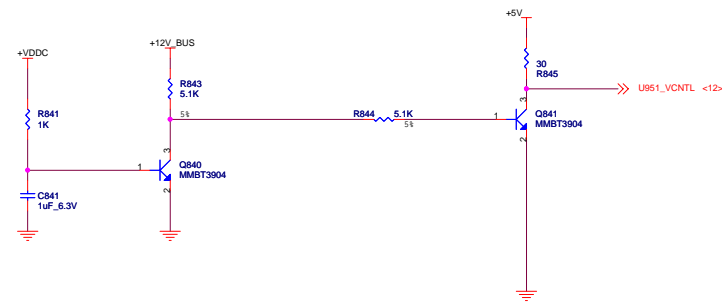
Recommended caps:
(see BOM for qualified values/vendors)
10uF , X6S, 10%, 0805, 6.3V, 1.4MM MAX THICK
1uF , X6S, 10%, 0402, 6.3V
100nF, X7R, 10%, 0402
10nF , X7R, 10%, 0402

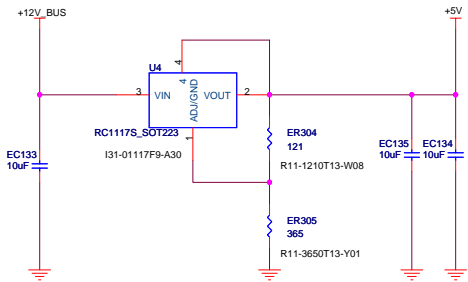
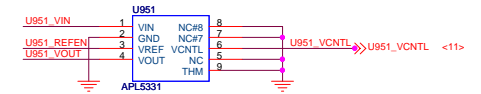
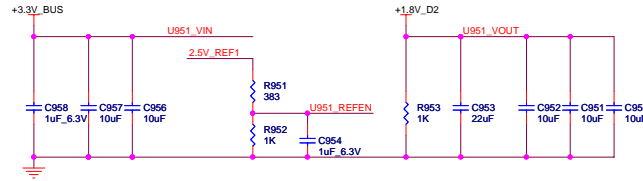
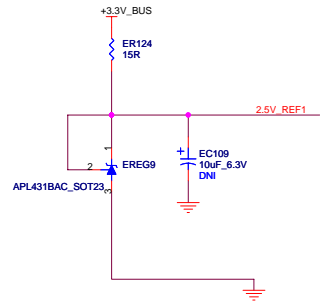
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Date: Wednesday, February 13, 2008		Rev 17	
Sheet 7 of 20		Doc No. 105-B350xx-00C	

CHANNEL A: RANK 0 128MB DDR2

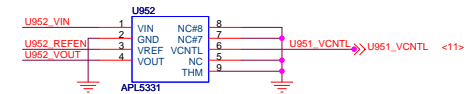
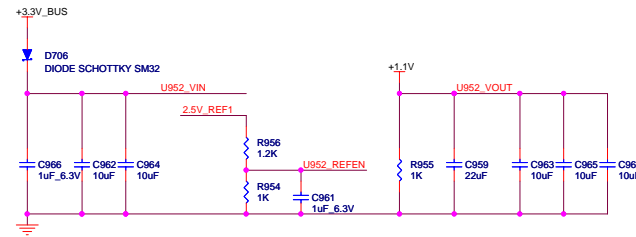




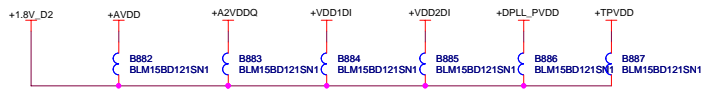


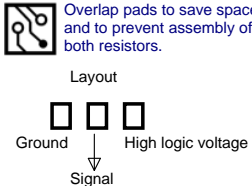


$$V_{out} = 1.25V * [1 + (ER305/ER304)]$$



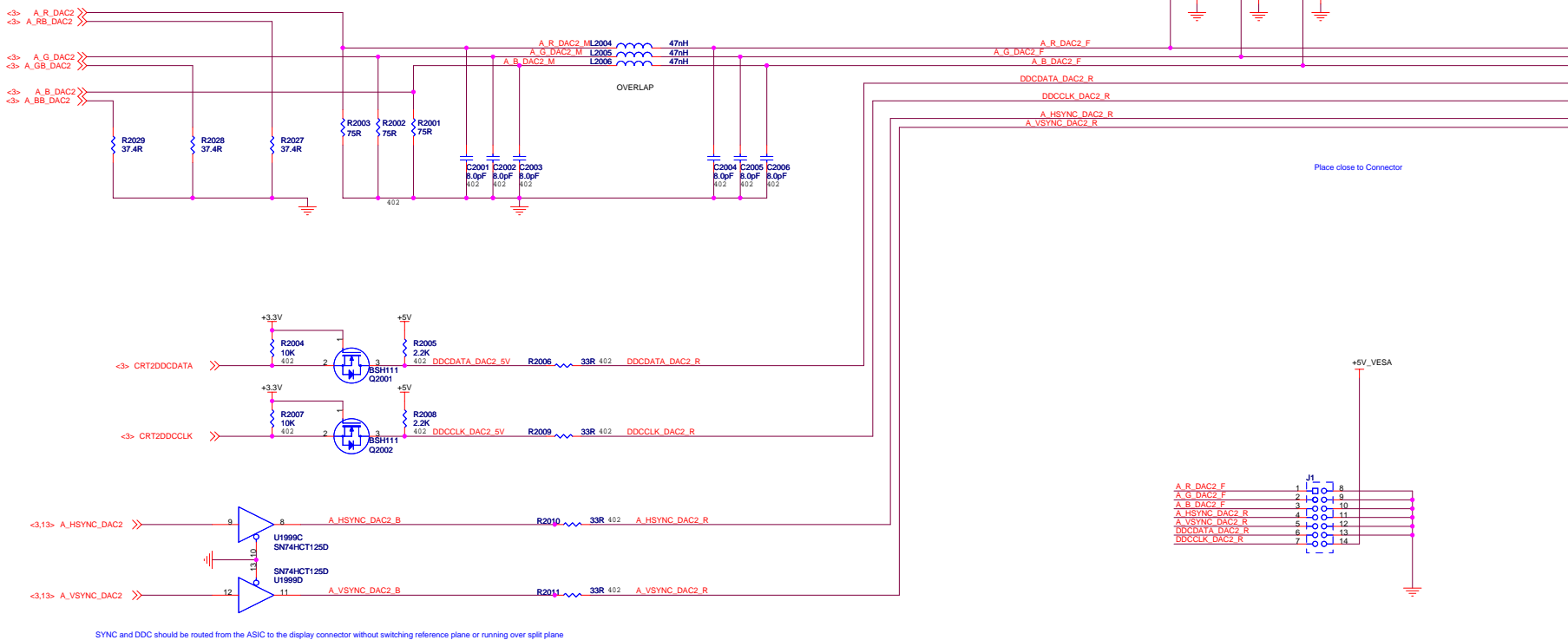
Shared Power Rails







Place close to Connector
Pseudo differential RGB signals should be routed from the ASIC to the display connector without switching reference plane or running over split plane



TMDs_1(Single_Link) + DAC_2-CRT



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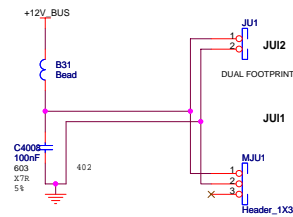
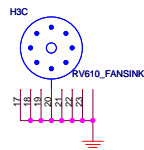
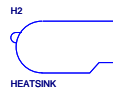
Title RH RV620 256/128MB DDR2-BGA84 32/16Mx16 VO ddr2 Rev No. 105-B350xx-00C

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Date: Thursday, May 08, 2008 Rev 17

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5 4 3 2 1

D

D

C

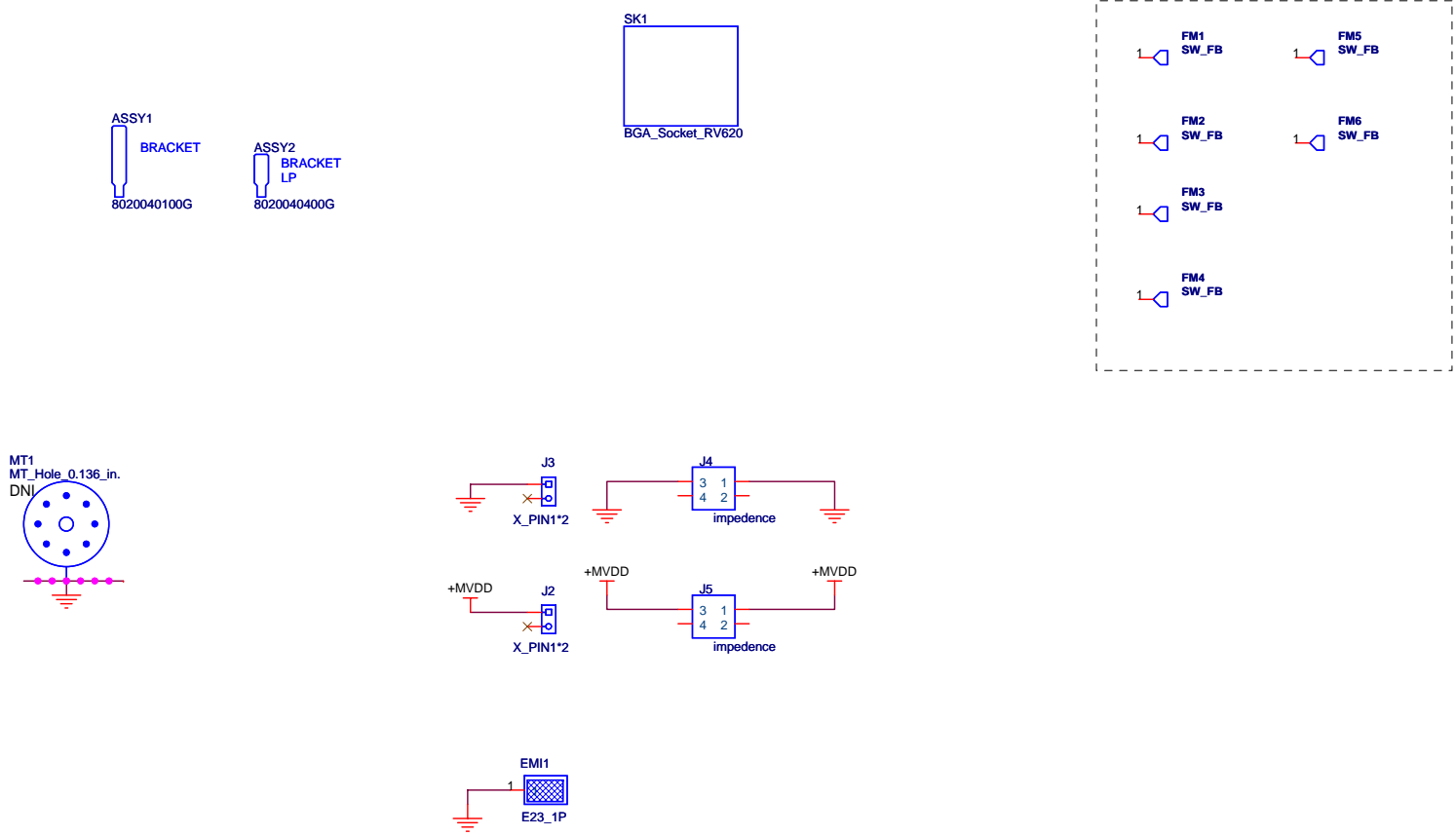
C


B

B

A

A



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Date: Thursday, May 15, 2008				Rev 17	
Sheet 18 of 20				Doc No. 105-B350xx-00C	
Title RH RV620 256/128MB DDR2-BGA84 32/16Mx16 VO d DVI					

5 4 3 2 1



Title

RH RV620 256/128MB DDR2-BGA84 32/16Mx16 VO dDVI

Schematic No.

105-B350xx-00C

Date:

Monday, January 28, 2008

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

17

Sch
RevPCB
Rev

Date

REAL

REVISION DESCRIPTION

01 00A 2007.05.07 START NEW SCHEMATIC. DERIVED FROM B170 (RV610) SCHEMATIC.

02 00A 2007.05.17 p. 4 MR155/R155 FIX SHORT

03 00A 2007.05.17 RM R7, NR7, R5, MB60, MR45, R45, R890, R1248, R1247, R1242, R1243, C853, C863; ADD R2, B890, MR890, C846; CHANGE R1022, R1023;

04 00A 2007.05.22 REMOVE GND_TXVSSR, GND_PVSS; AG23 NOW NC - WAS SCHEM MISTAKE; ADD R858 FOR BUO; R858 CHANGE TO 1210;

05 00A 2007.05.24 CTF: ADD Q1252, R1254, R1255, R1256, R1258, Q1253, Q1254, CHANGE U1250 TO SINGLE FF; UPDATE BLOCK DIAGRAM.

06 00A 2007.05.25 LVTM: ADD R110, RM R109, MR109, R108, R107;

07 00A 2007.05.28 LVTM: ADD C118, RM C104; REMOVE MR85, MR86 FOR SIMPLIFICATION;

08 00A 2007.05.28 XTALIN/OUT: LAYOUT EASEMENT; REMOVE MR108 (R849 ALREADY THERE); LVTM: ADD C119 (LOWER COST OPTION); POWER SUPPLY: REMOVE R706, MR707, R606 & MR607;

09 00A 2007.05.29 REMOVAL OF +5V: ADD R861, MR861, R862, REG861, R869, R863, R867; REMOVE MU830, U830, C830. R833, R834, C831, R832, MR832, R831, MR831; CONNECT DDC TO 5V_VESA;

010 00A 2007.05.30 CHNG C858 TO 3.3VBUS; CONNECTION TO R845 CHNG; ADD R870, MR870, C867;

011 00A 2007.05.30 REMOVE R4033; REMOVE B201-204; ADD R30-33 [PLACE NEAR ASIC]; REMOVE R3004, R3005;

012 00A 2007.05.31 REMOVE C164-C166, C170, C172 PER SIMULATION RESULTS - THESE CAPS DO NOT IMPROVE DECOUPLING. RM TP860 (LAYOUT CONSTRAINTS. ALREADY ICT TP ON THAT NET);

013 00A 2007.05.31 RM R154-R157, MR154-157 -> FUNCTIONALITY TAKEN BY EXISTING STRAPS. LAYOUT USE PLACE OF M/R154-7; ADD R7; RM MR706, MR606, B889, R863; ADD D861;

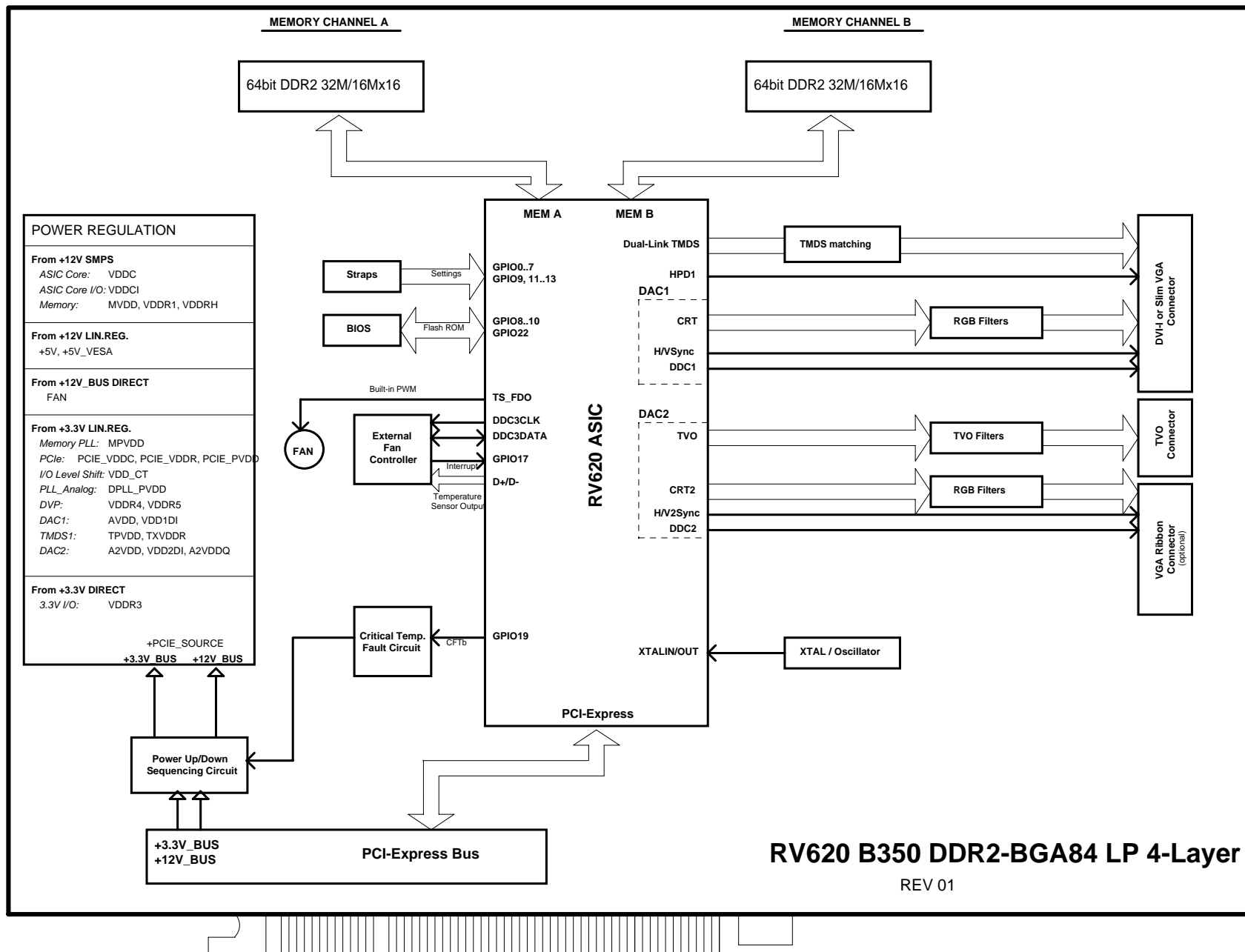
014 00A 2007.05.32 ADD SOCKET SK1

015 00A 2007.06.1 SK? CORRECTED TO SK1.

016 00B 2007.06.25 NO NETLIST CHANGES; - MOUNTING HOLES CHANGED TO 3.175mm;

017 00C 2007.10.01

- p. 1 - CONNECT B7 TO GND (SEE PA RV6XX H1)
- REMOVE R2. IT IS ALWAYS POPULATED, NO NEED TO ZERO OHM. THIS BOARD DOES NOT SUPPORT JTAG DEBUG;
- p. 11 - REMOVE R839. THIS CIRCUIT IS VERIFIED, THERE IS NO NEED TO BE ABLE TO DISCONNECT IT;
- p. 12 - REMOVE R870 - THIS OPTION NOT USED, VCNTRL MUST BE HIGHER THAN +3.3V;
- MR870 REMOVED - ALWAYS POPULATED, DO NOT NEED ZERO OHM RESISTOR OPTION;
- REMOVE R860 - WAS BRING UP ONLY OPTION;
- p. 17 - REPLACED FAN CIRCUIT WITH ONE THAT HAS FEEDBACK:
- ADD R4033, R4031, R4019, R4034, R4006, R4035, Q4004, R4035, Q40002. R4009, R4011, Q4003, R4012, R4013;



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