

PCI-EXPRESS EDGE CONNECTOR

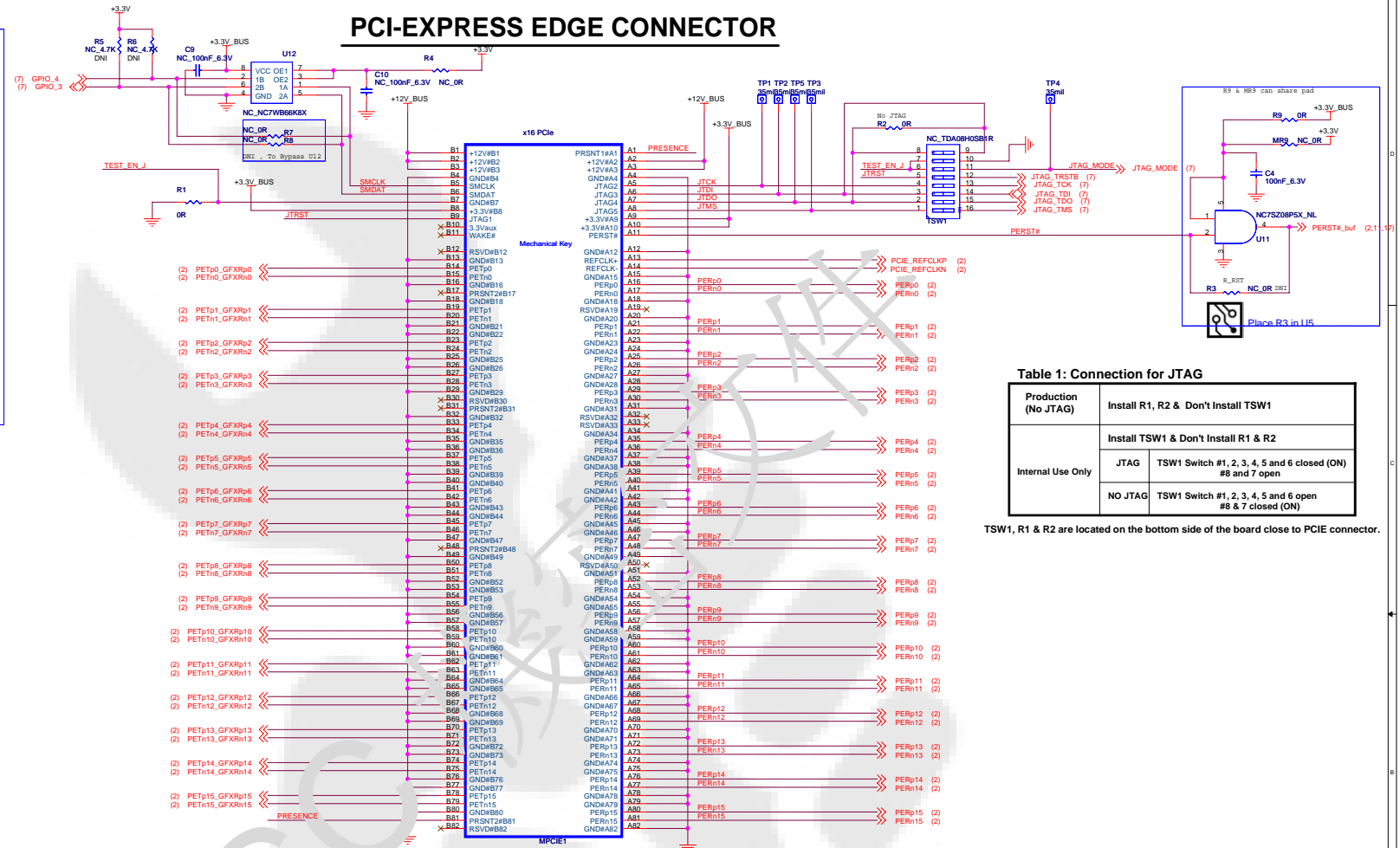
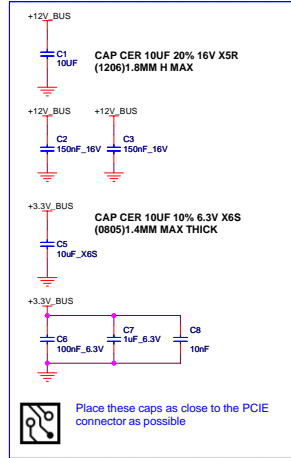


Table 1: Connection for JTAG

Production (No JTAG)	Install R1, R2 & Don't Install TSW1
Internal Use Only	Install TSW1 & Don't Install R1 & R2
JTAG	TSW1 Switch #1, 2, 3, 4, 5 and 6 closed (ON) #8 and 7 open
NO JTAG	TSW1 Switch #1, 2, 3, 4, 5 and 6 open #8 & 7 closed (ON)

TSW1, R1 & R2 are located on the bottom side of the board close to PCIe connector.

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

HD4870XG5-v10

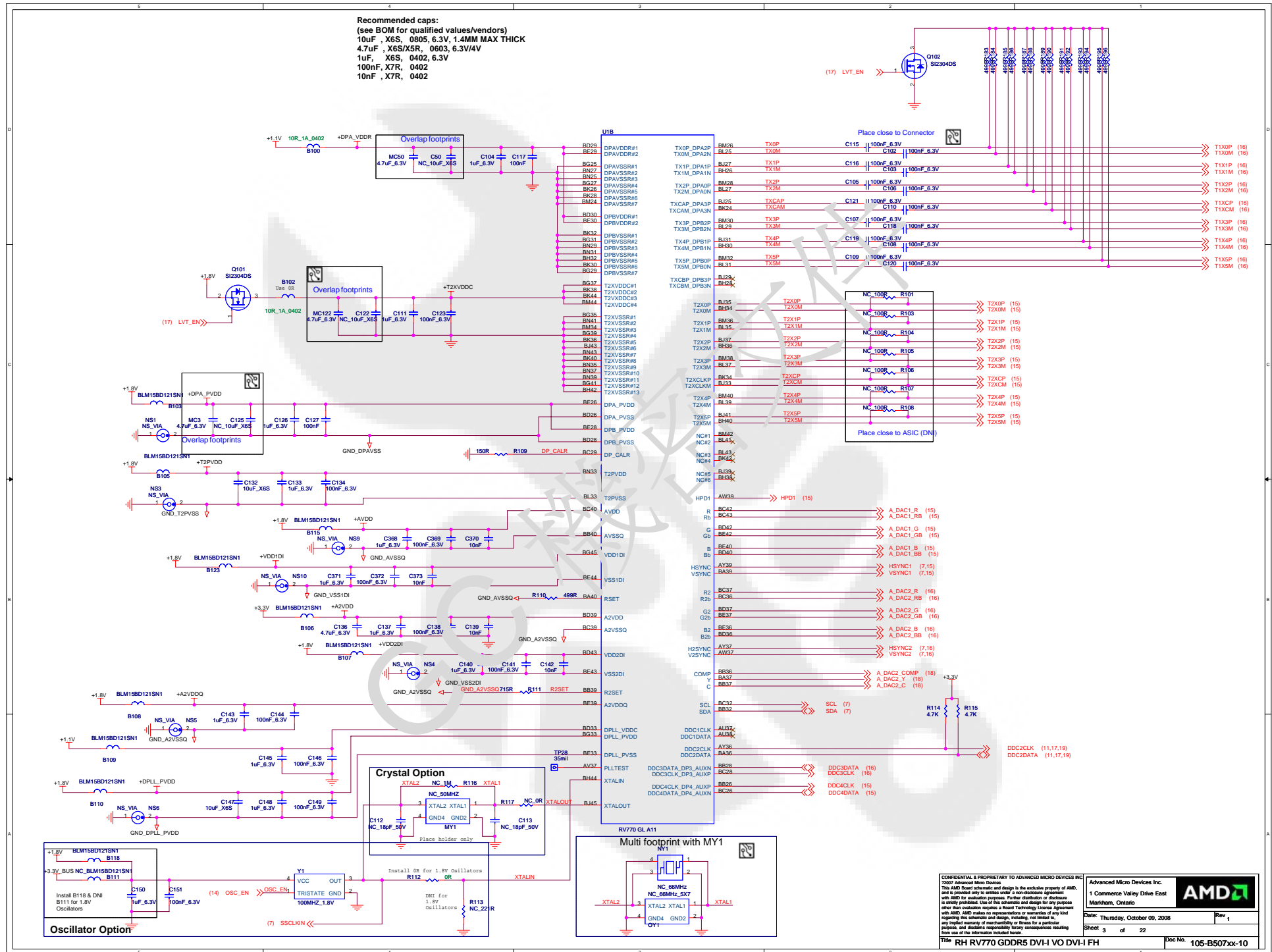
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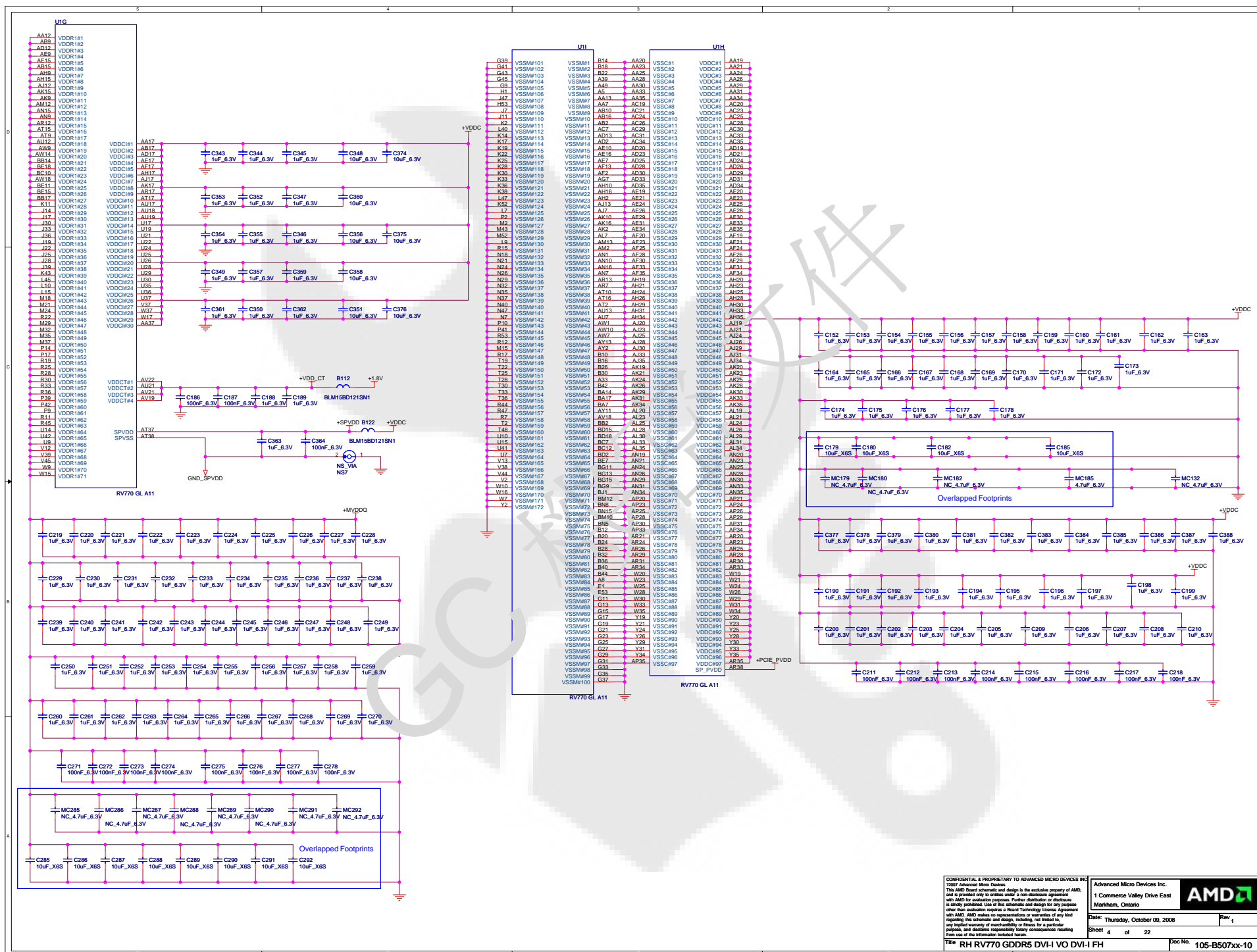
Advanced Micro Devices Inc.
1 Commerce Valley Drive East
Markham, Ontario
Date: Thursday, October 09, 2008
Sheet 1 of 22
Rev 1

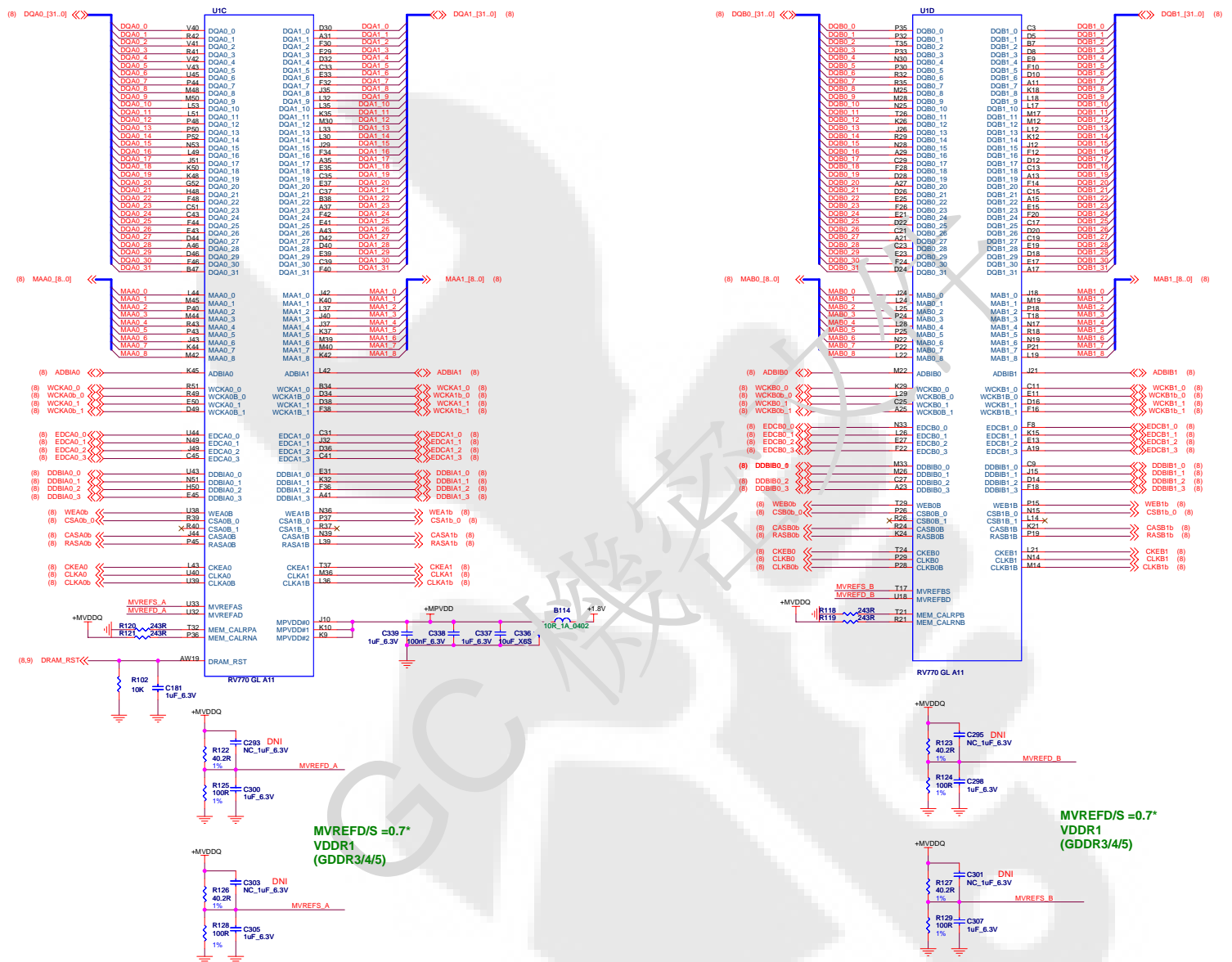


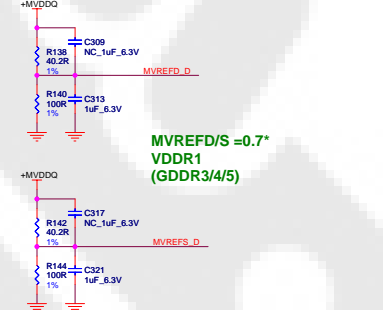
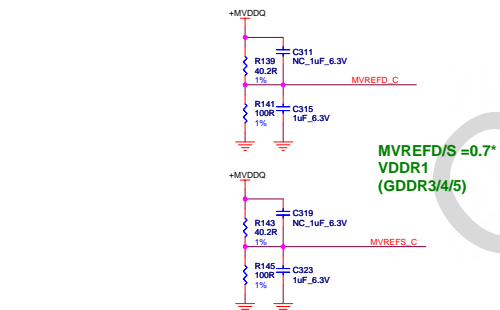
Title RH RV770 GDDR5 DVI-I VO DVI-I 105-B507xx-10

Recommended caps:
(see BOM for qualified values/vendors)
10uF , X6S, 0805, 6.3V, 1.4MM MAX THICK
4.7uF , X6S/X5R, 0603, 6.3V/4V
1uF, X6S, 0402, 6.3V
100nF, X7R, 0402
10nF , X7R, 0402



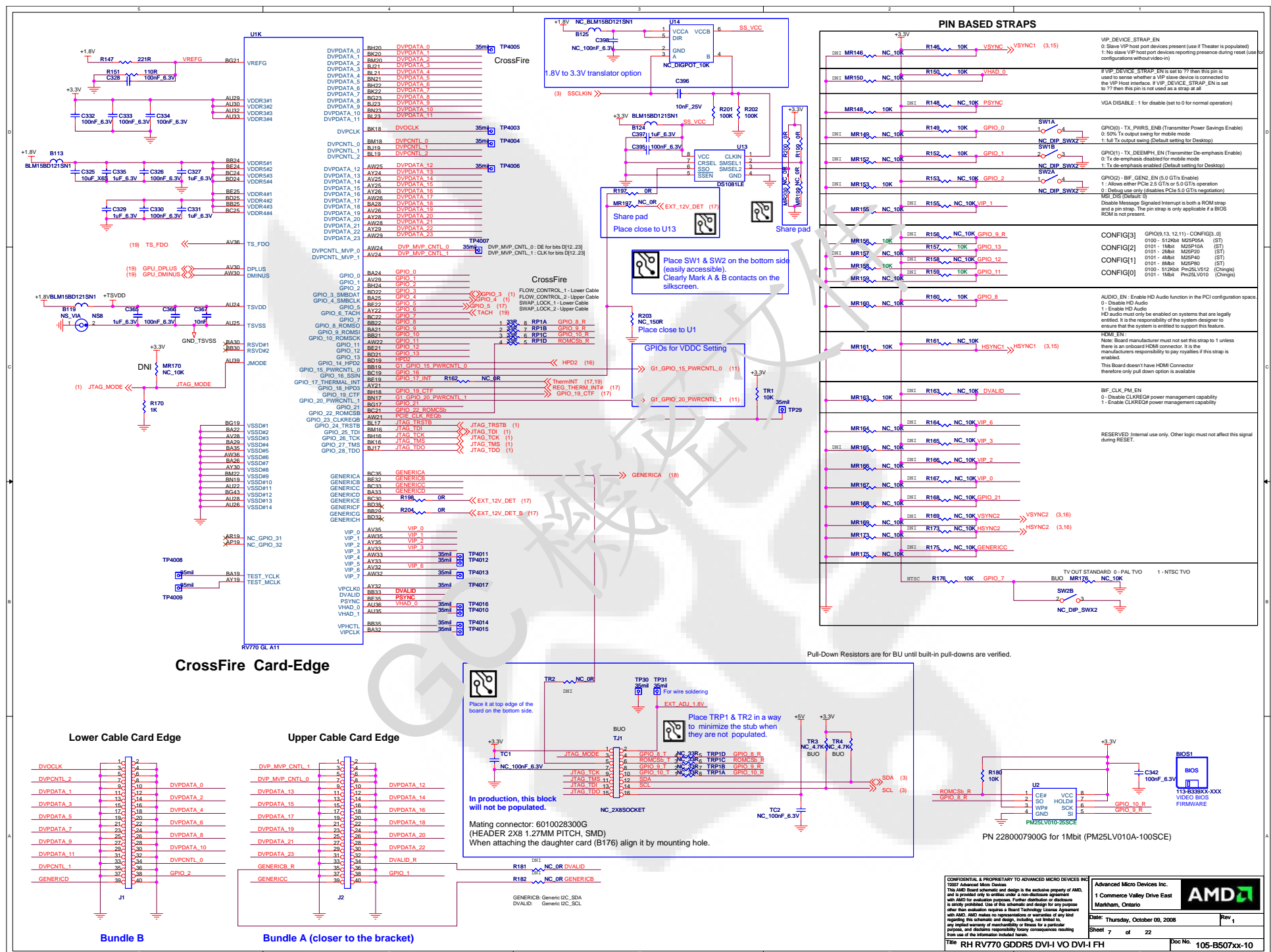


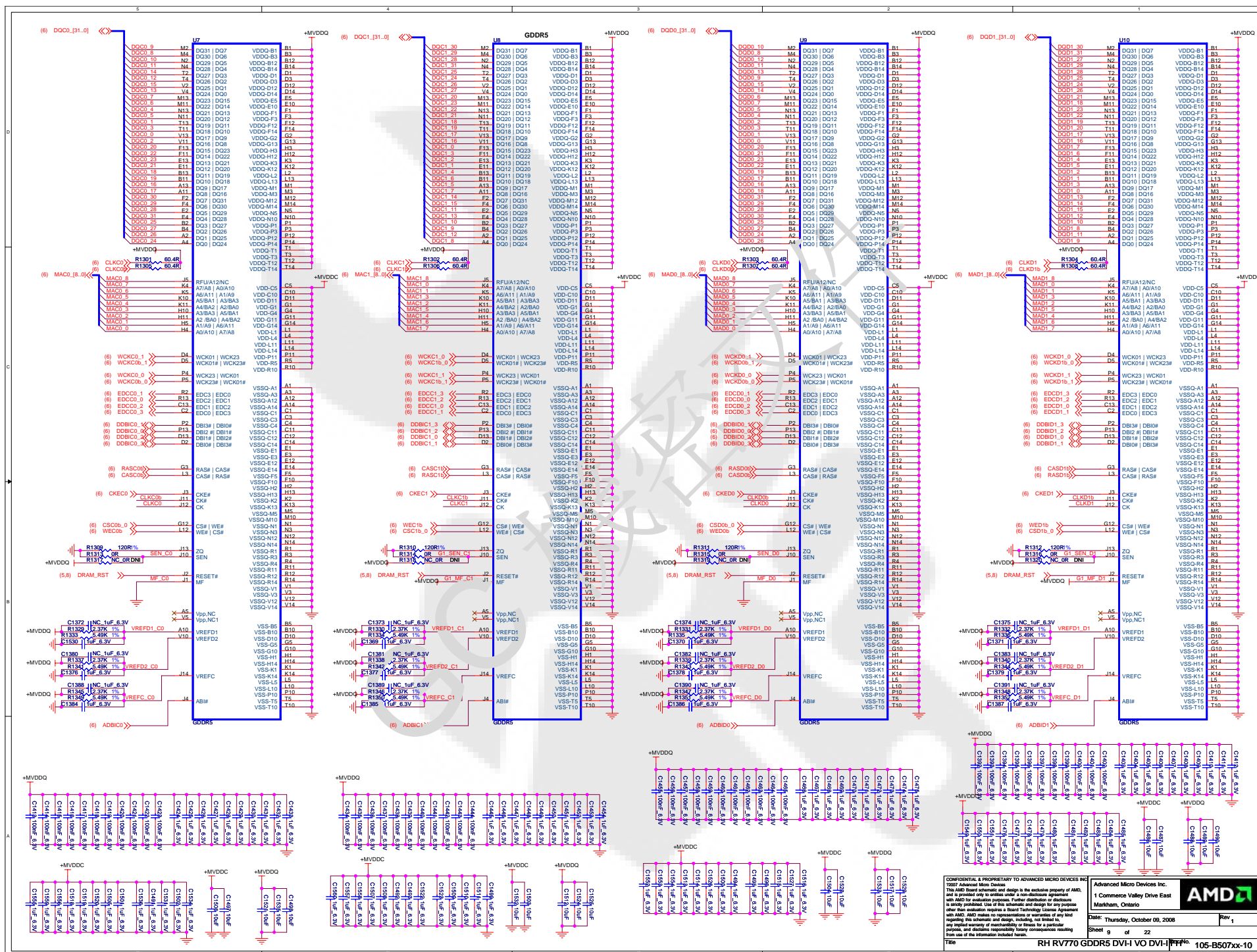




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Title	RH RV770 GDDR5 DVI-I VO DVI-I	Doc No.	105-B507xx-1
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U1J

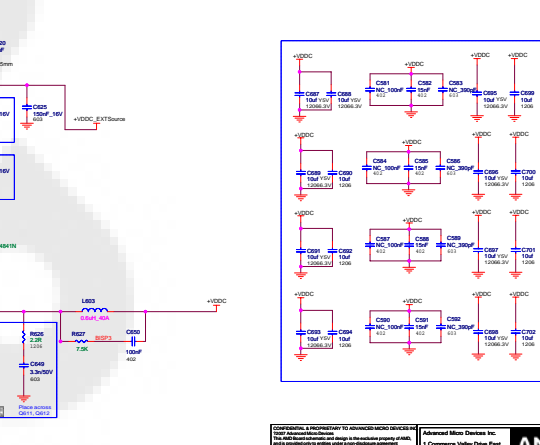
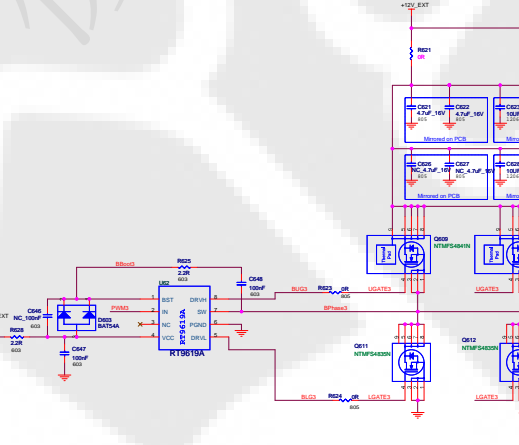
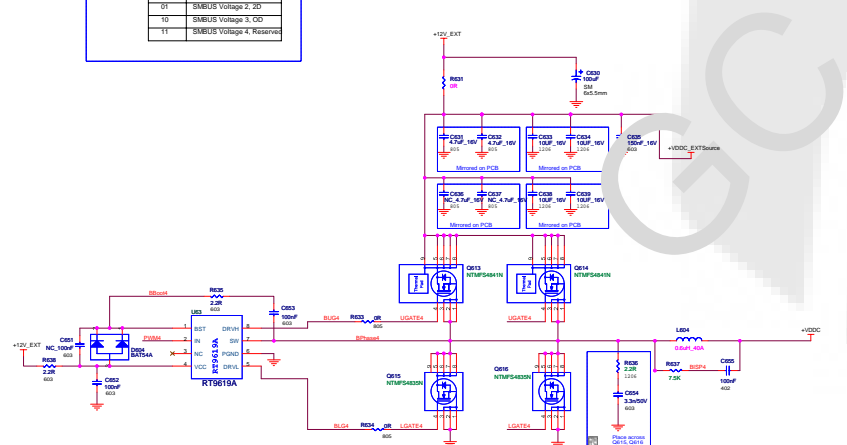
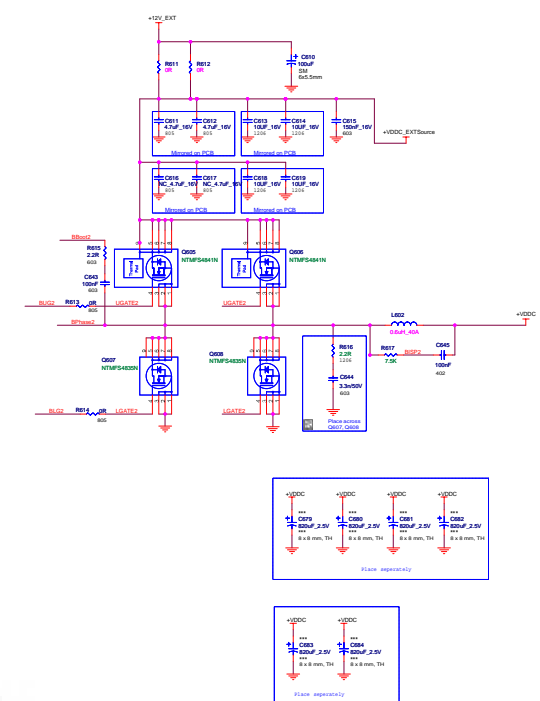
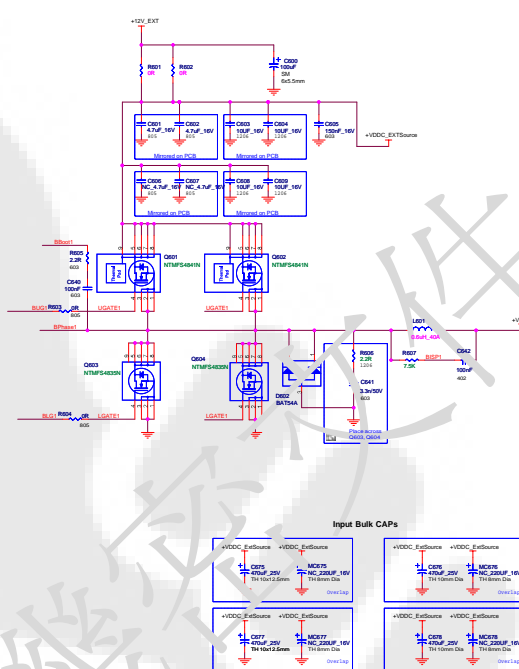
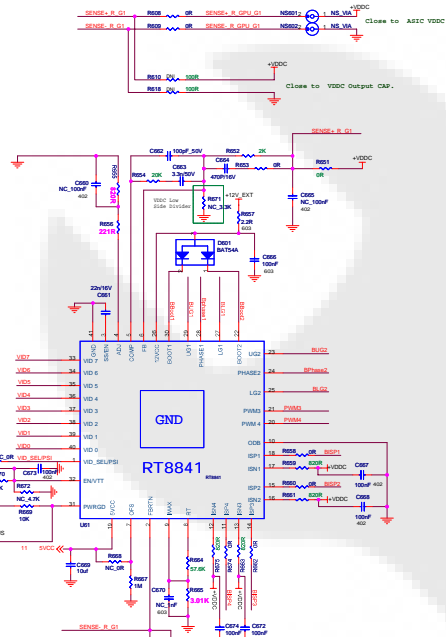
XB49	SP_RX0P	SP_TX0P	BB49
XB51	SP_RX0N	SP_TX0N	BB49
XB50	SP_RX1P	SP_TX1P	BC45
XB52	SP_RX1N	SP_TX1N	BC45
XB48	SP_RX2P	SP_TX2P	BB45
XB49	SP_RX2N	SP_TX2N	BB45
XB51	SP_RX3P	SP_TX3P	AY42
XB52	SP_RX3N	SP_TX3N	AY42
XB48	SP_RX4P	SP_TX4P	AY45
XB49	SP_RX4N	SP_TX4N	AY45
XB51	SP_RX5P	SP_TX5P	AW49
XB52	SP_RX5N	SP_TX5N	AW49
XB48	SP_RX6P	SP_TX6P	AW45
XB49	SP_RX6N	SP_TX6N	AW45
XB51	SP_RX7P	SP_TX7P	AI42
XB52	SP_RX7N	SP_TX7N	AI42
XB48	SP_RX8P	SP_TX8P	AI45
XB49	SP_RX8N	SP_TX8N	AI45
XB51	SP_RX9P	SP_TX9P	AT49
XB52	SP_RX9N	SP_TX9N	AT49
XB48	SP_RX10P	SP_TX10P	AT45
XB49	SP_RX10N	SP_TX10N	AT45
XB51	SP_RX11P	SP_TX11P	AR42
XB52	SP_RX11N	SP_TX11N	AR42
XB48	SP_RX12P	SP_TX12P	AR45
XB49	SP_RX12N	SP_TX12N	AR45
XB51	SP_RX13P	SP_TX13P	AN49
XB52	SP_RX13N	SP_TX13N	AN49
XB48	SP_RX14P	SP_TX14P	AN45
XB49	SP_RX14N	SP_TX14N	AN45
XB51	SP_RX15P	SP_TX15P	AI42
XB52	SP_RX15N	SP_TX15N	AI42
XB47	SP_REFCLKP	SP_CALRP	AN39
XB48	SP_REFCLKN	SP_CALRN	AN39

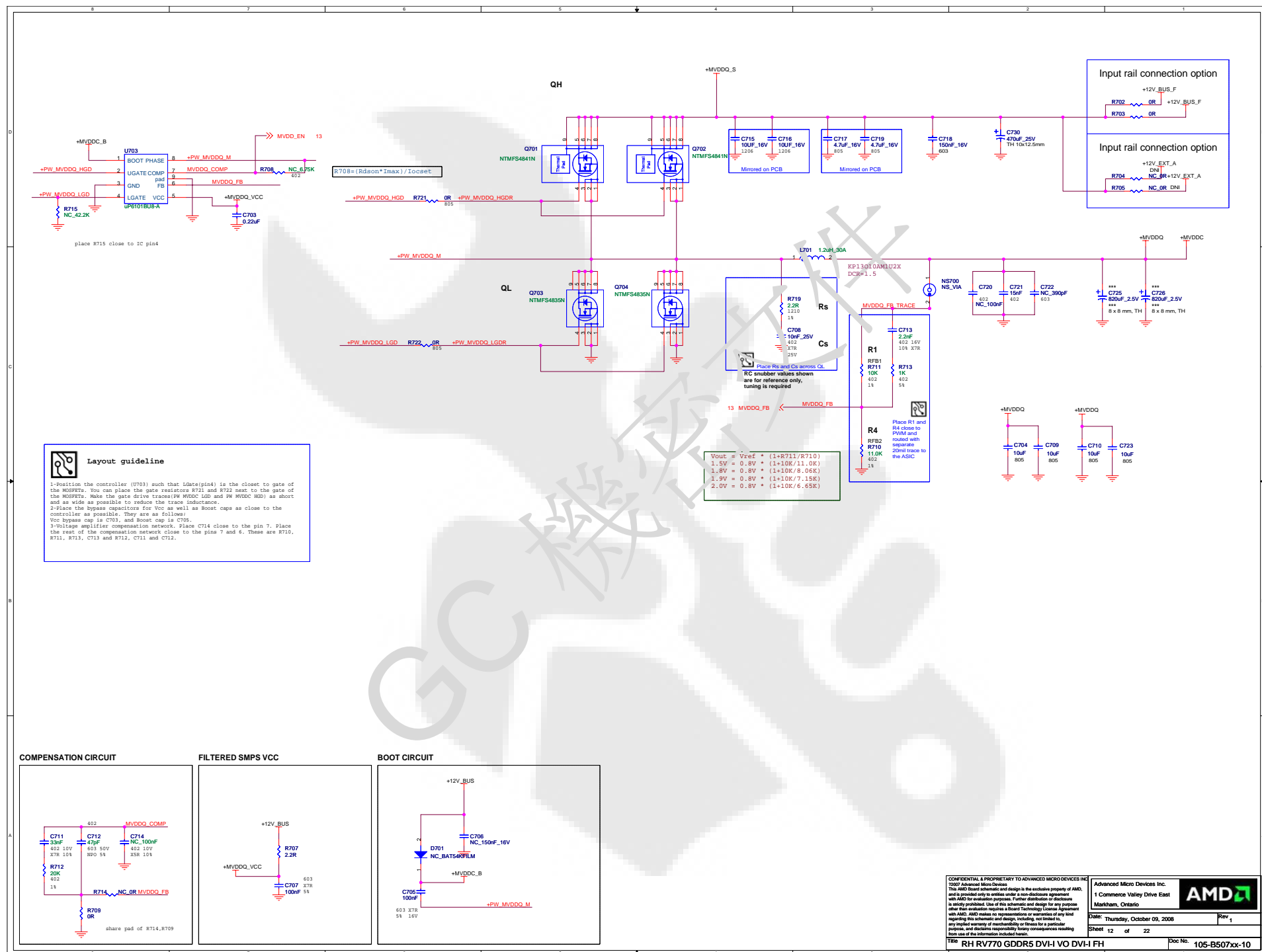
RV770 GL A11

VID6	VID5	VID4	VID3	VID2	VID1	VID0	Output Voltage
1	1	0	1	1	0	0	1.5500
1	1	0	1	1	0	1	1.5250
1	1	0	1	1	1	0	1.5000
1	1	0	1	1	1	1	1.4750
1	1	1	0	0	0	0	1.4500
1	1	1	0	0	0	1	1.4250
1	1	1	0	0	1	0	1.4000
1	1	1	0	0	1	1	1.3750
1	1	1	0	1	0	0	1.3500
1	1	1	0	1	0	1	1.3250
1	1	1	0	1	1	0	1.3000
1	1	1	0	1	1	1	1.2750
1	1	1	1	0	0	0	1.2500
1	1	1	1	0	0	1	1.2250
1	1	1	1	0	1	0	1.2000
1	1	1	1	0	1	1	1.1750
1	1	1	1	1	0	0	1.1500
1	1	1	1	1	0	1	1.1250
1	1	1	1	1	1	0	1.1000

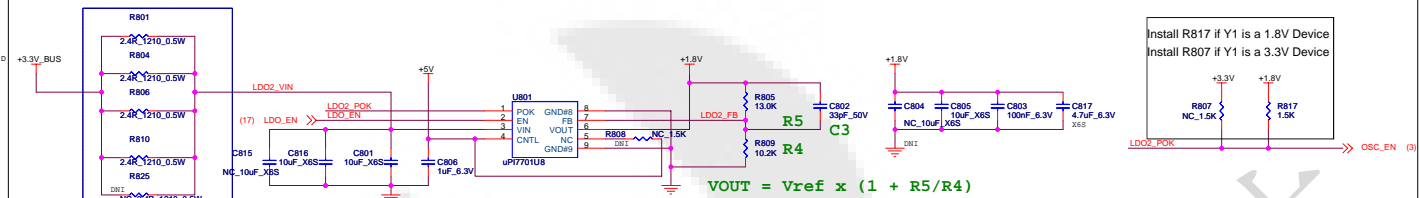
SVID Setting
VID3[4] = 11, VDDCmax = 1.10V
VID3[3] = 10, VDDCmin = 1.20V
VID3[2] = 01, VDDCmax = 1.30V
VID3[2] = 00, VDDCmin = 1.40V

VID[4:1]	VDDC
00	SWBUS Voltage 1, 3d
01	SWBUS Voltage 2, 3d
10	SWBUS Voltage 3, 3d
11	SWBUS Voltage 4, Reserved

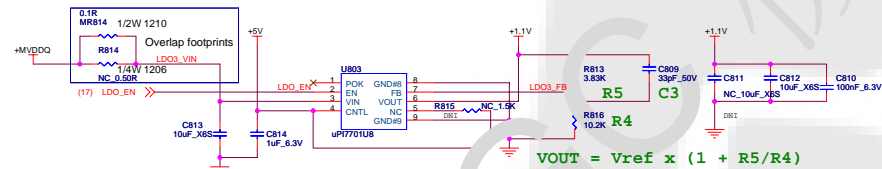




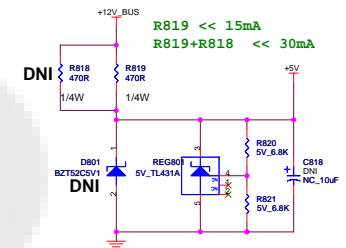
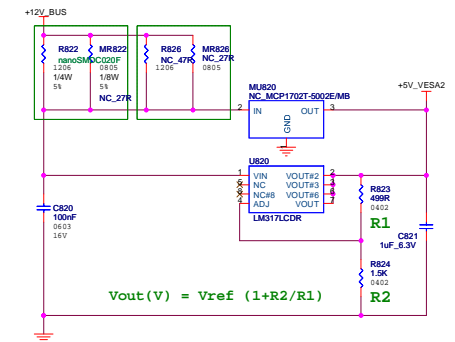
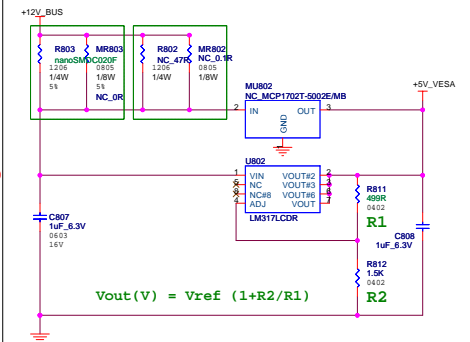
LDO #2: Vin = 2.5V to 3.6V MAX Vout = +1.8V +/- 3% Iout = 1.7A (TBV) RMS MAX
PCB: Min 70mm sq. copper area for cooling

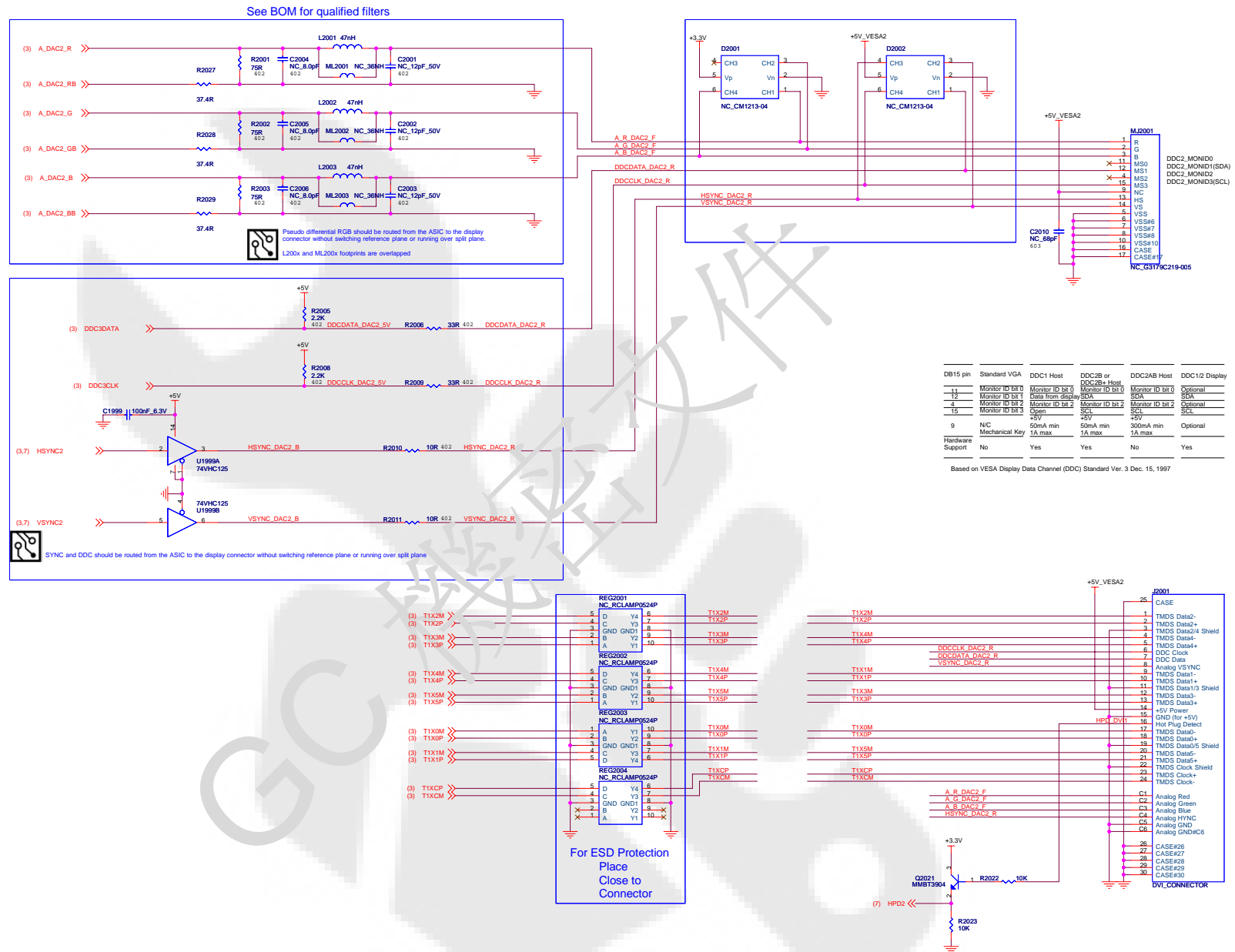


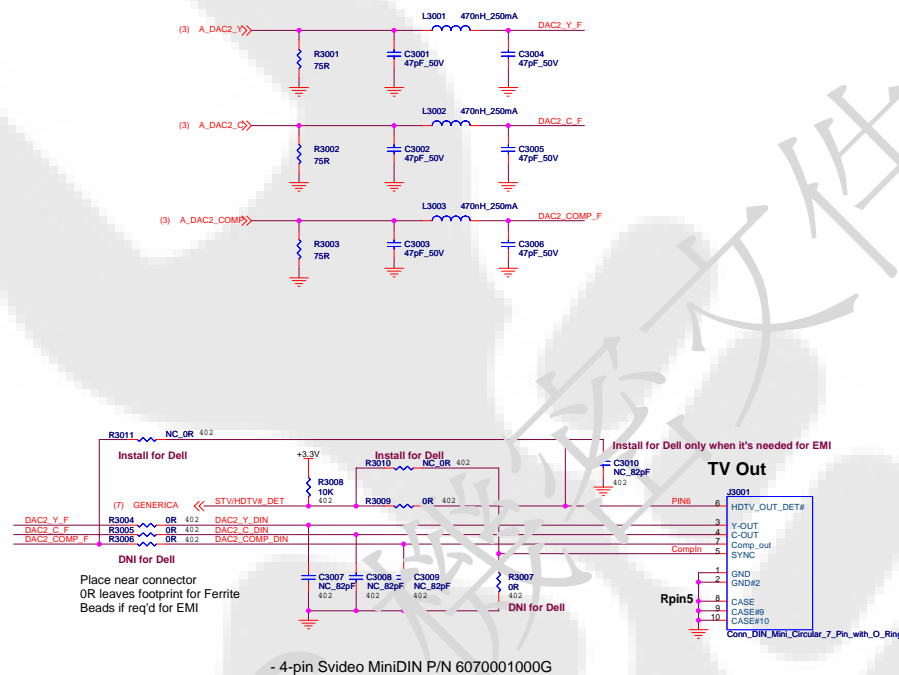
LDO #3: Vin = +1.50V to 2.1VMAX Vout = +1.1V +/- 3% Iout = Up to 1.3A (TBV) RMS MAX
PCB: Min 70mm sq. copper area for cooling

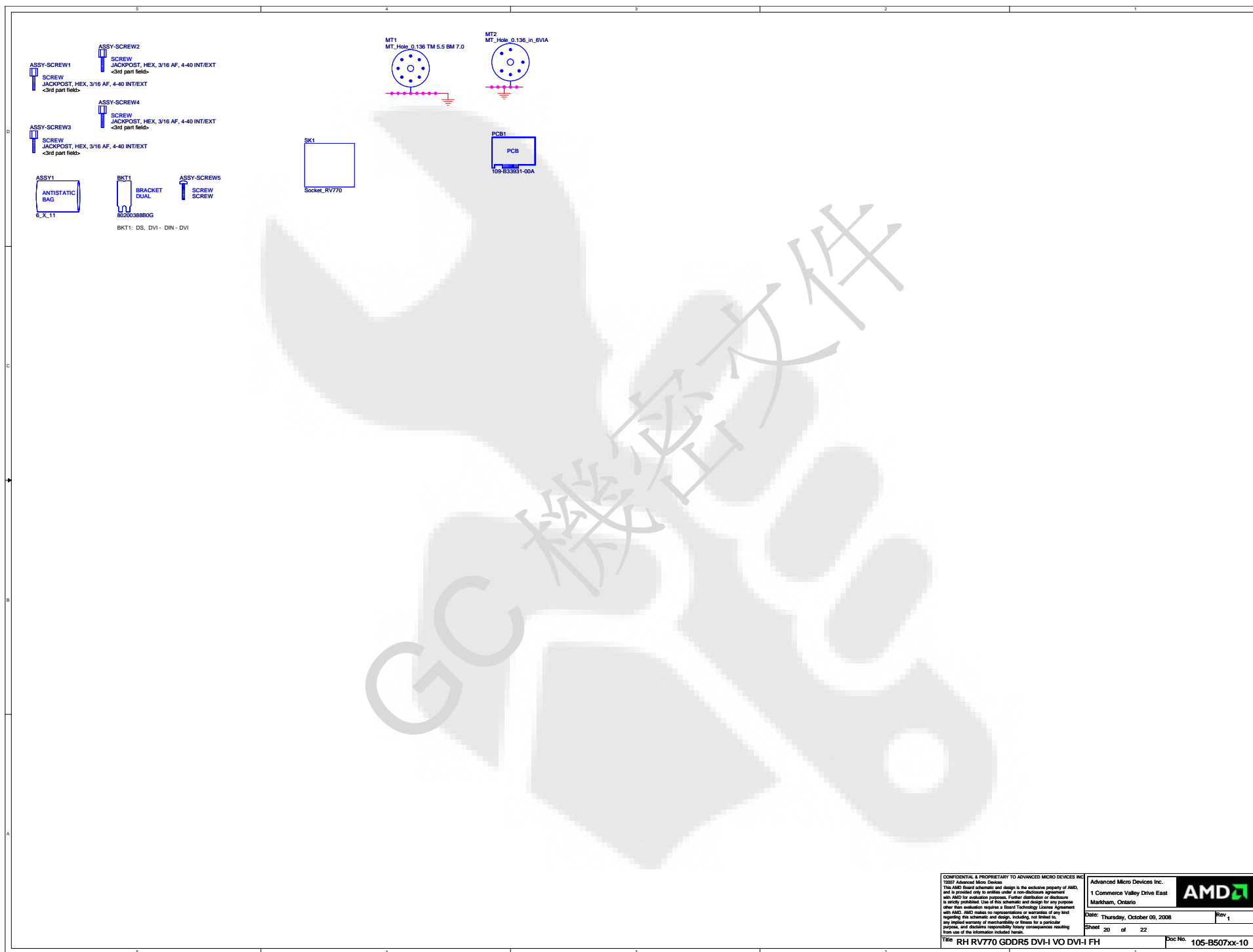


Regulators for +5V, +5V_VESA and +5V_VESA2

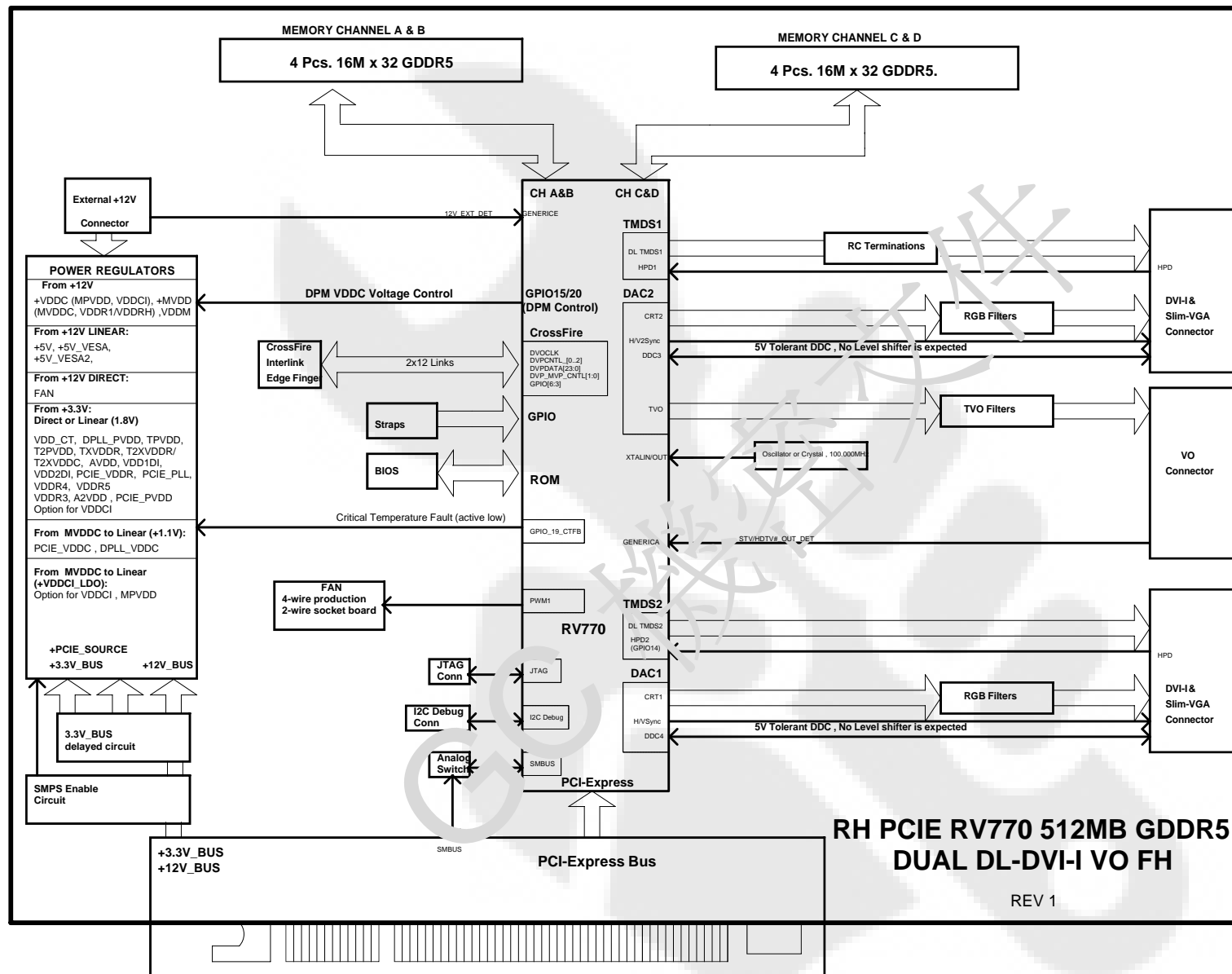








5			4			3			2			1		
AMD			Title RH RV770 GDDR5 DVI-I VO DVI-I FH						Schematic No. 105-B507xx-10			Date: Thursday, October 09, 2008		
			REVISION HISTORY									NOTE: This schematic represents the PCB, it does not represent any specific SKU. For Stuffing options (component values, DNI , ? please consult the product specific BOM. Please contact AMD representative to obtain latest BOM closest to the application desired.		
Sch Rev	PCB Rev	Date	REVISION DESCRIPTION											
0	00A	08/01/04	Initial design for B507 based on B500 board with display changed to DVI VO- DVI											
1	10	08/05/05	Based on B507-00 PCB with the following changes: 1. Spread Spectrum changed to MAXIM- pg.7 2. Add second 12V AUX power supply - pg.17 3. Add temperature monitor for VDDC regulator - pg.17 4. Add 12V_BUS & 12V_EXT input switch circuit - pg.17											



**RH PCIE RV770 512MB GDDR5
DUAL DL-DVI-I VO FH**

REV 1

RV770XTG5-v02

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