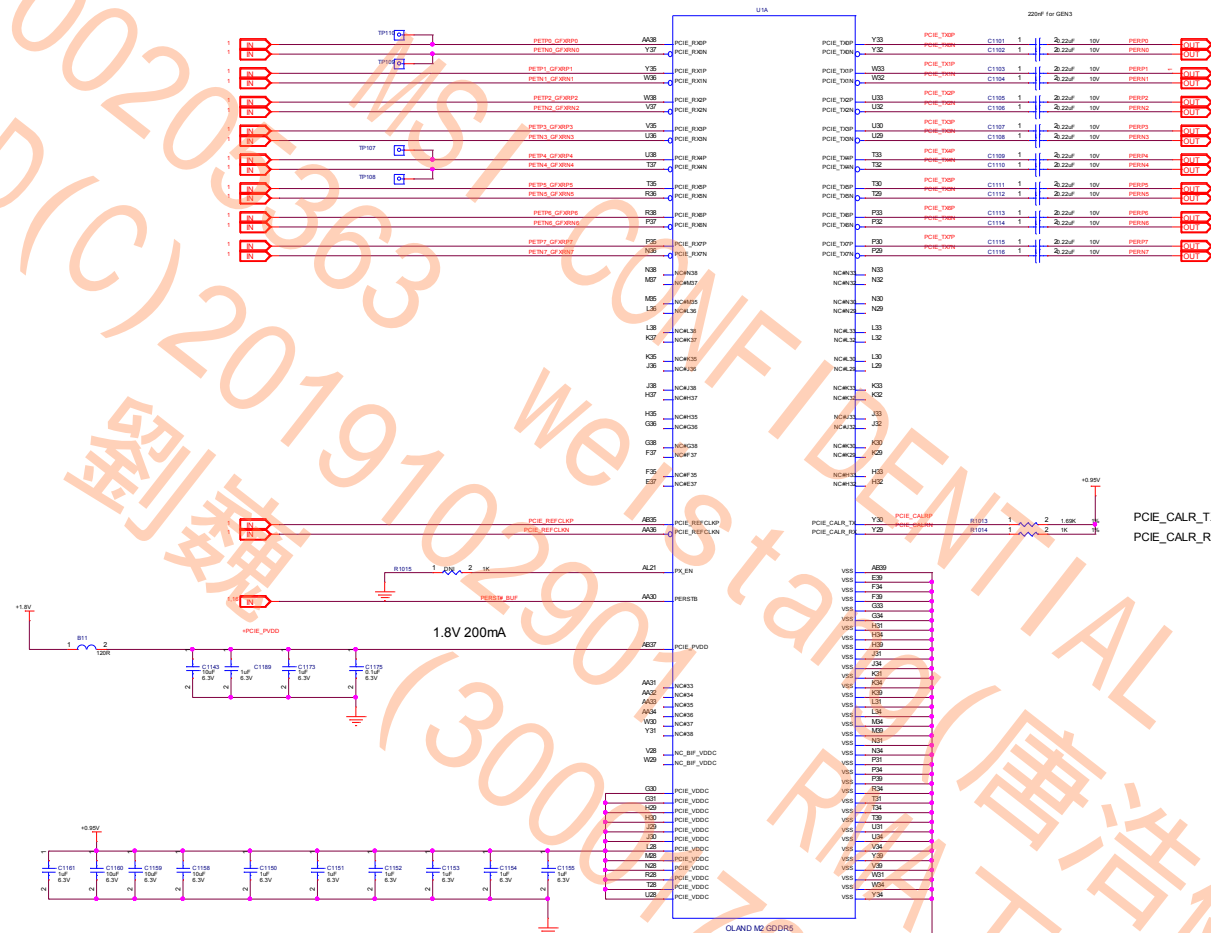



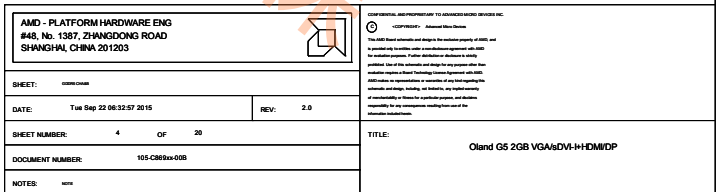
Oland PCIe Interface

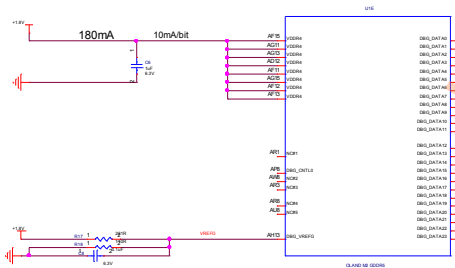
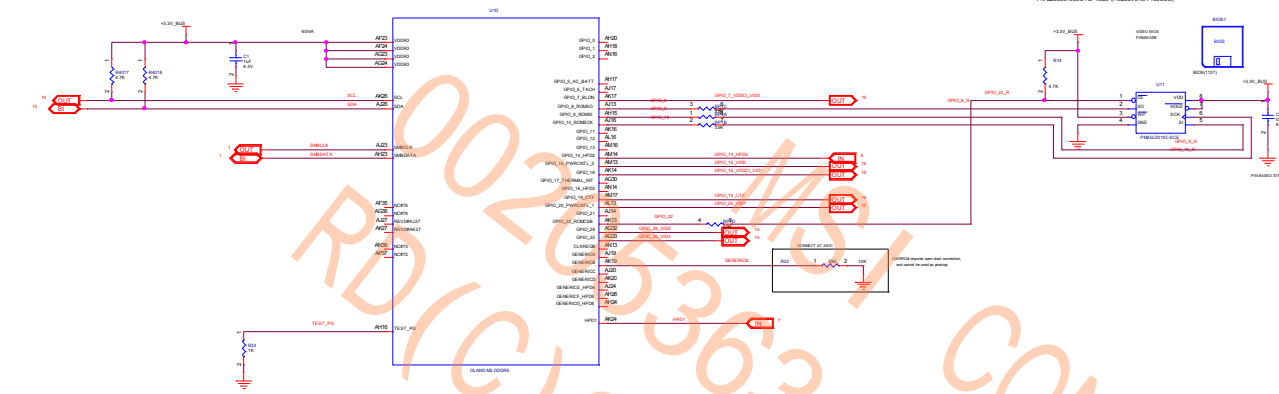
NOTE: Some of the PCIE testpoints will be available through vias on traces.



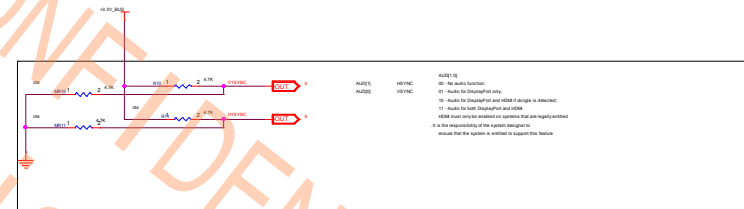
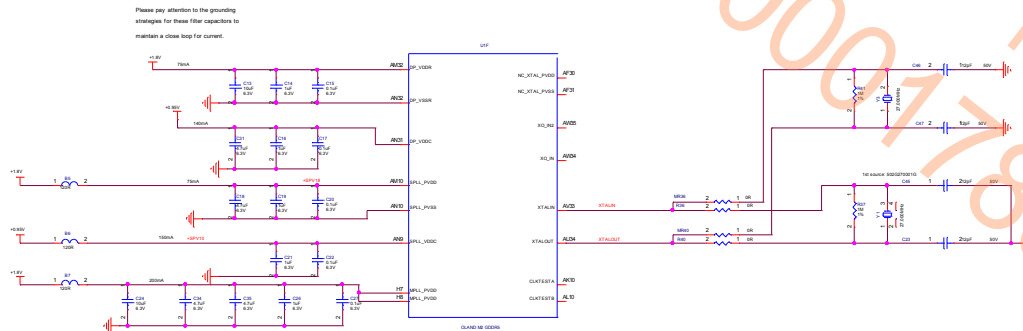
PCIE_CALR_TX 1.69k pull up for Oland
PCIE_CALR_RX 1k pull up for Oland

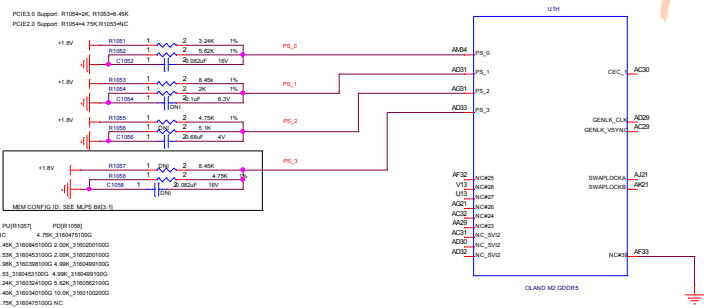
AMD - PLATFORM HARDWARE ENG #448, No. 1387, ZHANGDONG ROAD SHANGHAI, CHINA 201203	<div style="text-align: center;">  </div> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p style="margin: 0;">CONFIDENTIAL AND PROPRIETARY (1) TO ADVANCED MICRODEVICES INC.</p> <p style="margin: 0;">©COPYRIGHT (c) Advanced Micro Devices</p> <p style="margin: 0;">This AMD/BSI schematic and design is the exclusive property of AMD and is provided only to entities under a non-disclosure agreement with AMD or its authorized partners. Further distribution or disclosure is strictly prohibited. Use of this schematic and design for any purpose other than what is intended is a direct violation of our Non-Disclosure Agreement with AMD. AMD makes no representations or warranties of any kind regarding this schematic and design, including, but not limited to, any copyright claim of third-party content or the use of a particular product, and disclaims responsibility for any consequences resulting from the use of the information contained herein.</p> </div>
SHEET: Clamd PCIe Interface	REV. 2.0
DATE: Mon Sep 21 10:05:43 2015	
SHEET NUMBER: 2 OF 20	TITLE: Clamd G5 2GB VGA+DVI+HDMI+DP
DOCUMENT NUMBER: 105-C8809-00B	




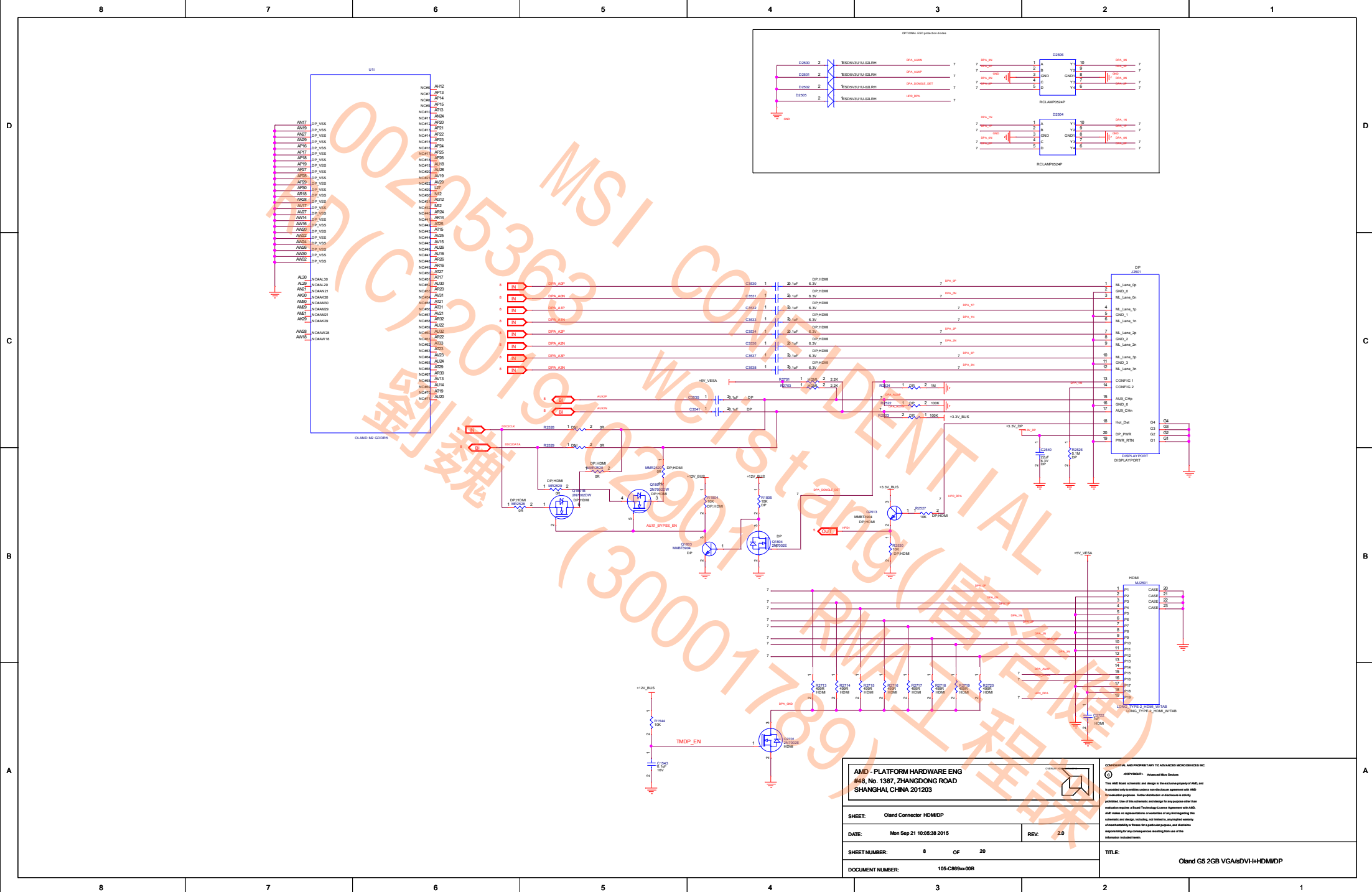


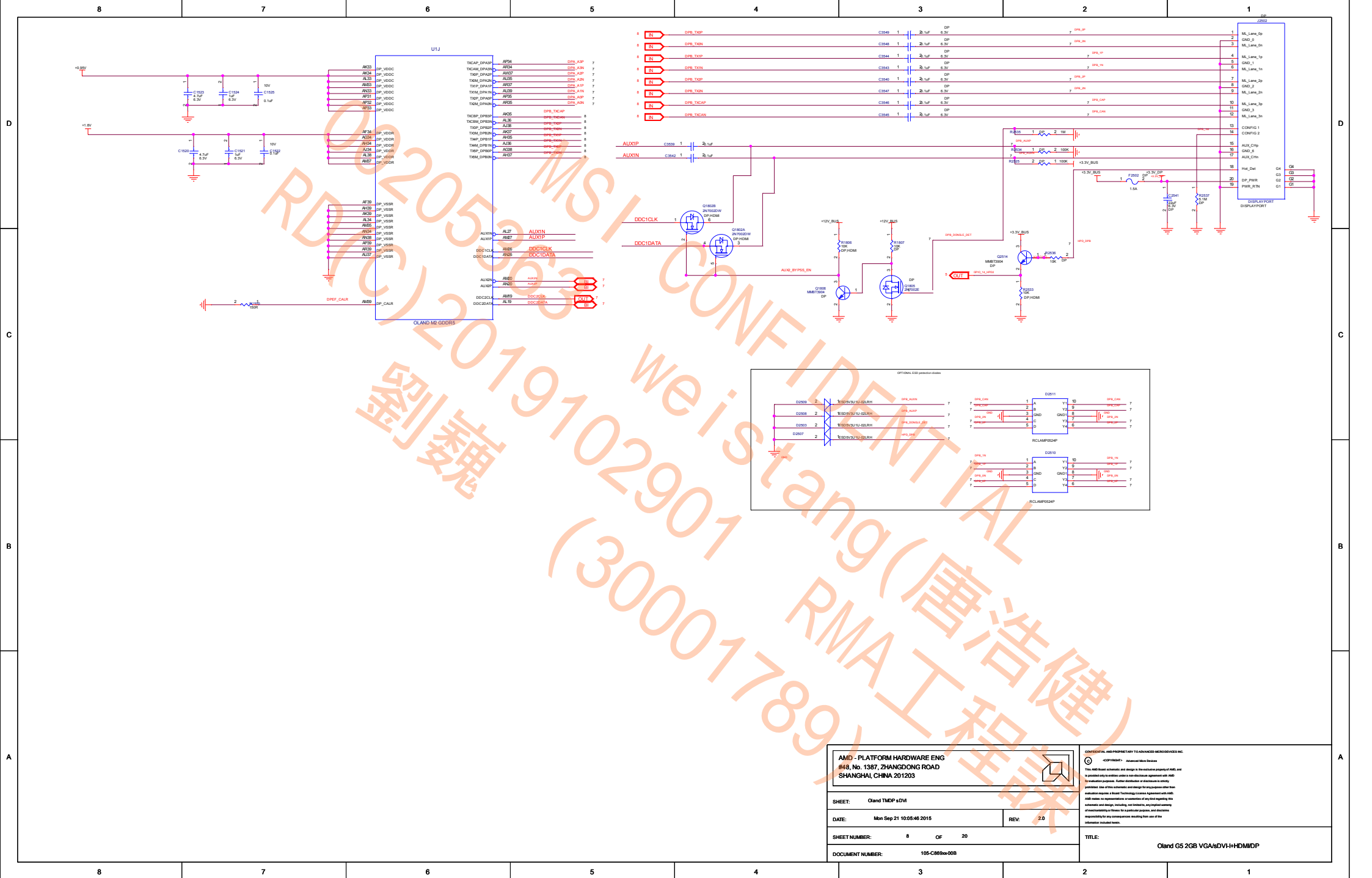
Place the crossfire
testpoints near the ASIC and
not the connector



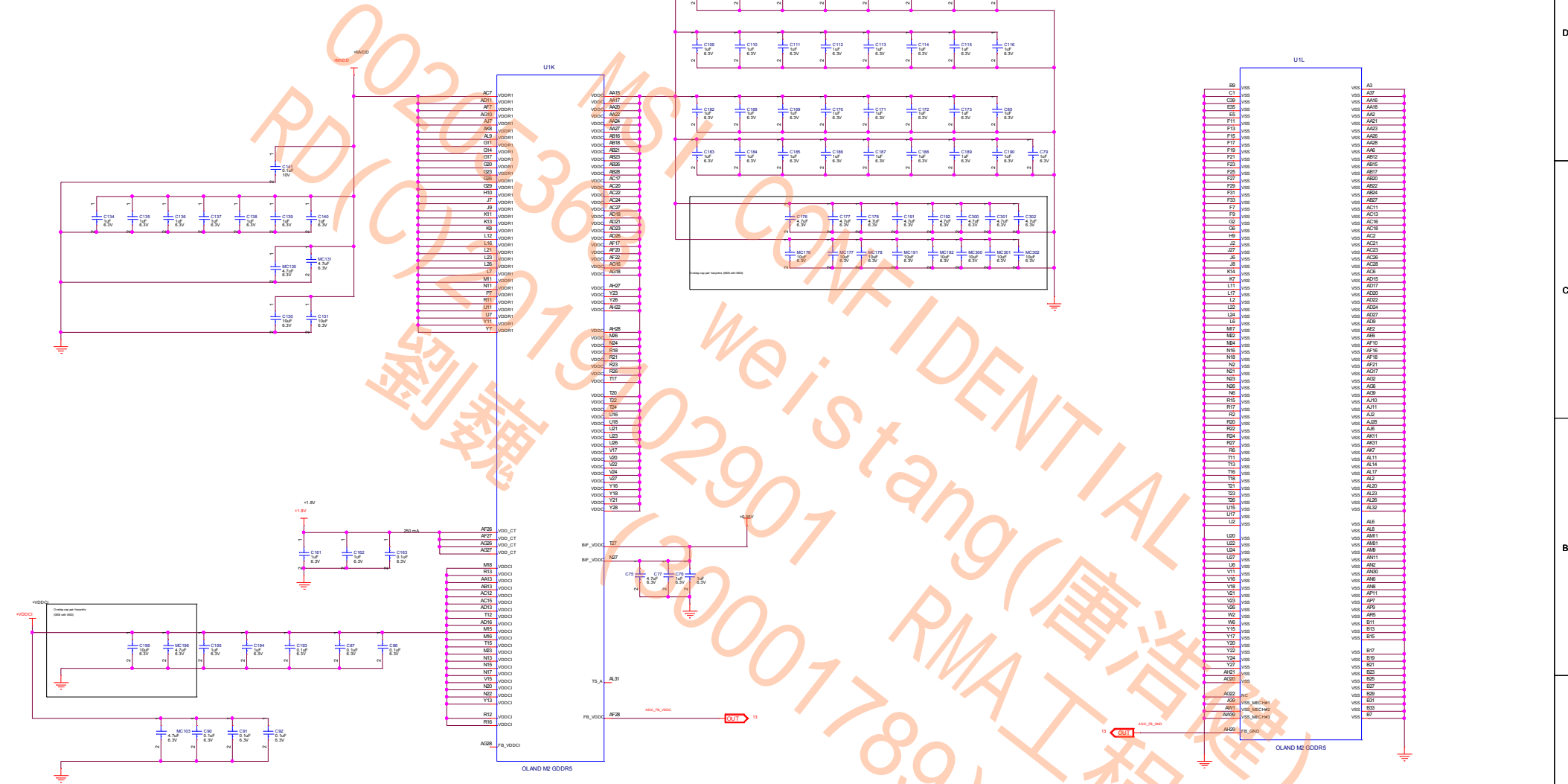


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<p>SHEET: Oland DAC and MLPS</p>	
<p>DATE: Tue Sep 22 06:32:58 2015</p>	<p>REV: 2.6</p>
<p>SHEET NUMBER: 6 OF 20</p>	
<p>DOCUMENT NUMBER: 105-C869xx-00B</p>	
<p>NOTES: NOTE</p>	<p>TITLE:</p> <p style="text-align: center; font-weight: bold;">Oland G5 2GB VGA/sDV11+HDMI/DP</p>





OLAND Power & GND



AMD - PLATFORM HARDWARE ENG
#48, No. 1387, ZHANGDONG ROAD
SHANGHAI, CHINA 201203



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SHEET: 01 and Power&GND

DATE: Mon Sep 21 10:05:46 2015

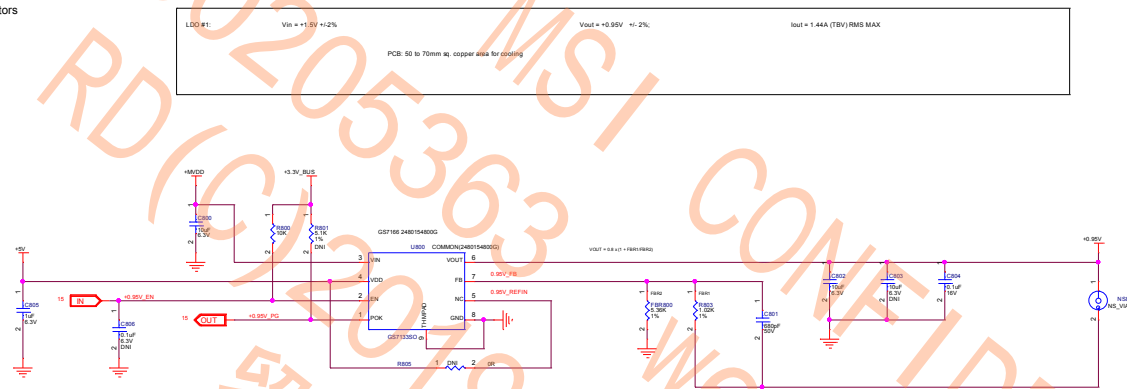
REV: 2.0

SHEET NUMBER: 9 OF 20

TITLE:

Oland G5 2GB VGA/sDVI-I+HDMI/DP

Linear Regulators



AMD - PLATFORM HARDWARE ENG
#48, No. 1387, ZHANGDONG ROAD
SHANGHAI, CHINA 201203



SHEET: 0.95V

DATE: Mon Sep 21 10:05:44 2015

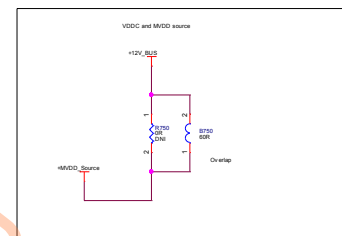
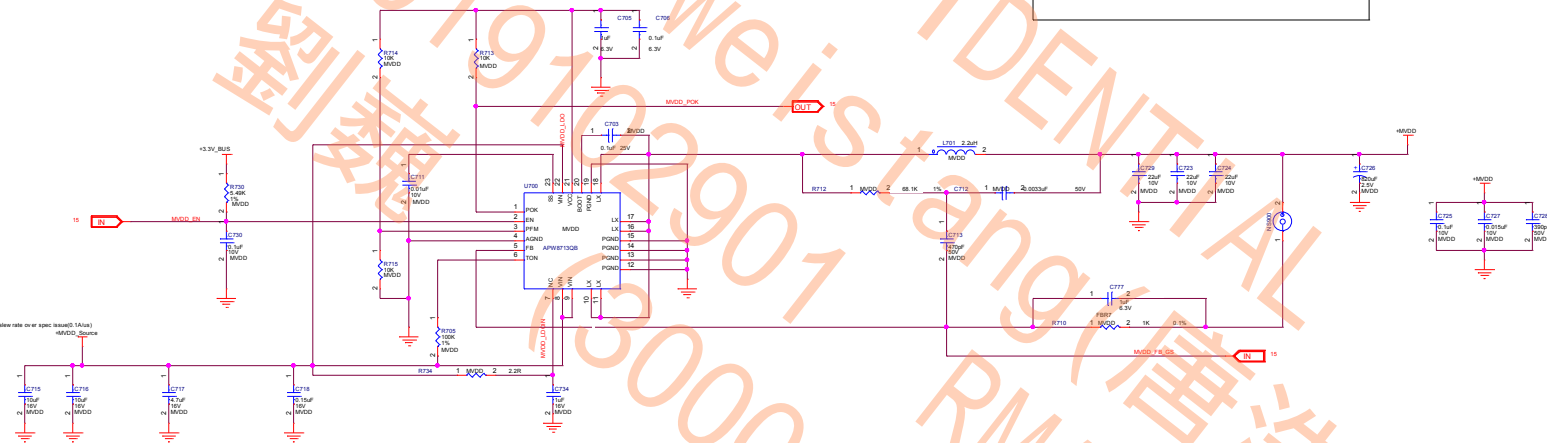
REV: 2.0


SHEET NUMBER: 10 OF 20

DOCUMENT NUMBER: 105-C869xx-00B

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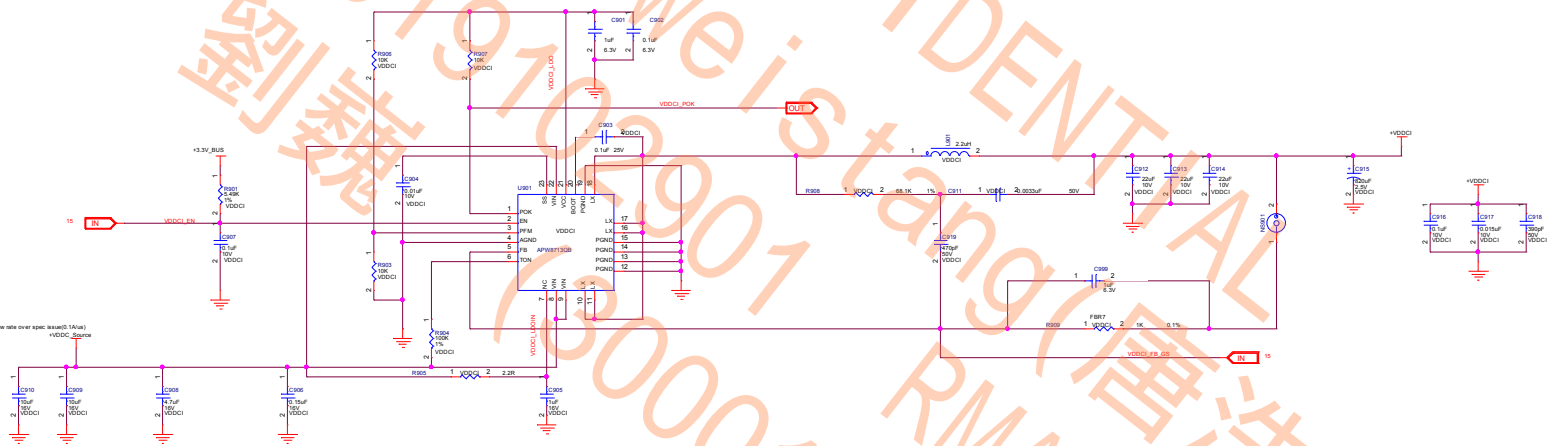
TITLE: Oland G5 2GB VGA/sDVI-I+HDMI/DP



AMD - PLATFORM HARDWARE ENG #48, No. 1387, ZHANGDONG ROAD SHANGHAI, CHINA 201203			
SHEET: MM00		TITLE:	
DATE: Tue Sep 22 06:59:59 2015		REV: 2.0	
SHEET NUMBER: 11 OF 20		TITLE:	
DOCUMENT NUMBER: 105-C89500B		Oland G5 2GB VGAs/DVI+HDMI/DP	

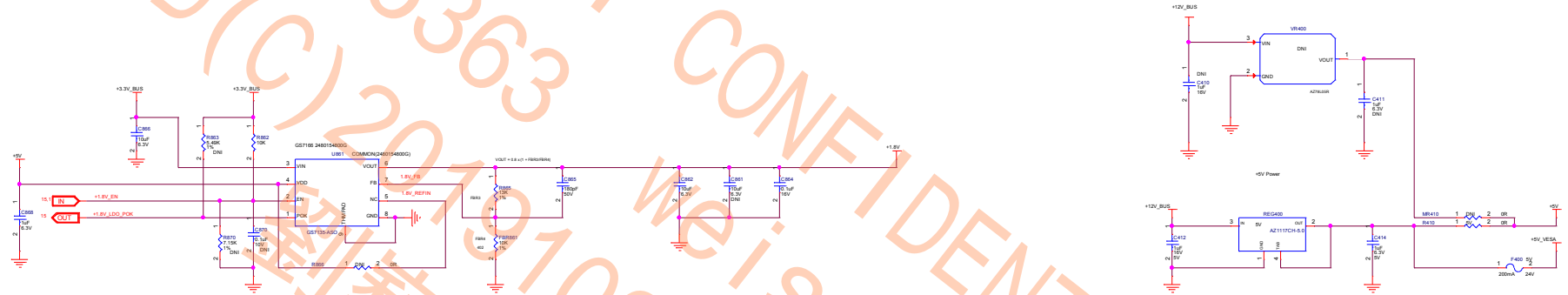
Regulator for VDD0

Use rVDD0_Source to share L801 to eliminate PCIe 12V current slew rate over spec issue(0.1A/us)
rVDD0_Source



Linear Regulators

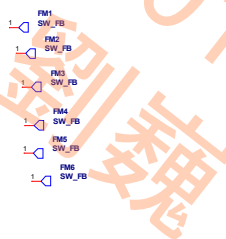
LDO #2:	$V_{in} = 3.00V \text{ to } 3.60V (3.3V \pm 3\%)$	$V_{out} = +1.8V \pm 1.2\%$	$I_{out} = 1.5A (75V)_{RMS\ MAX}$
PCB: 50 to 70mm sq. copper area for cooling			




AMD - PLATFORM HARDWARE ENG #49, No. 1367, ZHANGDONG ROAD SHANGHAI, CHINA 201203	
SHEET: Linear Regulators	
DATE: Mon Sep 21 10:06:44 2015	REV: 2.0
SHEET NUMBER: 14 OF 20	
DOCUMENT NUMBER: 105-C869w-008	

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TITLE: Oland G5 2GB VGA+DVI+HDMI+DP	

(19) Debug Circuits



Bottom
Different
PEX PCIe
85 Ω +/- 10 %
4.33mils/5.51mils



100 ohm

impedance

L4 INNER
Different
Mem Clock
80 ohm +/- 10 %
5.12 mils / 7.48 mils

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TITLE:

Old AMD 52 GB VGA+SDVI-I-HDMI/DP

DW-L	HPD4	DDCAUJM
HDIM	HPD1	DDCAUJM
DP	HPD3	DDCAUJM

GPIO5	VDDC_VDD	
GPIO25	VDDC_VDD1	
GPIO7	VDDC_VDD	DEFAULT1
GPIO5	VR_HDT	

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
1A

0.95V@1A

1.8V_LDO
0.5A

1.8V@0.5A

3.3V@60mA

3.3V_BUS
3A

AMD - PLATFORM HARDWARE ENG
#48, No. 1387, ZHANGDONG ROAD
SHANGHAI, CHINA 201203

SHEET:GPIO DDC HPD map

DATE:Tue Sep 22 06:32:59 2015REV:2.0

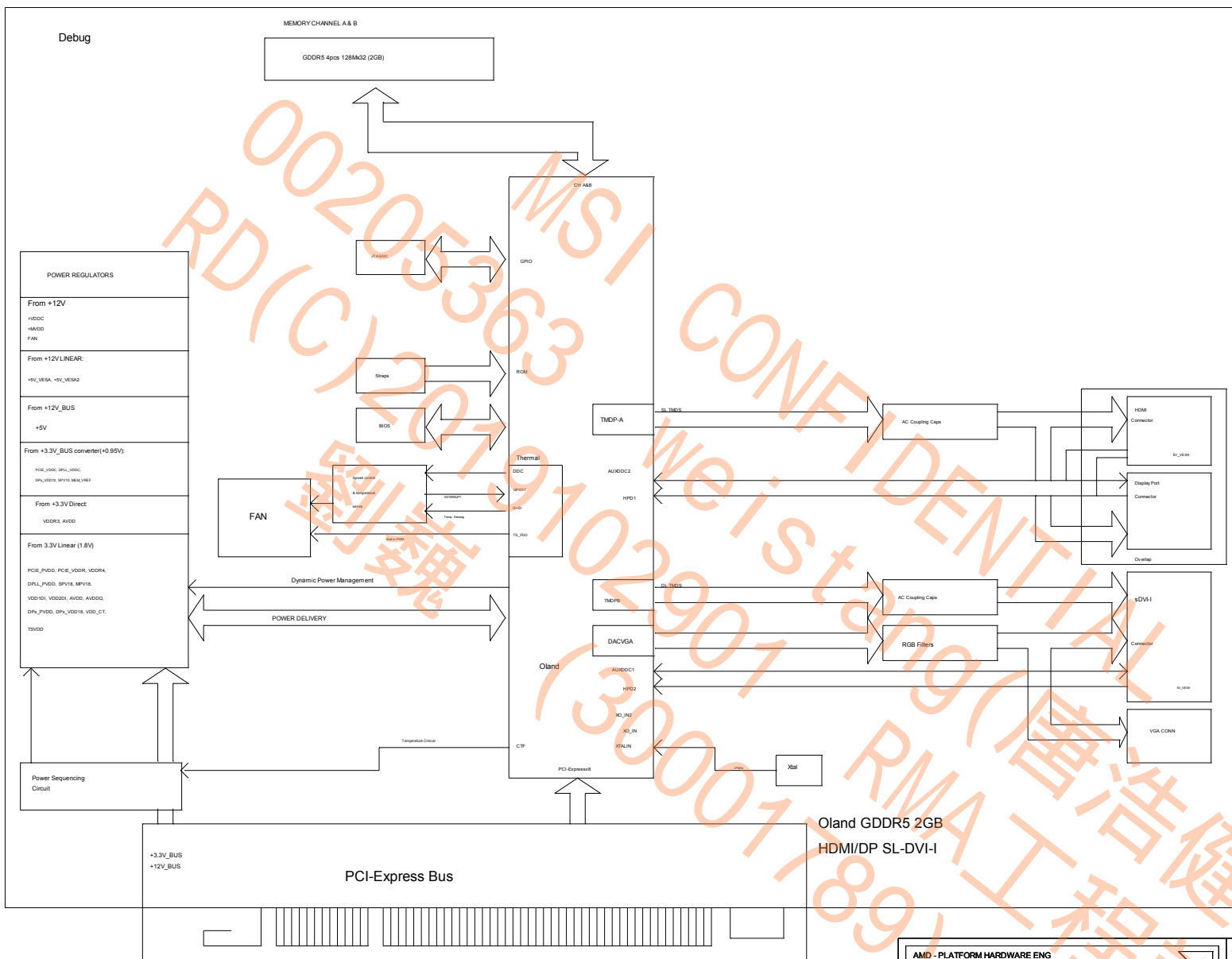
SHEET NUMBER:18OF20


DOCUMENT NUMBER:105-C8690x-008

NOTES:NOTE

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TITLE:
Oland G5 2GB VGA/DVI-HDMI/DP



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SHEET: BLOCK DIAGRAM		DATE: Fri Sep 18 08:34:41 2015		REV: 2.0	
SHEET NUMBER: 19		OF 20		TITLE: Oland G5 2GB VGA/sDVI-I-HDMI-DP	
DOCUMENT NUMBER: 105-C869rev-008					

8		7		6		5		4		3		2		1	
AMD				TITLE: Oland G6 2GB VGA/6DVI+HDMI/DP		DOCUMENT NUMBER: 105-C889w-008		DATE: Tue Sep 22 02:20:17 2015		SHEET NUMBER: 20 OF 20		REV: 2.0			
REVISION HISTORY				ENGINEER: Tony Yang		NOTES: NOTE		<small>CONFIDENTIAL AND PROPRIETARY TO ADVANCED MICRODEVICES INC. This AMD Board schematic and design is the exclusive property of AMD, and is provided only to entities under a non-disclosure agreement with AMD for evaluation purposes. Further disclosure or disclosure to third parties, even if this information was obtained for any purpose other than evaluation without a Board Technology License Agreement with AMD, AMD makes no representation or warranty of any kind regarding this schematic and design, including, not limited to, any implied warranty of non-infringement in third parties for a particular purpose, and disclaims responsibility for any consequences resulting from use of this information without AMD's consent.</small>		<small>CONFIDENTIAL AND PROPRIETARY TO ADVANCED MICRODEVICES INC. This AMD Board schematic and design is the exclusive property of AMD, and is provided only to entities under a non-disclosure agreement with AMD for evaluation purposes. Further disclosure or disclosure to third parties, even if this information was obtained for any purpose other than evaluation without a Board Technology License Agreement with AMD, AMD makes no representation or warranty of any kind regarding this schematic and design, including, not limited to, any implied warranty of non-infringement in third parties for a particular purpose, and disclaims responsibility for any consequences resulting from use of this information without AMD's consent.</small>		AMD - PLATFORM HARDWARE ENG #48, No. 1367, ZHANGDONG ROAD SHANGHAI, CHINA 201203			
SCH Rev		PCB Rev		Date		REVISION DESCRIPTION									
1.00		000		06/19/14		1 Initial release									
2.00		000		09/22/15		2 AMD VGA, 48									

00205363 MSI CONFIDENTIAL RD(C)2019102901 weistang (唐浩健) 劉魏 (30001789) RMA工程課