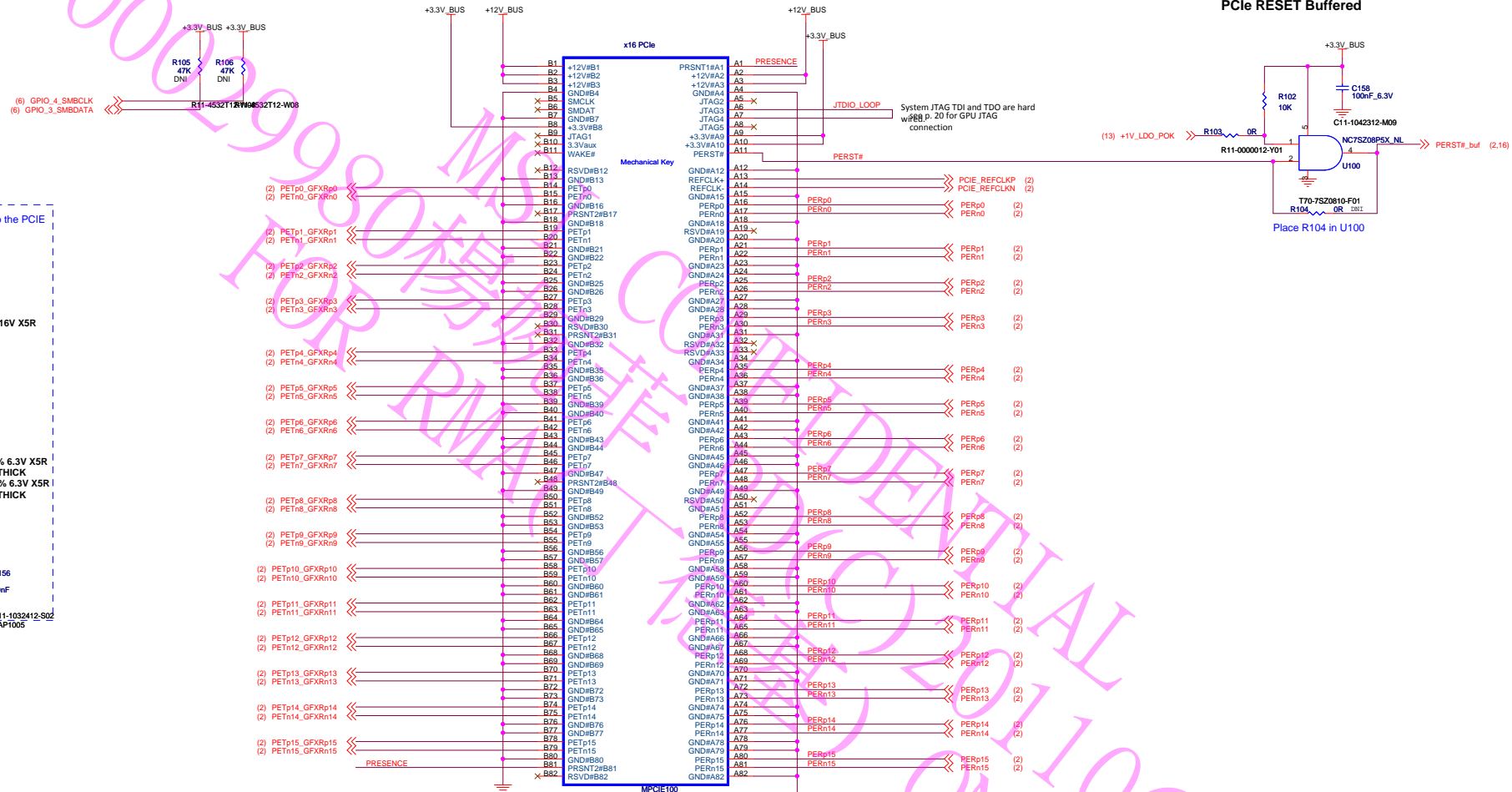


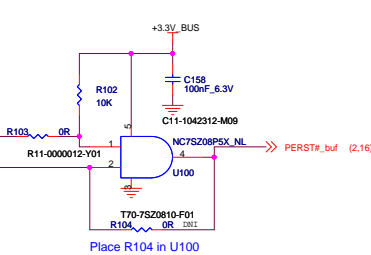
PCI-EXPRESS EDGE CONNECTOR

REDWOOD
ROGUE



Place these caps as close to the PCIe connector as possible

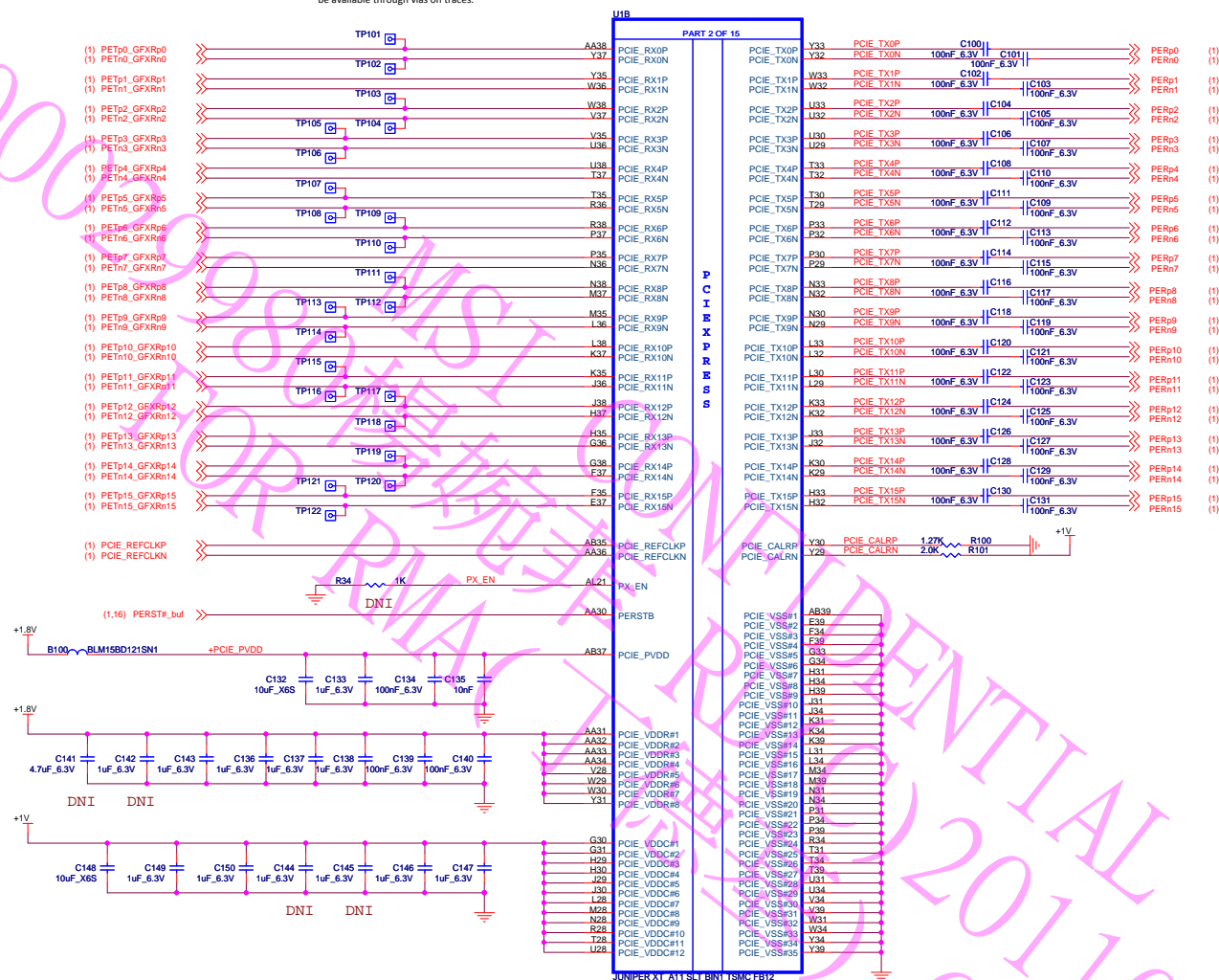
PCIe RESET Buffered



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

(2) REDWOOD PCIe Interface

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



CONFIDENTIAL & PROPRIETARY TO ADVANCED MICRO DEVICES INC.
2007 Advanced Micro Devices
 This AMD Board schematic and design is the exclusive property of AMD, and is provided only to entities under a non-disclosure agreement with AMD for evaluation purposes. Further distribution or disclosure is strictly prohibited. Use of this schematic and design for any purpose other than evaluation requires a Board Technology License Agreement with AMD. AMD makes no representations or warranties of any kind regarding this schematic and design, including, not limited to, any implied warranty of merchantability or fitness for a particular purpose, and disclaims responsibility for any consequences resulting

Advanced Micro Devices Inc. 1 Commerce Valley Drive East Markham, Ontario



Date: Friday, October 15, 2010

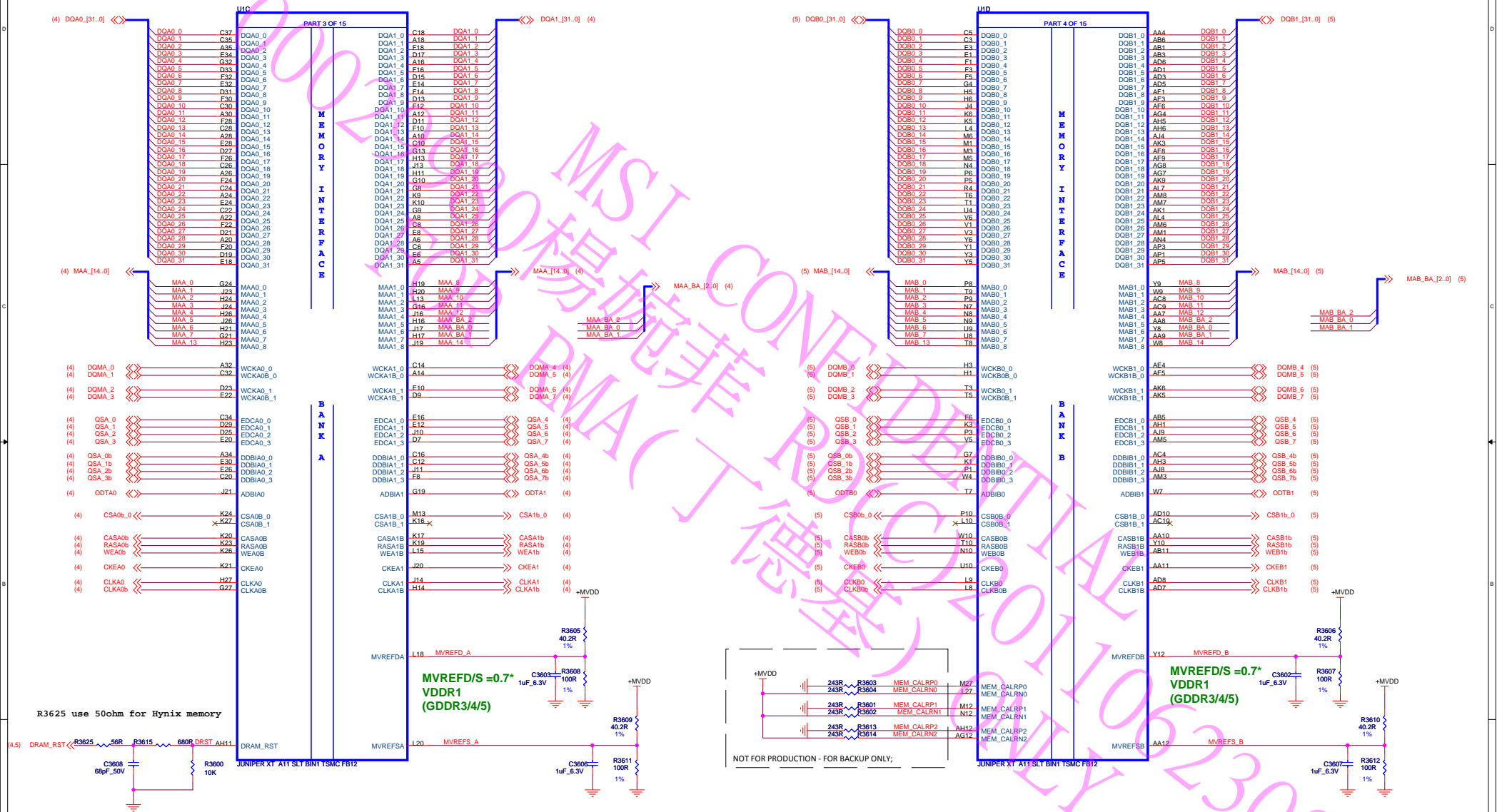
Sheet 2 of 19

Rev P01

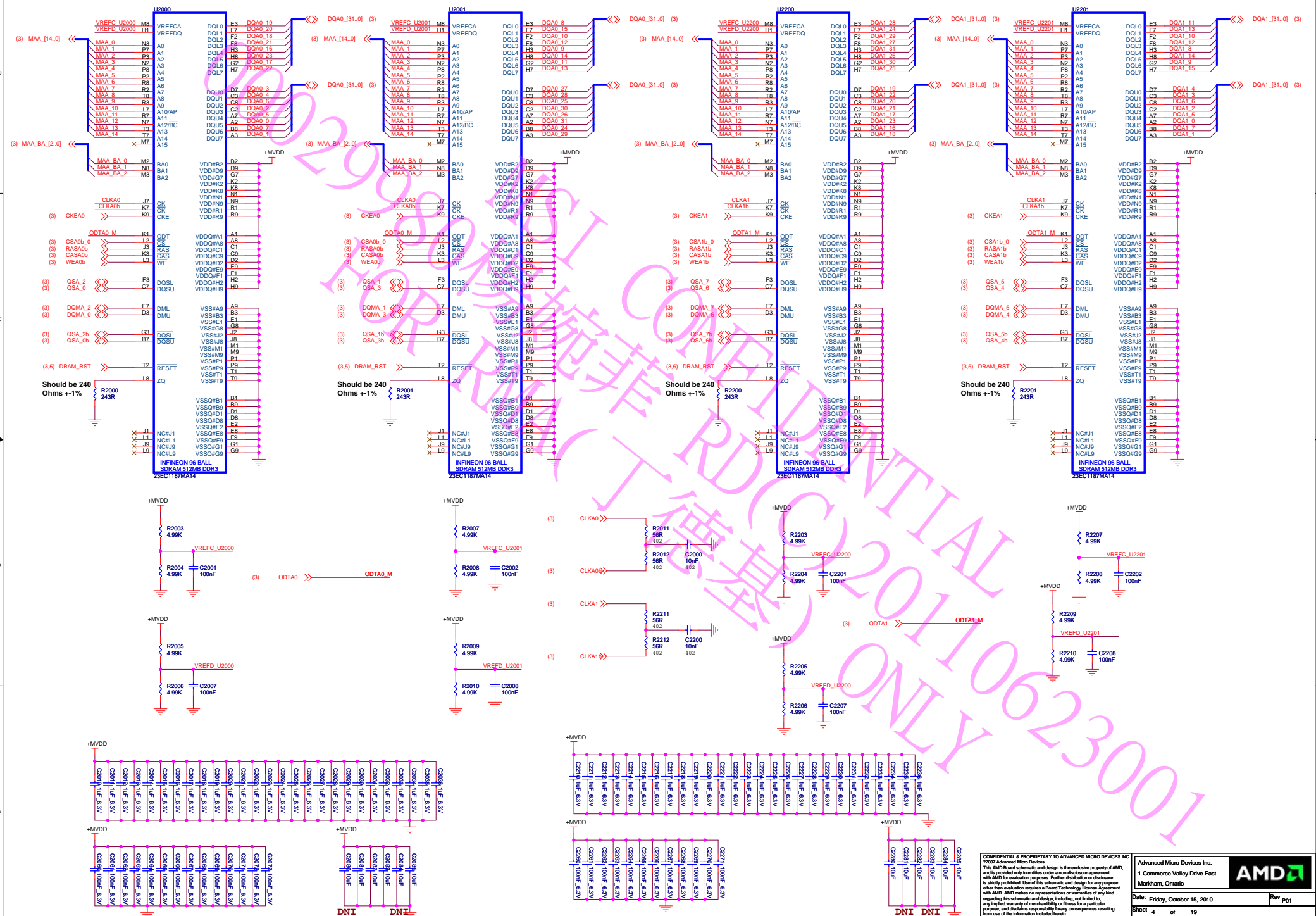
Title TURKS DDR3 1GB rVGA+HDMI/DP+DVI LP

Doc No. 105-C241xx-00b

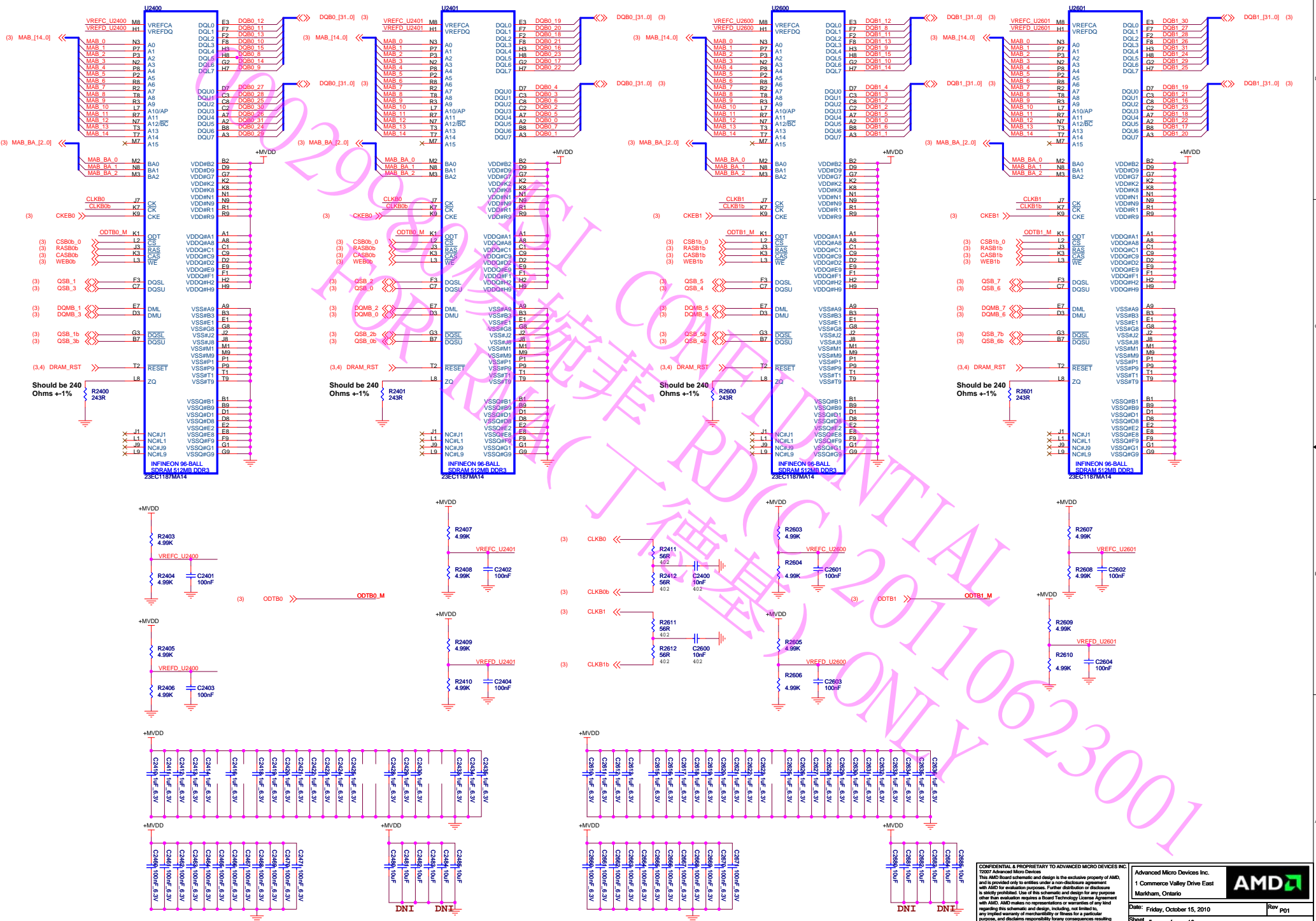
(3) REDWOOD MEM Interface Ch A&B



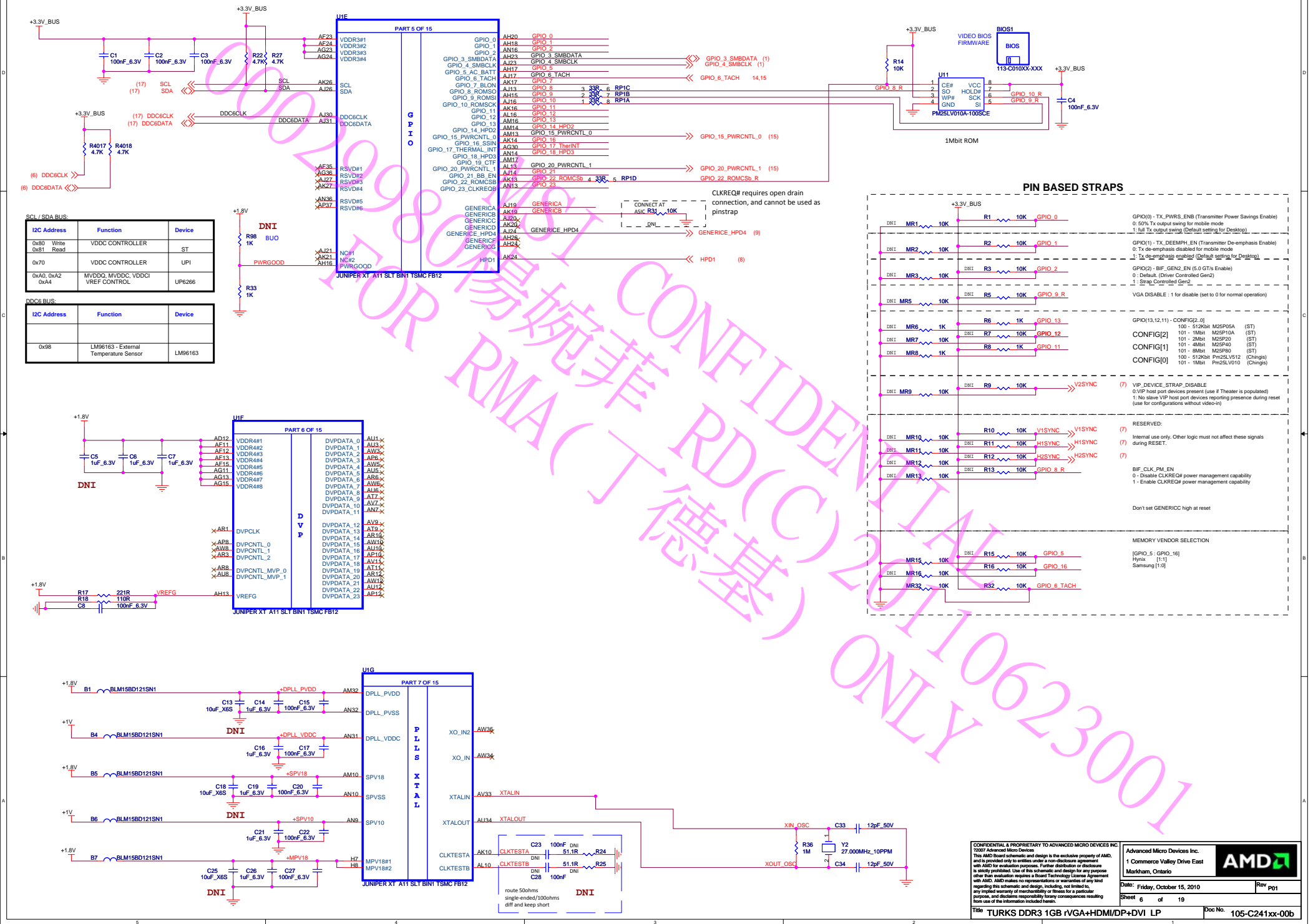
(4) DDR3 Memory Channel A



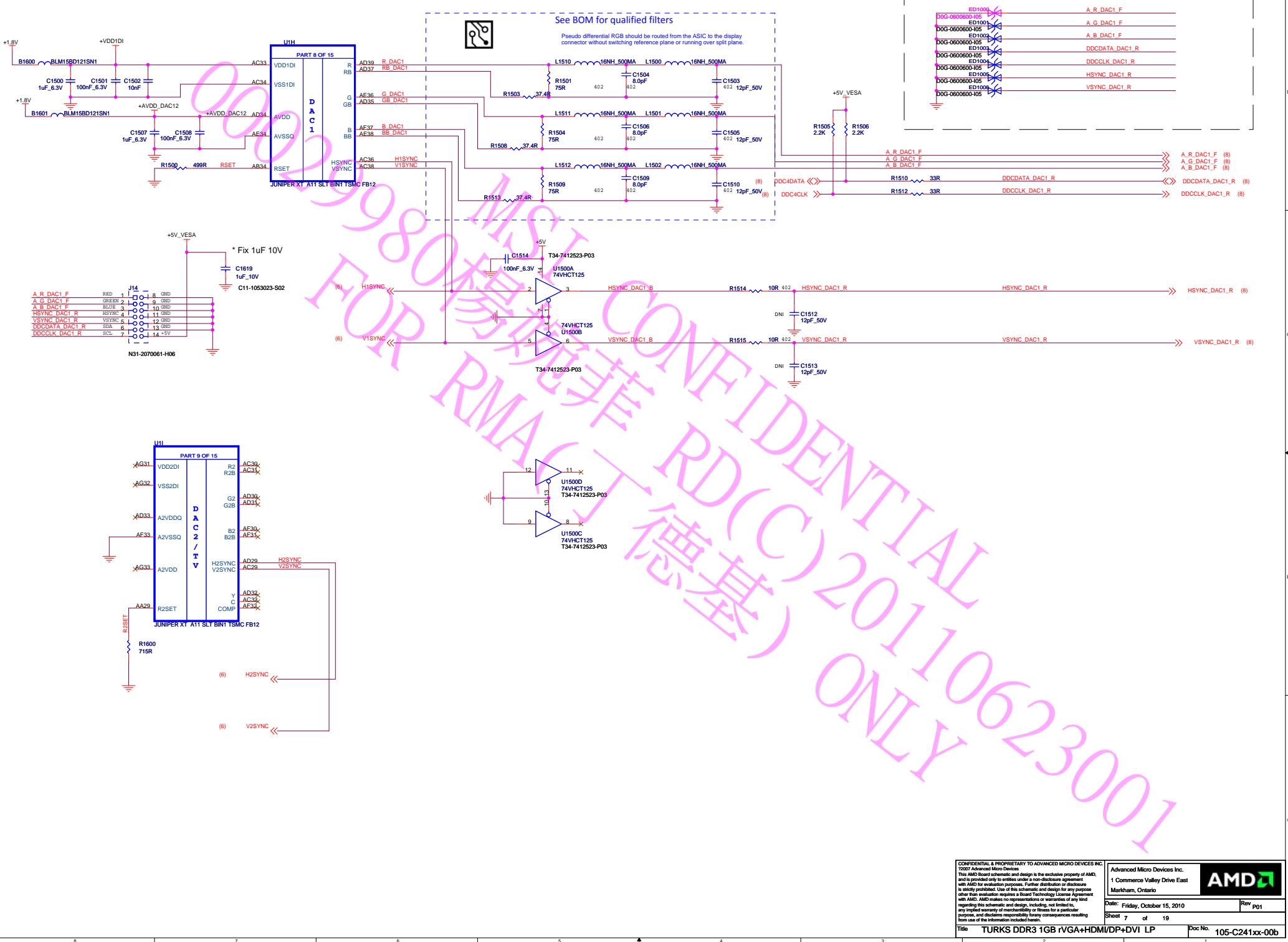
(5) DDR3 Memory Channel B



(06) REDWOOD GPIOs Strap CF XTAL OSC

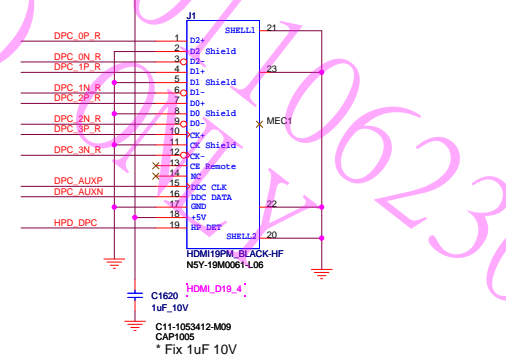
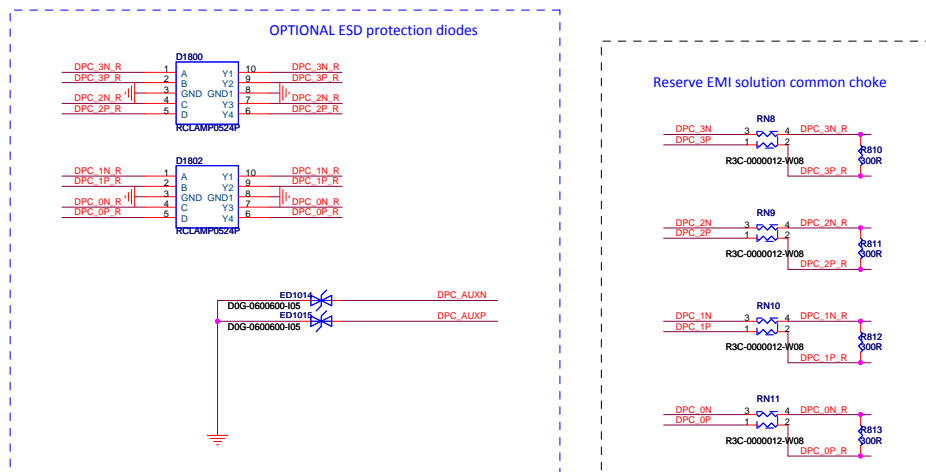
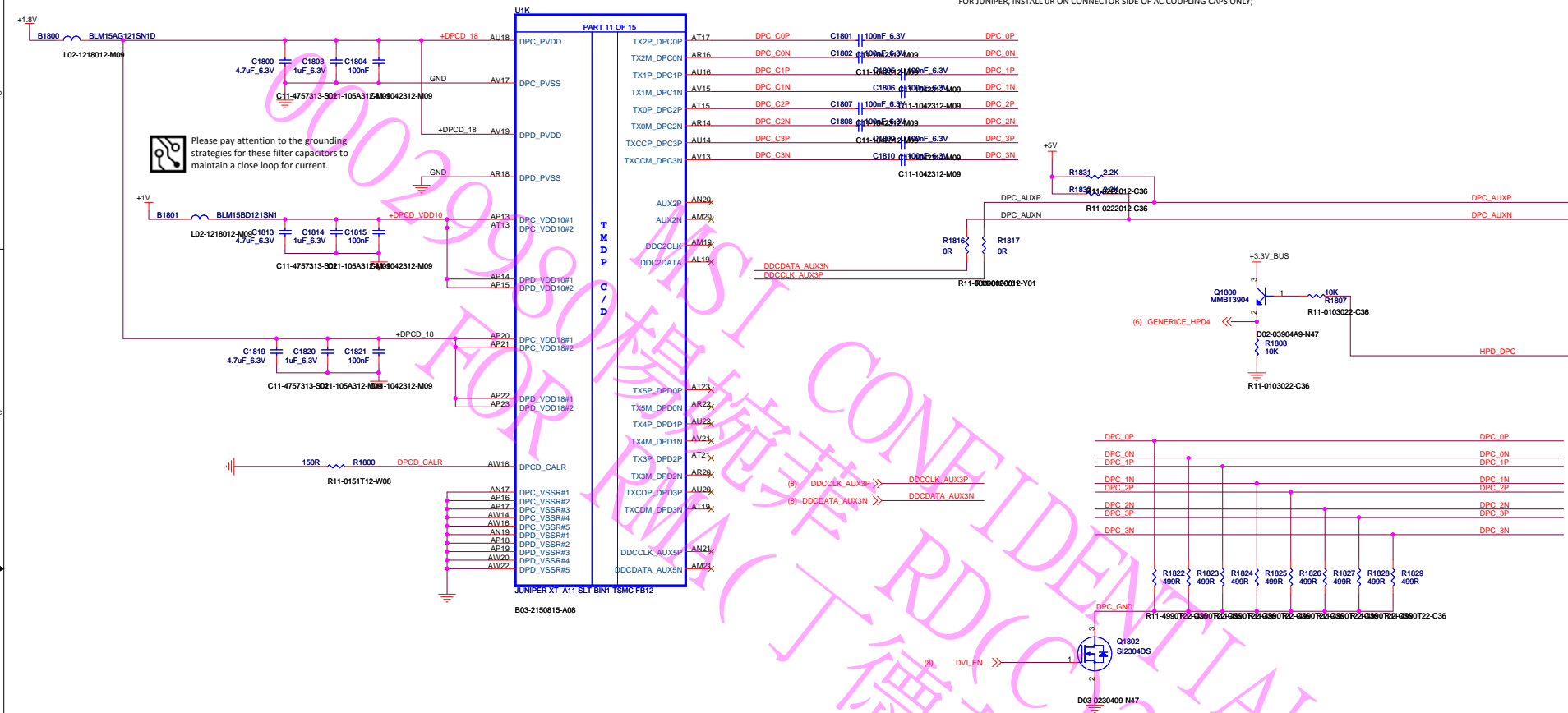


(07) REDWOOD DAC1 and DAC2



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

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



CONFIDENTIAL & PROPRIETARY TO ADVANCED MICRO DEVICES INC.
72007 Advanced Micro Devices
 The AMD Board of Technology design is the exclusive property of AMD, and is provided only to entities under a non-disclosure agreement with AMD for evaluation purposes. Further distribution or disclosure is strictly prohibited. Use of this schematic and design for any purpose other than evaluation requires a Board Technology License Agreement with AMD. AMD makes no representations or warranties of any kind regarding this schematic and design, including, not limited to, any implied warranty of merchantability or fitness for a particular purpose, and disclaims responsibility for any consequences resulting

INC.	Advanced Micro Devices Inc. 1 Commerce Valley Drive East Murray Hill, N.J. 07974
------	--



Date: Friday, October 15, 2010

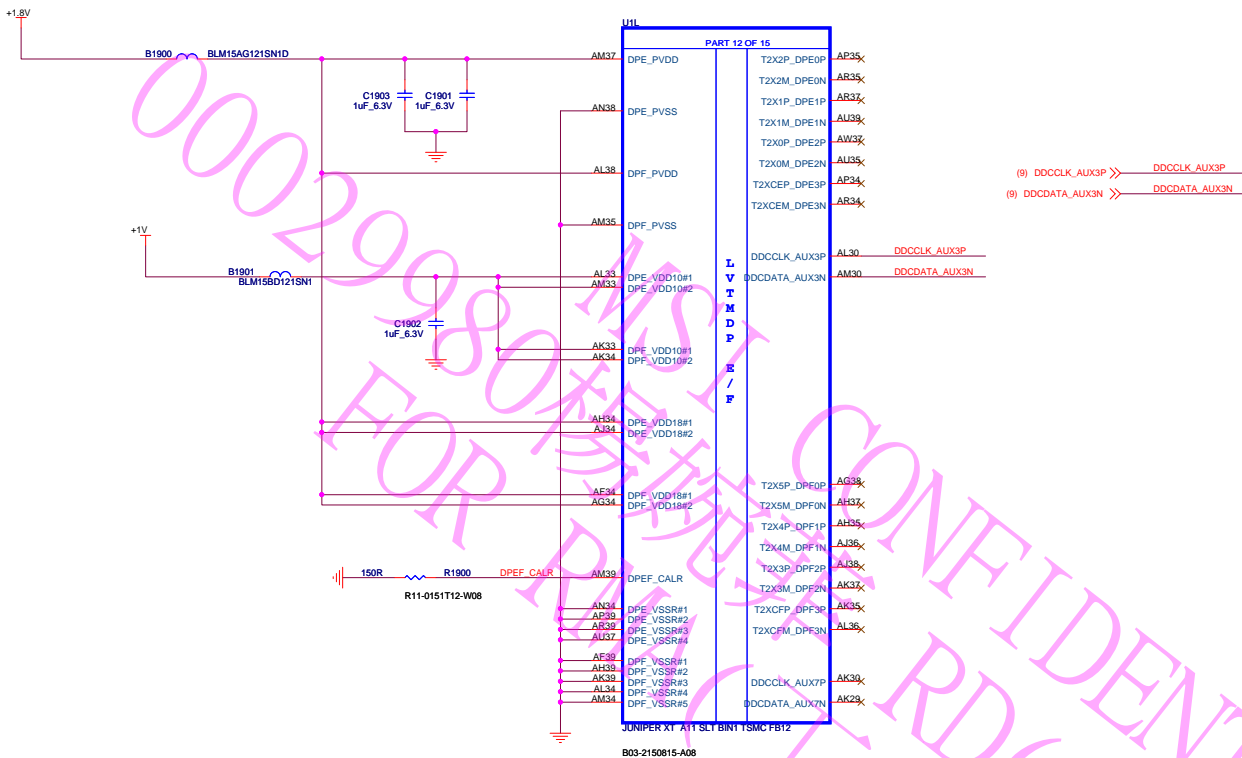
Sheet 9 of 19

Rev P01

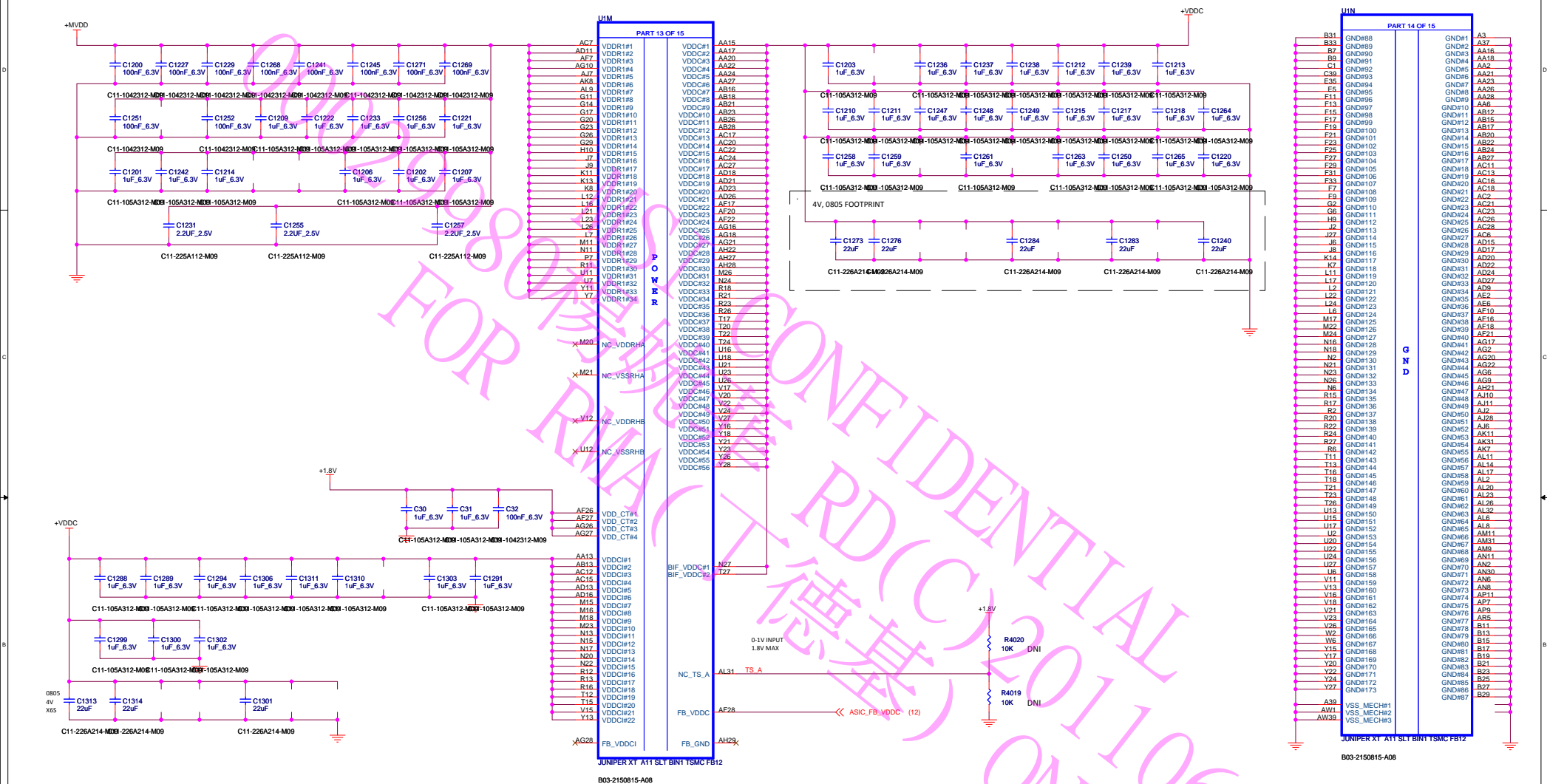
from use of the information included herein.		9	51
Title	TURKS DDR3 1GB rVGA+HDMI/DP+DVI LP		

Doc No.	105-C-241xx-00b
---------	-----------------

(10) REDWOOD LVTMDP E&F



(11) REDWOOD Power & GND



CONFIDENTIAL & PROPRIETARY TO ADVANCED MICRO DEVICES INC.
72007 Advanced Micro Devices

This AMD Board schematic and design is the exclusive property of AMD, and is provided only to entities under a non-disclosure agreement with AMD for evaluation purposes. Further distribution or disclosure is strictly prohibited. Use of this schematic and design for any purpose other than evaluation requires a Board Technology License Agreement with AMD. AMD makes no representations or warranties of any kind regarding this schematic and design, including, not limited to, any implied warranty of merchantability or fitness for a particular purpose, and disclaims responsibility for any consequences resulting from use of the information included herein.

Advanced Micro Devices Inc.
1 Commerce Valley Drive East
Markham, Ontario



Date: Friday, October 15, 2010

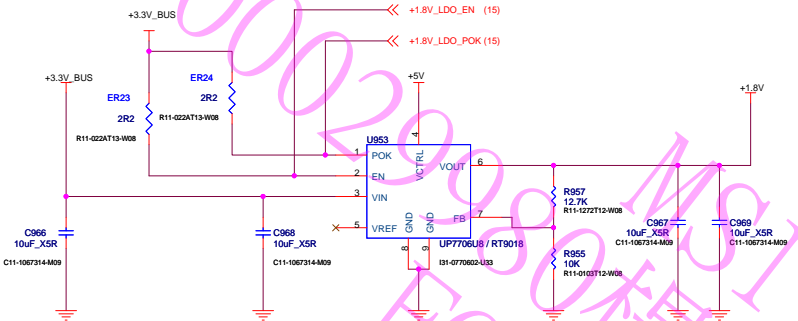
Sheet 11 of 19

Rev P0

Title	TURKS DDR3 1GB rVGA+HDMI/DP+DVI LP	Doc No.	105-C241xx-00
-------	------------------------------------	---------	---------------

(13) 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



1.8V WORST-CASE REQUIREMENT

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

Install R1010 to gate LV LDO with 1.8V LDO.

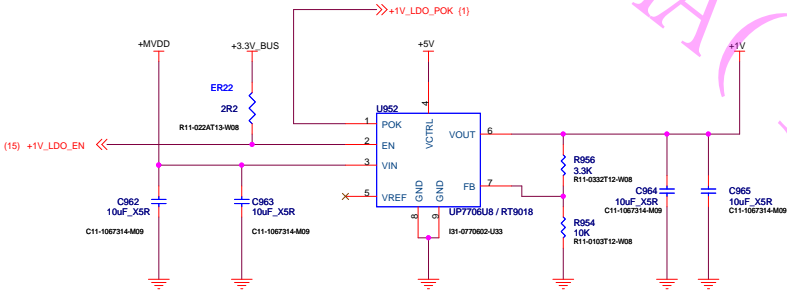


$V_{out} = 0.8V \times (1 + R_{957} / R_{955})$

$1.7960 = 0.8 \times (1 + 12.7K / 10.2K)$

$1.8160 = 0.8 \times (1 + 12.7K / 10.0K)$

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



1.0V WORST-CASE REQUIREMENT

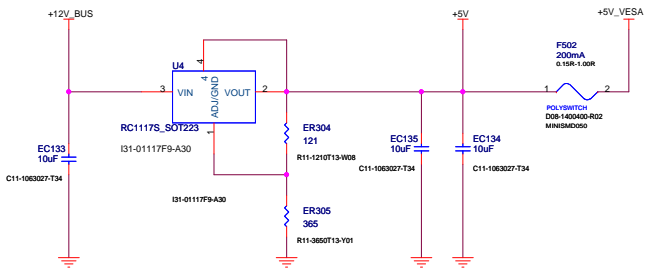
Display Config	Est. Current
DVI+HDMI+DP	1560mA

$V_{out} = 0.8V \times (1 + R_{956} / R_{954})$

$1.0000 = 0.8 \times (1 + 2.5K / 10K)$

$1.0640 = 0.8 \times (1 + 3.3K / 10K)$

Regulators for +5V, +5V_VESA



$V_{out} = 1.25V \times [1 + (ER_{305} / ER_{304})]$

$5.0206 = 1.25 \times (1 + 365 / 121)$

$5.1108 = 1.25 \times (1 + 383 / 124)$

CONFIDENTIAL & PROPRIETARY TO ADVANCED MICRO DEVICES INC.
7207 Advanced Micro Devices
This AMD Board schematic and design is the exclusive property of AMD, and is provided only to entities under a non-disclosure agreement with AMD for evaluation purposes. Further distribution or disclosure is strictly prohibited. Use of this schematic and design for any purpose other than evaluation requires a Board Technology License Agreement with AMD. AMD makes no representations or warranties of any kind regarding this schematic and design, including, not limited to, any implied warranty of merchantability or fitness for a particular purpose, and disclaims responsibility for any consequences resulting from use of the information included herein.

Advanced Micro Devices Inc.
1 Commerce Valley Drive East
Markham, Ontario



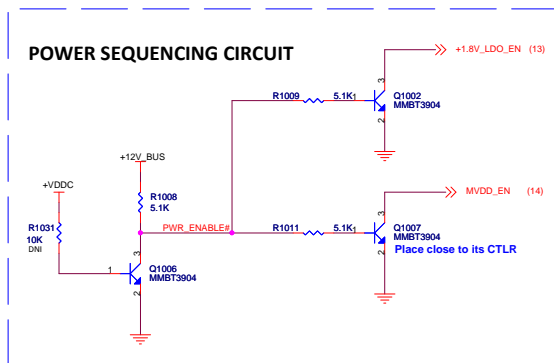
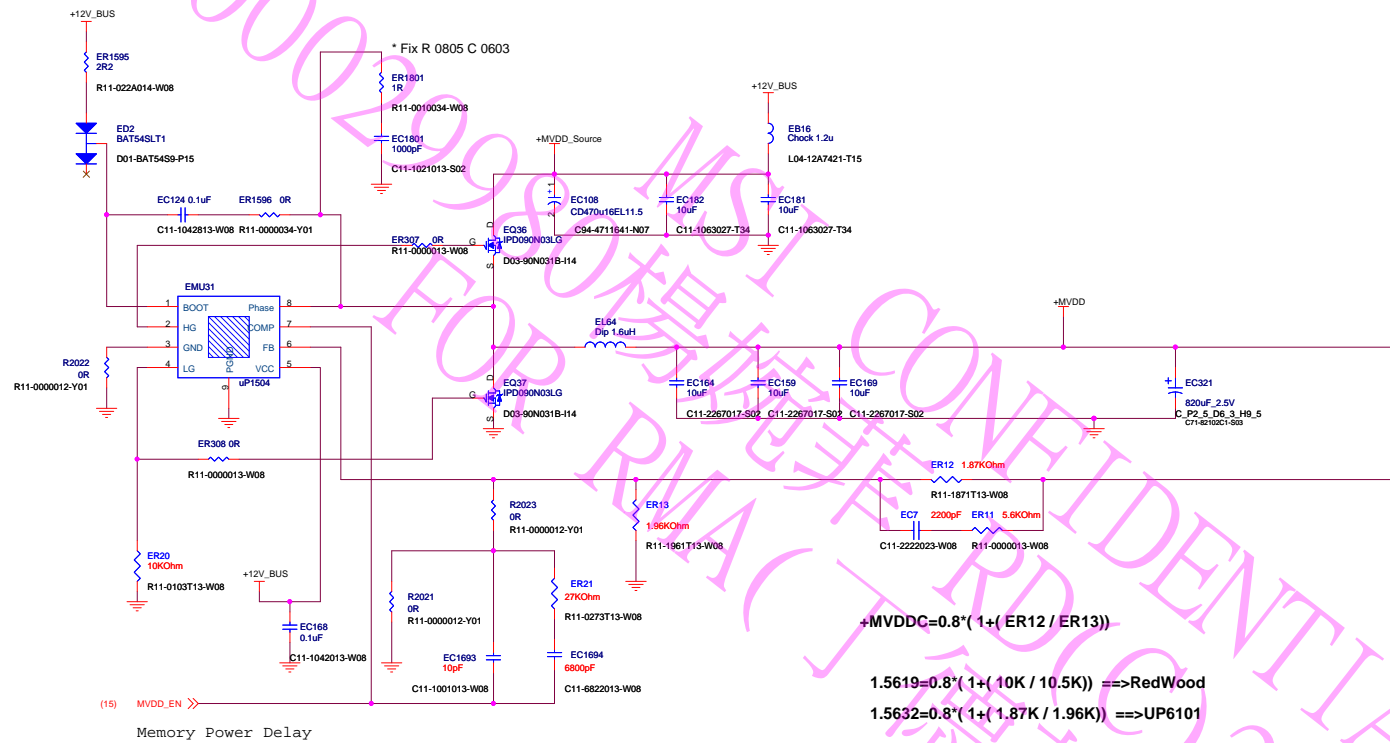
Date: Friday, October 15, 2010
Sheet 13 of 19

Rev P01

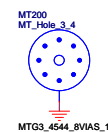
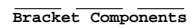
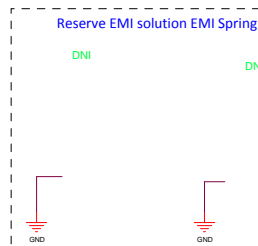
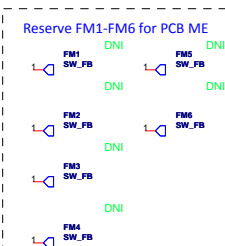
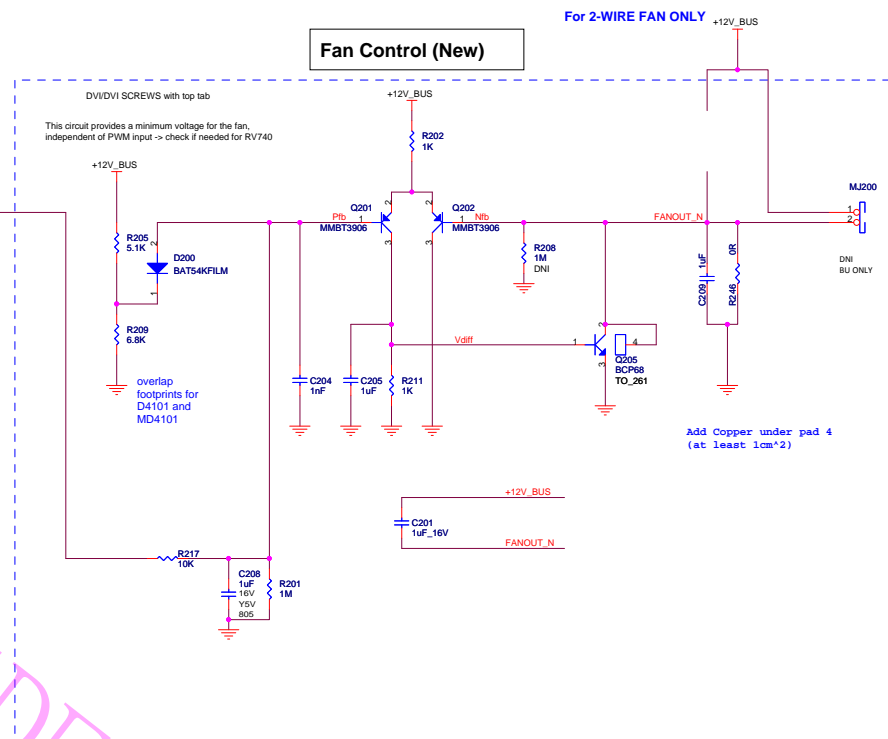
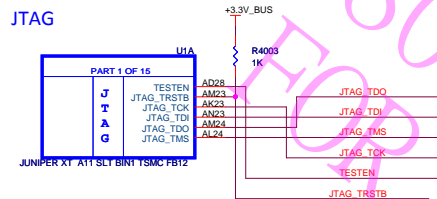
Title TURKS DDR3 1GB iVGA+HDMI/DP+DVI LP

Doc No. 105-C241xx-00b

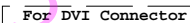
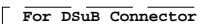
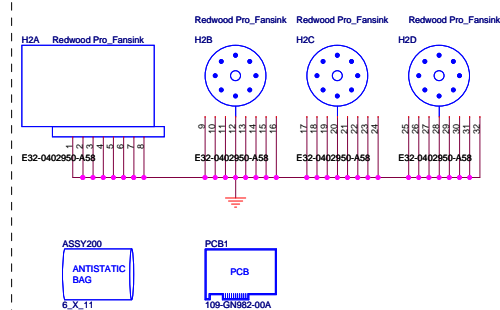
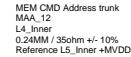
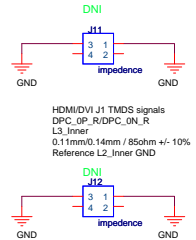
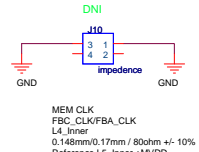
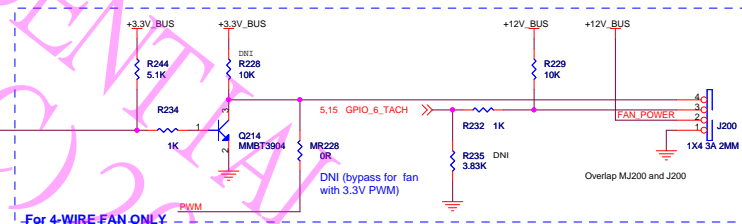
(14) MVDD



(19) Mechanical and Thermal Management



7020005200G



CONFIDENTIAL & PROPRIETARY TO ADVANCED MICRO DEVICES IN 72007 Advanced Micro Devices

This AMD Board schematic and design is the exclusive property of AMD, and is provided only to entities under a non-disclosure agreement with AMD for evaluation purposes. Further distribution or disclosure is strictly prohibited. Use of this schematic and design for any purpose other than evaluation requires a Board Technology License Agreement with AMD. AMD makes no representations or warranties of any kind regarding this schematic and design, including, not limited to, any implied warranty of merchantability or fitness for a particular purpose, and disclaims responsibility for any consequences resulting from use of the information included herein.

Advanced Micro Devices Inc.
1 Commerce Valley Drive East
Markham, Ontario

Date: Friday, October 15, 2010

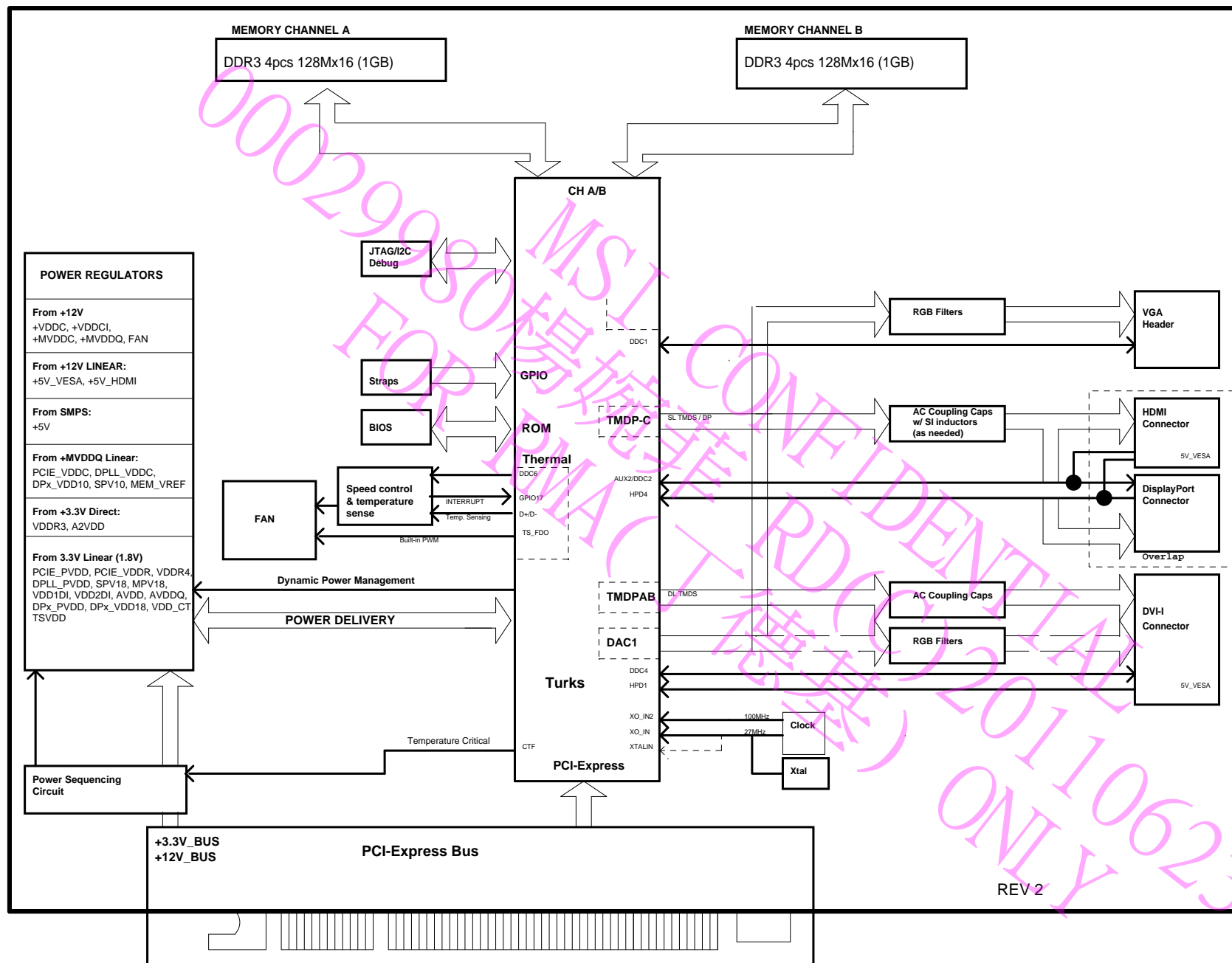
Sheet 16 of 19



Rev B01

Title **TURKS DDR3 1GB rVGA+HDMI/DP+DVI LP**

Doc No. 105-C241xx-00



TURKS DDR3 1GB rVGA+HDMI/DP+DVI LP

<div>AMD</div>			Title		Schematic No.		Date:				
			TURKS DDR3 1GB rVGA+HDMI/DP+DVI LP		105-C021xx-00C		Friday, October 15, 2010				
			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 P01	
Sch Rev	PCB Rev	Date	REVISION DESCRIPTION								
00	00A	2009/06/11	REDWOOD PRO DDR3 1GB BASED ON C020								
	00B	2009/07/17	REDWOOD PRO DDR3 1GB BASED ON C021 00A								
	00B	2009/09/29	Add R3625 on DRAM_RST Change HDMI I2C line to AUX3P/N Change DAC1 RGB topology to LC-LC								

002980 MSI CONFIDENTIAL
FOR RMA(楊婉菲 RD(C)20110623001
丁德基) ONLY