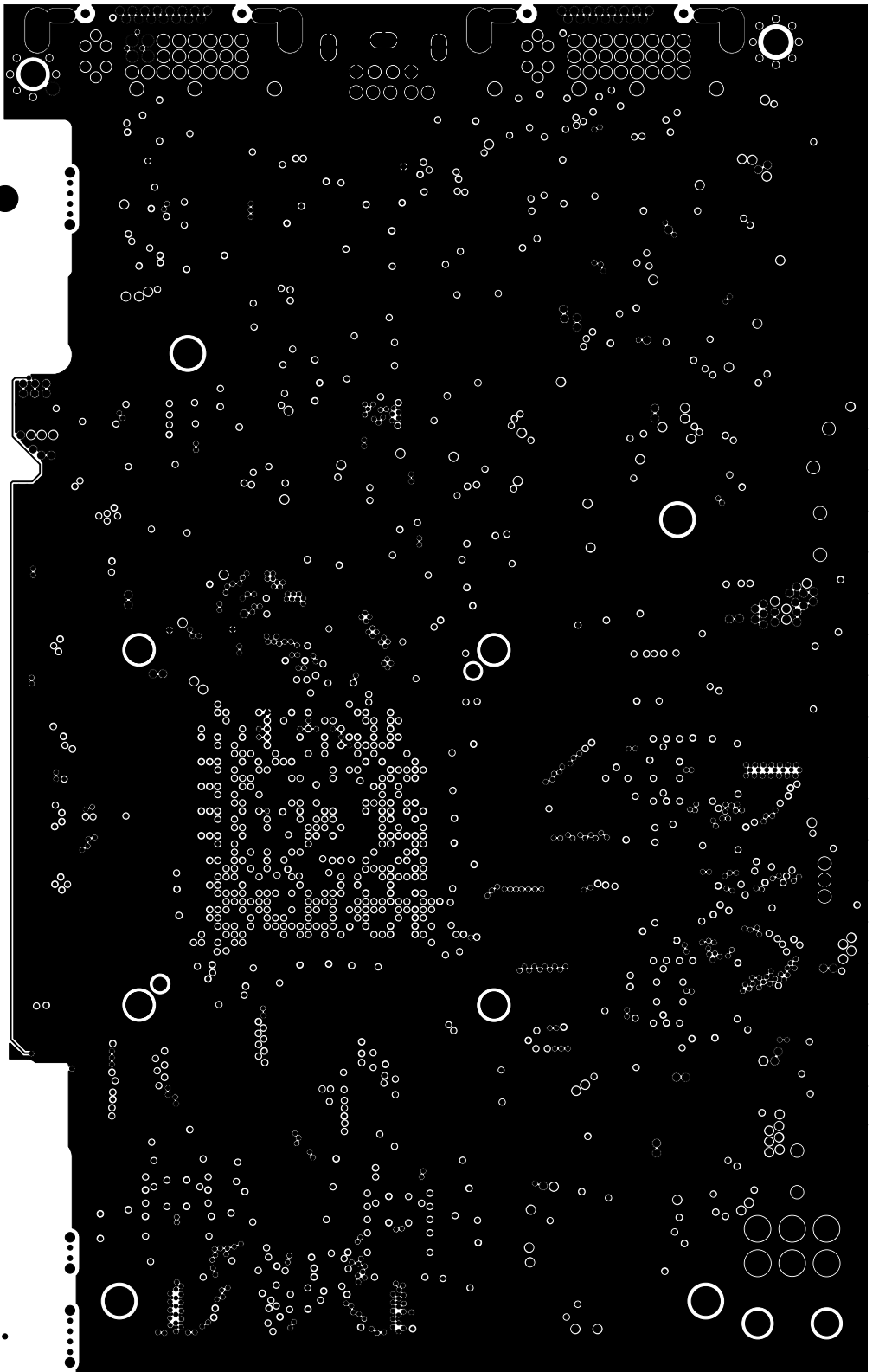
	RH PCIe RV560 512MB DDR2 DUAL DL-DVI-I VIVO 6L FH
	PN 109-B06731-00B
	AUG. 14, 2006
	DESIGNER DORINA A.
	LAYER 1
	L1 TOP
	FILM 1 OF 13

RESTRICTION NOTICE

THIS PCB ARTWORK CONTAINS INFORMATION WHICH IS PROPRIETARY TO AND IS THE PROPERTY OF ATI, AND MAY NOT BE USED, REPRODUCED OR DISCLOSED IN ANY MANNER WITHOUT EXPRESSED WRITTEN PERMISSION FROM ATI.

© 2006 ATI TECHNOLOGIES INC.



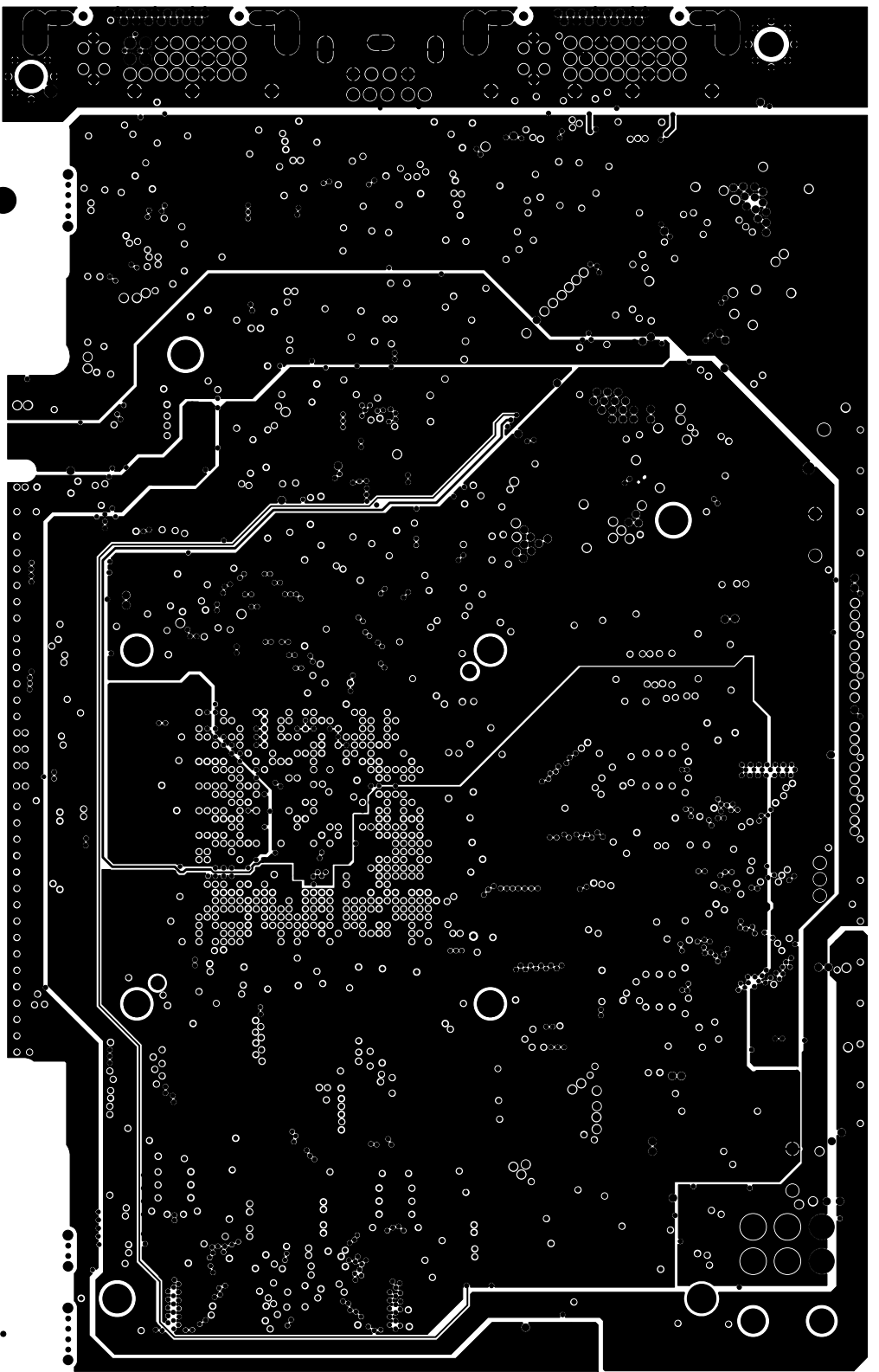
RH PCIe RV560 512MB DDR2 DUAL DL-DVI-I VIVO 6L FH
PN 109-B06731-00B
AUG. 14, 2006
DESIGNER DORINA A.

LAYER 2
L2 INNER
FILM 2 OF 13

RESTRICTION NOTICE

THIS PCB ARTWORK CONTAINS INFORMATION WHICH IS PROPRIETARY TO AND IS
THE PROPERTY OF ATI, AND MAY NOT BE USED, REPRODUCED OR DISCLOSED
IN ANY MANNER WITHOUT EXPRESSED WRITTEN PERMISSION FROM ATI.

© 2006 ATI TECHNOLOGIES INC.



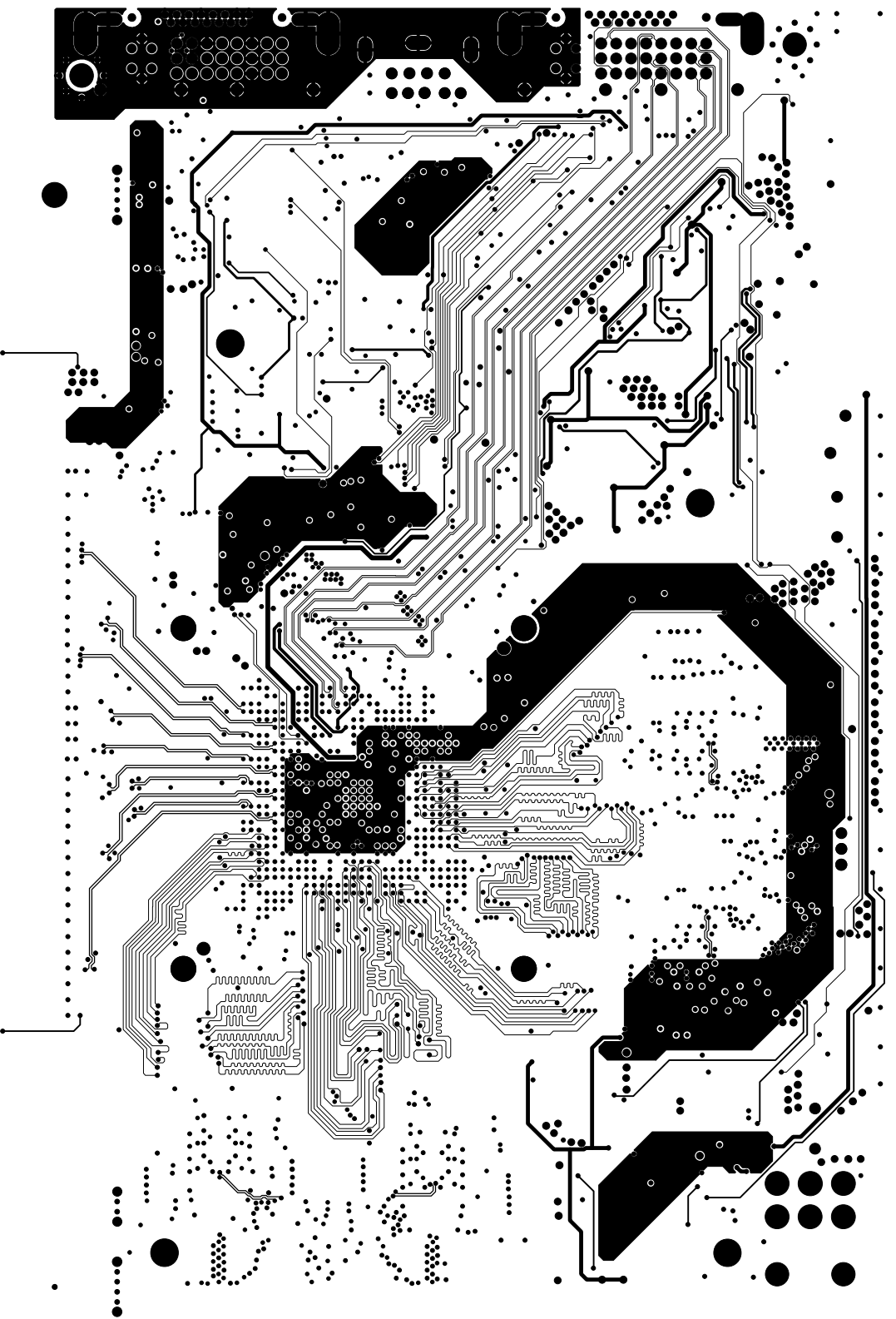
RH PCIe RV560 512MB DDR2 DUAL DL-DVI-I VIVO 6L FH
PN 109-B06731-00B
AUG. 14, 2006
DESIGNER DORINA A.

LAYER 3
L3 INNER
FILM 3 OF 13

RESTRICTION NOTICE

THIS PCB ARTWORK CONTAINS INFORMATION WHICH IS PROPRIETARY TO AND IS
THE PROPERTY OF ATI, AND MAY NOT BE USED, REPRODUCED OR DISCLOSED
IN ANY MANNER WITHOUT EXPRESSED WRITTEN PERMISSION FROM ATI.

© 2006 ATI TECHNOLOGIES INC.



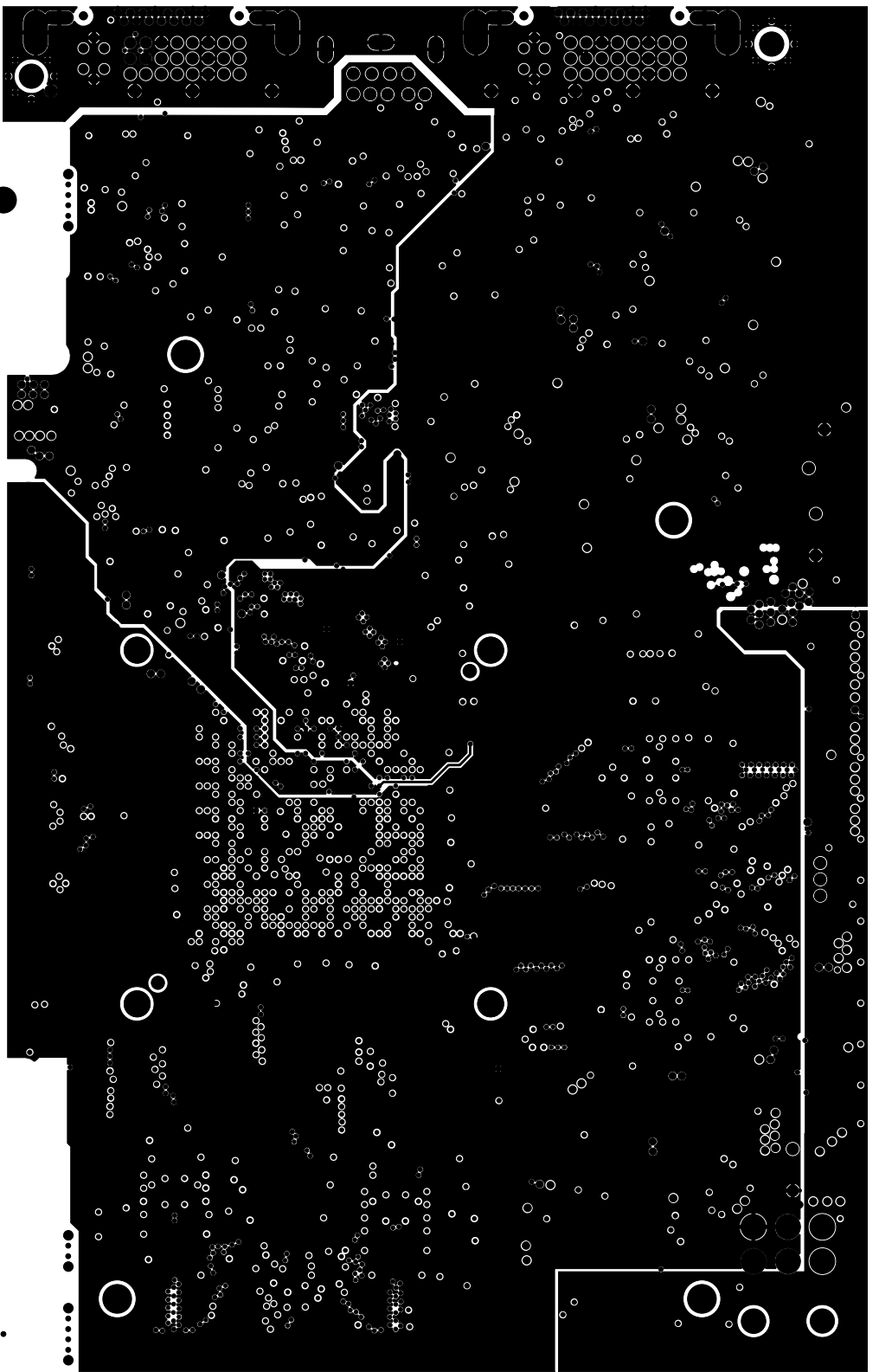
RH PCIe RV560 512MB DDR2 DUAL DL-DVI-I VIVO 6L FH
PN 109-B06731-00B
AUG.14,2006
DESIGNER DORINA A.

⬆ R3YAJ
R6MNI ⬆J
E1 70 ⬆ MJ17

RESTRICTION NOTICE

THIS PCB ARTWORK CONTAINS INFORMATION WHICH IS PROPRIETARY TO AND IS
THE PROPERTY OF ATI, AND MAY NOT BE USED, REPRODUCED OR DISCLOSED
IN ANY MANNER WITHOUT EXPRESSED WRITTEN PERMISSION FROM ATI.

© 2006 ATI TECHNOLOGIES INC.



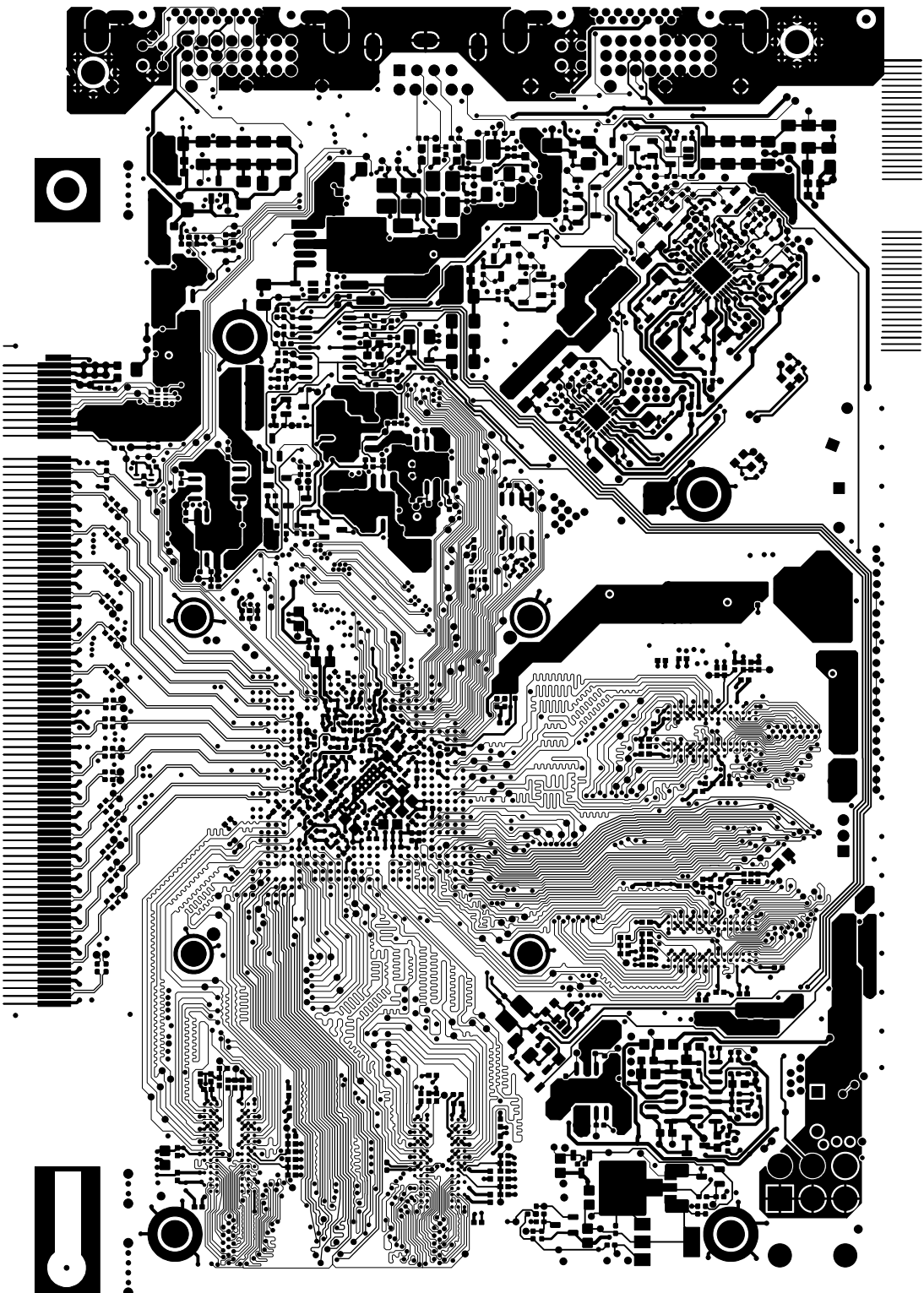
RH PCIe RV560 512MB DDR2 DUAL DL-DVI-I VIVO 6L FH
PN 109-B06731-00B
AUG. 14, 2006
DESIGNER DORINA A.

2 R3YA1
R3M1 2J
C1 70 2 MJ17

RESTRICTION NOTICE

THIS PCB ARTWORK CONTAINS INFORMATION WHICH IS PROPRIETARY TO AND IS
THE PROPERTY OF ATI, AND MAY NOT BE USED, REPRODUCED OR DISCLOSED
IN ANY MANNER WITHOUT EXPRESSED WRITTEN PERMISSION FROM ATI.

© 2006 ATI TECHNOLOGIES INC.



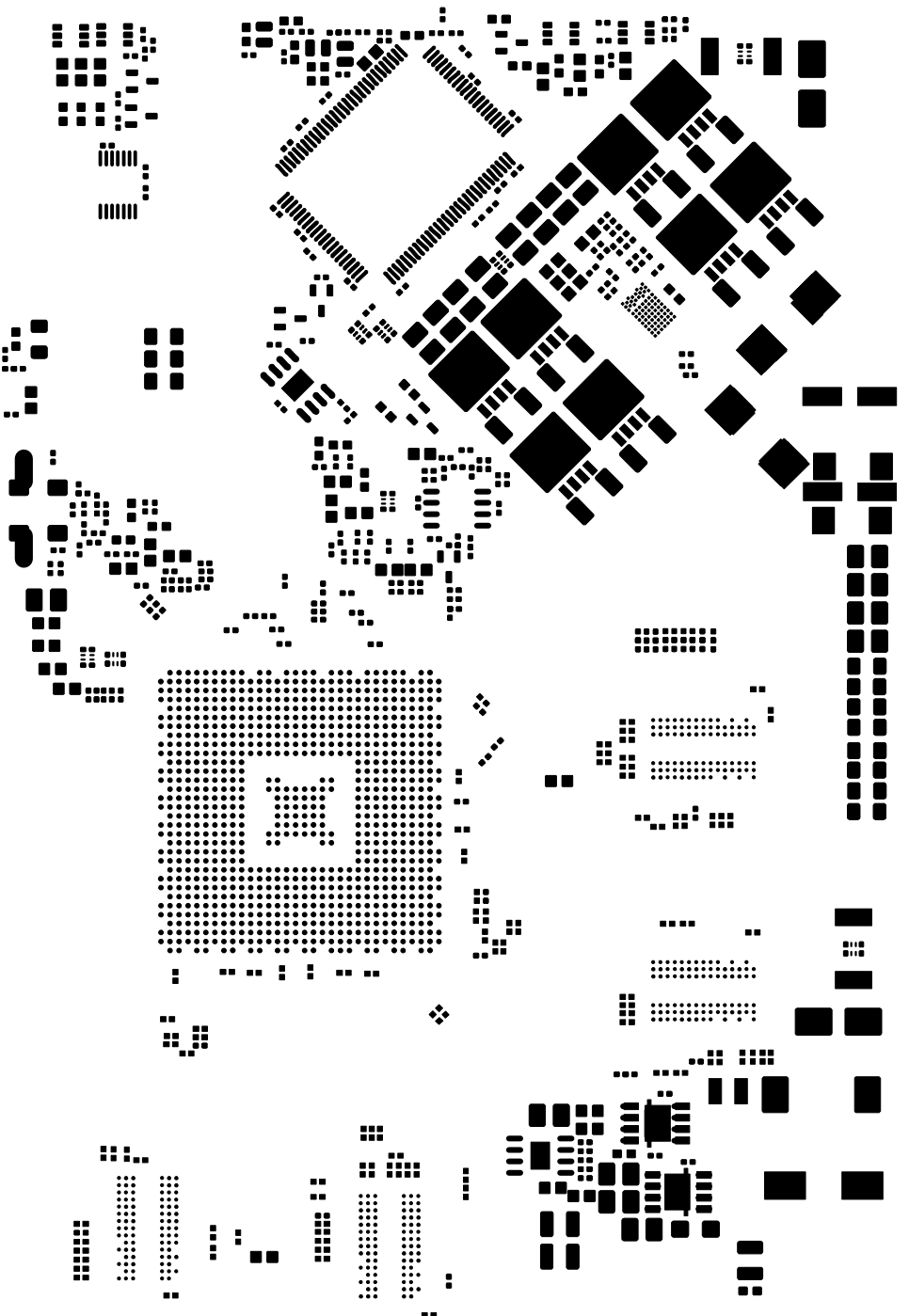
RH PCIe RV560 512MB DDR2 DUAL DL-DVI-I VIVO 6L FH
PN 109-B06731-00B
AUG. 14, 2006
DESIGNER DORINA A.

à 3EYAJ
MOTTOB 3J
£1 70 3 MJ17

RESTRICTION NOTICE

THIS PCB ARTWORK CONTAINS INFORMATION WHICH IS PROPRIETARY TO AND IS
THE PROPERTY OF ATI, AND MAY NOT BE USED, REPRODUCED OR DISCLOSED
IN ANY MANNER WITHOUT EXPRESSED WRITTEN PERMISSION FROM ATI.

© 2006 ATI TECHNOLOGIES INC.



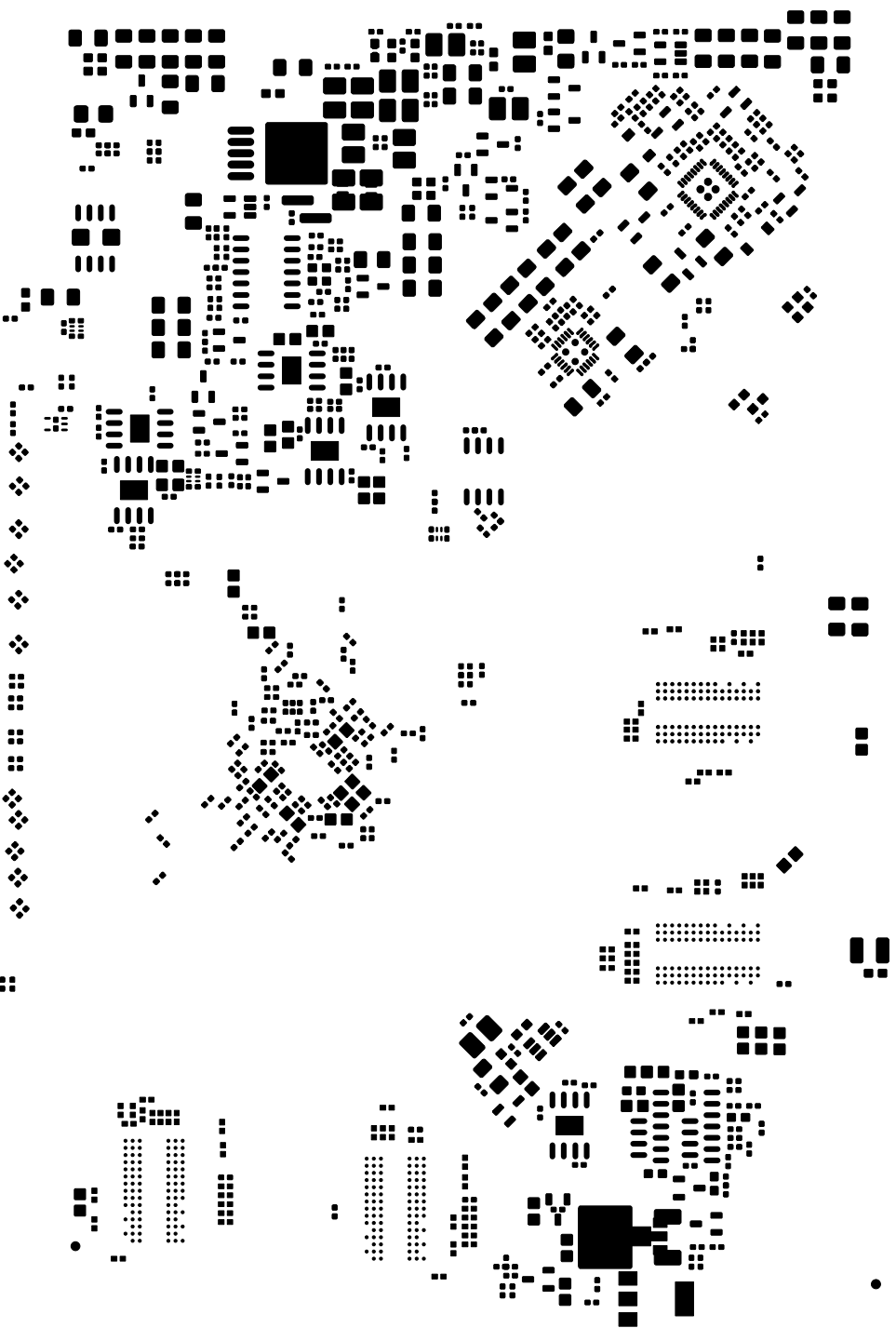
RH PCIe R5560 512MB DDR2 DUAL DL-DVI-I VIVO 6L FH
PN 109-B06731-00B
AUG.14,2006
DESIGNER DORINA A.

SOLDER PASTE TOP
FILM 7 OF 13

RESTRICTION NOTICE

THIS PCB ARTWORK CONTAINS INFORMATION WHICH IS PROPRIETARY TO AND IS
THE PROPERTY OF ATI, AND MAY NOT BE USED, REPRODUCED OR DISCLOSED
IN ANY MANNER WITHOUT EXPRESSED WRITTEN PERMISSION FROM ATI.

© 2006 ATI TECHNOLOGIES INC.



RH PCIe RV560 512MB DDR2 DUAL DL-DVI-I VIVO 6L FH
PN 109-B06731-00B
AUG. 14, 2006
DESIGNER DORINA A.

MOTTOB T32A9 R3QJ02
EI 70 8 MJ17

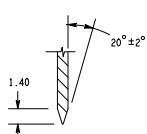
RESTRICTION NOTICE

THIS PCB ARTWORK CONTAINS INFORMATION WHICH IS PROPRIETARY TO AND IS
THE PROPERTY OF ATI, AND MAY NOT BE USED, REPRODUCED OR DISCLOSED
IN ANY MANNER WITHOUT EXPRESSED WRITTEN PERMISSION FROM ATI.

© 2006 ATI TECHNOLOGIES INC.

SECTION A - A

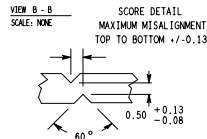
SCALE: NONE



PCIE CHAMFER TO BE ROUTED.
BEVELLING SHALL BE SMOOTH,
FREE OF BURRS, SLIVERS
AND SHARP EDGES.

VIEW B - B

SCALE: NONE



SCORE DETAIL
MAXIMUM MISALIGNMENT
TOP TO BOTTOM +/-0.13

8 LAYER CROSS SECTION BUILD - CONTROLLED IMPEDANCE

MASK	
TOP	(1/2 oz) ROUTING
L2 INNER	PREPREG [0.100] (1/2 oz) PLANE
L3 INNER	PREPREG [0.100] (1/2 oz) ROUTING
L4 INNER	PREPREG [0.978] (1/2 oz) ROUTING
L5 INNER	PREPREG [0.100] (1/2 oz) PLANE
BOTTOM	PREPREG [0.100] (1/2 oz) ROUTING
MASK	

BOARD THICKNESS AFTER PLATING: [0.53mm] +/-0.13mm
AS MEASURED AT GOLD PLATED FINGERS (IF PRESENT)

M1	MEGASTRIP IMPEDANCE 57 ohms +/- 10%
	Trace Width: 0.099 mm
	On Layers: 1,6
	Referenced To: 2,5
	Note: Mem Data & Add. Branch

M2	MEGASTRIP IMPEDANCE 51 ohms +/- 10%
	Trace Width: 0.130 mm
	On Layers: 6
	Referenced To: 5
	Note: Memory Address Trunk

D4	DIFFERENTIAL IMPEDANCE 100 ohms +/- 10%
	Trace Width: 0.0889 mm
	Spacing: 0.2109 mm
	On Layers: 1,6
	Referenced To: 2,5
	Note: TMS Signals

D1	DIFFERENTIAL IMPEDANCE 95 ohms +/- 10%
	Trace Width: 0.127 mm
	Spacing: 0.180 mm
	On Layers: 1,6
	Referenced To: 2,5
	Note: PCIE

D2	DIFFERENTIAL IMPEDANCE 95 ohms +/- 10%
	Trace Width: 0.127 mm
	Spacing: 0.180 mm
	On Layers: 4
	Referenced To: 5
	Note: PCIE

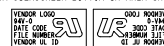
D3	DIFFERENTIAL IMPEDANCE 100 ohms +/- 10%
	Trace Width: 0.0889 mm
	Spacing: 0.1409 mm
	On Layers: 4
	Referenced To: 5
	Note: TMS Signals

TOLERANCES (unless otherwise specified)		
0.8	0.18	ANGLES
+/- 0.3	+/- 0.13	+/- 5°

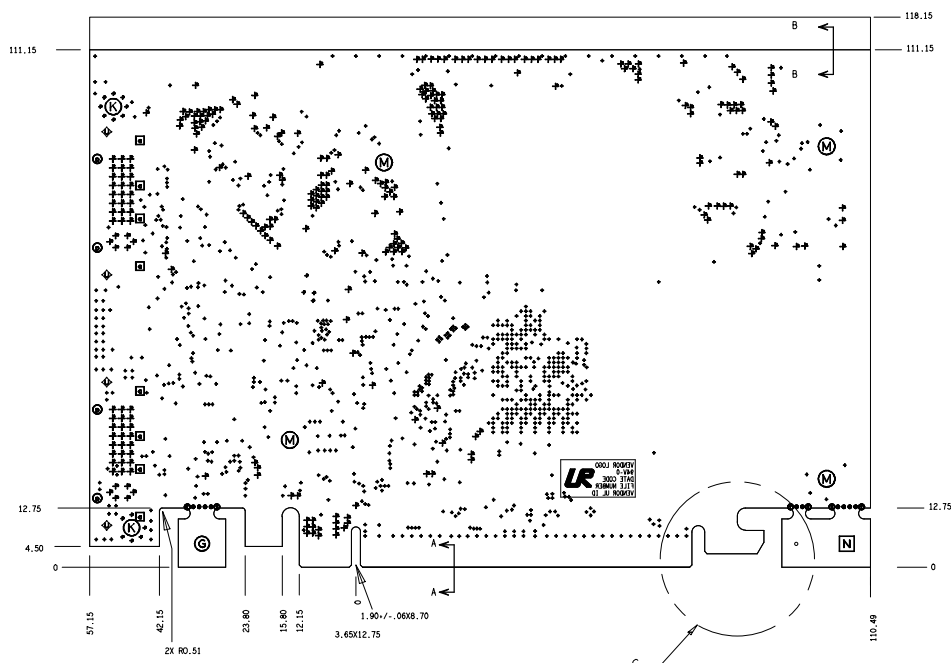
FOR IMPEDANCE CONTROL, VENDORS ON LAYER 2
TRACE WIDTH TO A MAXIMUM OF +/- 0.03mm
PREPREG THICKNESS TO A MAXIMUM OF +/- 0.03mm.
ANY FURTHER MODIFICATIONS MUST BE APPROVED BY ATI.

DRILL CHART: TOP TO BOTTOM (± TOL +/- 0.075mm)						
ØMMX	SIZE	TOL.DIM.	QTY	PLATING	SLOT	
0.03	#	6	PLATED	1.00 x 2.10		
0.11	#	4	PLATED	1.00 x 3.05		
0.19	#	4	PLATED	2.00 x 4.50		
0.25	+	0.00 - 0.15	2132	PLATED		
0.33	#	14	PLATED			
0.43	#	255	PLATED			
0.6	#	30	PLATED			
0.65	#	12	PLATED			
0.9	#	64	PLATED			
1.0	#	11	PLATED			
1.1	#	8	PLATED			
1.8	#	6	PLATED			
0.61	#	10	NON-PLATED			
1.2	+/- 0.05	6	NON-PLATED			
1.65	+/- 0.05	2	NON-PLATED			
1.95	+/- 0.05	8	NON-PLATED			
3.0	+/- 0.05	2	NON-PLATED			
3.175	+/- 0.05	5	NON-PLATED			
3.175	+/- 0.05	1	NON-PLATED			
3.4	+/- 0.05	2	NON-PLATED			
3.5	+/- 0.05	4	NON-PLATED			

- NOTES (FOR FABRICATION ISSUES EMAIL: atipcbcdsupportgroup@ati.com)
- ACCEPTABILITY: PRINTED WIRING BOARD SHALL MEET THE REQUIREMENTS OF IPC-6012 CLASS 2.
 - MATERIAL: CLASS EPOXY FR-4 FIRE RETARDANT AND UL 94V-0 RATING. BOARD OPERATING TEMPERATURE MUST BE UL APPROVED TO A MAX 130 Deg C. MATERIAL SHOULD MEET IPC-4101/99. MATERIAL SHALL ALSO MEET THE RELIABILITY REQUIREMENTS FOR MULTIPLE THERMAL PROFILES USED IN LEAD FREE ASSEMBLIES.
 - CLEANLINESS: PRINTED WIRING BOARD CLEANLINESS SHALL MEET J-STD-001 PRIOR TO APPLICATION OF SOLDER MASK.
 - SOLDER MASK: SHALL MEET REQUIREMENTS OF IPC-SM-840 CLASS 1, COLOUR RED. PLUG all non functional vias prior to solder mask application, then completely cover plugged vias over with solder mask. All functional vias should NOT BE PLUGGED. Definition of FUNCTIONAL VIA: any via with a solder mask opening of 0.55 mm or more on one side and on opening of the solder mask of drill diameter plus 0.08 mm on the opposite side. Solder mask registration across panel to be maintained within +/- 0.05mm.
 - FINISH: IMMERSION SILVER AS PER IPC-4553 Specification for Immersion Silver Plating for Printed Circuit Boards.
 - SILKSCREEN: NON-CONDUCTIVE EPOXY INK, WHITE COLOUR. DO NOT CLEAR SILKSCREEN FOR AGENCY MARKINGS CE, FCC, ICES AND DECLARATION OF CONFORMITY THAT ARE OVER VIAS, CLEAR SILKSCREEN OVER THROUGH HOLE AND SMD PADS AND ANY FUNCTIONAL VIAS (TEST POINTS).
 - BOW AND TWIST: SHALL NOT EXCEED 0.75% OF MAXIMUM DIMENSION WHEN TESTED ACCORDING TO IPC-TM-650.
 - VENDOR'S LOGO: BOARD MANUFACTURER'S LOGO, DATE CODE, UL FLAMMABILITY RATING, FILE NUMBER AND OR SYMBOL, SHALL APPEAR ON SILKSCREEN TOP IN AREA SHOWN OR IF WITHDRAWN ON SILKSCREEN BOTTOM IN AREA SHOWN, OR LOGO CAN BE SIZE ADJUSTABLE BUT LEGIBLE.



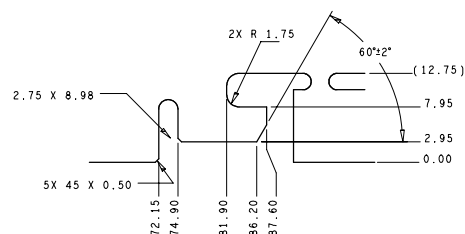
- HOLES: ALL HOLES SHALL BE DRILLED WITHIN 0.18 MM DIAMETER OF TRUE POSITION AT A MAXIMUM MATERIAL CONDITION RELATIVE TO MATERIAL AREA CENTRES. FINISHED HOLE SIZES SHOWN ARE APPLICABLE AFTER PLATING.
- EDGE FINGER CONTACTS: IF PRESENT, SHALL BE NICKEL-GOLD PLATED WITH A MINIMUM THICKNESS OF 0.25 MICRONS OF GOLD OVER 2.54 MICRONS OF NICKEL.
- ENVIRONMENTAL: THE PCB SUPPLIER SHALL PROVIDE A SIGNED CERTIFICATE OF COMPLIANCE. BY AN AUTHORIZED OR REPRESENTATIVE, THE BASE MATERIAL OF PCB SHALL NOT CONTAIN THE BANNED SUBSTANCES LISTED IN THE CERTIFICATE OF COMPLIANCE. FINAL PRODUCT MUST BE ROHS COMPLIANT. PRODUCT MUST ALSO BE COMPLIANT TO ATI ENVIRONMENTAL SPECIFICATION; CDD-000002
- INNER LAYER PADS: ALL UNUSED PADS ON THE INNER LAYERS SHOULD BE REMOVED.
- ANTI-PADS: ALL ANTI-PADS DIAMETERS ON INNER LAYERS MUST NOT VARY MORE THAN +/-0.03mm
- PAD TOLERANCE: ALL OUTER LAYER PADS WITH A DIMENSION EQUAL OR LESS THAN 0.50 MM REQUIRE +/-0.05 MM TOLERANCE. THE REST OF THE PADS SHOULD FOLLOW THE IPC 6012
- VIA ANNULAR RING: IT IS ALLOWED TO BREAK PADS AT NON-NECK LOCATION FOR VIAS WITH DIAMETERS EQUAL OR LESS THAN 0.50 MM AS LONG AS A GUARANTEED ANNULAR RING OF 0.03 MM IS PROVIDED AT NECK LOCATION. SEE IPC-A-600F/2.10 FOR CLASS 2.
- TEAR DROPS: DUE TO THE DIFFICULTY WITH THE ETCH FACTOR USING SILVER FINISH, TEARDROPS MUST BE ADDED TO ALL TRACES WIDTHS 0.25mm OR LESS TO ENSURE PLOTTED TRACE WIDTHS ARE MET.
- Micro Vias: IF PRESENT, ALL MICROVIAS (0.16mm DIA. OR LESS) ARE TO BE FILLED WITH A NON CONDUCTIVE MATERIAL AND CAPPED WITH COPPER.



ATI RH PCIe RV560 512MB DDR2 DUAL DL-DVI-I VIVO 6L FH
PN 109-B06731-00B
AUG.14.2006
DESIGNER DORINA A.

FAB DRAWING
FILM 9 OF 13

RESTRICTION NOTICE
THIS PCB ARTWORK CONTAINS INFORMATION WHICH IS PROPRIETARY TO AND IS THE PROPERTY OF ATI, AND MAY NOT BE USED, REPRODUCED OR DISCLOSED IN ANY MANNER WITHOUT EXPRESSED WRITTEN PERMISSION FROM ATI.
© 2006 ATI TECHNOLOGIES INC.



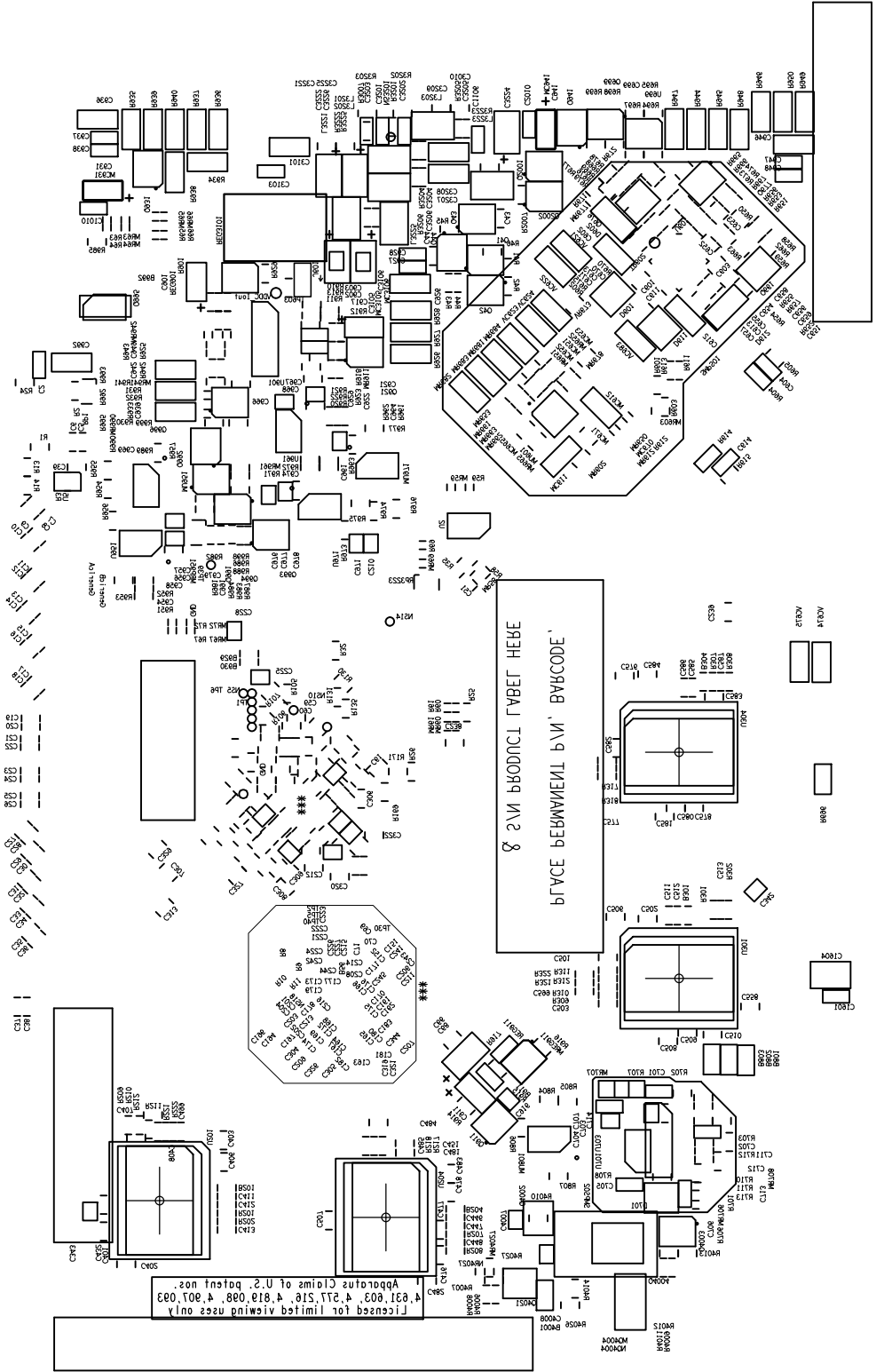
DETAIL C
NOT TO SCALE



SILKSCREEN TOP
FILM 10 OF 13

THIS PCB AIRWORK CONTAINS INFORMATION WHICH IS PROPRIETARY TO AND IS THE PROPERTY OF ATI, AND MAY NOT BE USED, REPRODUCED OR DISCLOSED IN ANY MANNER WITHOUT EXPRESSED WRITTEN PERMISSION FROM ATI.

© 2006 ATI TECHNOLOGIES INC.



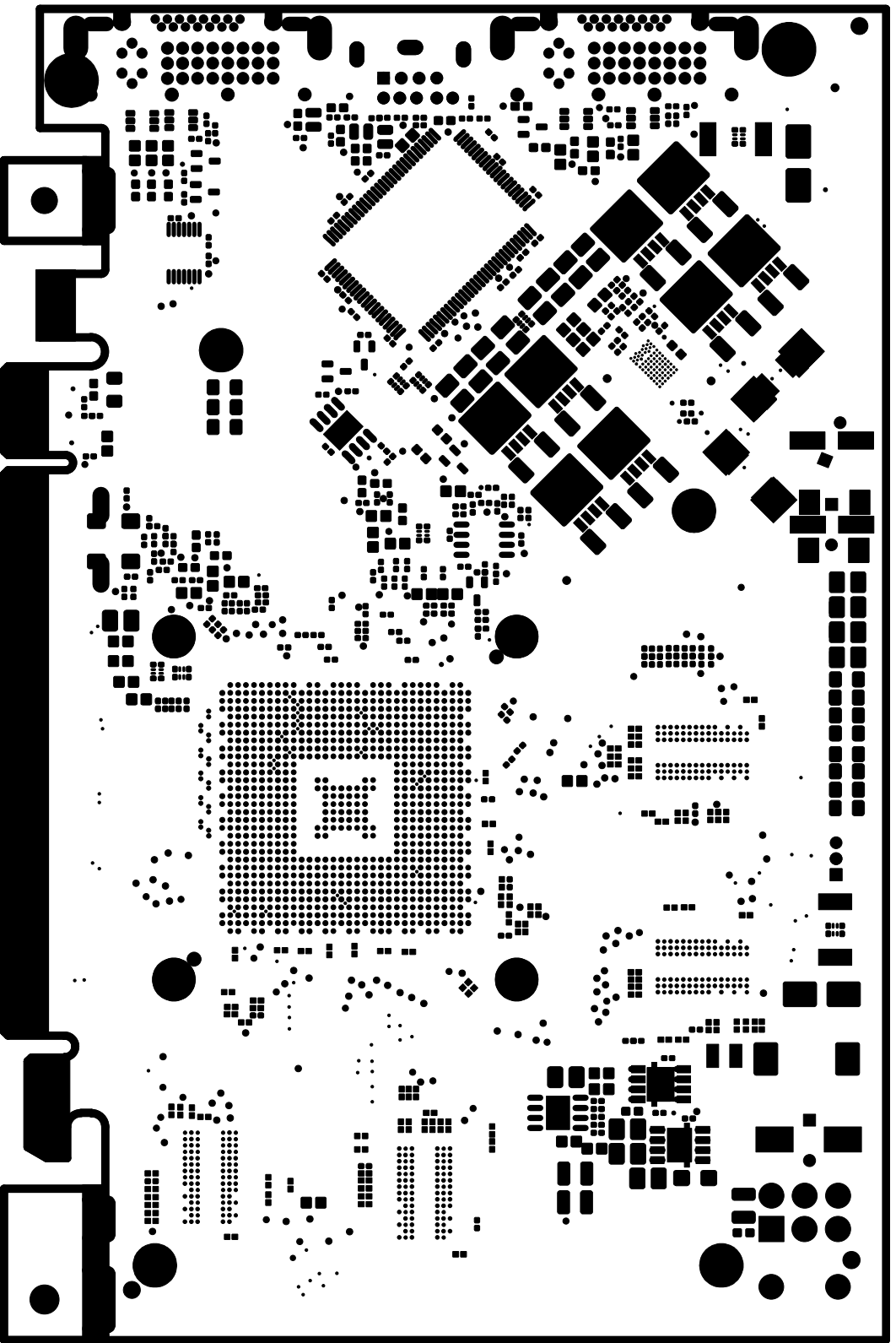
RH PCIe RV560 512MB DDR2 DUAL DL-DVI-I VIVO 6L FH
 PN 109-B06731-00B
 AUG. 14, 2006
 DESIGNER DORINA A.

MOTTOB N33R32JL12
 61 70 11 MJ17

RESTRICTION NOTICE

THIS PCB ARTWORK CONTAINS INFORMATION WHICH IS PROPRIETARY TO AND IS THE PROPERTY OF ATI. AND MAY NOT BE USED, REPRODUCED OR DISCLOSED IN ANY MANNER WITHOUT EXPRESSED WRITTEN PERMISSION FROM ATI.

© 2006 ATI TECHNOLOGIES INC.

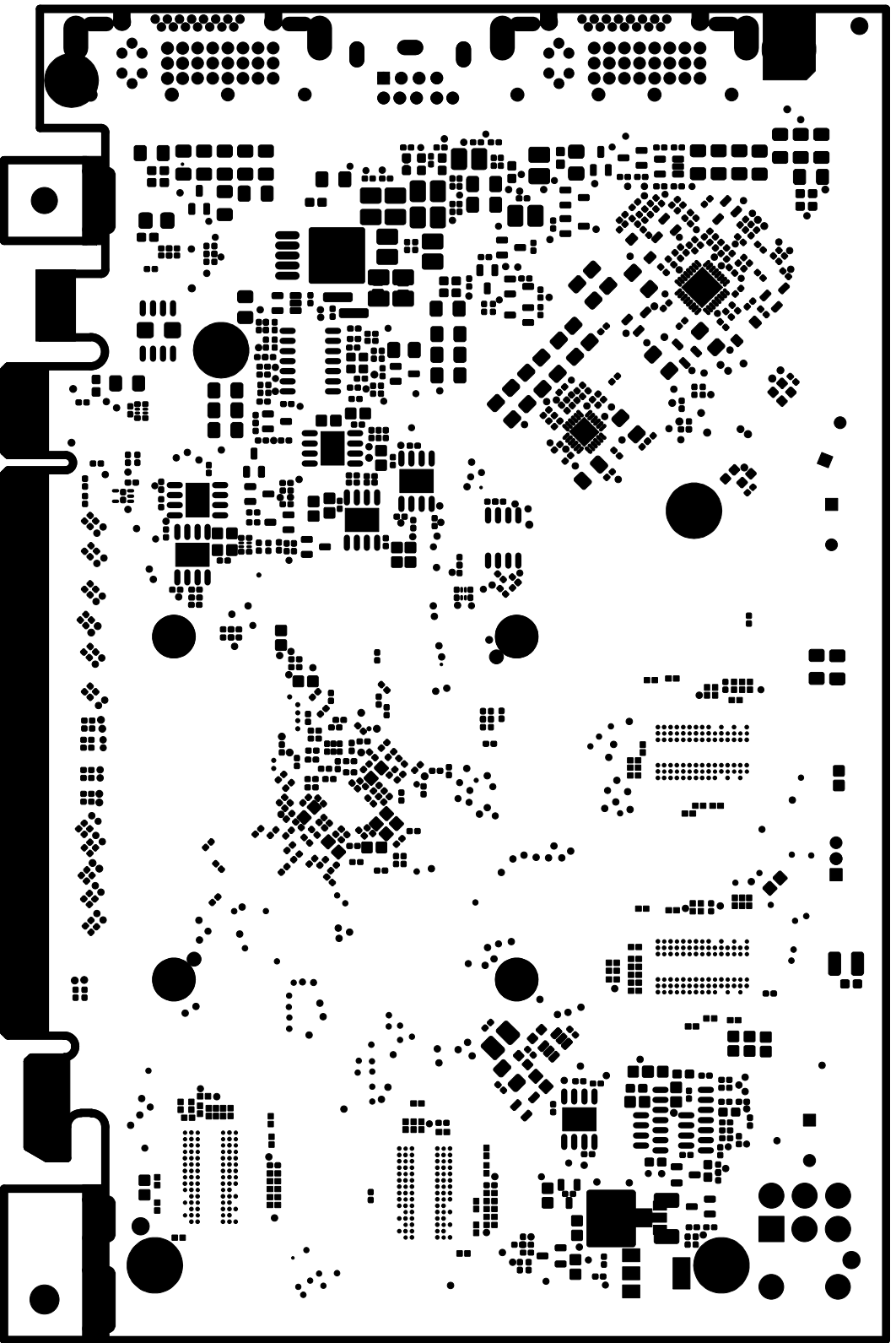


RH PCIe RV560 512MB DDR2 DUAL DL-DVI-I VIVO 6L FH
PN 109-B06731-00B
AUG. 14, 2006
DESIGNER DORINA A.

SOLDER MASK TOP
FILM 12 OF 13

RESTRICTION NOTICE

THIS PCB ARTWORK CONTAINS INFORMATION WHICH IS PROPRIETARY TO AND IS
THE PROPERTY OF ATI, AND MAY NOT BE USED, REPRODUCED OR DISCLOSED
IN ANY MANNER WITHOUT EXPRESSED WRITTEN PERMISSION FROM ATI.
© 2006 ATI TECHNOLOGIES INC.



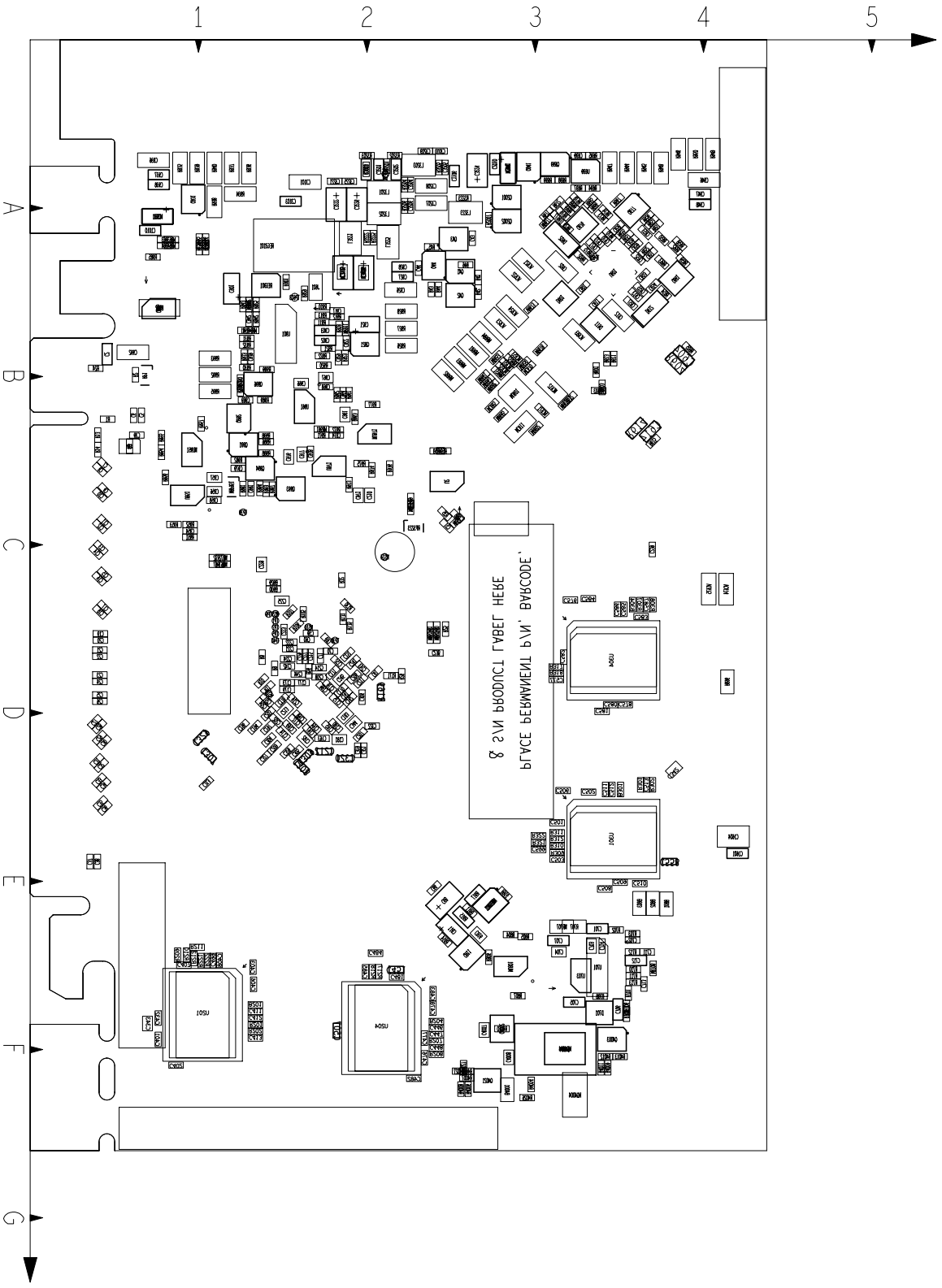
RH PCIe RV560 512MB DDR2 DUAL DL-DVI-I VIVO 6L FH
PN 109-B06731-00B
AUG. 14, 2006
DESIGNER DORINA A.

MOTTOB X2AM REQJOS
EI FO EI MJIT

RESTRICTION NOTICE

THIS PCB ARTWORK CONTAINS INFORMATION WHICH IS PROPRIETARY TO AND IS
THE PROPERTY OF ATI, AND MAY NOT BE USED, REPRODUCED OR DISCLOSED
IN ANY MANNER WITHOUT EXPRESSED WRITTEN PERMISSION FROM ATI.

© 2006 ATI TECHNOLOGIES INC.



RH PCIe RV560 512MB DDR2 DUAL DL-DVI-I VIVO 6L FH
PN 109-B06731-00B
AUG. 14, 2006
DESIGNER DORINA A.

MOTTOB YJBM32A
S TO S T3EH2

RESTRICTION NOTICE

THIS PCB ARTWORK CONTAINS INFORMATION WHICH IS PROPRIETARY TO AND IS
THE PROPERTY OF ATI. AND MAY NOT BE USED, REPRODUCED OR DISCLOSED
IN ANY MANNER WITHOUT EXPRESSED WRITTEN PERMISSION FROM ATI.
© 2006 ATI TECHNOLOGIES INC.