


| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| D | | | | | | | D |
| C | | | | | | | C |
| B | | | | | | | B |
| A | | | | | | | A |

TABLE OF CONTENTS

| SHEET NO. | SHEET NAME | SHEET NO. | SHEET NAME |
|-----------|----------------------------------|-----------|-----------------------|
| 1 | TOC | 26 | SMALL RAIL REGULATORS |
| 2 | NAV110 PCIe Interface | 27 | NAV110 DECAPS |
| 3 | NAV110 GPIOs | 28 | NAV110 POWER |
| 4 | NAV110 XTAL | 29 | NAV110 GND |
| 5 | NAV110 MEM CHAB | 30 | POWER MANAGEMENT |
| 6 | NAV110 MEM CHCD | 31 | SV12 & BAPACO |
| 7 | NAV110 MEM CHEF | 32 | MECHANICAL & THERMAL |
| 8 | NAV110 MEM CHGH | 33 | DEBUG |
| 9 | GDDR6 MEM CHAB | 34 | BLOCK DIAGRAM |
| 10 | GDDR6 MEM CHCD | 35 | REVISION HISTORY |
| 11 | GDDR6 MEM CHEF | | |
| 12 | GDDR6 MEM CHGH | | |
| 13 | NAV110 TMDPA - DP | | |
| 14 | NAV110 TMDPC - HDMI | | |
| 15 | NAV110 TMDPEF - DP DP | | |
| 16 | GFX & SOC CONTROLLER | | |
| 17 | VDDCR_GFX PHASES 2 and 5 | | |
| 18 | VDDCR_GFX PHASES 1 and 4 | | |
| 19 | VDDCR_GFX PHASES 3 and 7 | | |
| 20 | VDDCR_GFX PHASES 6 and VDDCR_SOC | | |
| 21 | MVDD_VDDCI CONTROLLER | | |
| 22 | REG MVDD | | |
| 23 | REG VDDCI | | |
| 24 | REG 0.75V | | |
| 25 | REG 1.8V | | |

AMD - PLATFORM HARDWARE ENG
No.669, HUANKE ROAD
SHANGHAI, CHINA 201203



SHEET: TOC

DATE: Fri Jun 21 05:25:22 2019REV: 1.00

SHEET NUMBER: 1 OF 35

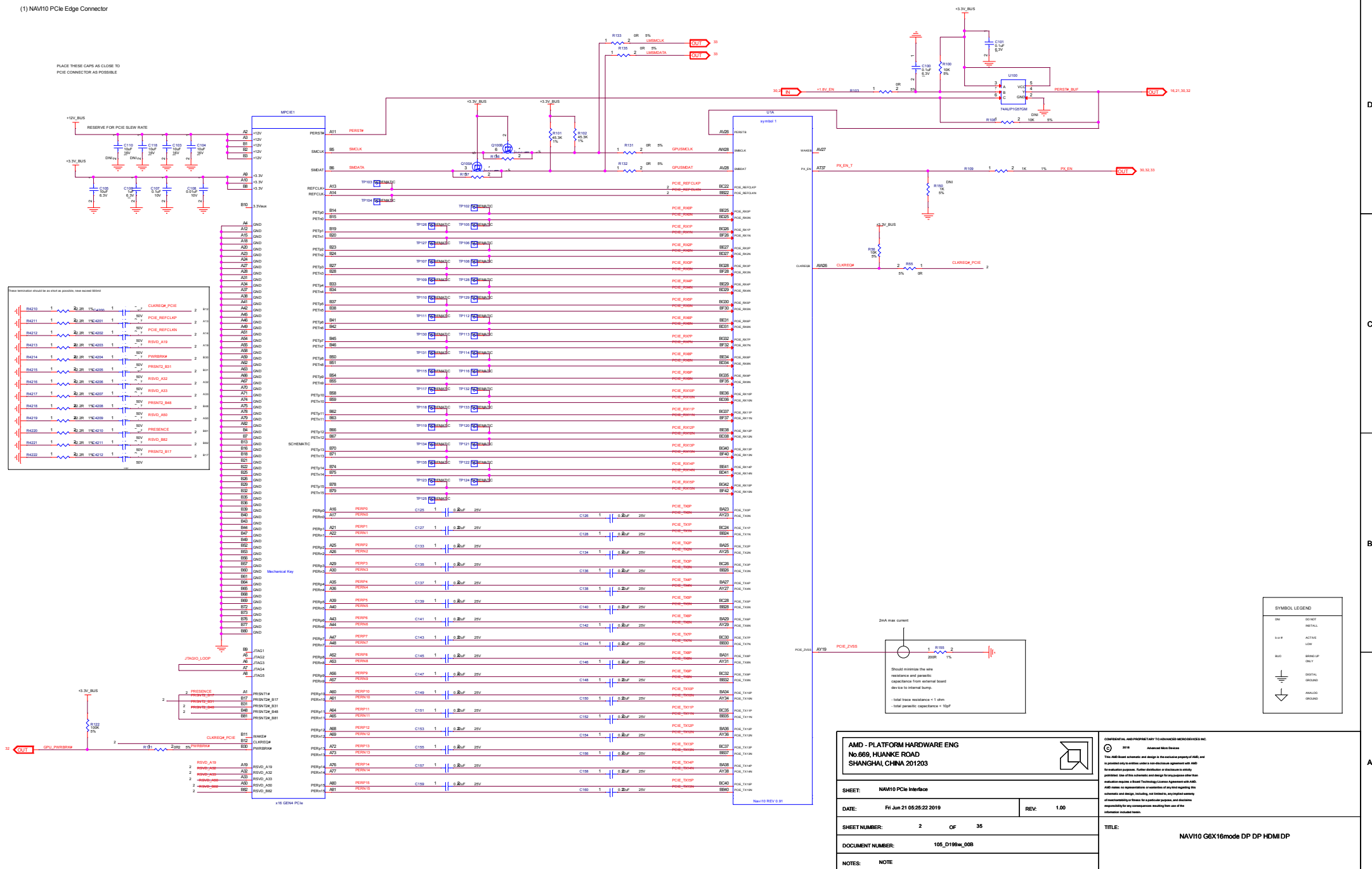
DOCUMENT NUMBER: 105_D199w_008

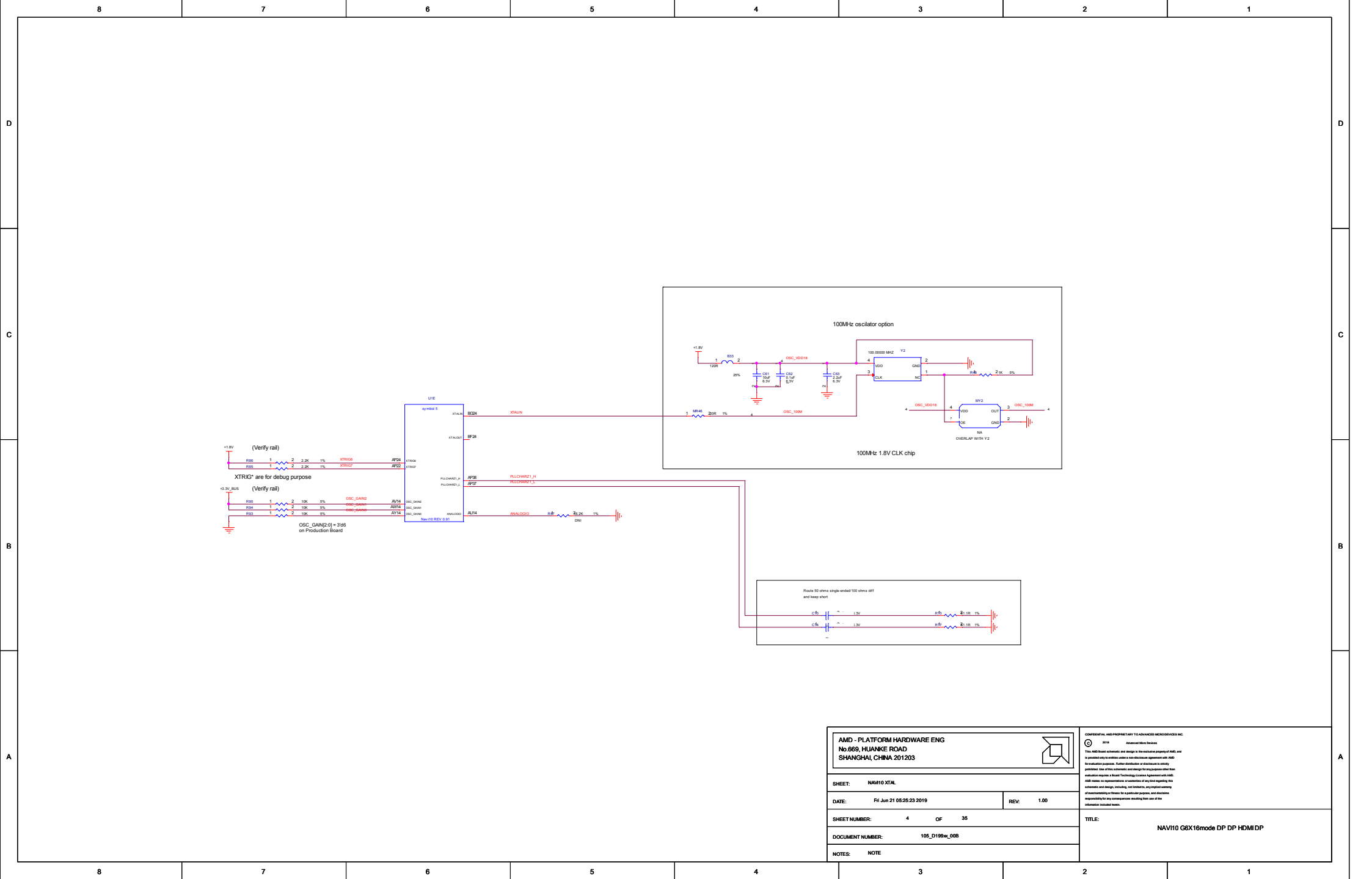
NOTES: NOTE

CONFIDENTIAL, AND PROPRIETARY TO ADVANCED MICRODEVICES INC.
© 2018 Advanced Micro Devices
This AMD Board schematic and design is the exclusive property of AMD, and is provided only in written under a non-disclosure Agreement with AMD for evaluation purposes. Further publication or disclosure is strictly prohibited. Use of this schematic and design for any purpose other than evaluation requires a Board Technology License Agreement with AMD. AMD makes no representations or warranties of any kind regarding the schematics and design, including, but not limited to, any explicit warranty of non-infringement or fitness for a particular purpose, and disclaims responsibility for any consequences resulting from use of the information included herein.

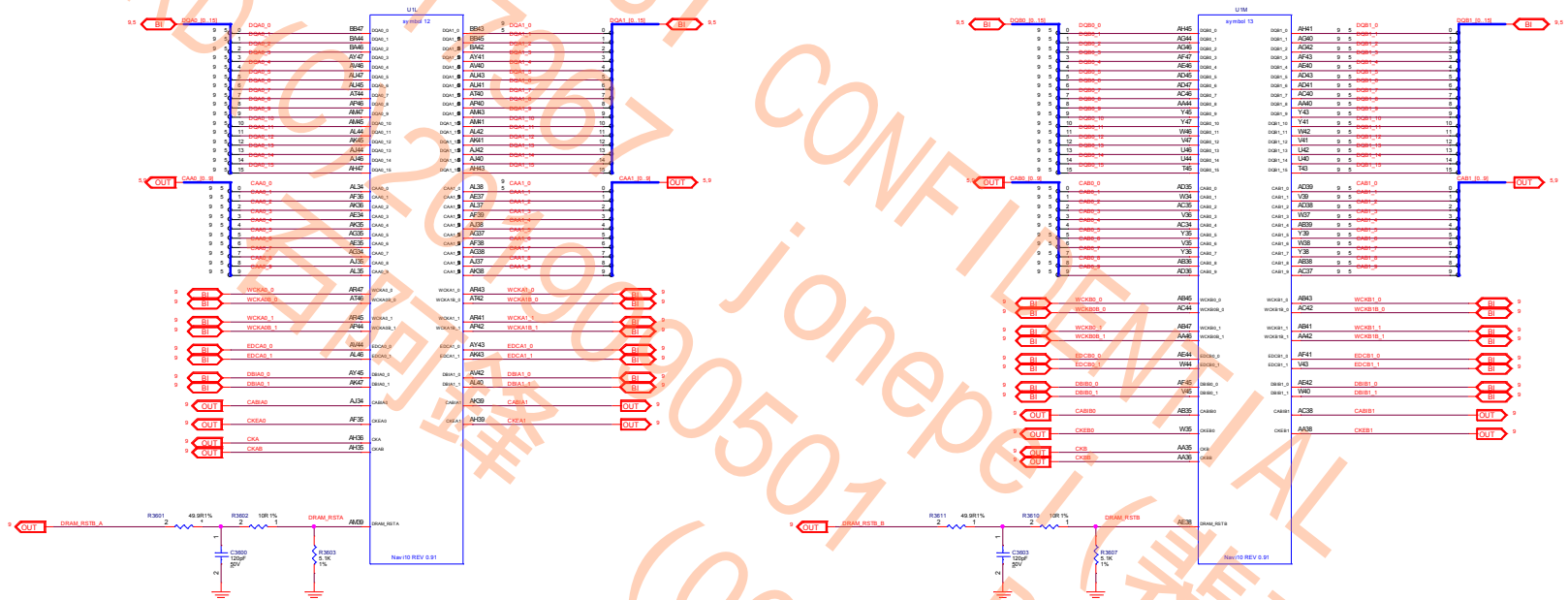
TITLE:
NAV110 G8X16mode DP DP HDMI DP

(1) NAVI10 PCIe Edge Connector





TITLE: NAVI10 G6X16mode DP DP HDMI DP





REV- 1.00

TITLE

NAVI10 G6X16mode DP DP HDMI DP

| NOTES: | NOTE |
|--------|------|
|--------|------|

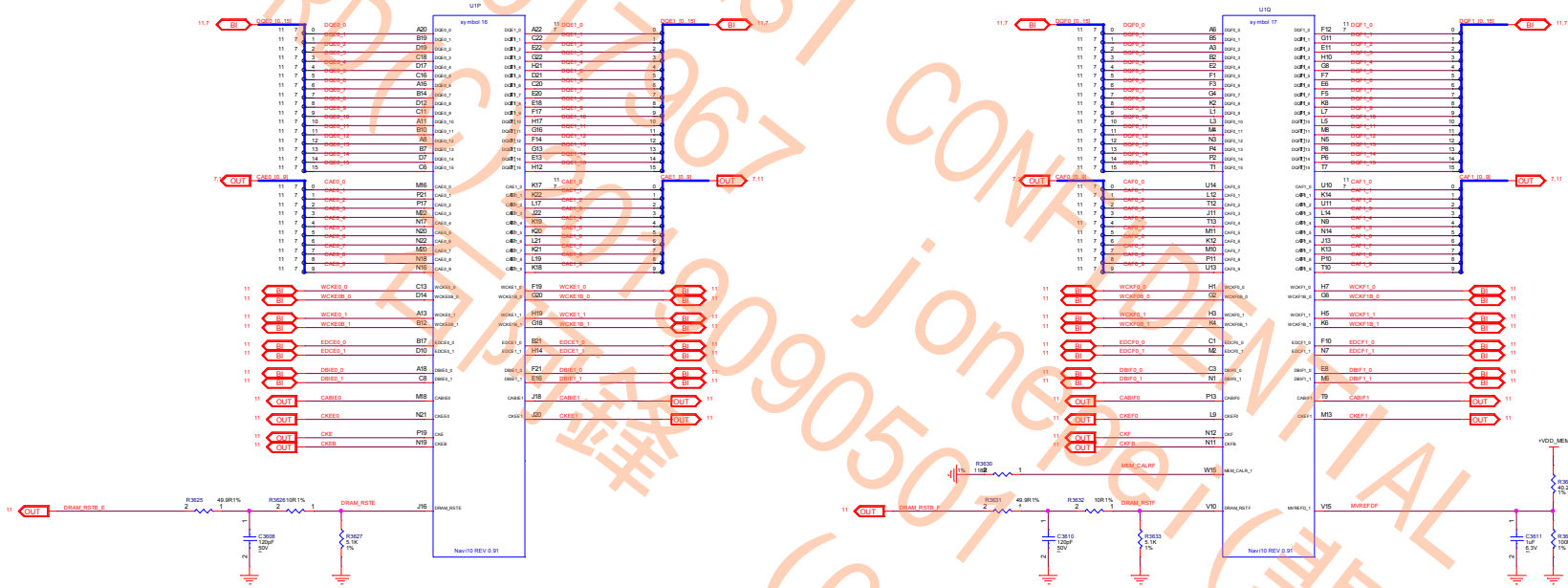
NOTE


CONFIDENTIAL AND PROPRIETARY TO ADVANCED MICRODEVICES INC.

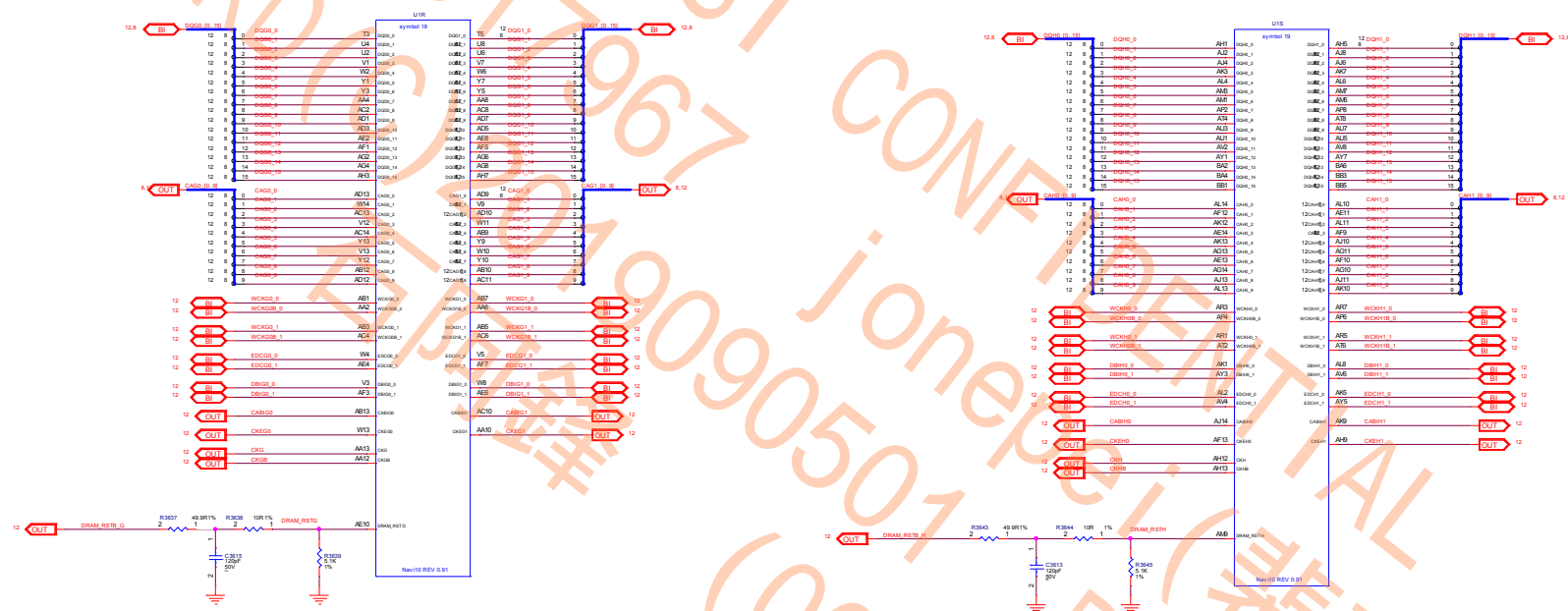
(C) 2018 Advanced Micro Devices

This AMD board schematic and design is the exclusive property of AMD, and is granted only to entities under a non-disclosure agreement with AMD for evaluation purposes. Further distribution or disclosure is strictly prohibited. Use of this schematic and design for any purpose other than evaluation requires a Board Technology License Agreement with AMD. AMD makes no representations or warranties of any kind regarding this schematic and design, including, not limited to, any implied warranty of merchantability or fitness for a particular purpose, and disclaims responsibility for any consequences resulting from use of the information included herein.

NAVI10 G6X16mode DP DP HDMI DP



| | | | | |
|--|--------------------------|----|--|--|
| AMD - PLATFORM HARDWARE ENG No.669, HUANKE ROAD SHANGHAI, CHINA 201203 | | | <div>CONFIDENTIAL AND PROPRIETARY TO ADVANCED MICRODEVICES INC.</div> <div>© 2018 Advanced Micro Devices</div> <div>This AMD based schematic and design is the exclusive property of AMD, and is provided only to the customer under a non-disclosure agreement with AMD. No reproduction, modification, or distribution of this schematic is permitted without the prior written consent of AMD. AMD makes no representations or warranties of any kind regarding the schematic and design, including, but not limited to, any copyright, patent, or trademark rights. AMD is not responsible for any consequences resulting from use of the information contained herein.</div> <div></div> | |
| SHEET: | NAVI10 MEMCHEF | | REV: | 1.00 |
| DATE: | Fri Jun 21 05:25:25 2019 | | | |
| SHEET NUMBER: | 7 | OF | 35 | TITLE: NAVI10 GX616mode DP DP HDMI DP |
| DOCUMENT NUMBER: | 105_0190w_008 | | | |
| NOTES: | NOTE | | | |



AMD - PLATFORM HARDWARE ENG
No.669, HUANKE ROAD
SHANGHAI, CHINA 201203

SHEET: NAVI10 MEMCHG

DATE: Fri Jun 21 05:25:26 2019

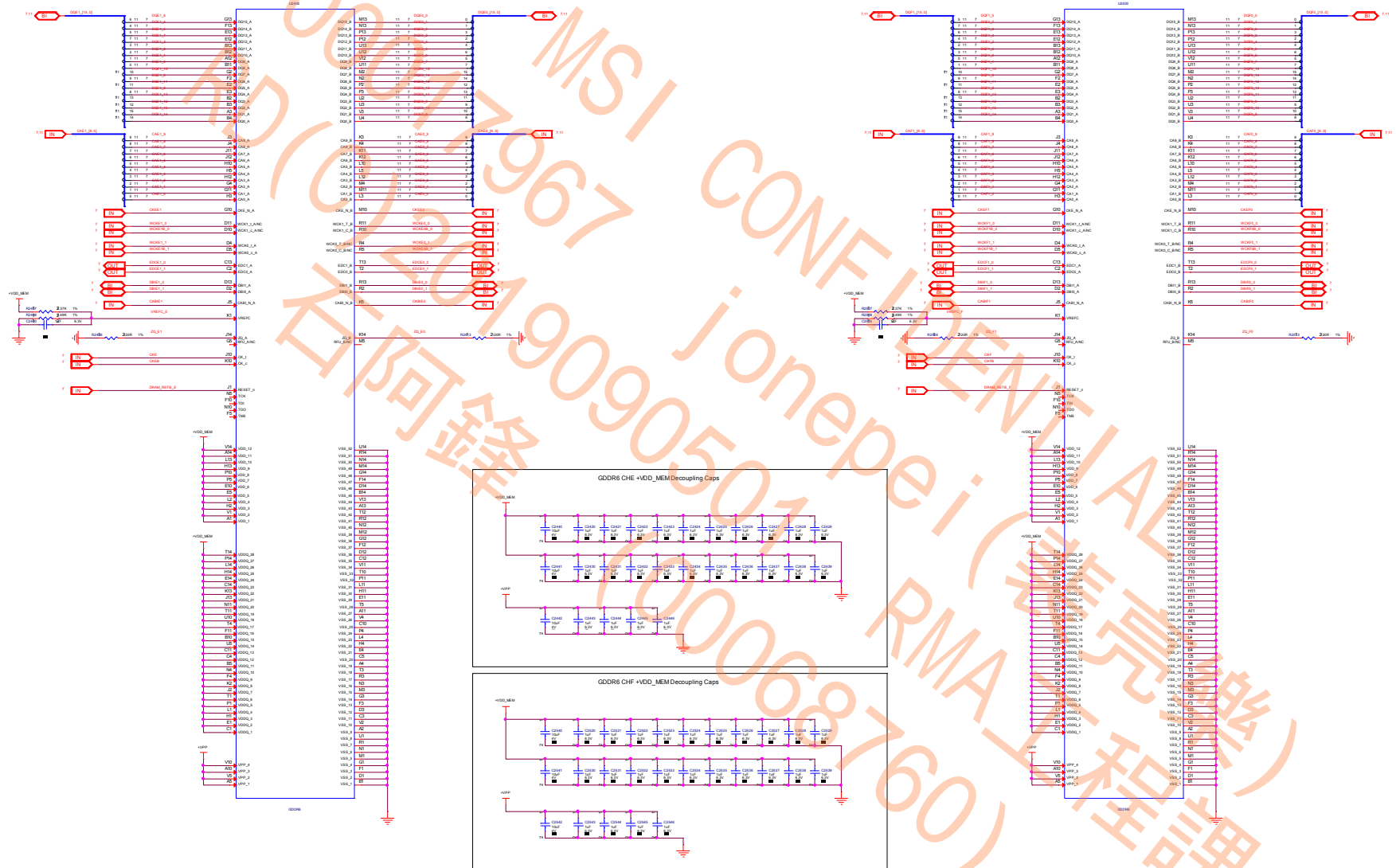
SHEET NUMBER: 8 OF 35

DOCUMENT NUMBER: 105_0190w_008

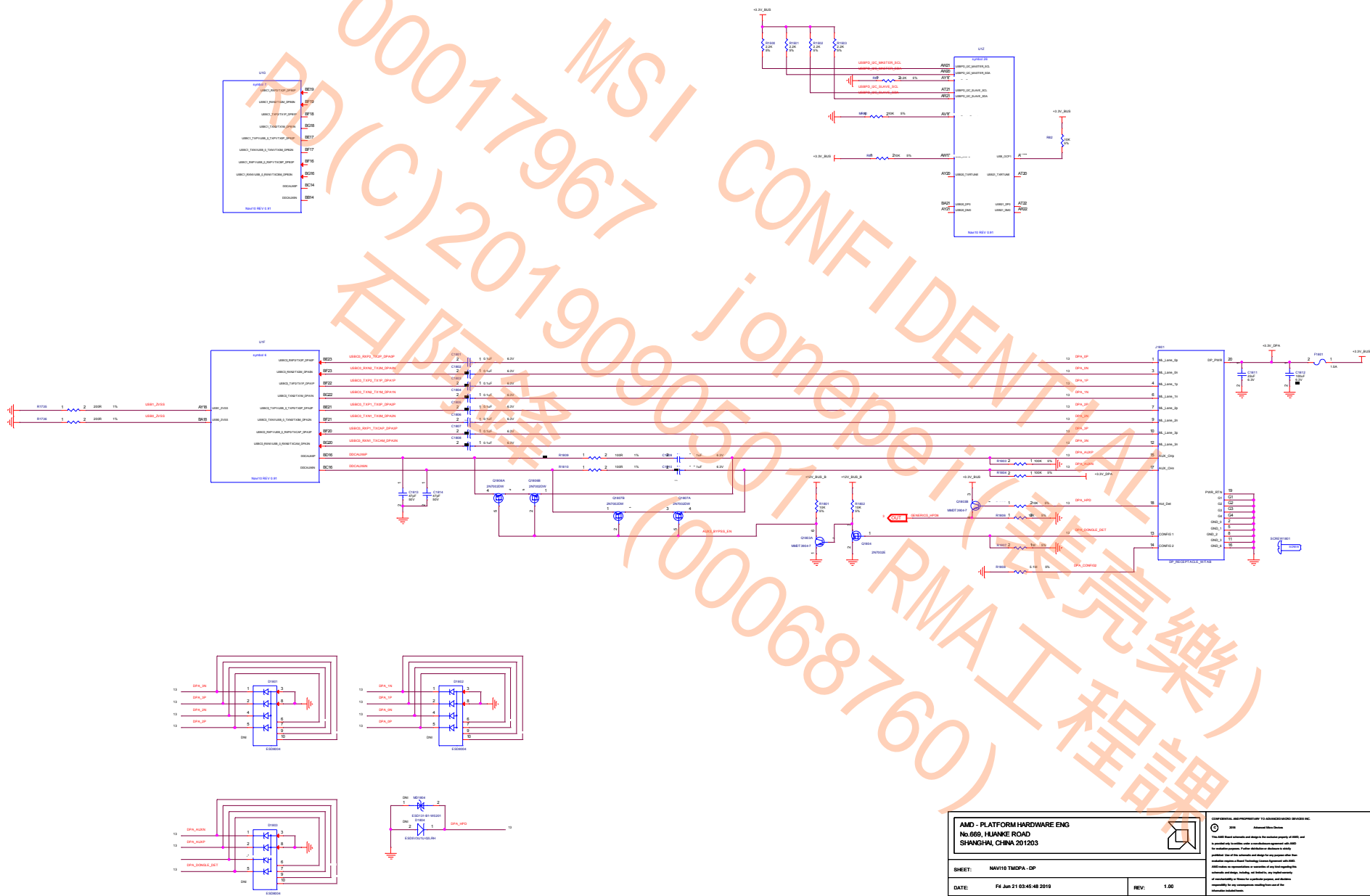
NOTES: NOTE

CONFIDENTIAL AND PROPRIETARY TO ADVANCED MICRODEVICES INC.
© 2018 Advanced Micro Devices
This AMD based schematic and design is the exclusive property of AMD, and is provided only to the customer under a non-disclosure agreement with AMD. No reproduction, modification, or distribution of this schematic or design is permitted without the prior written consent of AMD. AMD makes no representations or warranties of any kind regarding the schematic and design, including, but not limited to, any patent, trademark, or copyright infringement, or any other intellectual property rights, and disclaims responsibility for any consequences resulting from use of the information contained herein.

TITLE: NAVI10 G8X16mode DP DP HDMI DP



NAVI10 TMDP A/B



AMD - PLATFORM HARDWARE ENG
No.666, HUANKE ROAD
SHANGHAI, CHINA 201203

SHEET: NAVI10 TMDP-A - DP

DATE: F4 Jan 21 03:45:48 2019

SHEET NUMBER: 13 OF 35

DOCUMENT NUMBER: 101_0198x_088

NOTES: NOTE



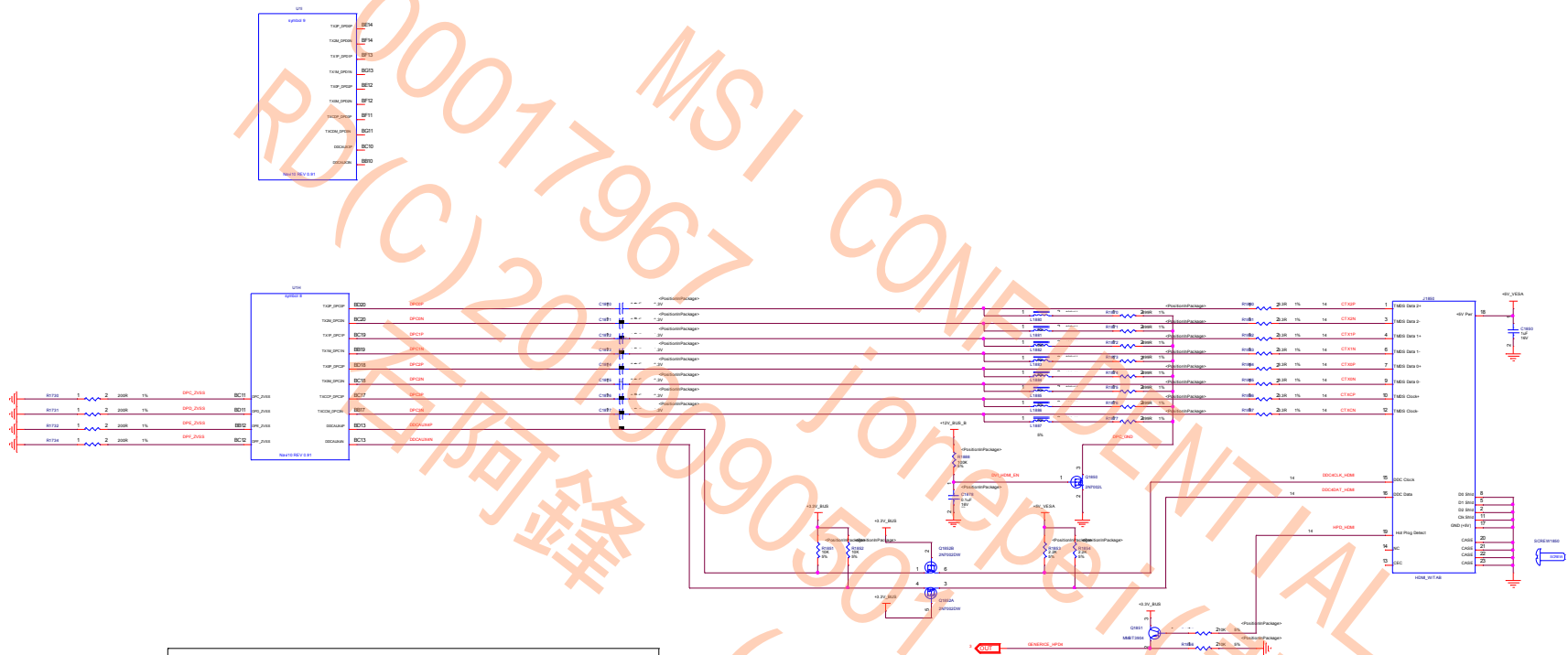
AMD CONFIDENTIAL - AMD PROPRIETARY 101_0198x_088 (REV. 1.0)


© 2019 AMD. All rights reserved.

This AMD based system and design is the exclusive property of AMD, and is intended for internal use only. It is not to be distributed or disclosed in any form without the express written permission of AMD.

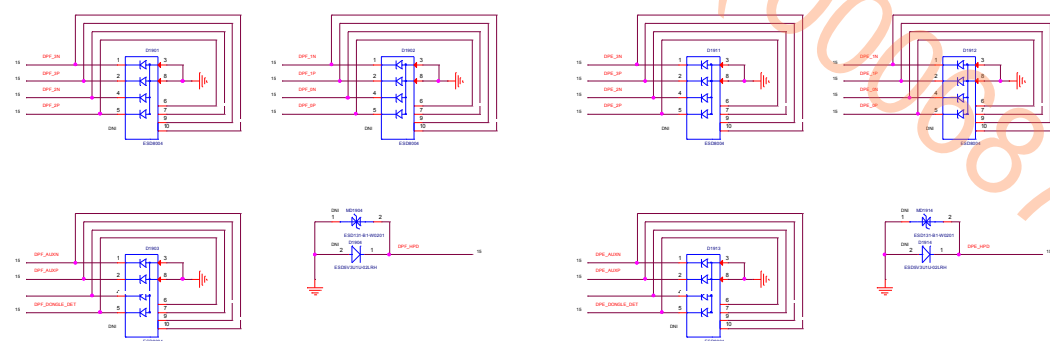
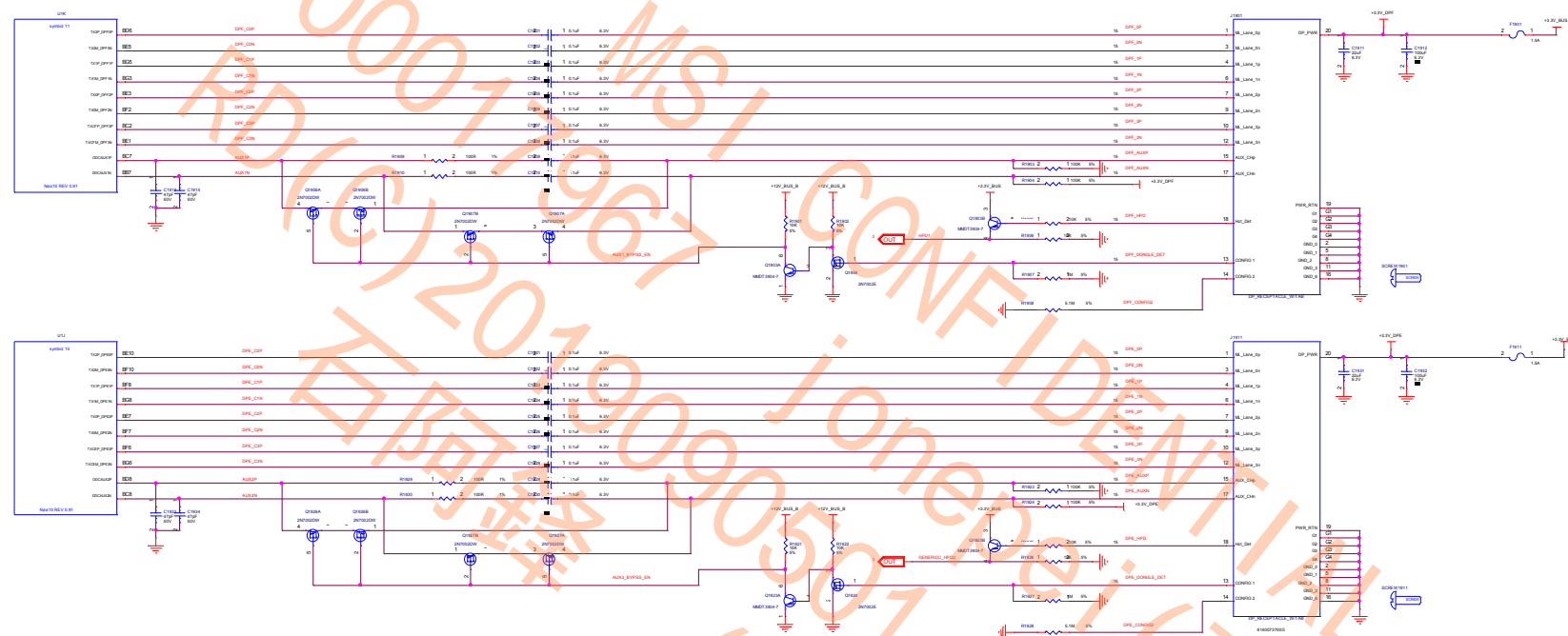
AMD makes no representation or warranty of any kind regarding the contents and design, including, but not limited to, any implied warranty of merchantability or fitness for a particular purpose, and disclaims any responsibility for any consequences resulting from use of the information contained herein.

TITLE: NAVI10 G6X16mode DP DP HDMI DP



| | | | | |
|--|--|--|--|---|
| AMD - PLATFORM HARDWARE ENG No.669, HUANKE ROAD SHANGHAI, CHINA 201203 | |  | CONFIDENTIAL AND PROPRIETARY TO ADVANCED MICRO DEVICES © 2016 Advanced Micro Devices | A |
| SHEET: NAV110 TMDPC - HDMI | | This document and design are for internal use only, and is a confidential and proprietary document owned by AMD. It is not intended for distribution outside of AMD. It is not to be used, copied, reproduced, or otherwise disclosed, in whole or in part, to any third party without the prior written permission of AMD. This document is provided "AS IS" without any warranty, express or implied, including but not limited to the accuracy, reliability, or suitability for any particular purpose. AMD shall not be responsible for any damages, including but not limited to, any special, incidental, or consequential damages, arising from the use of this document. AMD shall not be responsible for any damages, including but not limited to, any special, incidental, or consequential damages, arising from the use of this document. | | |
| DATE: Fri Jun 21 03:45:48 2016 | | REV: 1.00 | | |
| SHEET NUMBER: 14 OF 35 | | TITLE: NAV110 G6X16mode DP DP HDMI DP | | |
| DOCUMENT NUMBER: 105_D1999v0_008 | | | | |
| NOTES: NOTE | | | | |

(9) NAVI10 TMDP E/F



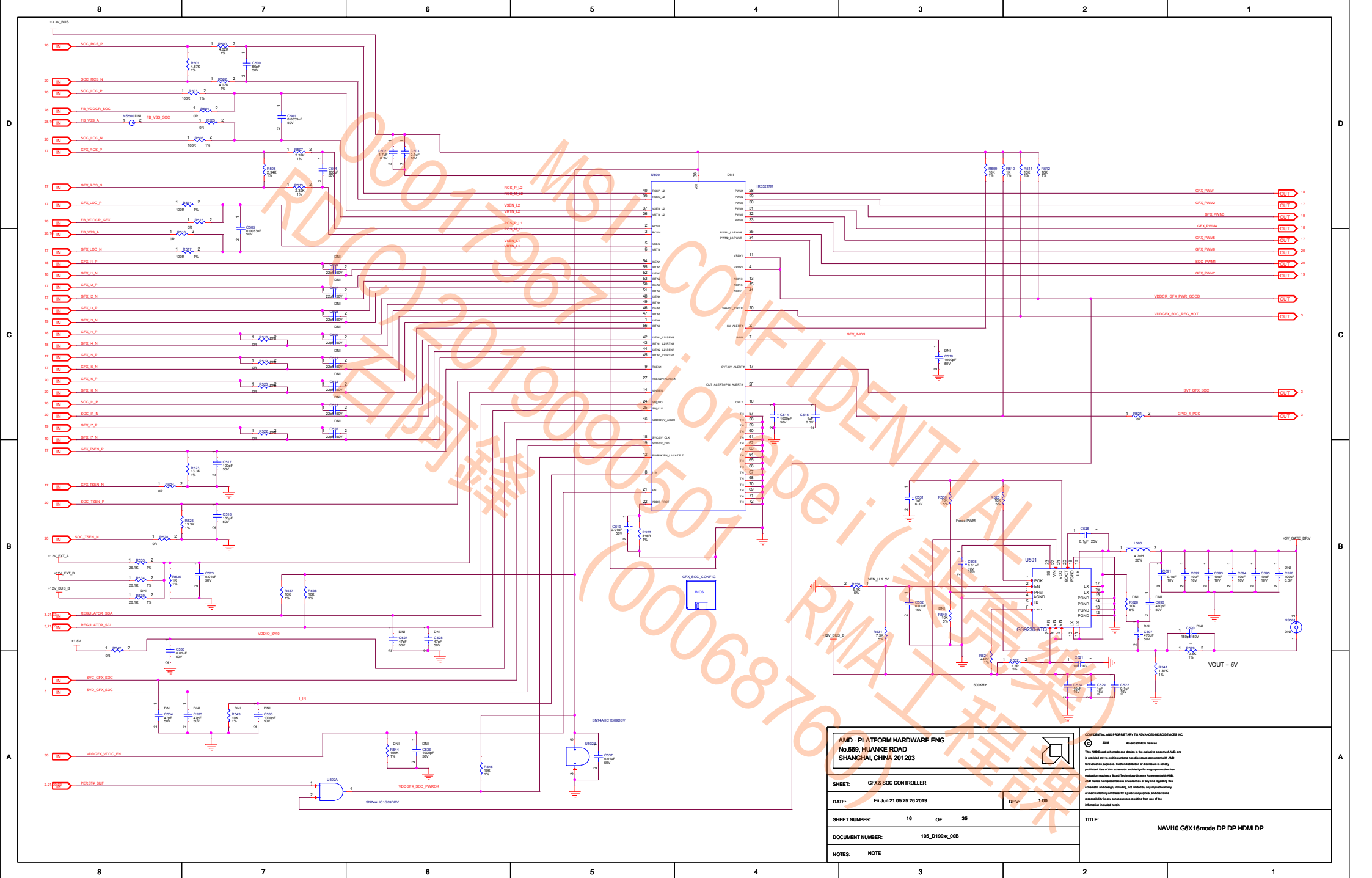
AMD - PLATFORM HARDWARE ENG
No.669, HUANKE ROAD
SHANGHAI, CHINA 201203

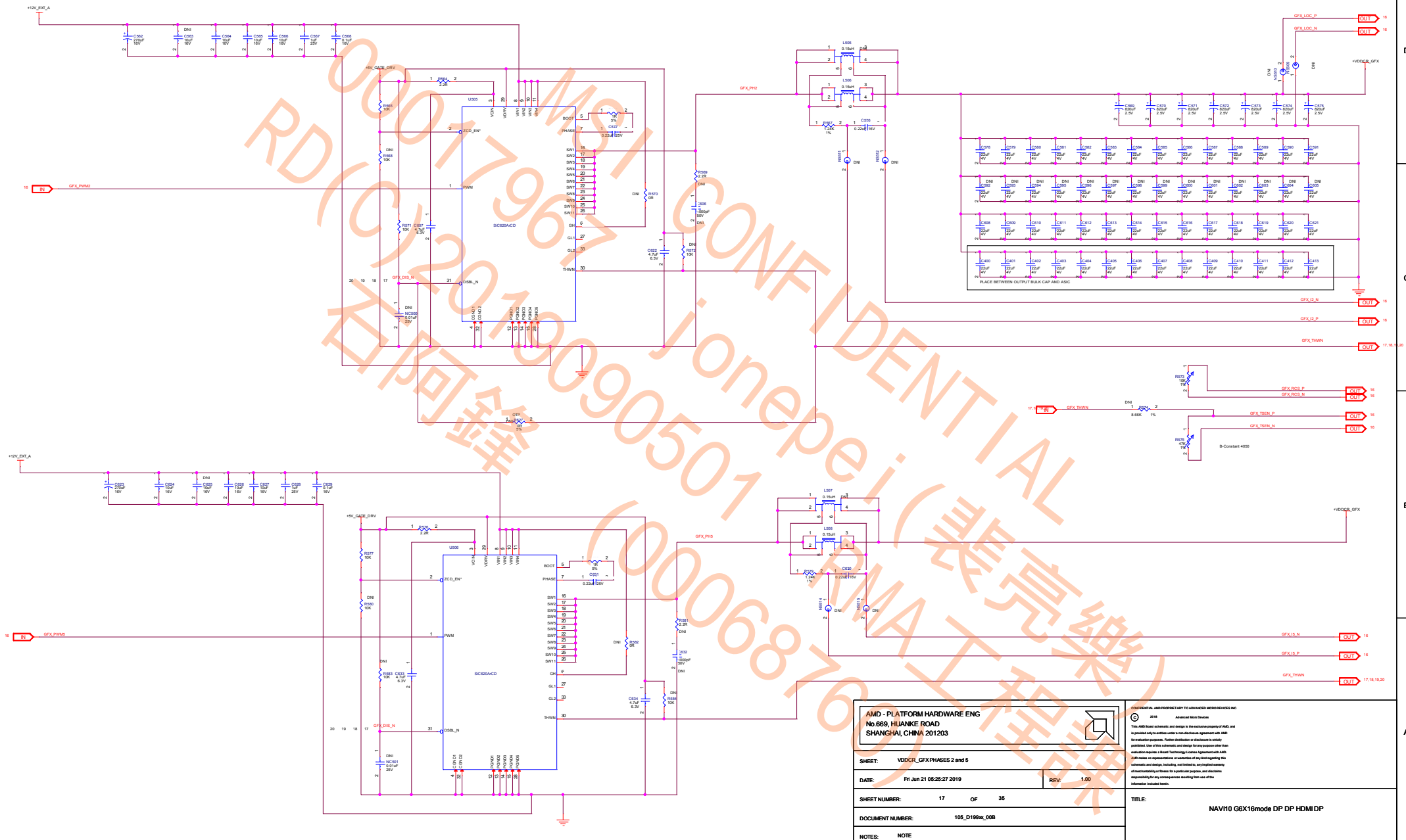
| | |
|------------------|--------------------------|
| SHEET: | NAV110 TMDPEF - DP DP |
| DATE: | Fri Jun 21 03:45:49 2019 |
| SHEET NUMBER: | 15 |
| DOCUMENT NUMBER: | 105 |
| NOTES: | NOTE |


(C) 2018 Advanced Micro Devices

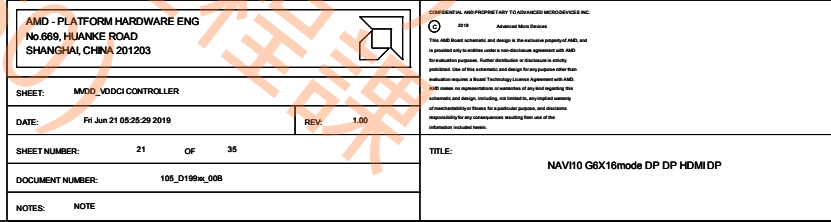
This AMD based schematic and design is the exclusive property of AMD, and is provided only to entities under a non-disclosure agreement with AMD for evaluation purposes. Further distribution or disclosure is strictly prohibited. Use of this schematic and design for any purpose other than evaluation requires an AMD Technology License Agreement with AMD. AMD makes no representations or warranties of any kind regarding this schematic and design, including, but not limited to, any implied warranty of merchantability or fitness for a particular purpose, and disclaims responsibility for any consequences resulting from use of the

TITLE: NAVI10 G6X16mode DP DP HDMI DP

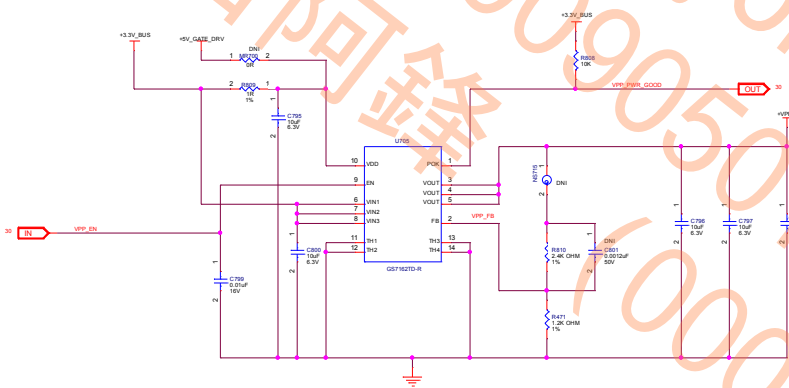
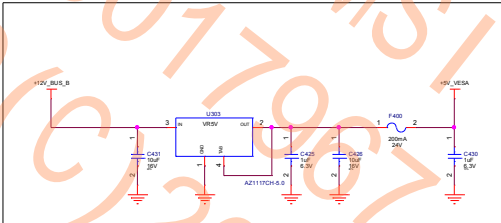




| | | | |
|---|--|---|--|
| AMD - PLATFORM HARDWARE ENG No.669, HUANKU ROAD SHANGHAI, CHINA 201203 | |  | |
| SHEET: VDDCR_CFXPHASES 2 and 5 | | | |
| DATE: Fri Jun 21 05:25:27 2019 | | REV: 1.00 | |
| SHEET NUMBER: 17 | | OF 35 | |
| DOCUMENT NUMBER: 105_D199ax_008 | | | |
| NOTES: NOTE | | | |



REGULATOR FOR +5V RAILS
IOUT = 50mA



AMD - PLATFORM HARDWARE ENG
No.669, HUANKE ROAD
SHANGHAI, CHINA 201203



SHEET: SMALL RAIL REGULATORS

DATE: Fri Jun 21 05:25:32 2019

REV: 1.00

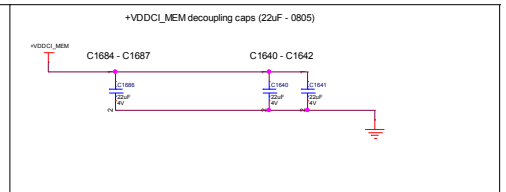
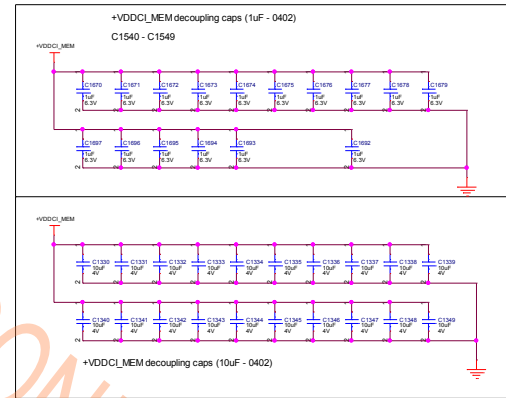
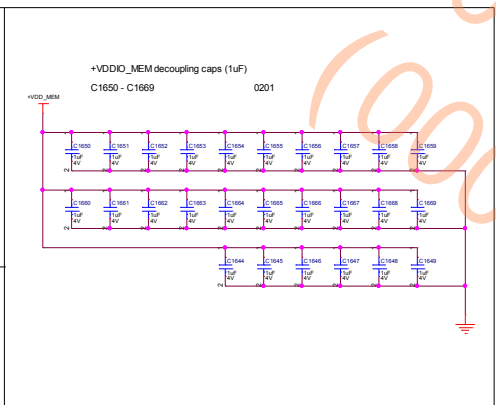
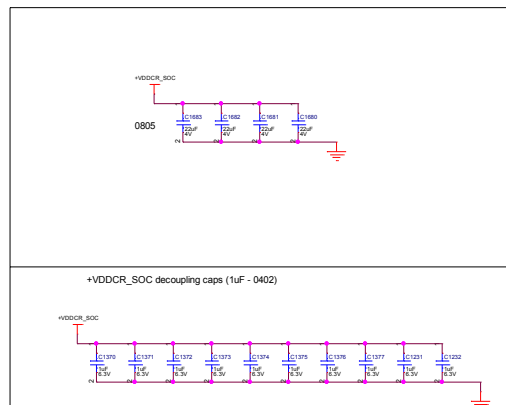
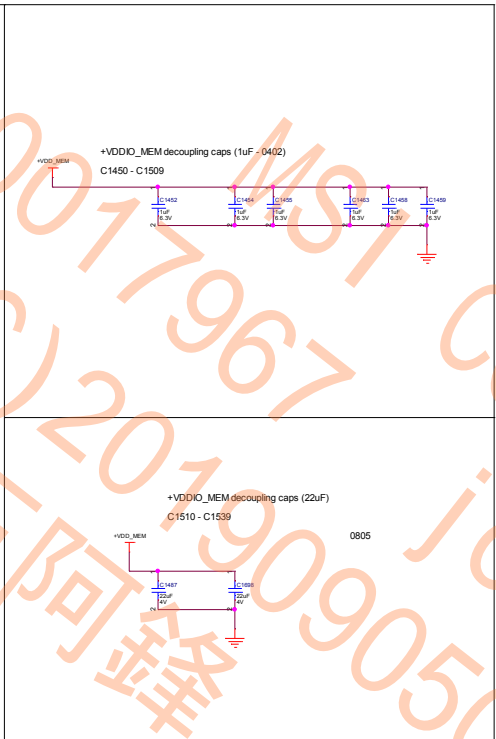
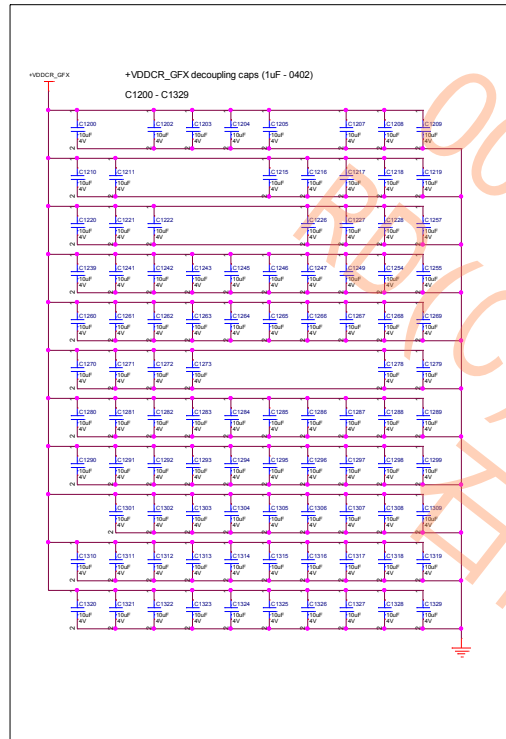
SHEET NUMBER: 26 OF 35

DOCUMENT NUMBER: 105_D199w_008

NOTES: NOTE

CONFIDENTIAL AND PROPRIETARY TO ADVANCED MICRODEVICES INC.
© 2018 Advanced Micro Devices
This AMD based schematic and design is the exclusive property of AMD, and is provided only to the customer under a non-disclosure agreement with AMD. AMD makes no representations or warranties of any kind regarding the schematics and design, including, but not limited to, any copyright, patent, or trademark rights. AMD makes no representations or warranties of any kind regarding the schematics and design, including, but not limited to, any copyright, patent, or trademark rights. AMD makes no representations or warranties of any kind regarding the schematics and design, including, but not limited to, any copyright, patent, or trademark rights.

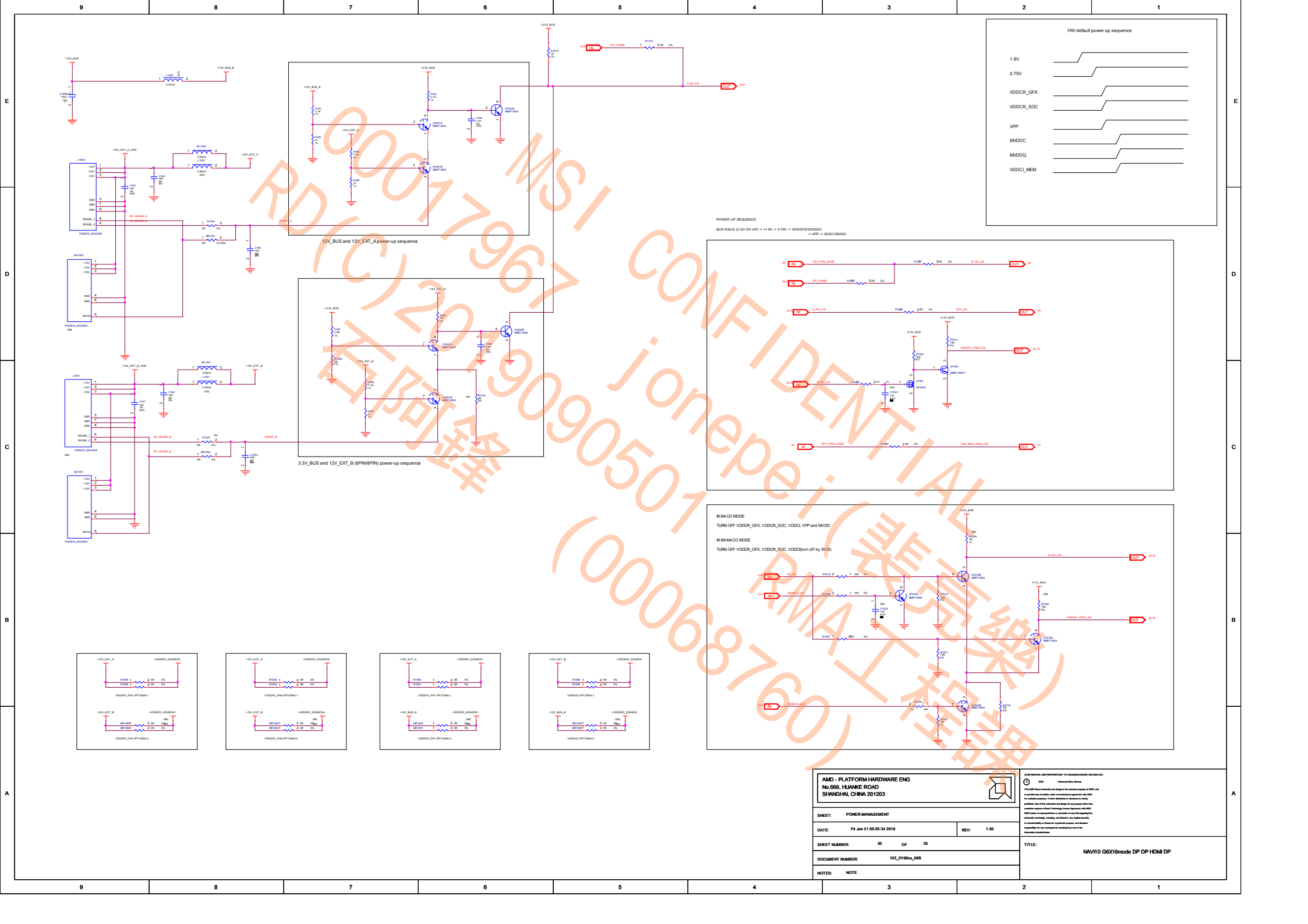
TITLE: NAVI10 G8X16mode DP DP HDMI DP

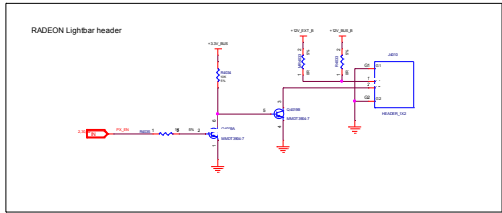
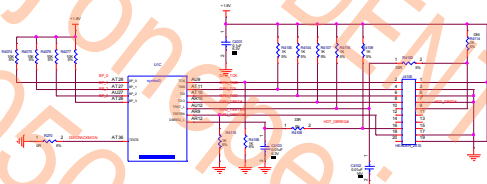
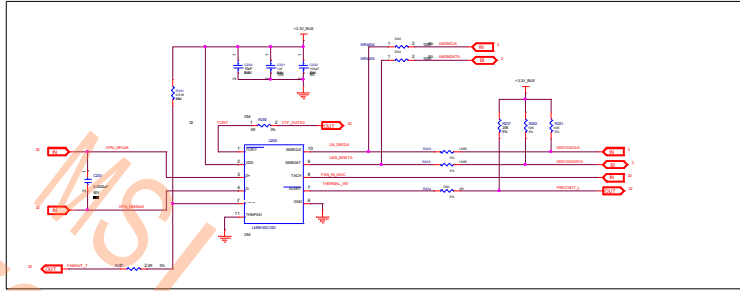


| | |
|--|-----------|
| AMD - PLATFORM HARDWARE ENG No.889, HUANKE ROAD SHANGHAI, CHINA 201203 | |
| SHEET: NAV10 DECAPS | |
| DATE: Fri Jun 21 05:25:32 2019 | REV: 1.00 |
| SHEET NUMBER: 27 OF 35 | |
| DOCUMENT NUMBER: 105_D199w_008 | |
| NOTES: NOTE | |

CONFIDENTIAL AND PROPRIETARY TO ADVANCED MICRODEVICES INC.
© 2018 Advanced Micro Devices
This AMD based schematic and design is the exclusive property of AMD, and is provided only to the customer under a non-disclosure agreement with AMD. The customer is responsible for the protection of this information. AMD makes no representations or warranties of any kind regarding the accuracy and design, including, but not limited to, any copyright notice or information contained herein for the purposes of this document, and disclaims responsibility for any consequences resulting from use of the information contained herein.

TITLE: NAV10 G8X16mode DP DP HDMI DP





| | | | |
|--|--|-------------------------------------|--|
| NAME: PLATFORM HARDWARE ENG NUMBER: HUANKE HEAD BRANCH: CHINA 201233 | | | |
| SHEET: 000001 | | REV: 1.00 | |
| DATE: Fri Jan 27 09:45:01 2012 | | TITLE: NAVITO GSK16node EP12PHEM DP | |
| SHEET NUMBER: 33 | | DOCUMENT NUMBER: 16LJ16H000 | |

REVISION HISTORY

ENGINEER: Peak, Dong

| |
|-------|
| NOTES |
|-------|

NOTE

105_D199xx_00B

DATE: Fri Jun 21 03:44:58 2019

SHEET NUMBER: 35 OF 35

REV: 1.00

[illegible]