

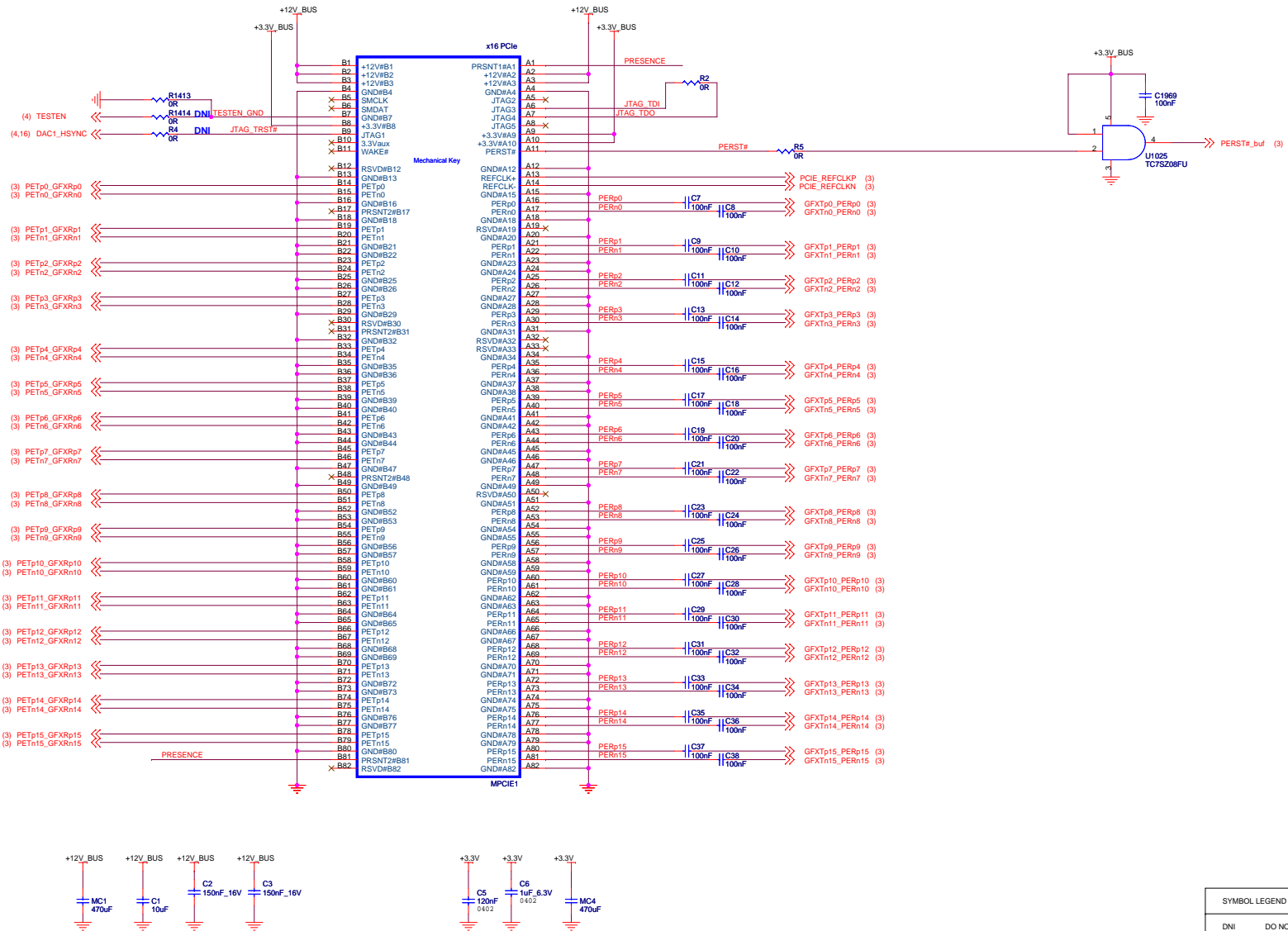
HELLFIRE - Schematic NOT FINAL



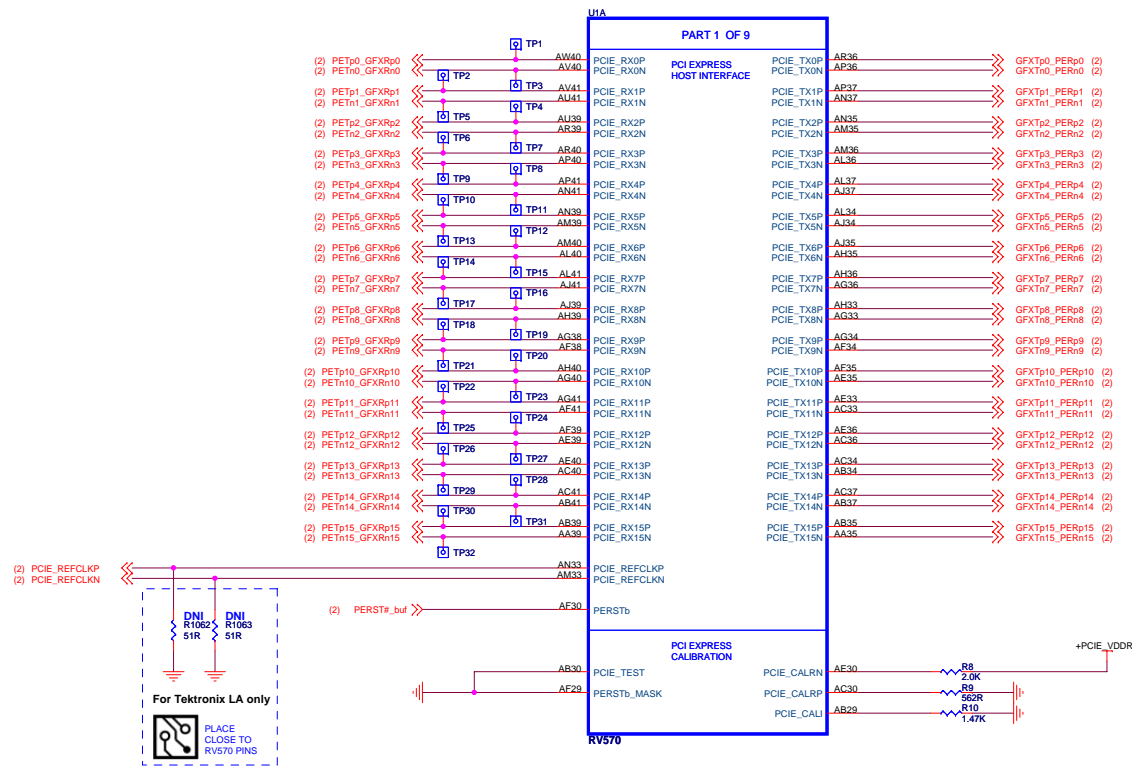
ATI Technologies Inc.
1 Commerce Valley Drive East
Markham, Ontario
Canada, L3T 7X6
(905) 882-2600

Title RH PCIE RV570 512M 136bDDR3 DDVI DDVI VIVO CF
Size C Document Number 105-A999xx-10 Rev 1
Date: Monday, November 27, 2006 Sheet 1 of 20

PCI-EXPRESS EDGE CONNECTOR



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

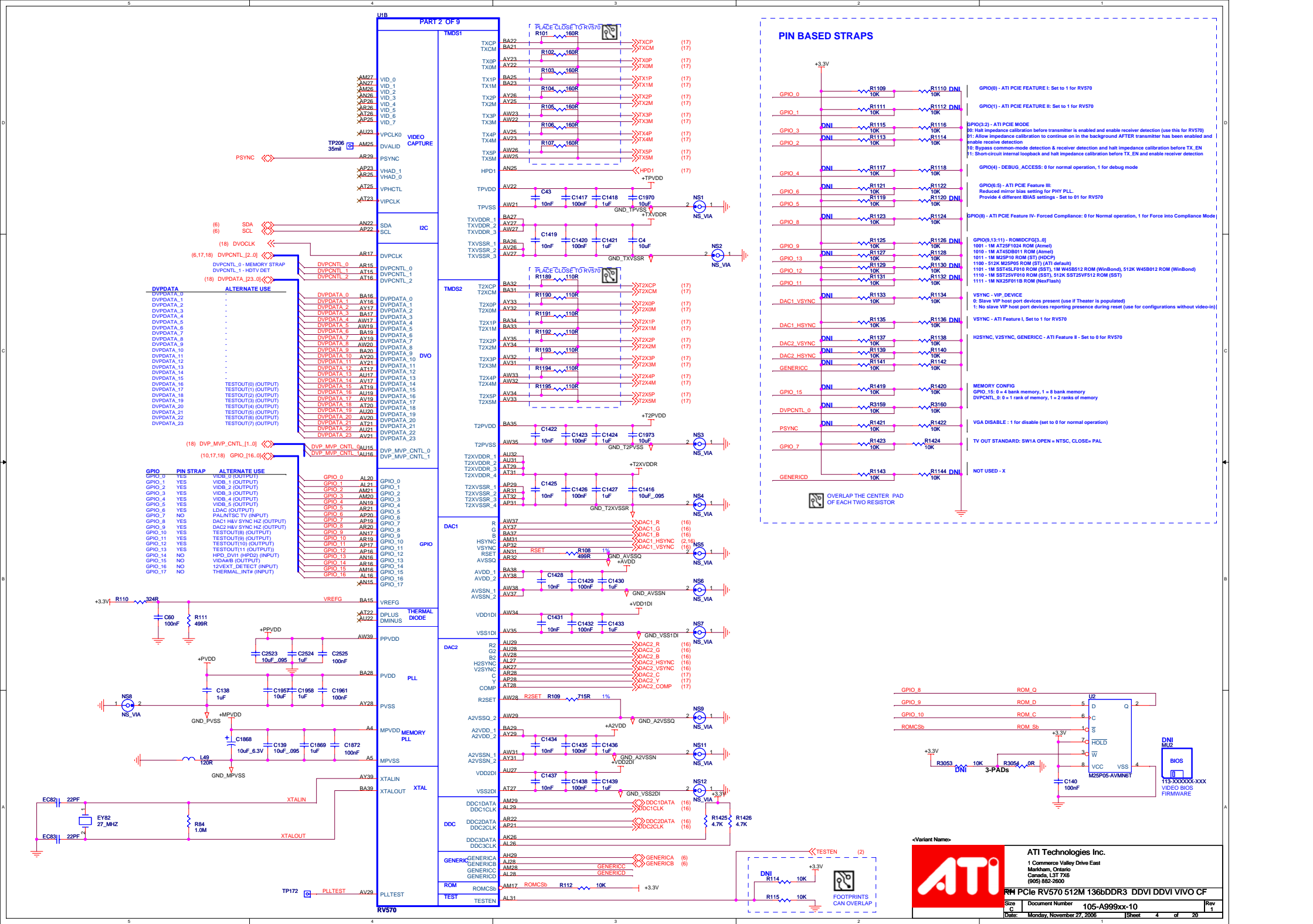


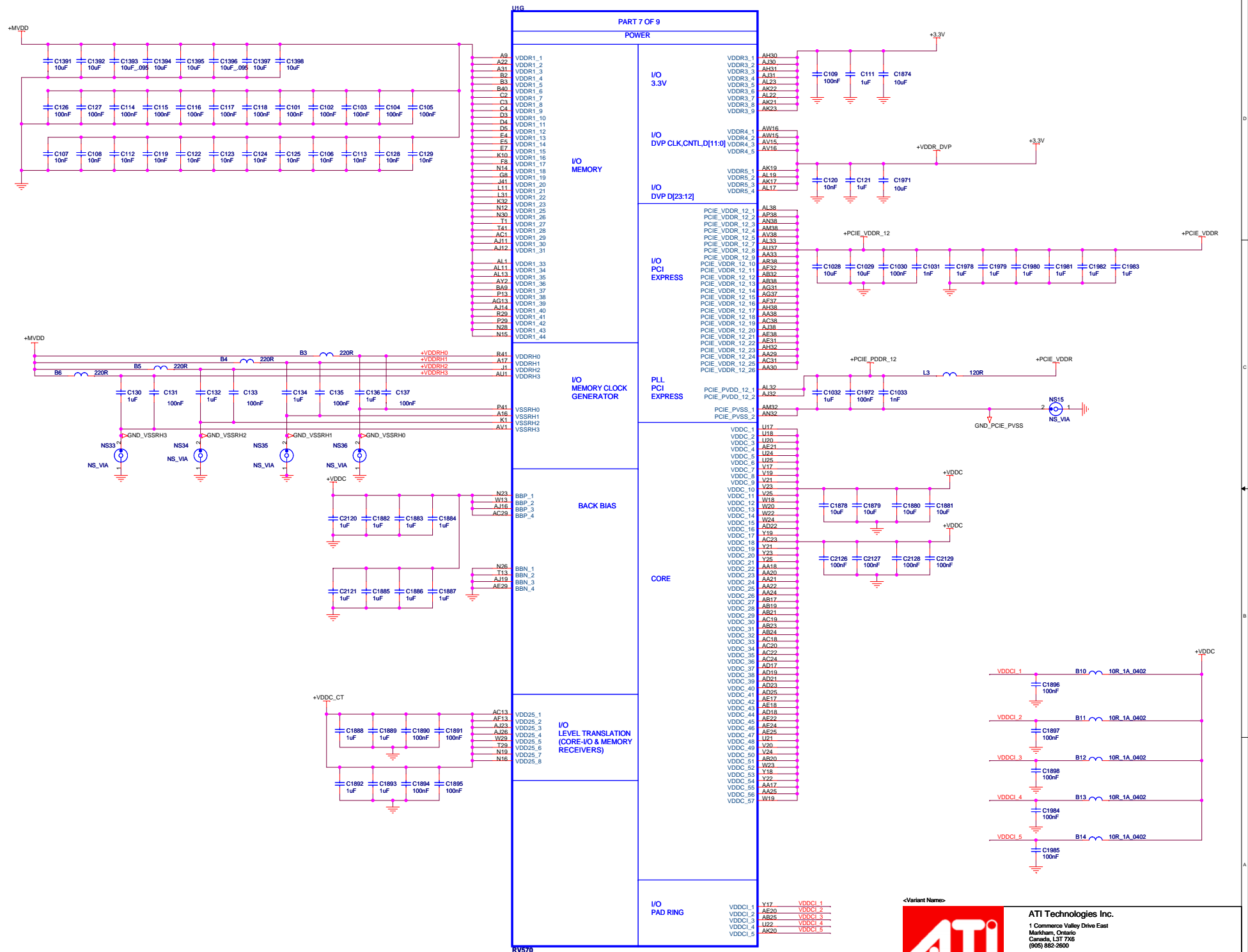
<Variant Name>

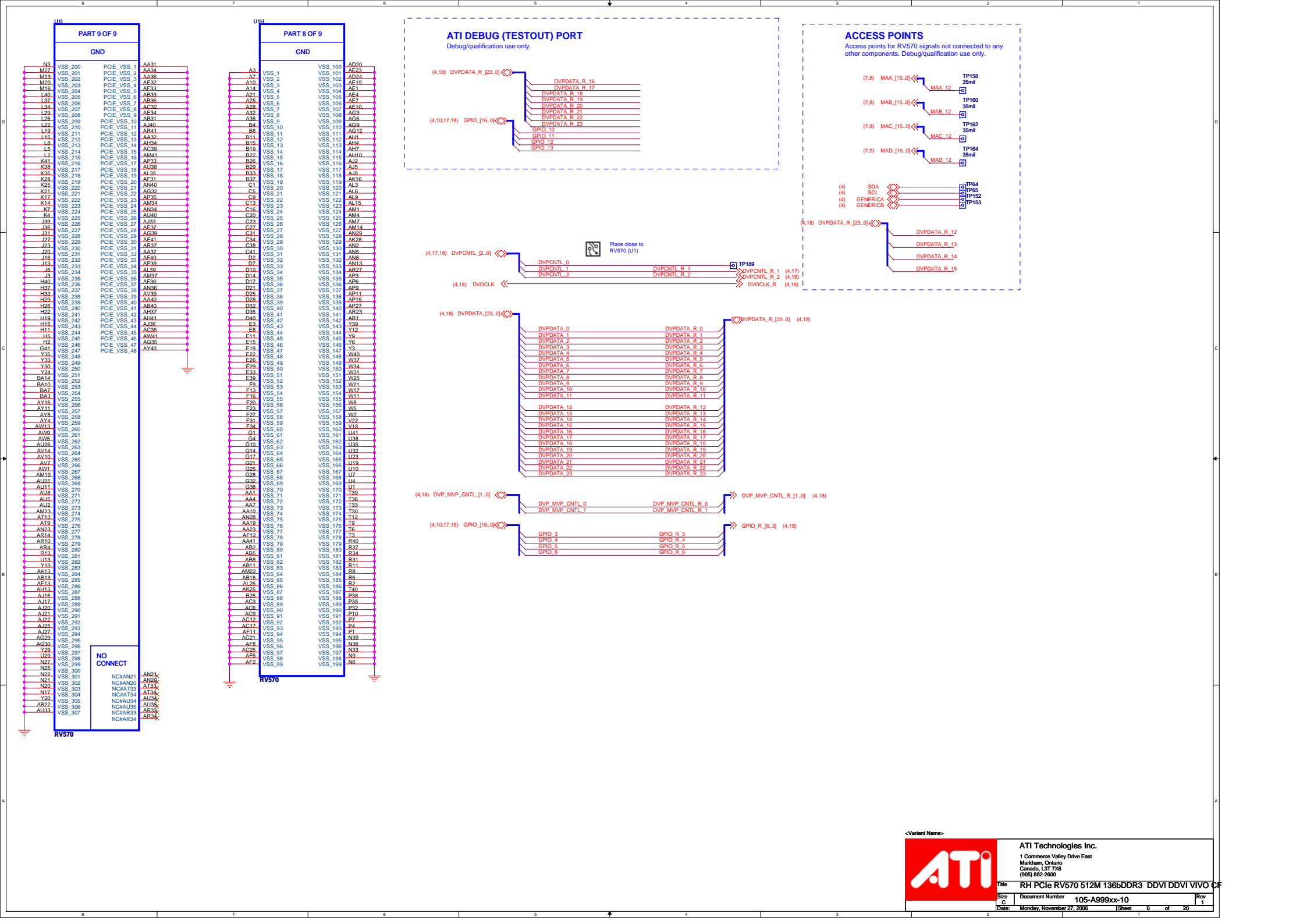


ATI Technologies Inc.
1 Commerce Valley Drive East
Markham, Ontario
Canada, L3T 7X6
(905) 882-2600

Title		RH PCIe RV570 512M 136bDDR3 DDVI DDVI VIVO CF	
Size	Document Number	105-A999xx-10	Rev
C			1
Date:	Monday, November 27, 2006	Sheet	3 of 20

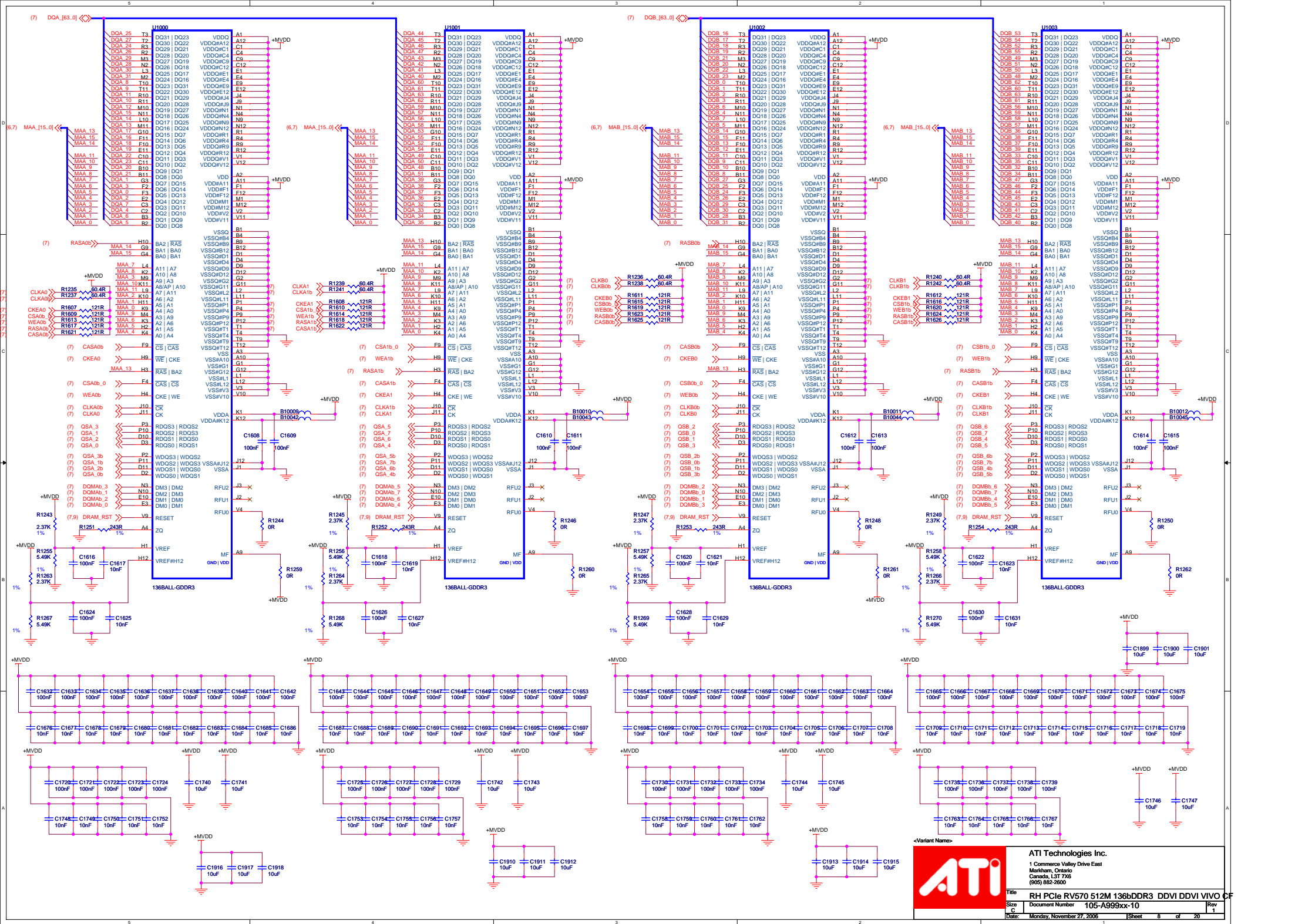


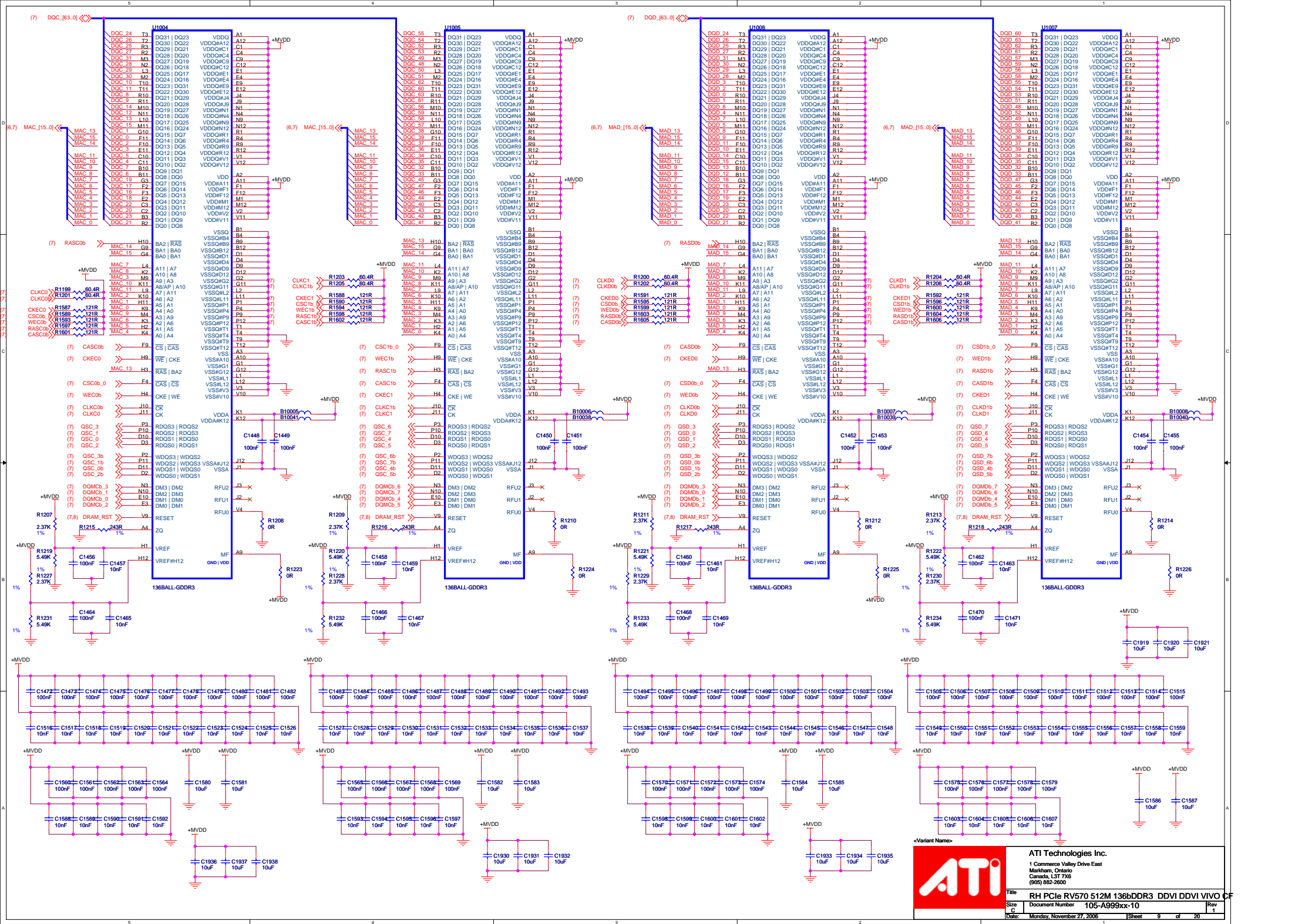




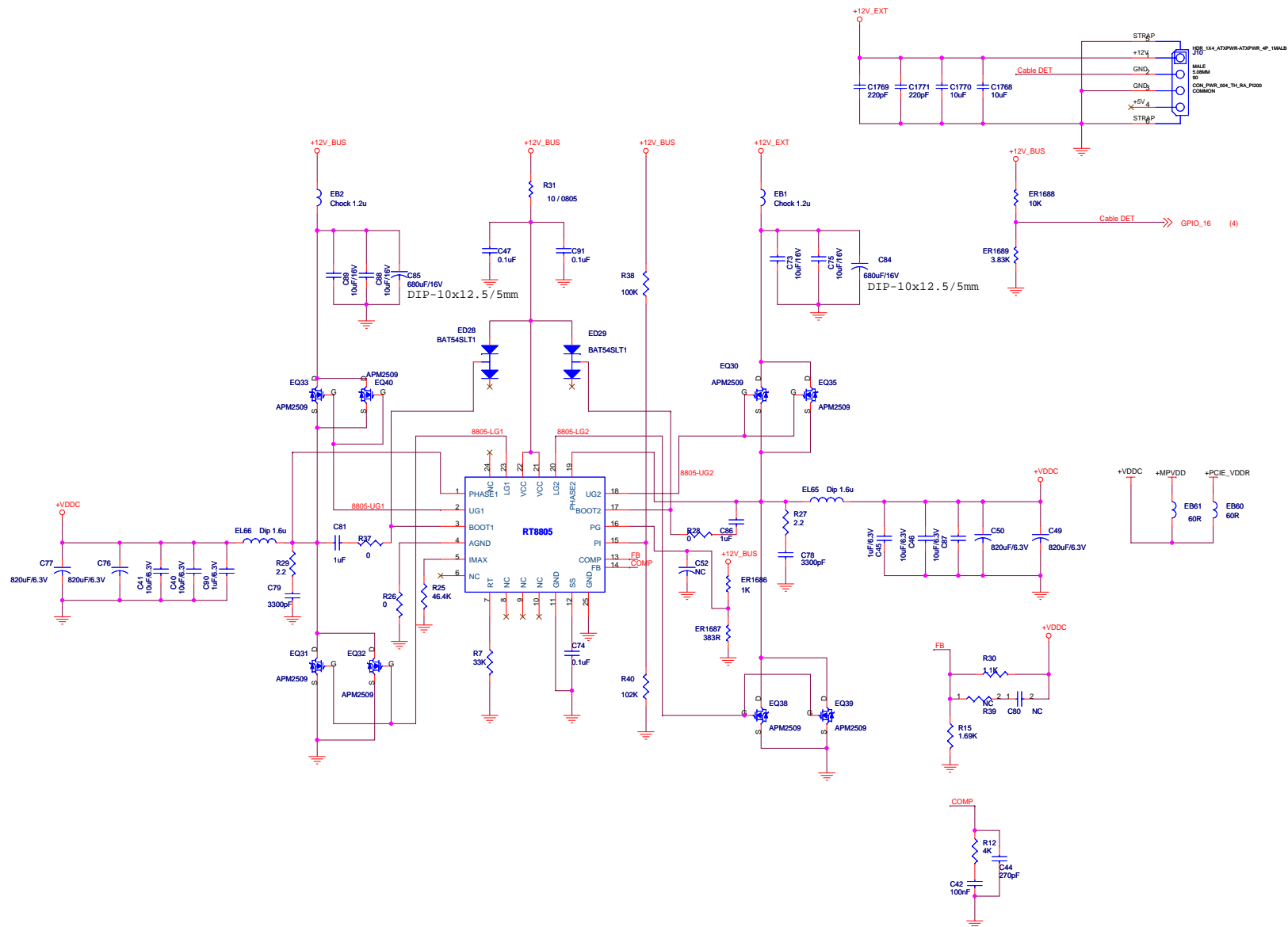


1 Commerce Valley Drive East
Markham, Ontario
Canada, L3T 7X6
(905) 882-2600



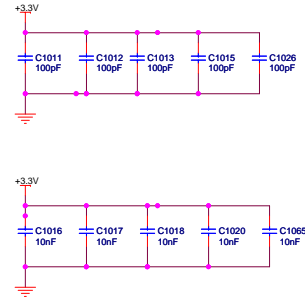
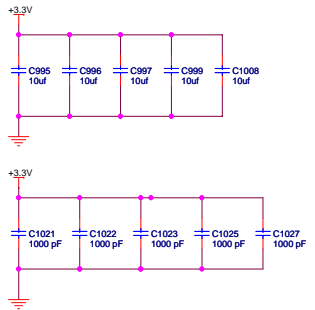
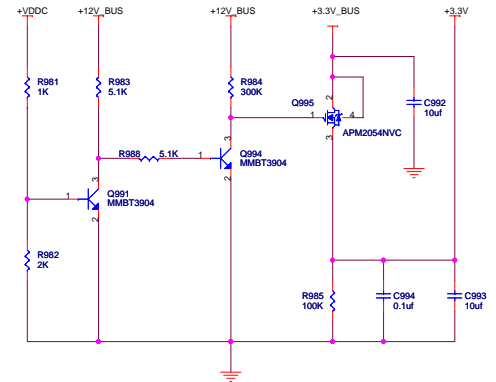


CORE REGULATOR VDDC

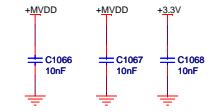


ATI Technologies Inc.
1 Commerce Valley Drive East
Markham, Ontario
Canada, L3T 7X6
(905) 882-2600

Title				RH PCIe RV570 512M 136bDDR3 DDVI DDVI VIVO CF			
Size C		Document Number				Rev	
		105-A999xx-10				1	
Date: Monday, November 27, 2006				Sheet 10 of 20			



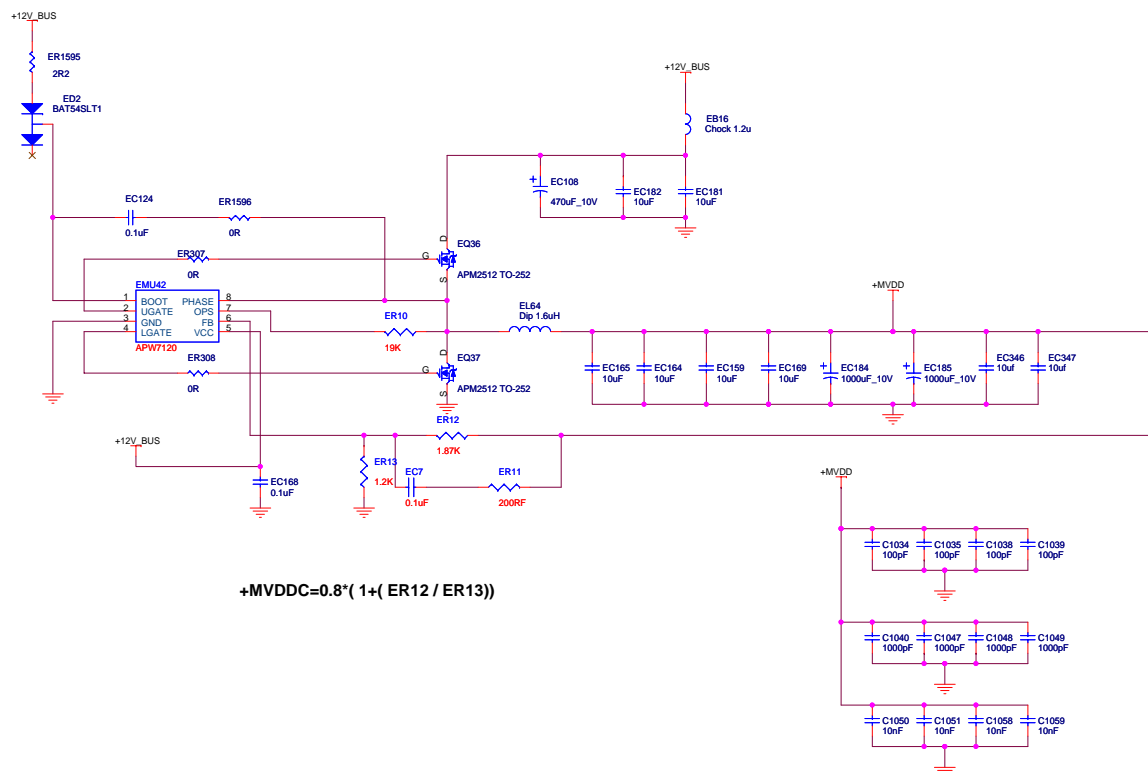
EMI Cap





ATI Technologies Inc.
1 Commerce Valley Drive East
Markham, Ontario
Canada, L3T 7X6
(905) 882-2600

Title		RH PCIe RV570 512M 136bDDR3 DDVI DDVI VIVO GF		
Size	Document Number	105-A999xx-10		Rev
Custom				1
Date:	Monday, November 27, 2006	Sheet	12	of 20



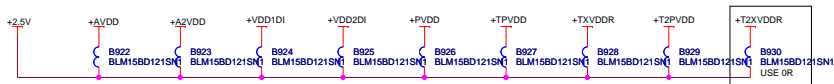
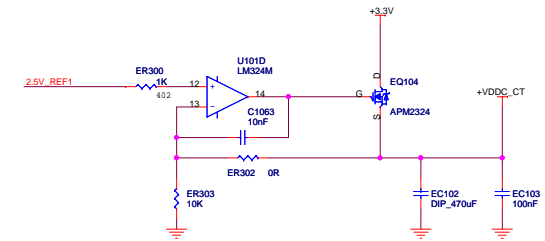
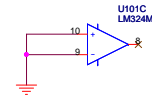
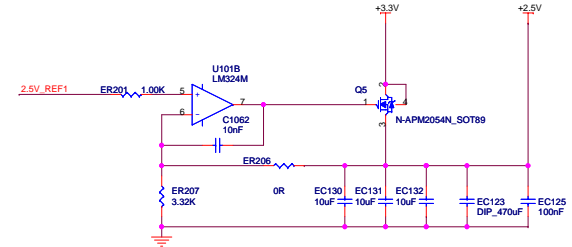
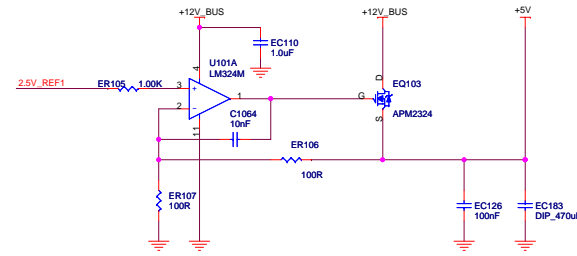
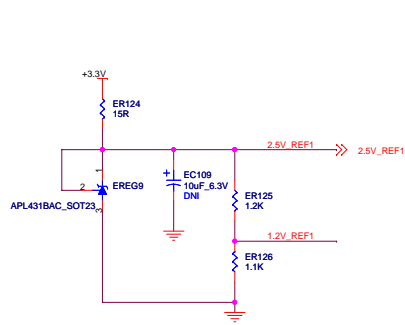
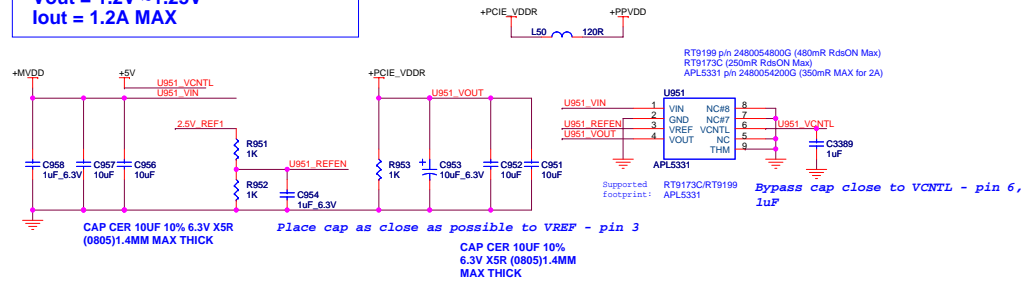
<Variant Name>



ATI Technologies Inc.
1 Commerce Valley Drive East
Markham, Ontario
Canada, L3T 7X6
(905) 882-2600

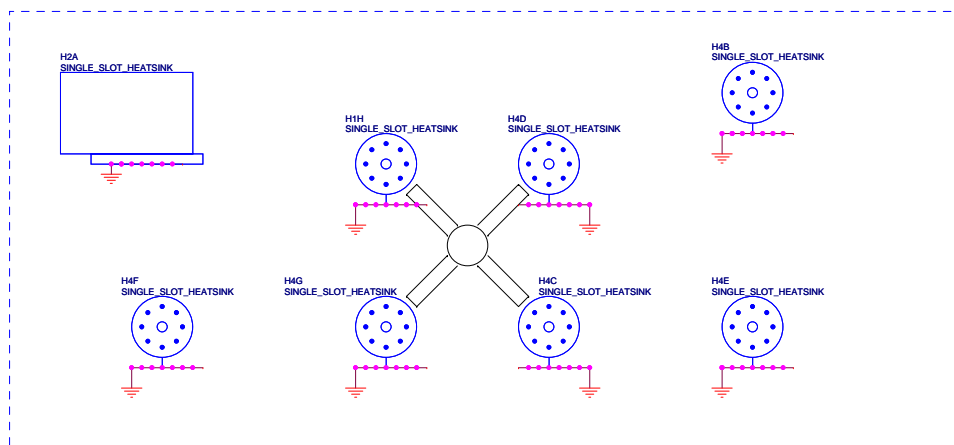
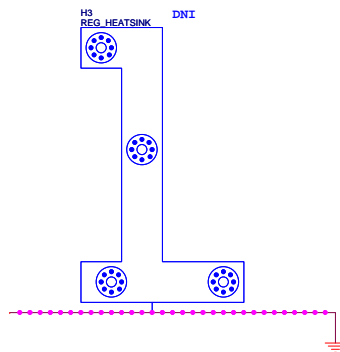
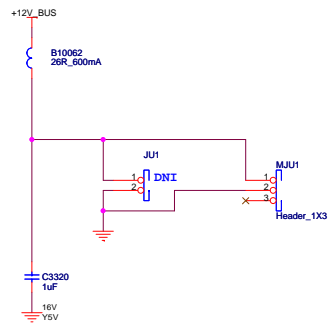
Title	RH PCIe RV570 512M 136bDDR3 DDVI DDVI VIVO		
Size	Document Number	105-A999xx-10	Rev
C			1
Date:	Monday, November 27, 2006	Sheet	13 of 20

Optional regulator for +PCIE
 $V_{out} = 1.2V \sim 1.25V$
 $I_{out} = 1.2A \text{ MAX}$



ATI Technologies Inc.
 1 Commerce Valley Drive East
 Markham, Ontario
 Canada, L3T 7X6
 (905) 882-2000

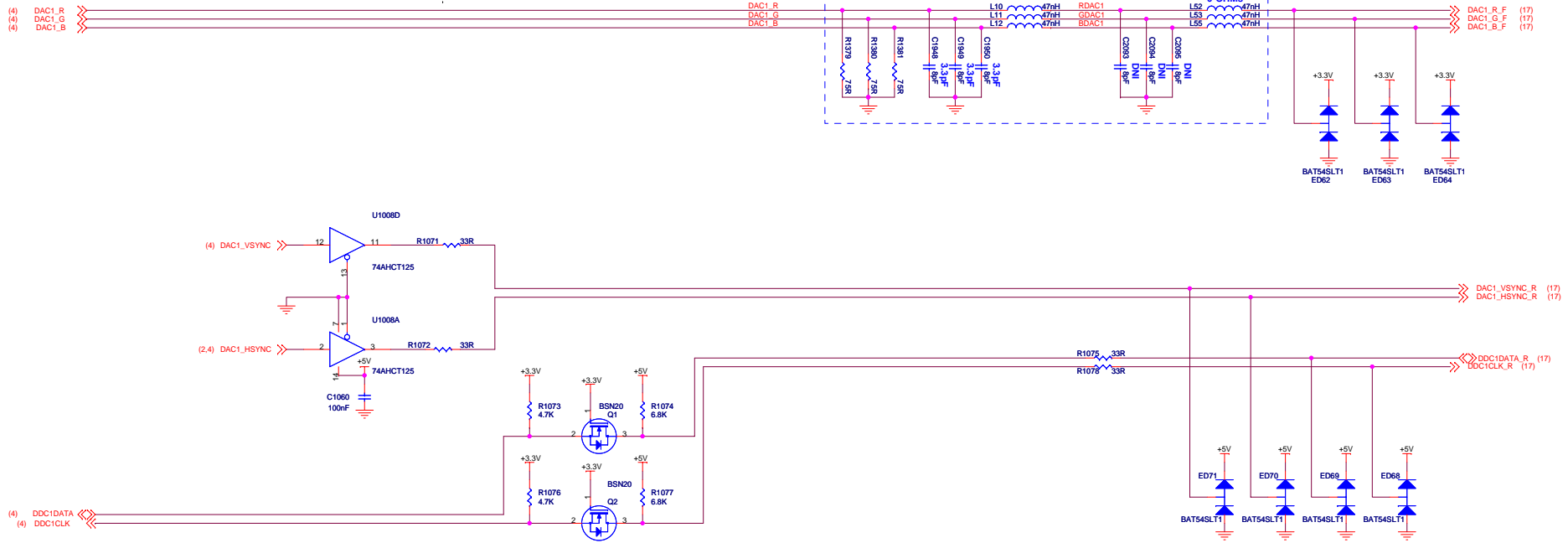
Title	RH PCIe RV570 512M 136bDDR3 DDVI DDVI VIVO CF		
Size	Document Number	105-A999xx-10	Rev
C			1
Date:	Monday, November 27, 2006	Sheet	14 of 20



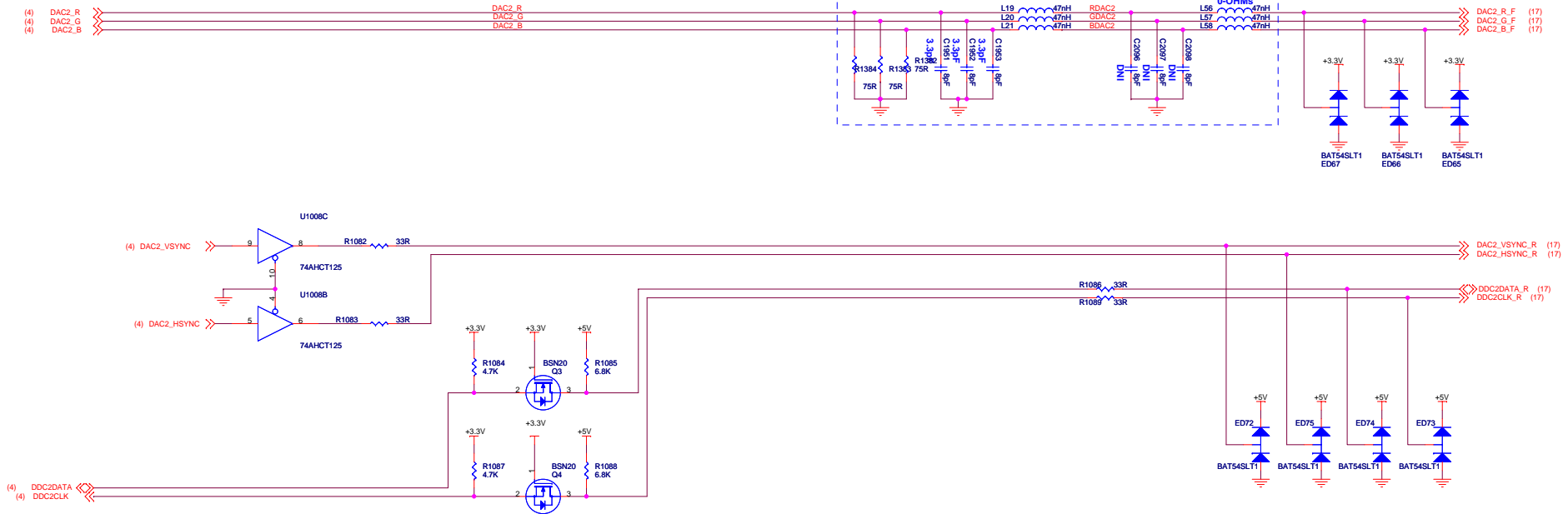
ATI Technologies Inc.
 1 Commerce Valley Drive East
 Markham, Ontario
 Canada, L3T 7X6
 (905) 882-2000

Title	RH PCIe RV570 512M 136bDDR3 DDVI DDVI VIVO CF		
Size	Document Number	105-A999xx-10	Rev
C			1
Date:	Monday, November 27, 2006	Sheet	15 of 20

DAC1 FILTERS (PRIMARY DISPLAY)



DAC2 FILTERS



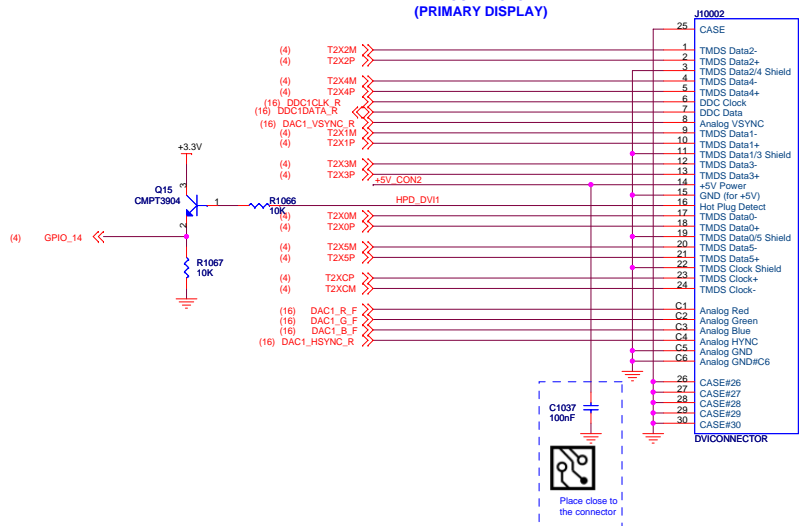
<Variant Name>



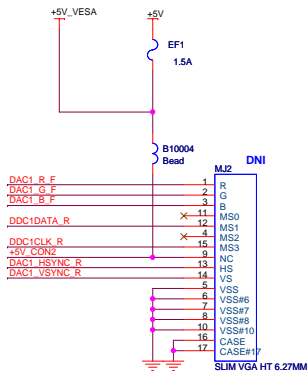
ATI Technologies Inc.
1 Commerce Valley Drive East
Markham, Ontario
Canada, L3T 7X6
(905) 882-2600

Title		RH PCIe RV570 512M 136bDDR3 DDVI DDVI VIVO CF	
Size	Document Number	105-A999xx-10	Rev
C			1
Date:	Monday, November 27, 2006	Sheet	16 of 20

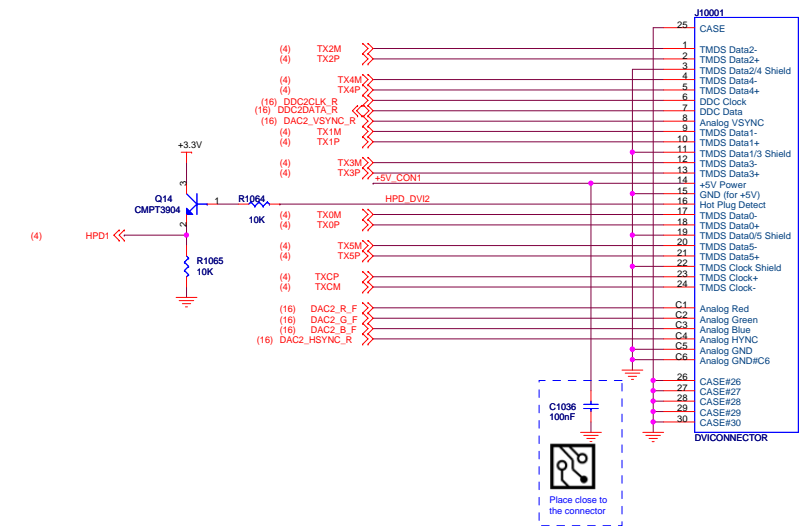
DVI-I CONNECTOR 1 (PRIMARY DISPLAY)



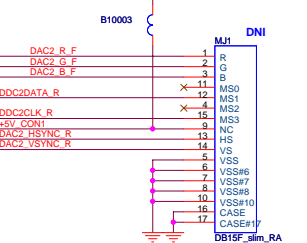
DB15 CONNECTOR 1 (PRIMARY DISPLAY)



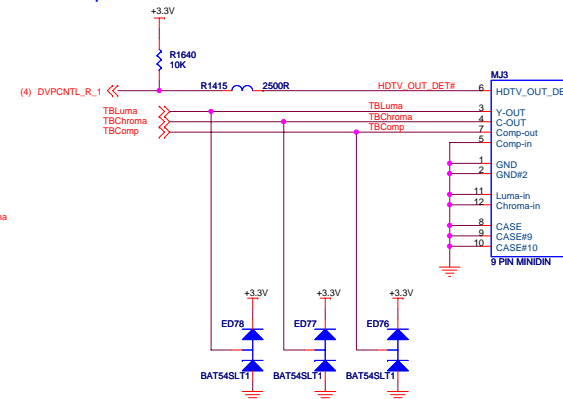
DVI-I CONNECTOR 2



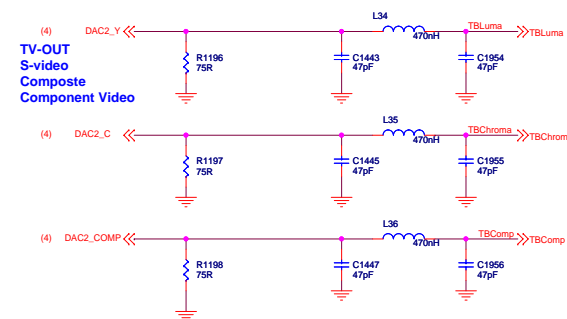
DB15 CONNECTOR 2



VIVO MiniDIN 9-pin



TV-OUT S-video Composite Component Video



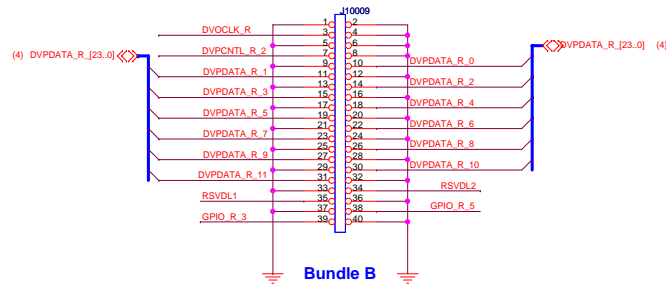
<Variant Name>
ATI Technologies Inc.

1 Commerce Valley Drive East
Markham, Ontario
Canada, L3T 7X6
(905) 882-2600

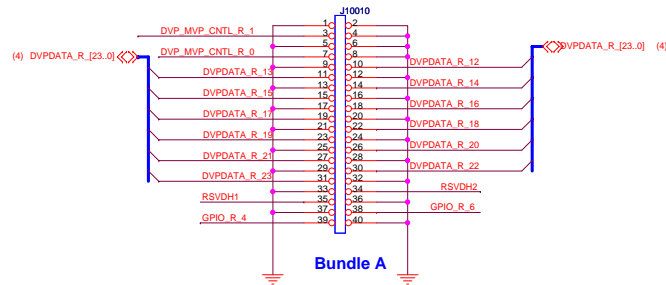
Title	RH PCIe RV570 512M 136bDDR3 DDVI DDVI VIVO CF
Size	C
Document Number	105-A999xx-10
Date	Monday, November 27, 2006
Sheet	17 of 20
Rev	1

CrossFire Card-Edge

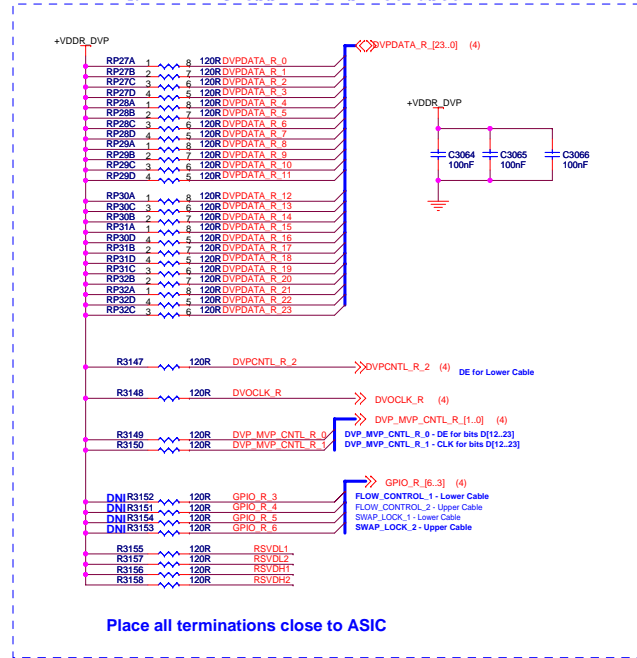
Lower Cable Card Edge



Upper Cable Card Edge



DNI - if CrossFire is not used

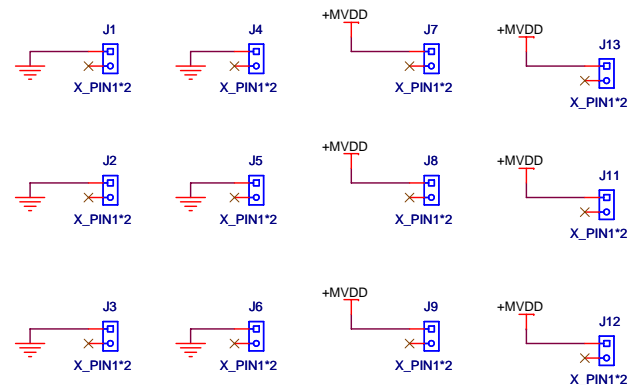
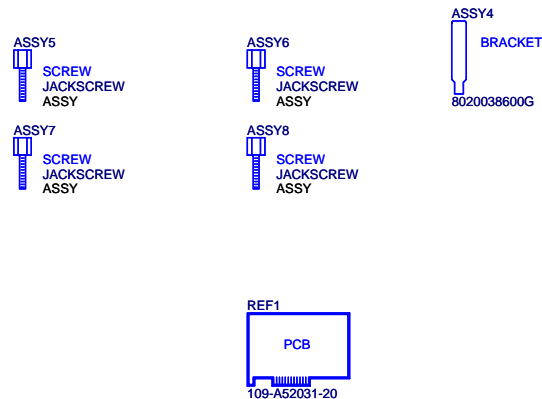


Place all terminations close to ASIC



ATI Technologies Inc.
1 Commerce Valley Drive East
Markham, Ontario
Canada, L3T 7X6
(905) 882-2600

Title	RH PCIe RV570 512M 136bDDR3 DDVI DDVI VIVO		
Size	Document Number	105-A999xx-10	Rev 0
Date:	Monday, November 27, 2006	Sheet 18 of 20	



STUFFING OPTIONS

DISPLAY CONFIGURATION	INSTALL	DO NOT INSTALL
DVI DVI VIVO	ASSY1	ASSY2, ASSY3
DVI VGA VIVO	ASSY3	
DVI VGA TVO		ASSY1, ASSY2

NOTE:
1 - Other components are to be installed.
2 - Components marked as DNI should not be installed. They should only be installed if default board settings are to be changed in which case other components may have to be adjusted accordingly.

<Variant Name>



ATI Technologies Inc.

1 Commerce Valley Drive East
Markham, Ontario
Canada, L3T 7X6
(905) 882-2600

Title	RH PCIe RV570 512M 136bDDR3 DDVI DDVI VIVO CF		
Size	Document Number	105-A999xx-10	Rev 1
Date:	Monday, November 27, 2006	Sheet 19 of 20	



Title
RH PCIe RV570 512M 136bDDR3 DDVI DDVI VIVO CF

Schematic No.
105-A999xx-10

Date:
Monday, November 27, 2006

REVISION HISTORY

Rev 1

Sch Rev	PCB Rev	Date
0	00A	Apr 19 / 06
1	00	July 10/ 06

REVISION DESCRIPTION		
<ul style="list-style-type: none">- Based on A88131-00B PCB - cost-down to 8 layers and replaced regulators to cheaper versions..- Changed VDDC regulator to 50A (dual phase) for cost down purposes.- Changed VDDCI regulator.- Changed memory regulators to one regulator MVDD.- Change regulators for other rails.		
<ul style="list-style-type: none">- Added mechanical holes for optional heatsink for Volterra parts.- Grounded holes for socket.- R121 resistor at VREFG that was connected to +1.8V has been removed .and replaced with capacitor C60.- Removed R1469 - not used.- Removed B992 - not used.- Removed optional regulator MU7.- Removed B911.		
<p>NOT FINAL - Note that the change history to -10 will be added in a refresh of this schematic. The Tach resistor change has been included under the Thermal Management sheet.</p>		