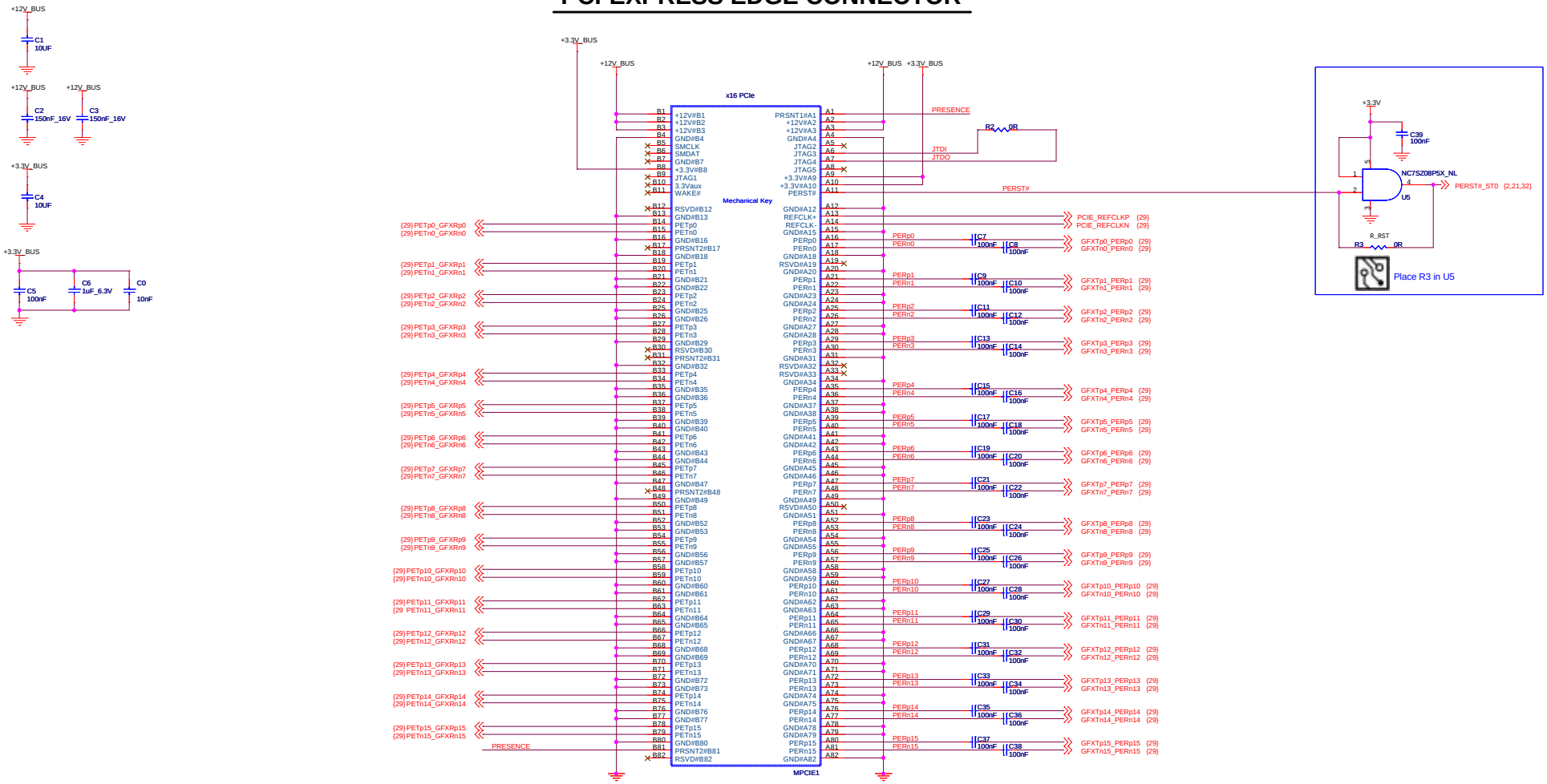
PCI-EXPRESS EDGE CONNECTOR



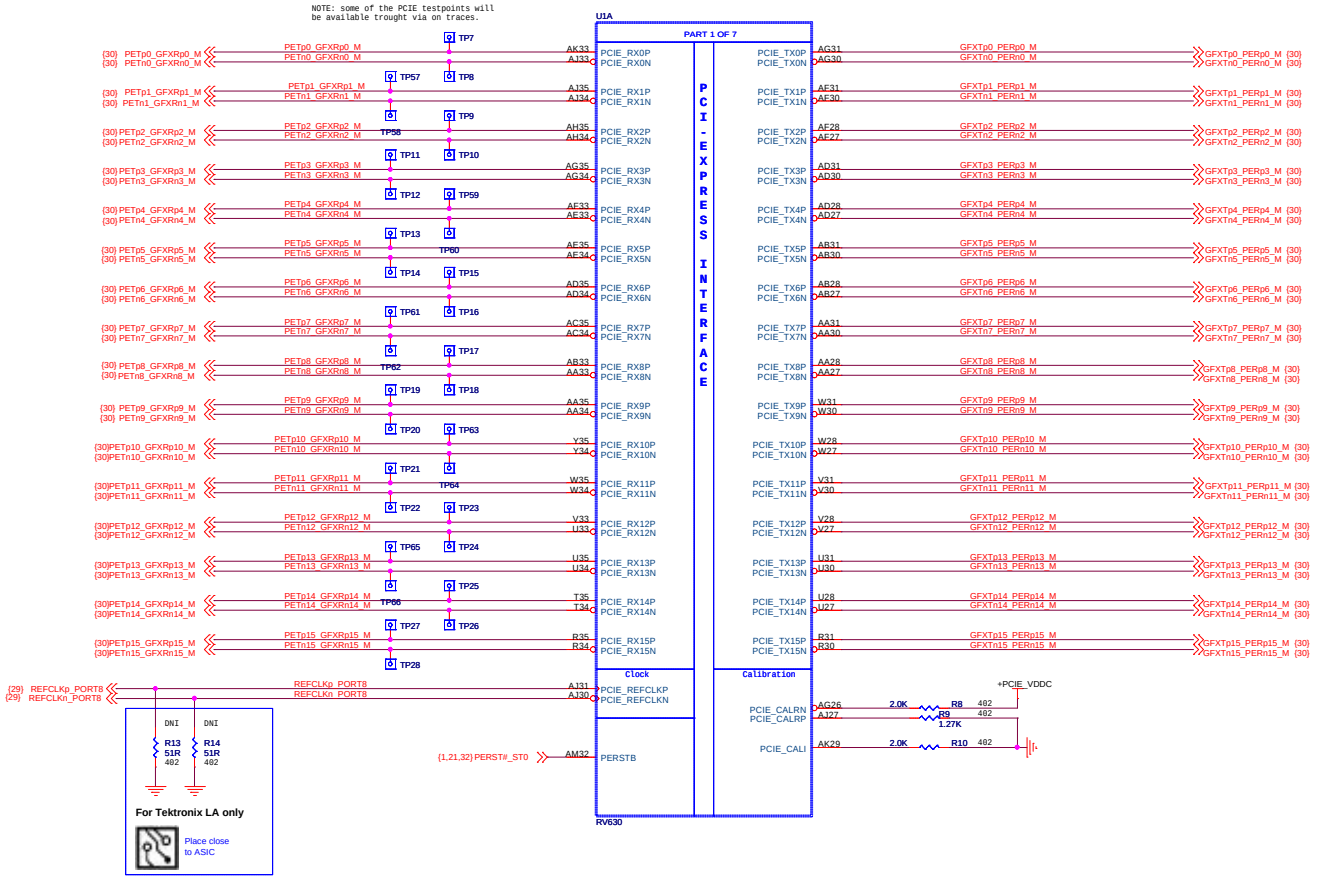
SYMBOL LEGEND

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

ATI Technologies Inc.

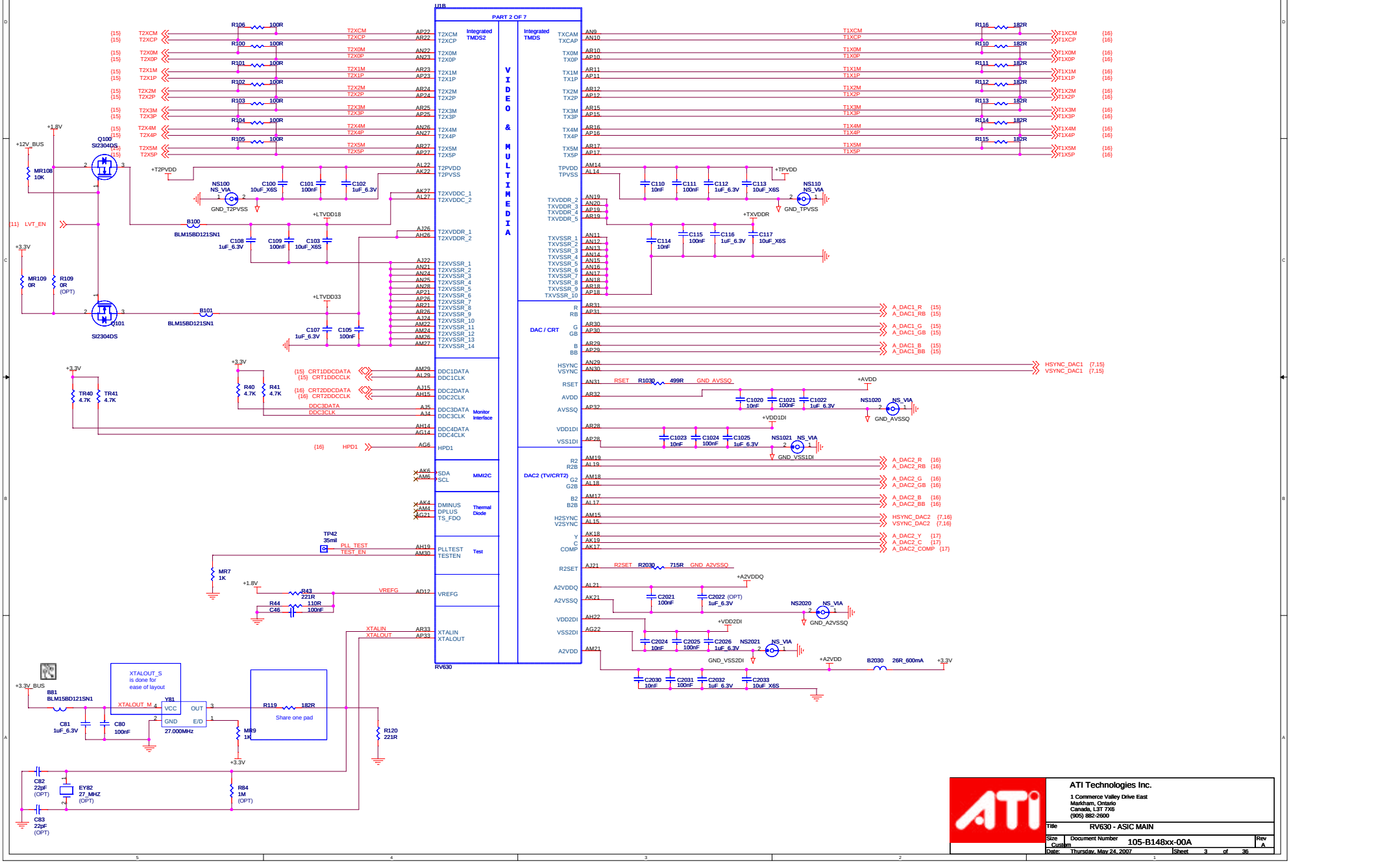
1 Commerce Valley Drive East
Markham, Ontario
Canada, L3T 7X6
(905) 882-2600

Title	PEX8547+RV630 GDDR3 VGA CARD		
Size C	Document Number DUAL GPU		Rev A
Date: Friday, May 25, 2007	Sheet 1 of 36		

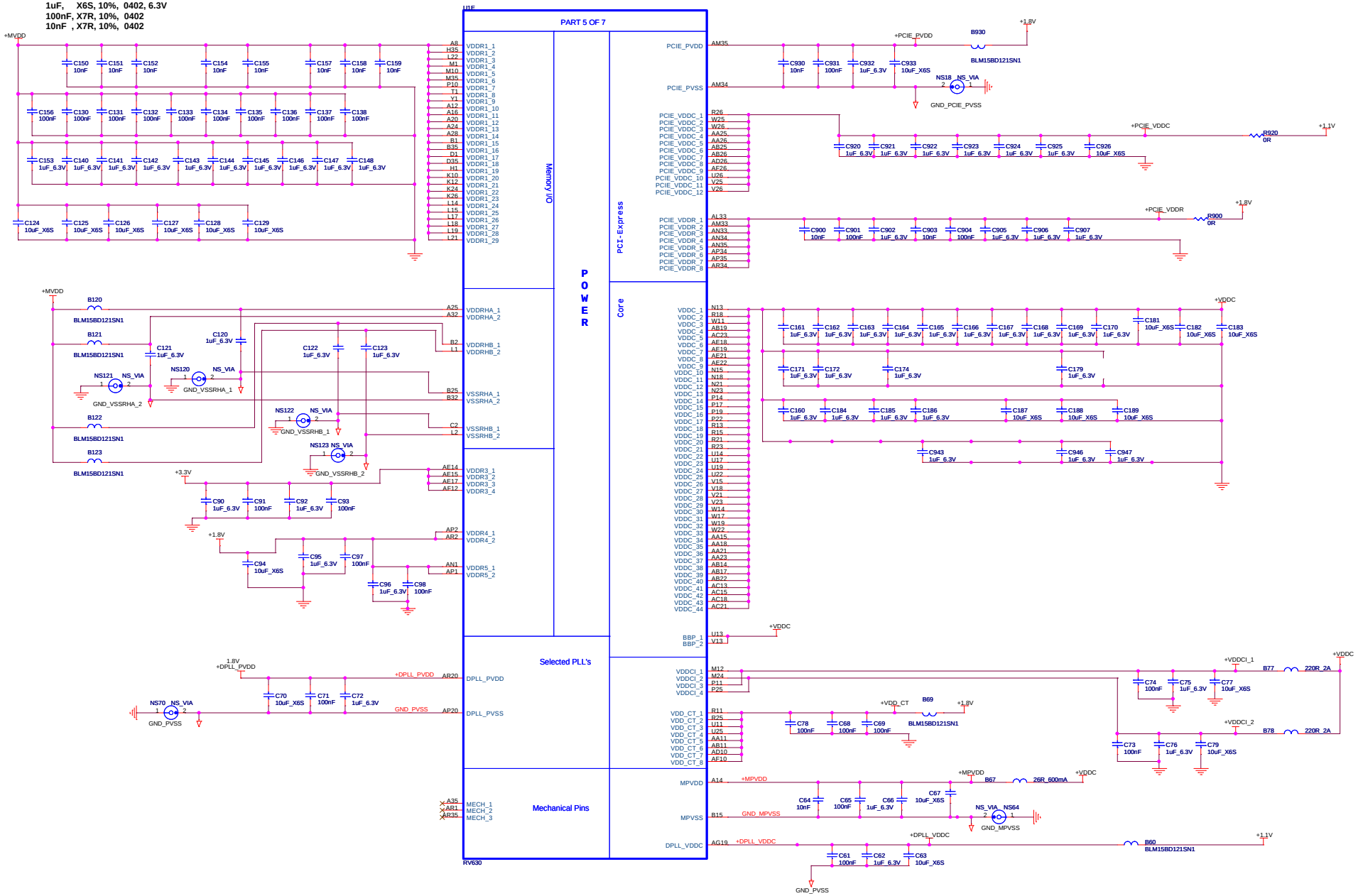


ATI Technologies Inc.
1 Commerce Valley Drive East
Markham, Ontario
Canada, L3T 7X6
(905) 882-2600

Title	PEX8547+RV630 GDDR3 VGA CARD		
Size C	Document Number DUAL GPU		Rev A
Date: Thursday, May 24, 2007		Sheet 2 of 36	

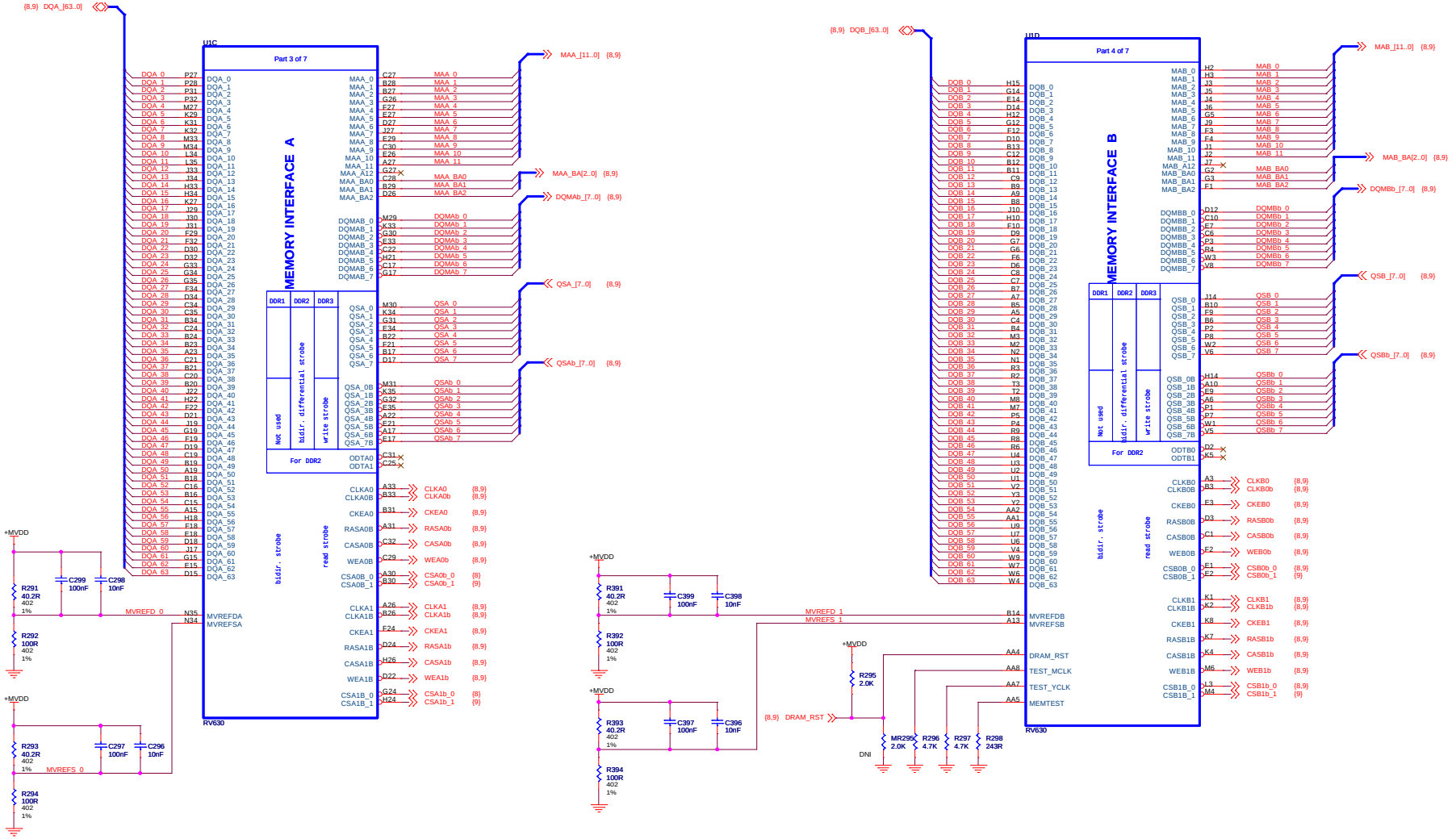

U1B
PART 2 OF 7
VIDEO & MULTIMEDIA
Integrated TMDS2
Integrated TMDS
DAC / CRT
DAC2 (TV/CRT2)
Monitor Interface
MMI2C
Thermal Diode
Test
RV630
ATI Technologies Inc.
1 Commerce Valley Drive East
Markham, Ontario
Canada, L3T 7X6
(905) 882-2600
RV630 - ASIC MAIN
105-B148xx-00A
Thursday, May 24, 2007
Sheet 3 of 36

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



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

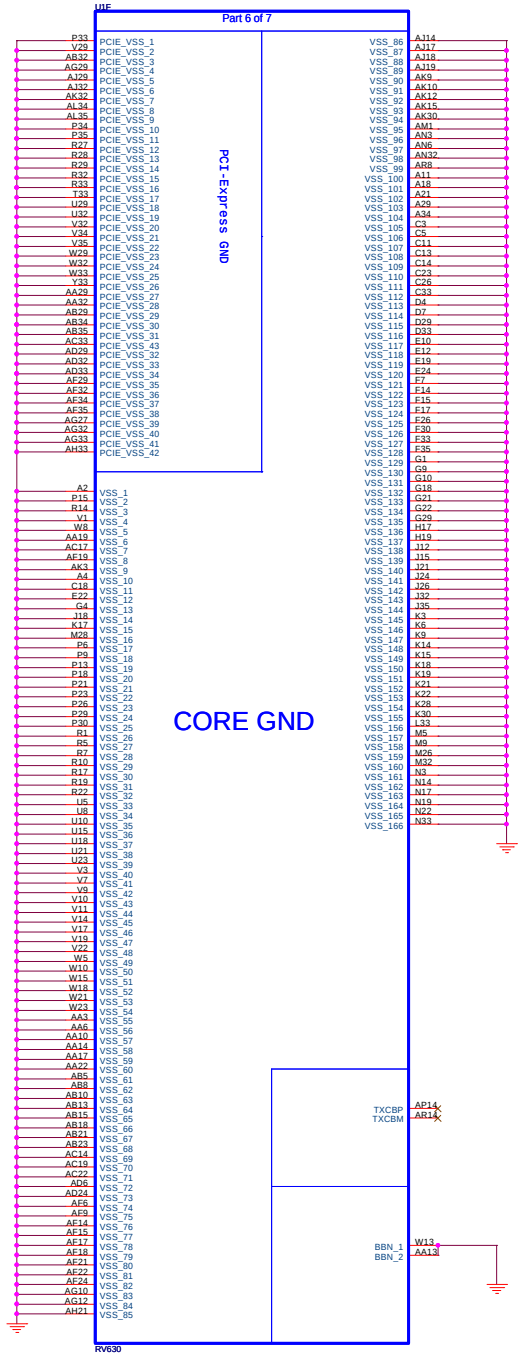
Title	RV630 GDDR3 - ASIC Power		
Size C	Document Number 105-B148xx-00A		Rev A
Date: Thursday, May 24, 2007		Sheet 4 of 36	



ATI Technologies Inc.

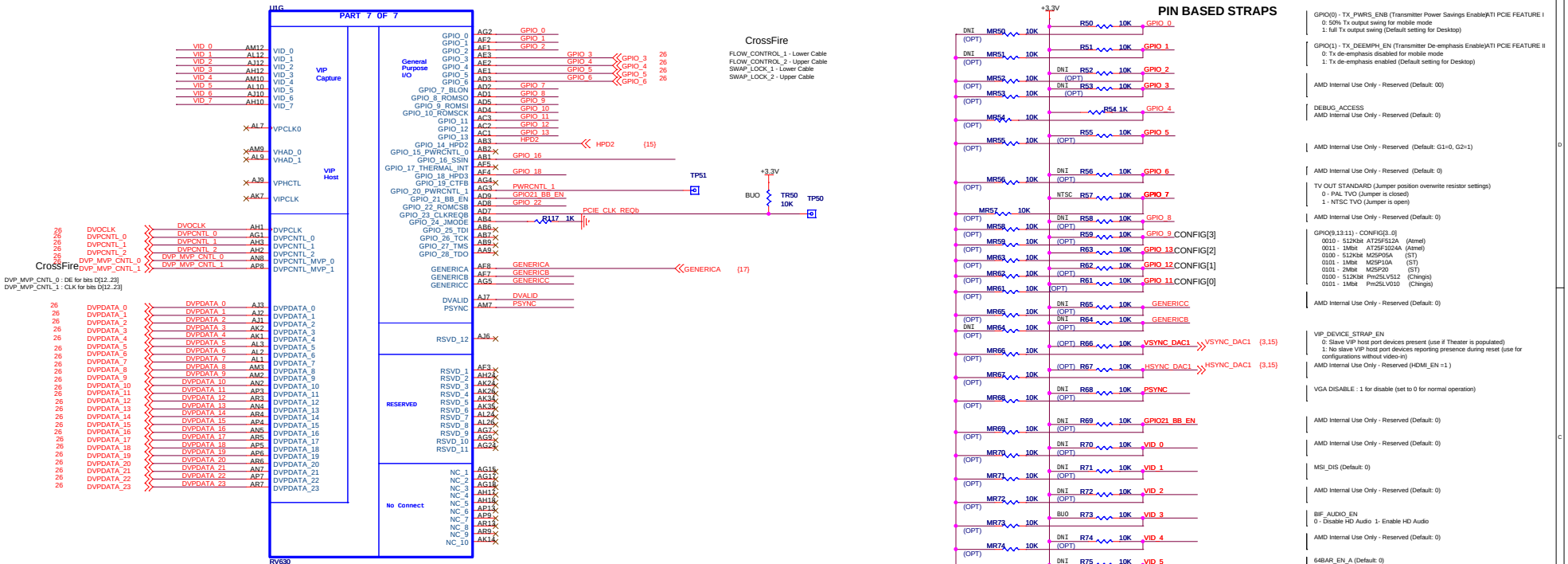
1 Commerce Valley Drive East
Markham, Ontario
Canada, L3T 7X6
(905) 882-2600

Title	RV630 GDDR3 - ASIC Memory Interface (Channel A & B)		
Size C	Document Number 105-B148xx-00A		Rev A
Date: Thursday, May 24, 2007		Sheet 5 of 36	



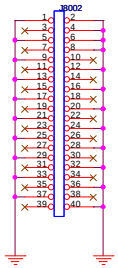
Title	RV630 GDDR3 - ASIC Grounds
Size	C
Document Number	105-B148xx-00A
Rev	A
Date:	Thursday, May 24, 2007
Sheet	6 of 36

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



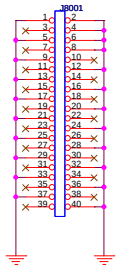
CrossFire Card-Edge

Lower Cable Card Edge

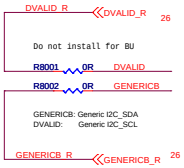


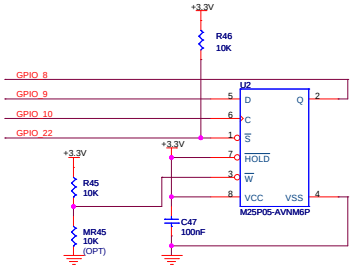
Bundle A

Upper Cable Card Edge

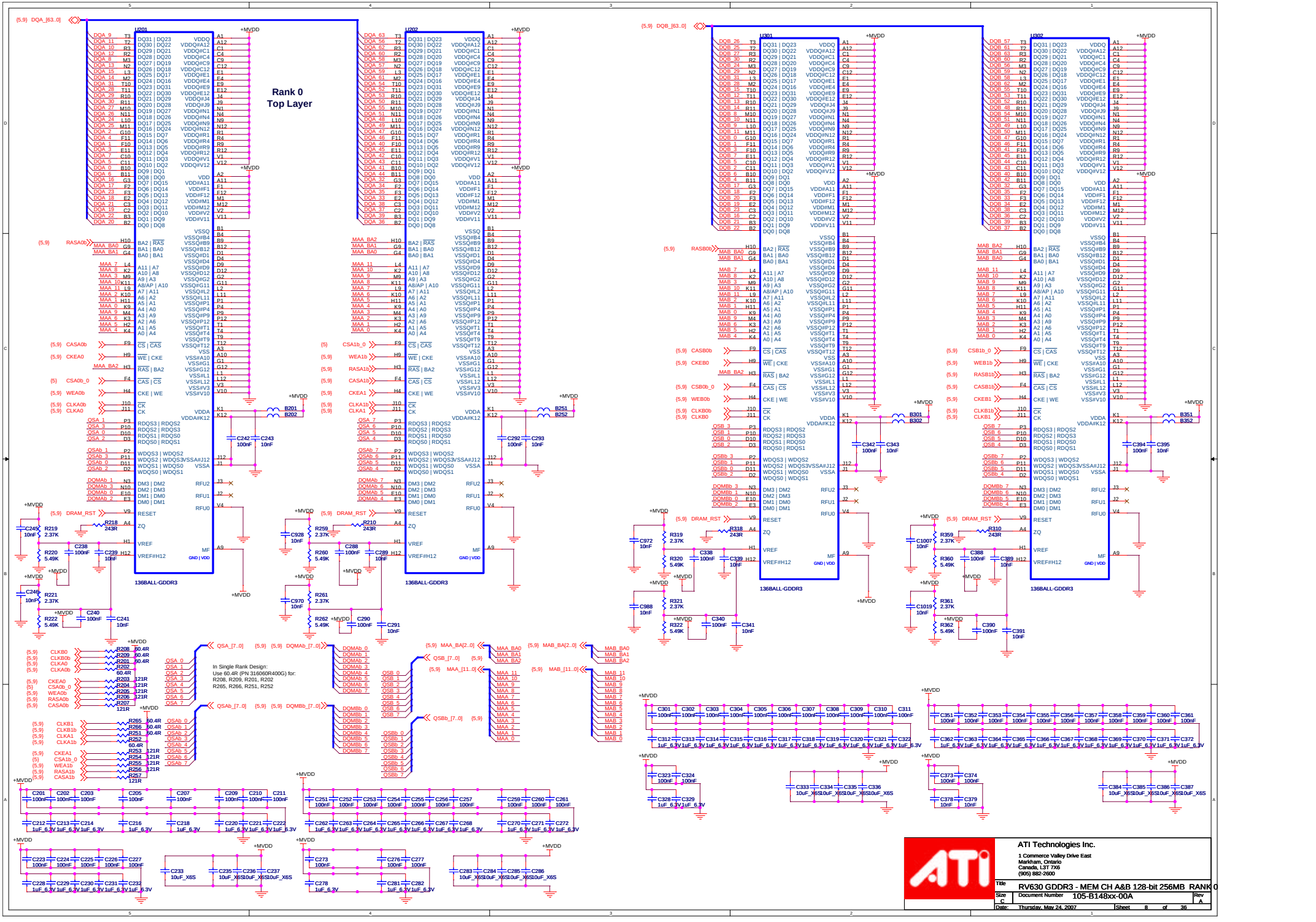


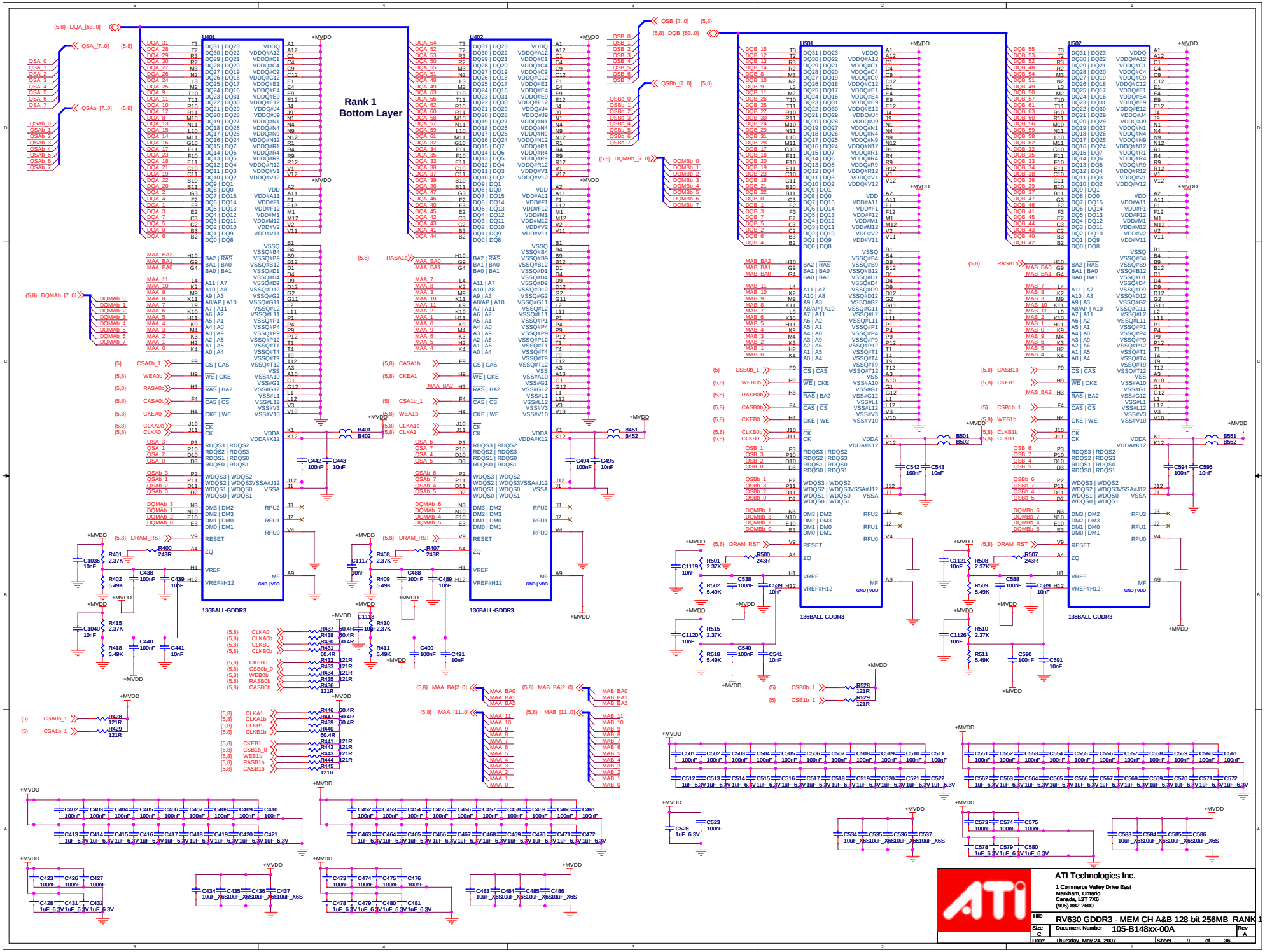
Bundle B (closer to the bracket)

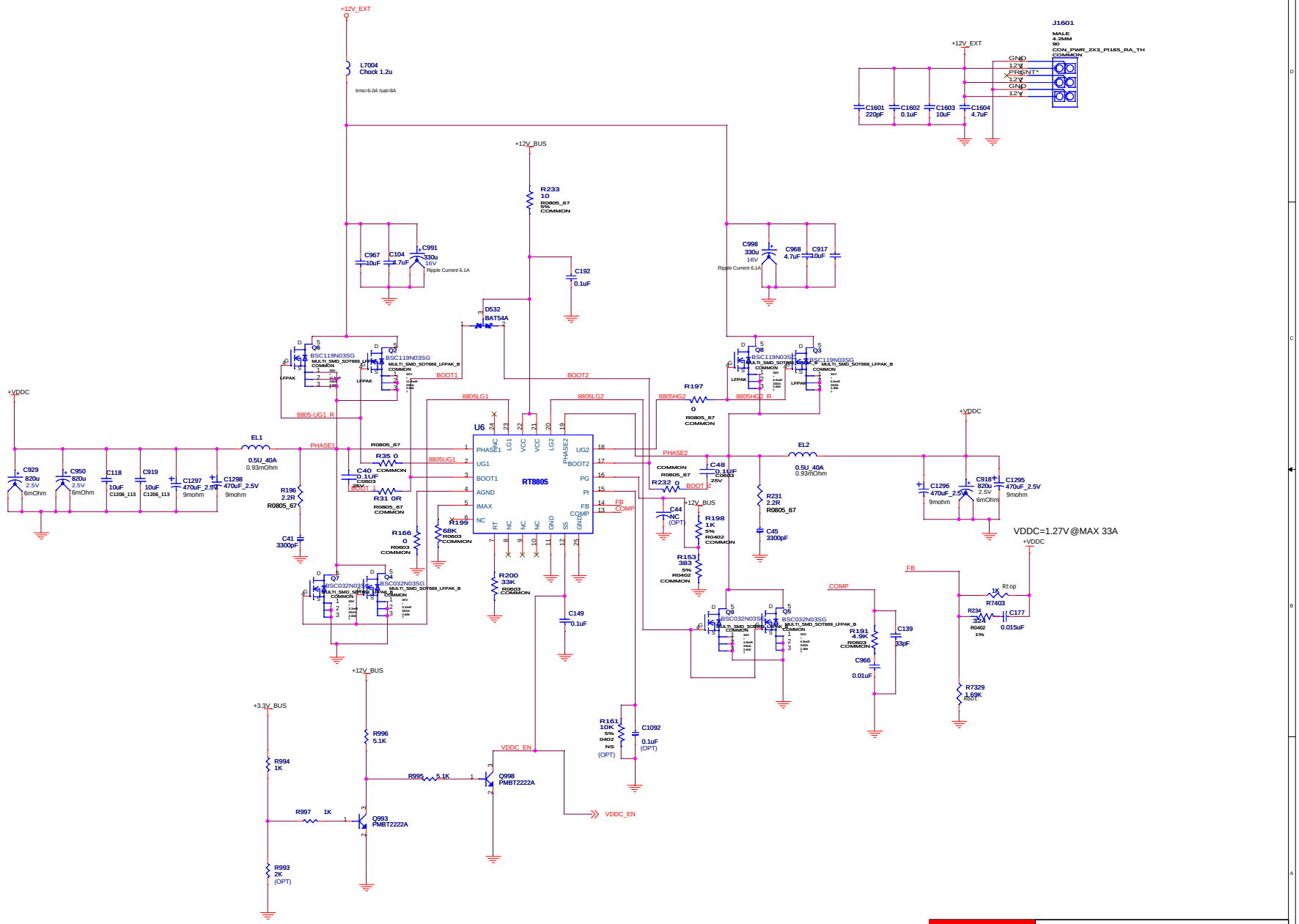




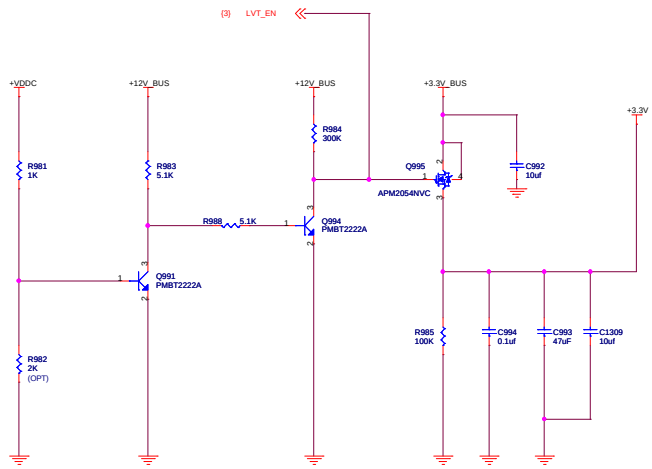
ATI Technologies Inc.			
1 Commerce Valley Drive East Markham, Ontario Canada, L3T 7X6 (905) 882-2600			
Title	RV630 GDDR3 - ASIC DVO & GPIOs		
Size: C	Document Number: 105-B148xx-00A		Rev: A
Date: Thursday, May 24, 2007	Sheet 7 of 36		


Rank 0
Top Layer
U201
U202
U301
U302
136BALL-GDDR3
In Single Rank Design:
Use 60.4R (PN 316060R400G) for:
R208, R209, R201, R202
R265, R266, R251, R252
ATI Technologies Inc.
1 Commerce Valley Drive East
Markham, Ontario
Canada, L3T 7X6
(905) 882-2600
Title
RV630 GDDR3 - MEM CH A&B 128-bit 256MB RANK 0
Size
C
Document Number
105-B148xx-00A
Rev
A
Date:
Thursday, May 24, 2007
Sheet
8
of
36


Rank 1
Bottom Layer
U401
U402
U501
U502
136BALL-GDDR3
+MVDD
{5,8} DQA_[63..0]
QSA_[7..0]
QSAb_[7..0]
QSB_[7..0]
QSBb_[7..0]
{5,8} DQB_[63..0]
{5,8} DQMAb_[7..0]
{5,8} DQMBb_[7..0]
{5,8} RASA1b
{5,8} RASB1b
{5,8} CASA1b
{5,8} CASB1b
{5,8} CKEA1
{5,8} CKEB1
{5,8} WEA1b
{5,8} WEB1b
{5,8} CLKA1b
{5,8} CLKB1b
{5,8} DRAM_RST
{5,8} MAA_BA[2..0]
{5,8} MAB_BA[2..0]
{5,8} MAA_[11..0]
{5,8} MAB_[11..0]
{5} CSA0b_1
{5} CSA1b_1
{5} CSB0b_1
{5} CSB1b_1
{5,8} CLKA0
{5,8} CLKA0b
{5,8} CLKB0
{5,8} CLKB0b
{5,8} CKEB0
{5,8} CSB0b_0
{5,8} WEB0b
{5,8} RASB0b
{5,8} CASB0b
ATI Technologies Inc.
1 Commerce Valley Drive East
Markham, Ontario
Canada, L3T 7X6
(905) 882-2600
Title
RV630 GDDR3 - MEM CH A&B 128-bit 256MB RANK 1
Size C
Document Number 105-B148xx-00A
Rev A
Date: Thursday, May 24, 2007
Sheet 9 of 36



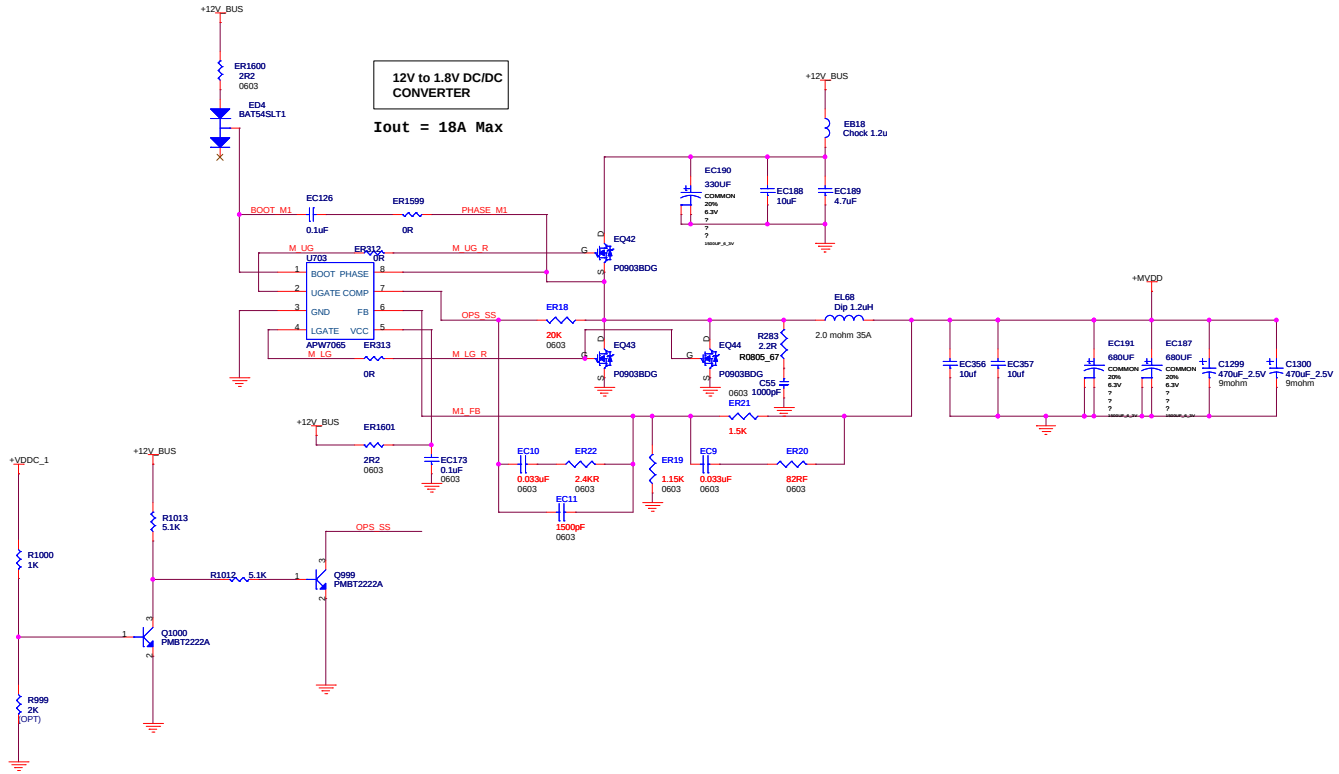
ATI Technologies Inc.		
1 Commerce Valley Drive East Markham, Ontario Canada, L3T 7X6 (905) 882-2600		
Title: RV630 GDDR3 - VDDC SMPS 01		
Size: Custom	Document Number: 105-B148xx-00A	Rev: A
Date: Friday, May 25, 2007	Sheet 10 of 36	



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

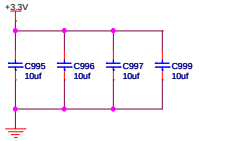
Title	RV630 GDDR3 - VDDC SMPS 02	
Size: Custom	Document Number: 105-B148xx-00A	Rev: A
Date: Thursday, May 24, 2007	Sheet 11 of 36	

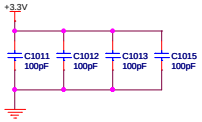
CORE REGULATOR VDDC

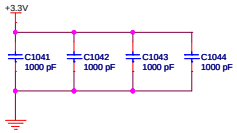


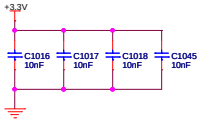
ATI Technologies Inc.
1 Commerce Valley Drive East
Markham, Ontario
Canada, L3T 7X6
(905) 882-2600

Title	RV630 GDDR3 - MVDD SMPS 01		
Size: Custom	Document Number: 105-B148xx-00A		Rev: A
Date: Friday, May 25, 2007	Sheet 12 of 36		



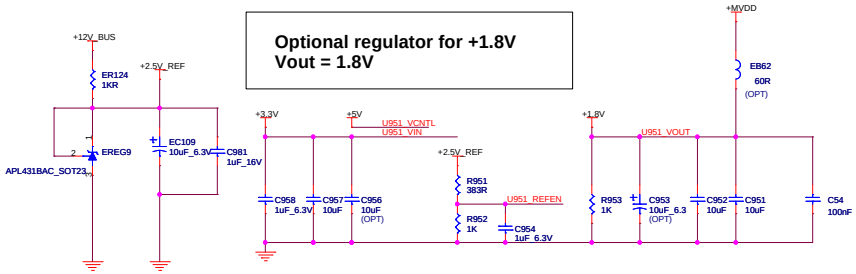


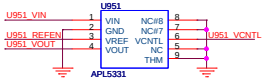


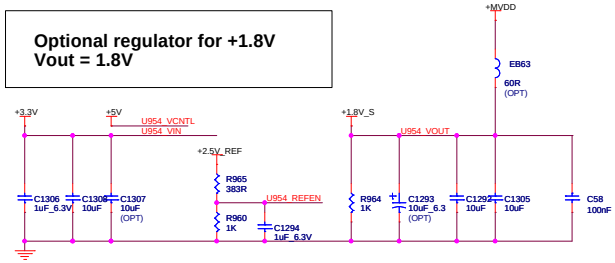


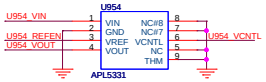
ATI Technologies Inc.
1 Commerce Valley Drive East
Markham, Ontario
Canada, L3T 7X6
(905) 882-2600

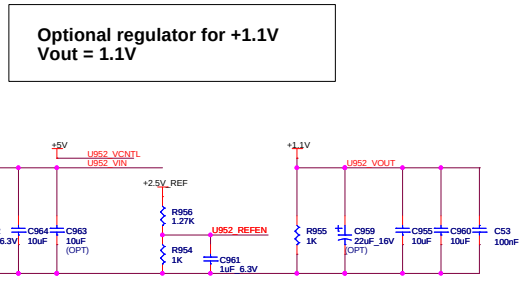
Title	RV630 GDDR3 - Power Management	
Size: C	Document Number: 105-B148xx-00A	Rev: A
Date: Thursday, May 24, 2007	Sheet 13 of 36	

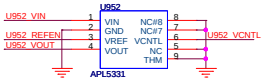


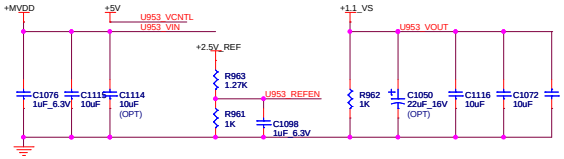


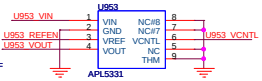




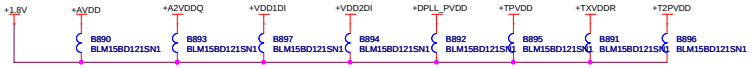






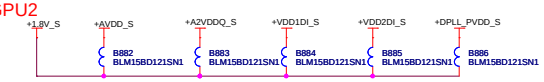


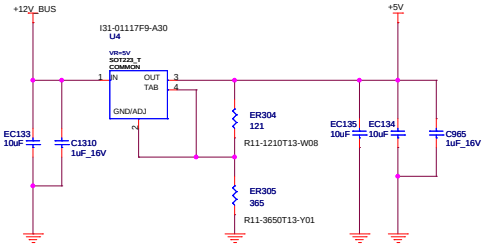
GPU1



Shared Power Rails

GPU2

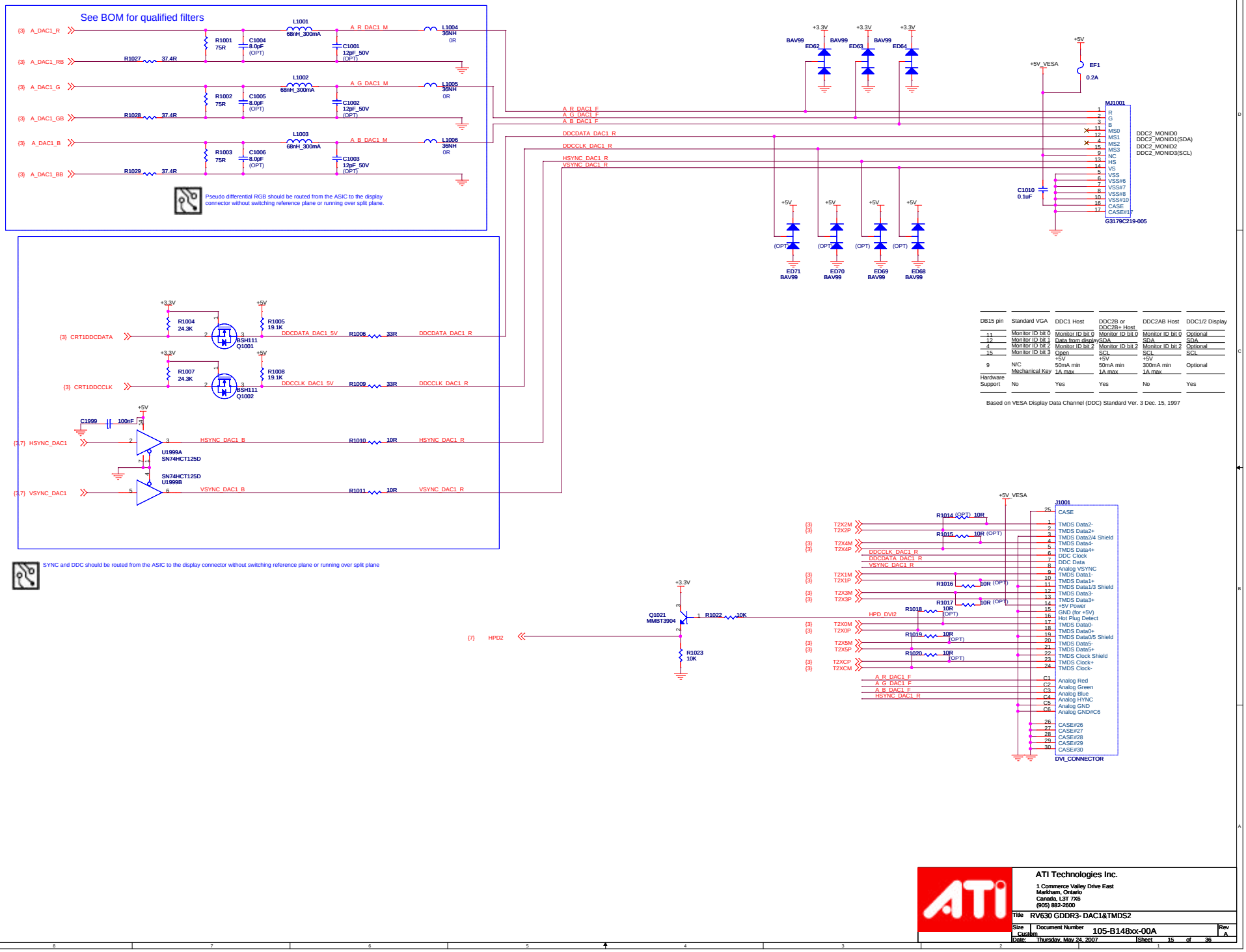




Vout=1.25V* [1+(ER305/ER304)]

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

Title	RV630 GDDR3 - Linear Regulators		
Size C	Document Number 105-B148xx-00A		Rev A
Date: Friday, May 25, 2007	Sheet 14 of 36		

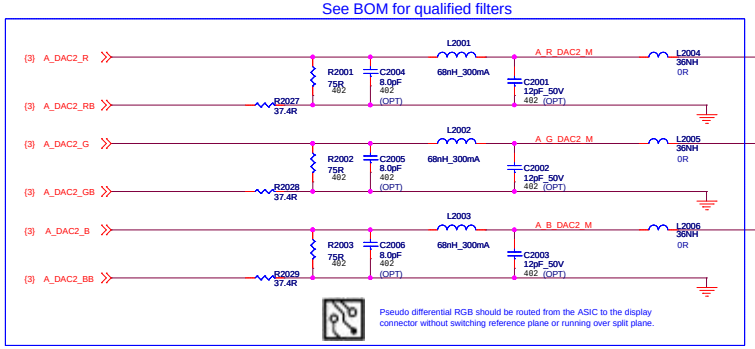


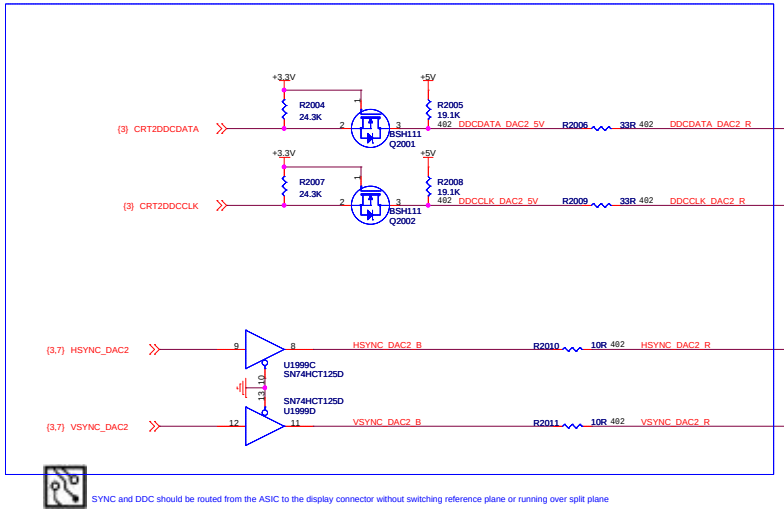
DB15 pin	Standard VGA	DDC1 Host	DDC2B or DDC2B+ Host	DDC2AB Host	DDC1/2 Display
11	Monitor ID bit 0	Monitor ID bit 0	Monitor ID bit 0	Monitor ID bit 0	Optional
12	Monitor ID bit 1	Data from display	SDA	SDA	SDA
4	Monitor ID bit 2	Monitor ID bit 2	Monitor ID bit 2	Monitor ID bit 2	Optional
15	Monitor ID bit 3	Open	SCL	SCL	SCL
9	N/C	+5V 50mA min	+5V 50mA min	+5V 300mA min	Optional
Hardware Support	Mechanical Key	1A max	1A max	1A max	
	No	Yes	Yes	No	Yes

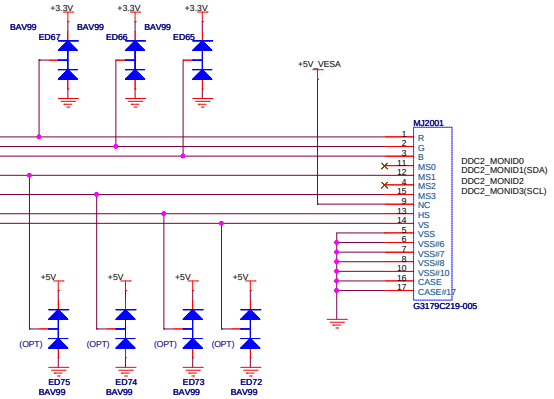
Based on VESA Display Data Channel (DDC) Standard Ver. 3 Dec. 15, 1997

ATI Technologies Inc.			
1 Commerce Valley Drive East Markham, Ontario Canada, L3T 7X6 (905) 882-2600			
Title	RV630 GDDR3- DAC1&TMDS2		
Size: Custom	Document Number: 105-B148xx-00A		Rev: A
Date: Thursday, May 24, 2007	Sheet 15 of 36		

See BOM for qualified filters

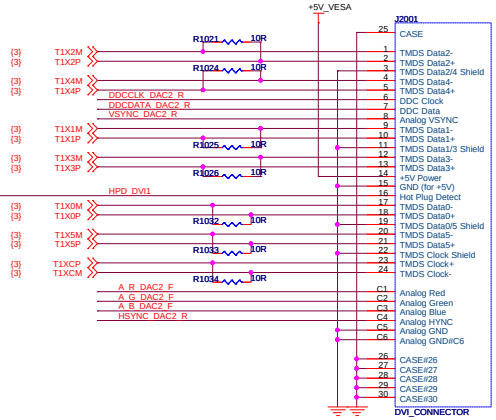






DB15 pin	Standard VGA	DDC1 Host	DDC2B or DDC2B+ Host	DDC2AB Host	DDC1/2 Display
11	Monitor ID bit 0	Monitor ID bit 0	Monitor ID bit 0	Monitor ID bit 0	Optional
12	Monitor ID bit 1	Data from display	SDA	SDA	SDA
4	Monitor ID bit 2	Monitor ID bit 2	Monitor ID bit 2	Monitor ID bit 2	Optional
15	Monitor ID bit 3	Open	SCL	SCL	SCL
9	N/C	+5V 50mA min	+5V 50mA min	+5V 300mA min	Optional
Hardware Support	Mechanical Key	1A max	1A max	1A max	
	No	Yes	Yes	No	Yes

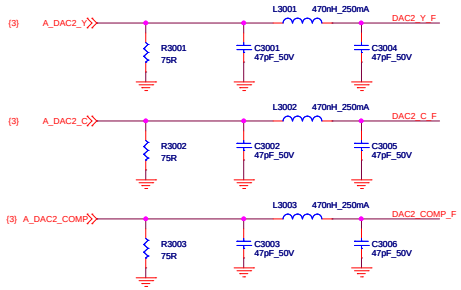
Based on VESA Display Data Channel (DDC) Standard Ver. 3 Dec. 15, 1997

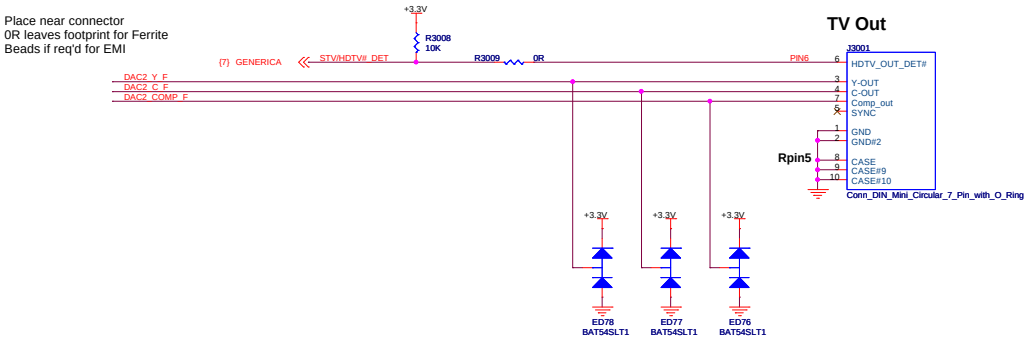


ATI Technologies Inc.

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

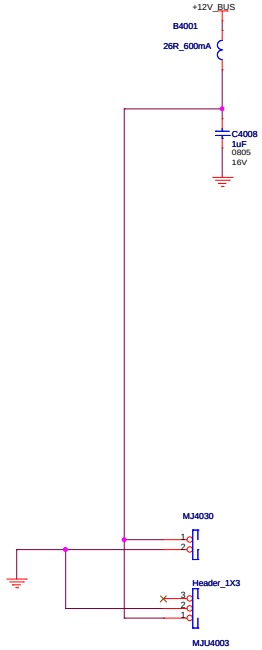
Title	RV630 GDDR3-DAC2/TMDS1	
Size: Custom	Document Number: 105-B148xx-00A	Rev: A
Date: Thursday, May 24, 2007	Sheet 16 of 36	





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

Title	RV630 GDDR3 - TVO	
Size C	Document Number 105-B148xx-00A	Rev A
Date: Friday, May 25, 2007	Sheet 17 of 36	



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

Title	RV630 GDDR3- Thermal Management		
Size C	Document Number 105-B148xx-00A		Rev A
Date: Thursday, May 24, 2007	Sheet 18 of 36		

DVI/DVI SCREWS with top tab

MEC4
MEC_HEX_JACK_SCREW
COMMON

MEC3
MEC_HEX_JACK_SCREW
COMMON

MEC2
MEC_HEX_JACK_SCREW
COMMON

MEC1
MEC_HEX_JACK_SCREW
COMMON

BKT1
BRACKET
8020042500G

DNI
SK1
RV410SOCKET

PCB1
PCB
109-GN982-00A

DNI
SK2
RV410SOCKET

H1
X_150 Drill / 300 Pad-0

FM1
SW_FB

FM2
SW_FB

FM3
SW_FB

FM5
SW_FB

FM4
SW_FB

FM6
SW_FB

Fiducial Point

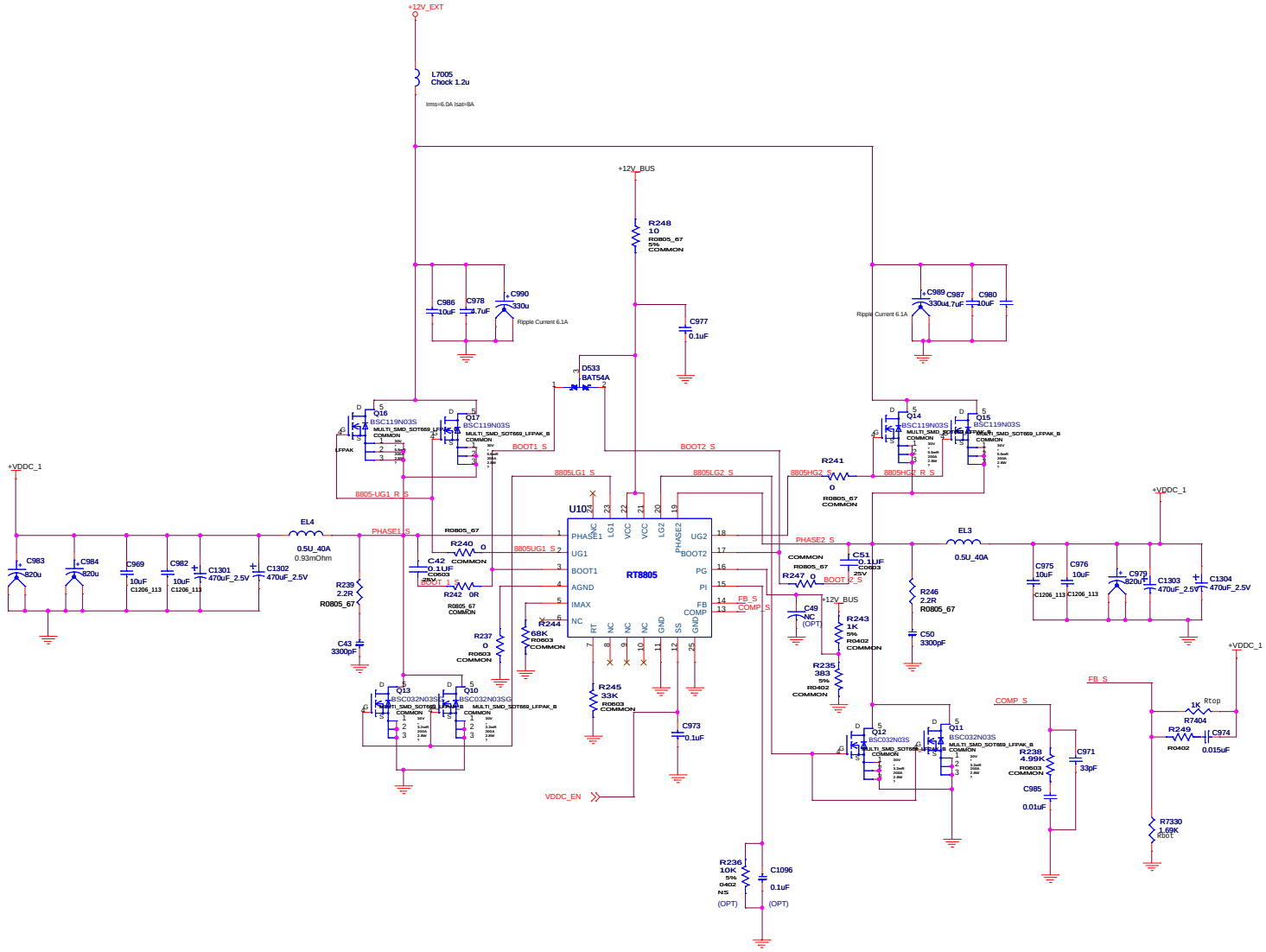
<Variant Name>

ATI Technologies Inc.

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

Title	RV630 GDDR3- Mechanical		
Size C	Document Number 105-B148xx-00A		Rev A
Date: Thursday, May 24, 2007		Sheet 19 of 36	

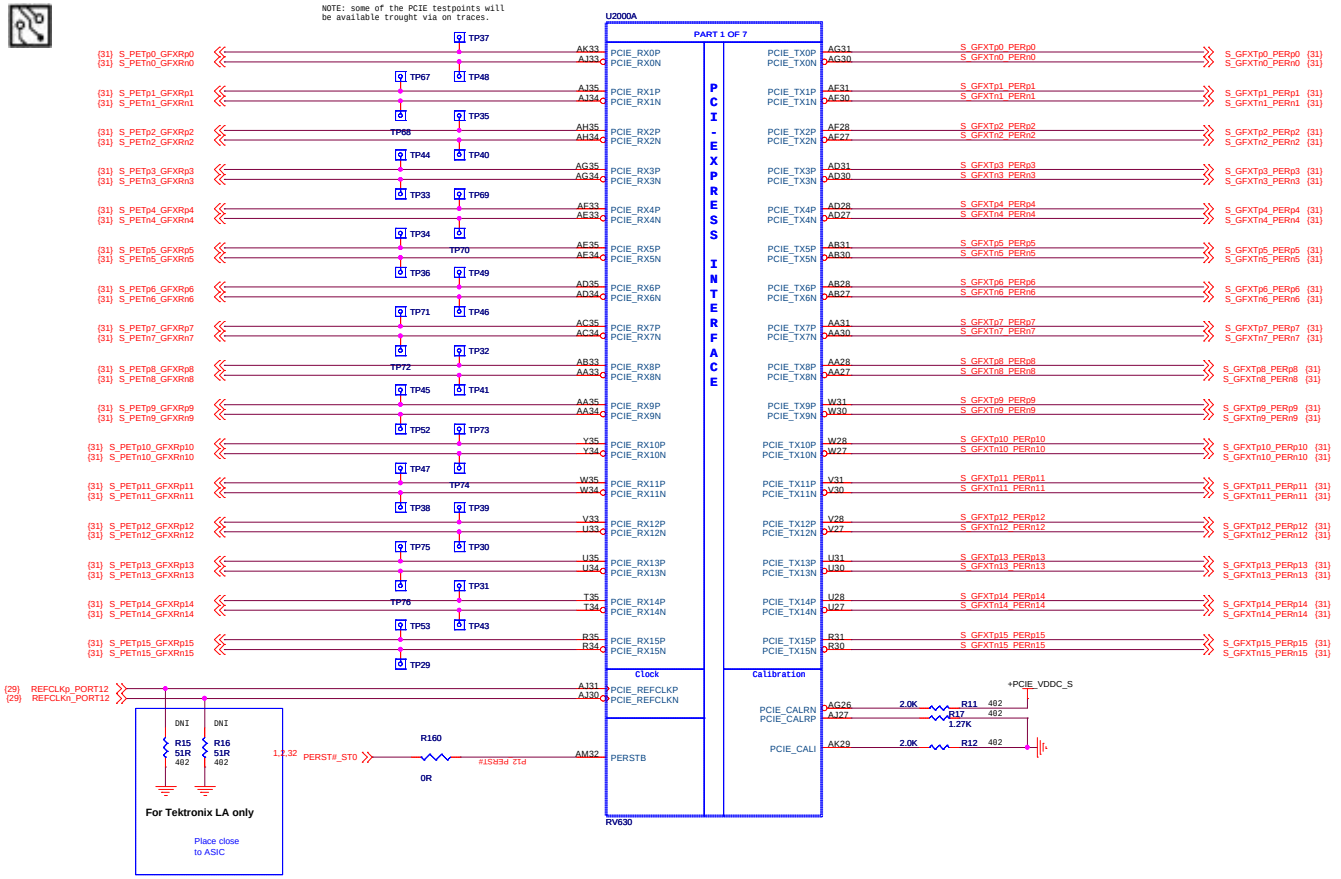
PCI-EXPRESS EDGE CONNECTOR



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

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

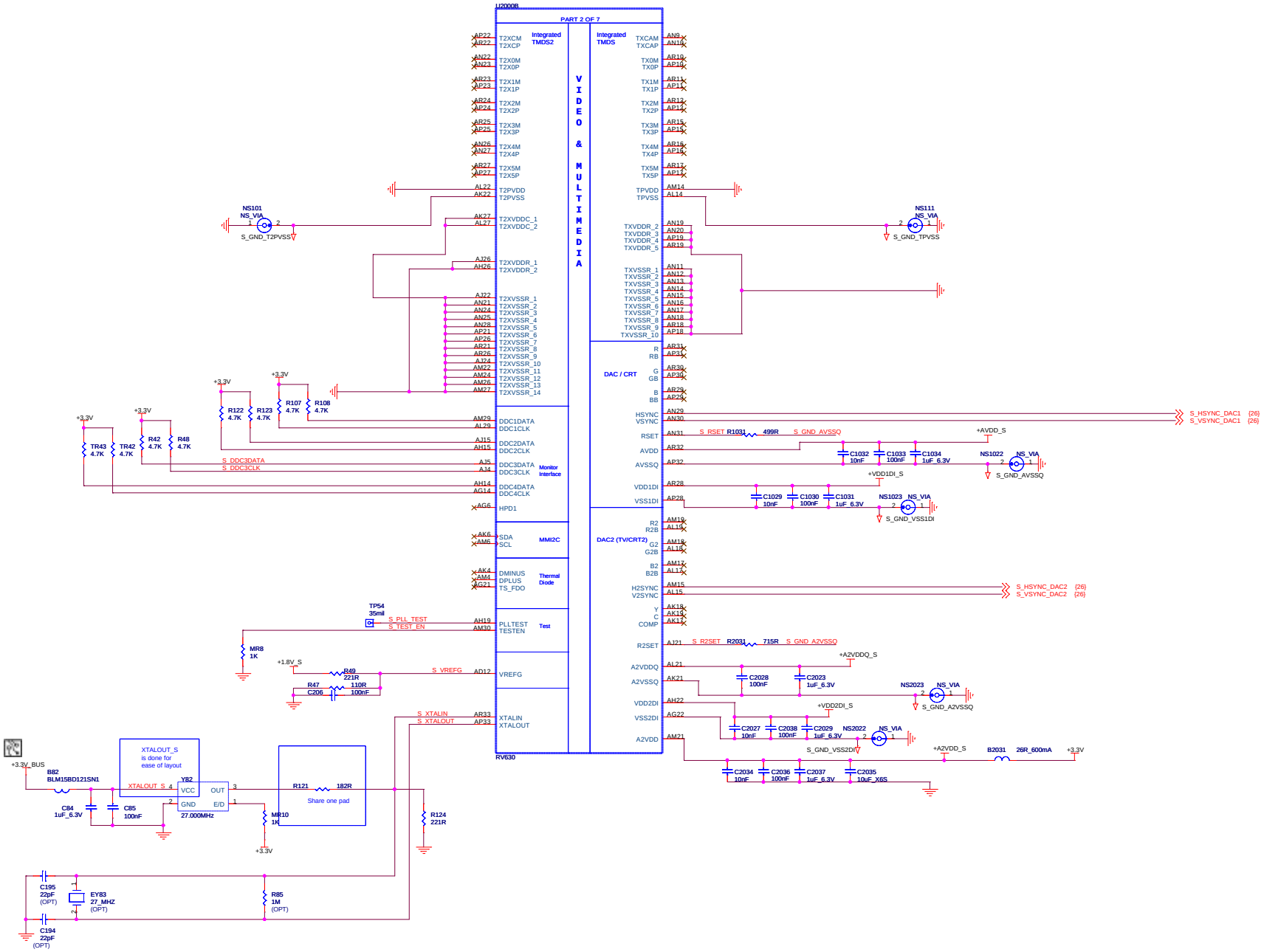
Title	PEX8547+RV630 GDDR3 VGA CARD		
Size C	Document Number DUAL GPU		Rev A
Date: Friday, May 25, 2007		Sheet 20 of 36	



ATI Technologies Inc.

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

Title	PEX8547+RV630 GDDR3 VGA CARD		
Size C	Document Number DUAL GPU		Rev A
Date: Thursday, May 24, 2007		Sheet 21 of 36	



ATI Technologies Inc.

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

Title	PEX8547+RV630 GDDR3 VGA CARD	
Size C	Document Number DUAL GPU	Rev A
Date: Thursday, May 24, 2007	Sheet 22 of 36	

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

U2000F
PART 5 OF 7
RV630
Memory I/O
PCI-Express
Core
POWER
Selected PLL's
Mechanical Pins

+MVDD
C449 10nF
C450 10nF
C447 10nF
C422 10nF
C462 10nF
C493 10nF
C377 10nF
C496 10nF
C527 100nF
C477 100nF
C492 100nF
C393 100nF
C445 100nF
C383 100nF
C448 100nF
C382 100nF
C430 100nF
C380 100nF
C274 1uF_6.3V
C446 1uF_6.3V
C425 1uF_6.3V
C433 1uF_6.3V
C392 1uF_6.3V
C412 1uF_6.3V
C347 1uF_6.3V
C429 1uF_6.3V
C526 1uF_6.3V
C533 1uF_6.3V
C400 10uF_X6S
C376 10uF_X6S
C269 10uF_X6S
C451 10uF_X6S
C498 10uF_X6S
C531 10uF_X6S
A8 H35 L22 M1 M10 M35 P10 T1 Y1 A12 A16 A20 A24 A28 B1 B35 D1 D35 H1 K10 K12 K24 K26 L14 L15 L17 L18 L19 L21
VDDR1_1 VDDR1_2 VDDR1_3 VDDR1_4 VDDR1_5 VDDR1_6 VDDR1_7 VDDR1_8 VDDR1_9 VDDR1_10 VDDR1_11 VDDR1_12 VDDR1_13 VDDR1_14 VDDR1_15 VDDR1_16 VDDR1_17 VDDR1_18 VDDR1_19 VDDR1_20 VDDR1_21 VDDR1_22 VDDR1_23 VDDR1_24 VDDR1_25 VDDR1_26 VDDR1_27 VDDR1_28 VDDR1_29

+MVDD
B127 BLM15BD121SN1
B126 BLM15BD121SN1
B124 BLM15BD121SN1
B125 BLM15BD121SN1
C549 1uF_6.3V
C525 1uF_6.3V
C582 1uF_6.3V
C548 1uF_6.3V
NS126 NS_VIA
NS125 NS_VIA
S_GND_VSSRHA_1
S_GND_VSSRHA_2
NS127 NS_VIA
S_GND_VSSRHB_1
NS124 NS_VIA
S_GND_VSSRHB_2
A25 A32 B2 L1 B25 B32 C2 L2
VDDRHA_1 VDDRHA_2 VDDRHB_1 VDDRHB_2 VSSRHA_1 VSSRHA_2 VSSRHB_1 VSSRHB_2

+3.3V
C381 1uF_6.3V
C487 100nF
C424 1uF_6.3V
C482 100nF
AE14 AE15 AE17 AE12
VDDR3_1 VDDR3_2 VDDR3_3 VDDR3_4

+1.8V_S
C598 10uF_X6S
C401 1uF_6.3V
C601 100nF
C250 1uF_6.3V
C258 100nF
AP2 AR2 AN1 AP1
VDDR4_1 VDDR4_2 VDDR5_1 VDDR5_2

+DPLL_PVDD_S
C602 10uF_X6S
C444 100nF
C375 1uF_6.3V
S_+DPLL_PVDD
S_GND_PVSS
NS71 NS_VIA
S_GND_PVSS
AR20 AP20
DPLL_PVDD DPLL_PVSS

A35 AR1 AR35
MECH_1 MECH_2 MECH_3

PCIE_PVDD AM35
PCIE_PVSS AM34
+PCIE_PVDD_S
B931 BLM15BD121SN1
+1.8V_S
C936 10nF
C935 100nF
C934 1uF_6.3V
C938 10uF_X6S
NS19 NS_VIA
S_GND_PCIE_PVSS

PCIE_VDDC_1 PCIE_VDDC_2 PCIE_VDDC_3 PCIE_VDDC_4 PCIE_VDDC_5 PCIE_VDDC_6 PCIE_VDDC_7 PCIE_VDDC_8 PCIE_VDDC_9 PCIE_VDDC_10 PCIE_VDDC_11 PCIE_VDDC_12
R26 W25 W26 AA25 AA26 AB25 AB26 AD26 AF26 U26 V25 V26
+PCIE_VDDC_S
C939 1uF_6.3V
C937 1uF_6.3V
C942 1uF_6.3V
C941 1uF_6.3V
C927 1uF_6.3V
C945 1uF_6.3V
C940 10uF_X6S
R921 0R
+1.1_VS

PCIE_VDDR_1 PCIE_VDDR_2 PCIE_VDDR_3 PCIE_VDDR_4 PCIE_VDDR_5 PCIE_VDDR_6 PCIE_VDDR_7 PCIE_VDDR_8
AL33 AM33 AN33 AN34 AN35 AP34 AP35 AR34
+PCIE_VDDR_S
C914 10nF
C915 100nF
C912 1uF_6.3V
C909 10nF
C910 100nF
C911 1uF_6.3V
C913 1uF_6.3V
C908 1uF_6.3V
R901 0R
+1.8V_S

+VDDC_1
VDDC_1 VDDC_2 VDDC_3 VDDC_4 VDDC_5 VDDC_6 VDDC_7 VDDC_8 VDDC_9 VDDC_10 VDDC_11 VDDC_12 VDDC_13 VDDC_14 VDDC_15 VDDC_16 VDDC_17 VDDC_18 VDDC_19 VDDC_20 VDDC_21 VDDC_22 VDDC_23 VDDC_24 VDDC_25 VDDC_26 VDDC_27 VDDC_28 VDDC_29 VDDC_30 VDDC_31 VDDC_32 VDDC_33 VDDC_34 VDDC_35 VDDC_36 VDDC_37 VDDC_38 VDDC_39 VDDC_40 VDDC_41 VDDC_42 VDDC_43 VDDC_44
N13 R18 W11 AB19 AC23 AE18 AE19 AE21 AE22 N15 N18 N21 N23 P14 P17 P19 P22 R13 R15 R21 R23 U14 U17 U19 U22 V15 V18 V21 V23 W14 W17 W19 W22 AA15 AA18 AA21 AA23 AB14 AB17 AB22 AC13 AC15 AC18 AC21
C587 1uF_6.3V
C592 1uF_6.3V
C593 1uF_6.3V
C596 1uF_6.3V
C337 1uF_6.3V
C344 1uF_6.3V
C345 1uF_6.3V
C500 1uF_6.3V
C524 1uF_6.3V
C327 10uF_X6S
C326 10uF_X6S
C300 10uF_X6S
C295 1uF_6.3V
C275 1uF_6.3V
C280 1uF_6.3V
C331 1uF_6.3V
C294 1uF_6.3V
C949 1uF_6.3V

BBP_1 BBP_2 U13 V13
+VDDC_1

VDDCI_1 VDDCI_2 VDDCI_3 VDDCI_4 M12 M24 P11 P25
+VDDCI_1S
B80 220R_2A
C597 100nF
C532 1uF_6.3V
C249 10uF_X6S
+VDDCI_2S
B79 220R_2A
C499 100nF
C287 1uF_6.3V
C529 10uF_X6S

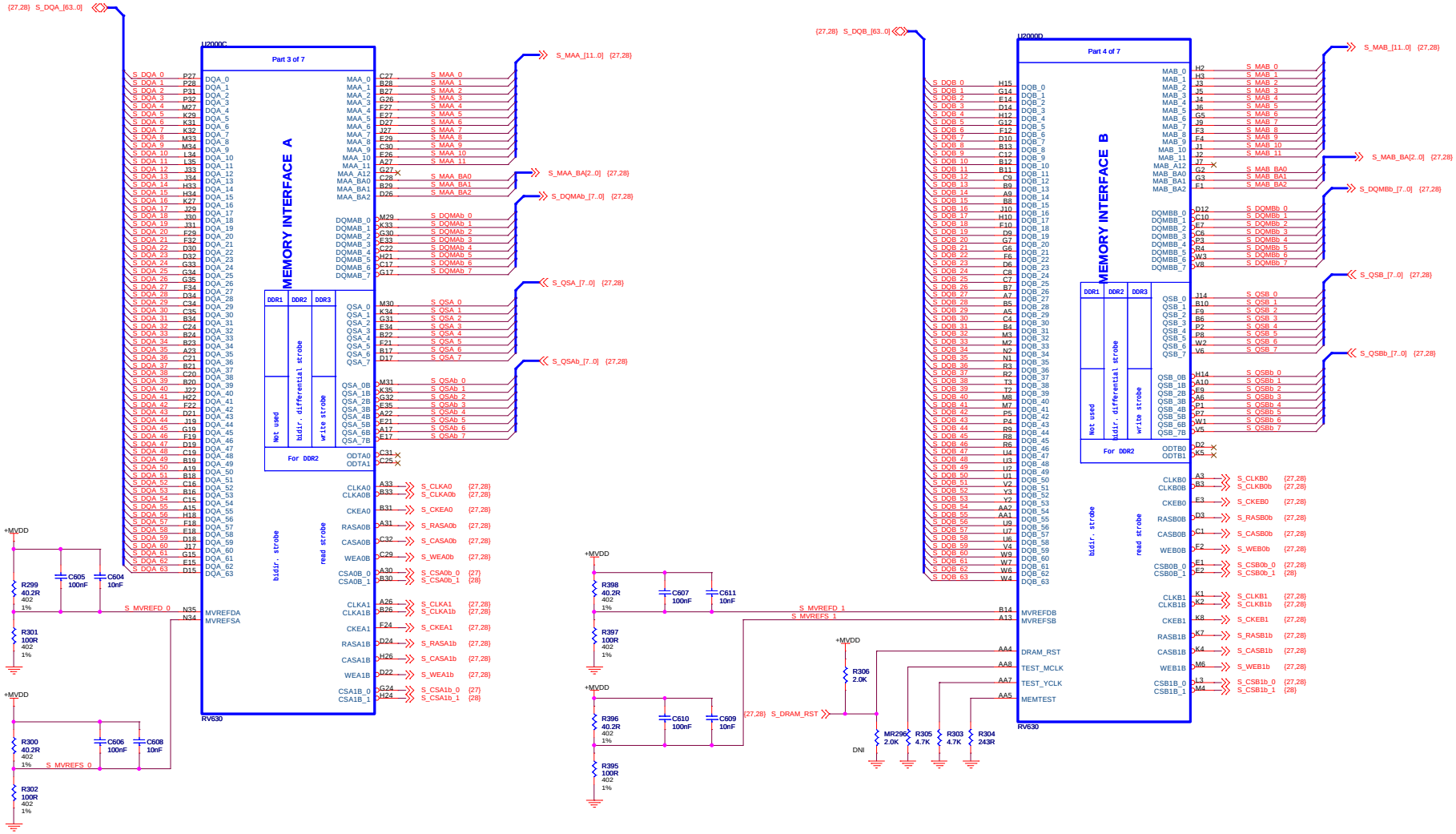
VDD_CT_1 VDD_CT_2 VDD_CT_3 VDD_CT_4 VDD_CT_5 VDD_CT_6 VDD_CT_7 VDD_CT_8 R11 R25 U11 U25 AA11 AB11 AD10 AE10
+VDD_CT_S
B70 BLM15BD121SN1
+1.8V_S
C544 100nF
C599 100nF
C547 100nF

MPVDD A14
MPVSS B15
+MPVDD_S
S_+MPVDD
B68 26R_600mA
+VDDC_1
C576 10nF
C600 100nF
C603 1uF_6.3V
C530 10uF_X6S
S_GND_MPVSS
NS_VIA_NS65
S_GND_MPVSS

DPLL_VDDC AG19
S_+DPLL_VDDC
+DPLL_VDDC_S
B61 BLM15BD121SN1
+1.1_VS
C550 100nF
C497 1uF_6.3V
C411 10uF_X6S
S_GND_PVSS

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

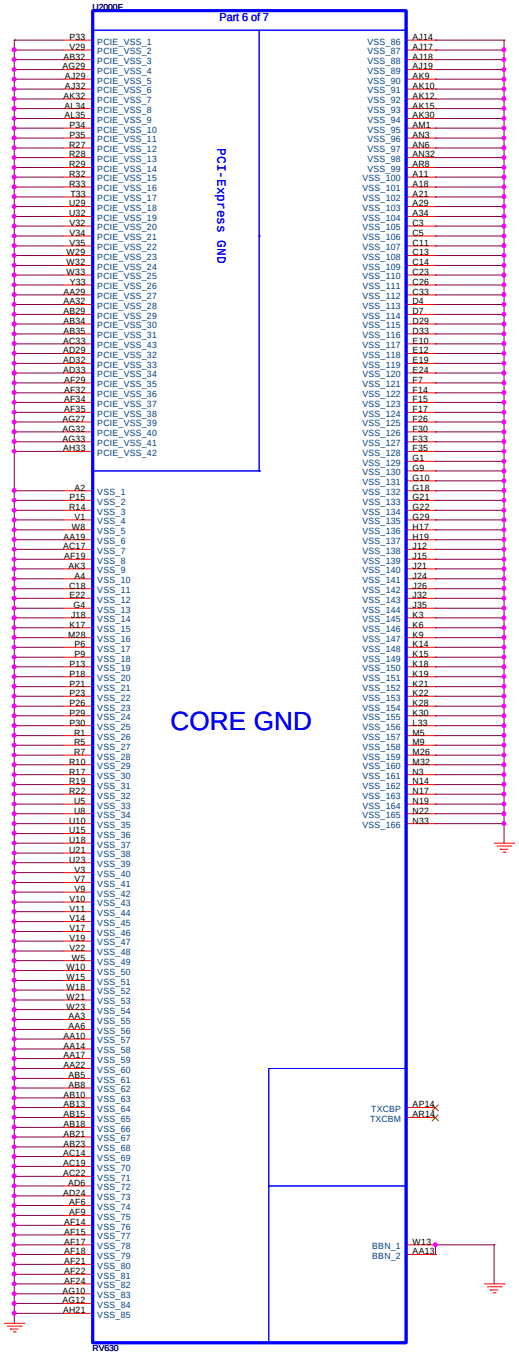
Title	PEX8547+RV630 GDDR3 VGA CARD		
Size C	Document Number DUAL GPU		Rev A
Date: Thursday, May 24, 2007		Sheet 23 of 36	



ATI Technologies Inc.

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

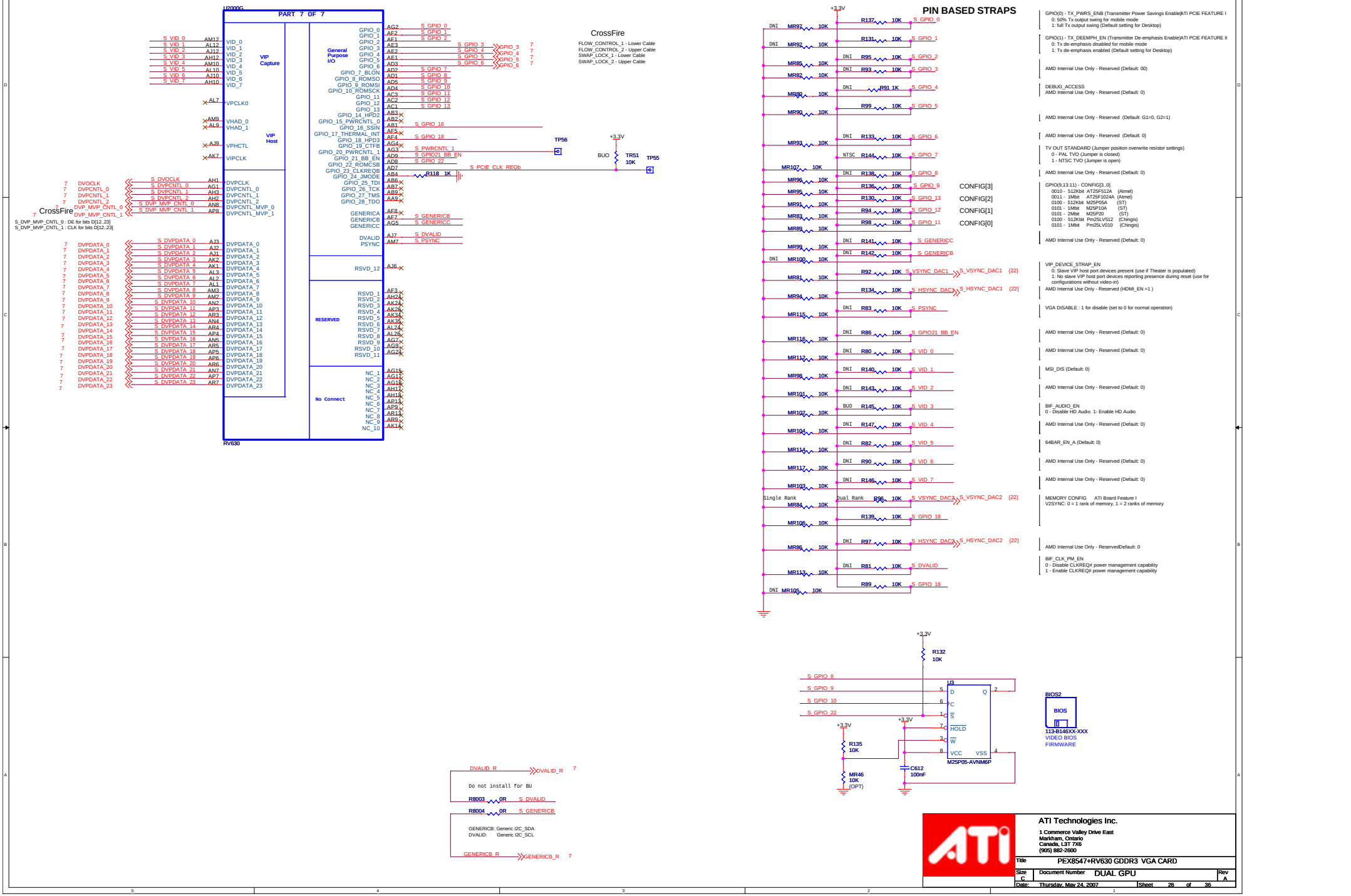
Title	PEX8547+RV630 GDDR3 VGA CARD	
Size: C	Document Number: DUAL GPU	Rev: A
Date: Thursday, May 24, 2007	Sheet 24 of 36	

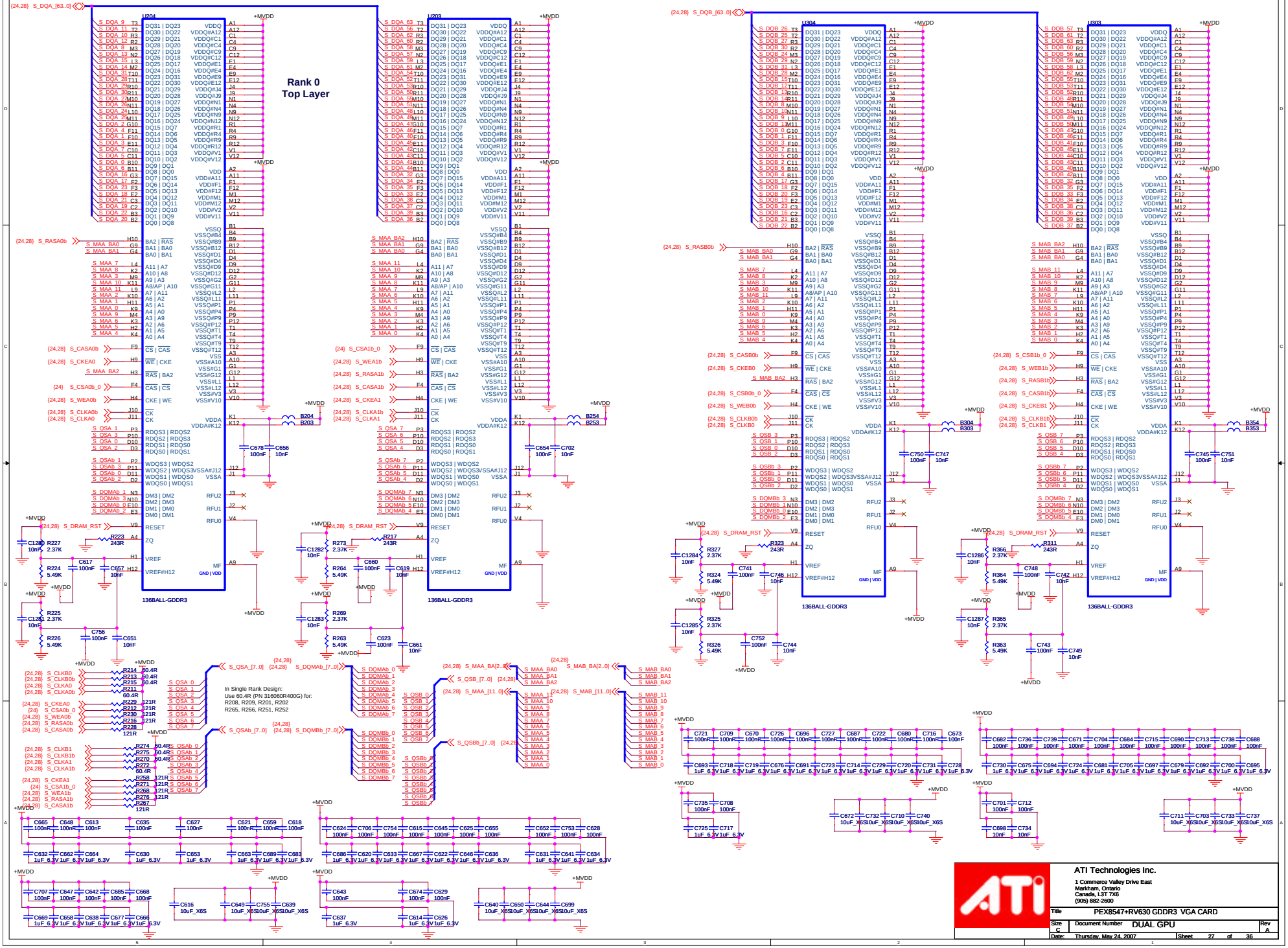


ATI Technologies Inc.

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

Title	PEX8547+RV630 GDDR3 VGA CARD		
Size: C	Document Number: DUAL GPU		Rev: A
Date: Thursday, May 24, 2007		Sheet 25 of 36	

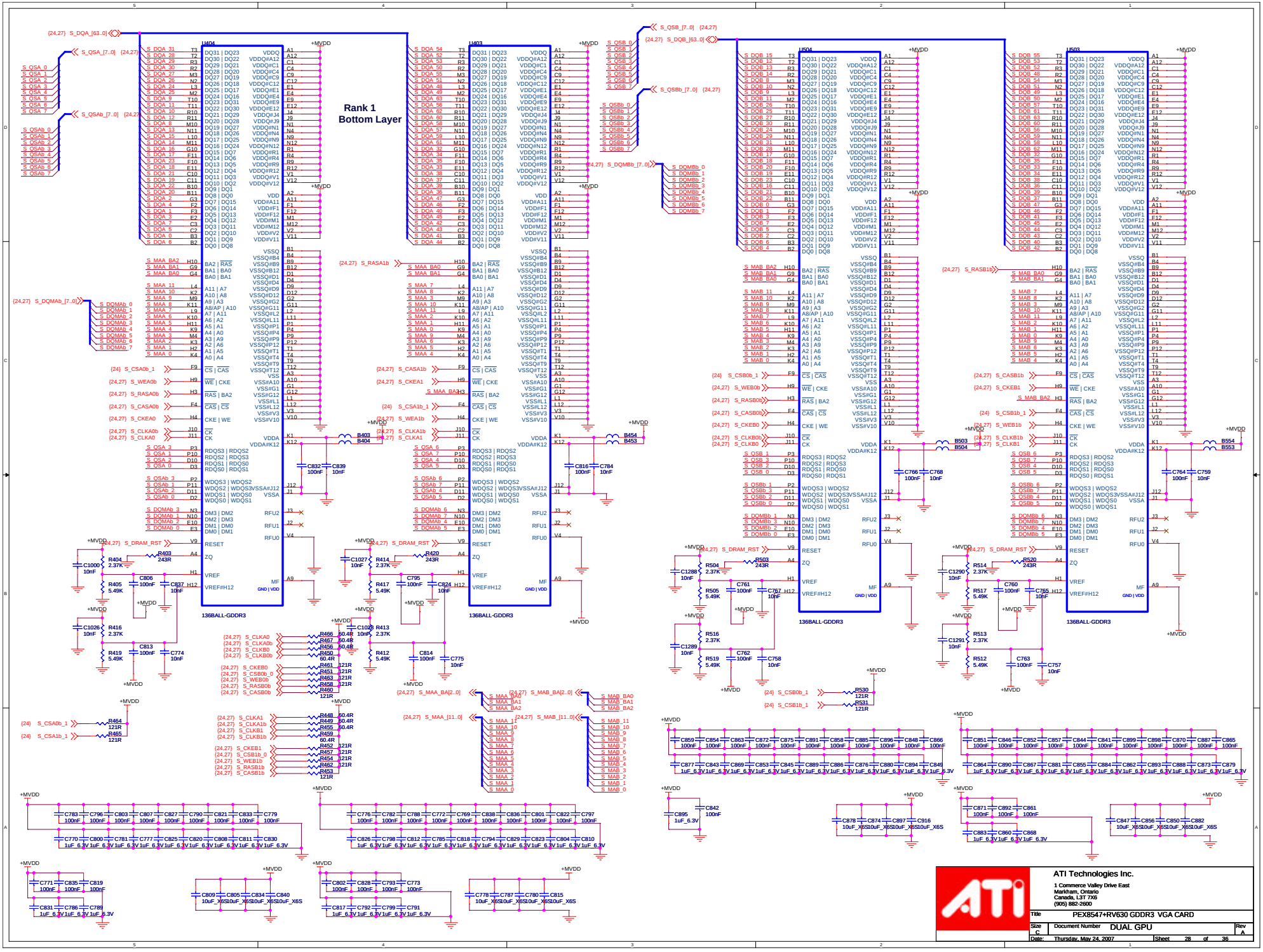

U2000G
PART 7 OF 7
VIP Capture
VIP Host
General Purpose I/O
No Connect
RESERVED
RV630
CrossFire
PIN BASED STRAPS
CONFIG[3]
CONFIG[2]
CONFIG[1]
CONFIG[0]
M25P05-AVNM6P
BIOS2
BIOS
113-B146XX-XXX
VIDEO BIOS
FIRMWARE
ATI Technologies Inc.
1 Commerce Valley Drive East
Markham, Ontario
Canada, L3T 7X6
(905) 882-2600
PEX8547+RV630 GDDR3 VGA CARD
DUAL GPU
Thursday, May 24, 2007
Sheet 26 of 36

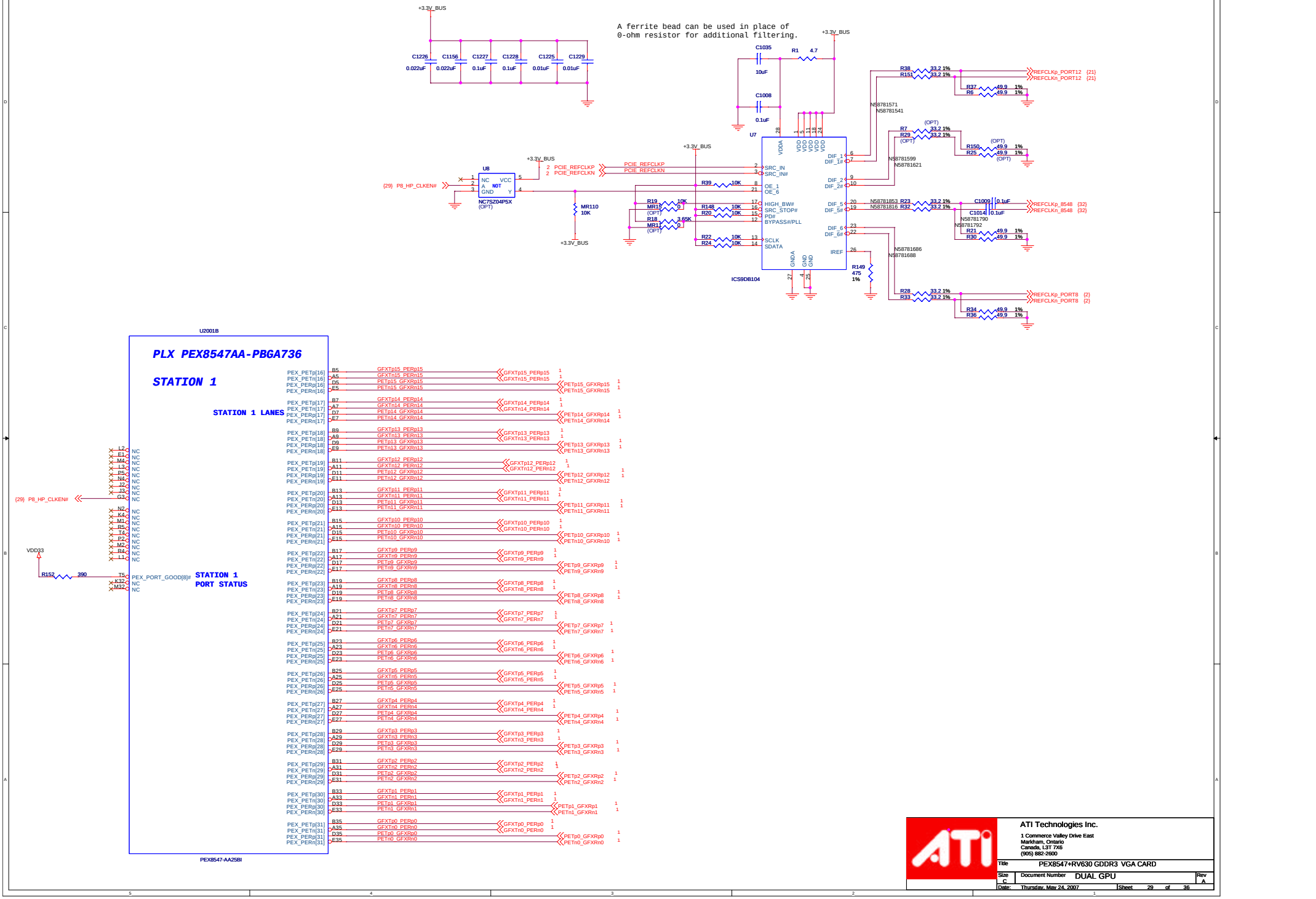


ATI Technologies Inc.

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

Title	PEX8547+RV630 GDDR3 VGA CARD		
Size C	Document Number DUAL GPU		Rev A
Date: Thursday, May 24, 2007		Sheet 27 of 36	

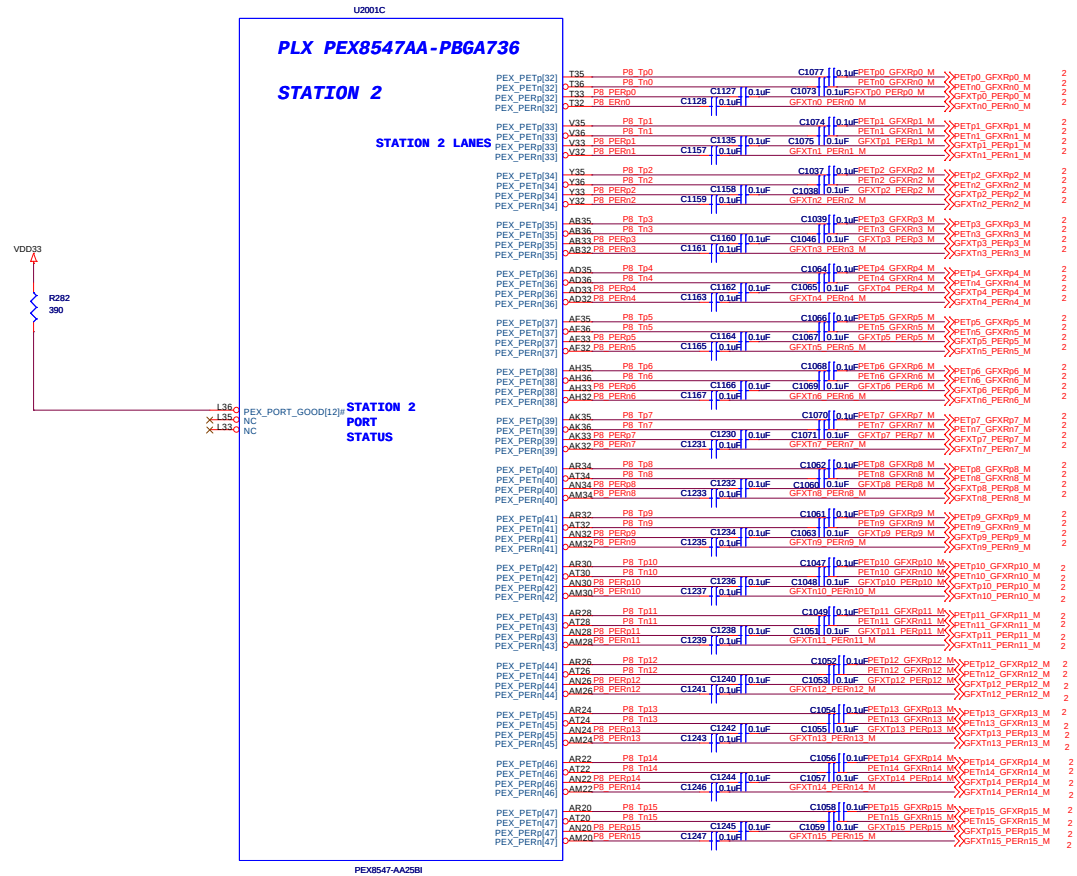

Rank 1
Bottom Layer
U404
U403
U504
U503
136BALL-GDDR3
+MVDD
{24,27} S_DQA_[63..0]
S_DQA_[7..0] {24,27}
S_QSA_[7..0] {24,27}
S_QSAb_[7..0] {24,27}
S_QSB_[7..0] {24,27}
S_QSBb_[7..0] {24,27}
S_DQB_[63..0] {24,27}
S_DQMBb_[7..0] {24,27}
S_DQMAb_[7..0]
S_RASA1b {24,27}
S_RASB1b {24,27}
S_CASA1b {24,27}
S_CASB1b {24,27}
S_WEA1b {24,27}
S_WEB1b {24,27}
S_CKEA1 {24,27}
S_CKEB1 {24,27}
S_CSA1b_1 {24}
S_CSB1b_1 {24}
S_CLKA1b {24,27}
S_CLKB1b {24,27}
S_CLKA1 {24,27}
S_CLKB1 {24,27}
S_DRAM_RST {24,27}
S_MAA_BA[2..0] {24,27}
S_MAA_[11..0] {24,27}
S_MAB_BA[2..0] {24,27}
S_MAB_[11..0] {24,27}
S_CSA0b_1 {24}
S_CSB0b_1 {24}
S_CKEA0 {24,27}
S_CKEB0 {24,27}
S_CSA0b_0 {24,27}
S_CSB0b_0 {24,27}
S_WEA0b {24,27}
S_WEB0b {24,27}
S_RASA0b {24,27}
S_RASB0b {24,27}
S_CASA0b {24,27}
S_CASB0b {24,27}
S_CLKA0 {24,27}
S_CLKB0 {24,27}
S_CLKA0b {24,27}
S_CLKB0b {24,27}
S_CSA0b_1 {24}
S_CSB0b_1 {24}
S_CKEA1 {24,27}
S_CKEB1 {24,27}
S_CSA1b_1 {24}
S_CSB1b_1 {24}
S_CLKA1b {24,27}
S_CLKB1b {24,27}
S_CLKA1 {24,27}
S_CLKB1 {24,27}
S_RASA1b {24,27}
S_RASB1b {24,27}
S_CASA1b {24,27}
S_CASB1b {24,27}
S_WEA1b {24,27}
S_WEB1b {24,27}
S_CKEA1 {24,27}
S_CKEB1 {24,27}
ATI Technologies Inc.
1 Commerce Valley Drive East
Markham, Ontario
Canada, L3T 7X6
(905) 882-2600
Title
PEX8547+RV630 GDDR3 VGA CARD
Size
C
Document Number
DUAL GPU
Rev
A
Date:
Thursday, May 24, 2007
Sheet
28
of
36



ATI Technologies Inc.

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

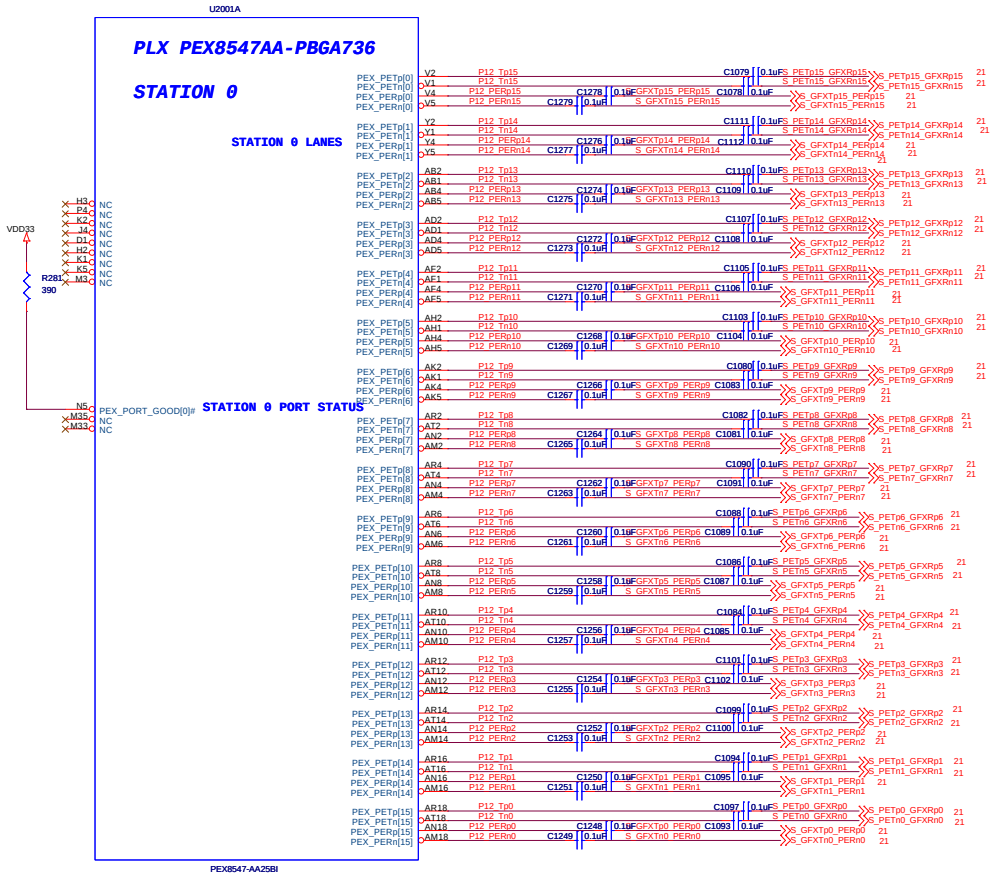
Title	PEX8547+RV630 GDDR3 VGA CARD		
Size C	Document Number DUAL GPU		Rev A
Date: Thursday, May 24, 2007		Sheet 29 of 36	



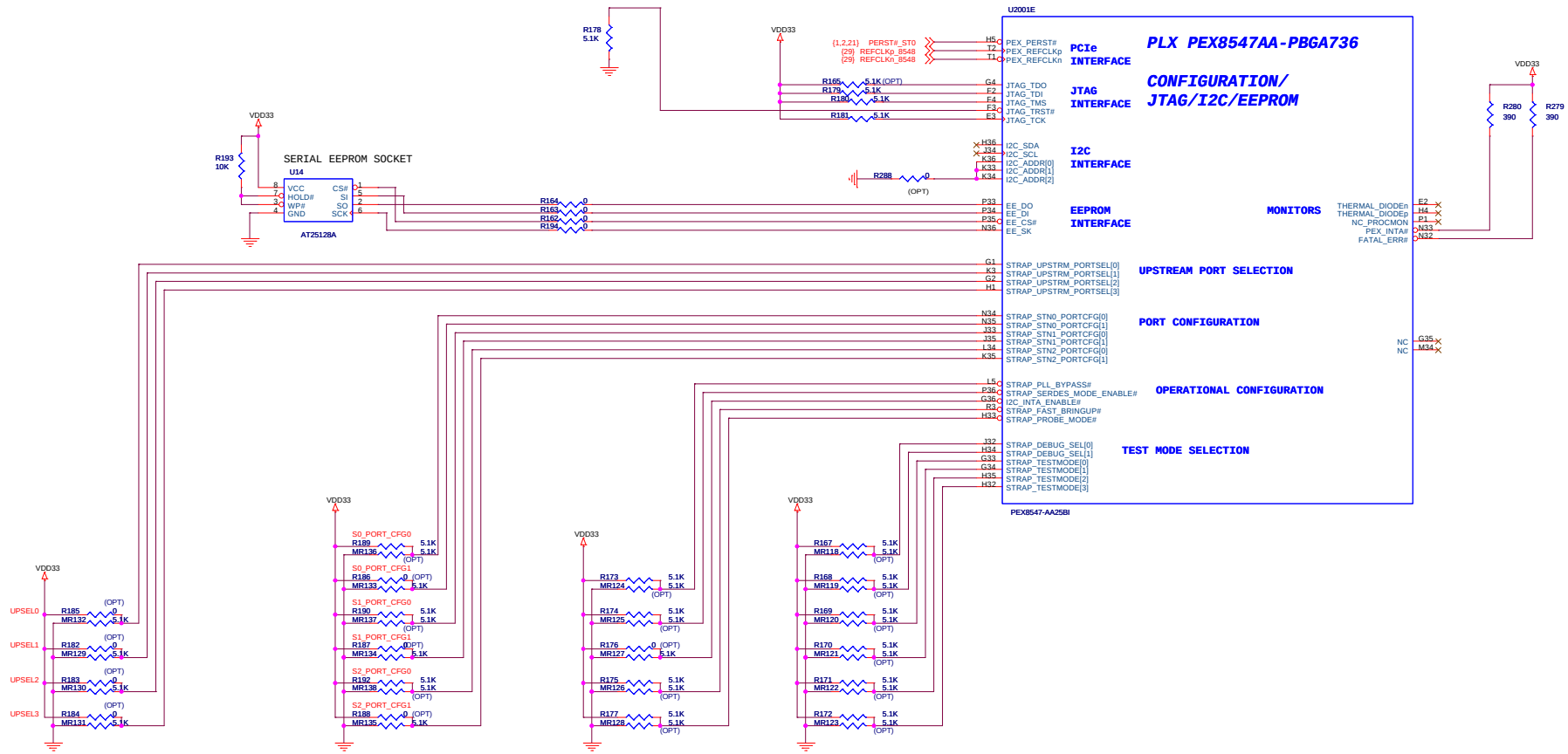
ATI Technologies Inc.

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

Title	PEX8547+RV630 GDDR3 VGA CARD		
Size C	Document Number DUAL GPU		Rev A
Date: Thursday, May 24, 2007	Sheet 30 of 36		



Company	ATI Technologies Inc.
Address	1 Commerce Valley Drive East Markham, Ontario Canada, L3T 7X6 (905) 882-2600
Title	PEX8547+RV630 GDDR3 VGA CARD
Size	C
Document Number	DUAL GPU
Rev	A
Date:	Thursday, May 24, 2007
Sheet	31 of 36



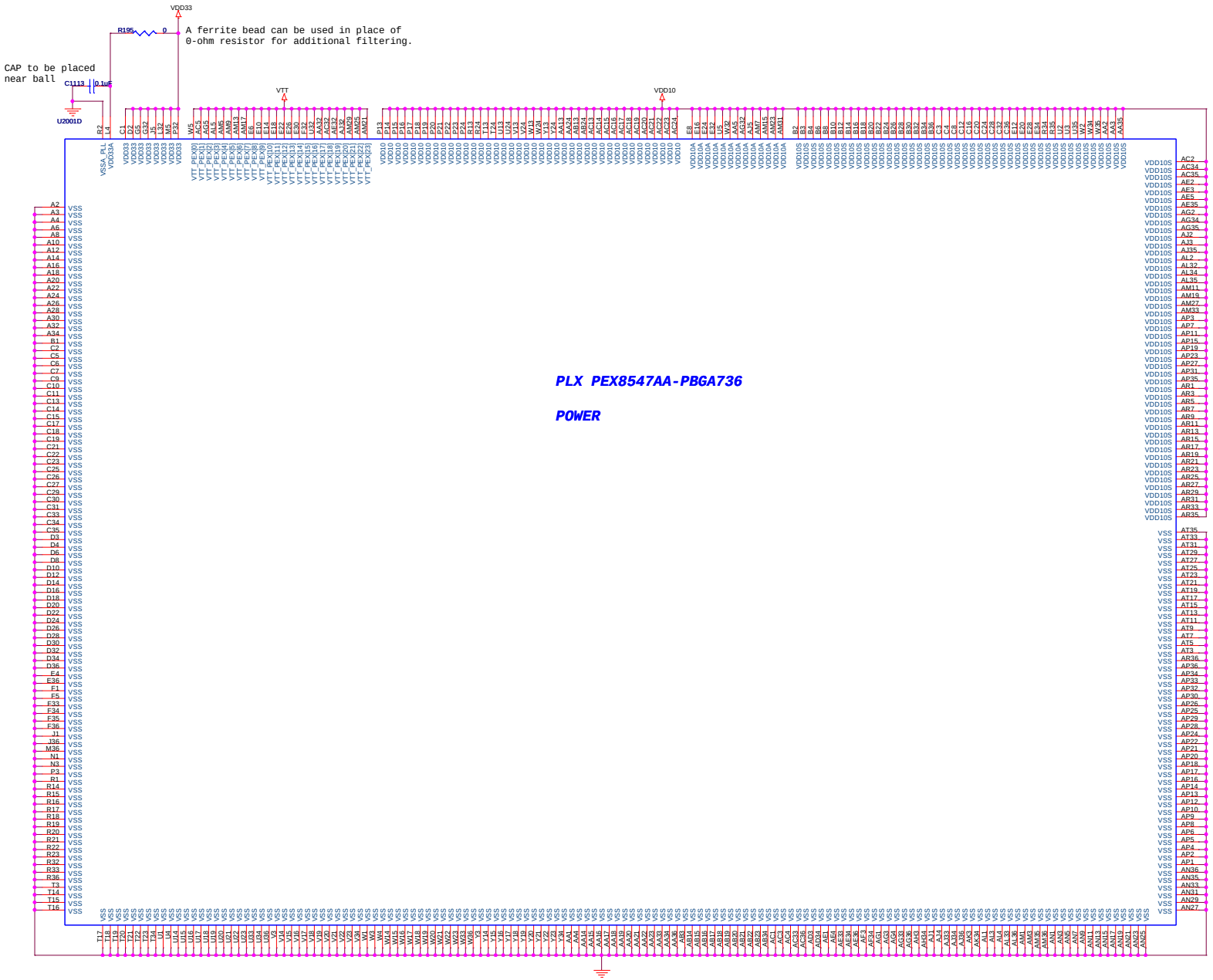
S0_PORT_CFG[1:0] DEFAULT SETTING IS 01b
S1_PORT_CFG[2:0] DEFAULT SETTING IS 01b
S2_PORT_CFG[1:0] DEFAULT SETTING IS 01b

UPSEL[3:0]	PORT	UPSEL[3:0]	PORT	UPSEL[3:0]	PORT
0000b	0	***1000b***	***8***	1100b	12
0001b	1	1001b	9	1101b	13
0010b	2	1010b	10	1110b	14

SN_PORT_CFG [1:0]	STATION 0/1/2 PORT CONFIGURATION		
	PORT 0/ PORT 8 PORT 12	PORT 1/ PORT 9 PORT 13	PORT 2/ PORT 10 PORT 14
00/11b	x8	x4	x4
01b	**x16**		
10b	x8	x8	

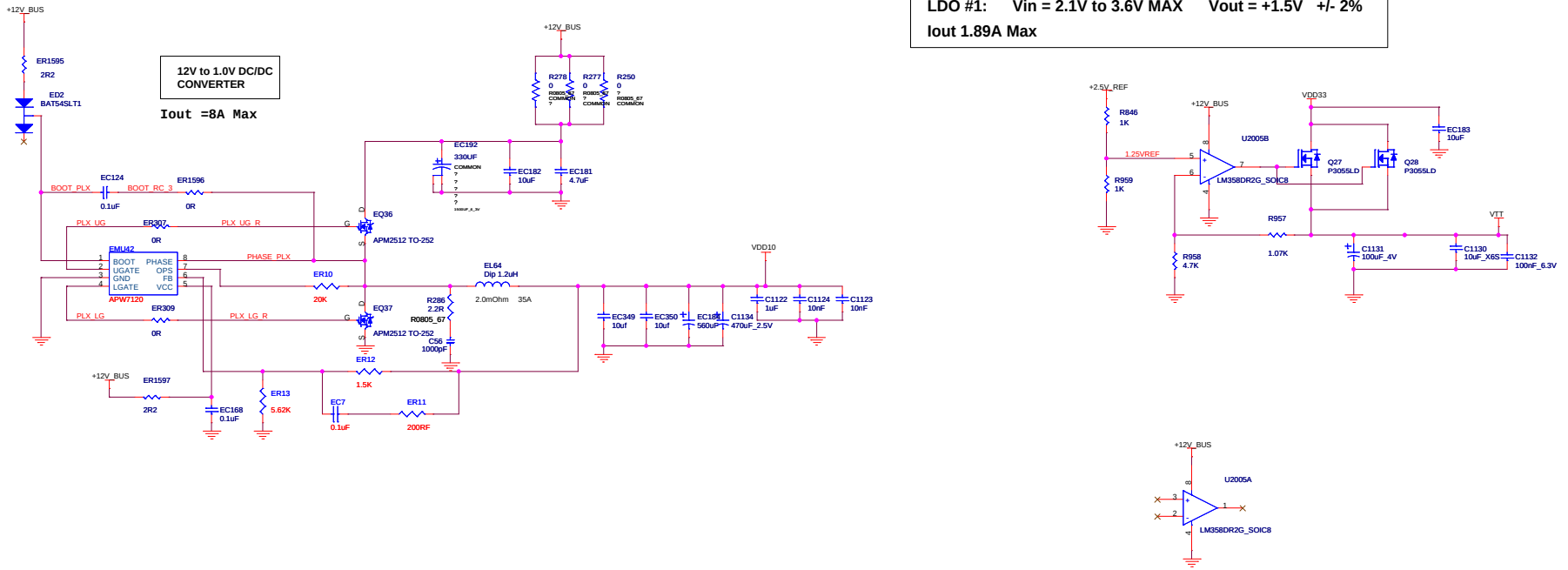
ATI Technologies Inc.
1 Commerce Valley Drive East
Markham, Ontario
Canada, L3T 7X6
(905) 882-2600

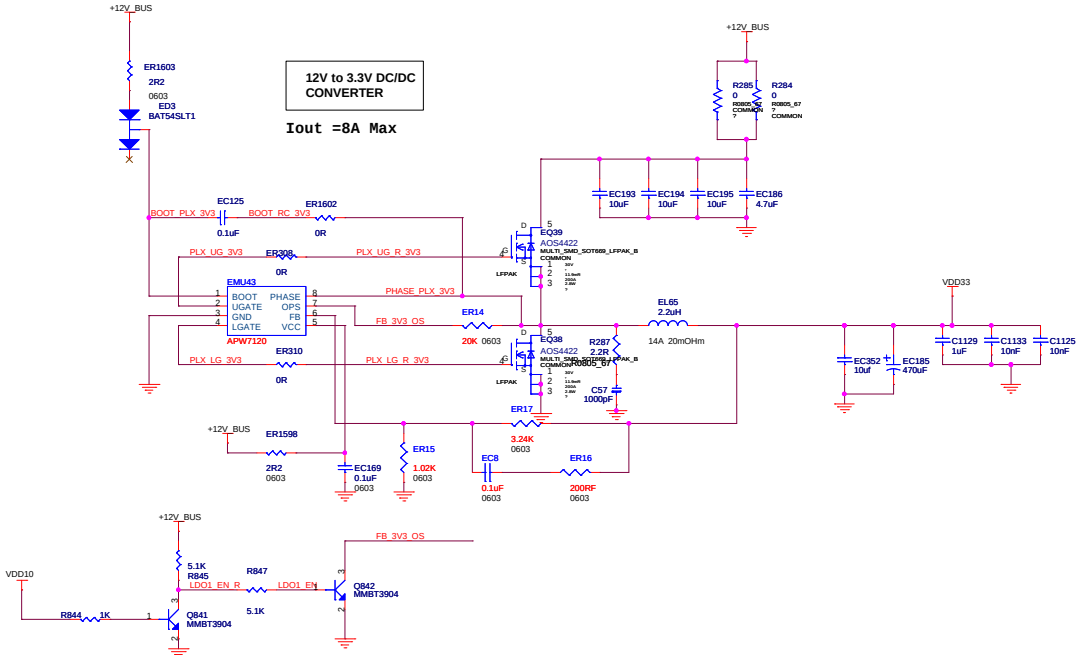
Title	PEX8547+RV630 GDDR3 VGA CARD	
Size C	Document Number DUAL GPU	Rev A
Date: Thursday, May 24, 2007	Sheet 32 of 36	



ATI Technologies Inc.			
1 Commerce Valley Drive East Markham, Ontario Canada, L3T 7X6 (905) 882-2600			
Title	PEX8547+RV630 GDDR3 VGA CARD		
Size C	Document Number DUAL GPU		Rev A
Date: Thursday, May 24, 2007		Sheet 33 of 36	

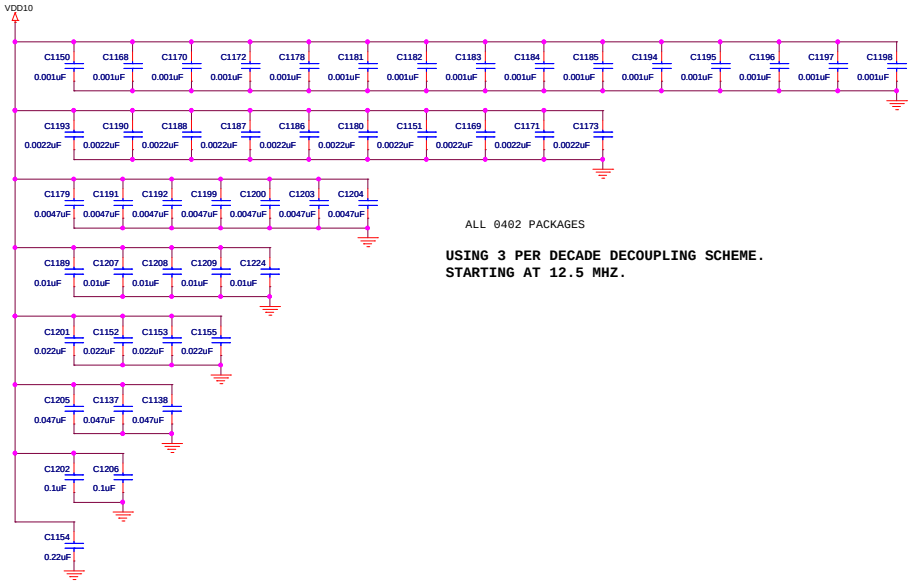
LDO #1: Vin = 2.1V to 3.6V MAX Vout = +1.5V +/- 2%
Iout 1.89A Max





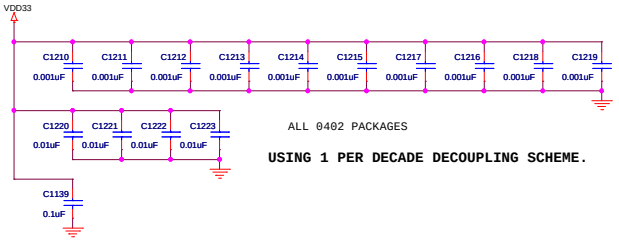
ATI Technologies Inc.
1 Commerce Valley Drive East
Markham, Ontario
Canada, L3T 7X6
(905) 882-2600

Title	PEX8547+RV630 GDDR3 VGA CARD	
Size C	Document Number DUAL GPU	Rev A
Date: Friday, May 25, 2007	Sheet 34 of 36	



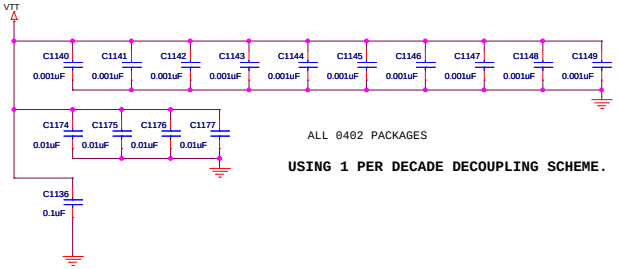
ALL 0402 PACKAGES

USING 3 PER DECADE DECOUPLING SCHEME.
STARTING AT 12.5 MHZ.



ALL 0402 PACKAGES

USING 1 PER DECADE DECOUPLING SCHEME.



ALL 0402 PACKAGES

USING 1 PER DECADE DECOUPLING SCHEME.

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

Title	PEX8547+RV630 GDDR3 VGA CARD	
Size: C	Document Number: DUAL GPU	Rev: A
Date: Thursday, May 24, 2007	Sheet 35 of 36	