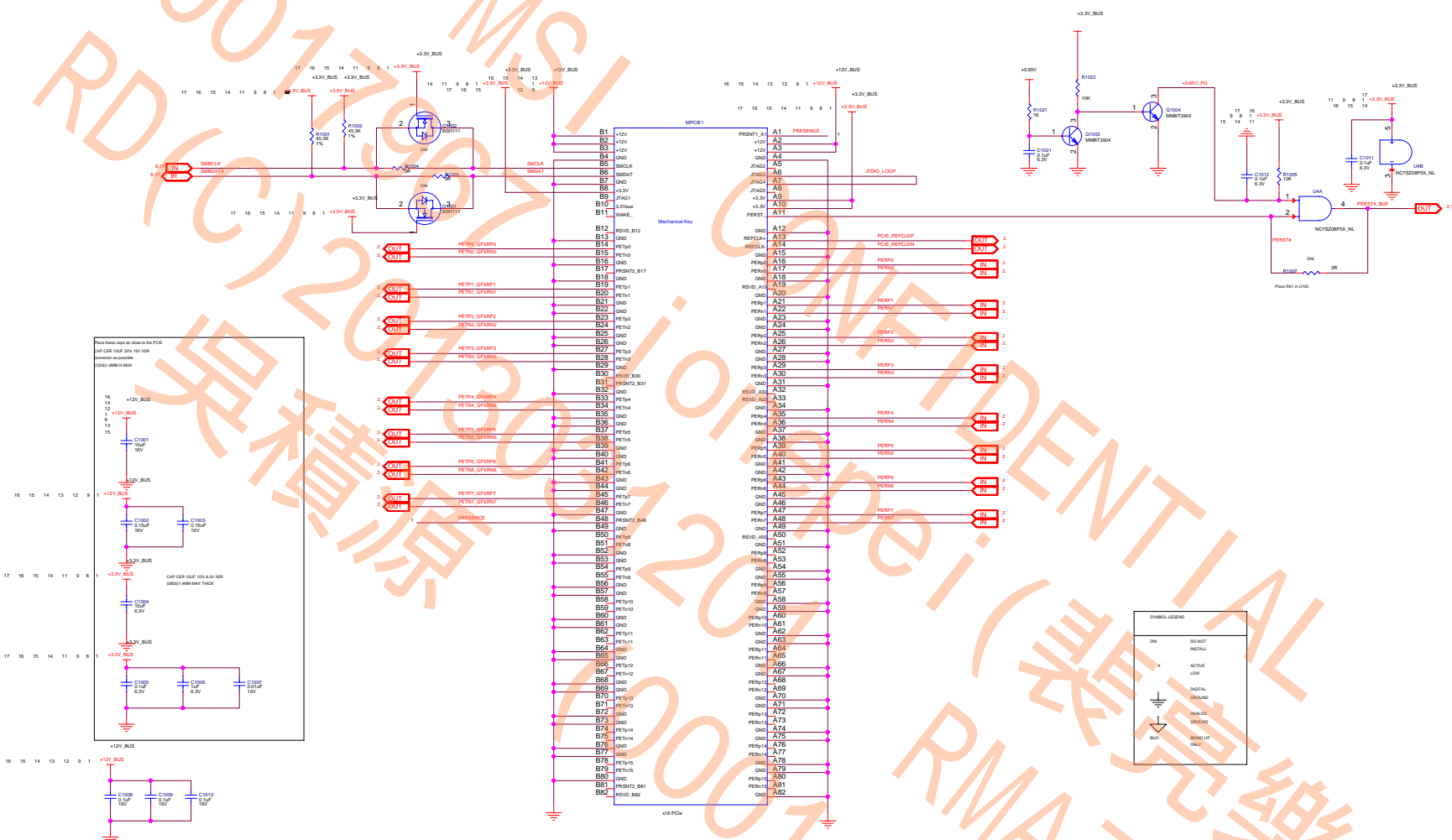


PCI-EXPRESS EDGE CONNECTOR



SYMBOL LEGEND	
DN	DO NOT
REFILL	REFILL
X	ACTIVE
LOW	LOW
DIGITAL	DIGITAL
GROUND	GROUND
ANALOG	ANALOG
GROUND	GROUND
BUC	BUCKING UP

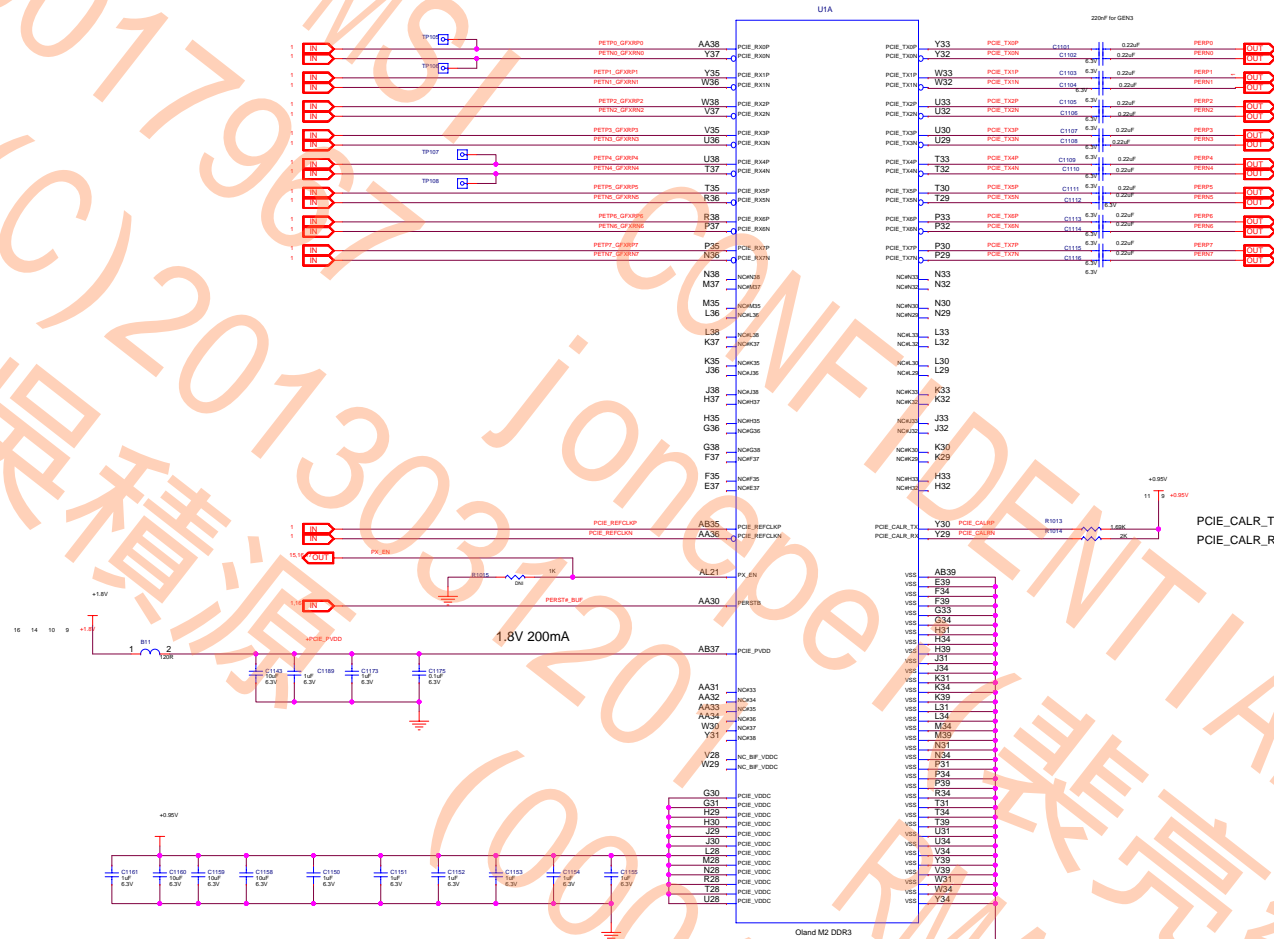
AMD - GRAPHICS 1 COMMERCE VALLEY MARKHAM, ONTARIO, L3T 7X6	
SHEET:	
DATE:	PCB Design Date: 2012
REV:	P01
SHEET NUMBER:	1 OF 20
DOCUMENT NUMBER:	105-C852x-00
NOTES:	NOTE

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TITLE: Oland Pro DDR3 2GB SL_DVI+HDMI+VGA

Oland M2 PCIe Interface

NOTE: Some of the PCIe responses will
be available through vias on traces.

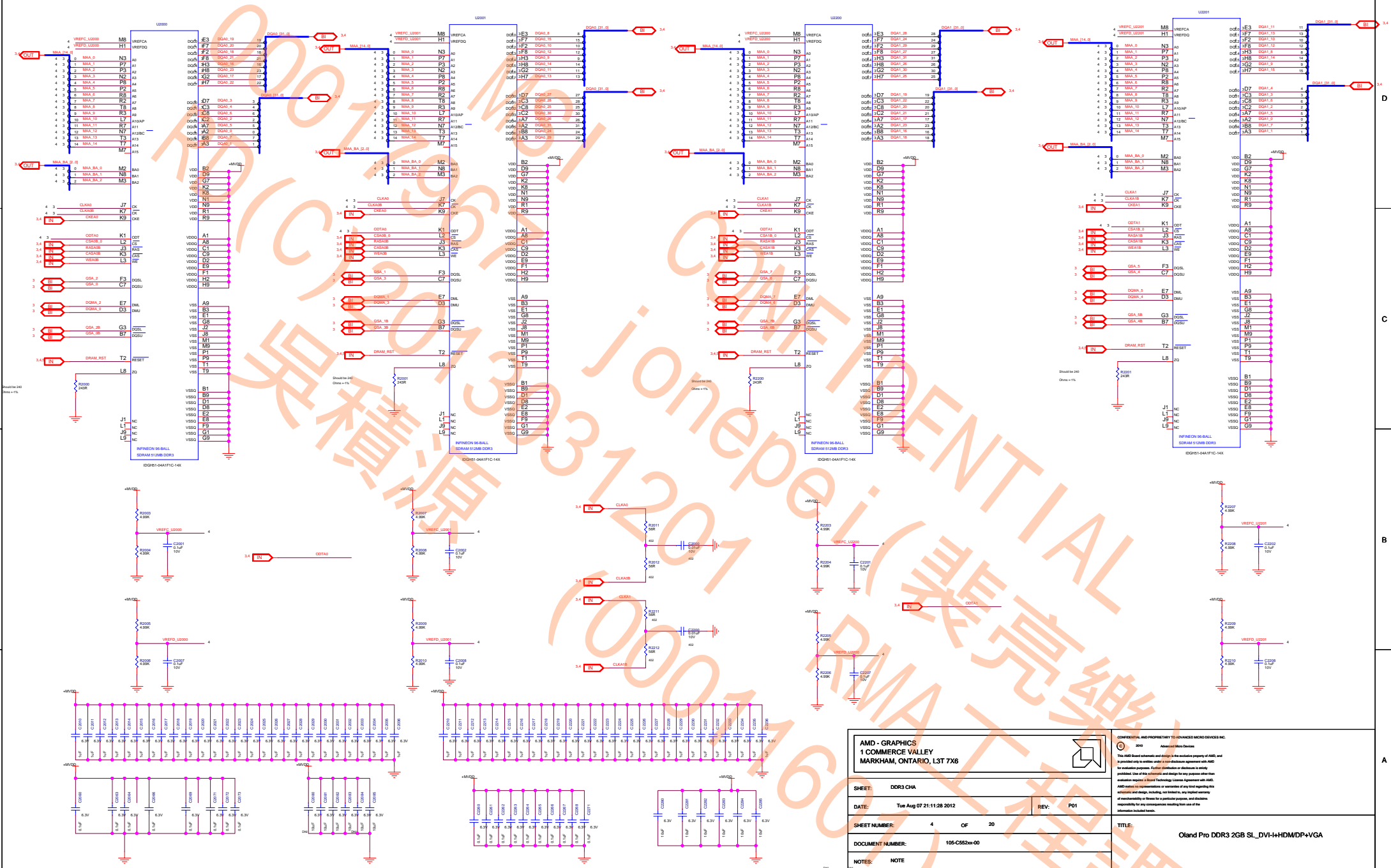



AMD - GRAPHICS 1 COMMERCE VALLEY MARKHAM, ONTARIO, L3T 7X6	
SHEET: 2 OF 20	
DATE: 01/10/2012	REV: P01
DOCUMENT NUMBER: 105-C852x-00	
NOTES: NOTE	

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TITLE: Oland Pro DDR3 2GB SL_DVI+HDMI+VGA

(4) DDR3 Memory Channel A



AMD - GRAPHICS 1 COMMERCE VALLEY MARKHAM, ONTARIO, L3T 7X6		
SHEET: DDR3 CHA		
DATE: Tue Aug 07 21:11:28 2012	REV: P01	
SHEET NUMBER: 4 OF 20		
DOCUMENT NUMBER: 105-C582zx-00		
NOTES: NOTE		

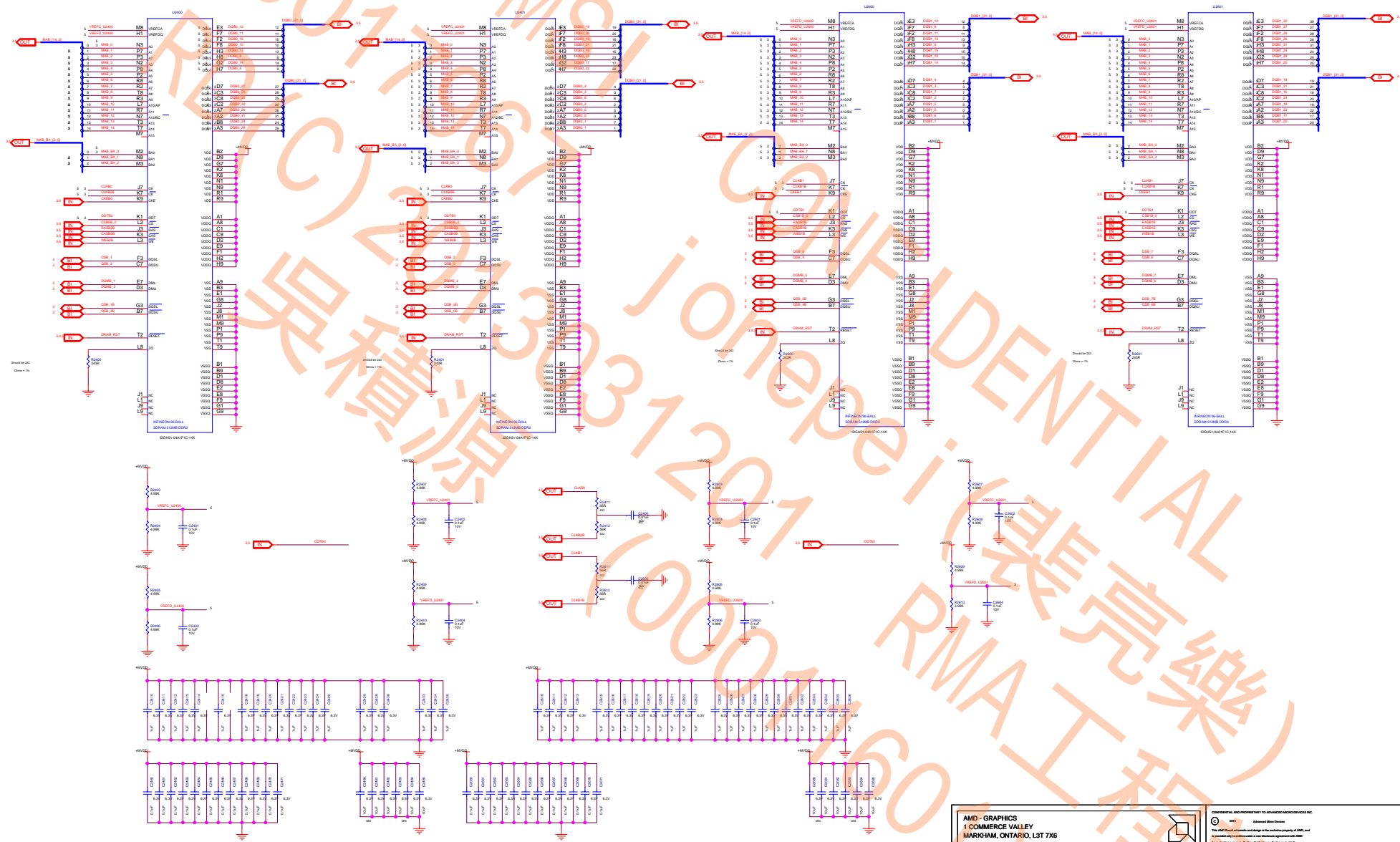
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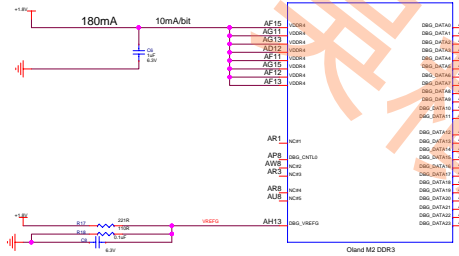
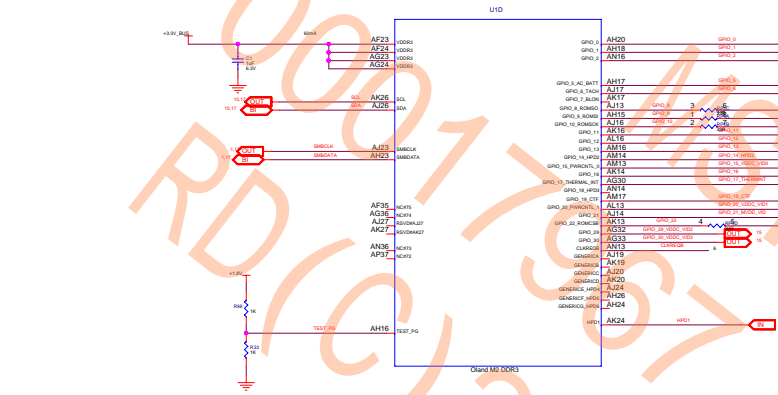
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TITLE:

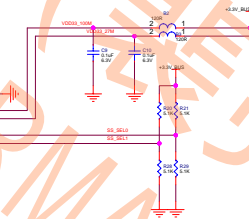
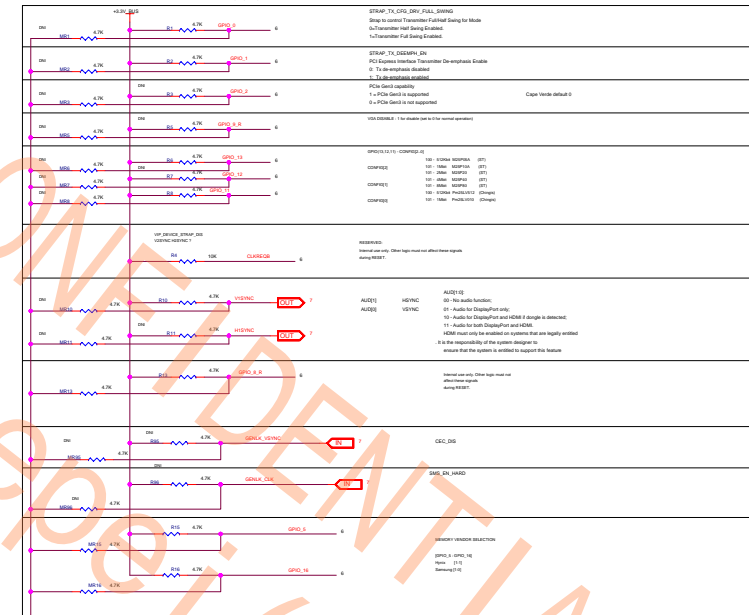
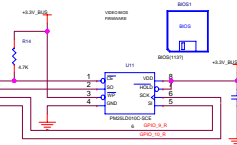
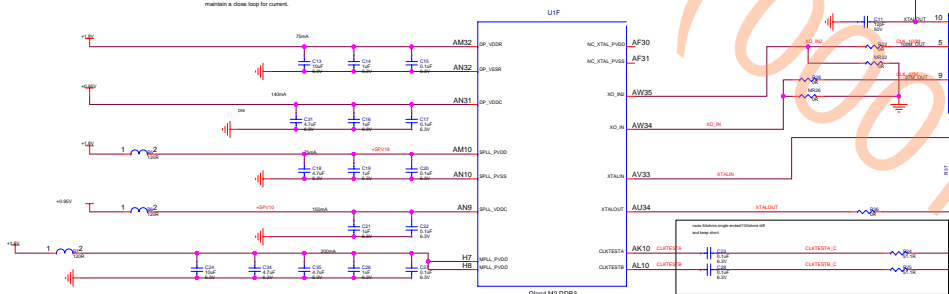
Oland Pro DDR3 2GB SL₁DVI-I+HDMI/DP+VGA

[illegible]

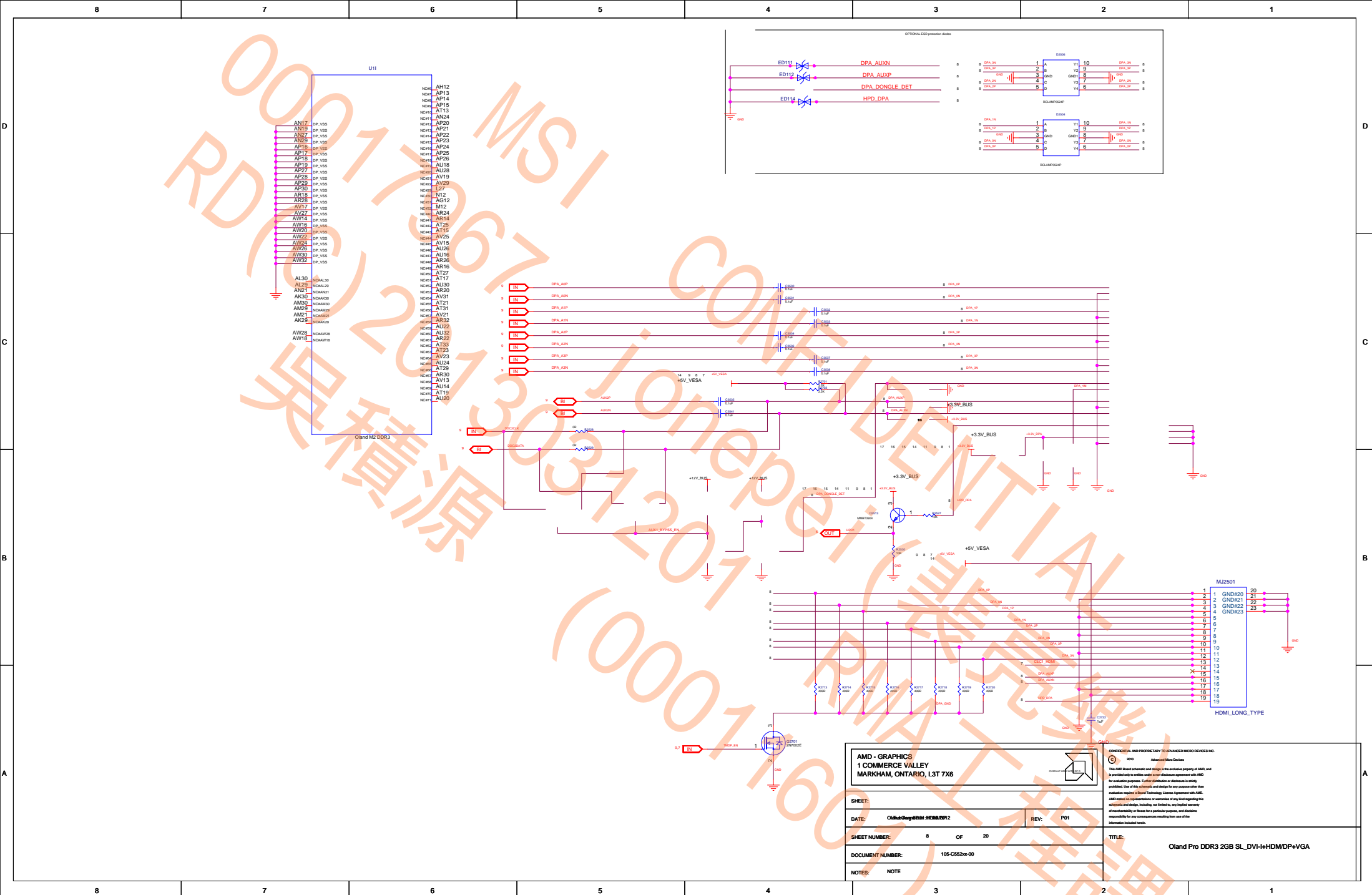


Place the capacitors
isopoints near the ASIC and
not the connector

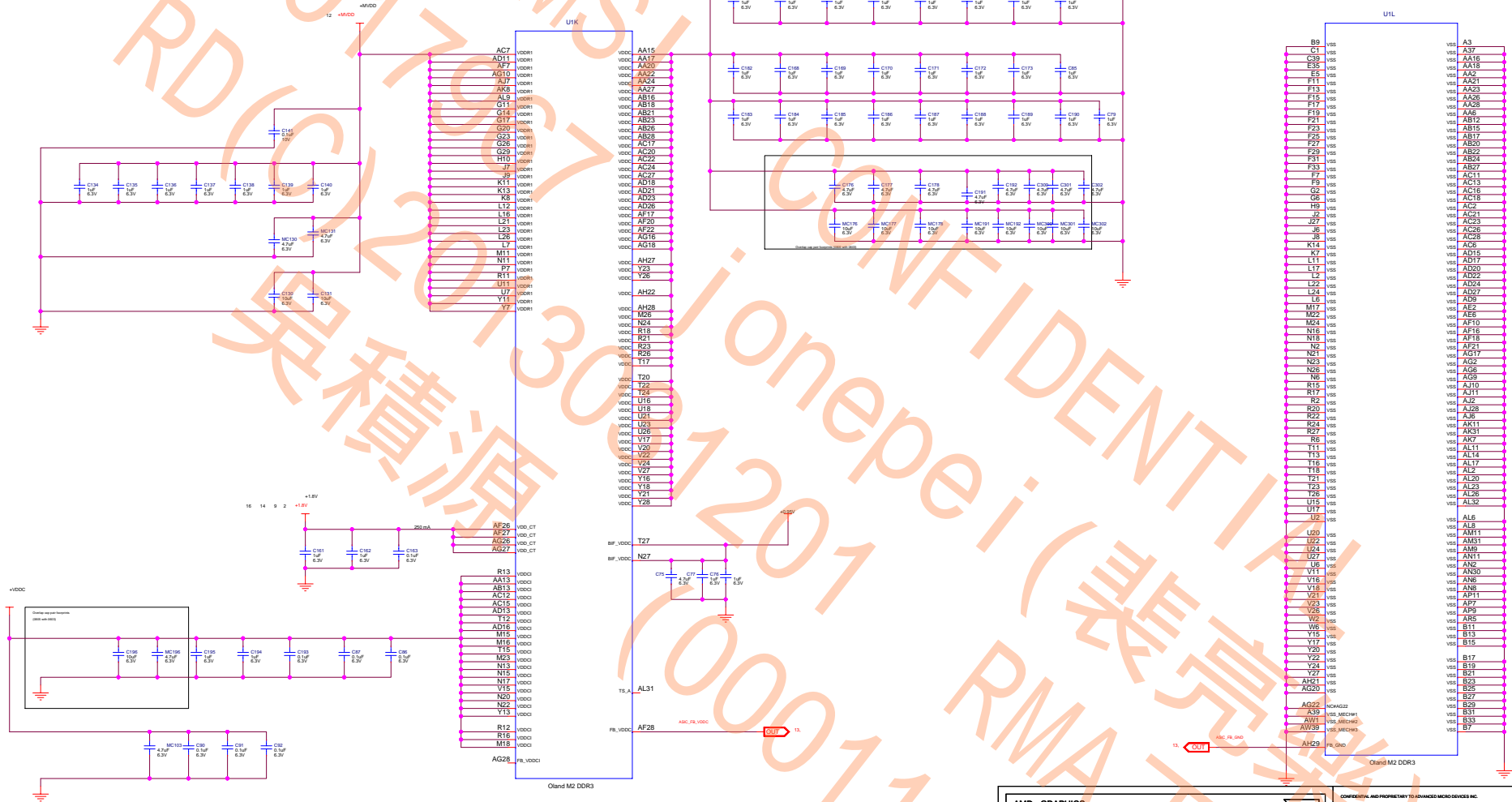
Please pay attention to the grounding
strategies for these filter capacitors to
maintain a close loop for current.




AMD - GRAPHICS 1 COMMERCE VALLEY MARGHAM, ONTARIO, L3T 7X6	
SHEET: Oland GPIO STRAP PCL	REV: P01
DATE: Top Aug 07 21:11:28 2012	REV: P01
SHEET NUMBER: 6 OF 20	TITLE: Oland Pro DDR3 2GB SL_DVI+HDMI/DP+VGA
DOCUMENT NUMBER: 105-CIS00w-00	
NOTES: none	



Oland M2 Power & GND



AMD - GRAPHICS 1 COMMERCIAL VALLEY MARKHAM, ONTARIO, L3T 7X6		
SHEET:		
DATE:	C:\Users\Phong\OneDrive\129 2012	REV: P01
SHEET NUMBER:	10	OF 20
DOCUMENT NUMBER:	105-C562a-00	
NOTES:	NOTE	

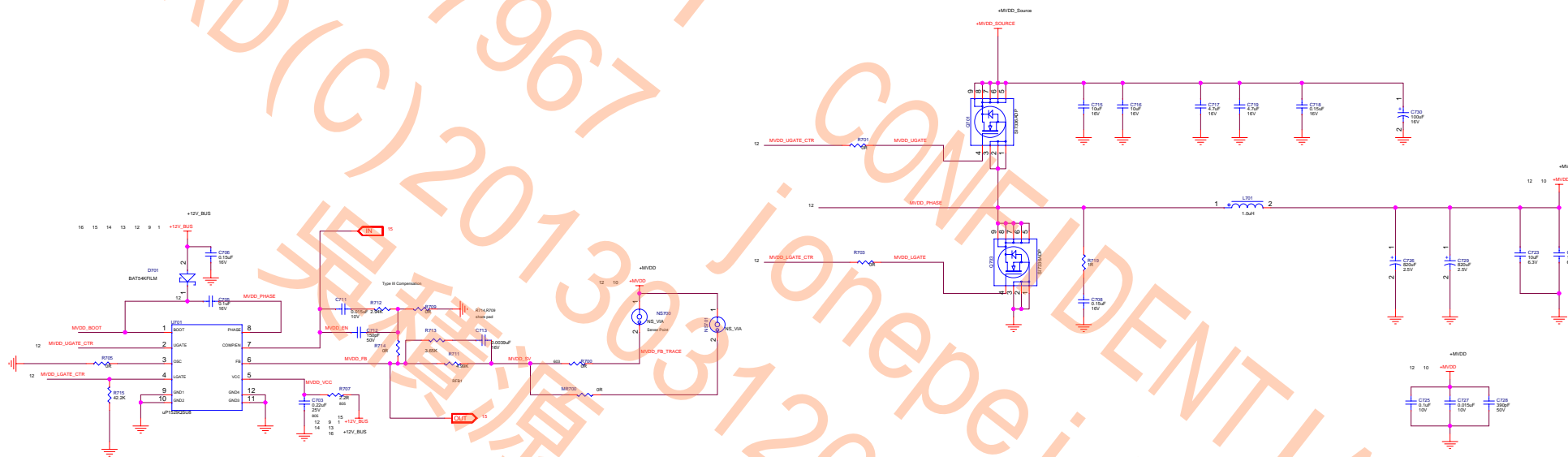
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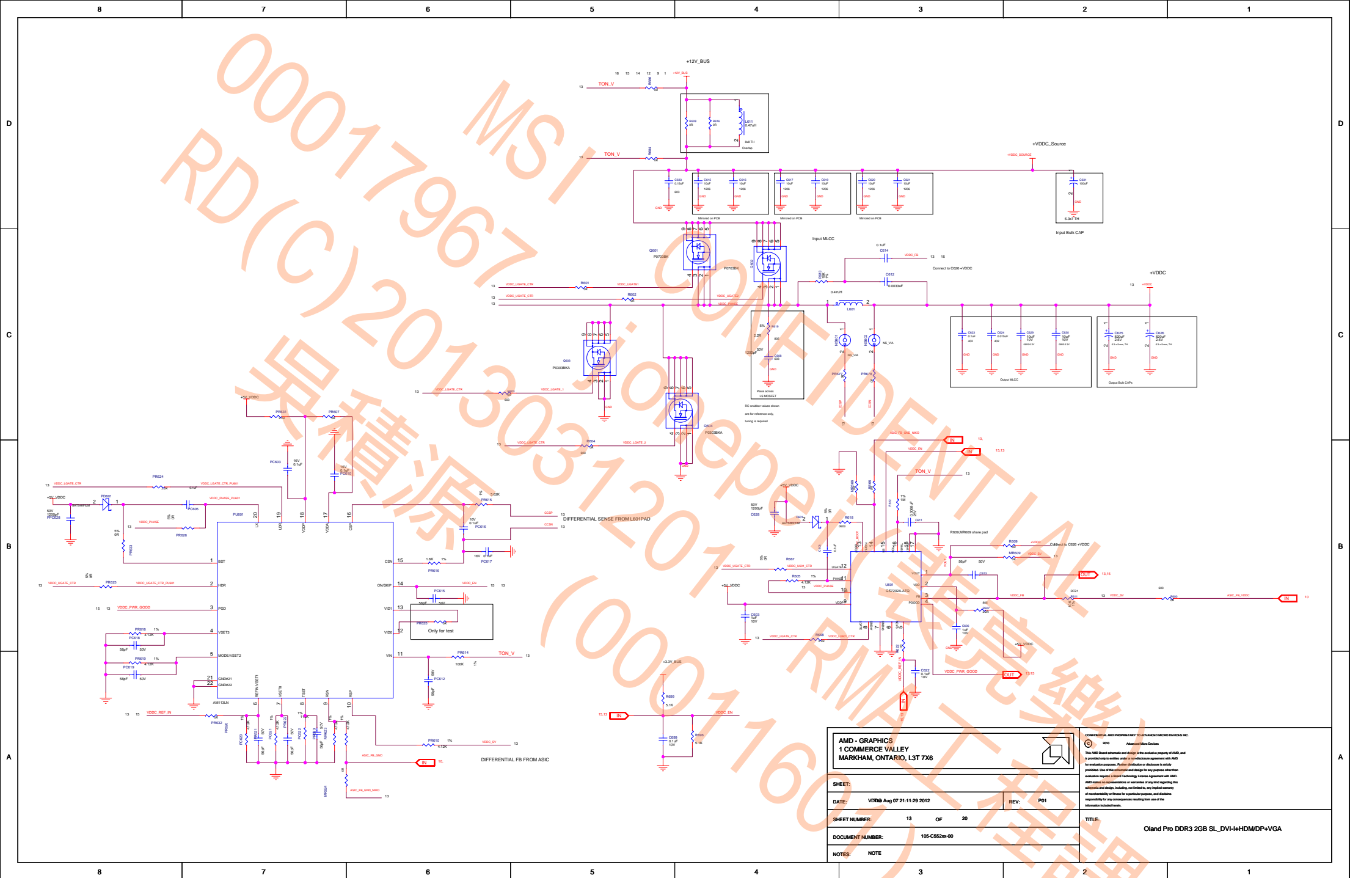
TITLE:

Oland Pro DDR3 2GB SL_DVI-I+HDM/DP+VGA



AMD - GRAPHICS 1 COMMERCE VALLEY MARKHAM, ONTARIO, L3T 7X6	
SHEET:	
DATE:	MVB Aug 07 21:11:29 2012
SHEET NUMBER:	12 OF 20
DOCUMENT NUMBER:	105-C682xx-00
NOTES:	NOTE

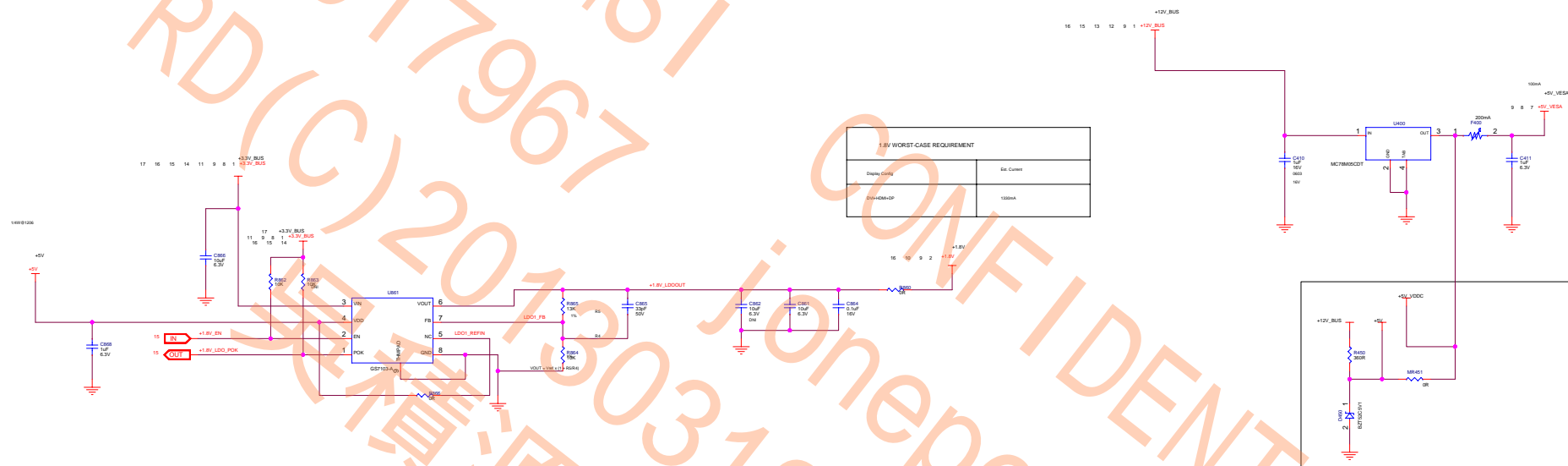
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TITLE:	Oland Pro DDR3 2GB SL_DVI+HDMI+VGA



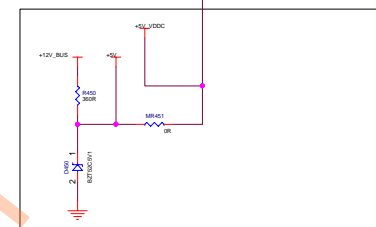
Linear Regulators

LDO #1: Vin = 3.00V to 3.60V (3.3V \pm 9%) Vout = +1.8V \pm 2% Iout = 1.6A (TbV) RMS MAX
PCB: 50 to 70mm sq. copper area for cooling

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



1.8V WORST-CASE REQUIREMENT	
Display Config	Ext. Content
DVI+HDMI+DP	1000mA



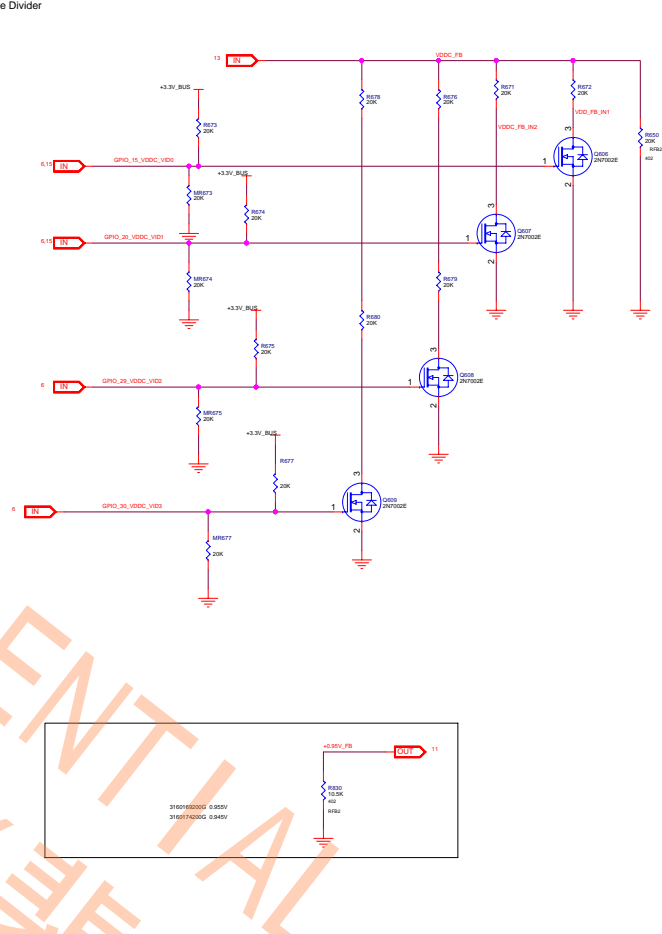
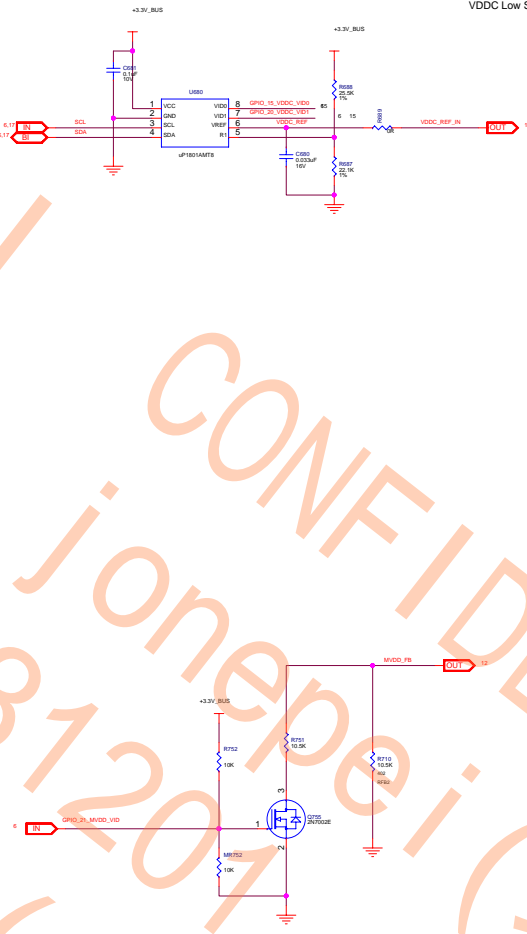
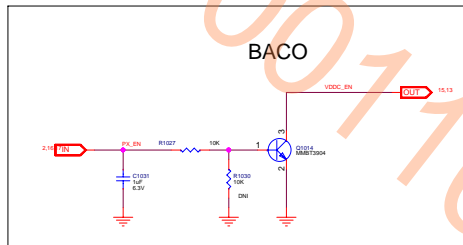
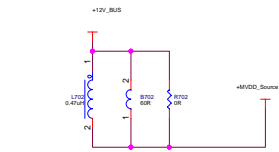
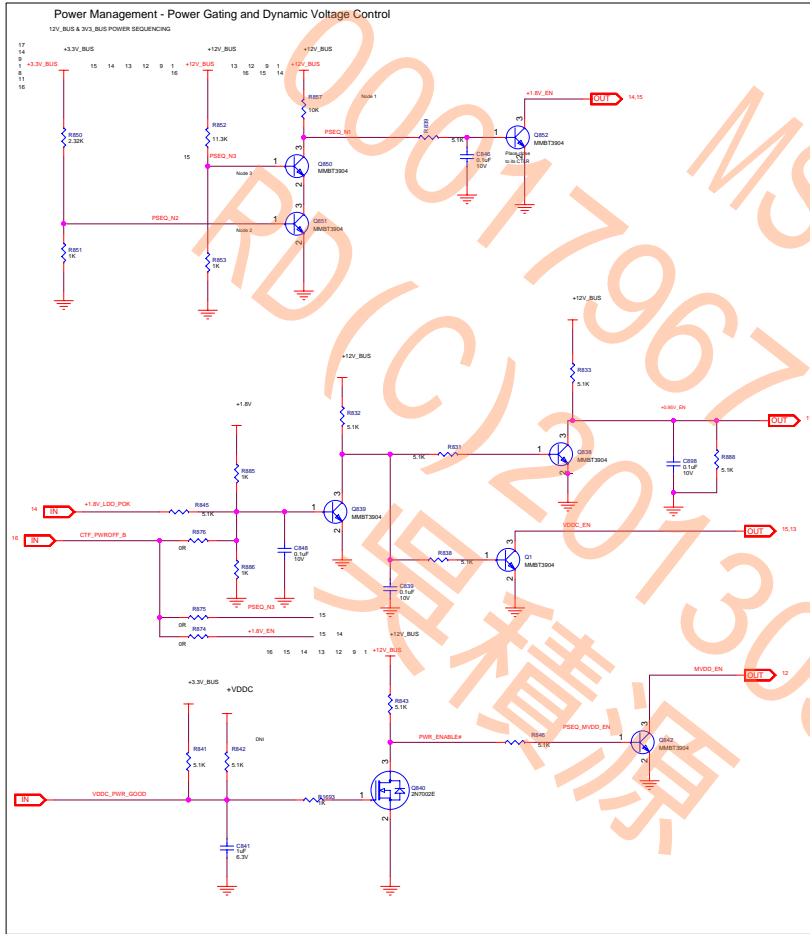
AMD - GRAPHICS
1 COMMERCE VALLEY
MARKHAM, ONTARIO, L3T 7X6

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SHEET:			
DATE:	LinTan Reg. 2012 11:29 2012		
SHEET NUMBER:	14	OF	20
DOCUMENT NUMBER:	105-C552xx-00		
NOTES:	NOTE		

TITLE: Oland Pro DDR3 2GB SL_DVI-I+HDM/DP+VGA

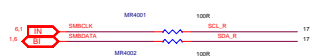
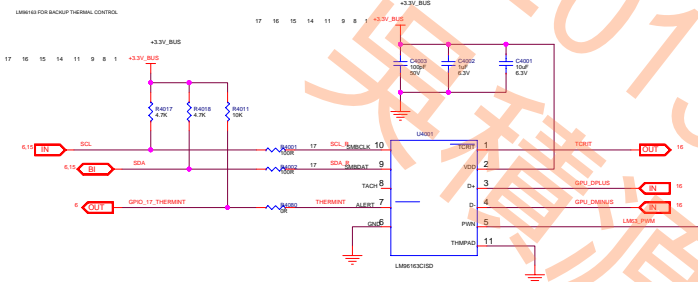
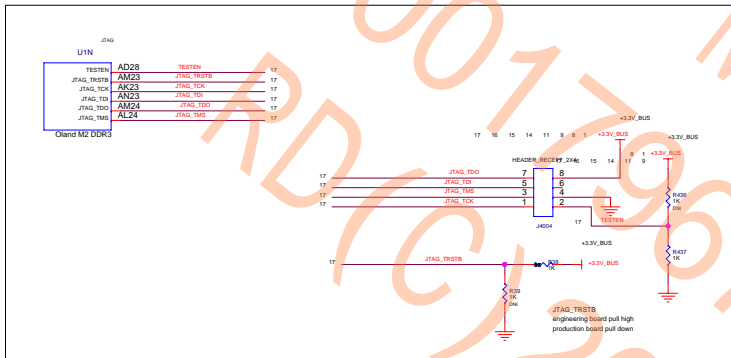


AMD - GRAPHICS 1 COMMERCE VALLEY MARKHAM, ONTARIO, L3T 7X6	
SHEET:	
DATE: PVB/AM/03/2012	REV: P01
SHEET NUMBER: 15	OF 20
DOCUMENT NUMBER: 105-C852x-00	
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TITLE: Oland Pro DDR3 2GB SL_DVI+HDMI+VGA

(19) Debug Circuits



AMD - GRAPHICS 1 COMMERCE VALLEY MARKHAM, ONTARIO, L3T 7X6	
SHEET:	
DATE: Dellug Ship# 21:11:30 2012	REV: P01
SHEET NUMBER: 17	OF 20
DOCUMENT NUMBER: 105-C852xx-00	
NOTES: NOTE	

AMD - GRAPHICS 1 COMMERCE VALLEY MARKHAM, ONTARIO, L3T 7X6	
SHEET: 17 OF 20	
DATE: Dellug Ship# 21:11:30 2012	
REV: P01	
DOCUMENT NUMBER: 105-C852xx-00	
NOTES: NOTE	

Oland Pro DDR3 2GB SL_DVI+HDMI+VGA

DVI-I	HPD2	DDCAUX1
HDMI0P	HPD1	DDCAUX2

12V_BUS
5.5A

MVDD SOURCE
1.5A

1.5V@10A

VDDCI SOURCE
0.6A

1.05V@6A

VDDC PHASE1 SOURCE
2.7A

VDDC@25A

VDDC PHASE2 SOURCE
2.7A

VDDC@25A

FAN
0.5A

0.95V SOURCE
1.5A

0.95V@2A


1.8V_LDO
0.5A

1.8V@0.5A




3.3V@60mA

3.3V_BUS
3A

GPIO15	VDDC_VDD	
GPIO20	VDDC_VDD1	
GPIO29	VDDC_VDD2	
GPIO30	VDDC_VDD3	
GPIO31	MVDD_VDD	

AMD - GRAPHICS 1 COMMERCE VALLEY MARKHAM, ONTARIO, L3T 7X6		
SHEET:	GPIO DDC HPD map	
DATE:	Tue Aug 07 21:11:30 2012	REV: P01
SHEET NUMBER:	18 OF 20	
DOCUMENT NUMBER:	105-C852xx-00	
NOTES:	NOTE	

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TITLE: Oland Pro DDR3 2GB SL_DVI+HDMI+DP+VGA	

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			TITLE		SCHEMATIC NO.		DATE																																																																																
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