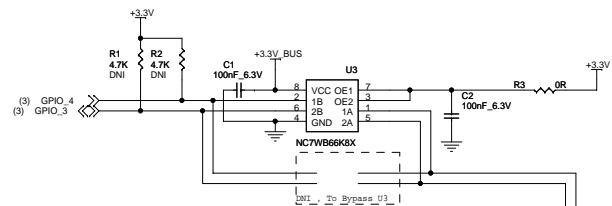
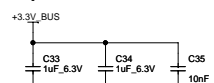
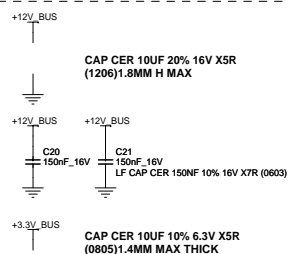
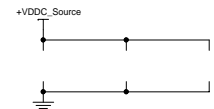


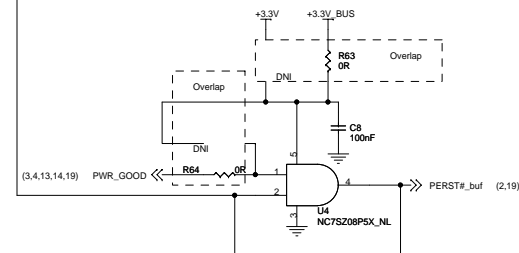
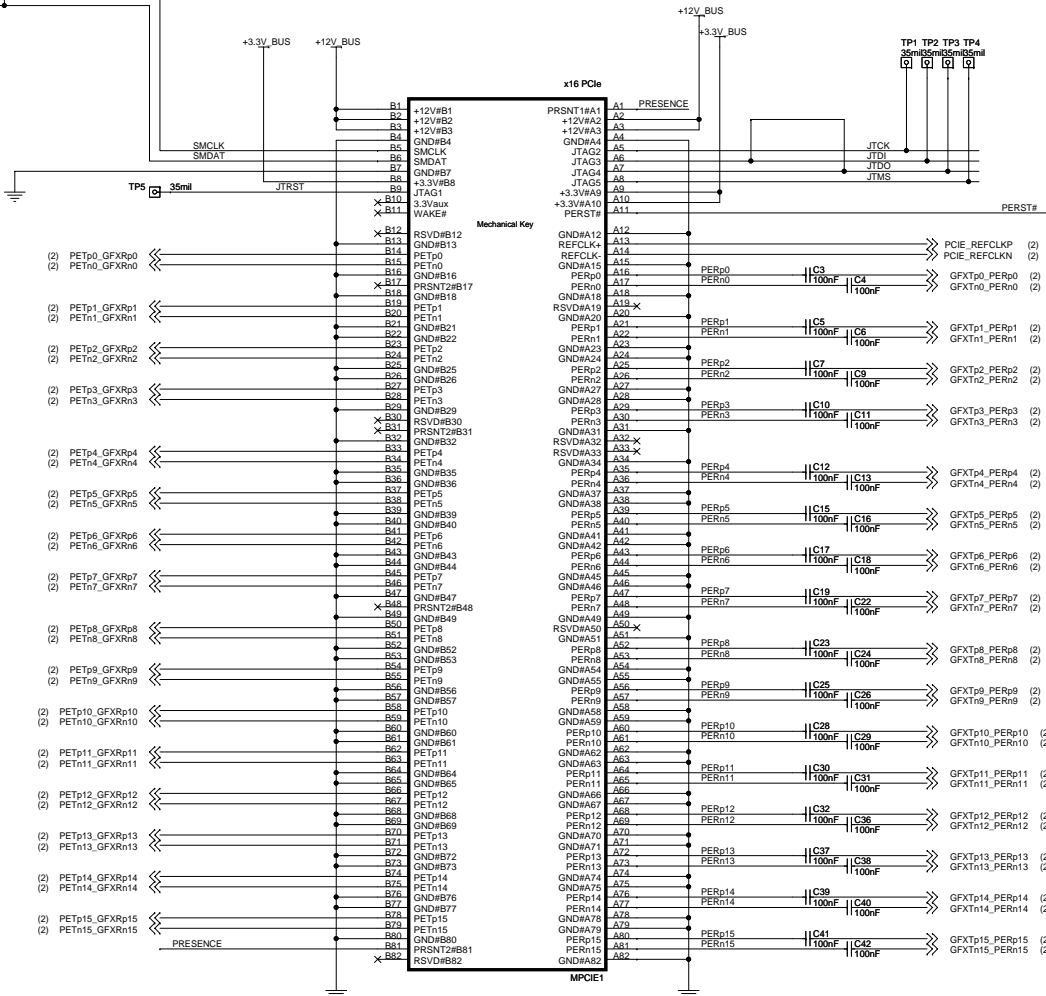
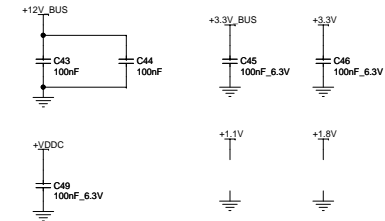
PCI-EXPRESS EDGE CONNECTOR



Place at regular intervals between
VDDC and MVDG regulator.



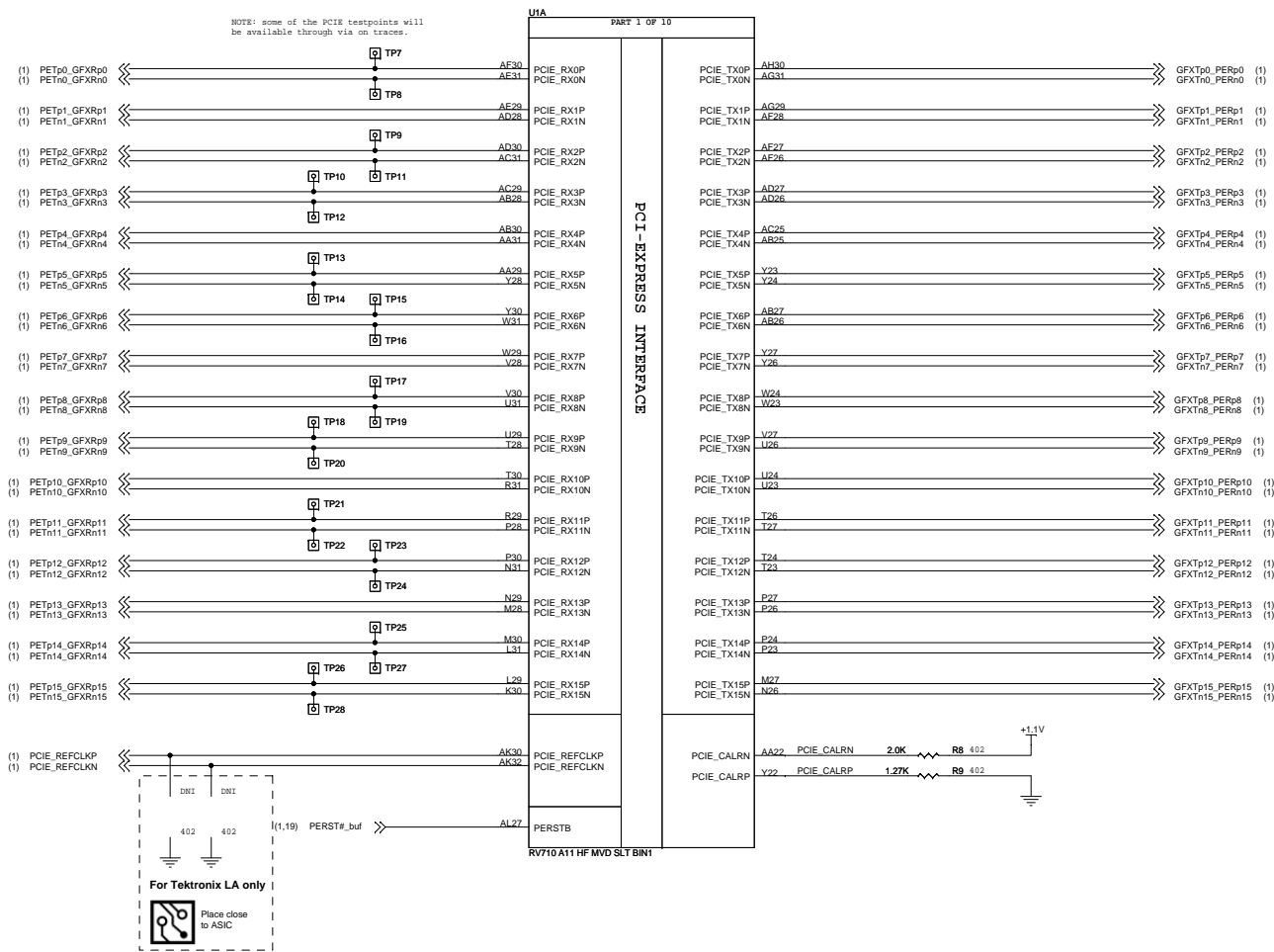
Place these caps last,
ideally as close to the bus
connector as possible

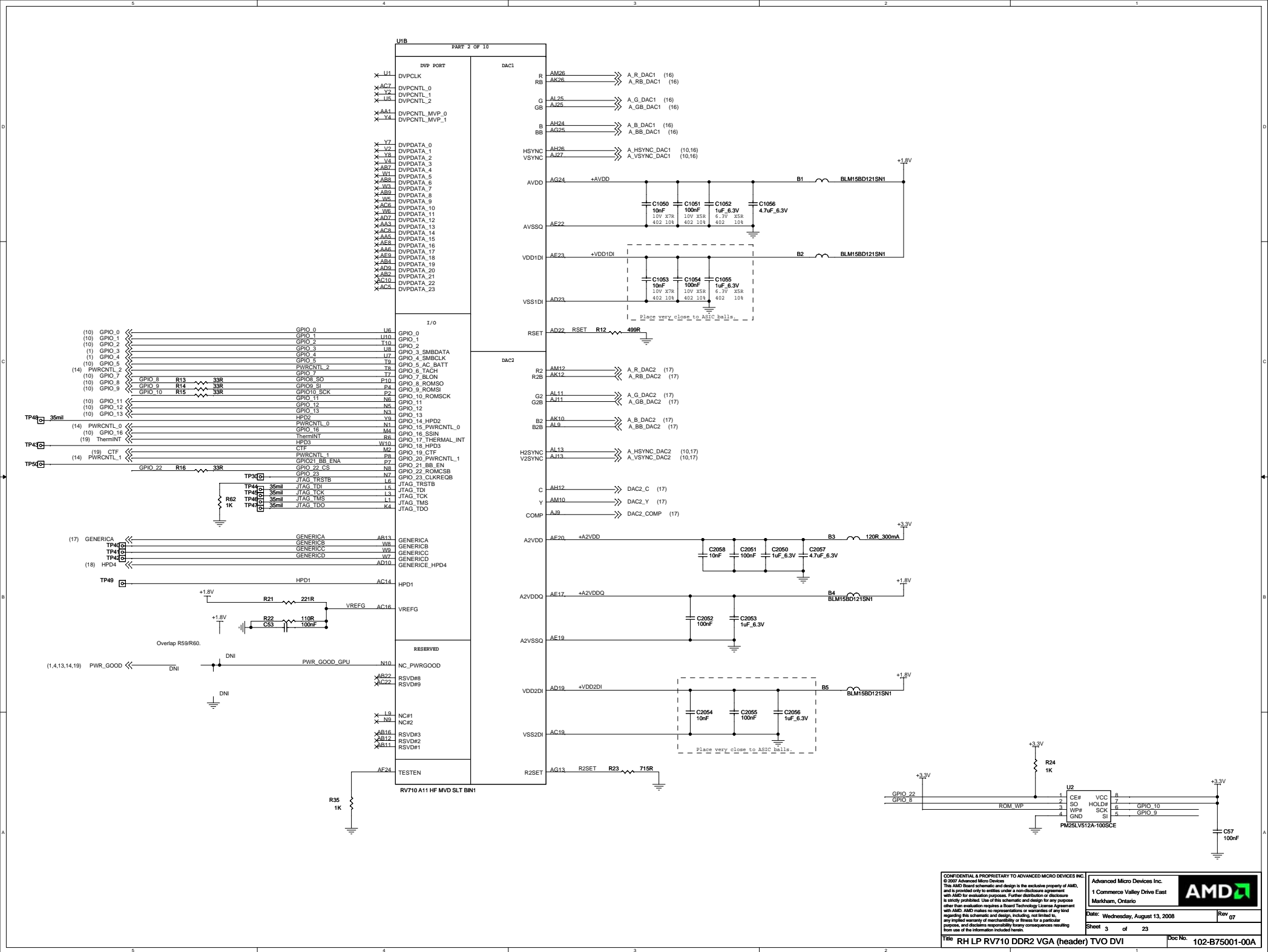


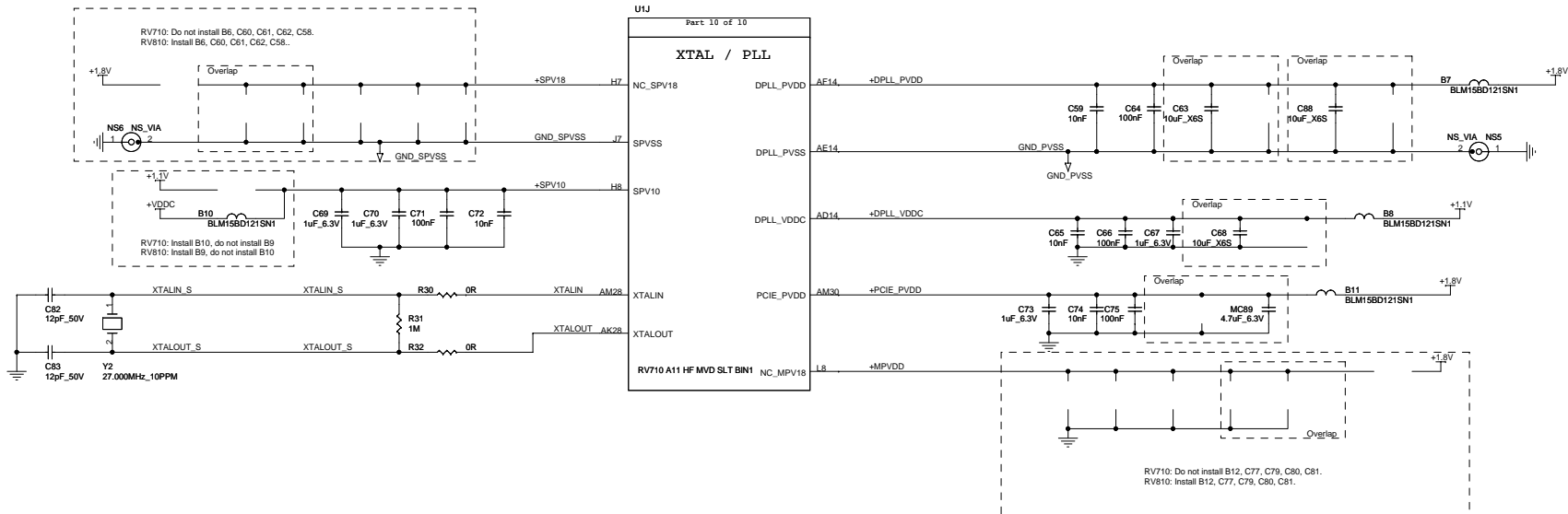
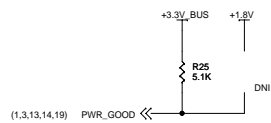
SYMBOL LEGEND	
DNI	DO NOT INSTALL
#	ACTIVE LOW
	DIGITAL GROUND
	ANALOG GROUND

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Rev 07
Sheet 1 of 23
Title RH LP RV710 DDR2 VGA (header) TVO DVI Doc No. 102-B75001-00A





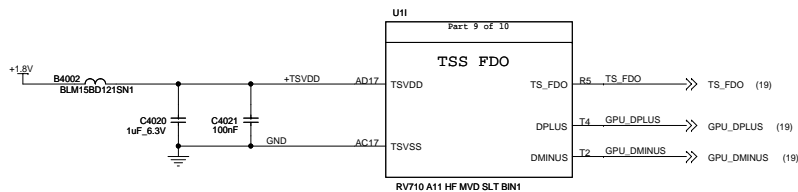
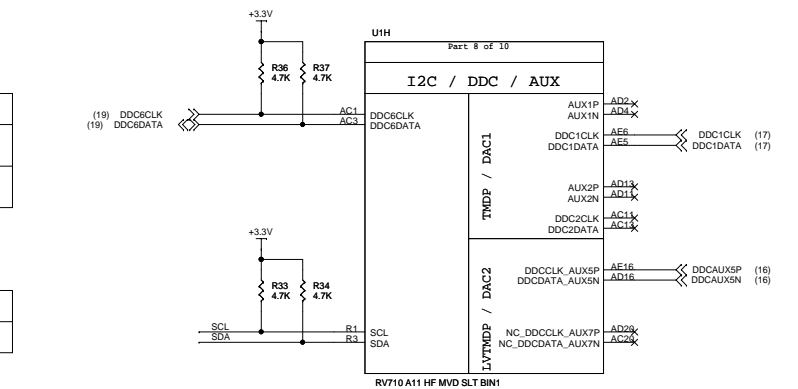


DDC6 BUS:

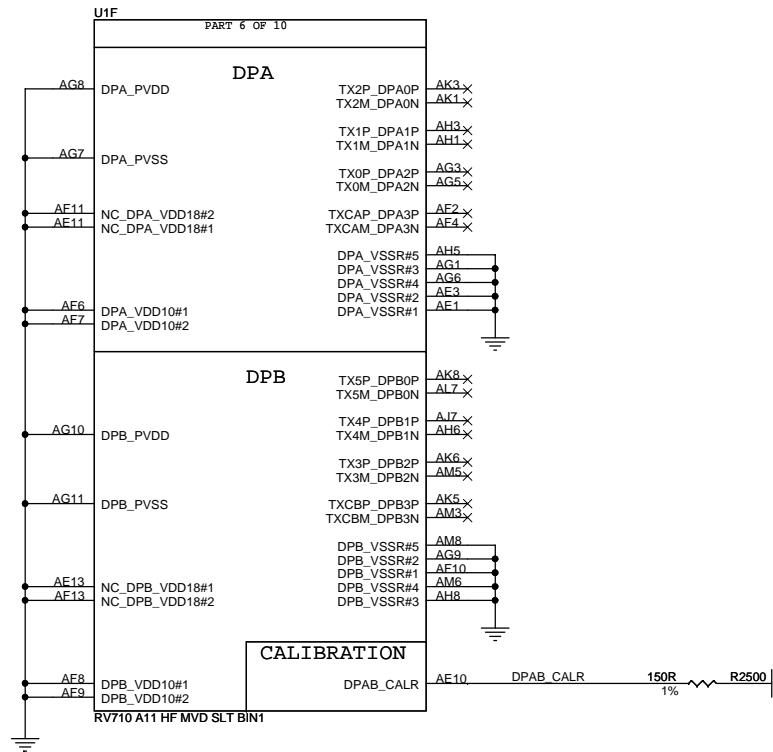
I2C Address	Function	Device
0x90	I2C VDDC Control	DS4402
0x98	LM63 - External Temperature Sensor	LM63


SCL / SDA BUS:

I2C Address	Function	Device
N/A	N/A	N/A

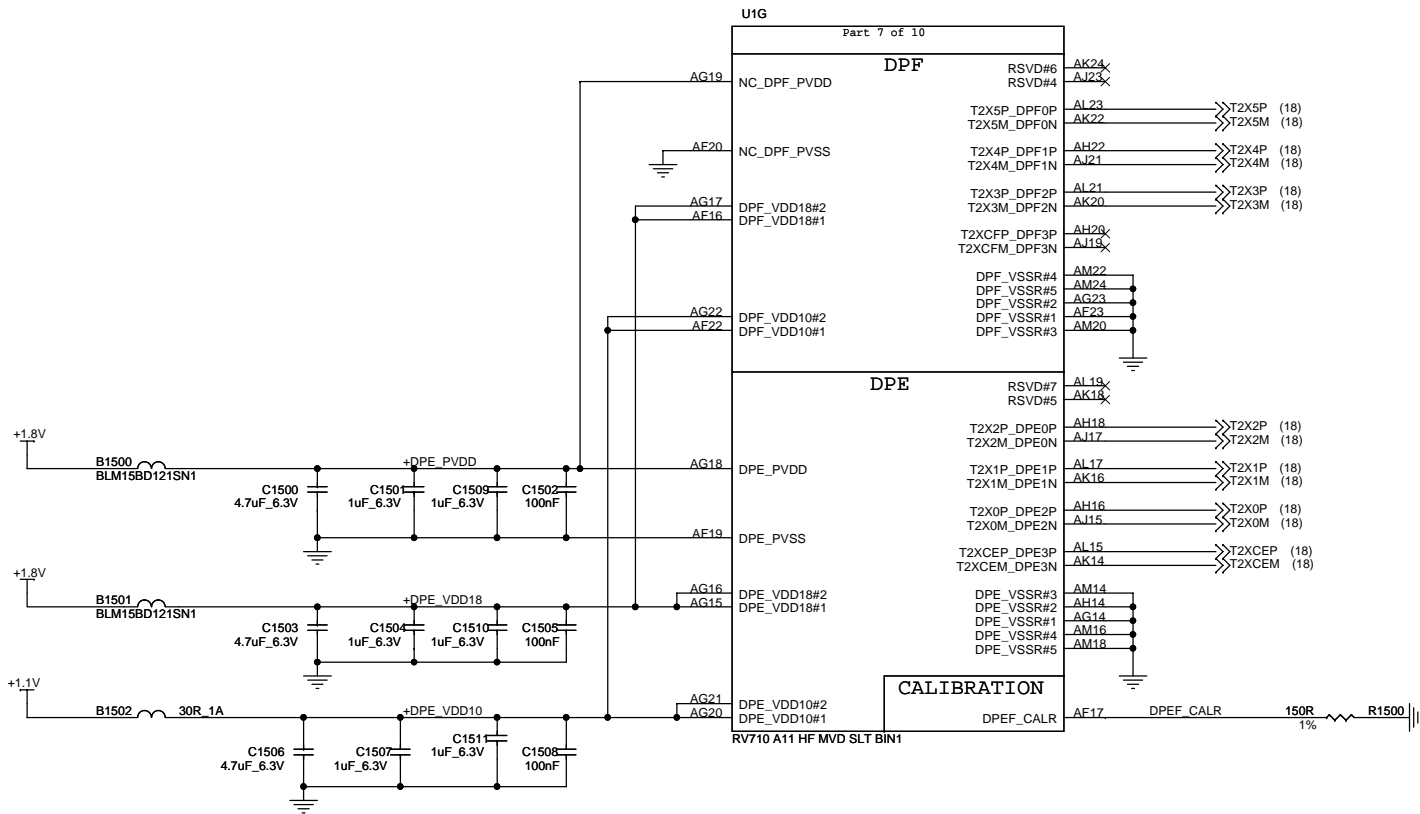


TMDP INTERFACE



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<p>Sheet 5 of 23</p>		<p>Doc No. 102-B75001-00A</p>	
<p>Title RH LP RV710 DDR2 VGA (header) TVO DVI</p>			

LVTMDP INTERFACE



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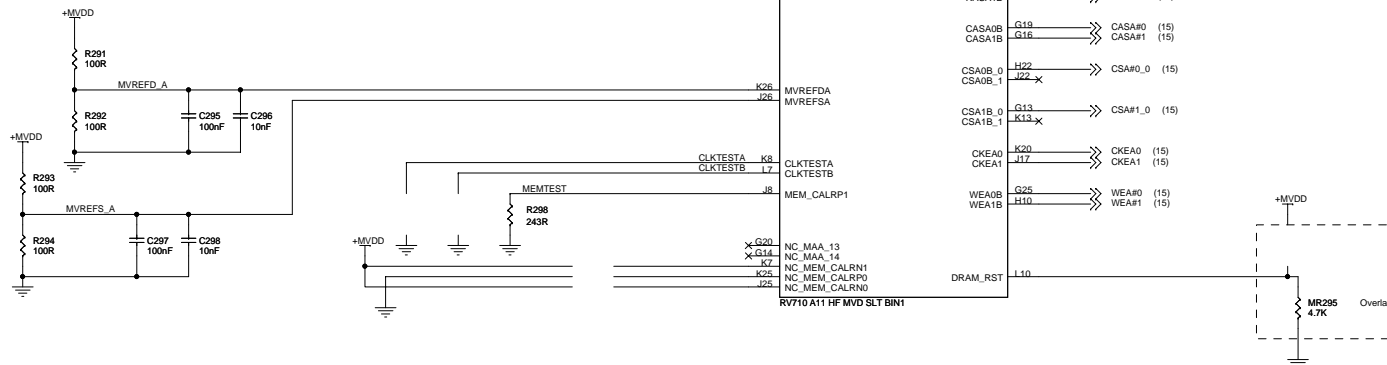
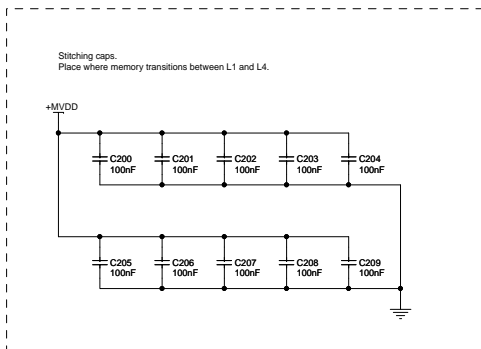


Date: Wednesday, August 13, 2008 Rev 07

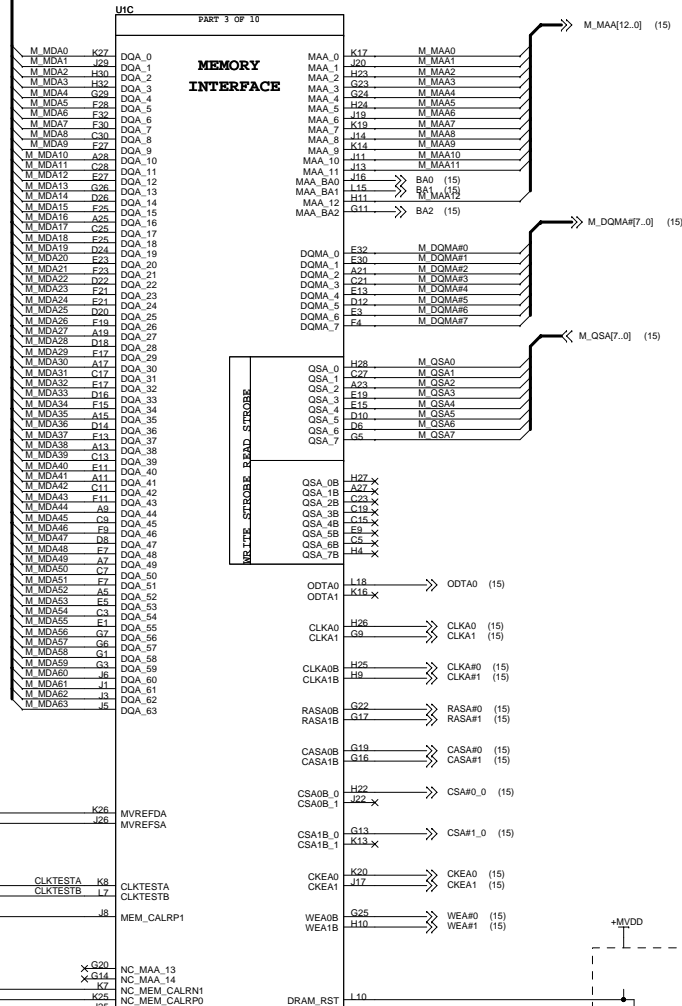
Sheet 6 of 23

Title RH LP RV710 DDR2 VGA (header) TVO DVI Doc No. 102-B75001-00A

MEMORY INTERFACE



DIVIDER RESISTORS	DDR2
MVREF TO 1.8V	100R
MVREF TO GND	100R



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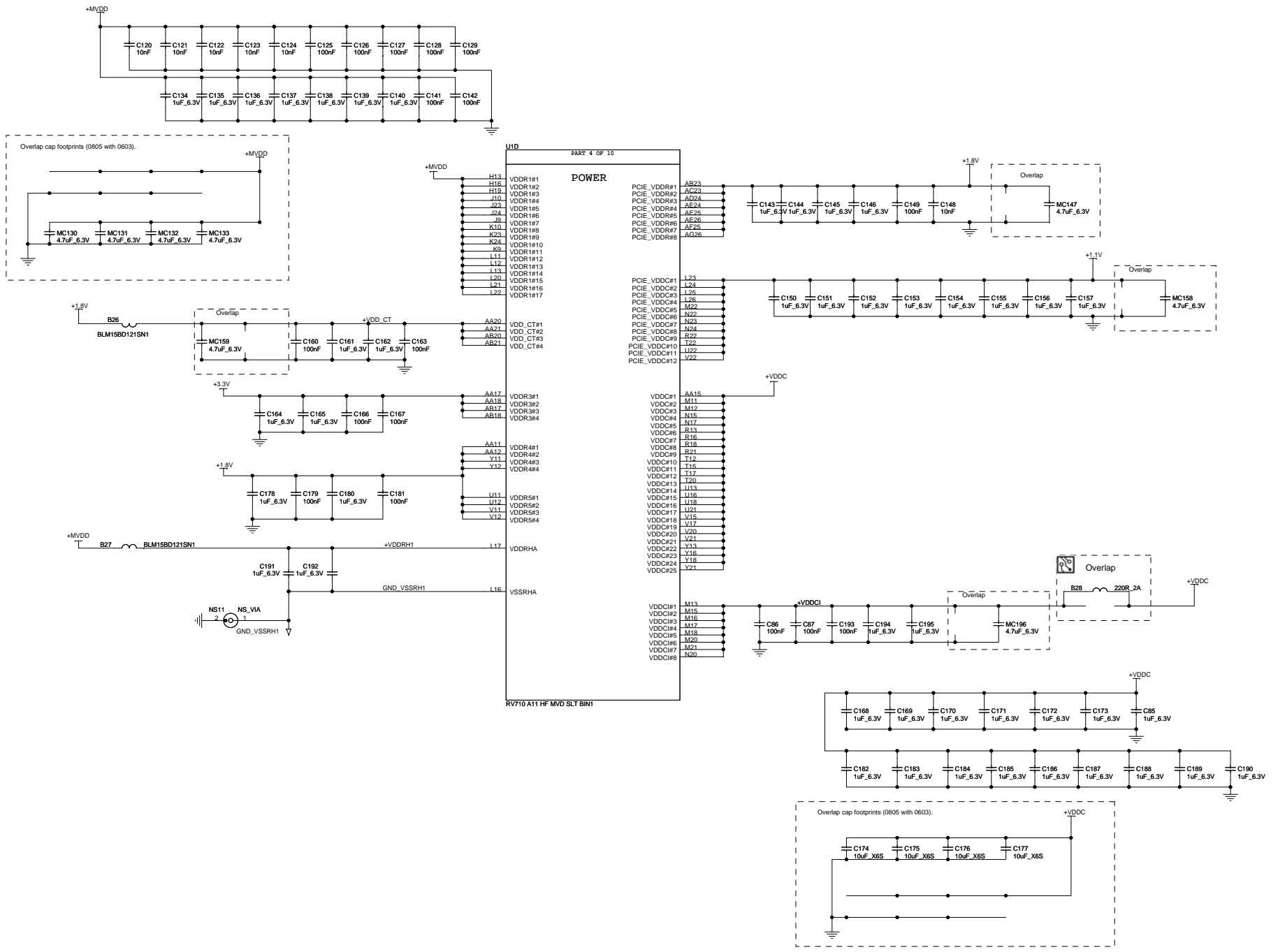


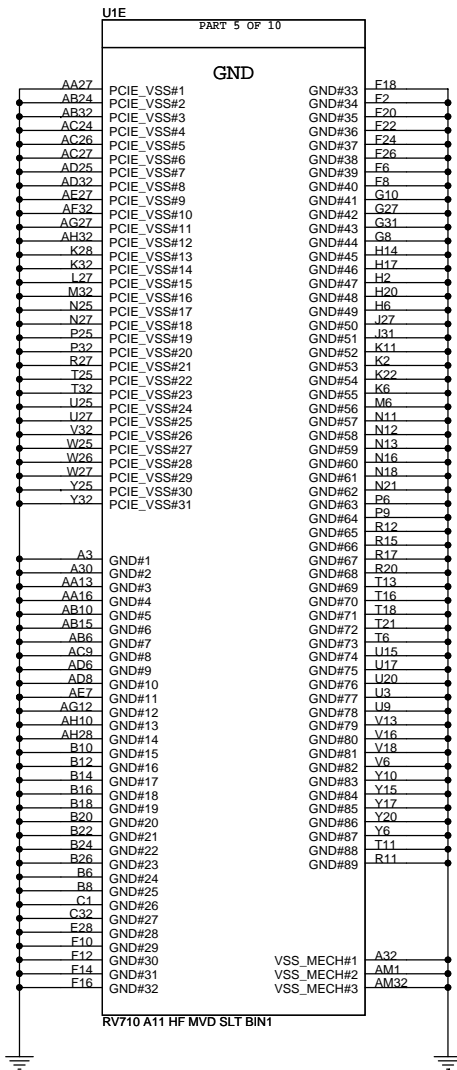
Date: Wednesday, August 13, 2008

Rev 07

Title	RH LP RV710 DDR2 VGA (header) TVO DVI
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Doc No.	102-B75001-00A
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Date: Wednesday, August 13, 2008 Rev 07
Sheet 9 of 23
Title RH LP RV710 DDR2 VGA (header) TVO DVI Doc No. 102-B75001-00A



PIN BASED STRAPS

Pull-Down Resistors are for BU until built-in pull-downs are verified.



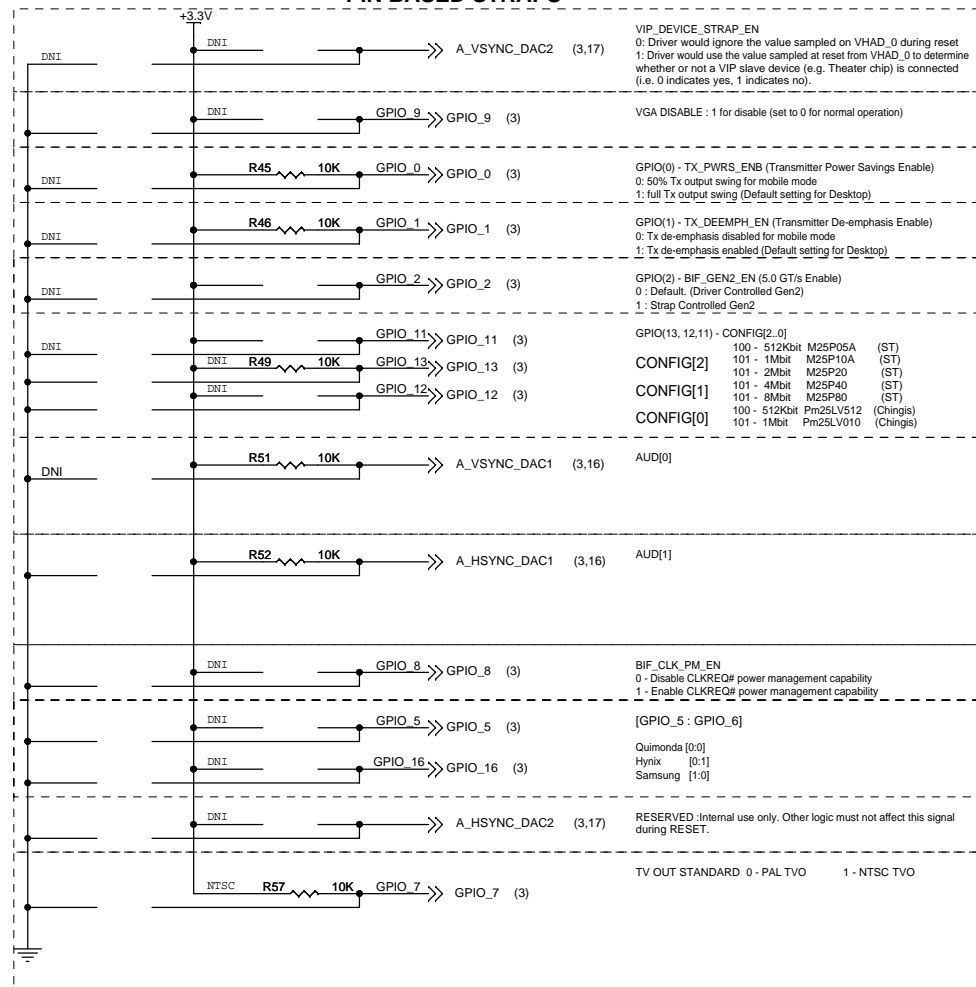
Overlap pads to save space
and to prevent assembly of
both resistors.

Layout



Ground
Signal
High logic voltage

PIN BASED STRAPS



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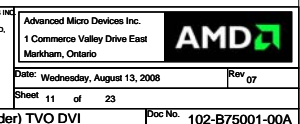
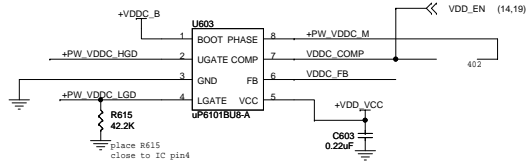
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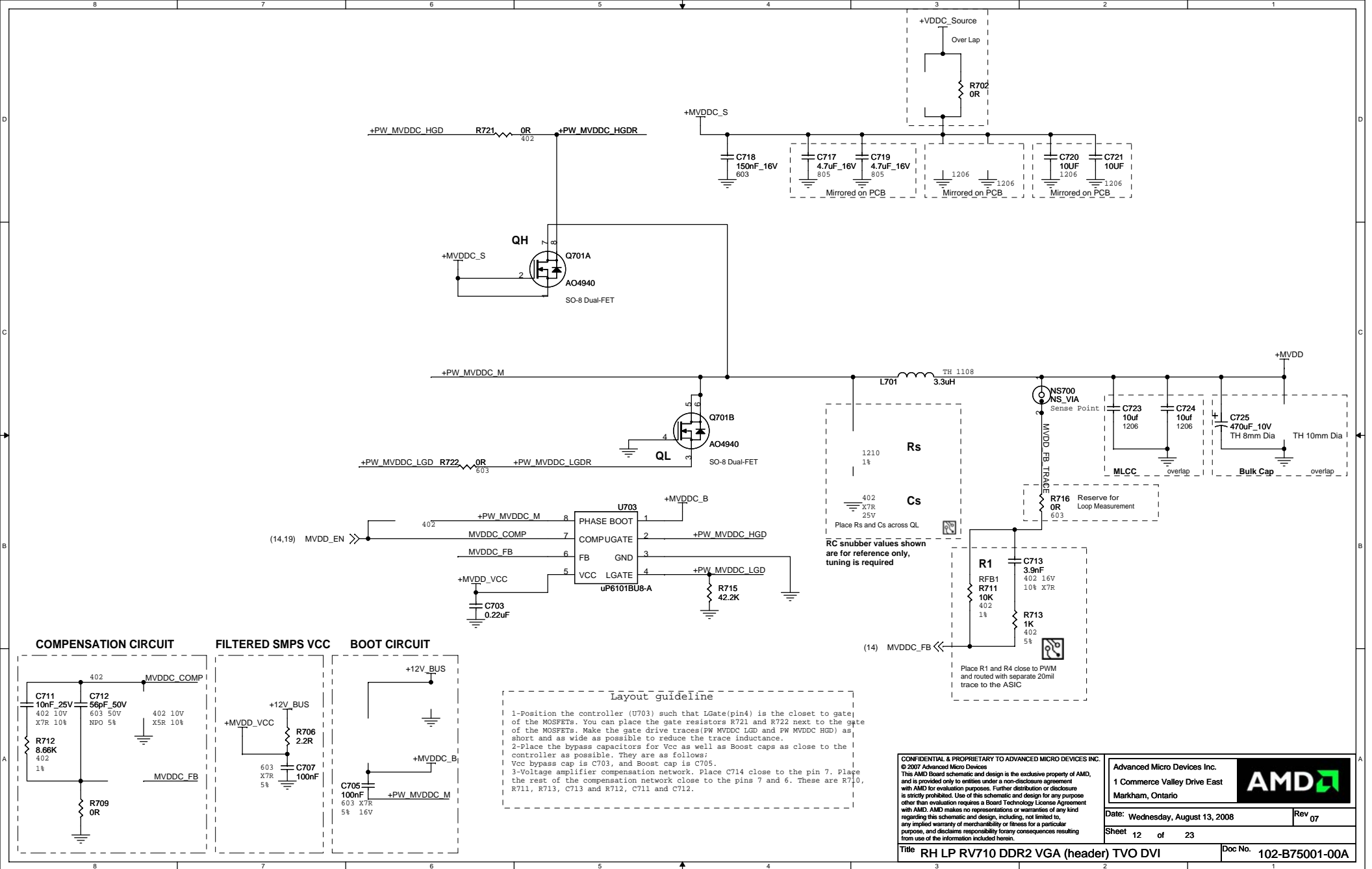
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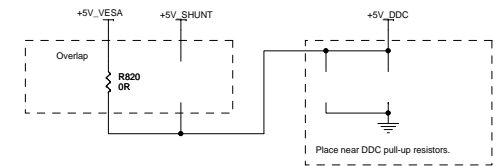
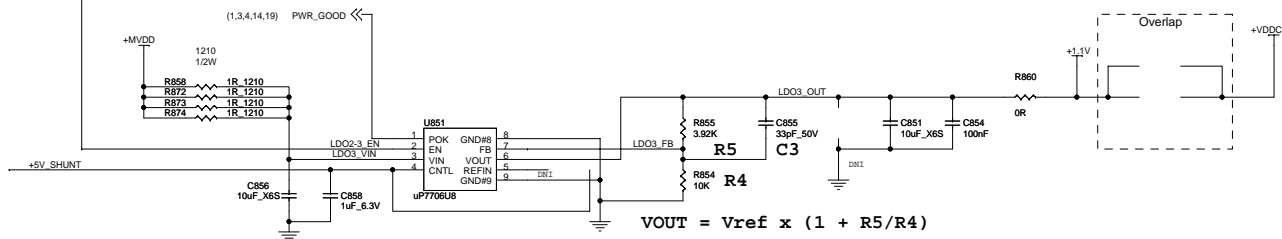
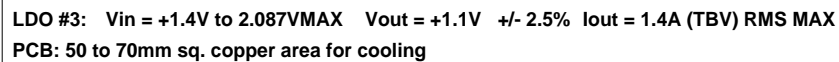
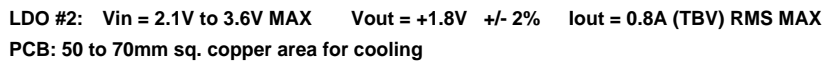
Sheet 10 of 23

Title RH LP RV710 DDR2 VGA (header) TVO DVI

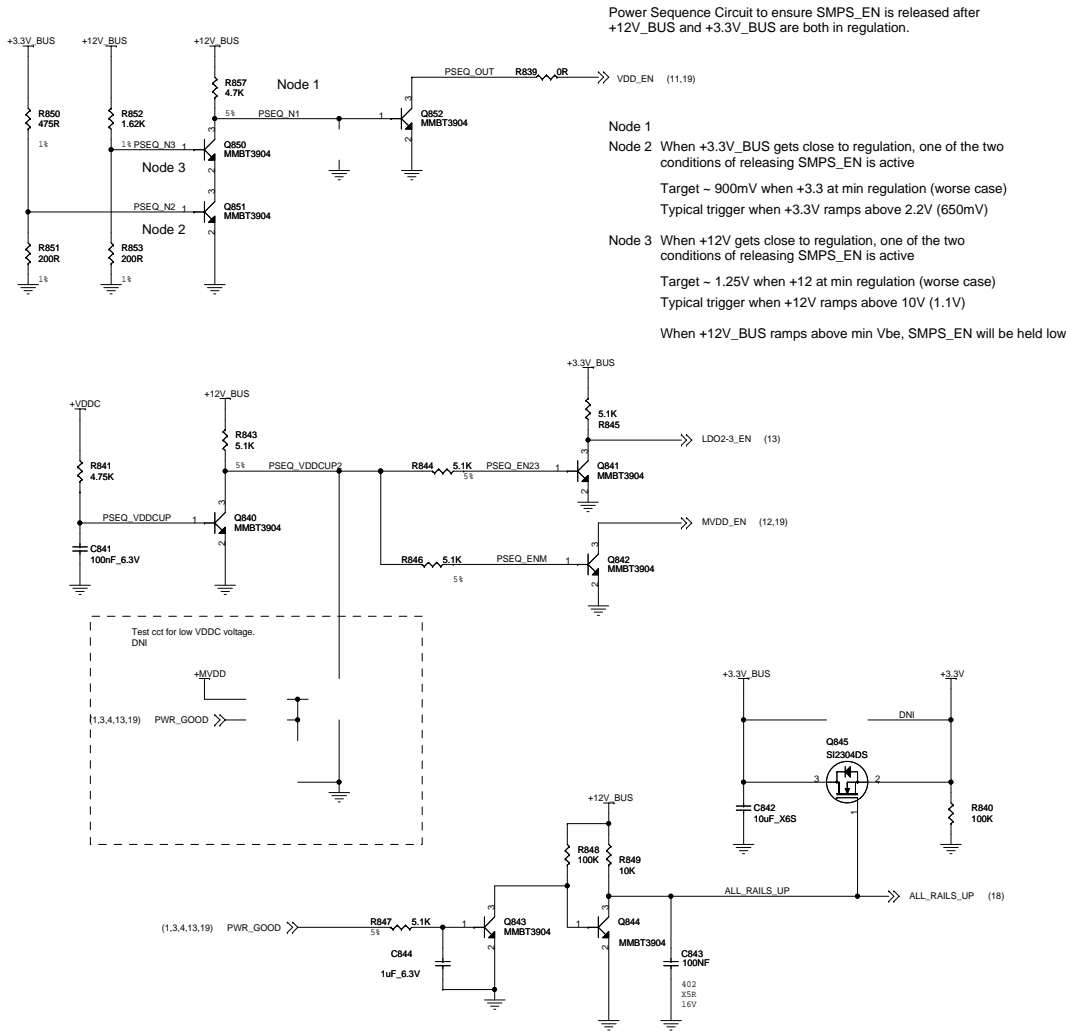
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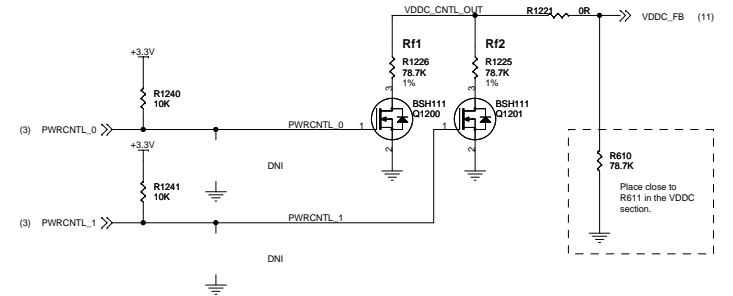
Power up/down Sequencing



Power Play

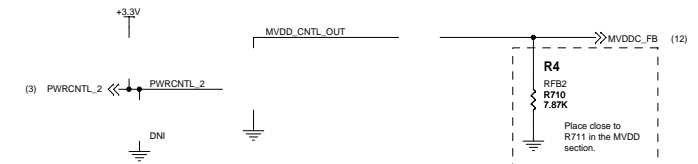
VDDC Voltage Settings Using GPIOs

PWR_CNTL_1 GPIO_20	PWR_CNTL_0 GPIO_15	Output Voltage (V)			
		RE1= RE2=	RE1= RE2=	RE1= RE2=	
0	0				
0	1				
1	0				
1	1	1	0	1	Power-up Default



MVDD Voltage Settings Using GPIOs

PWR_CNTL_2 GPIO_6	Output Voltage (V)			
	RE1= RE2=	RE1= RE2=	RE1= RE2=	
0				
1	1	0	1	Power-up Default



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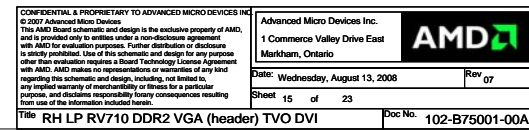
Rev 07

Sheet 14 of 23

Title RH LP RV710 DDR2 VGA (header) TVO DVI

Doc No. 102-B75001-00A

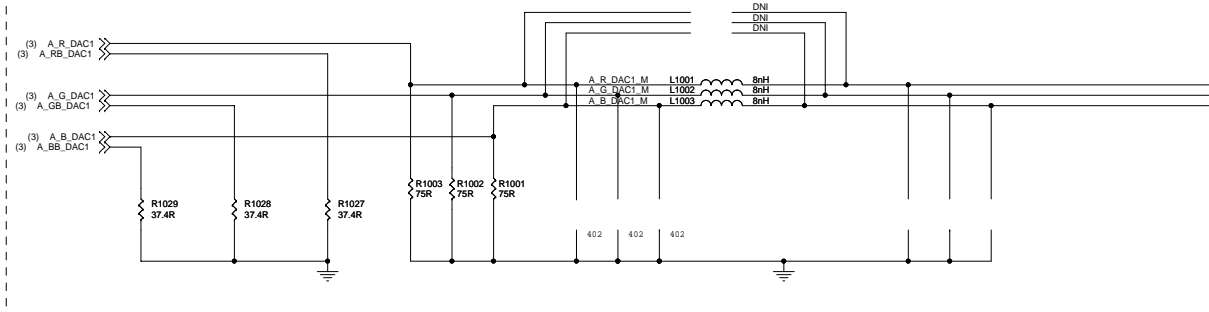
MAX DENSITY: 64Mx16



DAC 1 OUTPUT

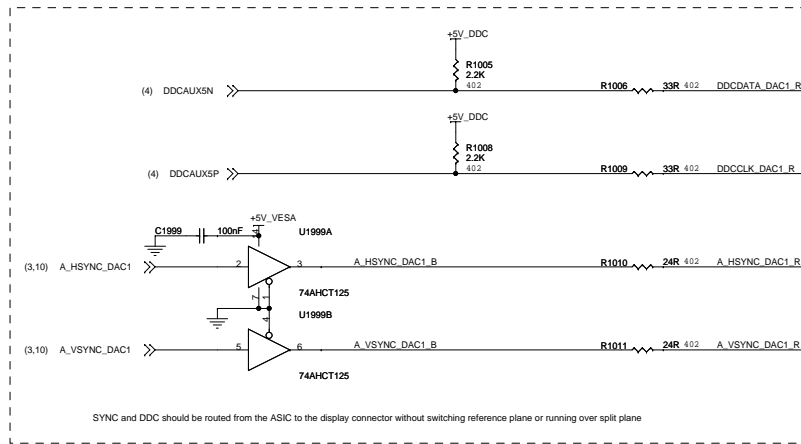
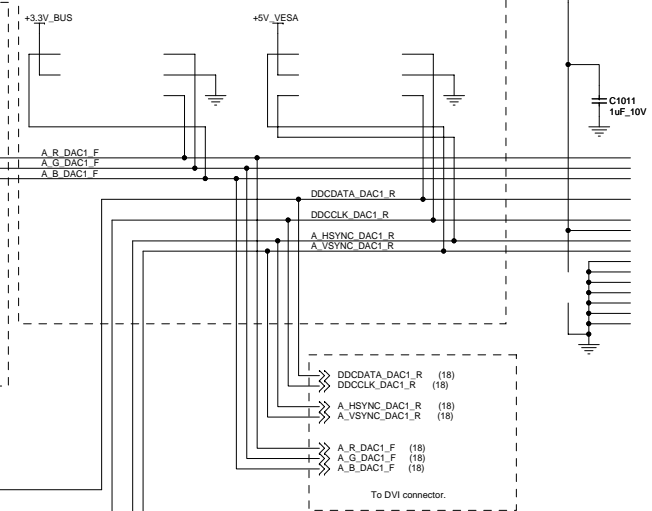


Place close to Connector
Pseudo differential RGB signals should be routed from the ASIC to the display connector without switching reference plane or running over split plane
Resistors are footprint options for the inductors. Footprints should be overlapped. (R1024-26)



Optional ESD Protection Diodes

Place close to Connector
ALLOW FOR A LOW INDUCTANCE PATH TO PIN 5



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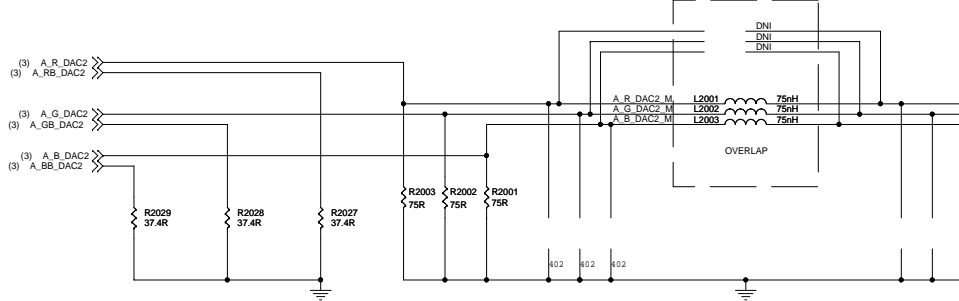
Date: Wednesday, August 13, 2008 Rev 07
Sheet 16 of 23

Title RH LP RV710 DDR2 VGA (header) TVO DVI Doc No. 102-B75001-00A

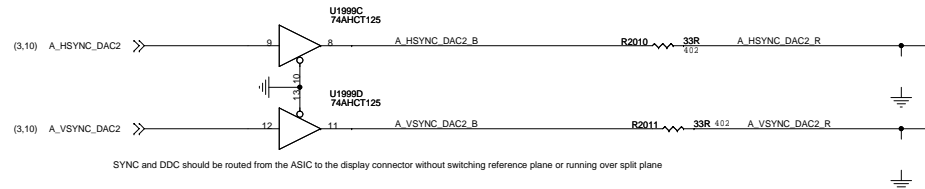
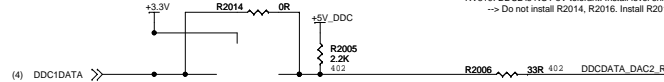
DAC 2 OUTPUT



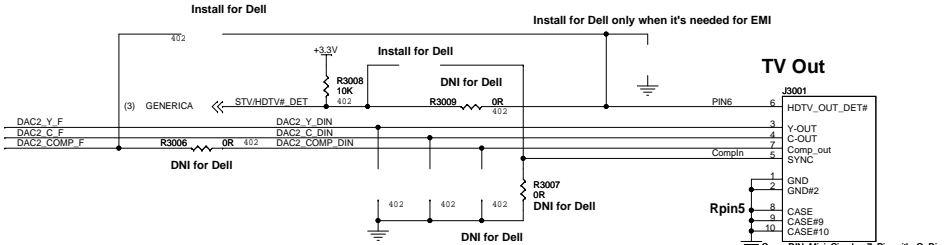
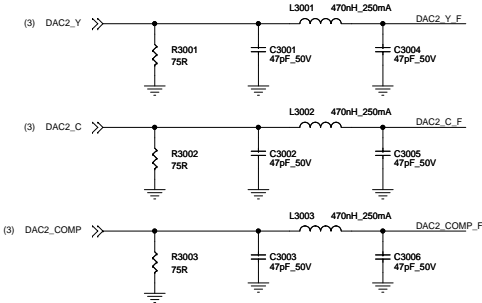
Place close to Connector
Pseudo differential RGB signals should be routed from the ASIC to the display connector without switching reference plane or running over split plane



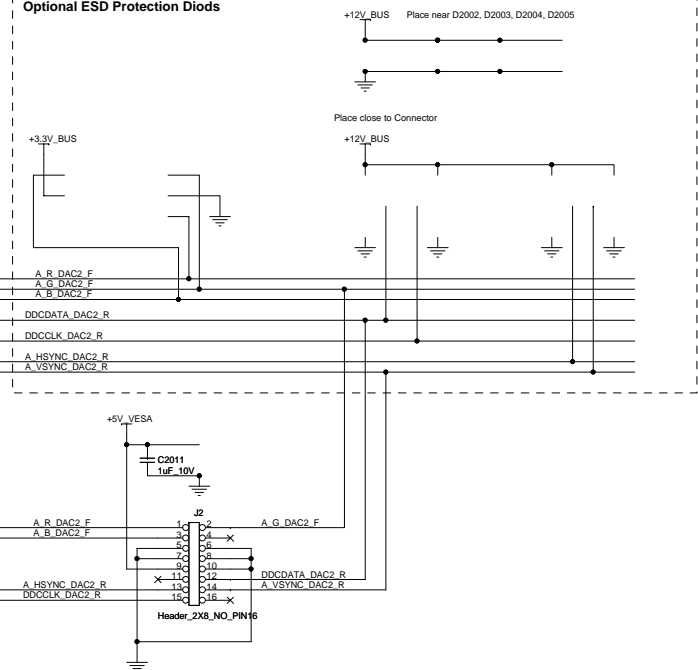
RV710: DDC2 is 5V tolerant. Do not install level shifter.
-> Do not install R2013, R2015, Q2001, Q2002. Install R2014, R2016.
RV810: DDC2 is NOT 5V tolerant. Install level shifter.
-> Do not install R2014, R2016. Install R2013, R2015, Q2001, Q2002.



TVO

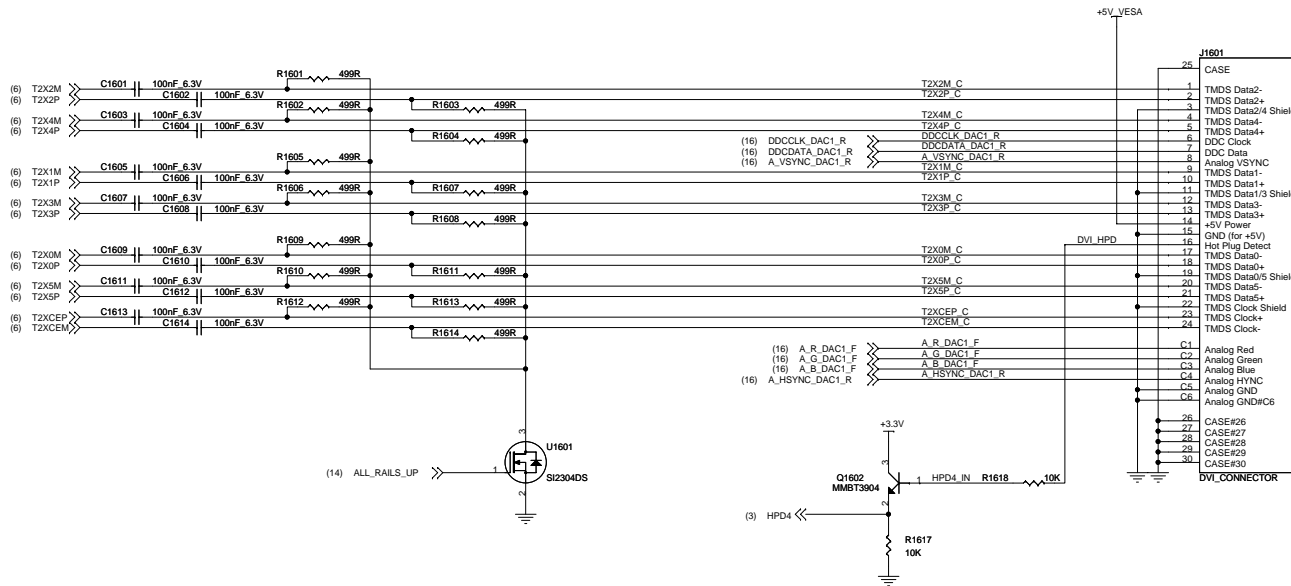


Optional ESD Protection Diodes

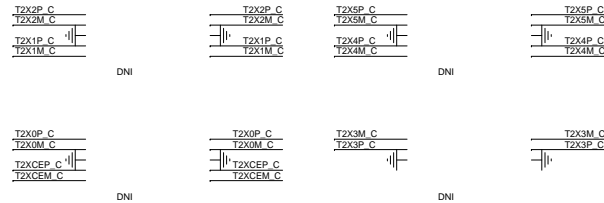


2X8 HEADER FOR VGA RIBBON CONNECTOR

DPE / DPF OUTPUT



Optional ESD protection diodes



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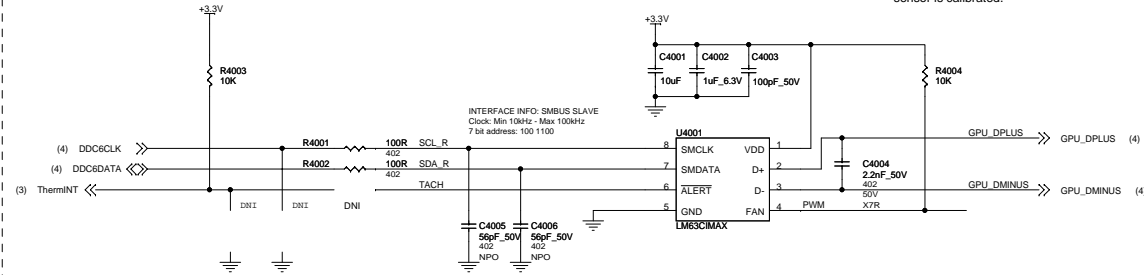
Date: Wednesday, August 13, 2008	Rev 07
Sheet 18 of 23	

Title	RH LP RV710 DDR2 VGA (header) TVO DVI	Doc No.	102-B75001-00A
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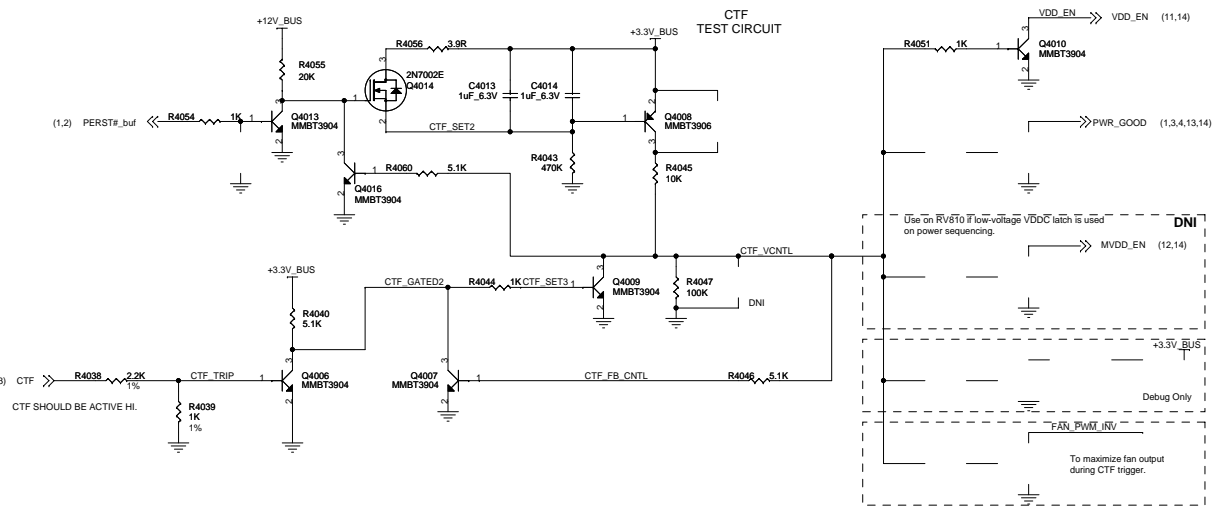
THERMAL MANAGEMENT

Remote Temperature Sensor

Remote diode temp sensor is for RV710 BU, until internal thermal sensor is calibrated.

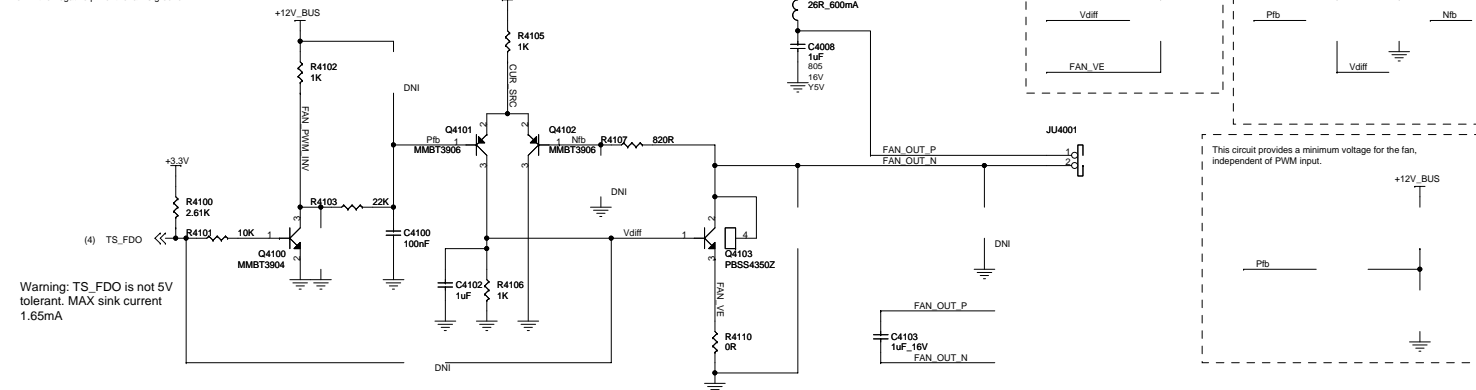


Critical Temperature Fault



Fan Control

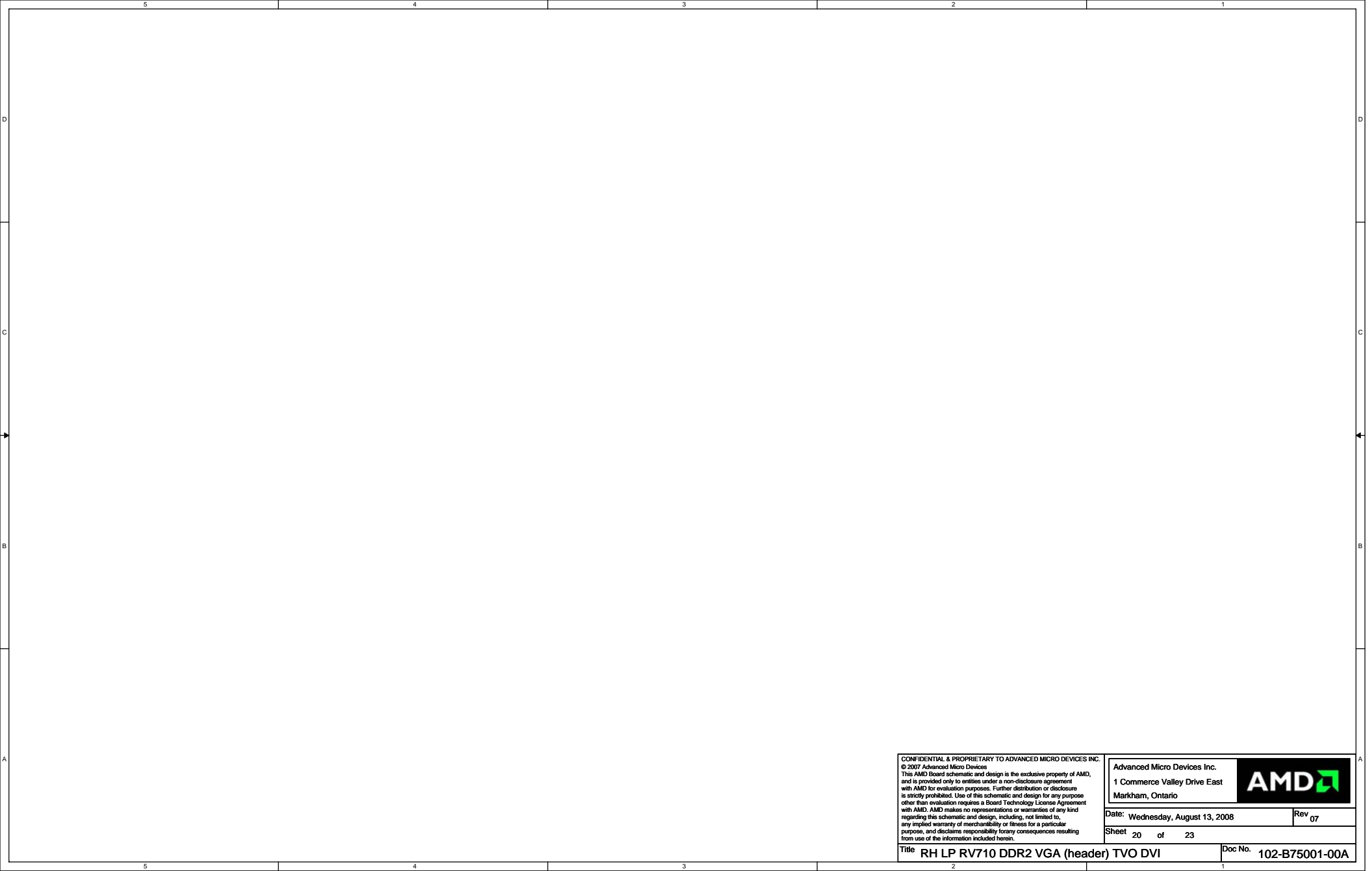
WARNING!
Be cautious when using a 3-wire fan with this fan control circuit. The negative pin will not always be ground. Some 3-wire fans with tachometers will only work if the negative pin of the fan is ground.




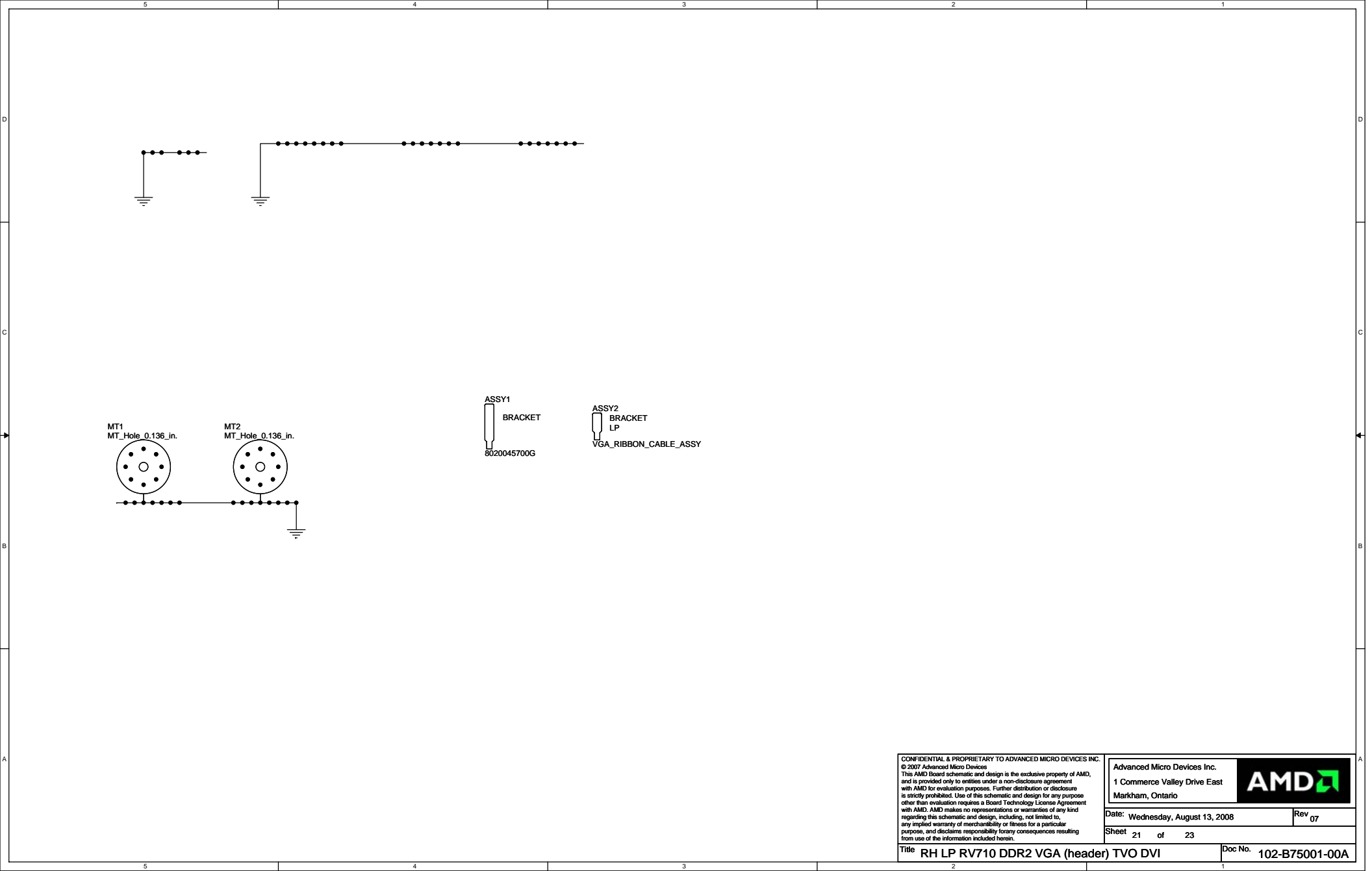
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Sheet 19 of 23
Rev 07

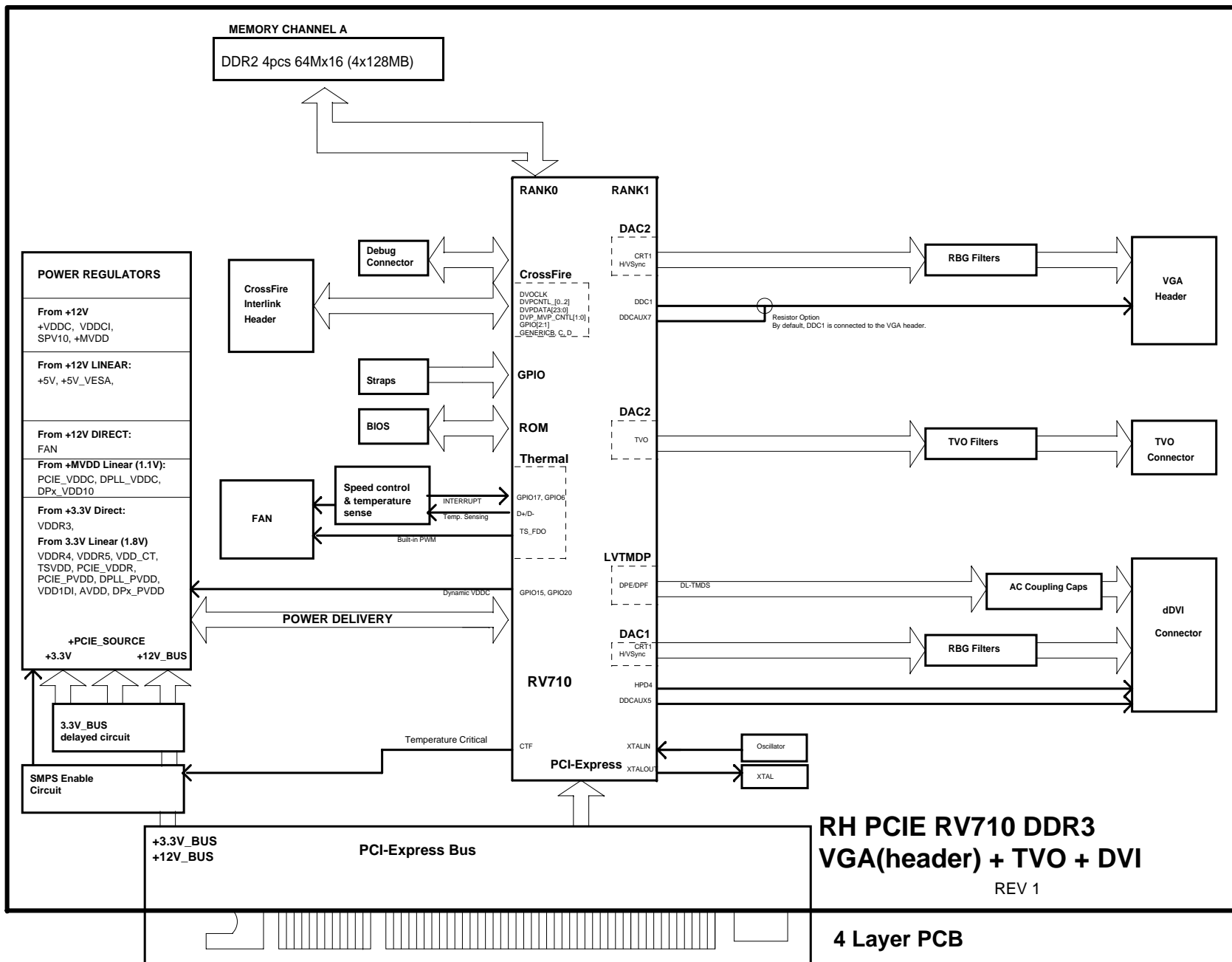




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Sheet 20 of 23			Doc No. 102-B75001-00A	
Title RH LP RV710 DDR2 VGA (header) TVO DVI				



<div>AMD</div>			Title		Schematic No.		Date:			
			RH LP RV710 DDR2 VGA (header) TVO DVI		102-B75001-00A		Wednesday, August 13, 2008			
			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 07
Sch Rev	PCB Rev	Date	RV710 ENGINEERING BOARD						REVISION DESCRIPTION	
01	00A	2008.04.02	INITIAL RELEASE OF CUSTOM-WIDE BOARD. BASED ON B625 REV06.							



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Sheet 24 of 23

Title RH LP RV710 DDR3 VGA (header) TVO DVI Doc No. 102-B75001-00A

