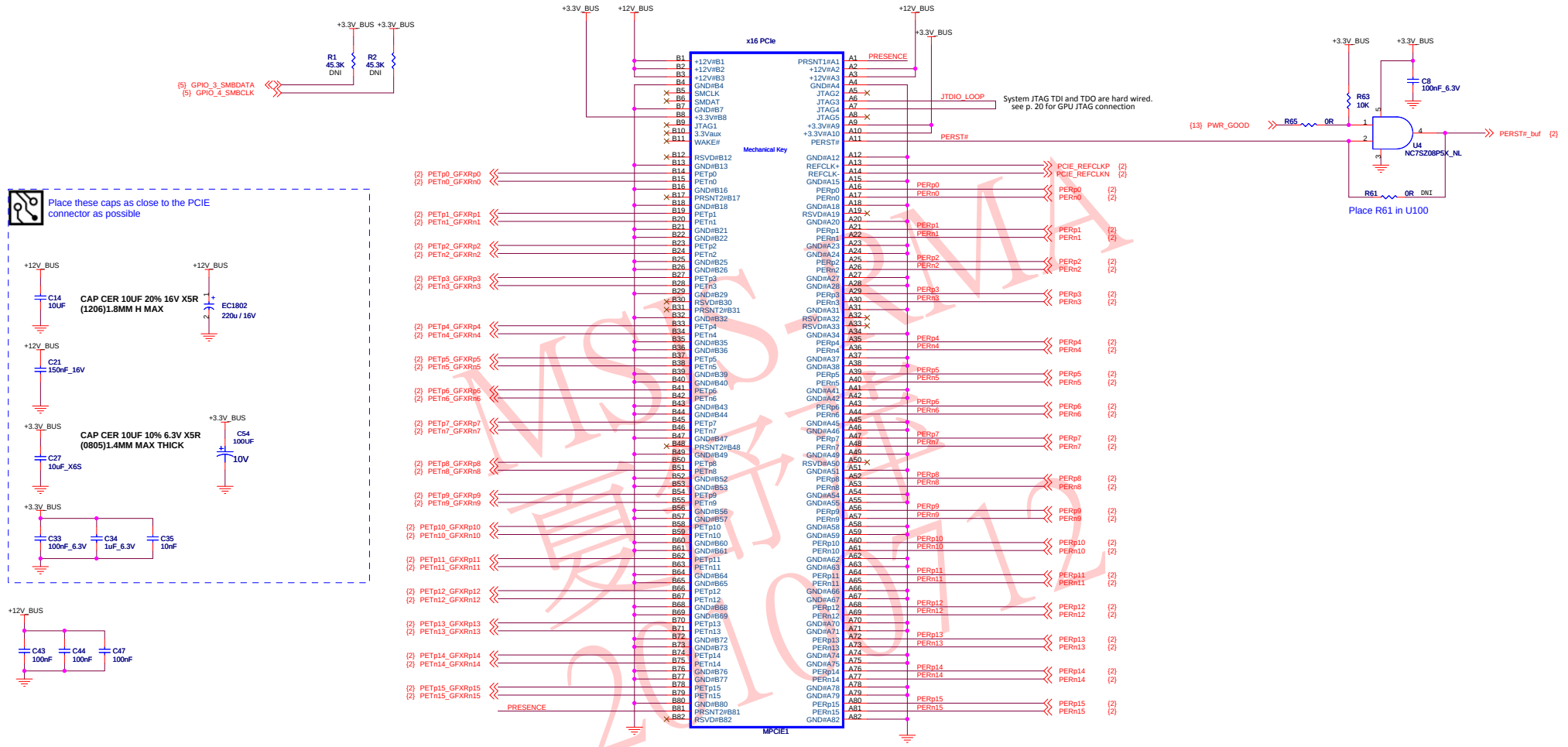
PCI-EXPRESS EDGE CONNECTOR

CEDAR BASS / PERCH



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

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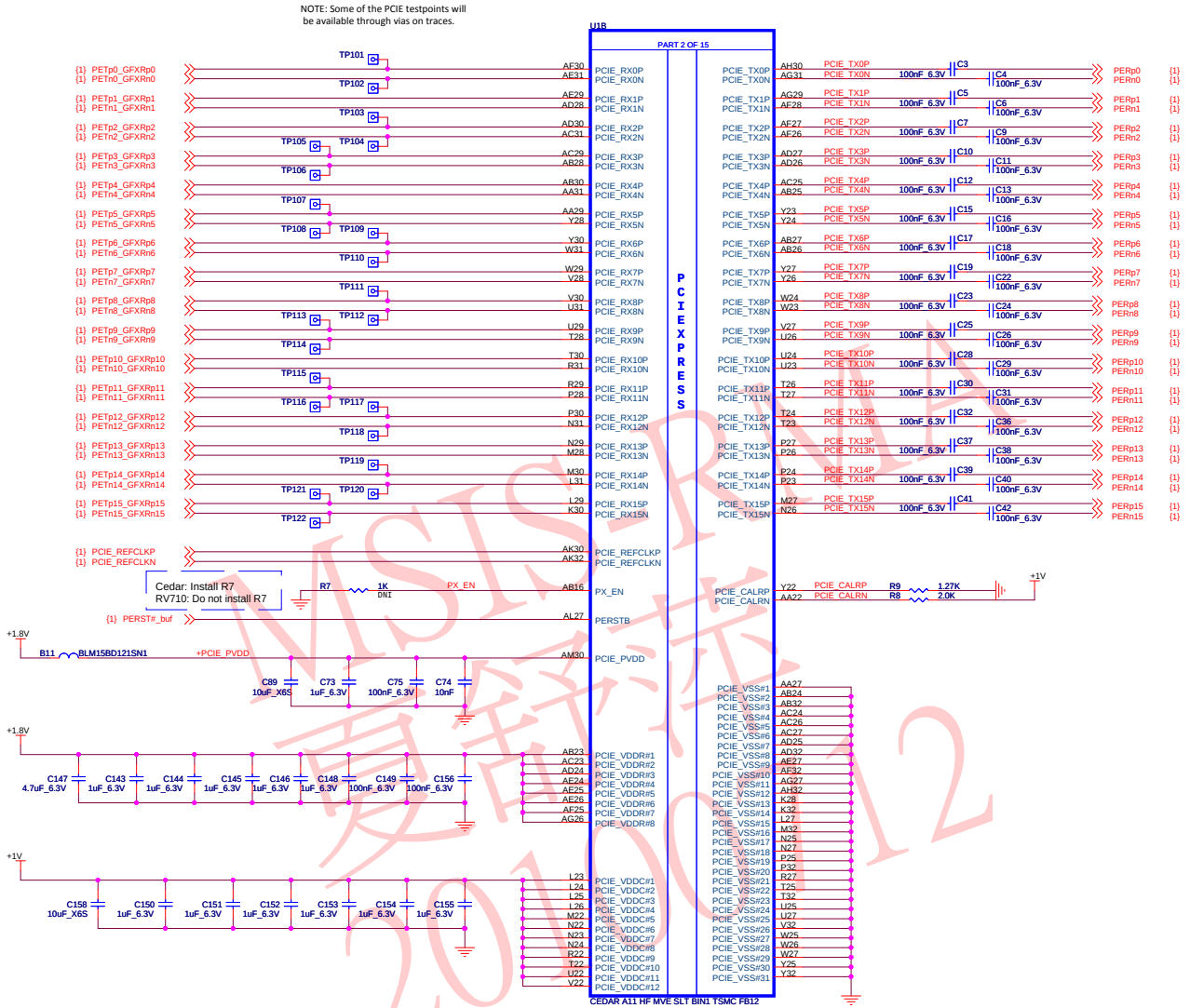
Date:	Tuesday, March 09, 2010
Rev	P03
Sheet	1 of 18
Title	RH CEDAR DDR3 1GB VGA+HDMI/DP+dDVI
Doc No.	105-C026XX-00D

CEDAR PCIe Interface



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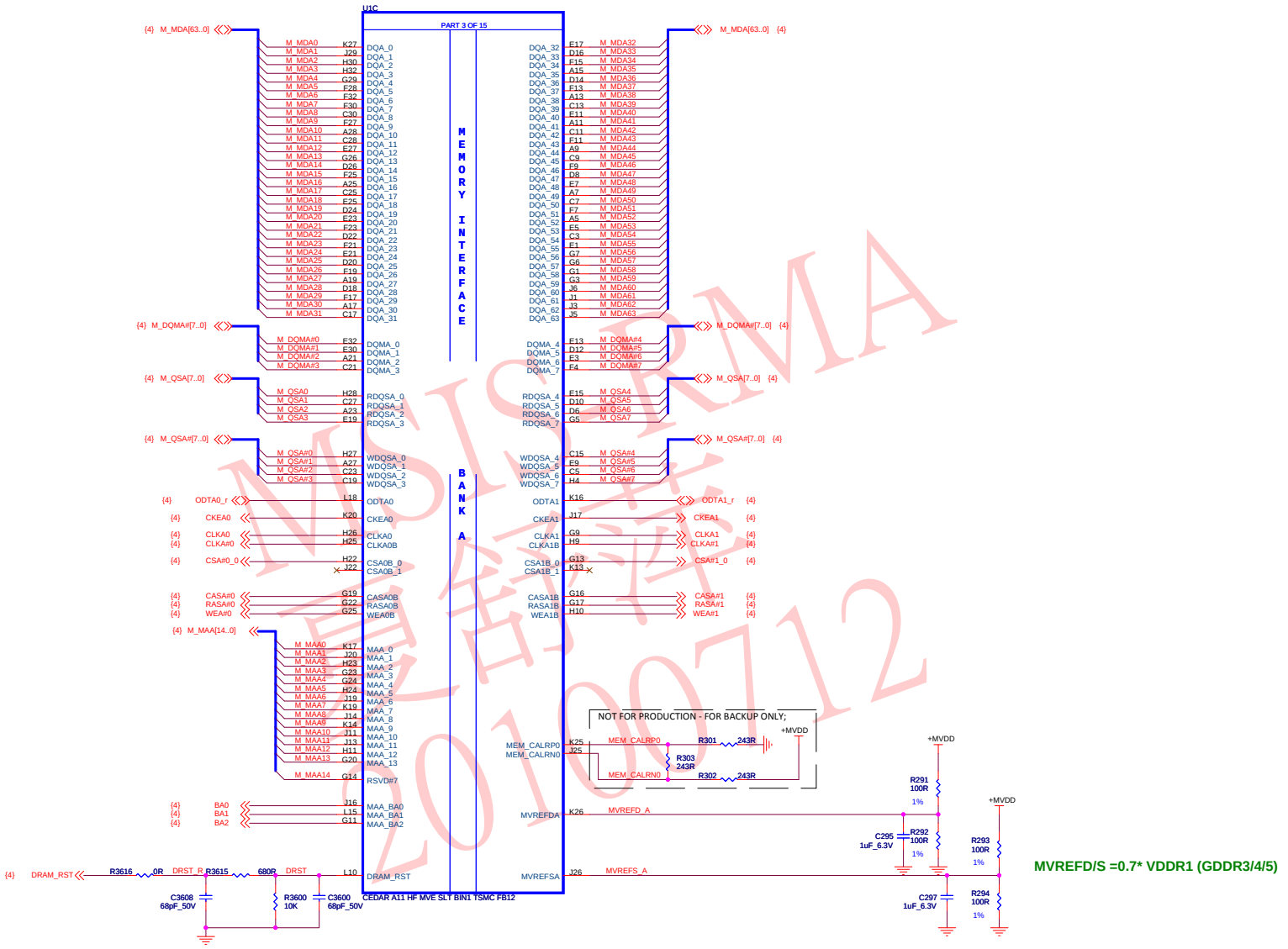
Date:	Tuesday, March 09, 2010
Rev	P03
Sheet	2 of 18
Title	RH CEDAR DDR3 1GB VGA+HDMI/DP+dDVI
Doc No.	105-C026XX-00D

CEDAR MEM Interface Ch A&B



MVREFD/S =0.7* VDDR1 (GDDR3/4/5)

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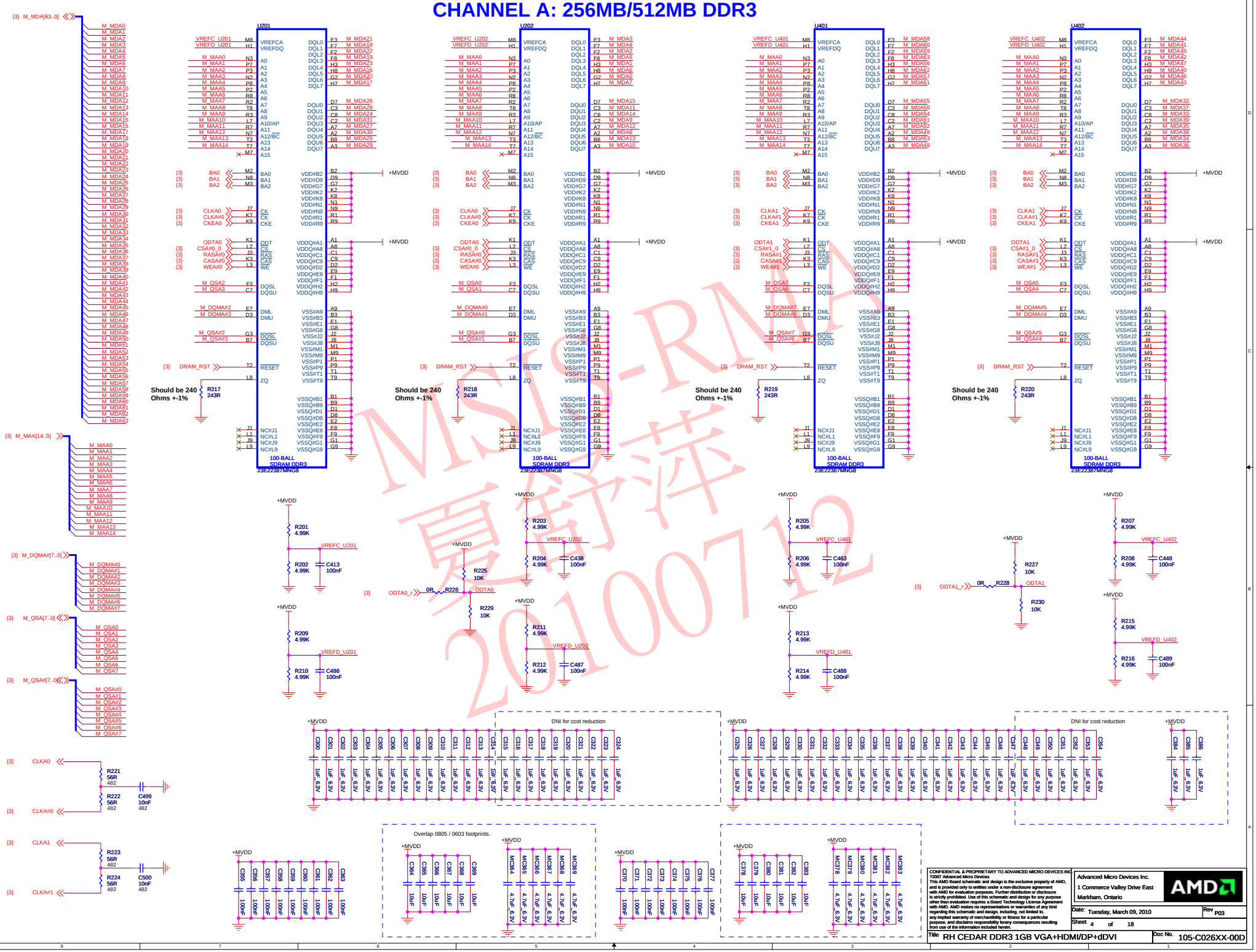
Date:	Tuesday, March 09, 2010
Rev	P03
Sheet	3 of 18
Title	RH CEDAR DDR3 1GB VGA+HDMI/DP+dDVI
Doc No.	105-C026XX-00D

CHANNEL A: 256MB/512MB DDR3



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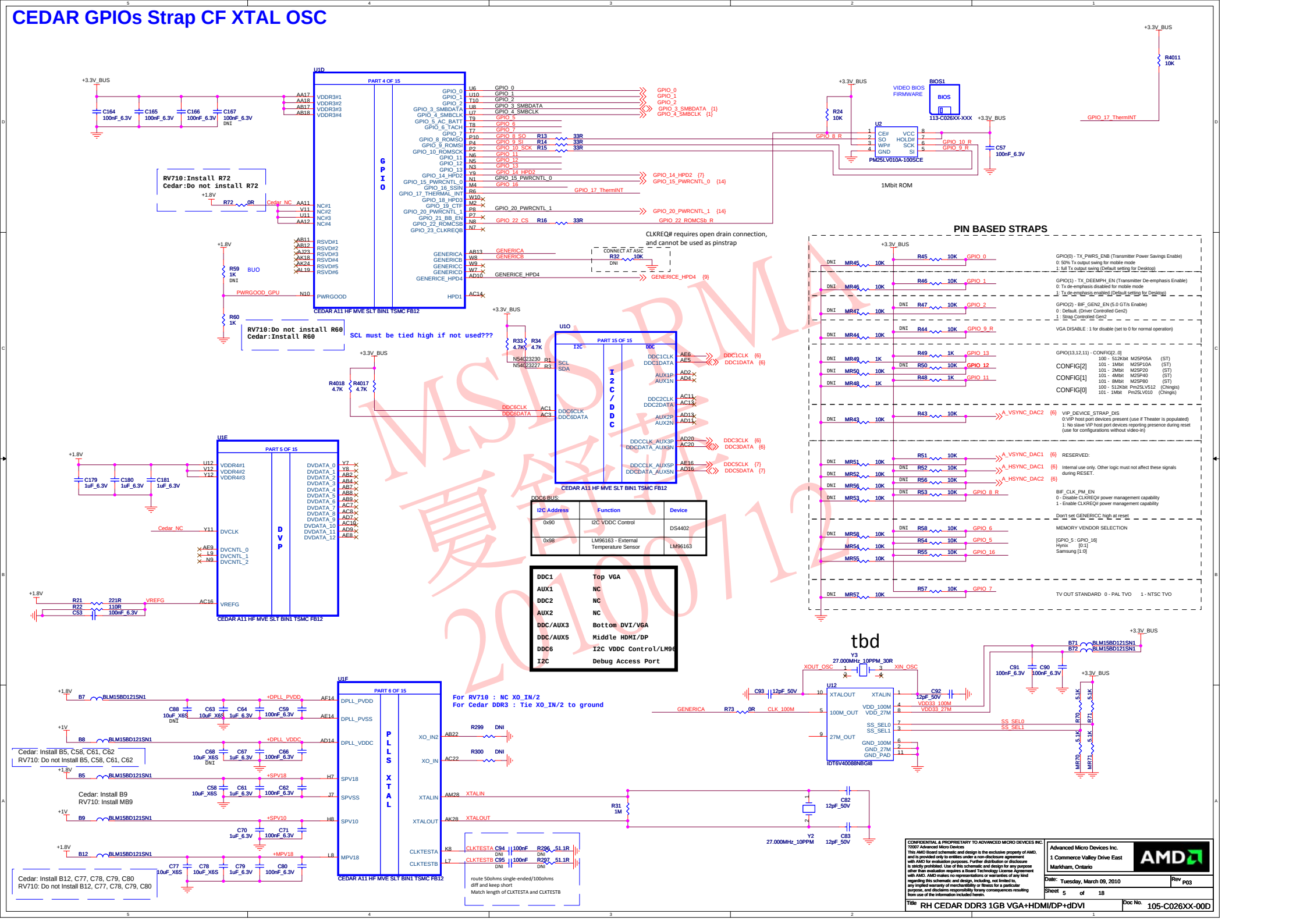
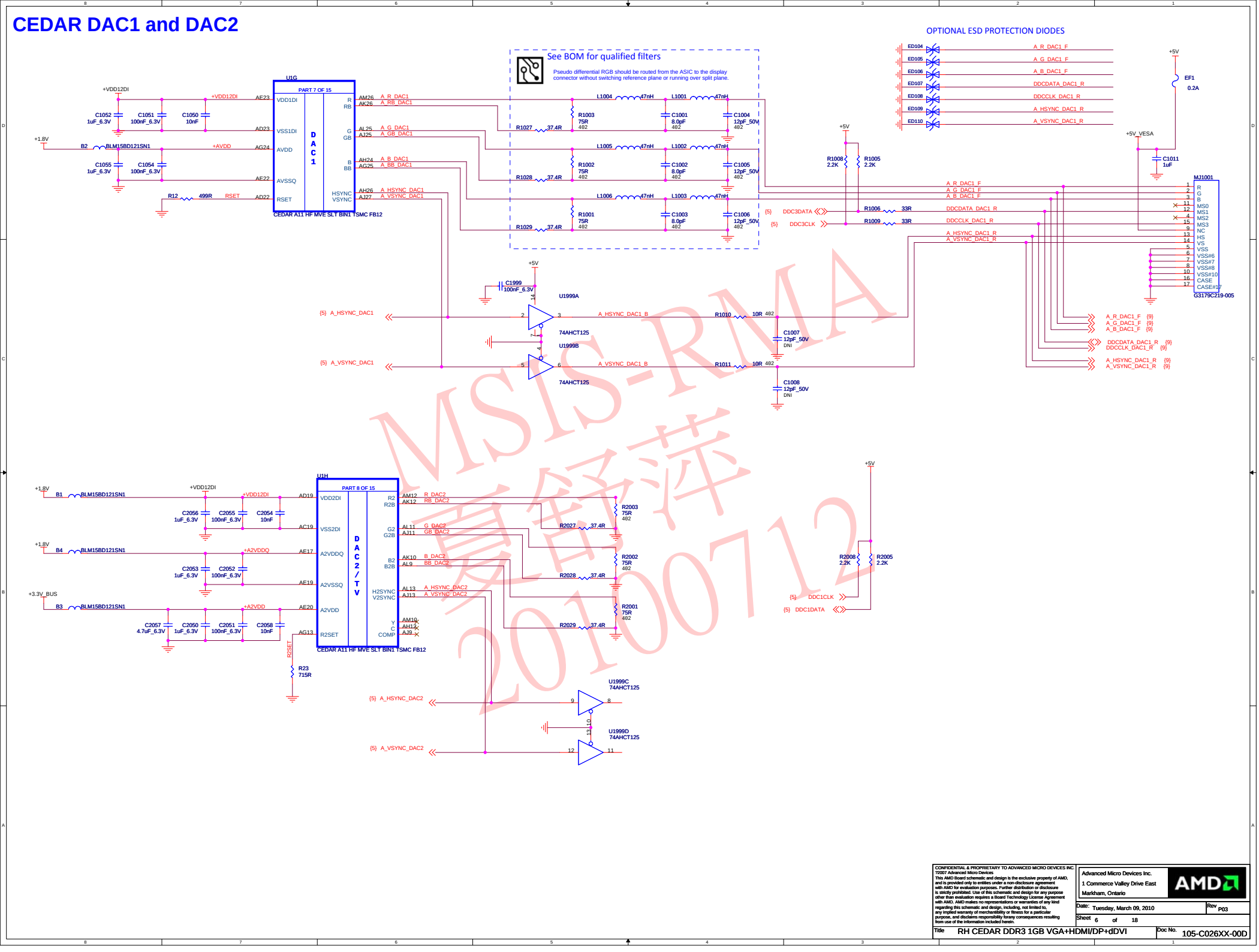
Date:	Tuesday, March 09, 2010
Rev	P03
Sheet	4 of 18
Title	RH CEDAR DDR3 1GB VGA+HDMI/DP+dDVI
Doc No.	105-C026XX-00D

CEDAR GPIOs Strap CF XTAL OSC



CEDAR DAC1 and DAC2



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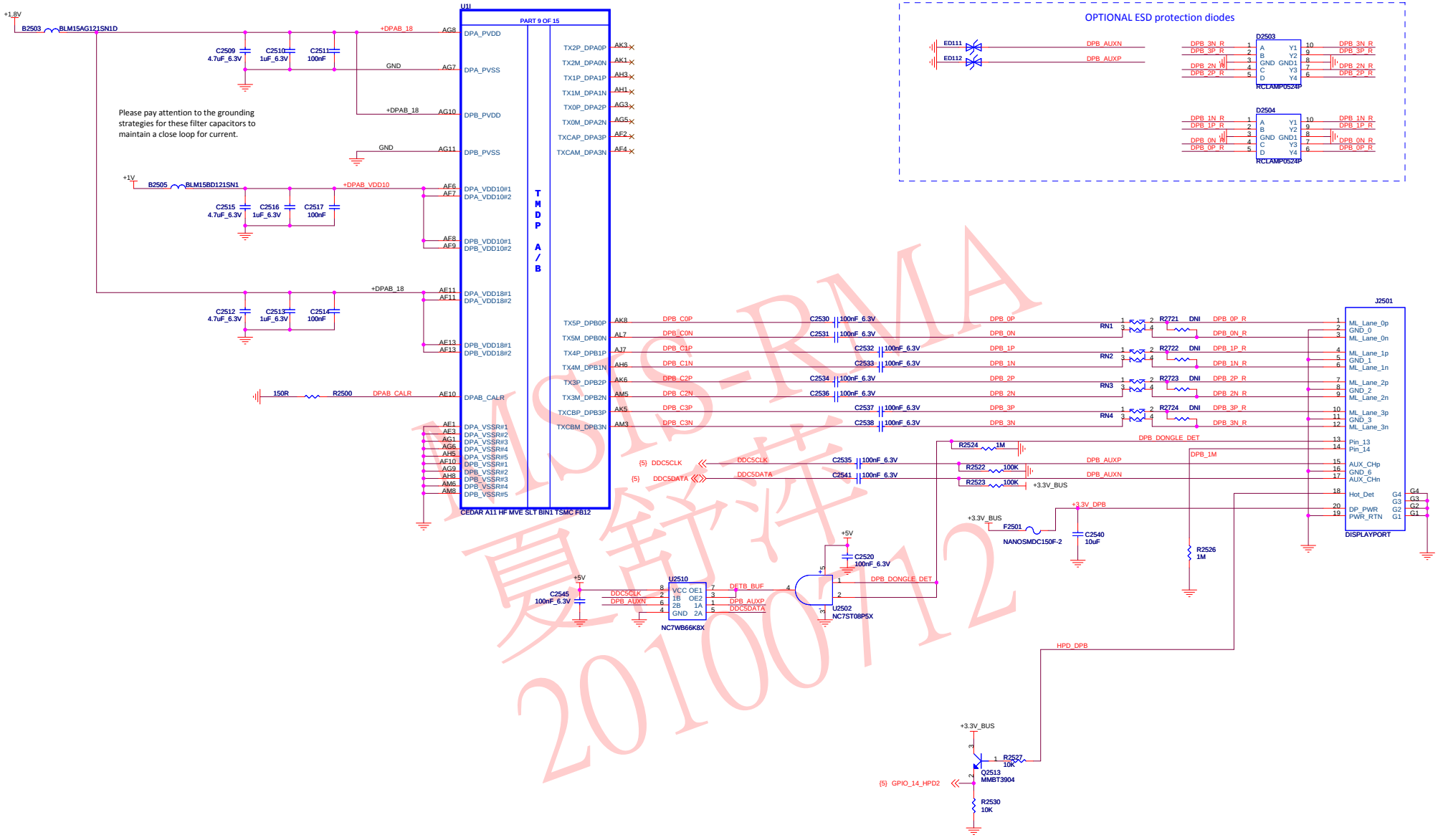
Date:	Tuesday, March 09, 2010
Rev	P03
Sheet	6 of 18
Title	RH CEDAR DDR3 1GB VGA+HDMI/DP+dDVI
Doc No.	105-C026XX-00D

CEDAR TMDP A&B DP/HDMI OVERLAP



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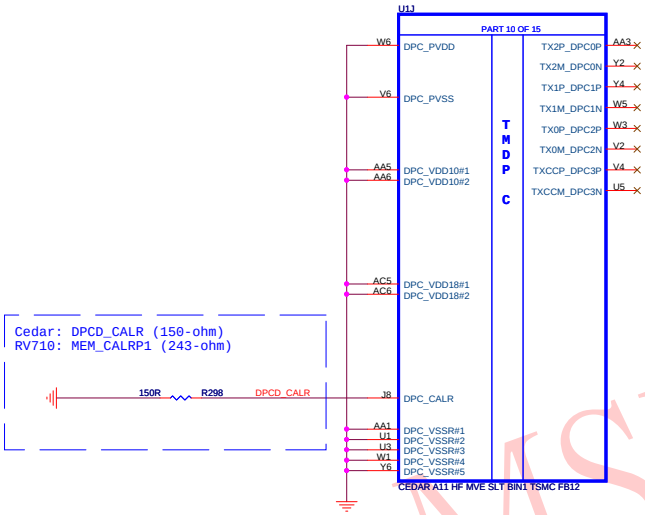
Date: Tuesday, March 09, 2010 | Rev P03
Sheet 7 of 18
Title: RH CEDAR DDR3 1GB VGA+HDMI/DP+dDVI | Doc No. 105-C026XX-00D

CEDAR Display Port C (Unused)



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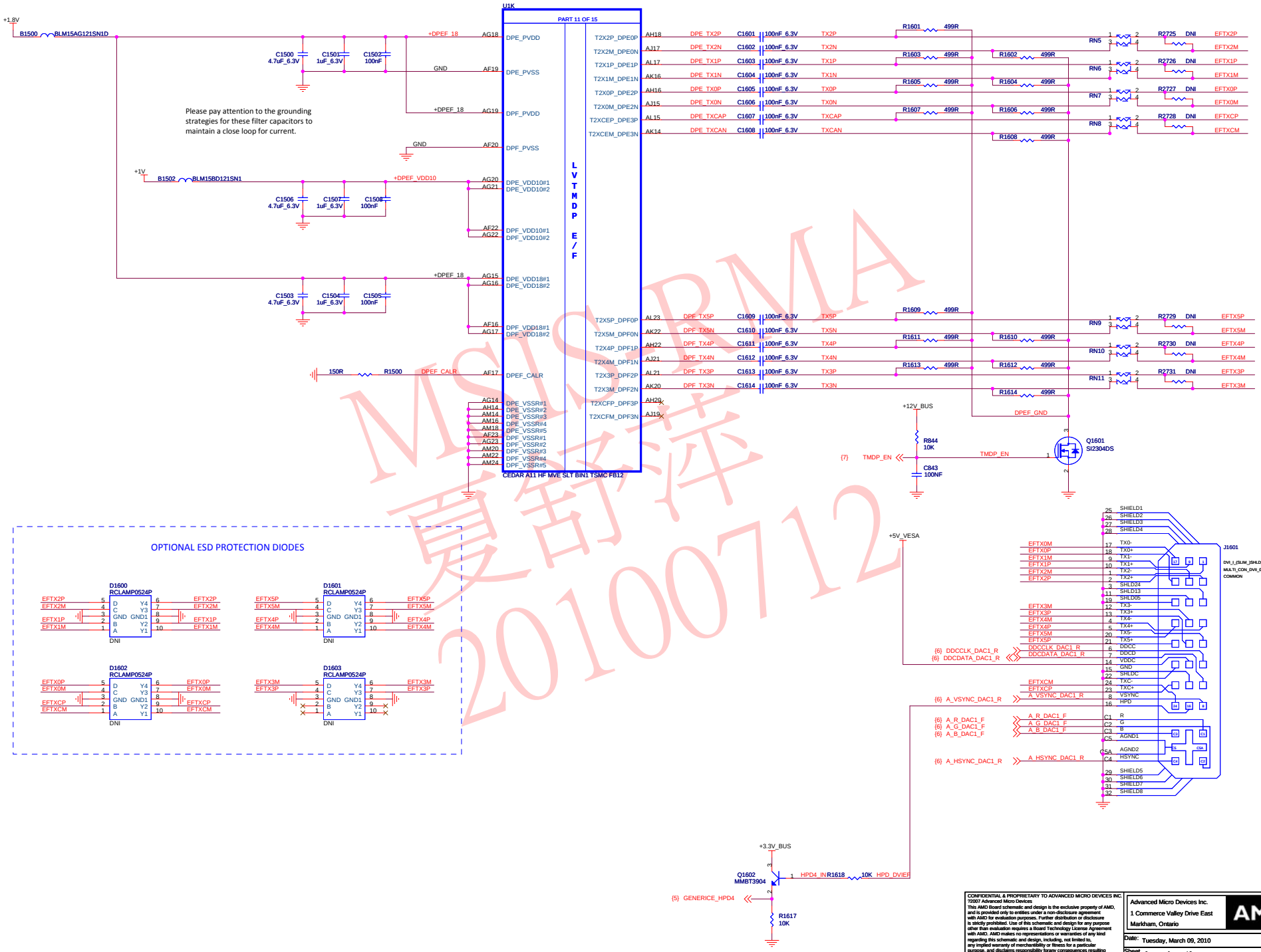
Date:	Tuesday, March 09, 2010
Rev	P03
Sheet	8 of 18
Title	RH CEDAR DDR3 1GB VGA+HDMI/DP+dDVI
Doc No.	105-C026XX-00D

CEDAR LVTMDP E&F dDVI-I



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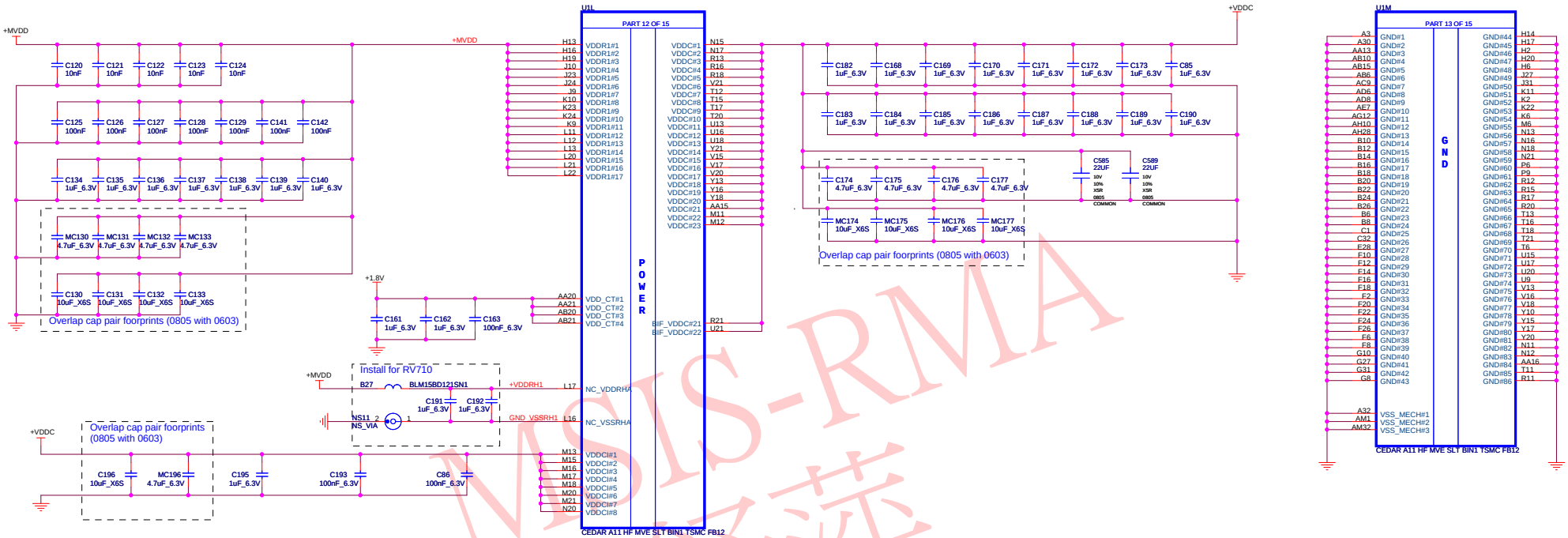
Date:	Tuesday, March 09, 2010
Rev	P03
Sheet	9 of 18
Title	RH CEDAR DDR3 1GB VGA+HDMI/DP+dDVI
Doc No.	105-C026XX-00D

CEDAR Power & GND



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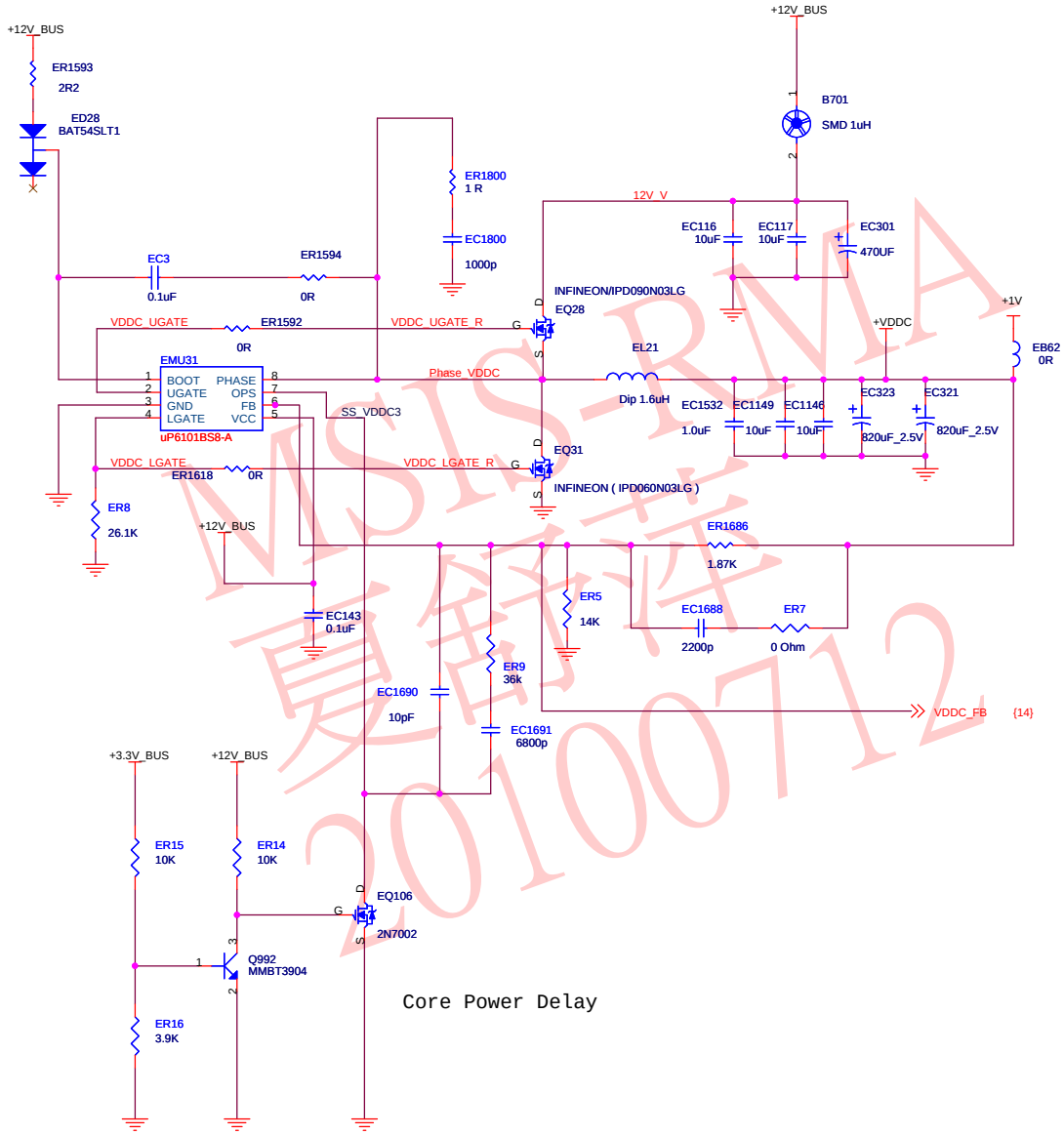
Date:	Tuesday, March 09, 2010
Rev	P03
Sheet	10 of 18
Title	RH CEDAR DDR3 1GB VGA+HDMI/DP+dDVI
Doc No.	105-C026XX-00D



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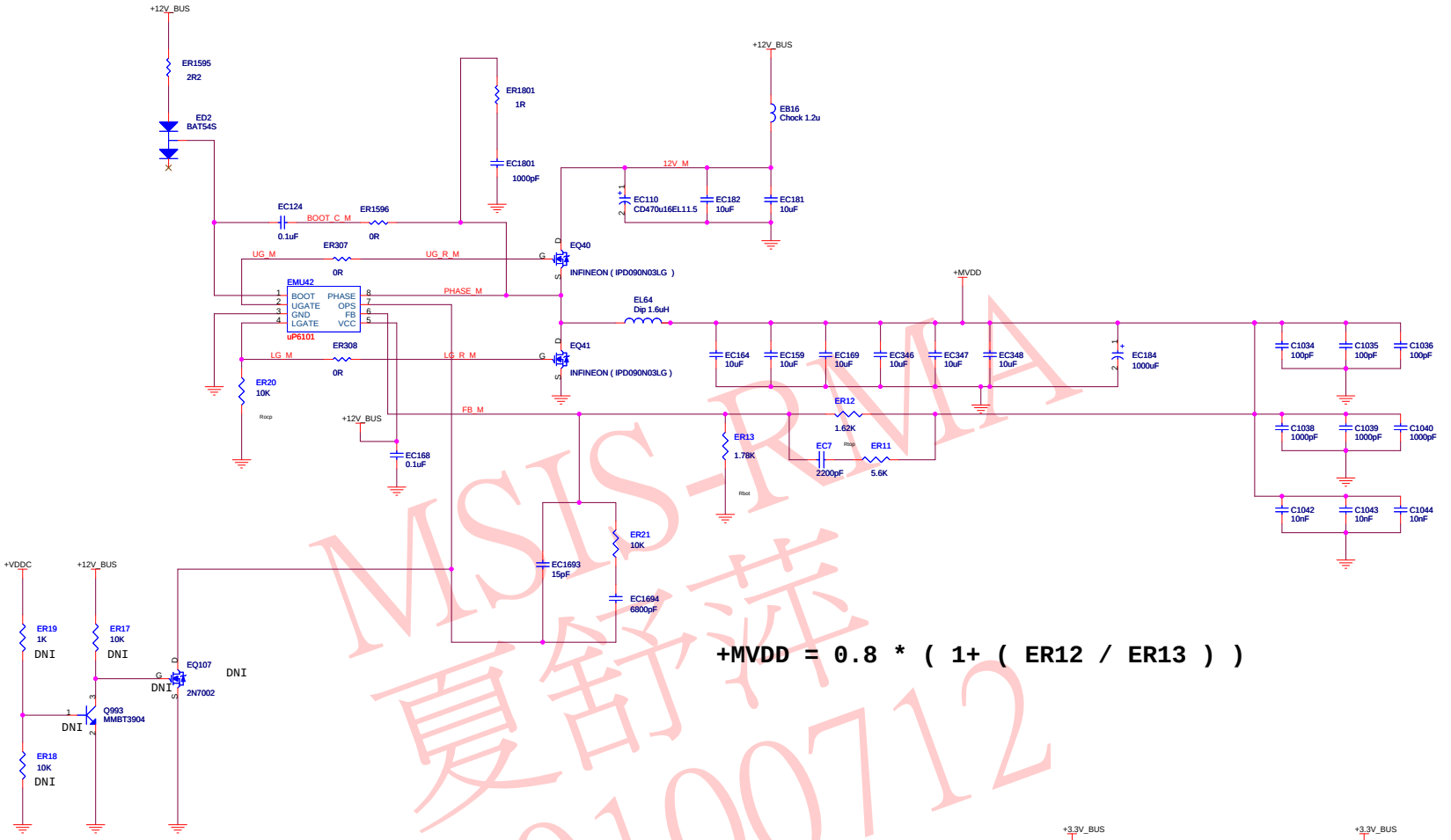
Date: Tuesday, March 09, 2010 Rev P03

Sheet 11 of 18

Title RH CEDAR DDR3 1GB VGA+HDMI/DP+dDVI

Doc No. 105-C026XX-00D



Memory Power Seq

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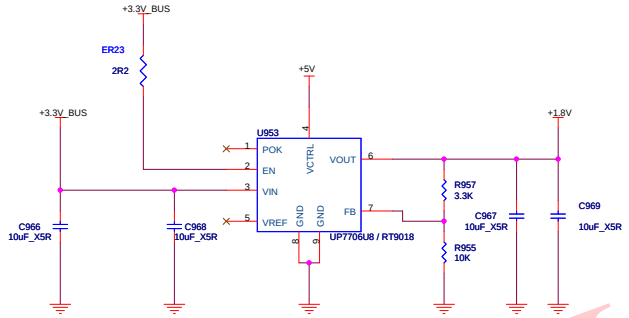
Date:	Tuesday, March 09, 2010
Rev	P03
Sheet	12 of 18
Title	RH CEDAR DDR3 1GB VGA+HDMI/DP+dDVI
Doc No.	105-C026XX-00D

Linear Regulators

Regulators for +5V, +5V_VESA and +5V_VESA2

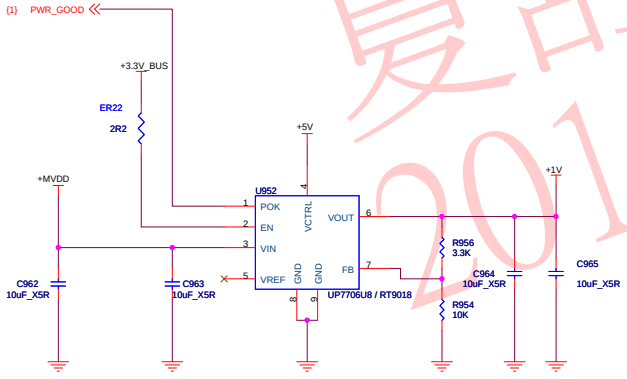
LDO #1: Vin = 3.00V to 3.60V (3.3V +/- 9%) Vout = +1.8V +/- 2%; Iout = 1.6A (TBV) RMS MAX
PCB: 50 to 70mm sq. copper area for cooling



Vout=0.8V * (1+ R957 / R955)

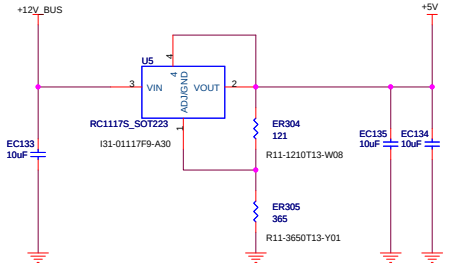
1.8V WORST-CASE REQUIREMENT	
Display Config	Est. Current
DVI+HDMI+DP	1330mA

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



Vout=0.8V * (1+ R956 / R954)

1.0V WORST-CASE REQUIREMENT	
Display Config	Est. Current
DVI+HDMI+DP	1560mA



Vout=1.25V* [1+(ER305/ER304)]

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Date:	Tuesday, March 09, 2010
Rev	P03
Sheet	13 of 18
Title	RH CEDAR DDR3 1GB VGA+HDMI/DP+dDVI
Doc No.	105-C026XX-00D

Power Management - Power Gating and Dynamic Voltage Control

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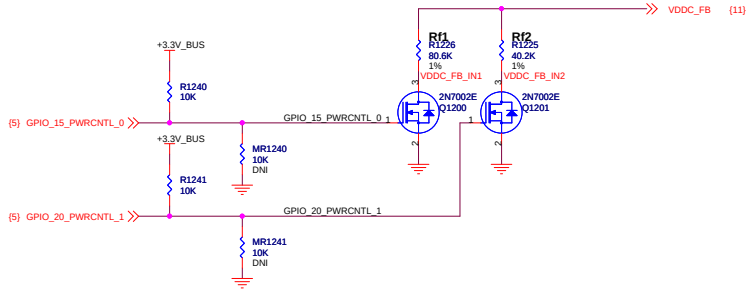
VDDC Low Side Divider



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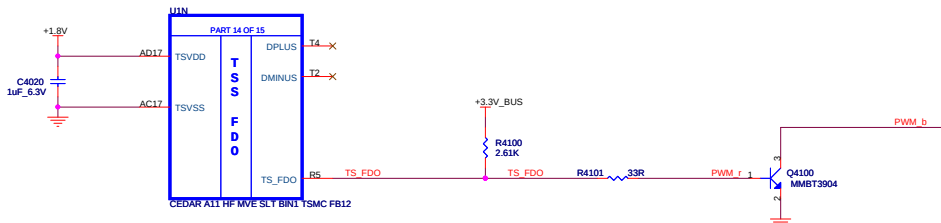
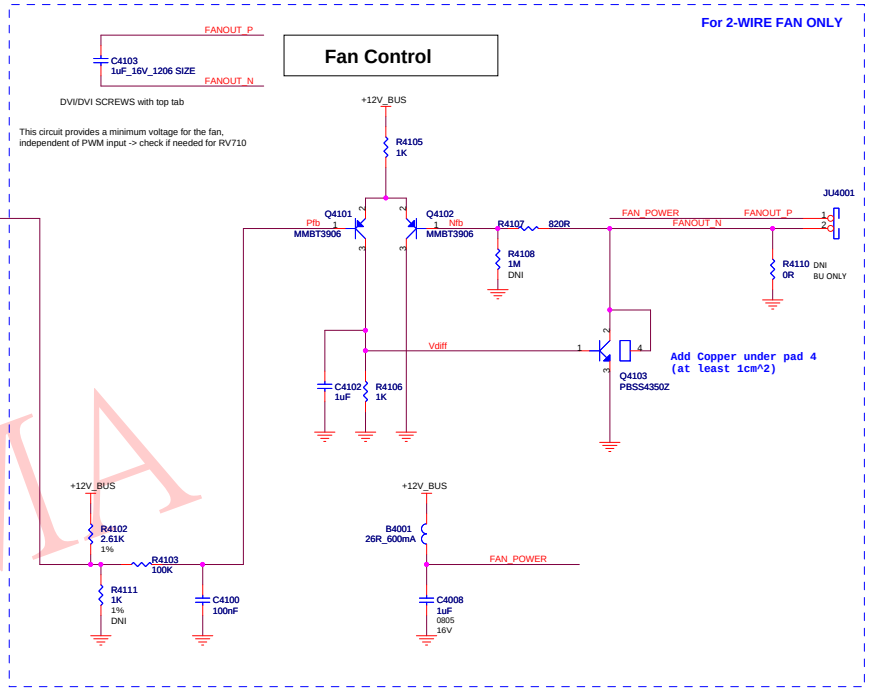
Date: Tuesday, March 09, 2010	Rev P03
Sheet 14 of 18	
Title RH CEDAR DDR3 1GB VGA+HDMI/DP+dDVI	Doc No. 105-C026XX-00D

Mechanical and Thermal Management



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



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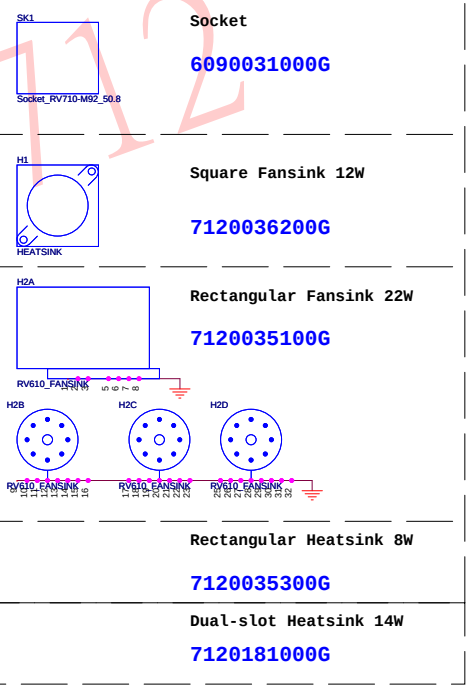

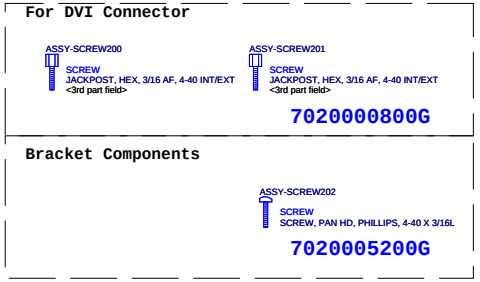

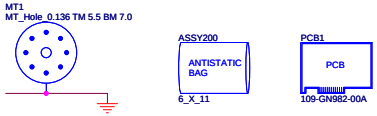

SKU		P/N	CONFIGURATION	Form Factor
	PERCH	8020051300G	DVI + DP + VGA	FH / SS
BASS		8020051400G	DVI +HDMI+ VGA	FH / SS
	PERCH	8020051600G	DVI + DP	LP / SS
BASS		80200516A0G	DVI +HDMI	LP / SS
	PERCH	8020051700G	DVI + DP + VGA	FH / DS
BASS		80200517A0G	DVI +HDMI+ VGA	FH / DS

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Date: Tuesday, March 09, 2010 Rev P03

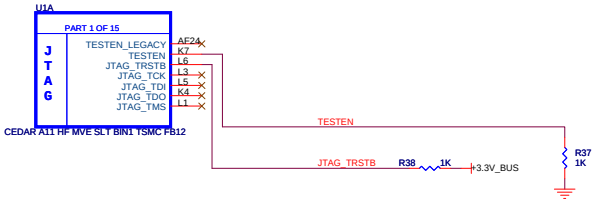
Sheet 15 of 18

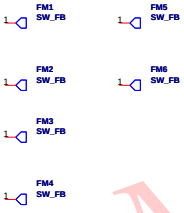
Title: RH CEDAR DDR3 1GB VGA+HDMI/DP+dDVI

Doc No. 105-C026XX-00D

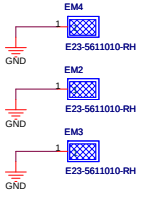
(19) Debug Circuits

JTAG





TOP	Bottom	TOP	Bottom
Single end	Single end	Different	Different
Address branch	Memory data	TMDS	PEX_PCIE
50 ohm +/- 5 ohm	45 ohm +/- 5 ohm	100 ohm +/- 10 %	85 ohm +/- 10 %
3.937 mils	4.724 mils	3.897 mils / 11.850 mils	4.921 mils / 6.889 mils



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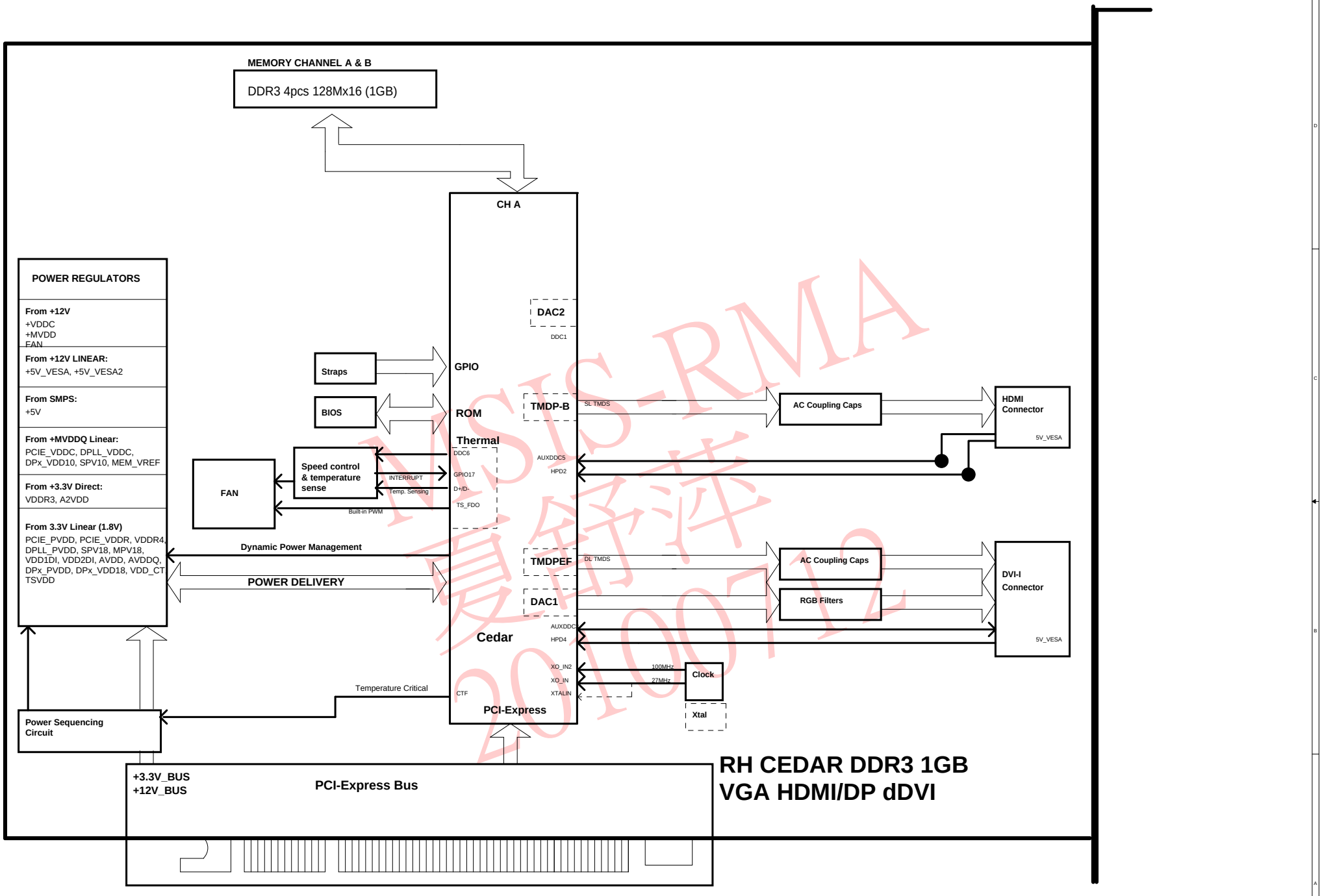
Date:	Tuesday, March 09, 2010	Rev	P03
Sheet	16 of 18		
Title	RH CEDAR DDR3 1GB VGA+HDMI/DP+dDVI	Doc No.	105-C026XX-00D



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(905) 882-2600

Date:	Tuesday, March 09, 2010	Rev	P03
Sheet	of	105-C026XX-00D	
Title	RH CEDAR DDR3 1GB VGA+HDMI/DP+dDVI	Doc No.	17 18

Title	Schematic No.	Date:
RH CEDAR DDR3 1GB VGA+HDMI/DP+dDVI	105-C026XX-00D	Tuesday, March 09, 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 P03

Sch Rev	PCB Rev	Date	REVISION DESCRIPTION
00	00A	2009/03/23	
01	00B	2009/07/3	
02	00C	2009/08/12	Initial Cedar schematic
03	00D	2009/09/24	Change DDC line configuration

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