

1. Vega10 PCIe Edge Connector

D

C

B

A

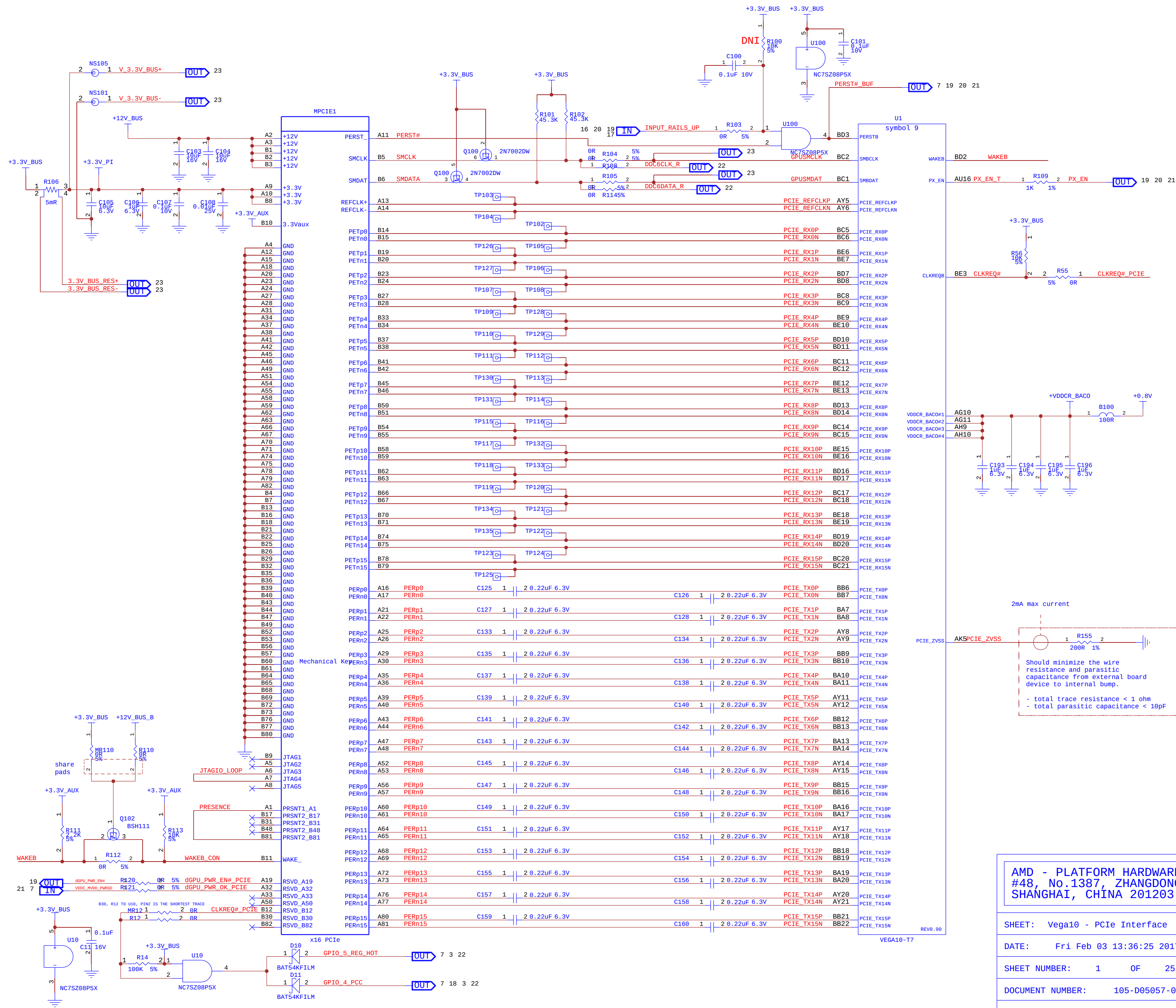


TABLE OF CONTENTS

SHEET NO.	SHEET NAME
1	Vega10 - PCIe Interface
2	Vega10 - Power / GND
3	Vega10 - GPIO, EXTRA
4	Vega10 - DFTIO, FREE, HPM_DAP, CRACKMON
5	Vega10 - TMDPAB 1xD, 1xHDMI & +5V VESA
6	Vega10 - TMDPEF 2xD
7	Control - VDDC / MVDD
8	Reg - VDDCR_SOC PHASES I and VII
9	Reg - VDDCR_SOC PHASES V and XI
10	Reg - VDDCR_SOC PHASES III and IX
11	Reg - VDDCR_SOC PHASES IV and X
12	Reg - VDDCR_SOC PHASES II and VIII
13	Reg - VDDCR_SOC PHASES VI and XII
14	Reg - VDDCR_IO
15	Reg - VDDCR_MEM and VPP
16	Reg - 0V8
17	Reg - 1V8 / VDDCR_BACO
18	PCC - VDDC
19	POWER MANAGEMENT
20	THERMAL
21	GPATCH & BACO LEDs
22	DEBUG
23	PI GLUE
24	BLOCK DIAGRAM
25	REVISION HISTORY

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

SHEET: Vega10 - PCIe Interface

DATE: Fri Feb 03 13:36:25 2017

REV: 1.0

SHEET NUMBER: 1 OF 25

DOCUMENT NUMBER: 105-D05057-00

NOTES: NOTE

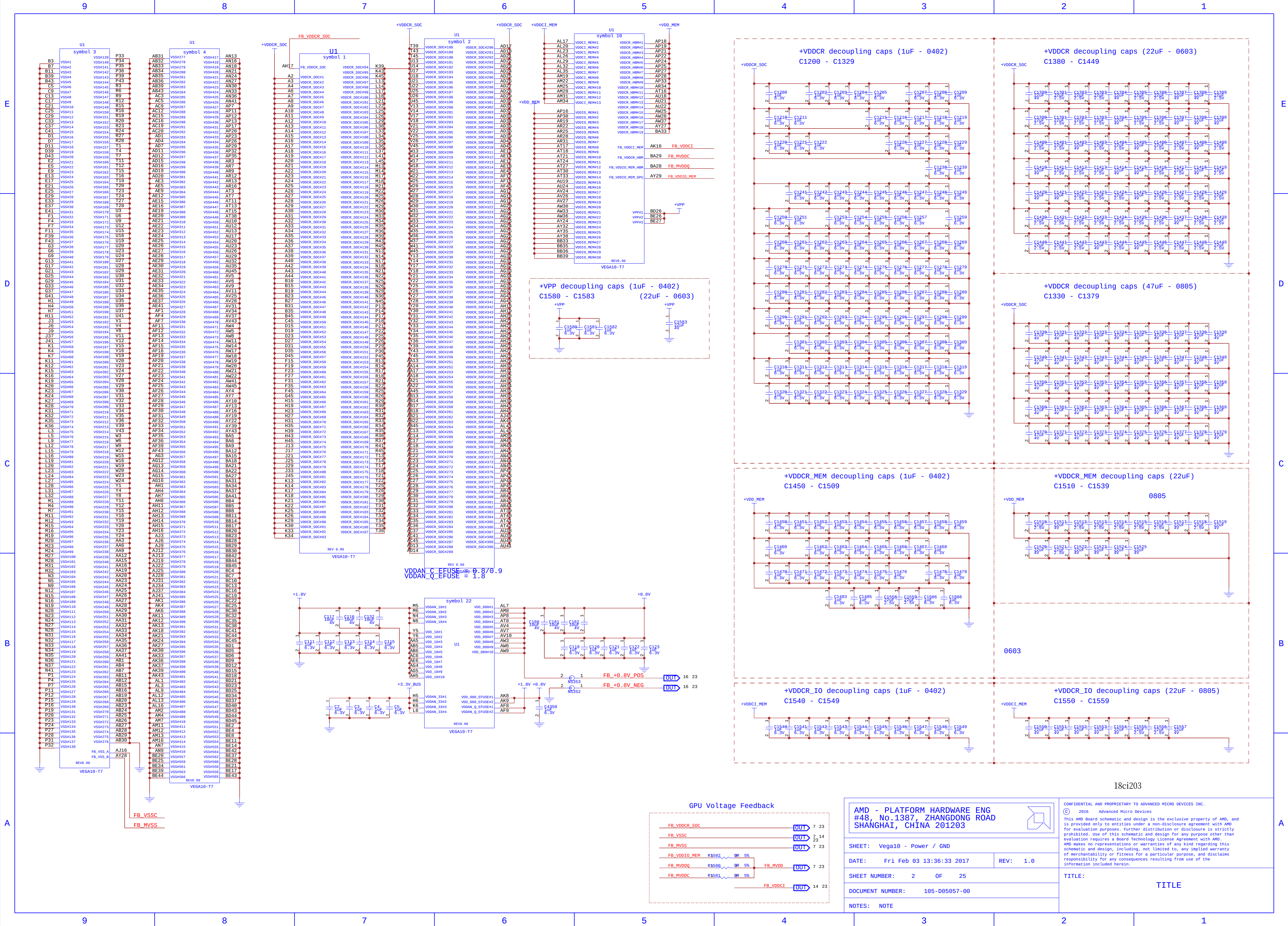
CONFIDENTIAL AND PROPRIETARY TO ADVANCED MICRO DEVICES INC.

© 2016 Advanced Micro Devices

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 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.

TITLE:

TITLE



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

SHEET: Vega10 - Power / GND

DATE: Fri Feb 03 13:36:33 2017

SHEET NUMBER: 2 OF 25

DOCUMENT NUMBER: 105-D05057-00

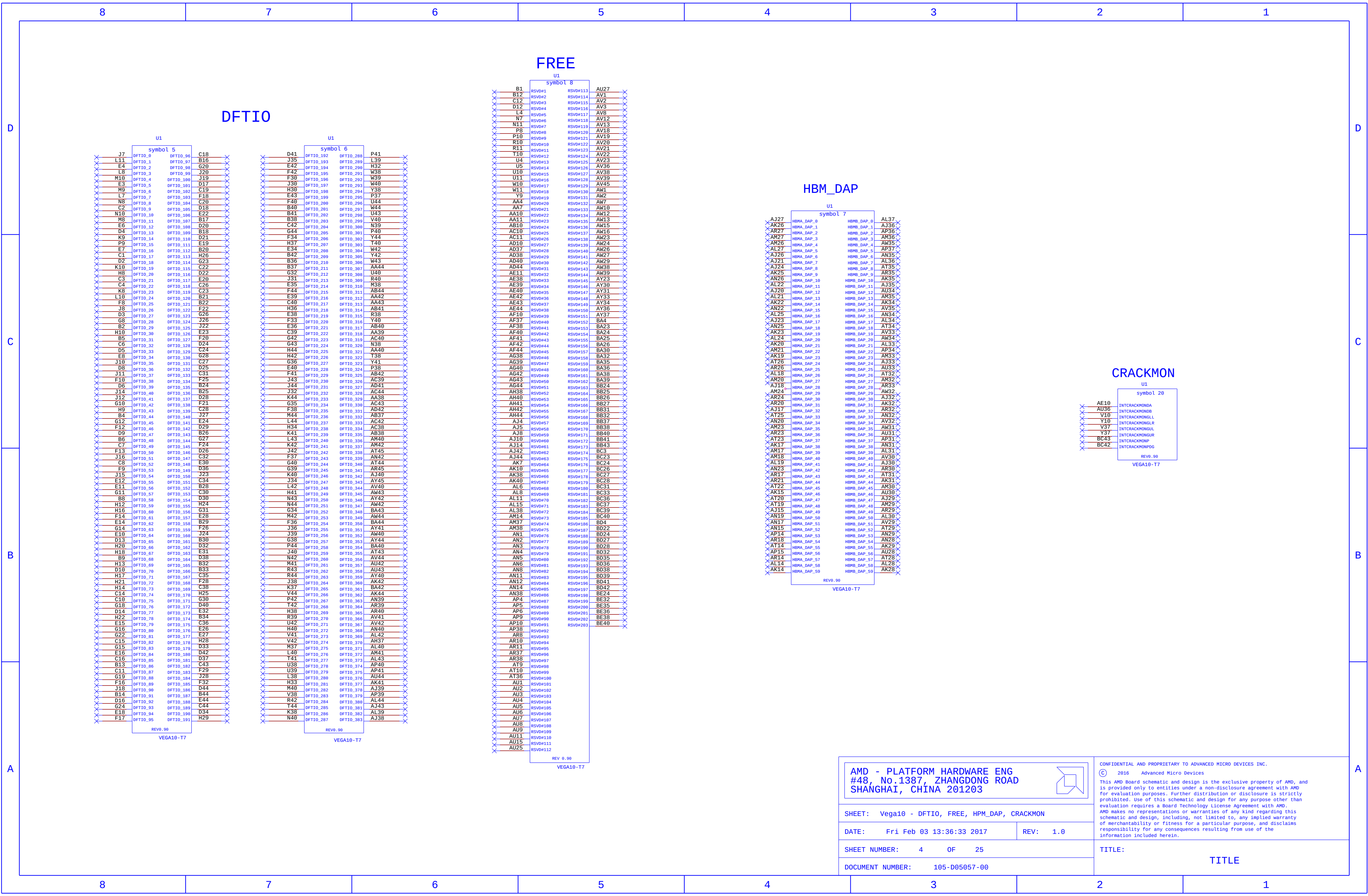
NOTES: NOTE

CONFIDENTIAL AND PROPRIETARY TO ADVANCED MICRO DEVICES INC.
© 2016 Advanced Micro Devices

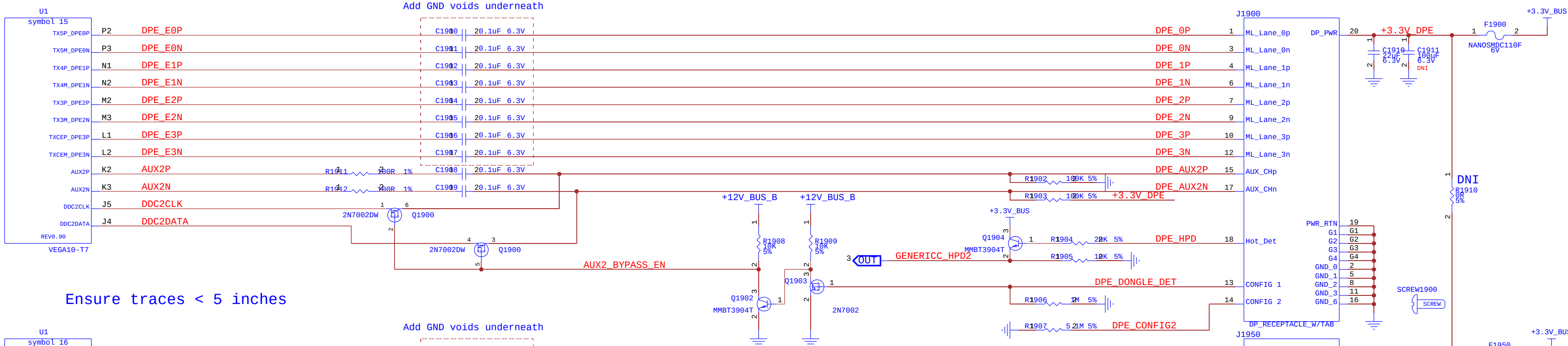
This AMD board schematic and design is the exclusive property of AMD, and is provided only to entities under a non-disclosure agreement with AMD for evaluation purposes. Further distribution or disclosure is strictly prohibited. Use of this schematic and design for any purpose other than evaluation is prohibited. 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.

TITLE:

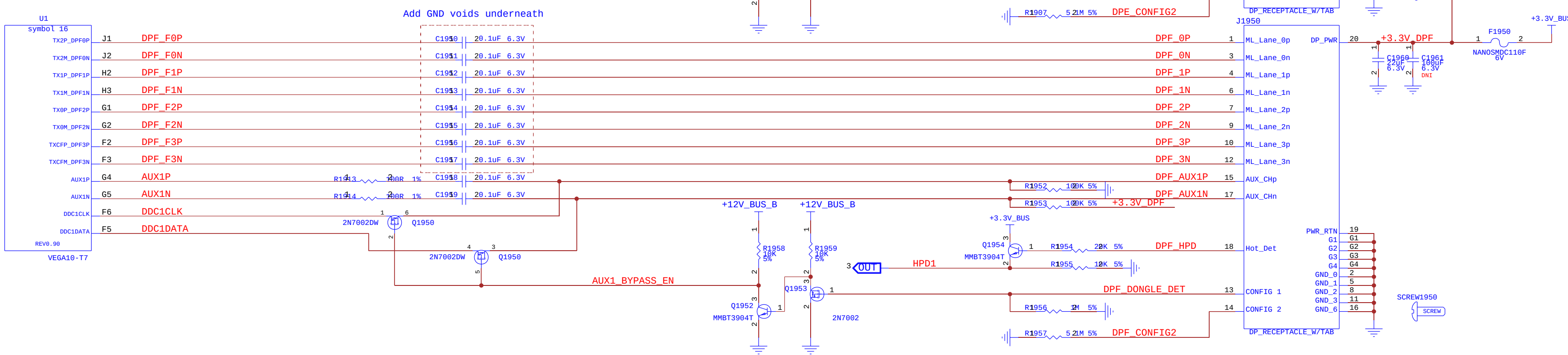
18ci203



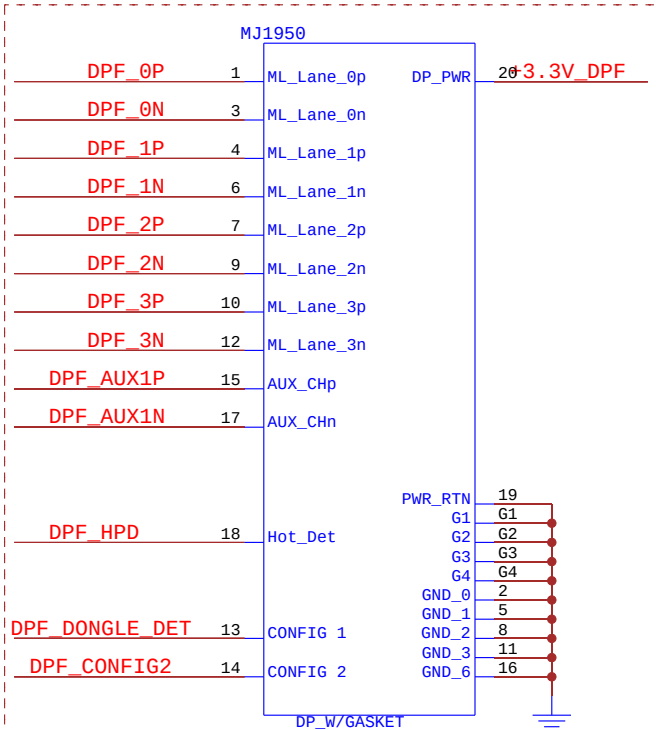
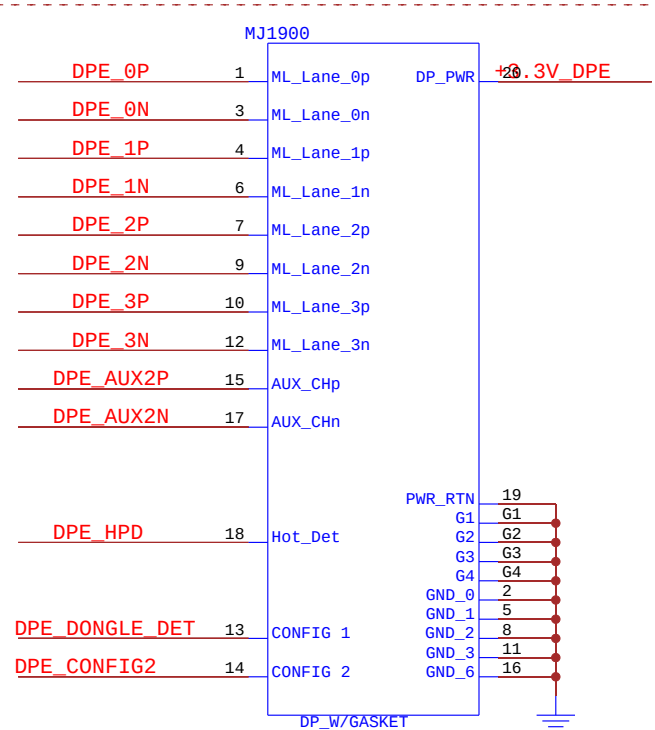
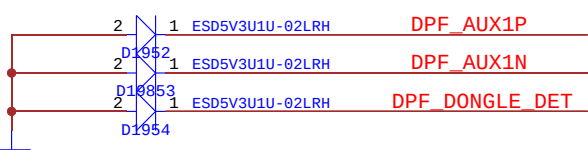
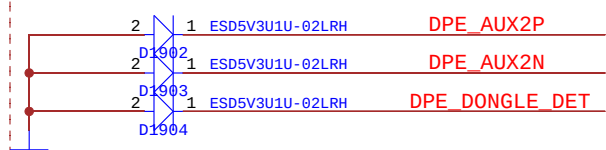
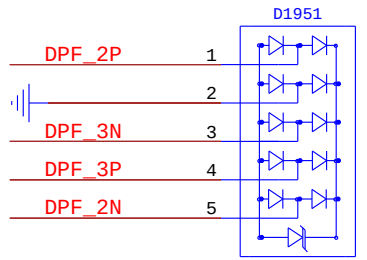
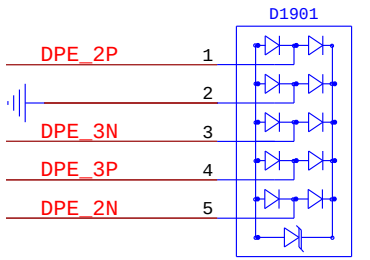
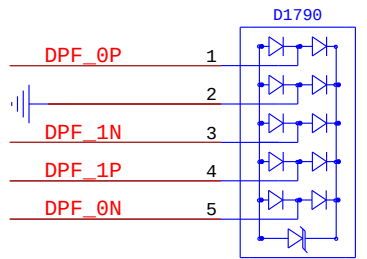
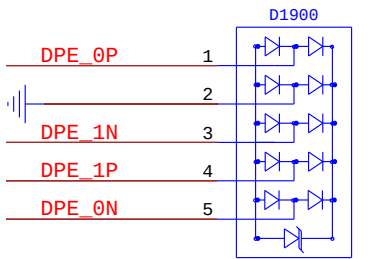
Ensure traces < 5 inches



Ensure traces < 5 inches



OPTIONAL ESD PROTECTION DIODES



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

SHEET: Vega10 - TMDPEF 2xDP

DATE: Fri Feb 03 13:36:27 2017

REV: 1.0

SHEET NUMBER: 6 OF 25

DOCUMENT NUMBER: 105-D05057-00

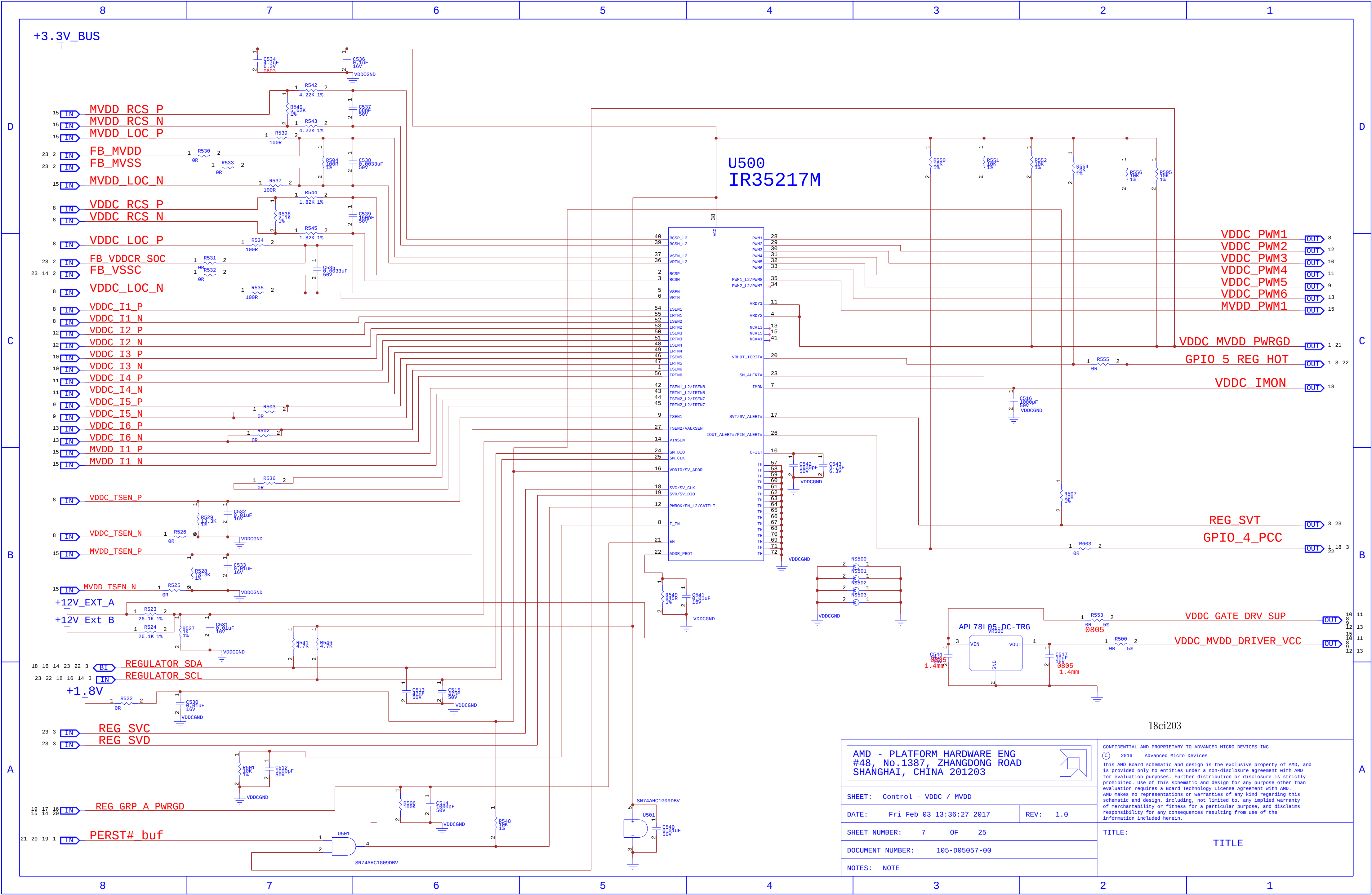
NOTES: NOTE

CONFIDENTIAL AND PROPRIETARY TO ADVANCED MICRO DEVICES INC.
© 2016 Advanced Micro Devices

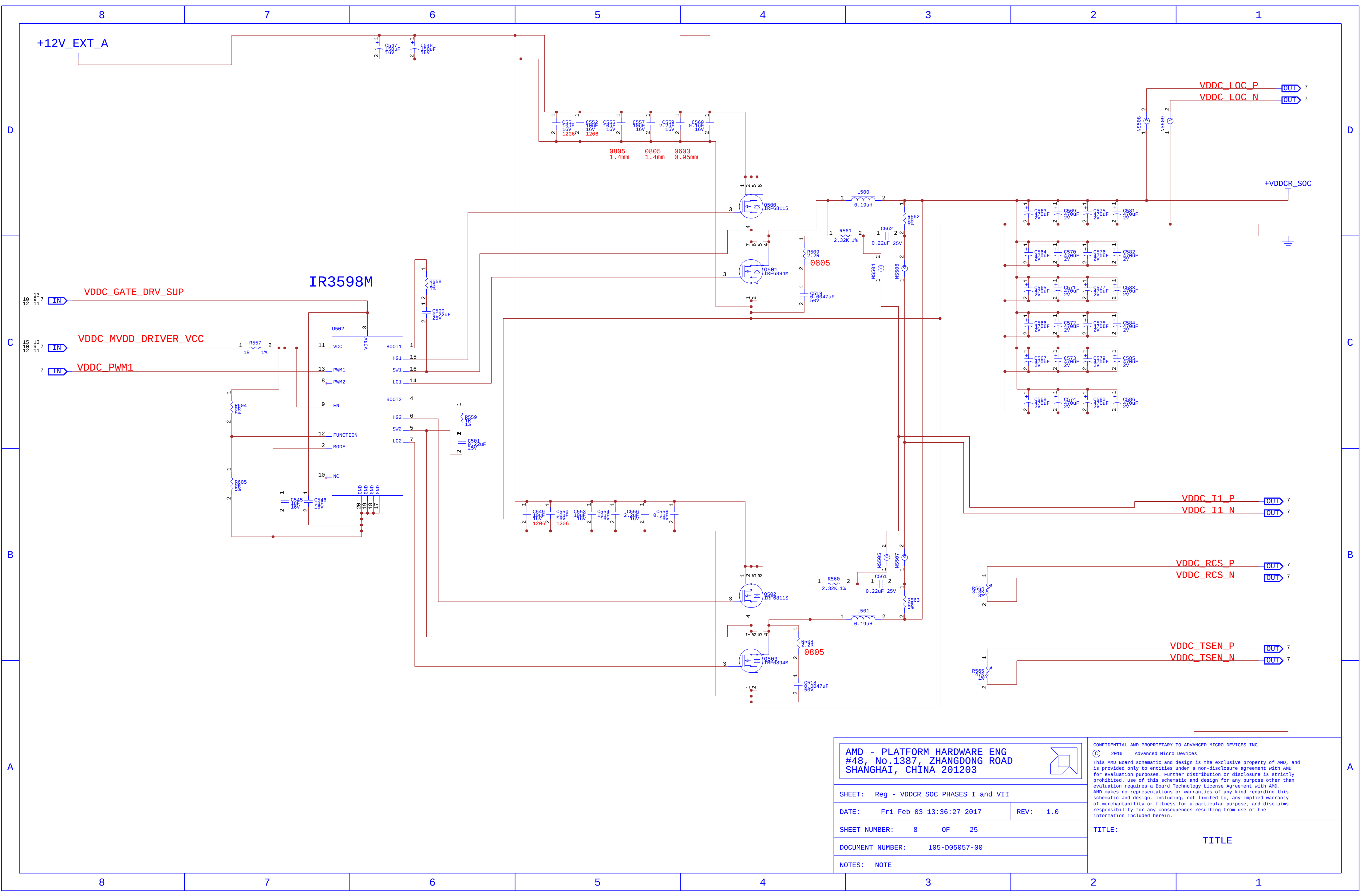
This AMD Board schematic and design is the exclusive property of AMD, and is provided only to entities under a non-disclosure agreement with AMD for evaluation purposes. Further distribution or disclosure is strictly prohibited. Use of this schematic and design for any purpose other than evaluation requires 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.

TITLE:

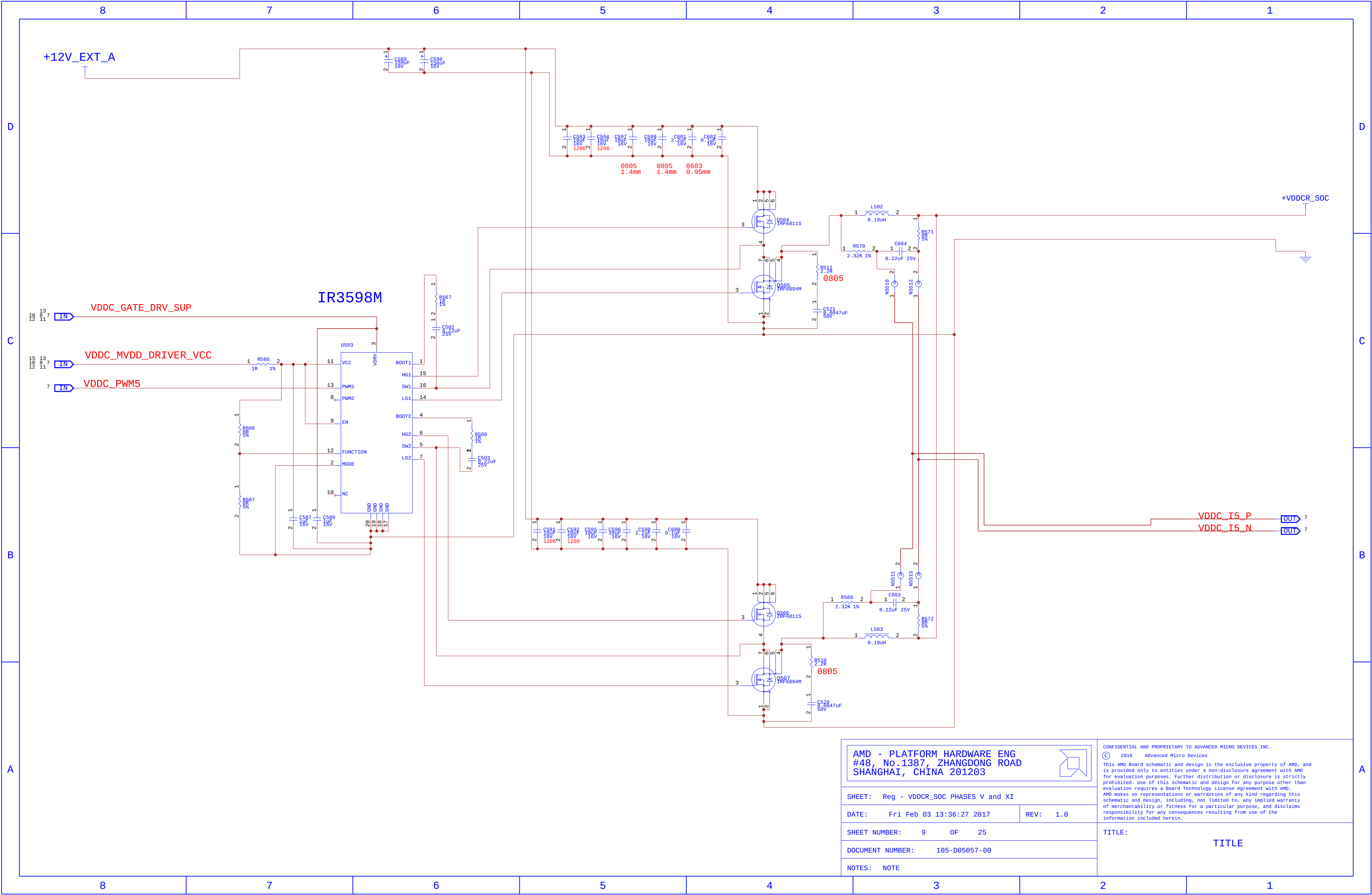
TITLE



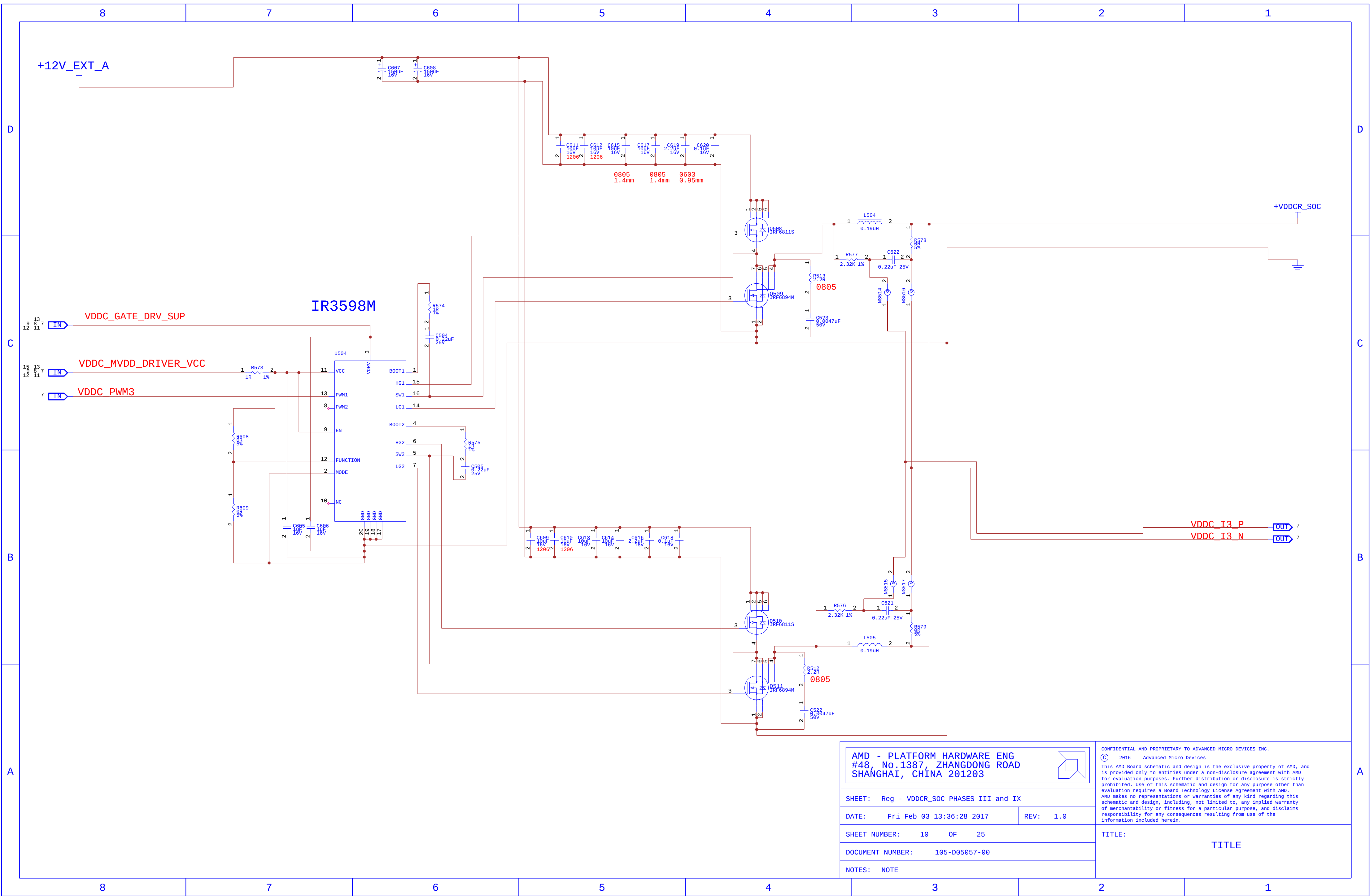
AMD - PLATFORM HARDWARE ENG #48, No.1387, ZHANGDONG ROAD SHANGHAI, CHINA 201203			CONFIDENTIAL AND PROPRIETARY TO ADVANCED MICRO DEVICES INC. © 2016 Advanced Micro Devices This AMD Board schematic and design is the exclusive property of AMD, and is provided only to entities under a non-disclosure agreement with AMD for evaluation purposes. Further 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.		
SHEET: Control - VDDC / MVDD			TITLE:		
DATE: Fri Feb 03 13:36:27 2017			REV: 1.0		
SHEET NUMBER: 7 OF 25			TITLE:		
DOCUMENT NUMBER: 105-D05057-00			TITLE:		
NOTES: NOTE			TITLE:		

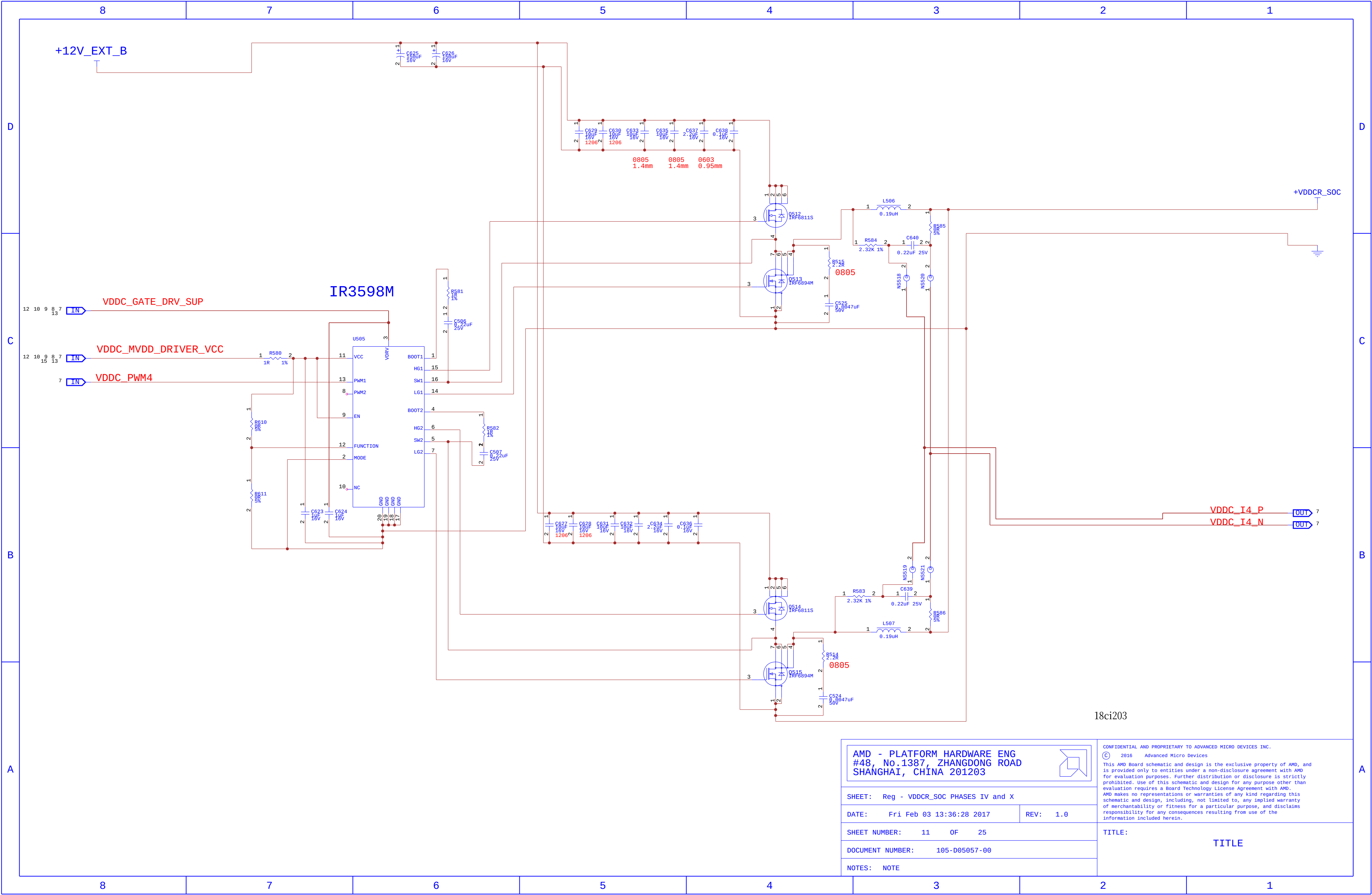


AMD - PLATFORM HARDWARE ENG #48, No.1387, ZHANGDONG ROAD SHANGHAI, CHINA 201203		CONFIDENTIAL AND PROPRIETARY TO ADVANCED MICRO DEVICES INC. © 2016 Advanced Micro Devices This AMD Board schematic and design is the exclusive property of AMD, and is provided only to entities under a non-disclosure agreement with AMD for evaluation purposes. Further 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.	
SHEET: Reg - VDDCR_SOC PHASES I and VII		TITLE: TITLE	
DATE: Fri Feb 03 13:36:27 2017	REV: 1.0		
SHEET NUMBER: 8 OF 25			
DOCUMENT NUMBER: 105-D05057-00			
NOTES: NOTE			

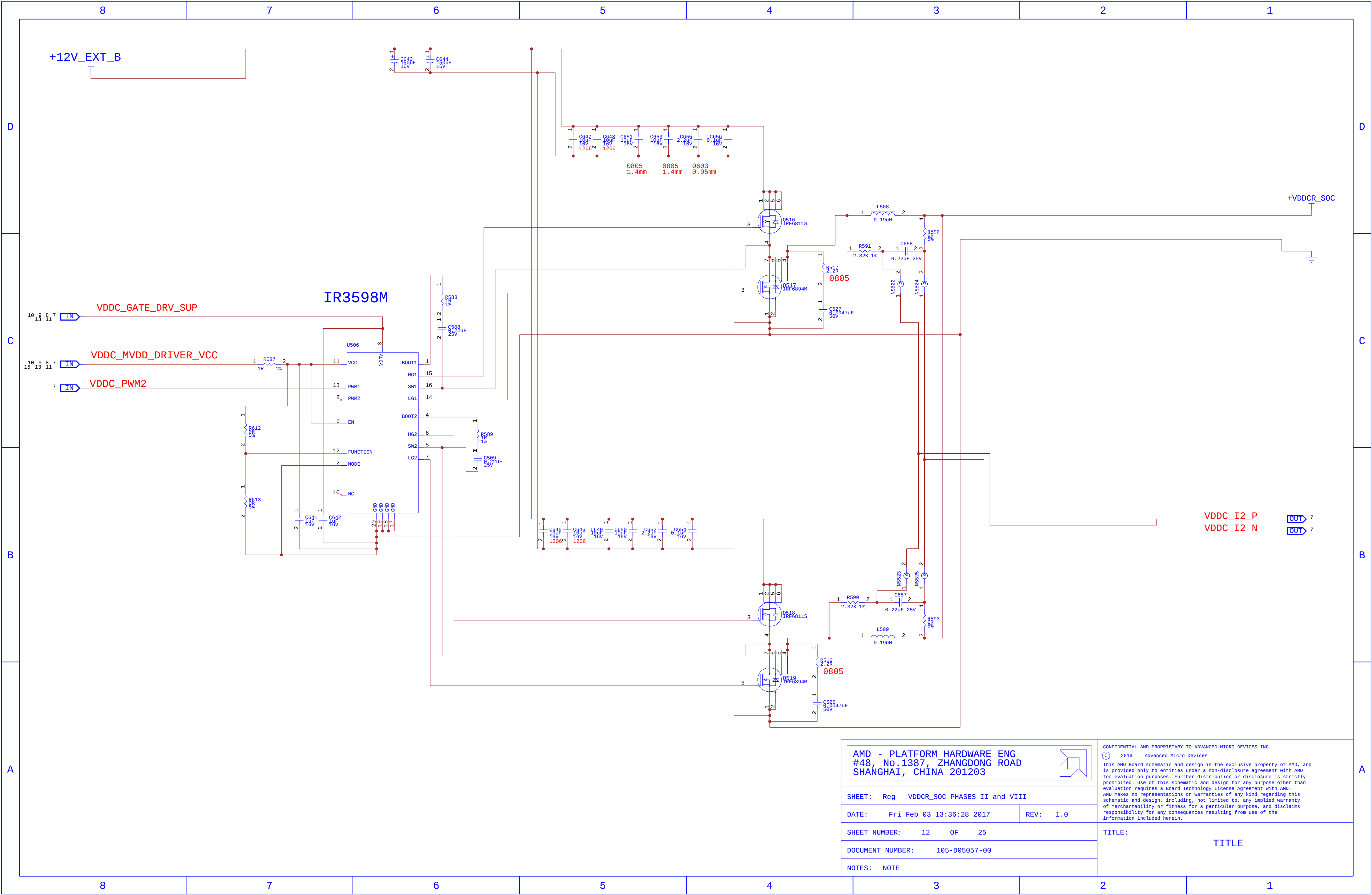


AMD - PLATFORM HARDWARE ENG #48, No.1387, ZHANGDONG ROAD SHANGHAI, CHINA 201203		CONFIDENTIAL AND PROPRIETARY TO ADVANCED MICRO DEVICES INC. © 2016 Advanced Micro Devices This AMD Board schematic and design is the exclusive property of AMD, and is provided only to entities under a non-disclosure agreement with AMD for evaluation purposes. Further 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.
SHEET: Reg - VDDCR_SOC PHASES V and XI		TITLE: TITLE
DATE: Fri Feb 03 13:36:27 2017	REV: 1.0	
SHEET NUMBER: 9 OF 25		
DOCUMENT NUMBER: 105-D05057-00		
NOTES: NOTE		

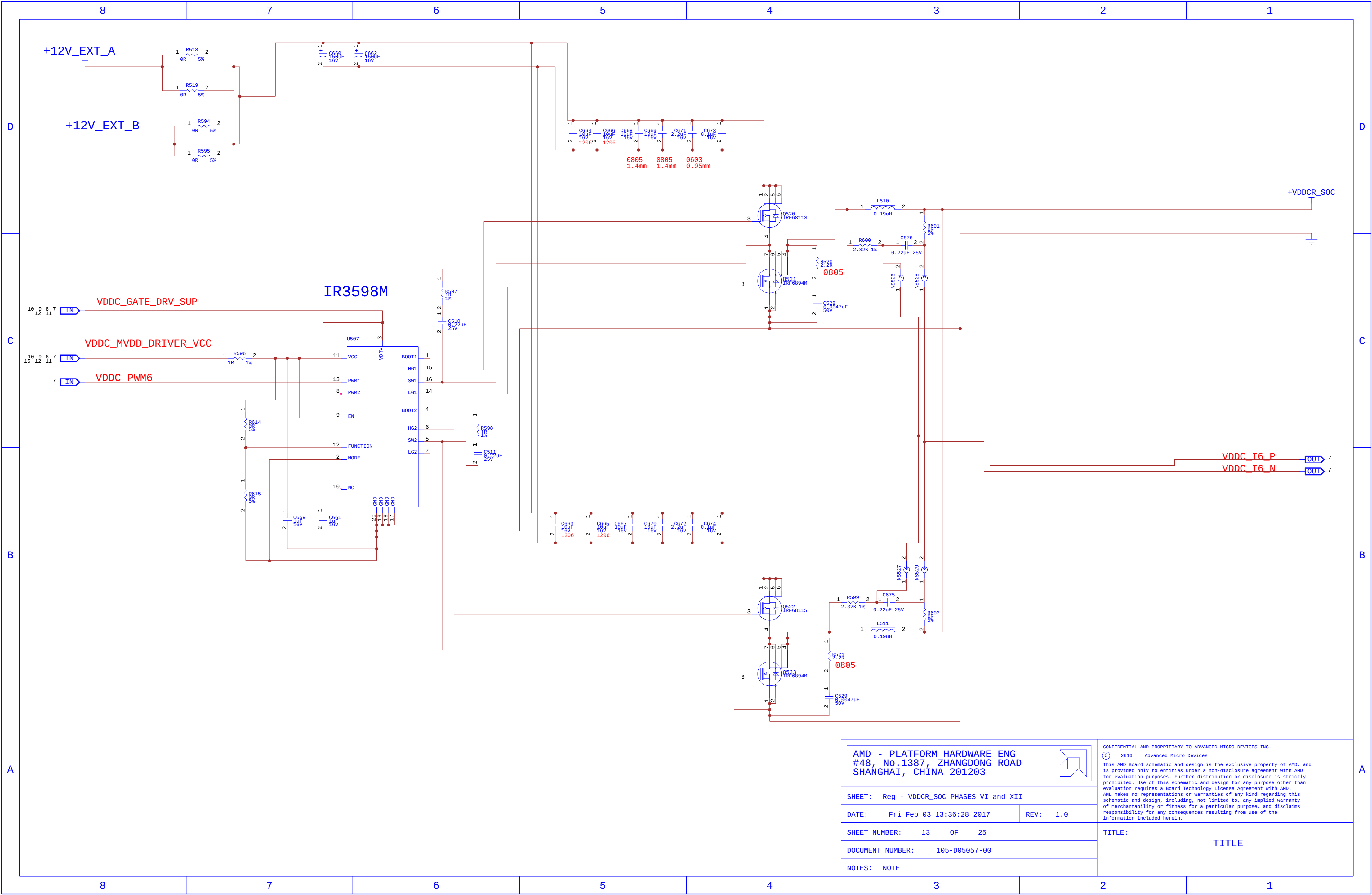




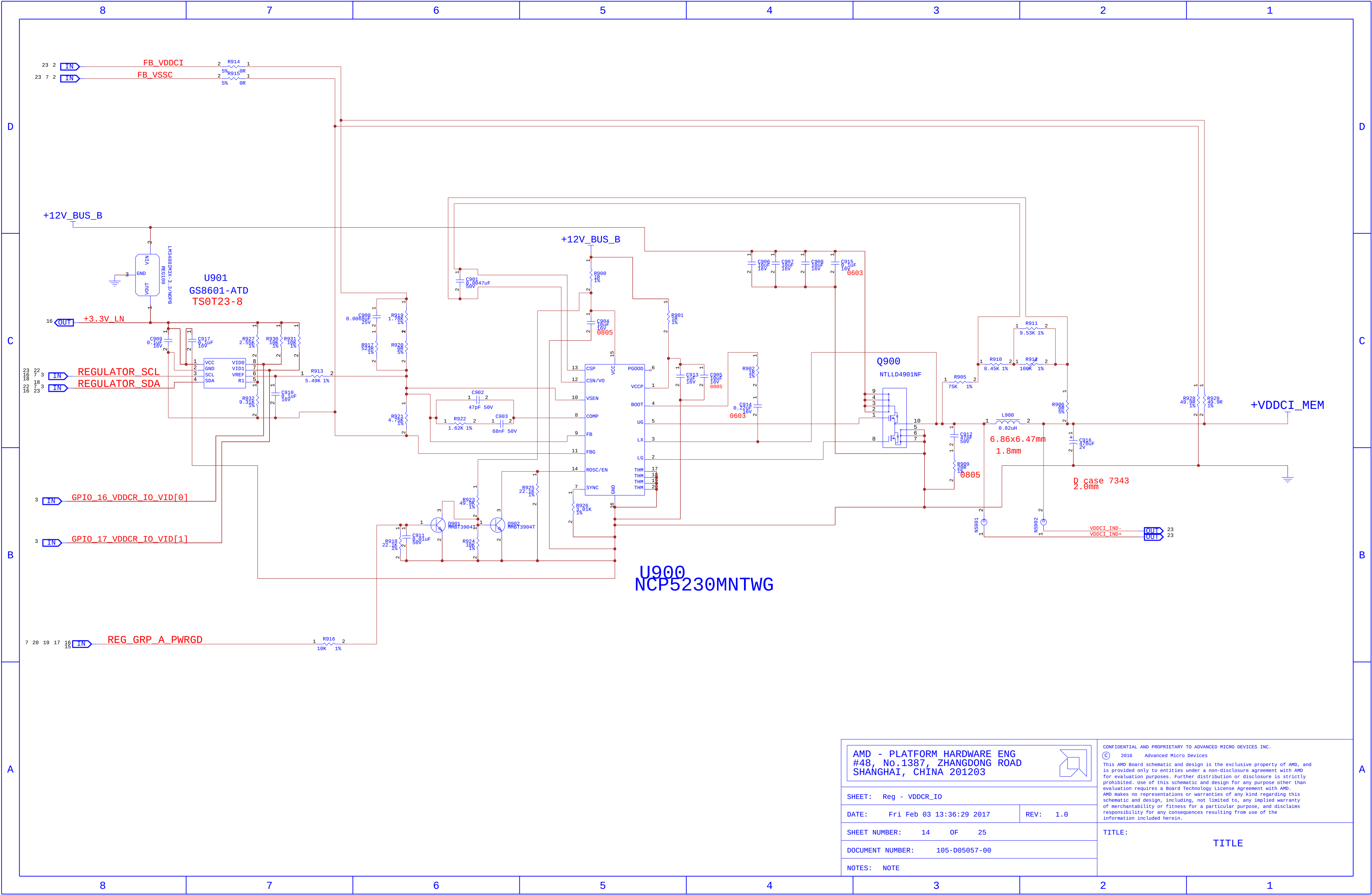
AMD - PLATFORM HARDWARE ENG #48, No.1387, ZHANGDONG ROAD SHANGHAI, CHINA 201203 			CONFIDENTIAL AND PROPRIETARY TO ADVANCED MICRO DEVICES INC. © 2016 Advanced Micro Devices This AMD Board schematic and design is the exclusive property of AMD, and is provided only to entities under a non-disclosure agreement with AMD for evaluation purposes. Further 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.	
SHEET: Reg - VDDCR_SOC PHASES IV and X			TITLE: TITLE	
DATE: Fri Feb 03 13:36:28 2017		REV: 1.0		
SHEET NUMBER: 11 OF 25				
DOCUMENT NUMBER: 105-D05057-00				
NOTES: NOTE				



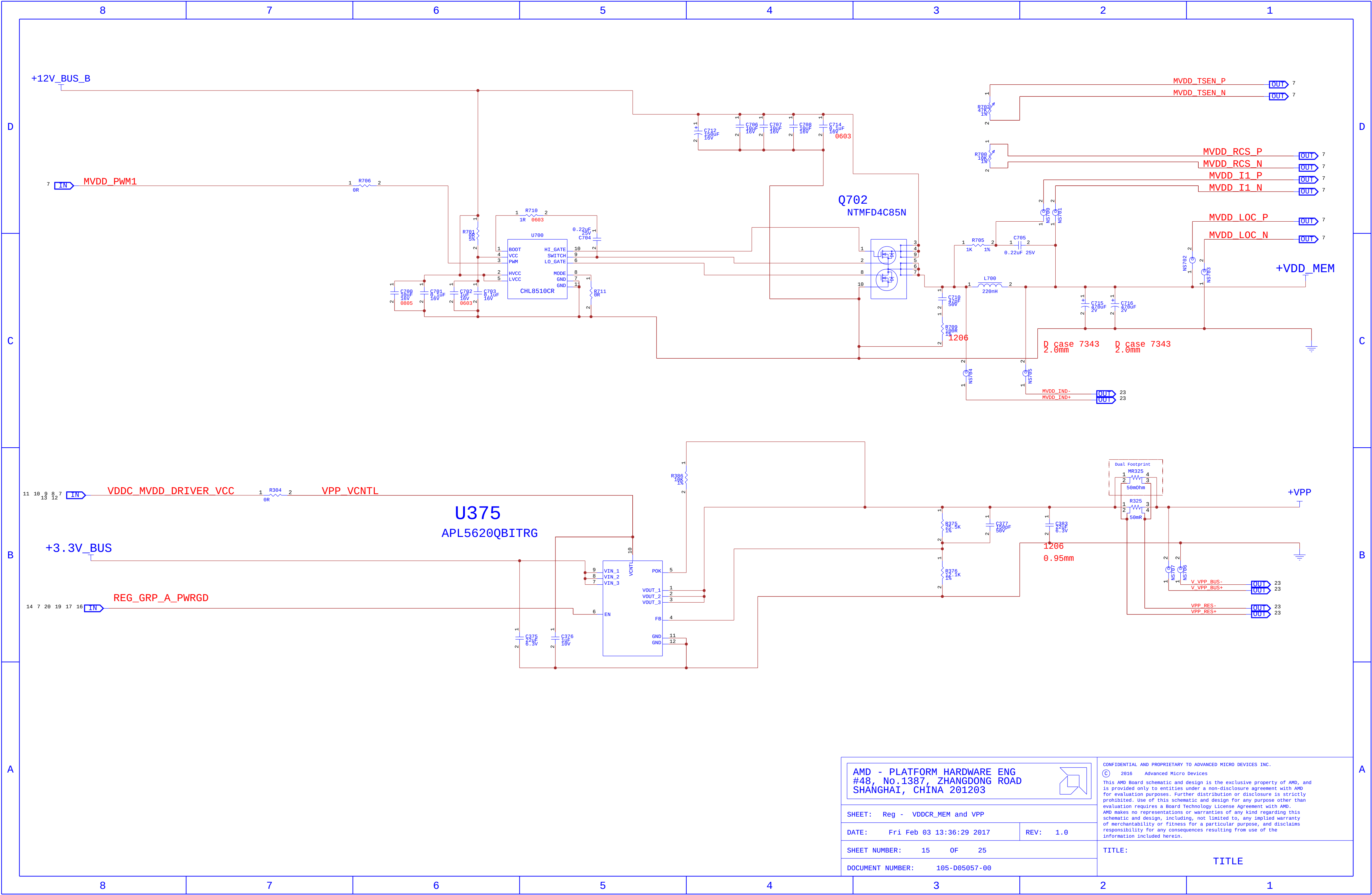
AMD - PLATFORM HARDWARE ENG #48, No.1387, ZHANGDONG ROAD SHANGHAI, CHINA 201203			CONFIDENTIAL AND PROPRIETARY TO ADVANCED MICRO DEVICES INC. © 2016 Advanced Micro Devices This AMD Board schematic and design is the exclusive property of AMD, and is provided only to entities under a non-disclosure agreement with AMD for evaluation purposes. Further 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.	
SHEET: Reg - VDDCR_SOC PHASES II and VIII			TITLE: TITLE	
DATE: Fri Feb 03 13:36:28 2017		REV: 1.0		
SHEET NUMBER: 12 OF 25				
DOCUMENT NUMBER: 105-D05057-00				
NOTES: NOTE				



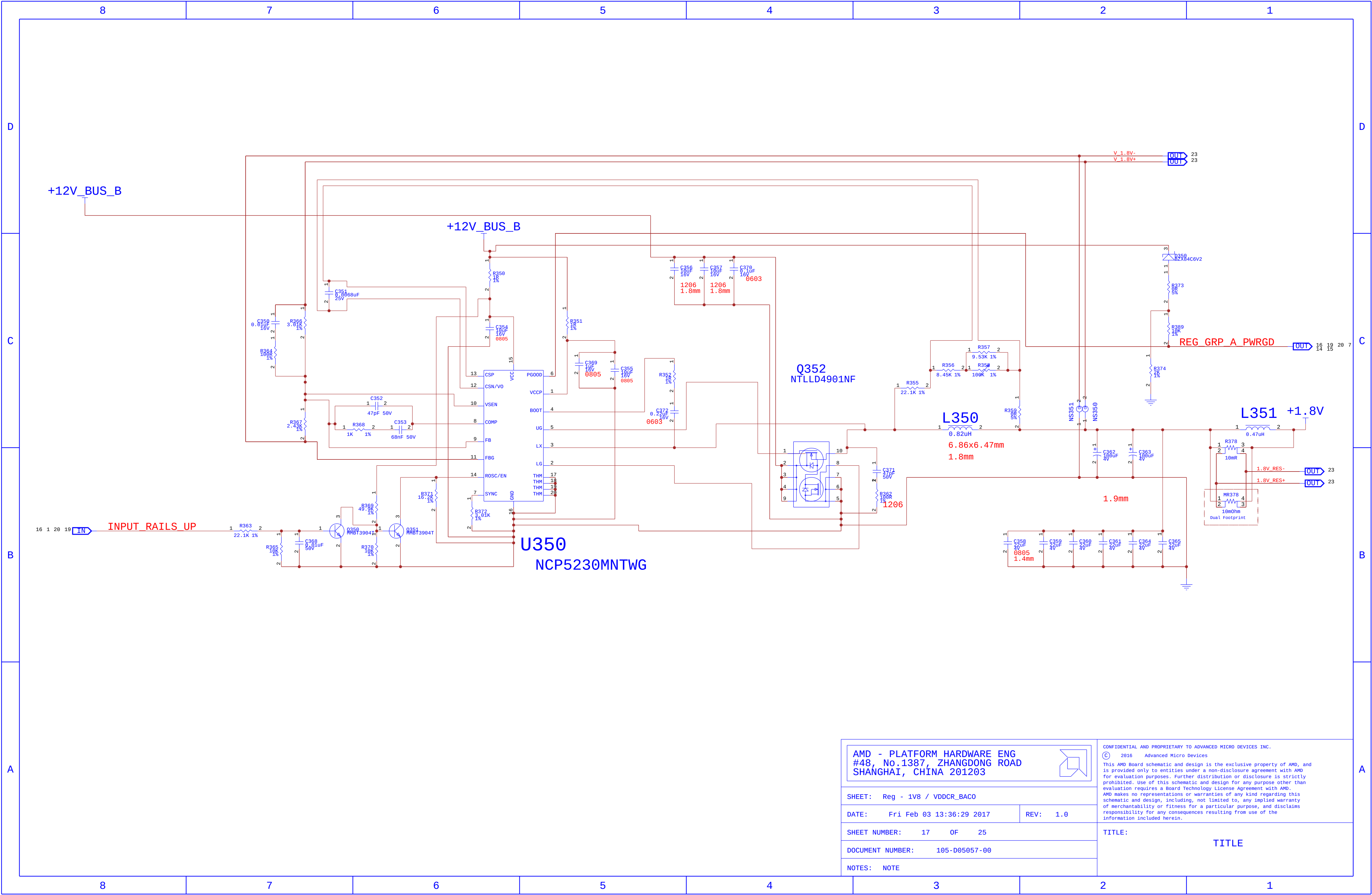
AMD - PLATFORM HARDWARE ENG #48, No.1387, ZHANGDONG ROAD SHANGHAI, CHINA 201203		CONFIDENTIAL AND PROPRIETARY TO ADVANCED MICRO DEVICES INC. © 2016 Advanced Micro Devices This AMD Board schematic and design is the exclusive property of AMD, and is provided only to entities under a non-disclosure agreement with AMD for evaluation purposes. Further 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.	
SHEET: Reg - VDDCR_SOC PHASES VI and XII		TITLE: TITLE	
DATE: Fri Feb 03 13:36:28 2017		REV: 1.0	
SHEET NUMBER: 13 OF 25			
DOCUMENT NUMBER: 105-D05057-00			
NOTES: NOTE			



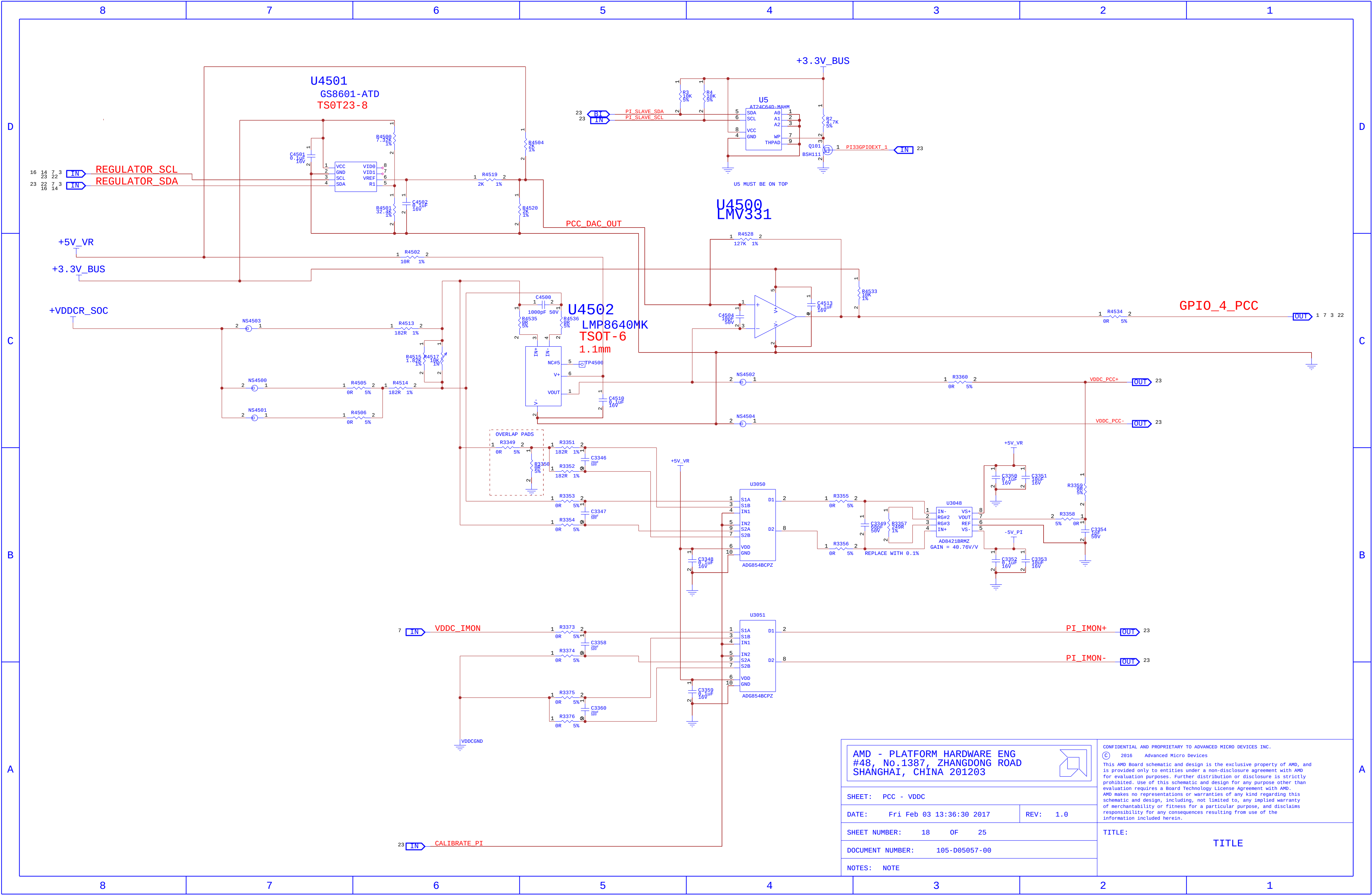
AMD - PLATFORM HARDWARE ENG #48, No.1387, ZHANGDONG ROAD SHANGHAI, CHINA 201203				CONFIDENTIAL AND PROPRIETARY TO ADVANCED MICRO DEVICES INC. © 2016 Advanced Micro Devices This AMD Board schematic and design is the exclusive property of AMD, and is provided only to entities under a non-disclosure agreement with AMD for evaluation purposes. Further 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.	
SHEET: Reg - VDDCR_IO				TITLE:	
DATE:	Fri Feb 03 13:36:29 2017	REV:	1.0	TITLE	
SHEET NUMBER: 14 OF 25					
DOCUMENT NUMBER: 105-D05057-00					
NOTES: NOTE					



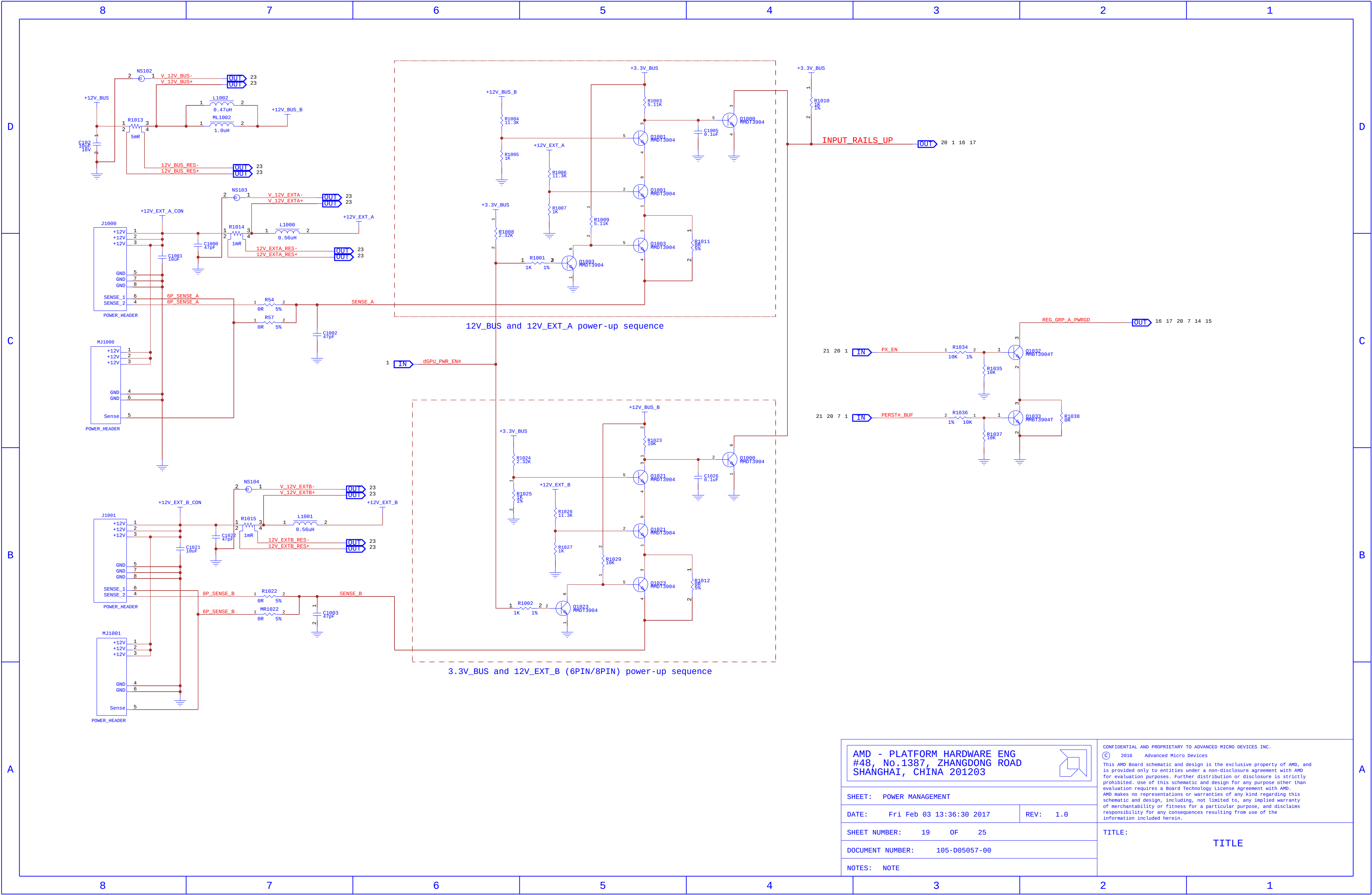
AMD - PLATFORM HARDWARE ENG #48, No.1387, ZHANGDONG ROAD SHANGHAI, CHINA 201203 		CONFIDENTIAL AND PROPRIETARY TO ADVANCED MICRO DEVICES INC. © 2016 Advanced Micro Devices This AMD Board schematic and design is the exclusive property of AMD, and is provided only to entities under a non-disclosure agreement with AMD for evaluation purposes. Further 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.	
SHEET: Reg - VDDCR_MEM and VPP		TITLE:	
DATE: Fri Feb 03 13:36:29 2017	REV: 1.0	TITLE	
SHEET NUMBER: 15 OF 25			
DOCUMENT NUMBER: 105-D05057-00			



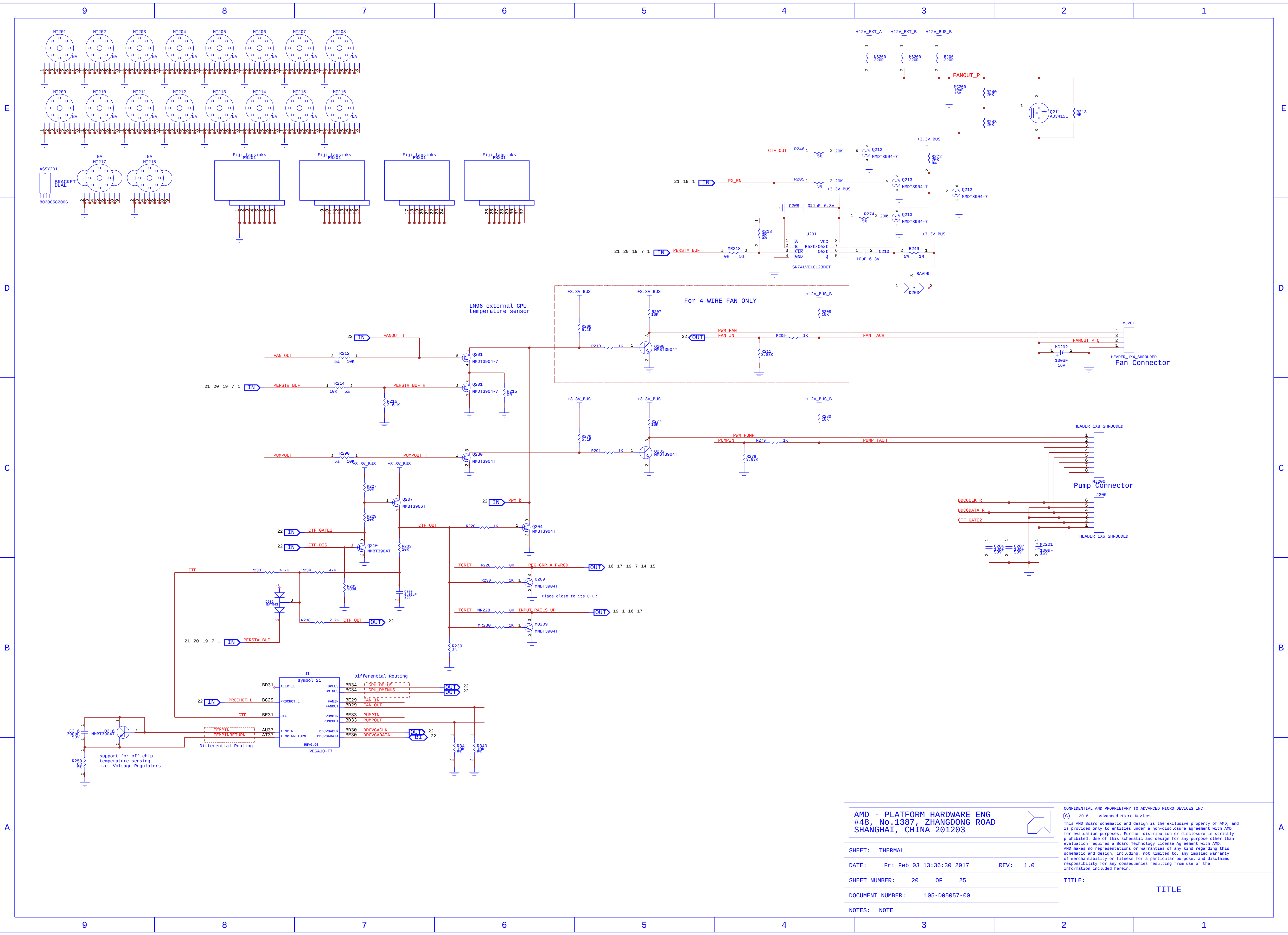
AMD - PLATFORM HARDWARE ENG #48, No.1387, ZHANGDONG ROAD SHANGHAI, CHINA 201203				CONFIDENTIAL AND PROPRIETARY TO ADVANCED MICRO DEVICES INC. © 2016 Advanced Micro Devices	
SHEET: Reg - 1V8 / VDDCR_BACO				This AMD Board schematic and design is the exclusive property of AMD, and is provided only to entities under a non-disclosure agreement with AMD for evaluation purposes. Further 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.	
DATE: Fri Feb 03 13:36:29 2017		REV: 1.0		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.	
SHEET NUMBER: 17 OF 25				TITLE:	
DOCUMENT NUMBER: 105-D05057-00				TITLE	
NOTES: NOTE					

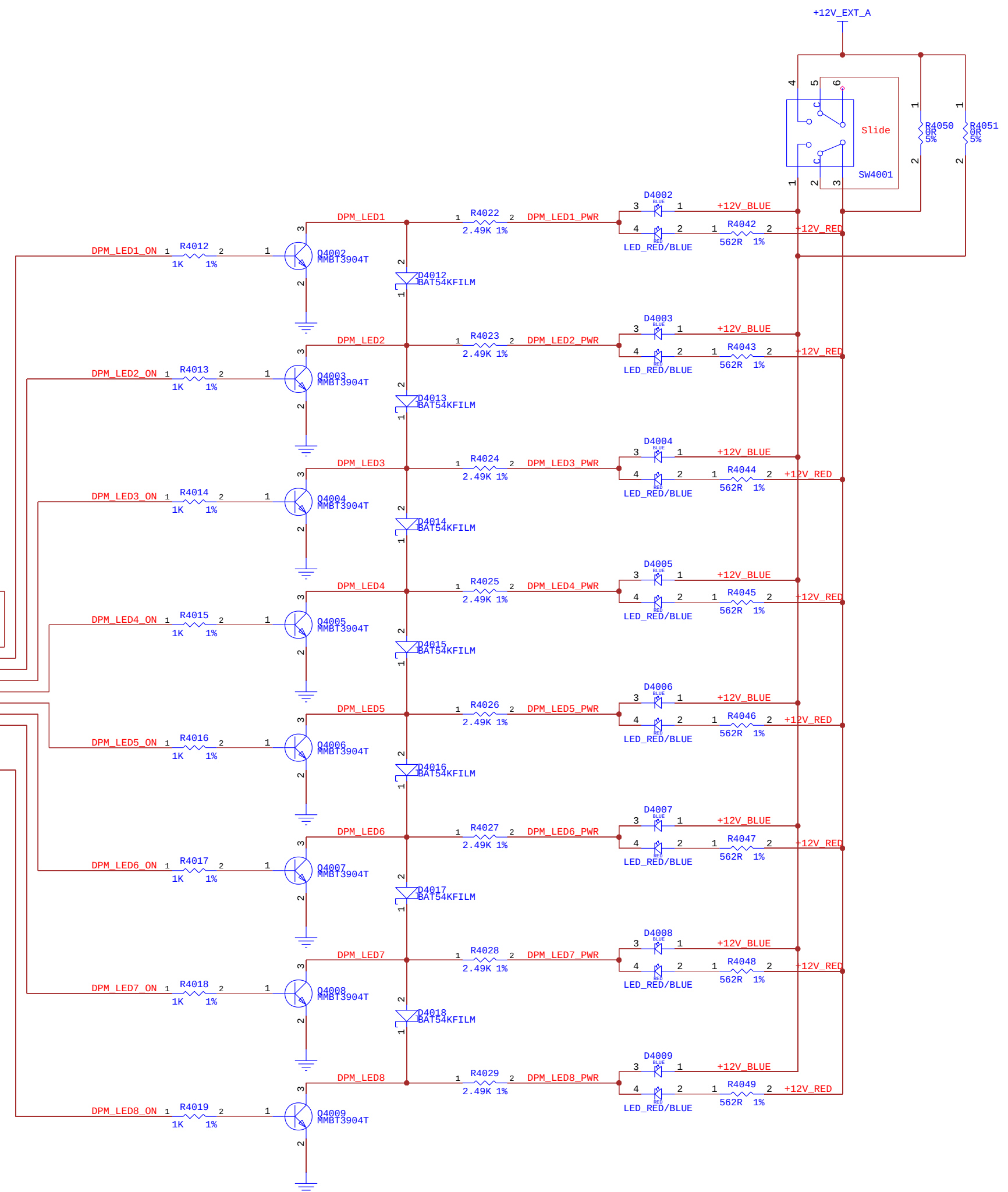
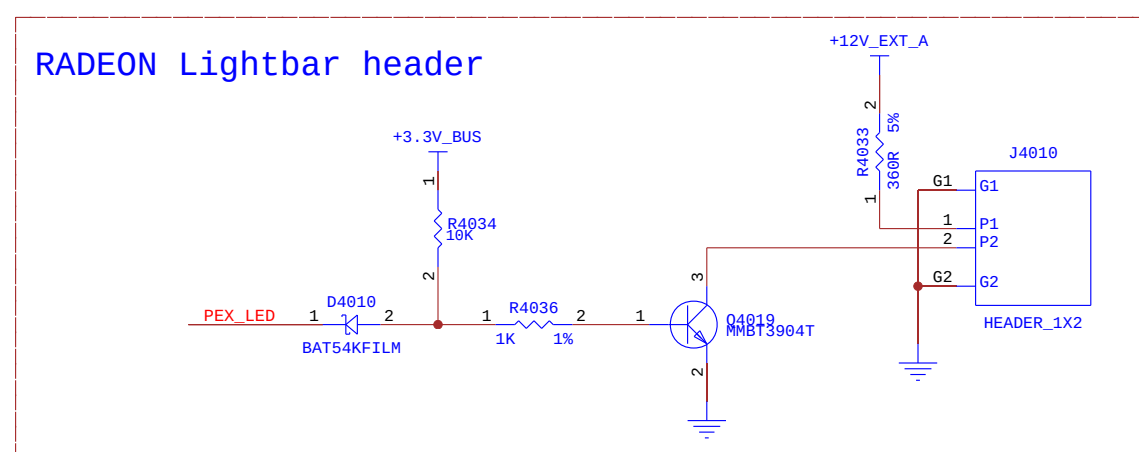
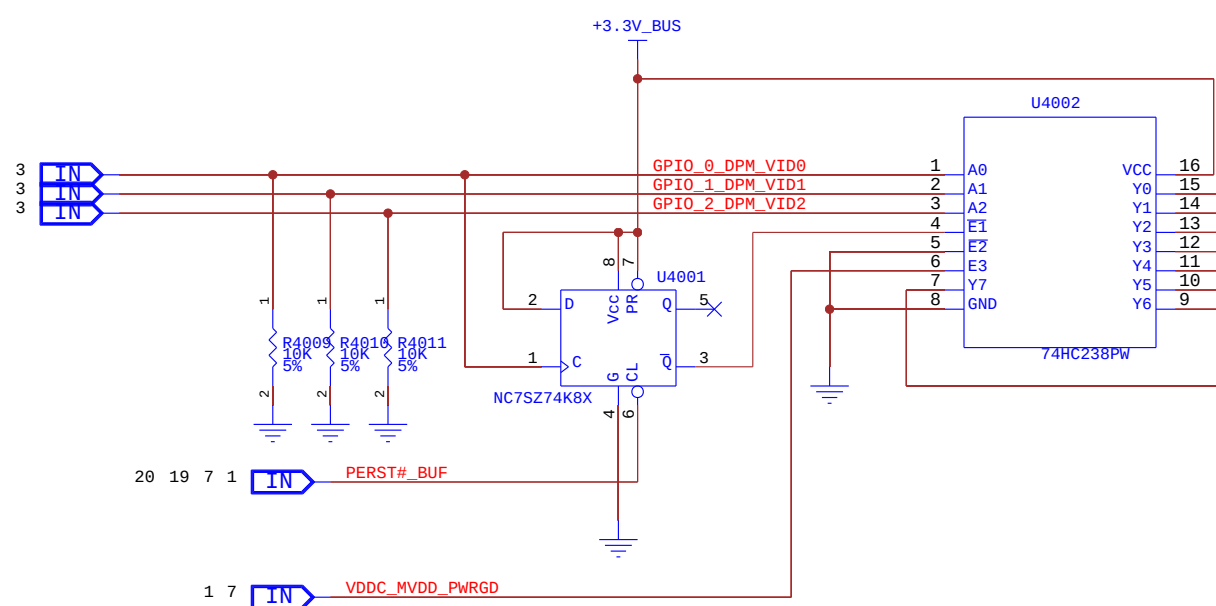
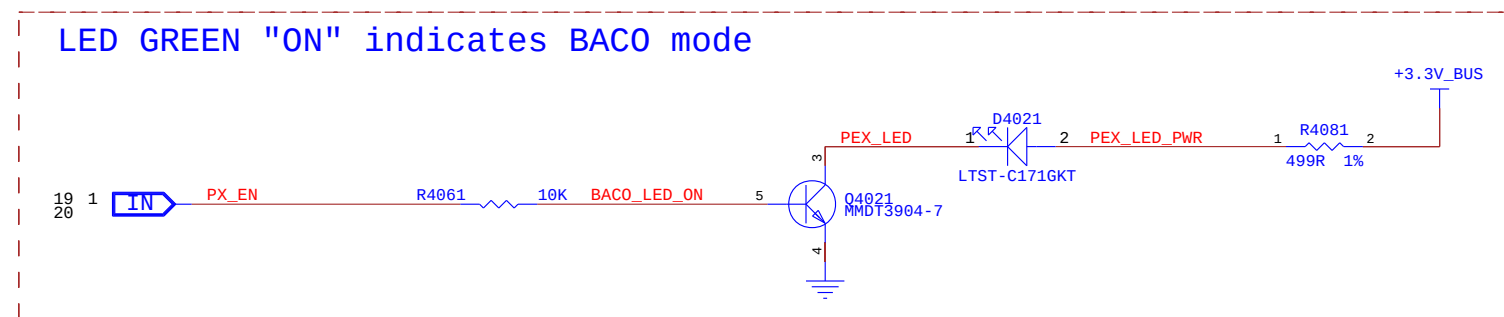


AMD - PLATFORM HARDWARE ENG #48, No.1387, ZHANGDONG ROAD SHANGHAI, CHINA 201203				CONFIDENTIAL AND PROPRIETARY TO ADVANCED MICRO DEVICES INC. © 2016 Advanced Micro Devices This AMD Board schematic and design is the exclusive property of AMD, and is provided only to entities under a non-disclosure agreement with AMD for evaluation purposes. Further 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.	
SHEET: PCC - VDDC				TITLE:	
DATE:	Fri Feb 03 13:36:30 2017	REV:	1.0	TITLE	
SHEET NUMBER: 18 OF 25					
DOCUMENT NUMBER: 105-D05057-00					
NOTES: NOTE					



AMD - PLATFORM HARDWARE ENG #48, No.1387, ZHANGDONG ROAD SHANGHAI, CHINA 201203		CONFIDENTIAL AND PROPRIETARY TO ADVANCED MICRO DEVICES INC. © 2016 Advanced Micro Devices 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 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.	
SHEET: POWER MANAGEMENT		TITLE: TITLE	
DATE: Fri Feb 03 13:36:30 2017		REV: 1.0	
SHEET NUMBER: 19 OF 25			
DOCUMENT NUMBER: 105-D05057-00			
NOTES: NOTE			





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

CONFIDENTIAL AND PROPRIETARY TO ADVANCED MICRO DEVICES INC.
© 2016 Advanced Micro Devices

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 distribution or disclosure is strictly prohibited. Use of this schematic and design for any purpose other than the specific request from the Board member is prohibited. 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 any liability for any consequences resulting from use of the information included herein.

SHEET: GPUTACH & BACO LEDs

DATE: Fri Feb 03 13:36:30 2017	REV: 1.0
--------------------------------	----------

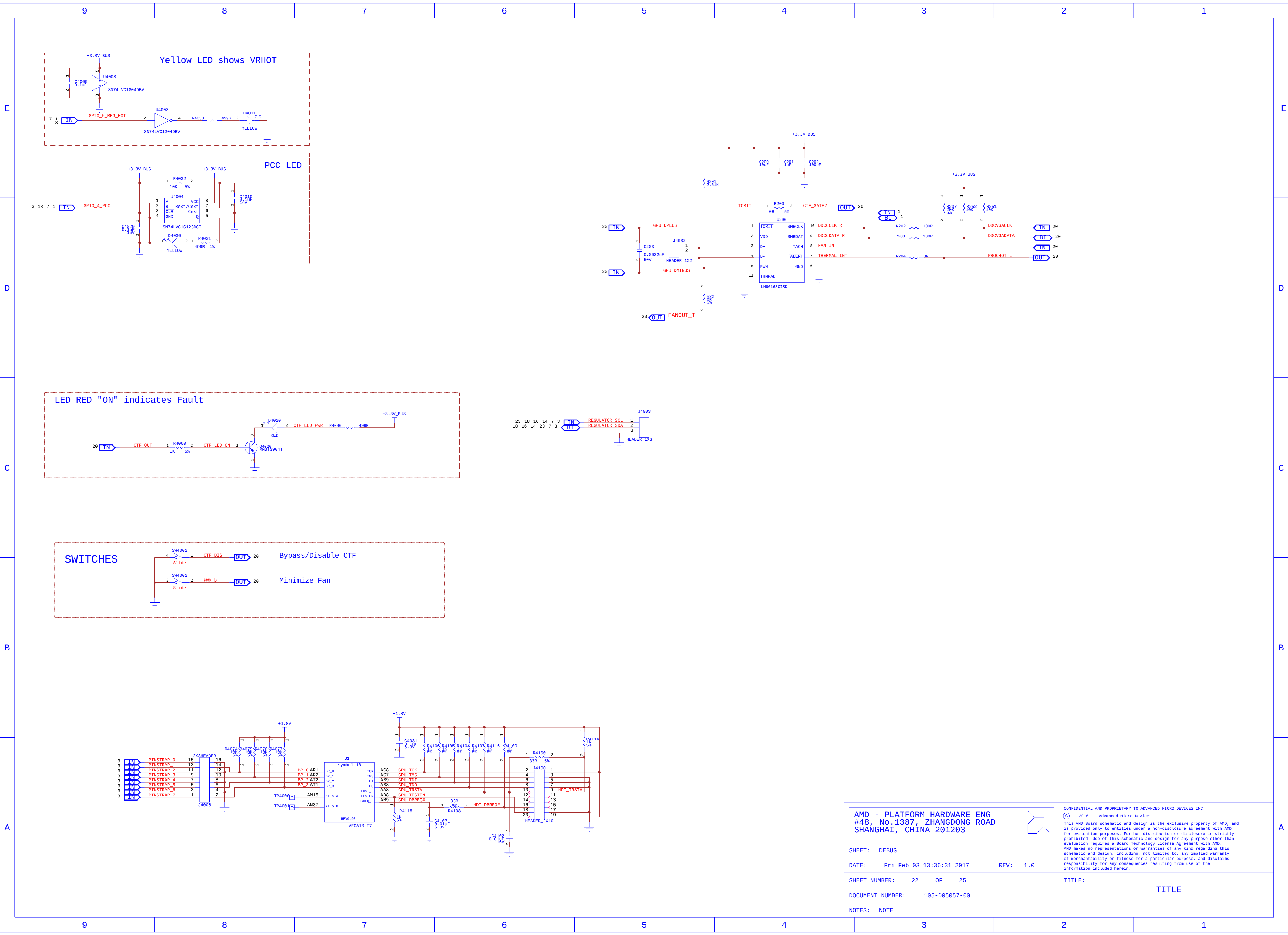
SHEET NUMBER: 21 OF 25

DOCUMENT NUMBER: 105-D05057-00

NOTES: NOTE

TITLE:

TITLE

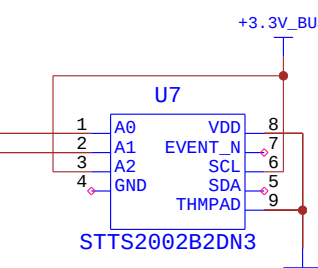


AMD - PLATFORM HARDWARE ENG #48, No.1387, ZHANGDONG ROAD SHANGHAI, CHINA 201203				CONFIDENTIAL AND PROPRIETARY TO ADVANCED MICRO DEVICES INC. © 2016 Advanced Micro Devices This AMD Board schematic and design is the exclusive property of AMD, and is provided only to entities under a non-disclosure agreement with AMD for evaluation purposes. Further 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.	
SHEET: DEBUG				TITLE:	
DATE: Fri Feb 03 13:36:31 2017			REV: 1.0		
SHEET NUMBER: 22 OF 25			TITLE		
DOCUMENT NUMBER: 105-D05057-00					
NOTES: NOTE					

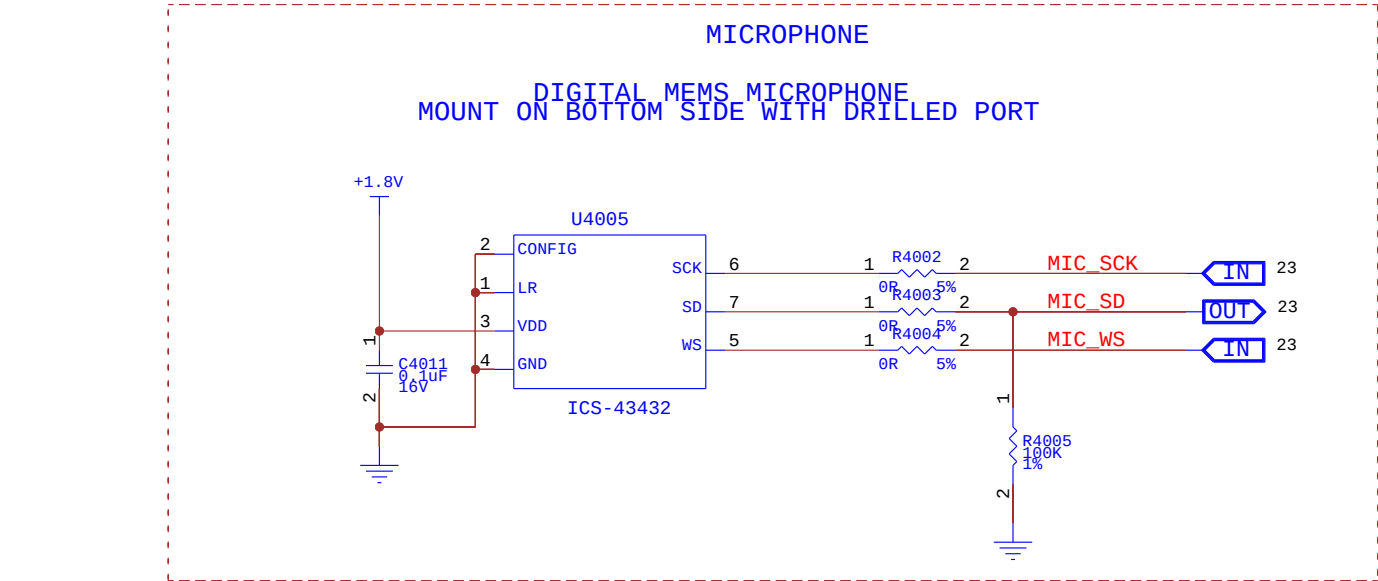
8	7	6	5	4	3	2	1
---	---	---	---	---	---	---	---



1.



PL



DOCUMENT NUME

TITLE



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

AMD - PLATFORM HARDWARE ENG #48, NO.1387, ZHANGDONG ROAD SHANGHAI, CHINA 201203			CONFIDENTIAL AND PROPRIETARY TO ADVANCED MICRO DEVICES INC. © 2016 Advanced Micro Devices 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 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.
SHEET: BLOCK DIAGRAM			
DATE: Thu Feb 02 12:25:15 2017		REV: 1.0	
SHEET NUMBER: 24 OF 25			TITLE: TITLE
DOCUMENT NUMBER: 105-D05057-00			
NOTES: NOTE			

8				7				6				5				4				3				2				1																							
AMD								TITLE:								TITLE								DOCUMENT NUMBER: 105-D05057-00								DATE: Fri Feb 03 11:52:28 2017								SHEET NUMBER: 25 OF 25								REV: 1.0			
REVISION HISTORY												ENGINEER: XXX				NOTES: NOTE				CONFIDENTIAL AND PROPRIETARY TO ADVANCED MICRO DEVICES INC. C • 2016 Advanced Micro Devices 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 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.												AMD - PLATFORM HARDWARE ENG #48, No.1387, ZHANGDONG ROAD SHANGHAI, CHINA 201203																			
SCH Rev		PCB Rev		Date		REVISION DEScriptON																																													
D		0		A		10/9/15		Initial schematic creation																										D																	
				B		6/30/16		Many Changes on PI circuit , Minor Chnages on SMPS																																											
				C		9/30/16		Many Changes on PI circuit , ASIC SYMBOL UPDATED FOR FLASH ROM INTERFACE , flash ROM SI/S0 swapped , RP1 added																																											
				D		11/29/16		Changes on PI circuit , 100MHz HCSL clock source replced (contact AMD for detailes)																																											
				E		01/05/17		PI circuit removed , 200R added to DP AUX (6 resistors)																																											
				-00		02/02/17		1.8V/VPP Kelvin resistors dual footprinted , DP AUX (6 resistors changed to 100R) , Changed R4033 to 360R 1206 and moved to 12V_AUX , SMBUS Address note swap , J4001 removed , R115/R116 changed to 61.9R , R205 added																																											
C																																C																			
B																																B																			
A																																A																			
8				7				6				5				4				3				2				1																							