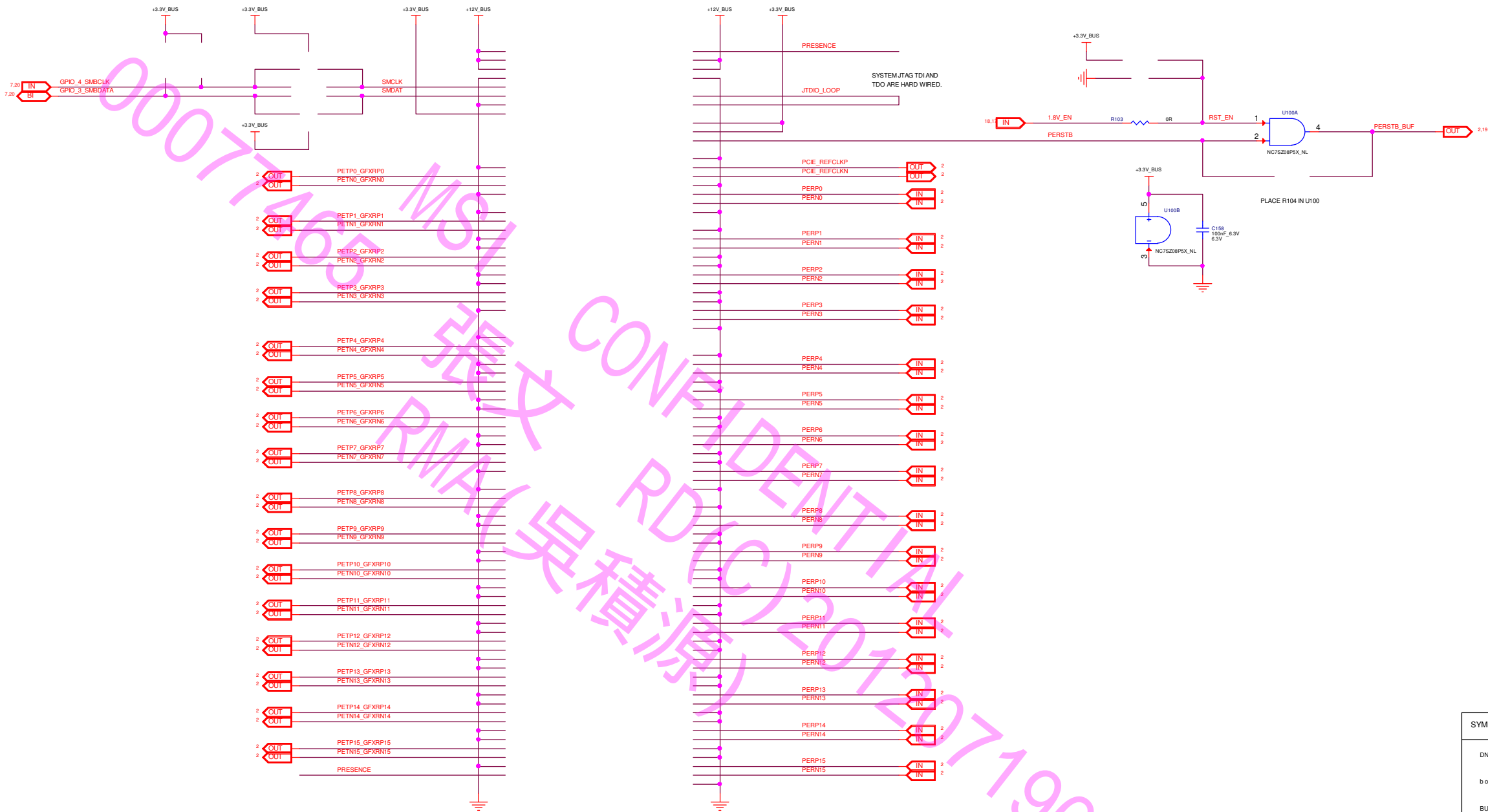
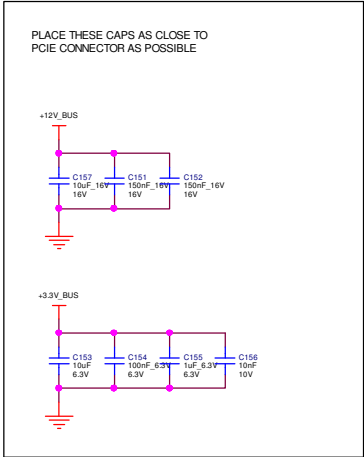


(1) PCI-EXPRESS EDGE CONNECTOR



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

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SHEET:	PCI-E EDGE CONNECTOR	REV:	16
DATE:	Wed Dec 21 19:15:39 2011		
SHEET NUMBER:	1 OF 22	TITLE:	Pitcairn GDDR5 x32
DOCUMENT NUMBER:	102-C40102-00		
NOTES:	NOTE		

(2) PITCAIRN PCIE INTERFACE

SOME PCIE TEST POINTS ARE AVAILABLE THROUGH VAS ON TRACES

FOR BARTS, USE 100NF PN 4171010400G

PCIE\_REFCLKx\_OUTx WORKSTATION DESIGNS MAY USE THIS FEATURE

OVERLAP C141 AND MC141

PCIE\_CALRP\_TX: PD MR100 (1.27K) FOR BARTS  
PU R100 (1.69K) FOR PITCAIRN

PCIE\_CALRN\_RX: PU R101 (2K) FOR BARTS  
PU R101 (1K) FOR PITCAIRN

GROUND PX\_EN (TS1) FOR BARTS (NO BACO)

PCIE\_VSS MERGED TO VSS IN PITCAIRN

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SHEET: PITCAIRN PCIE INTERFACE

DATE: Wed Dec 21 19:15:42 2011

SHEET NUMBER: 2 OF 22

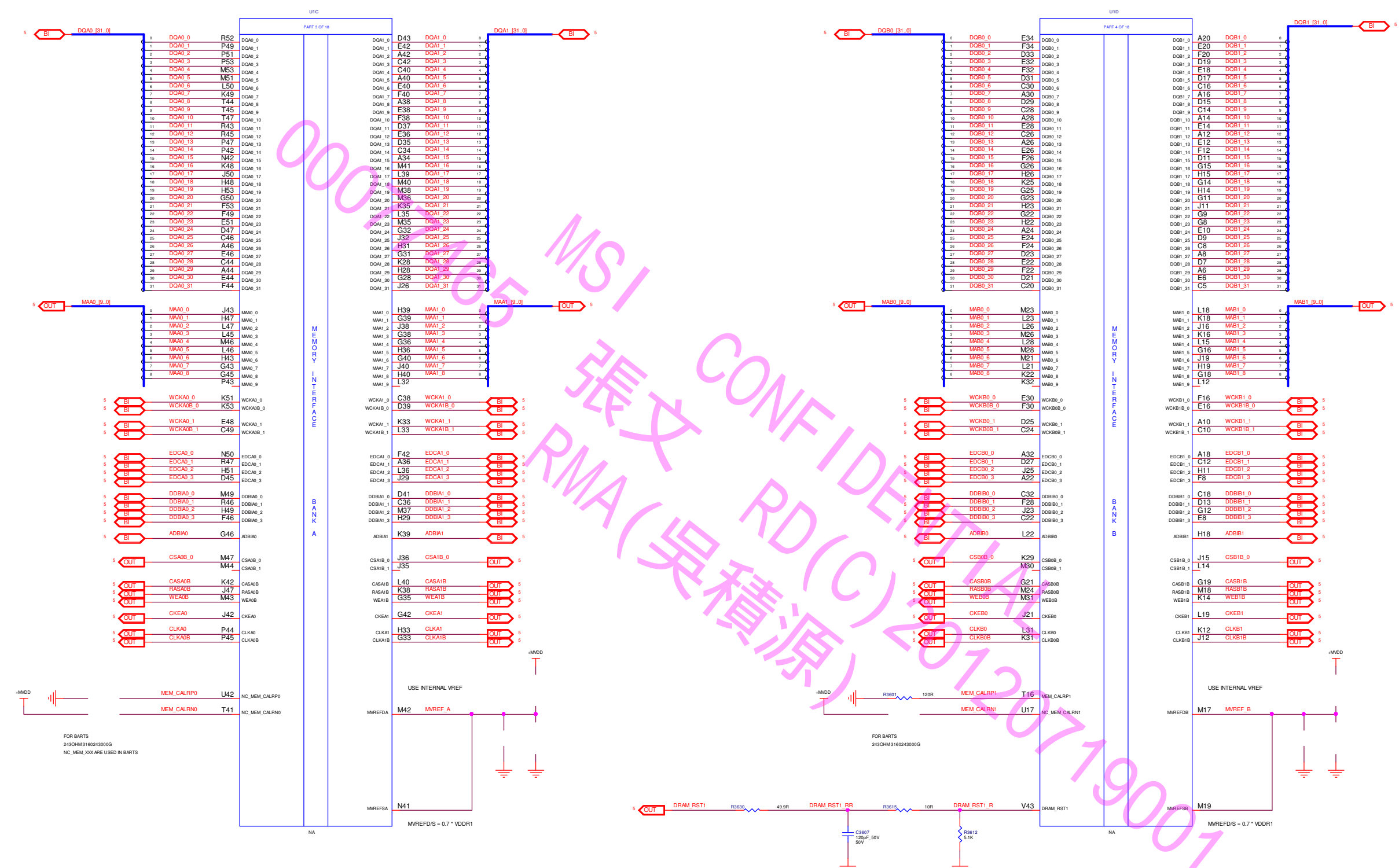
DOCUMENT NUMBER: 102-C40102-00

NOTES: NOTE

REV: 16

TITLE: Pitcairn GDDR5 x32

(3) PITCAIRN MEM INTERFACE CH AB



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SHEET: PITCAIRN MEM CH AB

DATE: Wed Dec 21 19:15:47 2011

SHEET NUMBER: 3 OF 22

DOCUMENT NUMBER: 102-C40102-00

NOTES: NOTE

REV: 16

TITLE: Pitcairn GDDR5 x32

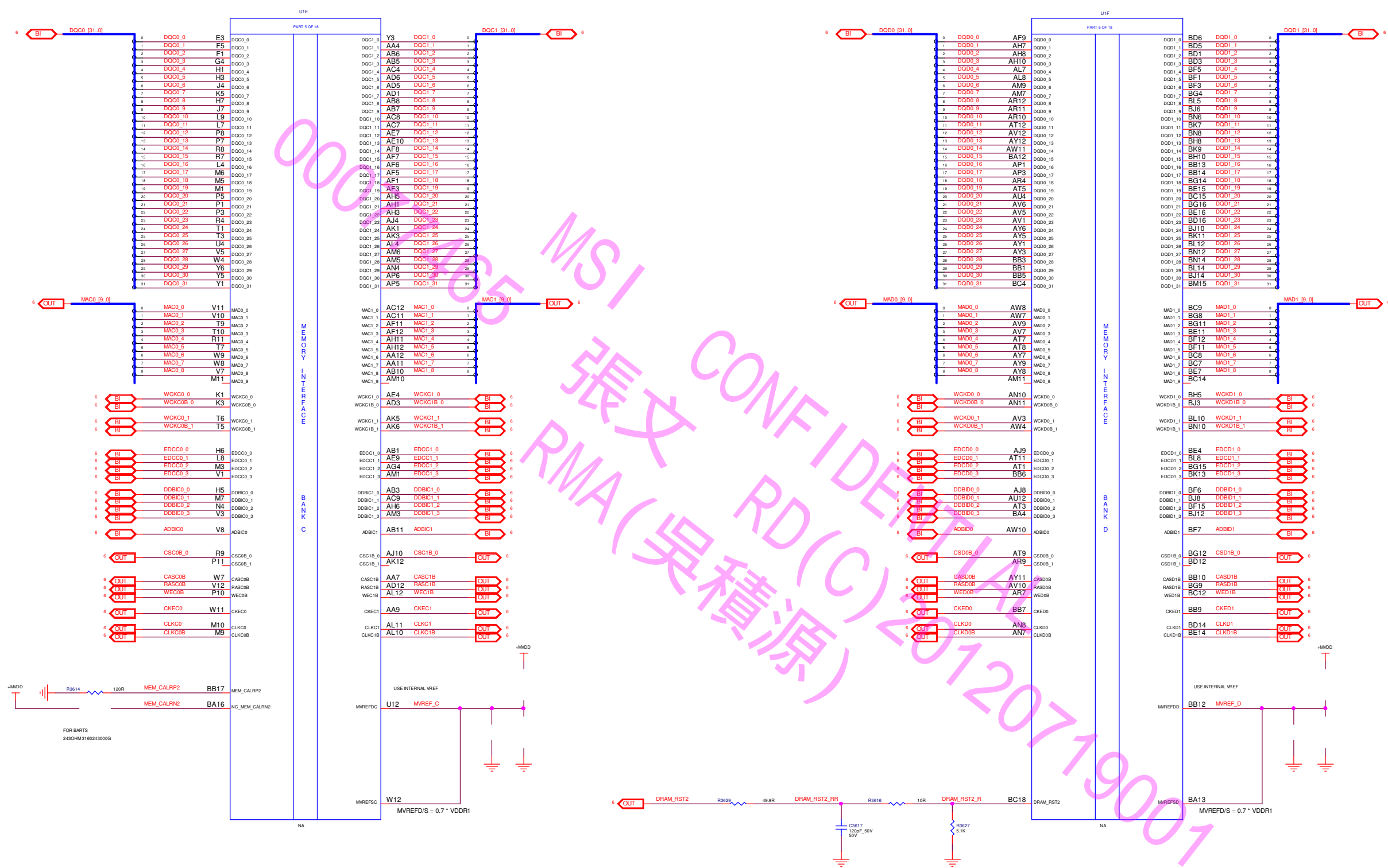
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(4) PITCAIRN MEM INTERFACE CH CD



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SHEET: PITCAIRN MEM CH CD

DATE: Wed Dec 21 19:15:51 2011

SHEET NUMBER: 4 OF 22

DOCUMENT NUMBER: 102-C40102-00

NOTES: NOTE

REV: 16

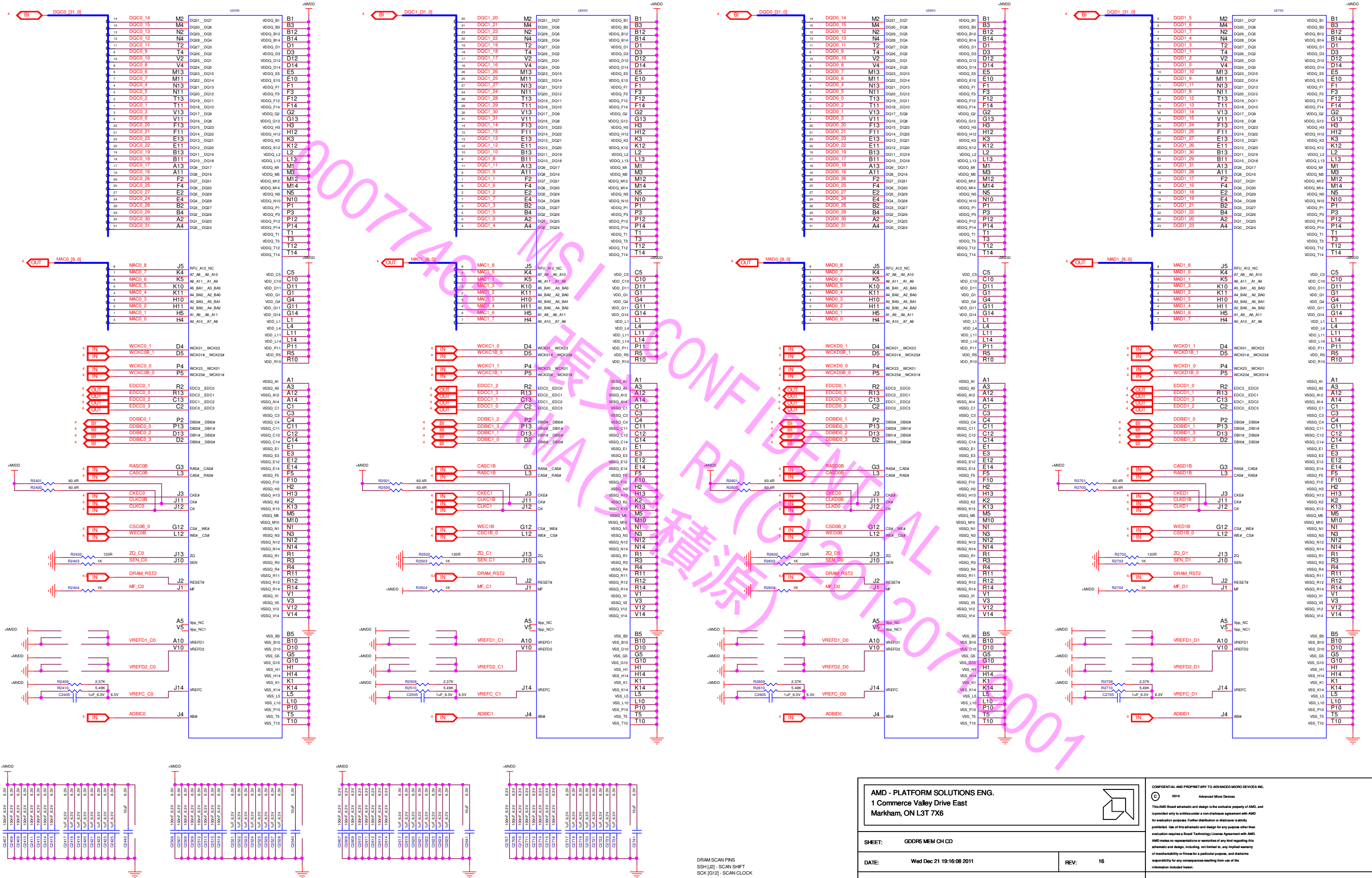
TITLE: Pitcairn GDDR5 x32

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(6) GDDR5 MEMORY CH CD



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SHEET: GDDR5 MEM CH CD

DATE: Wed Dec 21 19:16:08 2011

SHEET NUMBER: 6 OF 22

DOCUMENT NUMBER: 102-C40102-00

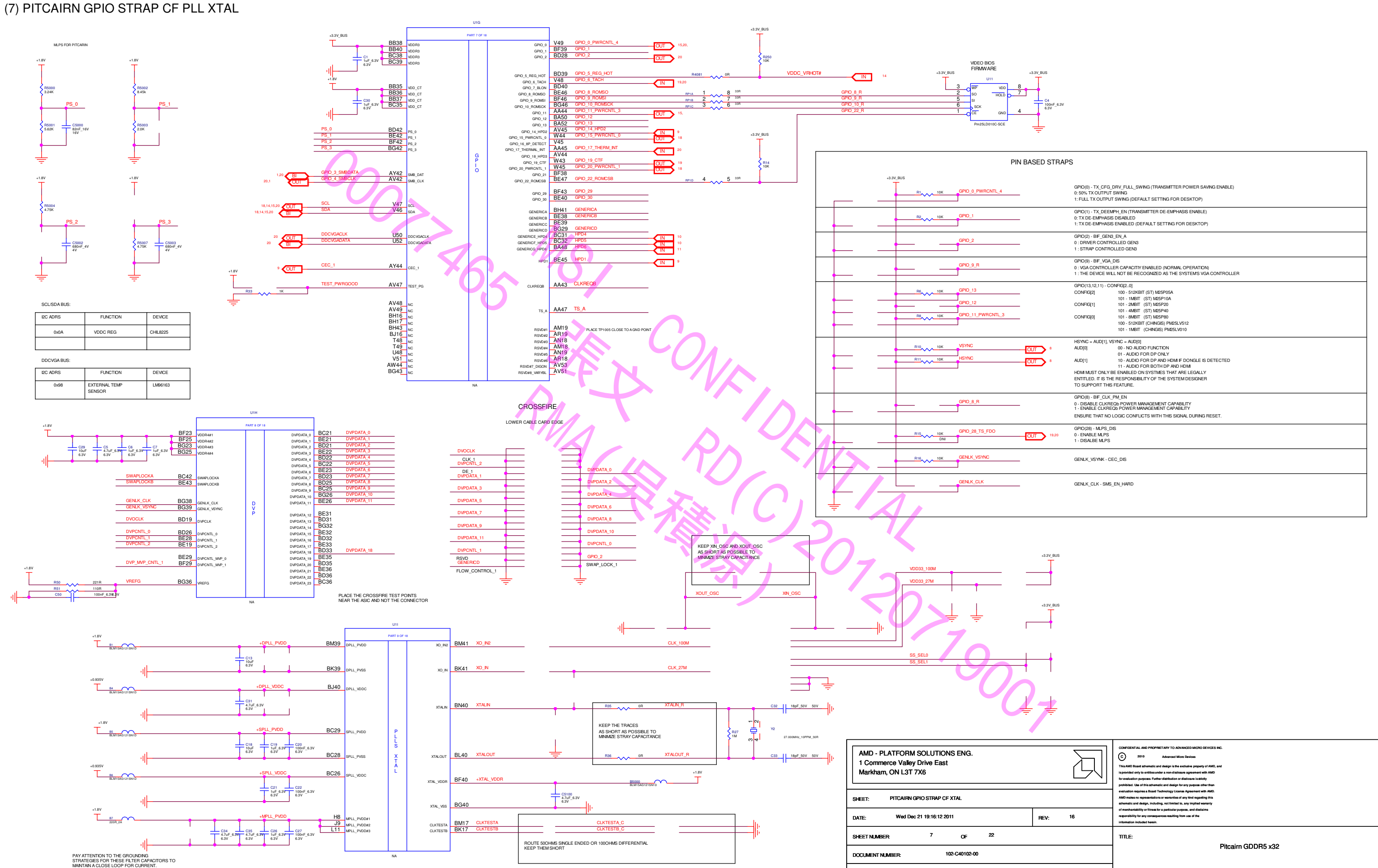
NOTES: NOTE

REV: 16

TITLE: Pitcairn GDDR5 x32

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## (7) PITCAIRN GPIO STRAP CF PLL XTAL



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SHEET: PITCAIRN GPIO STRAP CF XTAL

DATE: Wed Dec 21 19:16:12 2011

SHEET NUMBER: 7 OF

DOCUMENT NUMBER:

NOTES:	NOTE
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TITLE: Pitcairn GDDR5 x32

[illegible]

(8) PITCAIRN DAC

The schematic diagram illustrates the Pitcairn DAC circuit. It begins with power supply decoupling for +1.8V and +5V\_VESA rails, featuring resistors (R1600, R1500) and capacitors (C1500, C1501, C1507, C1508). The DAC core (U1J) is shown with its internal components (AY45, AW45, BB45, BC45, BB44, BC44, AY47, AY46, BB47, BB46, BC47, BC46, AW46, AW47) and external components (R\_DAC, R\_DAC\_L, G\_DAC, G\_DAC\_L, B\_DAC, B\_DAC\_L). The DAC core is connected to the output drivers (U1500A, U1501B) via resistors (R1514, R1515) and capacitors (C1514, C1515). The output drivers are connected to the output pins (A\_R\_DAC\_F, A\_G\_DAC\_F, A\_B\_DAC\_F, HSYNC\_DAC\_R, VSYNC\_DAC\_R). The circuit also includes optional ESD protection diodes for the output pins.

PAY ATTENTION TO THE GROUNDING STRATEGIES FOR THESE FILTER CAPACITORS TO MAINTAIN A CLOSE LOOP FOR CURRENT.

OPTIONAL ESD PROTECTION DIODES

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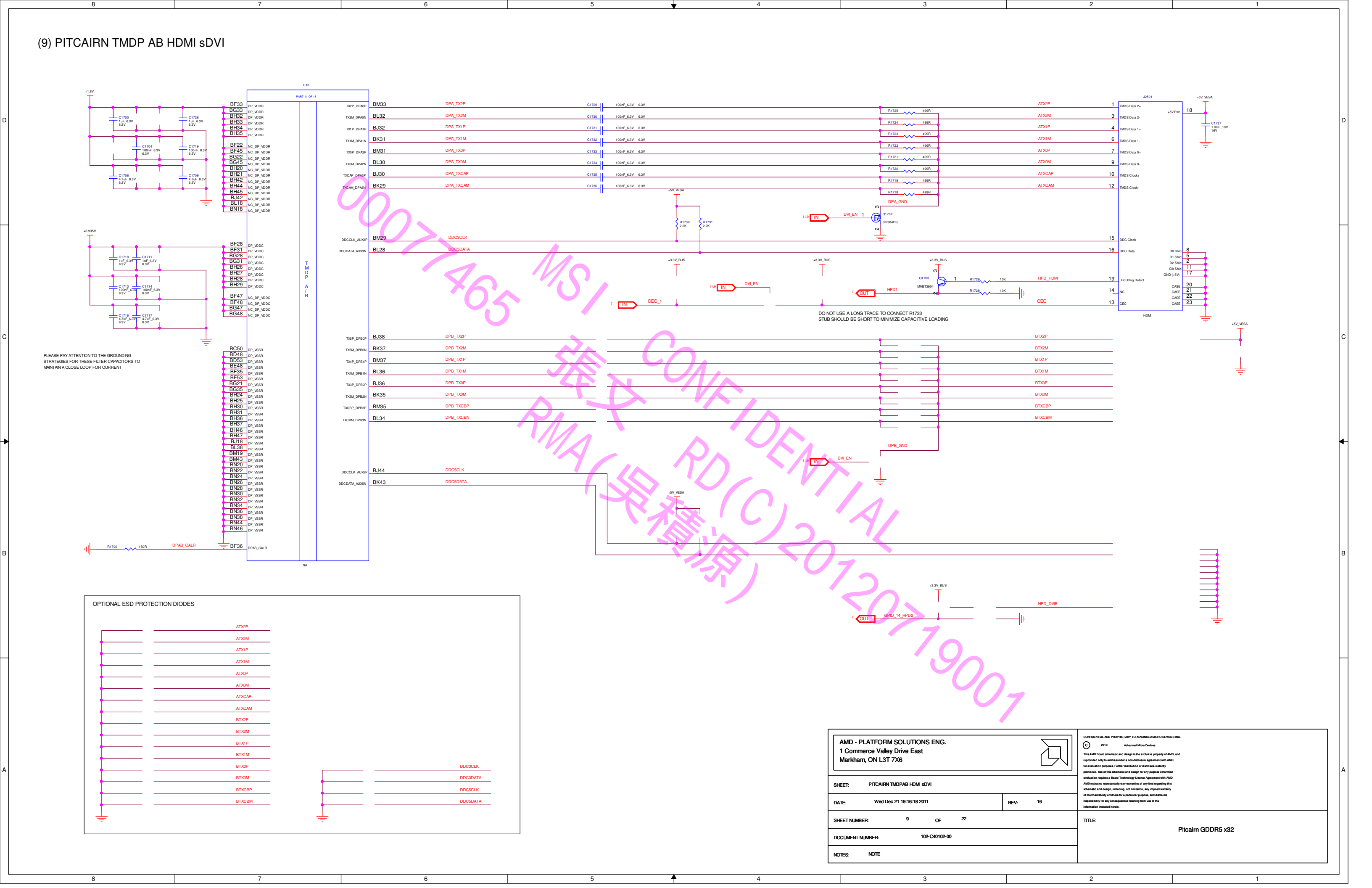
SHEET: PITCAIRN DAC  
DATE: Wed Dec 21 19:16:14 2011  
SHEET NUMBER: 8 OF 22  
DOCUMENT NUMBER: 102-C40102-00  
NOTES: NOTE

REV: 16

TITLE: Pitcairn GDDR5 x32



(9) PITCAIRN TMDP AB HDMI sDVI



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SHEET: PITCAIRN TMDPAB HDMI sDVI

DATE: Wed Dec 21 19:16:18 2011

REV: 16

SHEET NUMBER: 9 OF 22

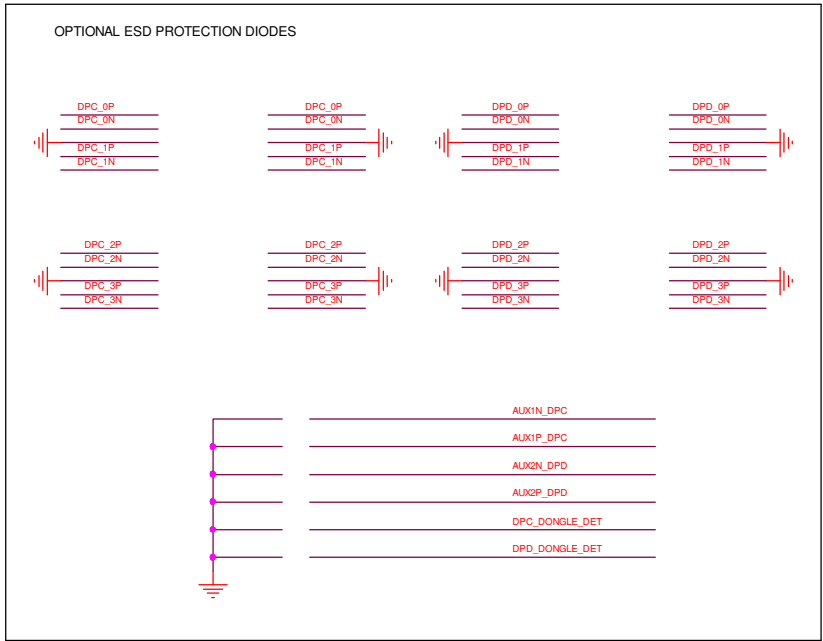
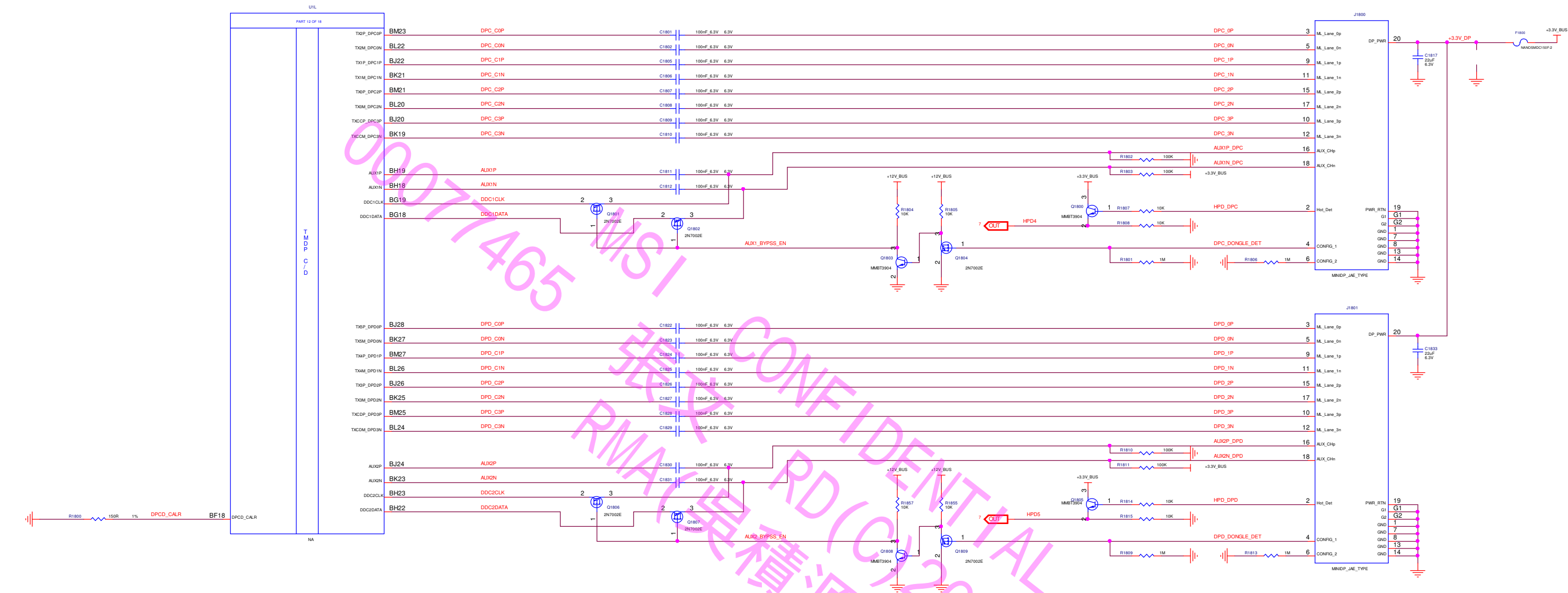
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TITLE: Pitcairn GDDR5 x32

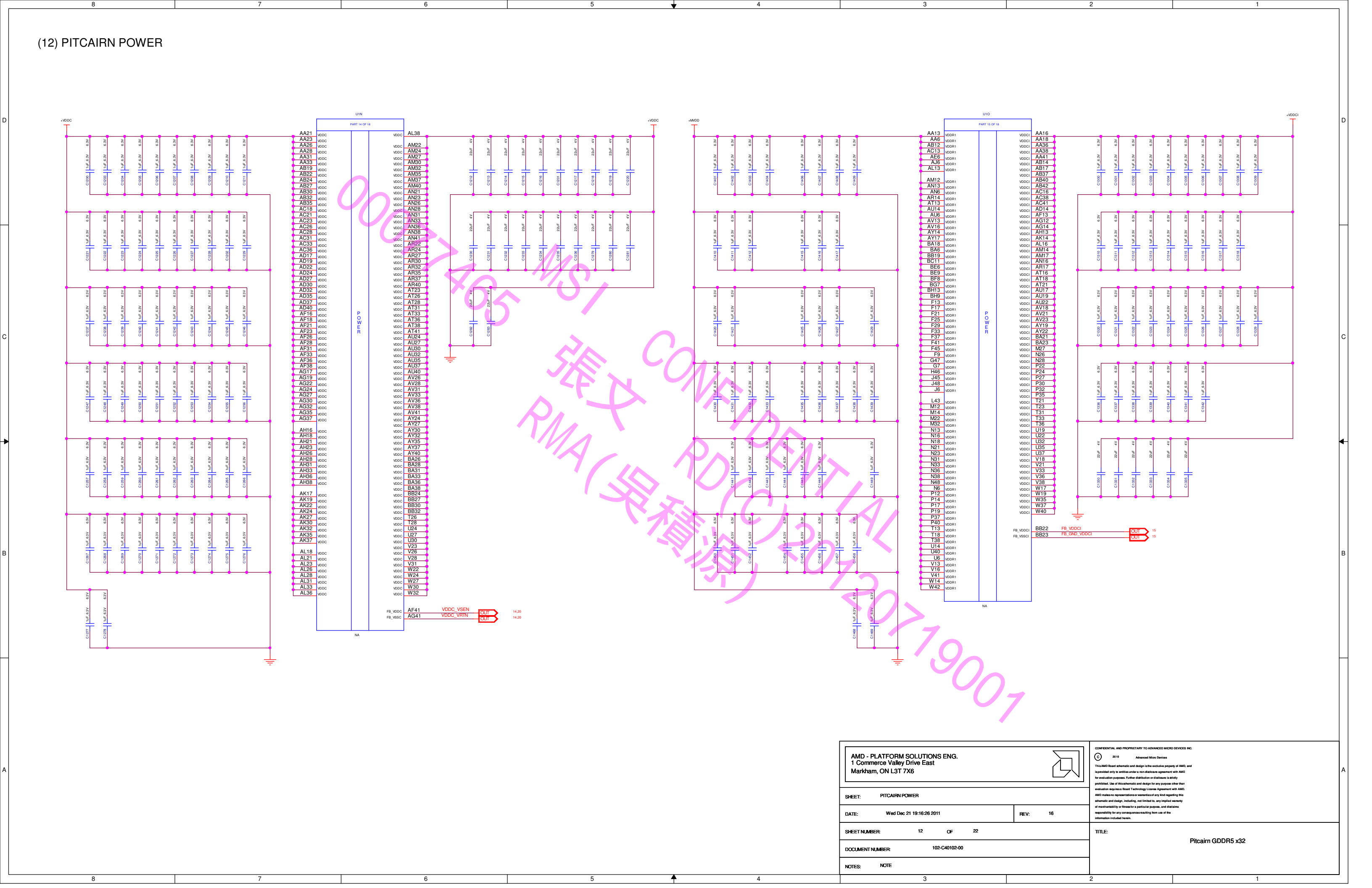
(10) PITCAIRN TMDP CD mDP mDP



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SHEET:	PITCAIRN TMDPCD mDP mDP		
DATE:	Wed Dec 21 19:16:20 2011	REV:	16
SHEET NUMBER:	10	OF	22
DOCUMENT NUMBER:	102-C40102-00		
NOTES:	NOTE		
TITLE:		Pitcairn GDDR5 x32	



(12) PITCAIRN POWER



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SHEET: PITCAIRN POWER

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SHEET NUMBER: 12 OF 22

DOCUMENT NUMBER: 102-C40102-00

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TITLE: Pitcairn GDDR5 x32

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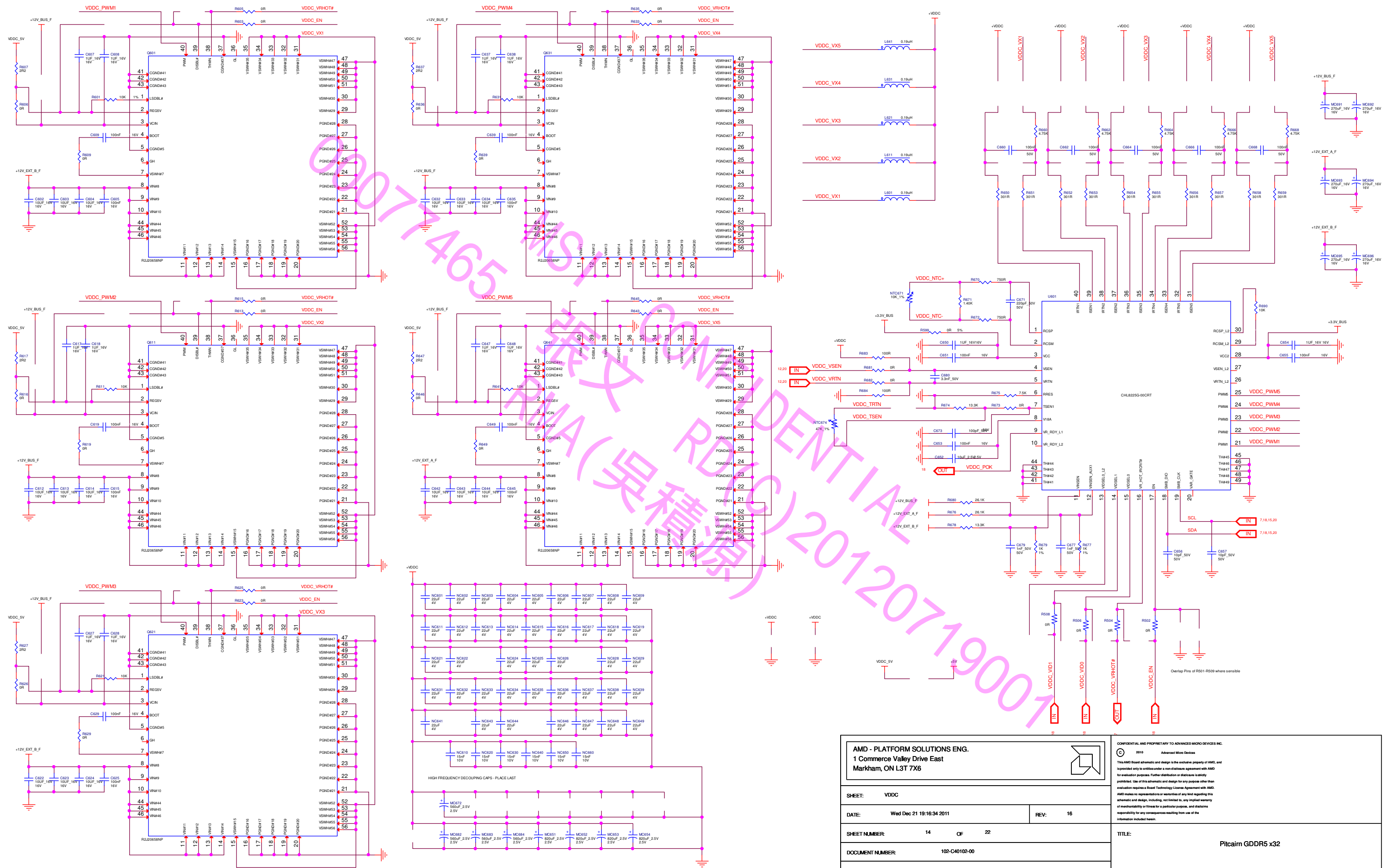
(13) PITCAIRN GND



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SHEET: PITCAIRN GND		REV: 16		TITLE: Pitcairn GDDR5 x32	
DATE: Wed Dec 21 19:16:28 2011		SHEET NUMBER: 13 OF 22		DOCUMENT NUMBER: 102-C40102-00	
NOTES: NOTE					



(14) VDDC



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ODC

REV:

22

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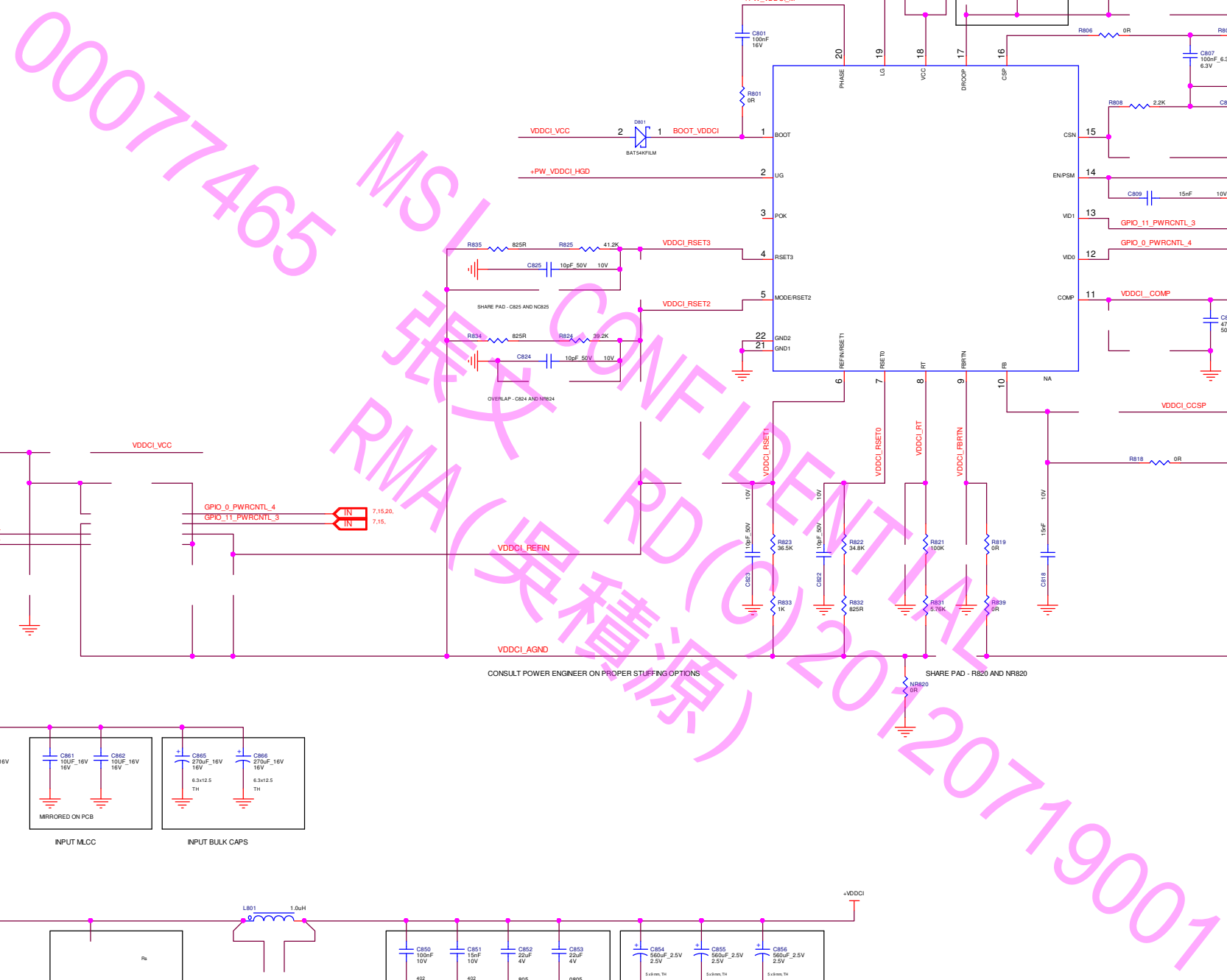
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TITLE: Pitcairn GDDR5 x32

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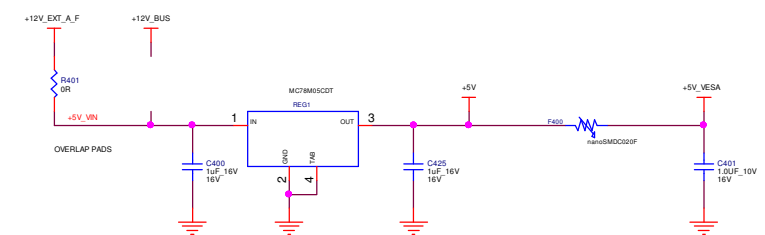
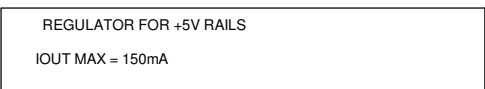


100

Pitcairn GDDR5 x32

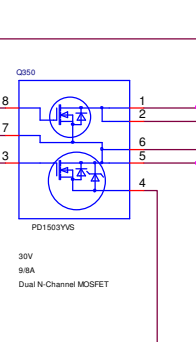


8	7	6	5	4	3	2	1
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2021036600G  
2020044100G

- 1 - Vin  
2 - Vin  
3 - LG  
4 - Gnd  
5 - Vx  
6 - Vx  
7 - Vx  
8 - HG



CONNECT ALL CONTROLLER RELATED GROUND ONLY AT C355

REV: 16

REV: 16

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102-C40102-00

**NOTE**

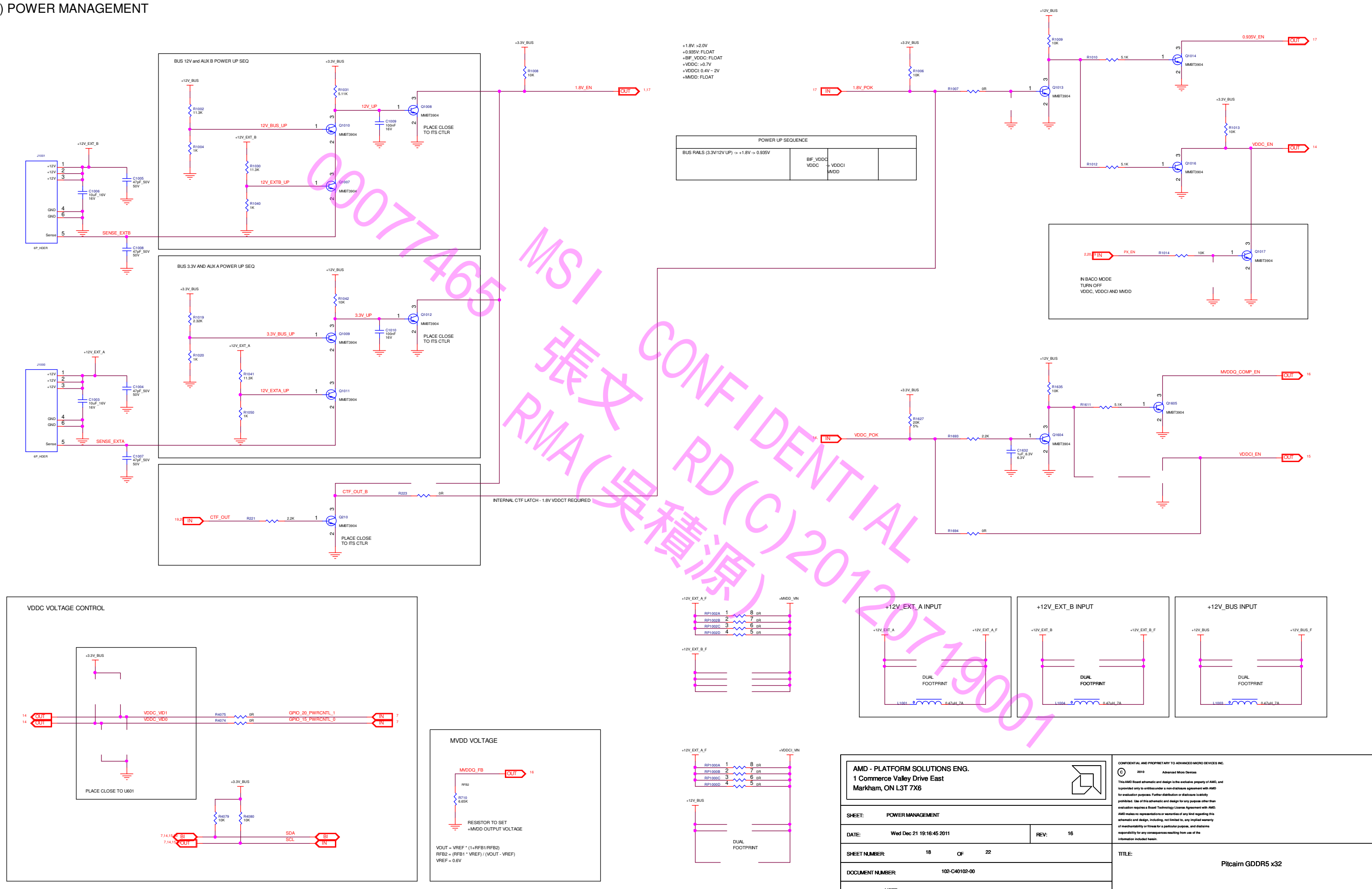
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(18) POWER MANAGEMENT



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SHEET: POWER MANAGEMENT

DATE: Wed Dec 21 19:16:45 2011

SHEET NUMBER: 18 OF 22

DOCUMENT NUMBER: 102-C40102-00

NOTES: NOTE

REV: 16

TITLE: Pitcairn GDDR5 x32

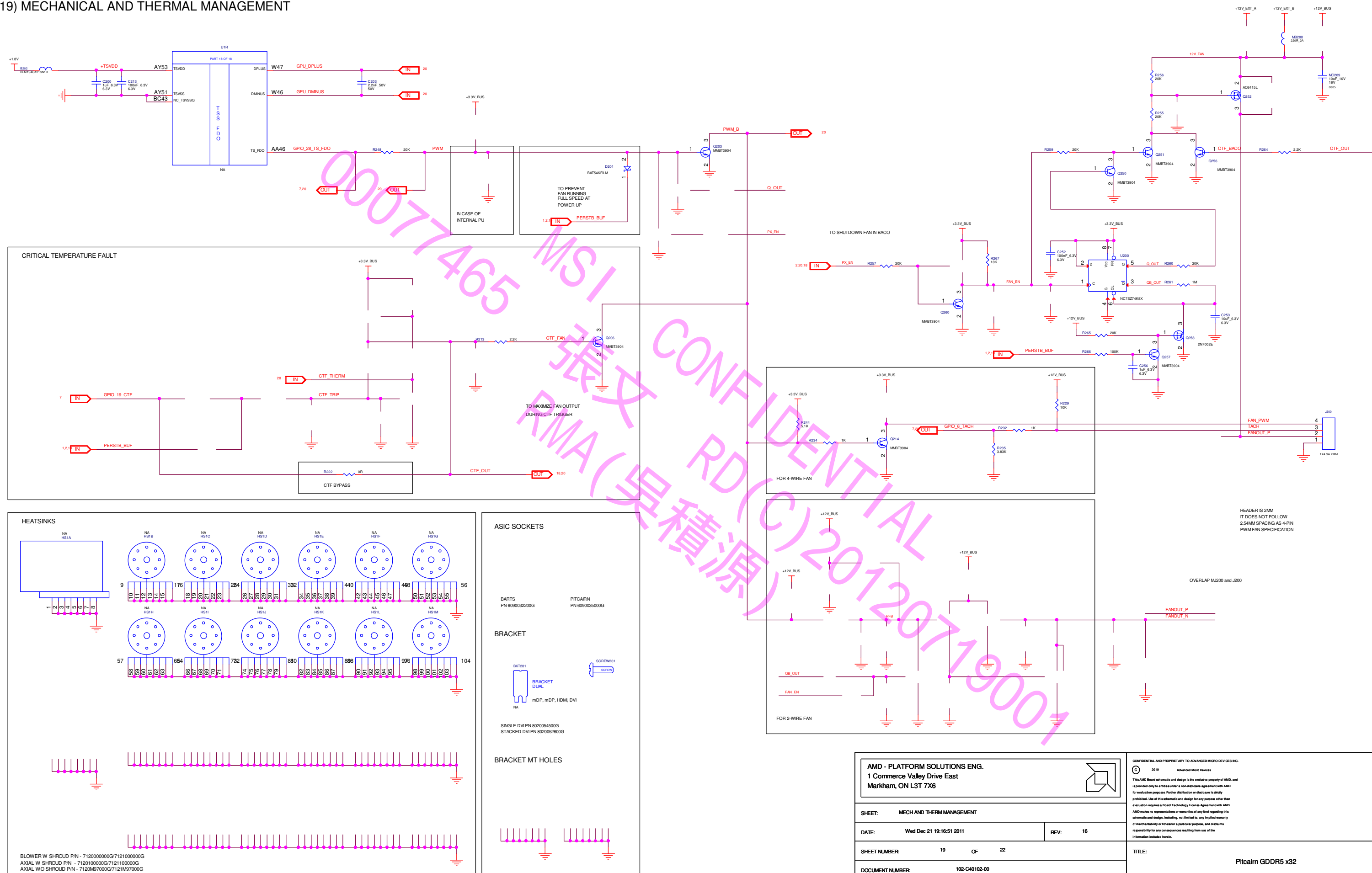
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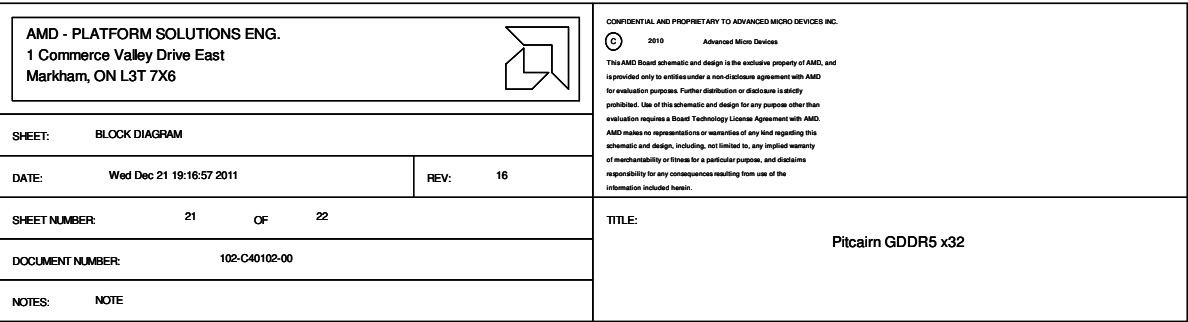
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## (19) MECHANICAL AND THERMAL MANAGEMENT







AMD



TITLE:

Pitcairn GDDR5 x32

DOCUMENT NUMBER:

102-C40102-00

DATE:

Wed Dec 21 19:16:58 2011

SHEET NUMBER:

22

OF

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REV:

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REVISION HISTORY

ENGINEER:

<ENGINEER>

NOTES:

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SCH Rev	PCB Rev	Date	REVISION DESCRIPTION
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0	00A	09/08/2011	INITIAL DESIGN BASED ON C405 PITCAIRN TRIAL LAYOUT
1	00B	30/08/2011	(LAYOUT) INCREASE SPACING BETWEEN J801 AND J802
2	00C	30/11/2011	UPDATE FANBACK CIRCUITRY (LAYOUT) IMPROVE DISPLAY ROUTINGS
3	00	19/12/2011	ADD R300, M300 (ADDING 3.3V INPUT OPTION FOR 0.935V RAIL) ADD R501-R509, R509, D501

00077465 MSI  
張文  
RD(C)20120719001  
RMA(吳積源)  
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