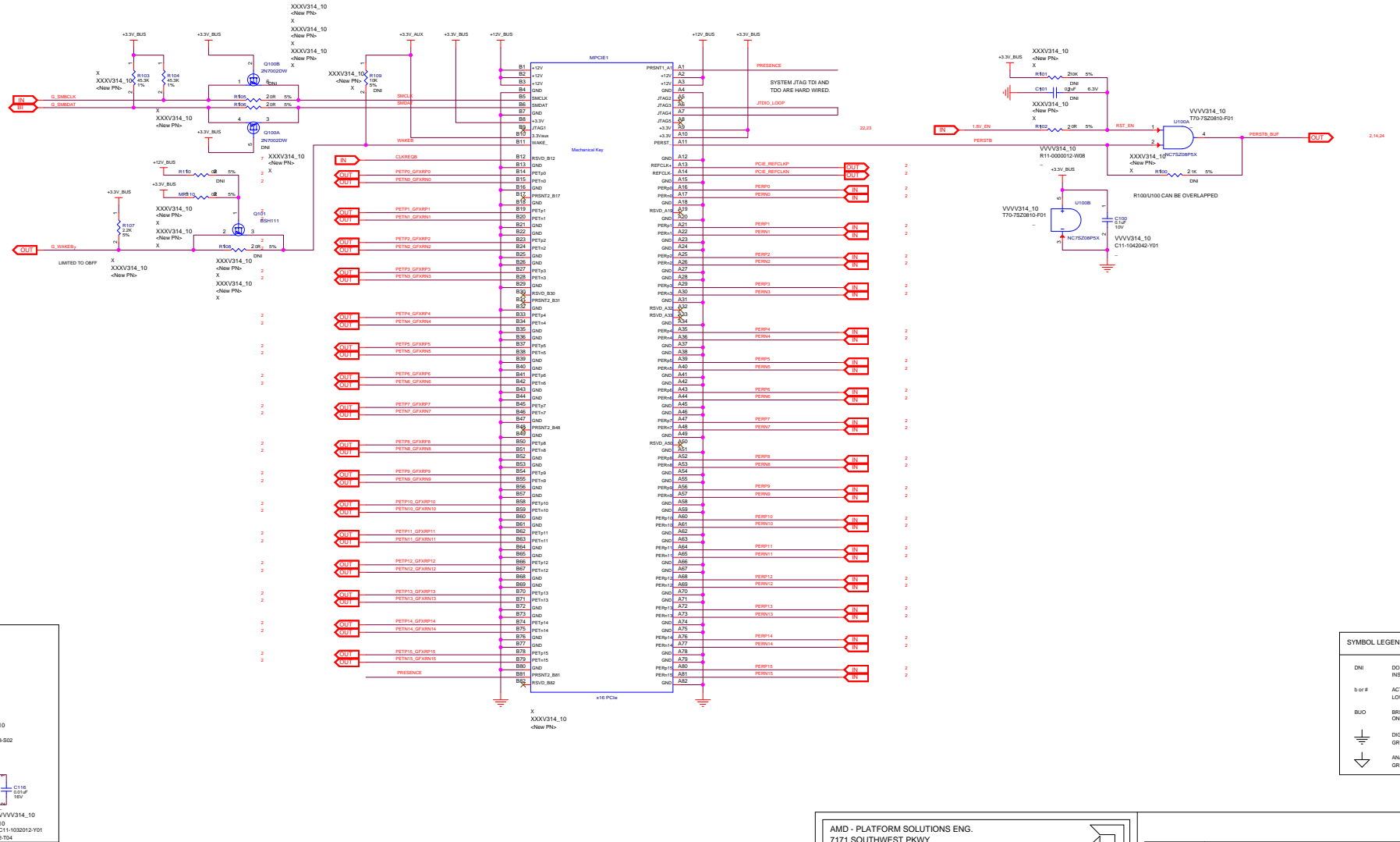


(1) PCI-EXPRESS EDGE CONNECTOR

vlab.su not for sale! thank n0by1



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SHEET: PCI-EXPRESS CONNECTOR

DATE: Mon May 12 19:11:52 2014

REV: 01

SHEET NUMBER: 1 OF 25

DOCUMENT NUMBER: 105-C766xx-00A

MICRO-STAR INT'L CO., LTD.

MS-V314

Size Custom

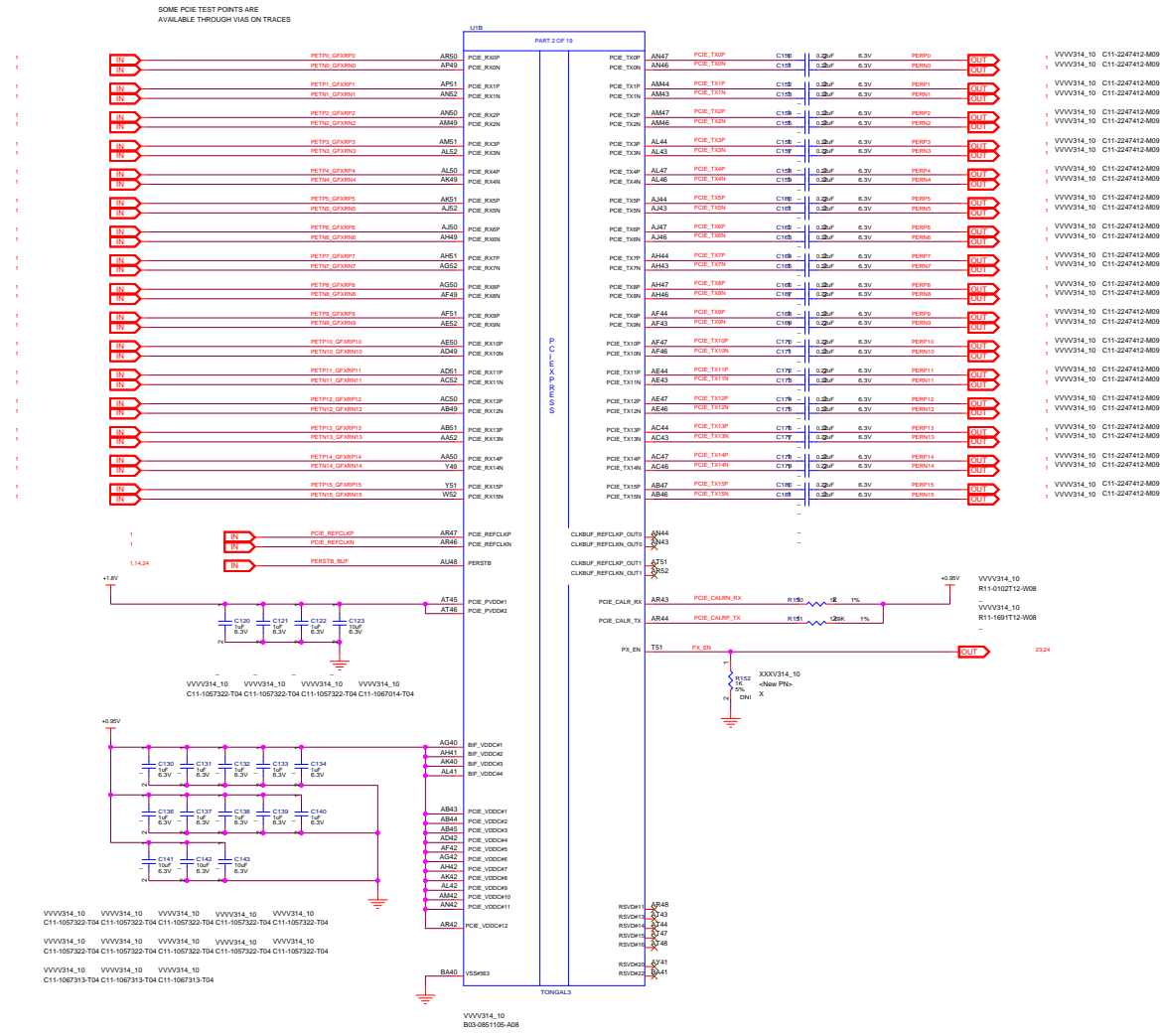
Rev 1.0

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Tonga-z56 G5 x32

(2) PCIE INTERFACE



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AUSTIN, TX. 78735

SHEET:	GPU PCIE		
DATE:	Mon May 12 19:11:54 2014		
SHEET NUMBER:	2	OF	25
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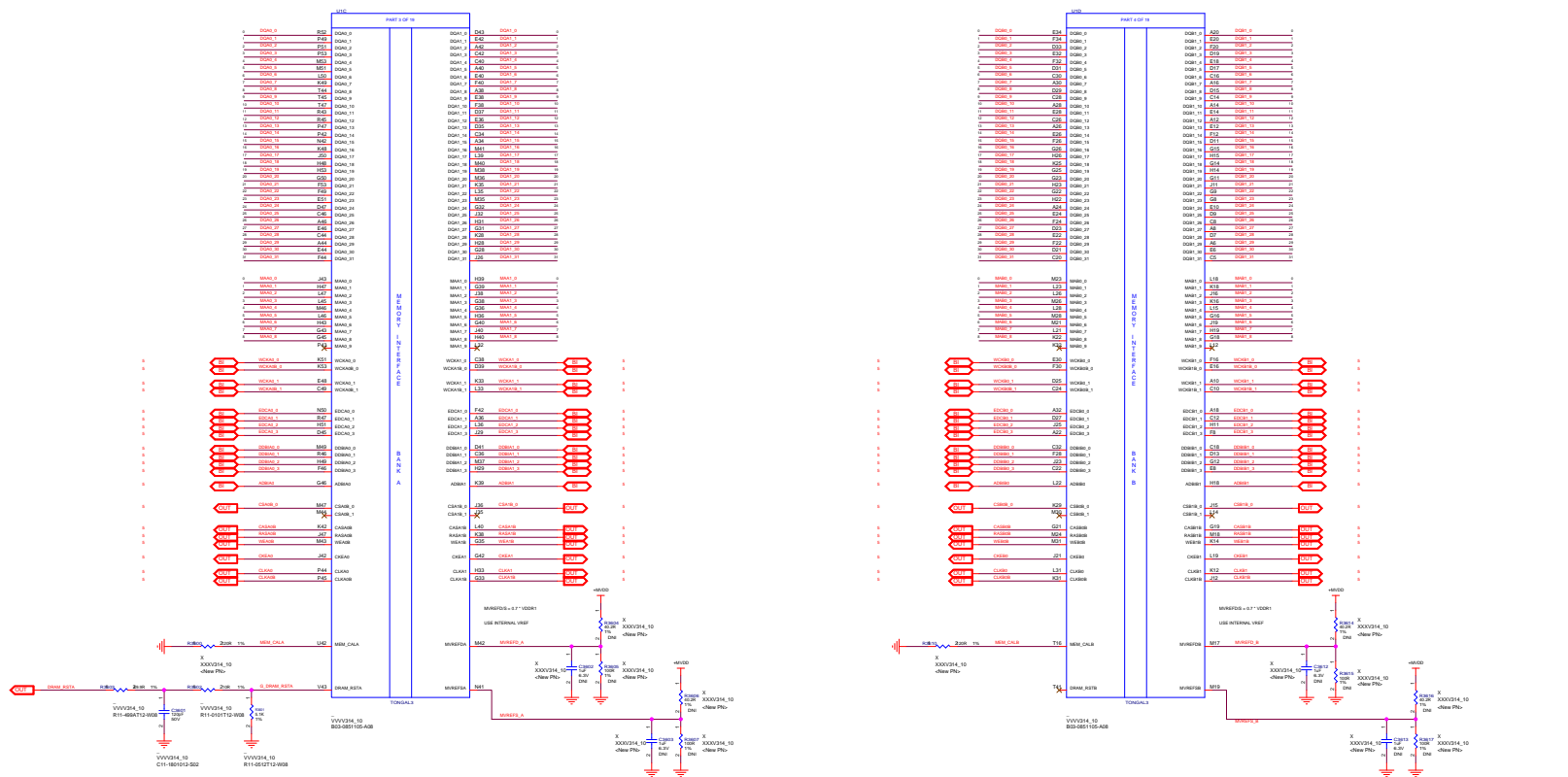
MICRO-STAR INT'L CO., LTD.


MS-V314

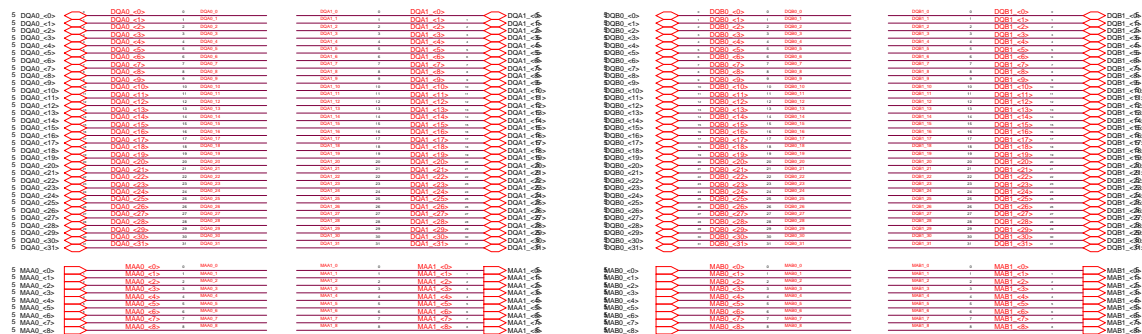
Size Custom	Rev 1.0
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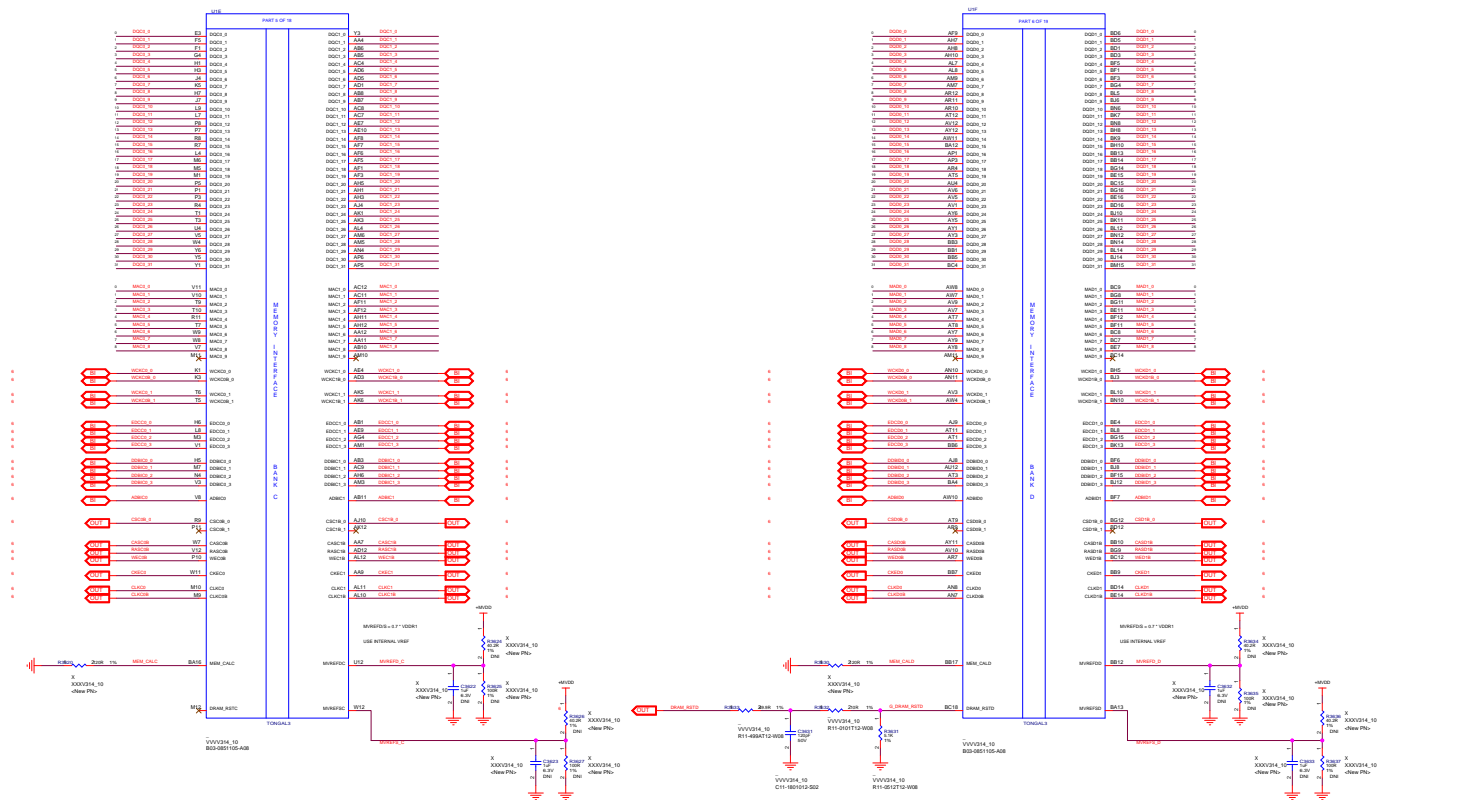
(3) MEM INTERFACE CH AB



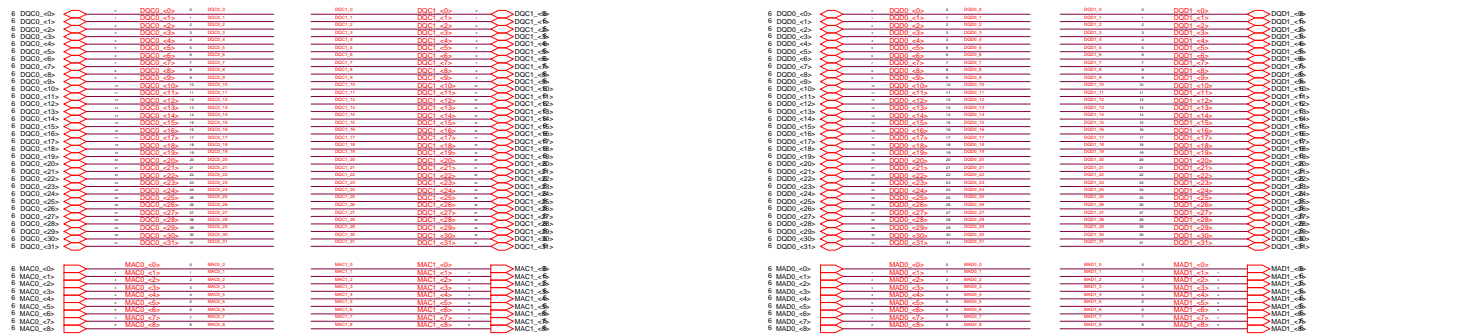
AND - PLATFORM SOLUTIONS ENG. 7171 SOUTHWEST PKWY AUSTIN, TX. 78735				MICRO-STAR INT'L CO., LTD. MS-V314 <small>SKU Number</small>		<small>Rev</small> 1
<small>SHEET:</small> GPU MECH DY A/B		<small>REV:</small> 01		<small>Date:</small> Tuesday, April 12, 2014		<small>Sheet</small> 3 of 38
<small>DATE:</small> Mon May 12 19:11:02 2014		<small>TITLE:</small> Tonga-256 G5 x32				
<small>SHEET NUMBER:</small> 3 OF 25		<small>DOCUMENT NUMBER:</small> 105-C7698-00A				



(4) MEM INTERFACE CH CD

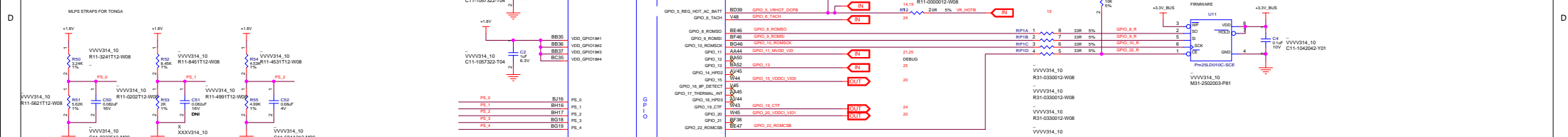


AMD - PLATFORM SOLUTIONS ENG. 7171 SOUTHWEST PKWY AUSTIN, TX. 78735			
SHEET: GPU MEM CH CD		MS-V314	
DATE: Mon May 12 10:11:52 2014		Rev 1.0	
SHEET NUMBER: 4 OF 25		Title: Tonga-256 G5 x32	
DOCUMENT NUMBER: 105.C766a-05A			

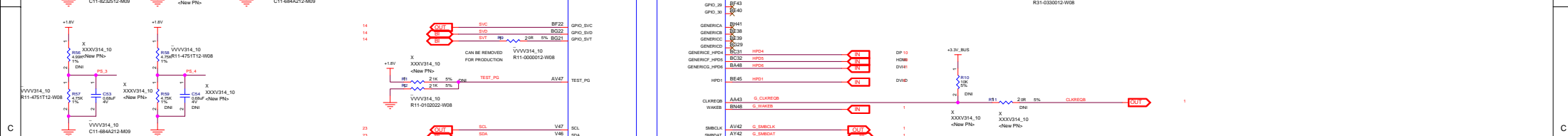


(7) GPIO STRAP CF PLL XTAL

D



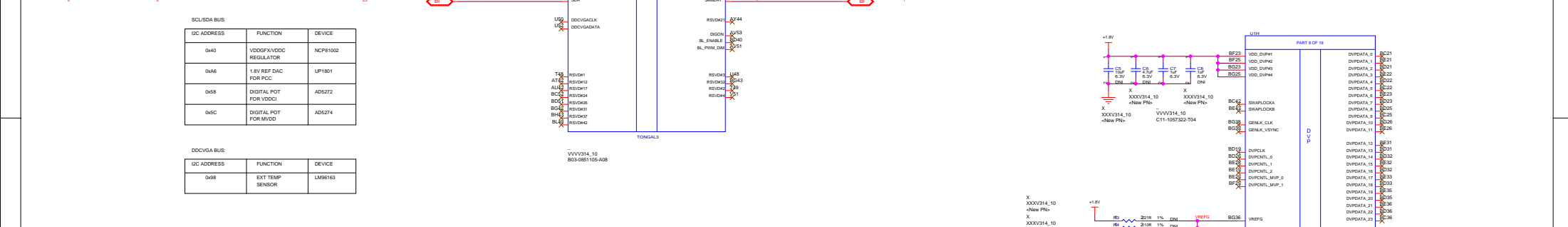
C



SCL/SDA BUS		
I2C ADDRESS	FUNCTION	DEVICE
0x40	VDDQ/VDDC REGULATOR	NCP1002
0x46	1.8V REF DAC FOR PCC	UP1801
0x58	DIGITAL POT FOR VDDCI	AD5272
0x5C	DIGITAL POT FOR MVD0	AD5274

DCCVGA BUS		
I2C ADDRESS	FUNCTION	DEVICE
0x58	EXT TEMP SENSOR	LM96183

B



A



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MSI

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MS-V314

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SHEET: GPU GPIO STRAP CF PLL XTAL

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SHEET NUMBER: 7 OF 25

DOCUMENT NUMBER: 105-C766xx-00A

REV: 01

TITLE: Tonga-Z56 G5 x32

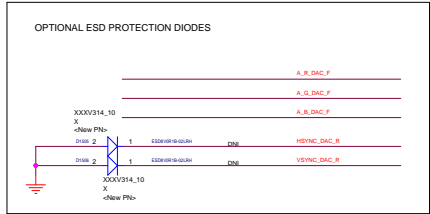
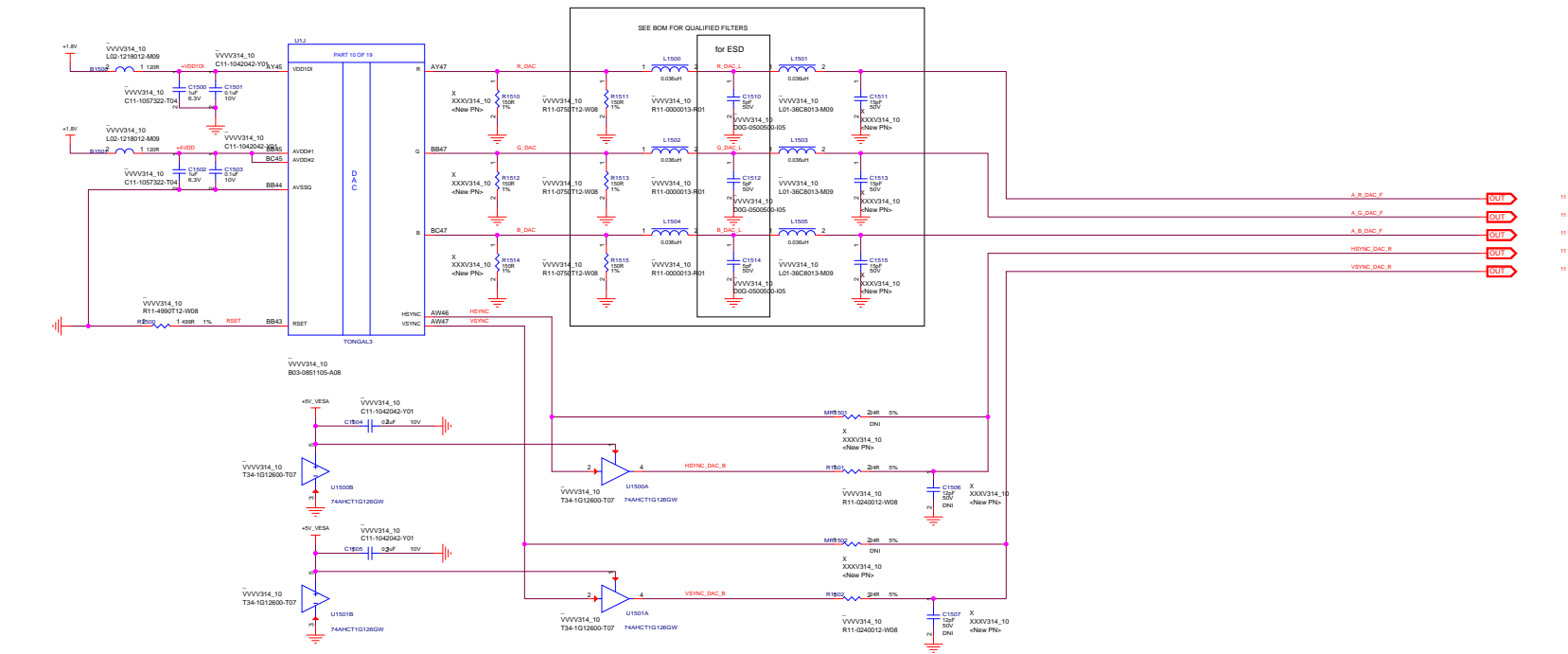
D

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B

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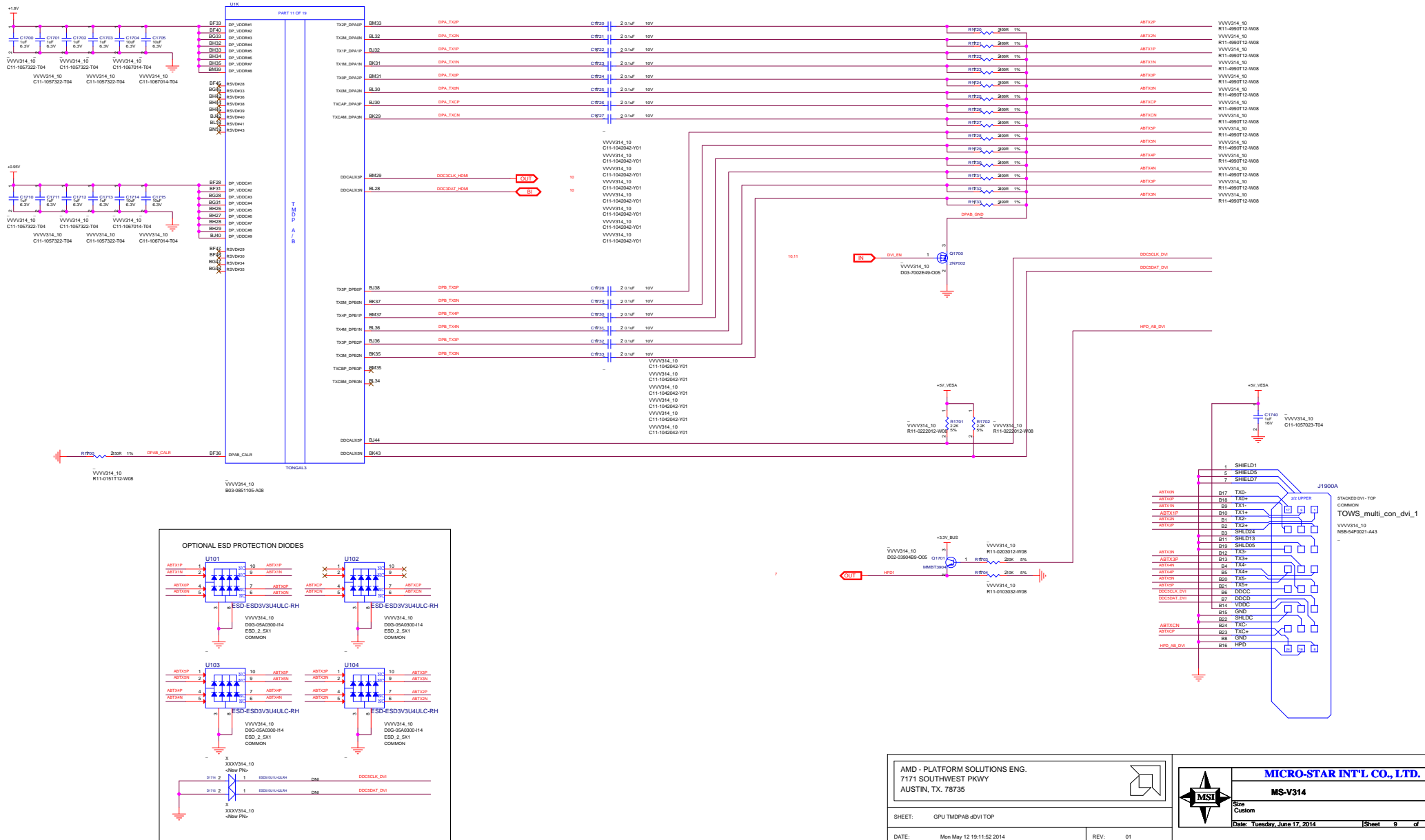
(8) DAC



AMD - PLATFORM SOLUTIONS ENG. 7171 SOUTHWEST PKWY AUSTIN, TX. 78735	
SHEET: GPU DAC	
DATE: Mon May 12 19:11:55 2014	REV: 01
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MS-V314	
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TITLE: Tonga-z56 G5 x32	

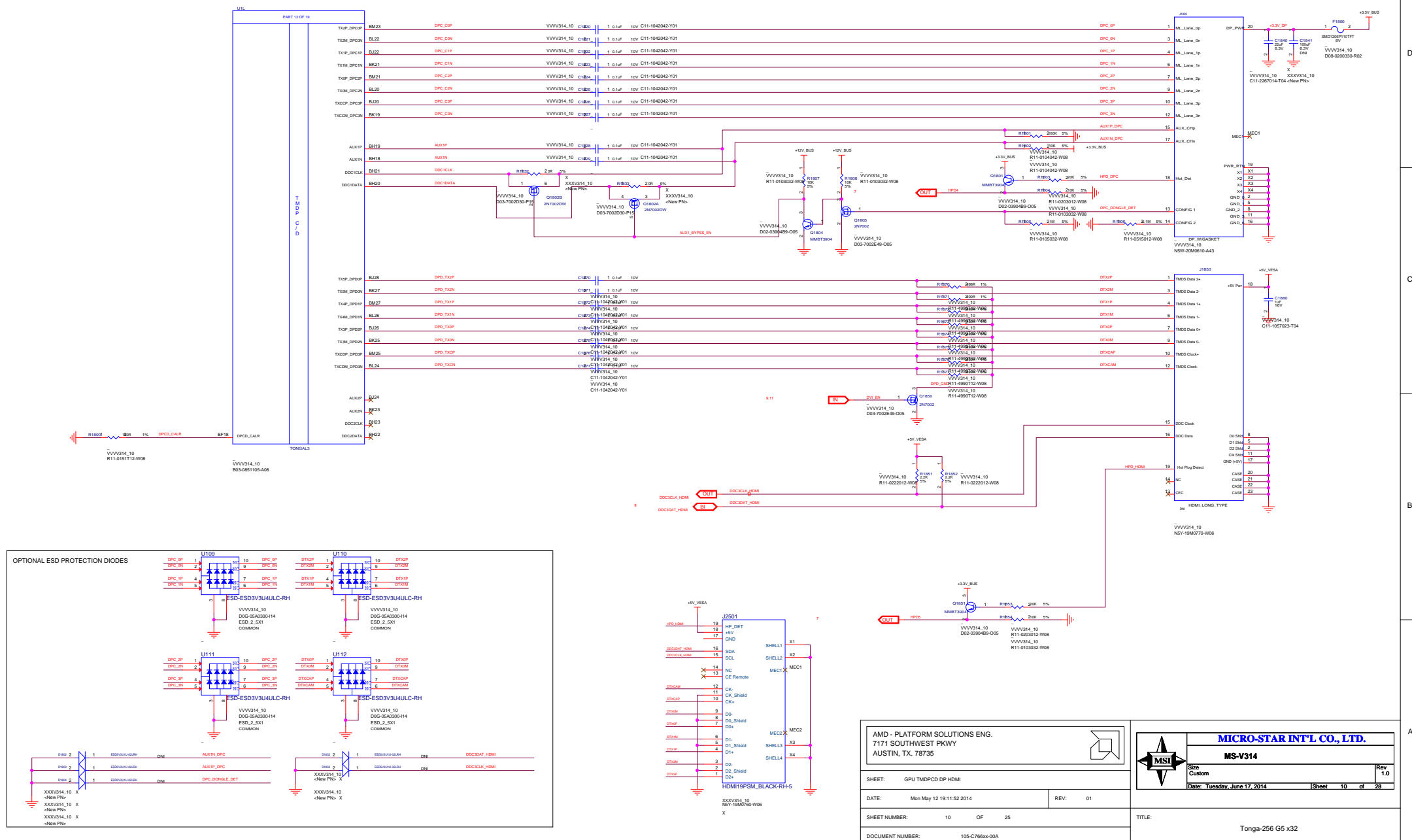
(9) TMDPAB sDVI



AMD - PLATFORM SOLUTIONS ENG. 7711 SOUTHWEST PKWY AUSTIN, TX. 78735			
SHEET: GPU TMDPAB dVBI TOP		REV: 01	
DATE: Mon May 12 10:11:52 2014		SHEET NUMBER: 9 OF 25	
DOCUMENT NUMBER: 105-C766xx-00A		TITLE: Tonga-Z56 G5 x32	

MSI		MS-V314	
Size Custom		Rev 1.0	
Date: Tuesday, June 17, 2014		Sheet 9 of 28	

(10) TMDPCD DP HDMI



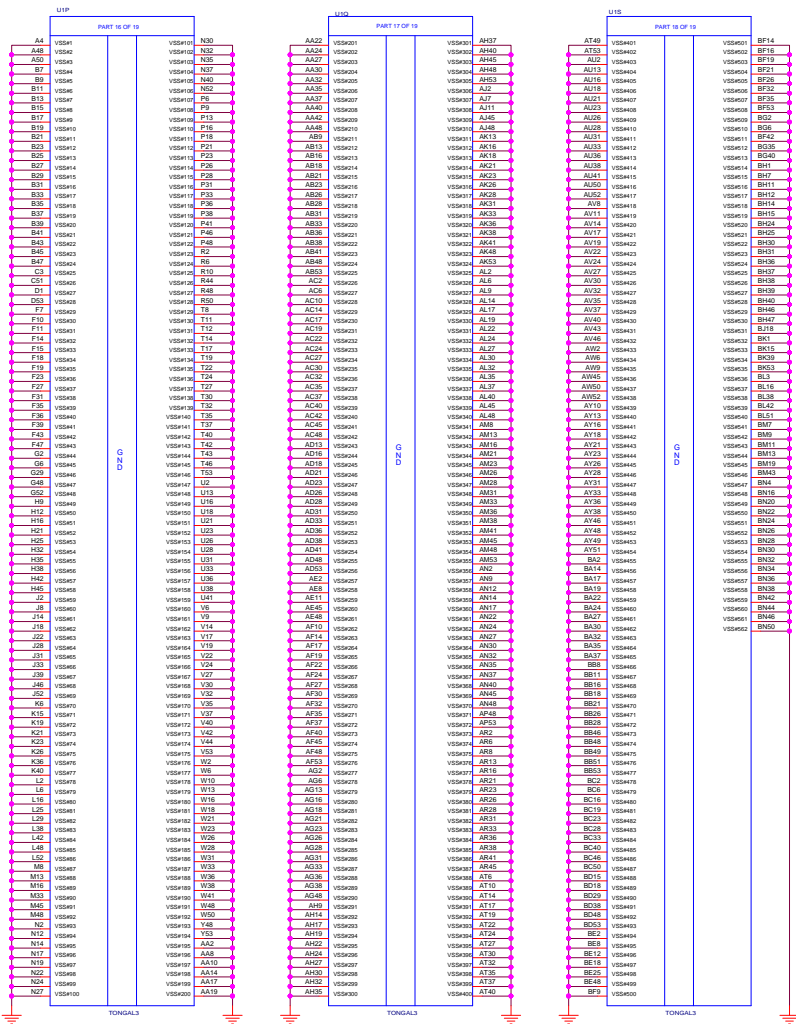
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DOCUMENT NUMBER: 105-C766xx-00A



(13) GND



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Size
Custom

Date: **Tuesday, June 17, 2014**

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SHEET: GPU GND

DATE: Mon May 12 19:11:55 2014

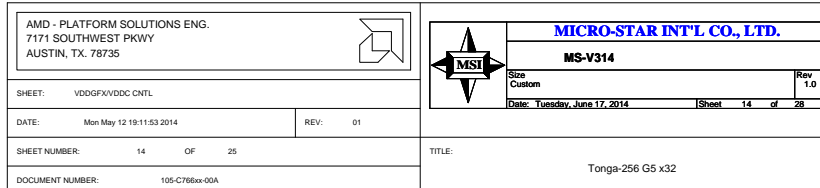
REV: 01

SHEET NUMBER: 13 OF 25

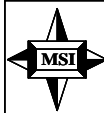
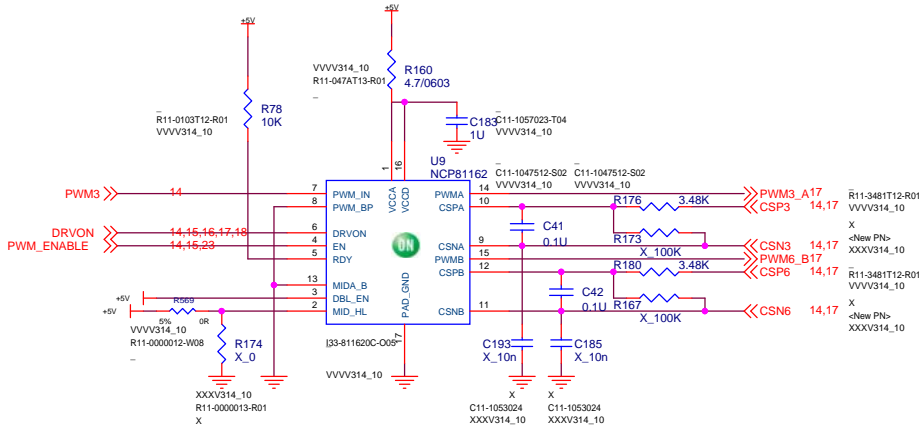
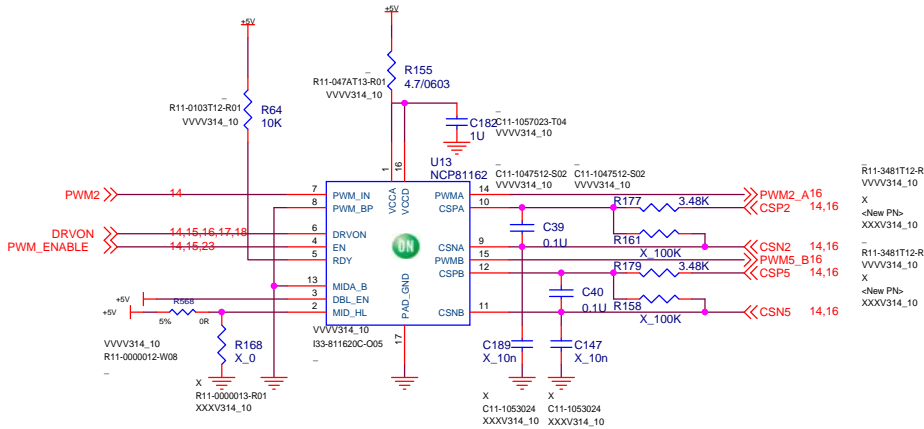
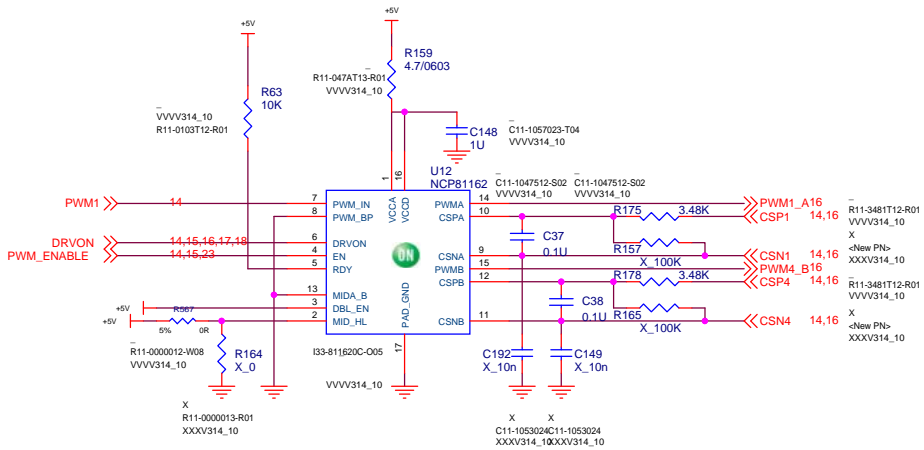
DOCUMENT NUMBER: 105-C766xx-00A

TITLE:

Tonga-Z56 G5 x32



(15) PHASE DOUBLERS



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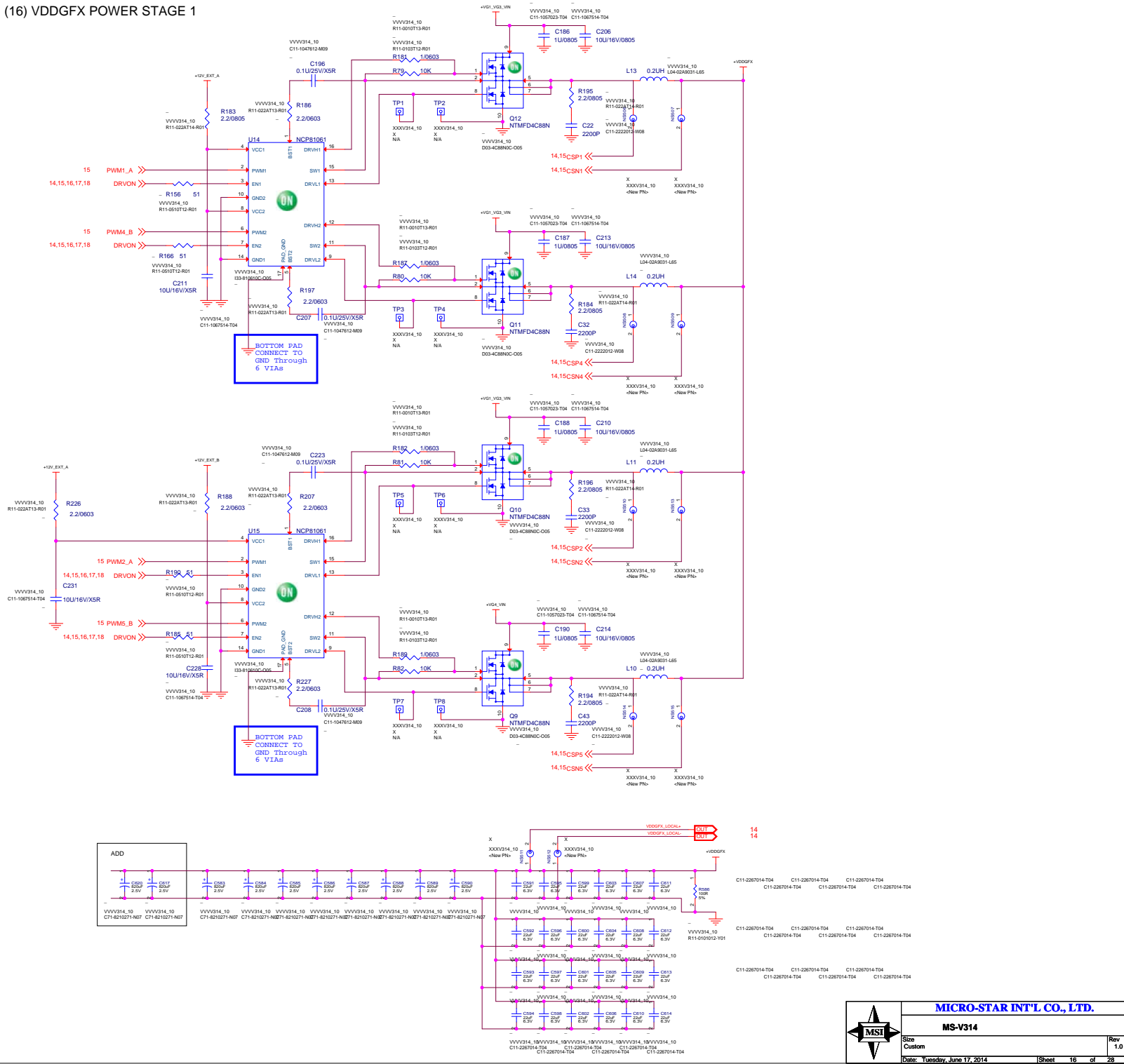
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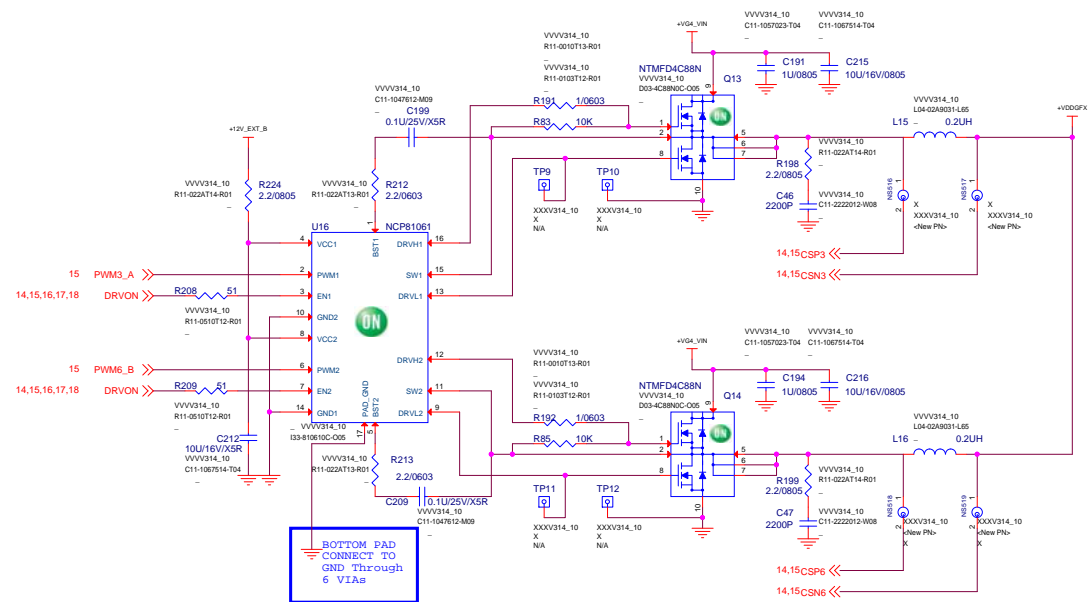
Rev
1.0

Date: Tuesday, June 17, 2014

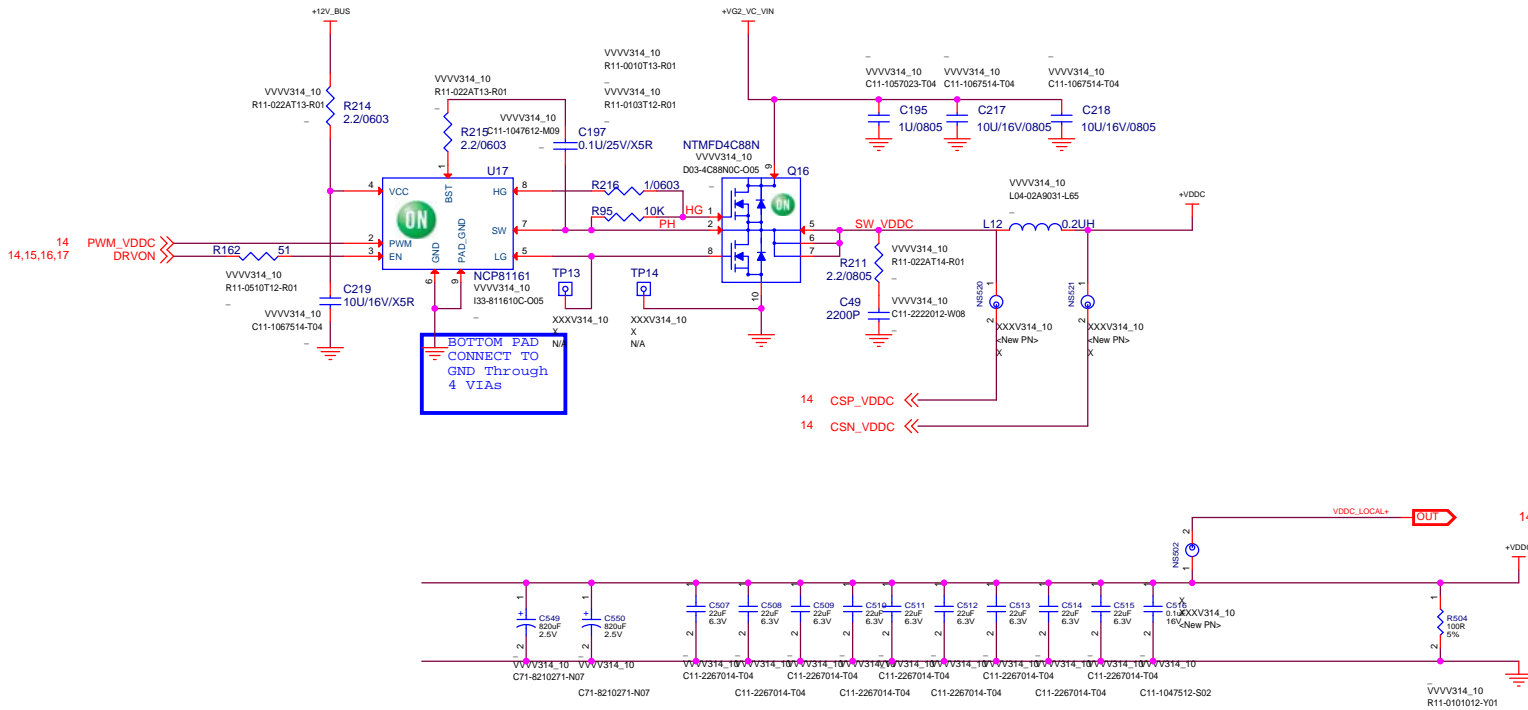
Sheet 15 of 28


(16) VDDGFX POWER STAGE 1



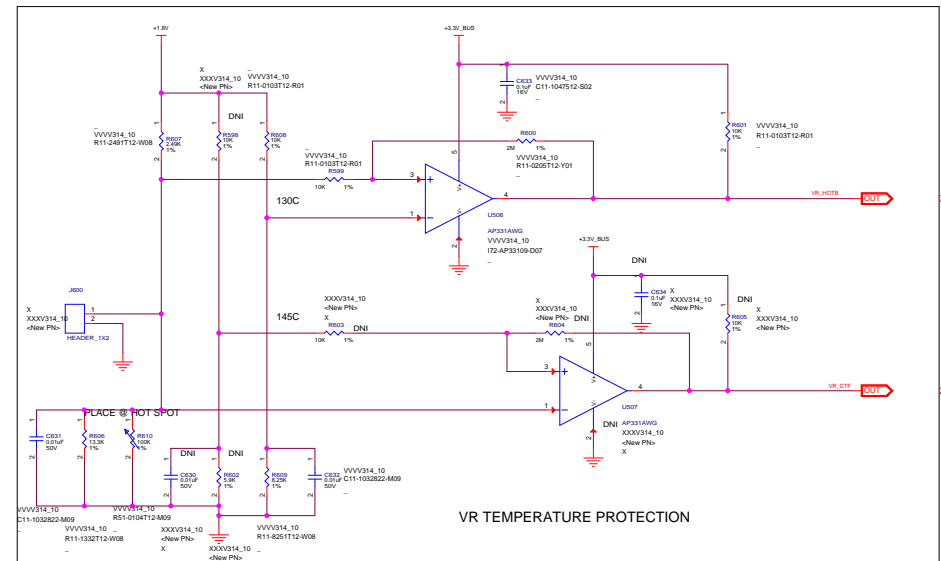
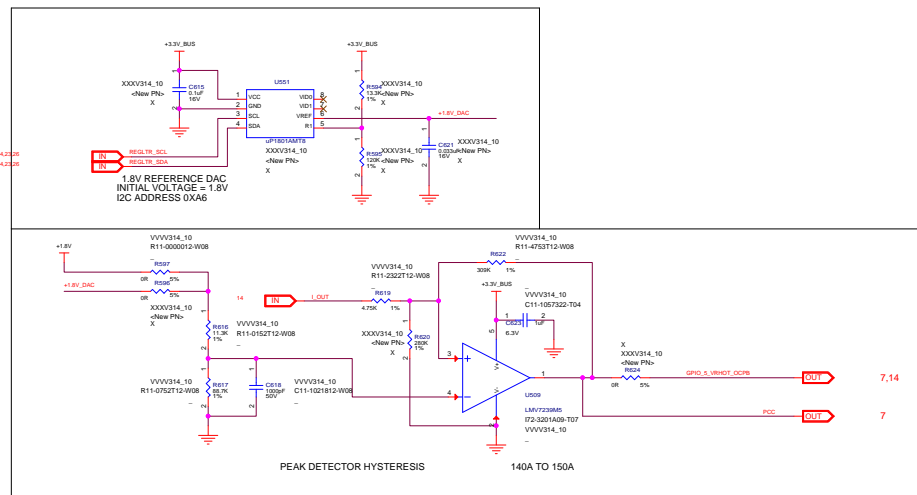


(18) VDDC OUTPUT STAGE



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(19) PCC & VRHOT



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MS-V314
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TITLE: Tonga-256 G5 x32

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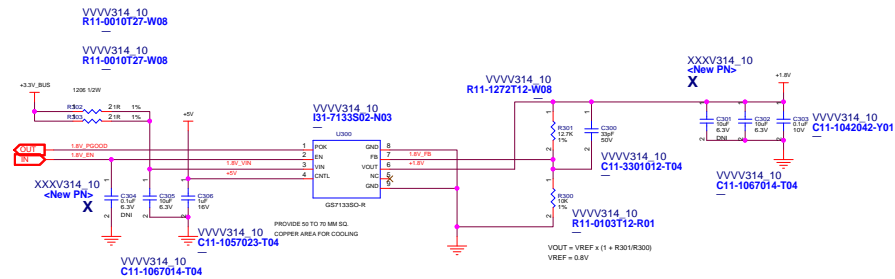
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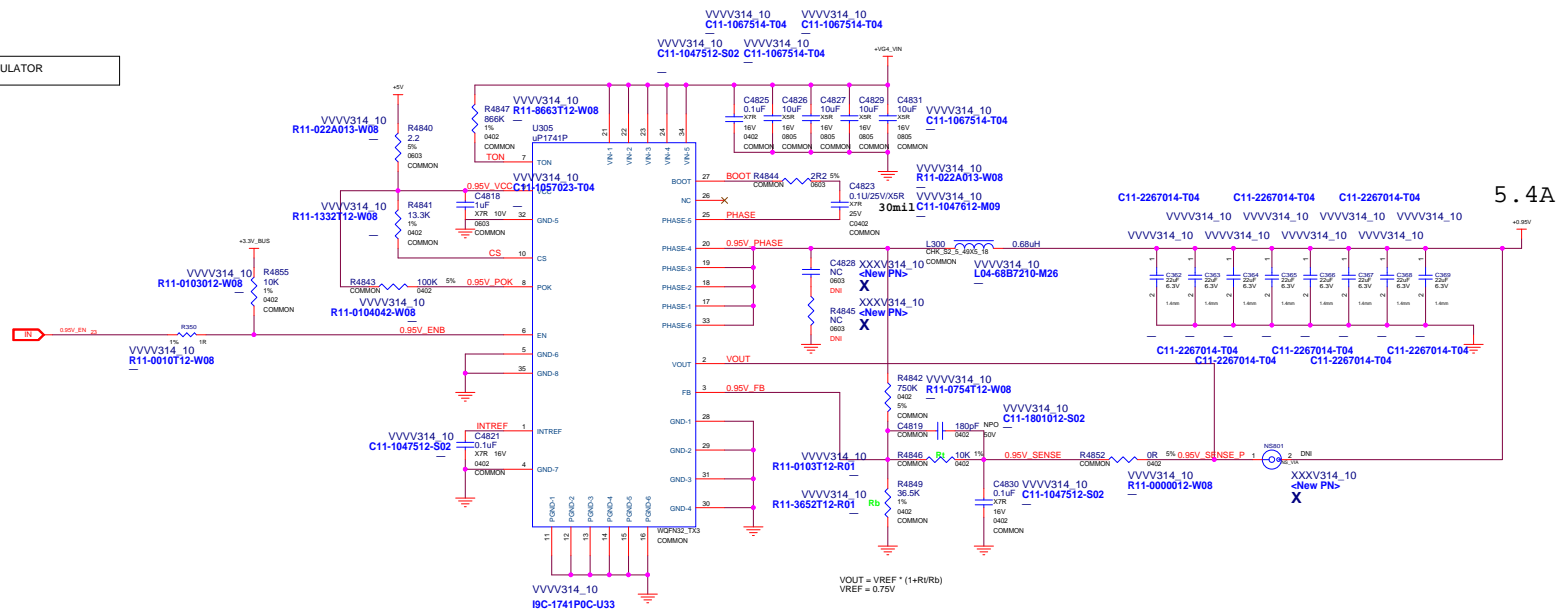


(22) SMALL RAIL REGULATOR

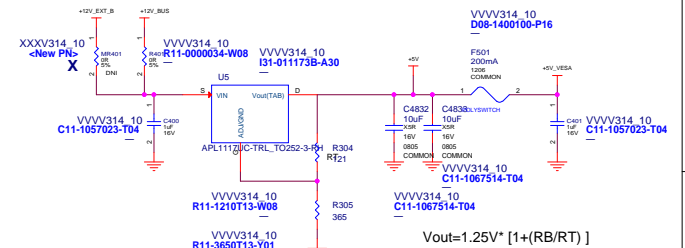
1.8V REGULATOR





0.95V REGULATOR



5V REGULATOR



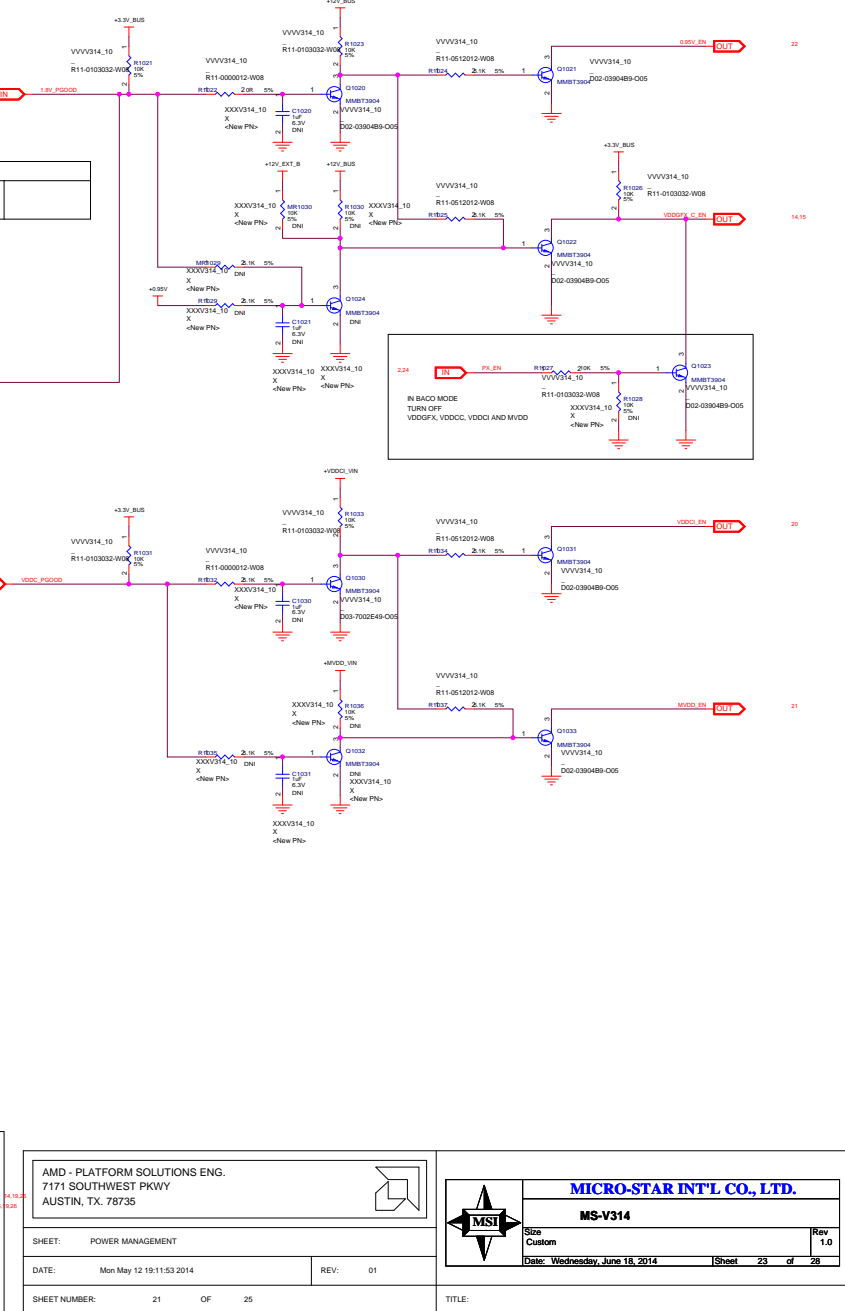
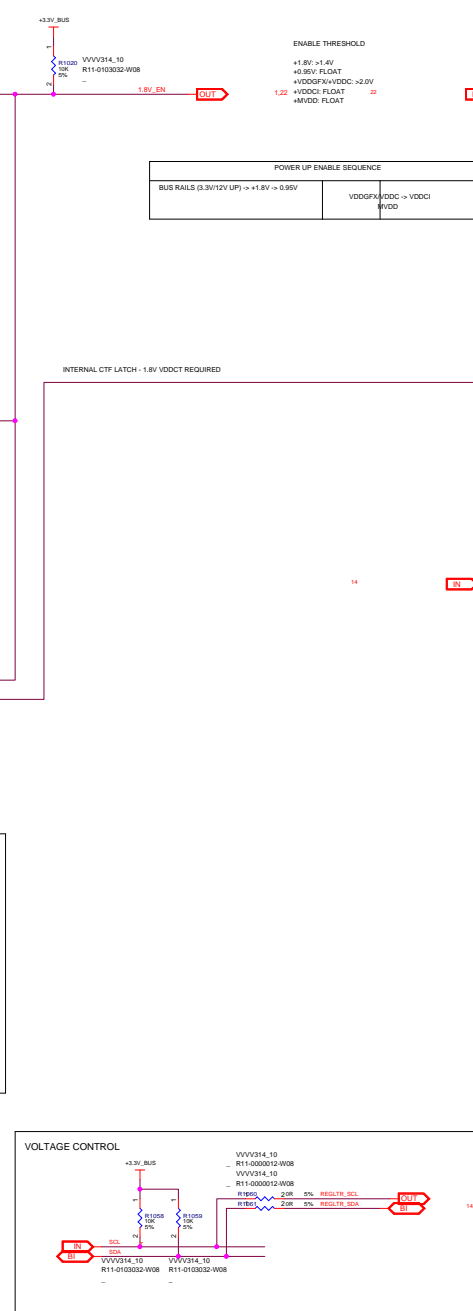
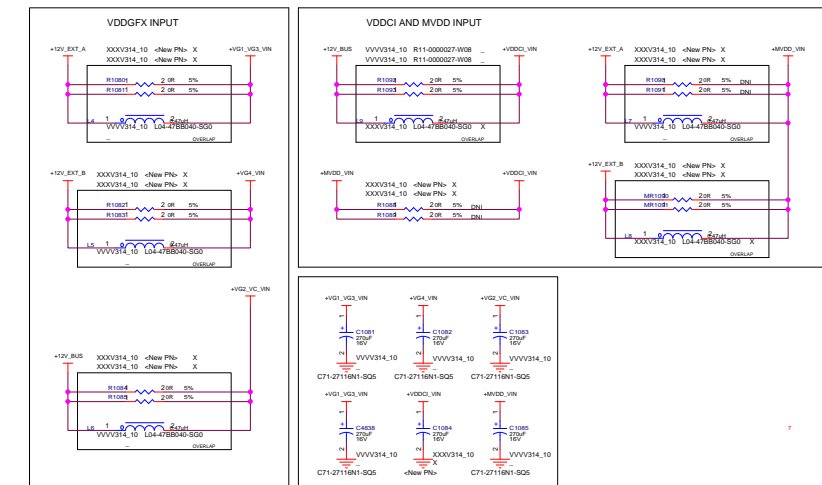
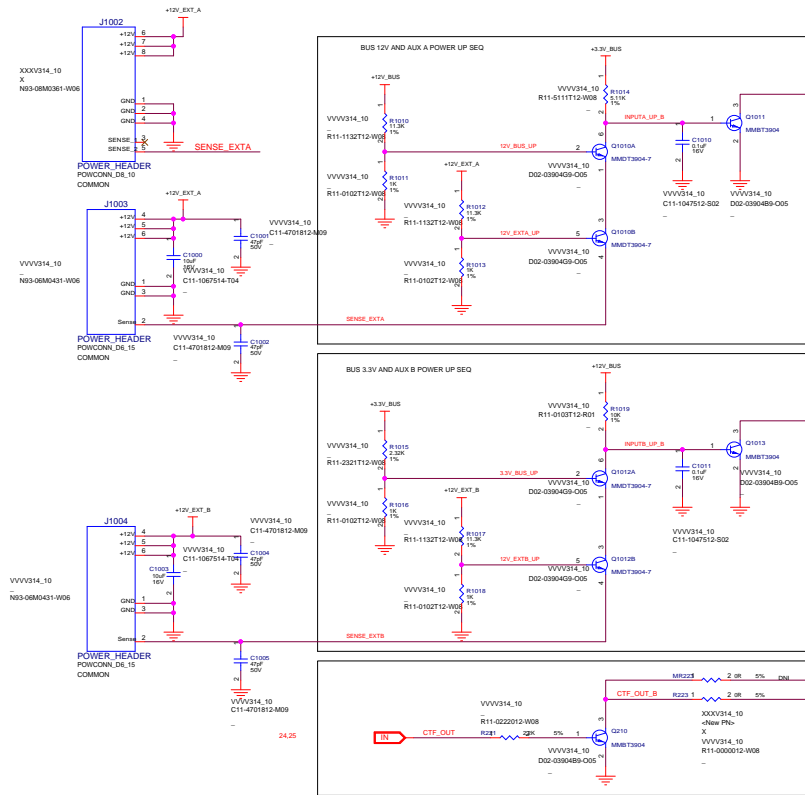
AMD - PLATFORM SOLUTIONS ENG. 7171 SOUTHWEST PKWY AUSTIN, TX. 78735		<table style="width: 100%; border-collapse: collapse;"> <tr> <td colspan="2" style="text-align: center; background-color: #f0f0f0;">MICRO-STAR INT'L CO., LTD.</td> </tr> <tr> <td colspan="2" style="text-align: center;">MS-V314</td> </tr> <tr> <td style="width: 80%;">Size Custom</td> <td style="width: 20%; text-align: center;">Rev 1.0</td> </tr> <tr> <td colspan="2">Date: <u>Tuesday, June 17, 2014</u></td> </tr> <tr> <td colspan="2" style="text-align: right;">Sheet <u>22</u> of <u>28</u></td> </tr> </table>	MICRO-STAR INT'L CO., LTD.		MS-V314		Size Custom	Rev 1.0	Date: <u>Tuesday, June 17, 2014</u>		Sheet <u>22</u> of <u>28</u>	
MICRO-STAR INT'L CO., LTD.												
MS-V314												
Size Custom	Rev 1.0											
Date: <u>Tuesday, June 17, 2014</u>												
Sheet <u>22</u> of <u>28</u>												
SHEET: SMALL RAIL REGULATOR												
DATE: <u>Mon May 12 19:11:53 2014</u>	REV: <u>01</u>											
SHEET NUMBER: <u>20</u> OF <u>25</u>												
DOCUMENT NUMBER: <u>105-C768xx-00A</u>												

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MICRO-STAR INT'L CO., LTD.											
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TITLE:

Tonga-256 G5 x32

(23) POWER MANAGEMENT



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SHEET: POWER MANAGEMENT

DATE: Mon May 12 19:11:53 2014

SHEET NUMBER:



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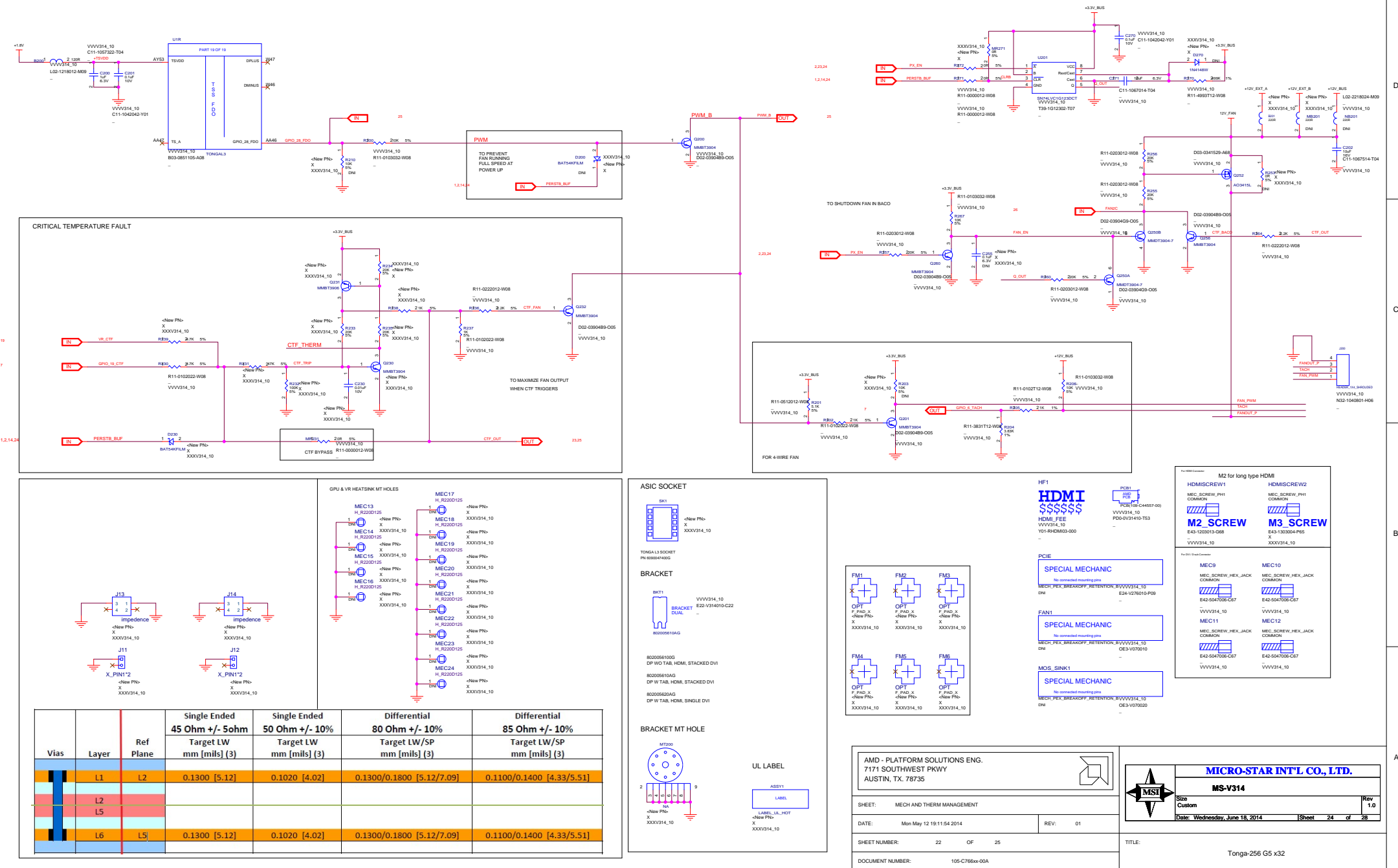
Size	Rev
Custom	1.0

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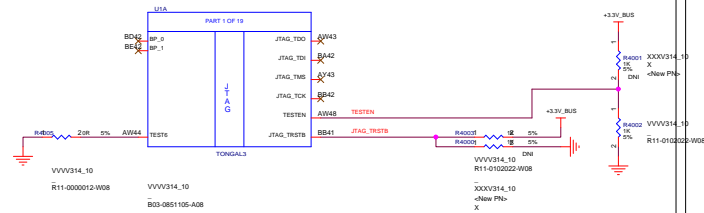
TITLE:

Tonga-256 G5 x32

(24) MECH AND THERM MANAGEMENT

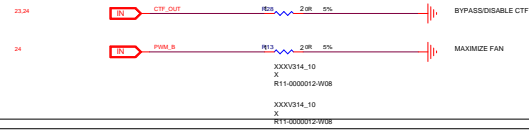


(25) DEBUG CIRCUIT



LM96163 FOR BACKUP THERMAL CONTROL

SWITCHES



VTMM - TEST CONNECTOR FOR VOLTAGE MEASUREMENTS

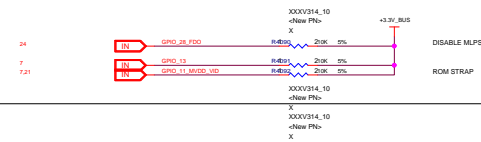
DIGITAL POTS

LED LIGHTS

LED RED "ON" INDICATES CTF FAULT

LED GREEN "ON" INDICATES BACO MODE

DEBUG PIN STRAPS



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SHEET: DEBUG CIRCUIT

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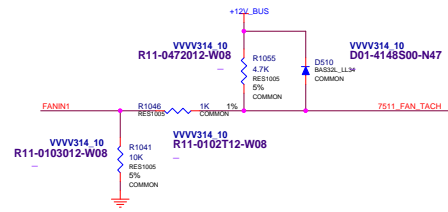
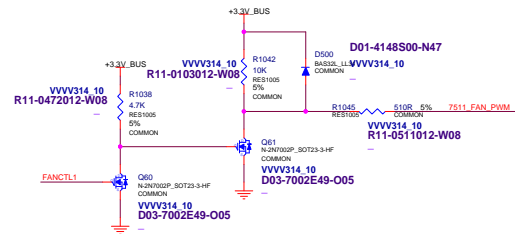
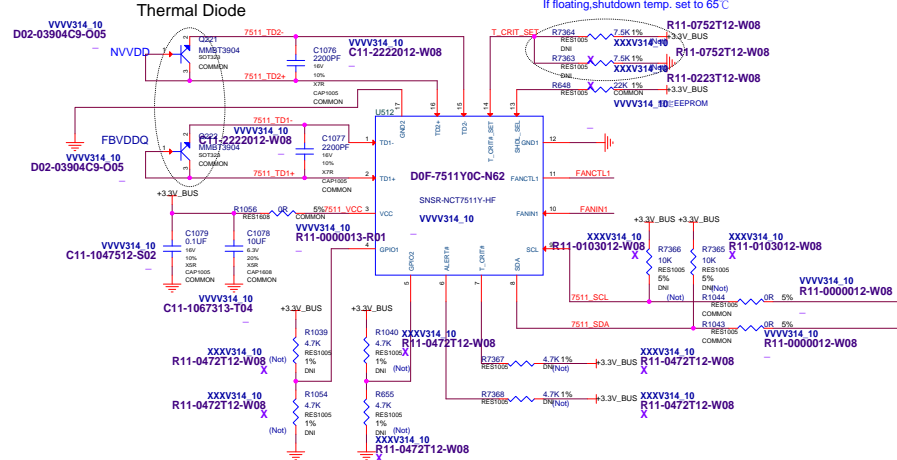
Tonga-256 G5 x32

Thermal IC : NCT7511Y

Layout notice :

- *Add ground shielding for D+ and Dtraces.
- *D+/D- route has to be away from the high noise area.
- *The recommended traces width and ground shielding spacing are 10mils.

Please refer datasheet
TCRIT_SET Table
If floating, shutdown temp. set to 65°C



EEPROM

