

Genesys ZU

Variant: 3EG

11/13/2019

Rev B.1

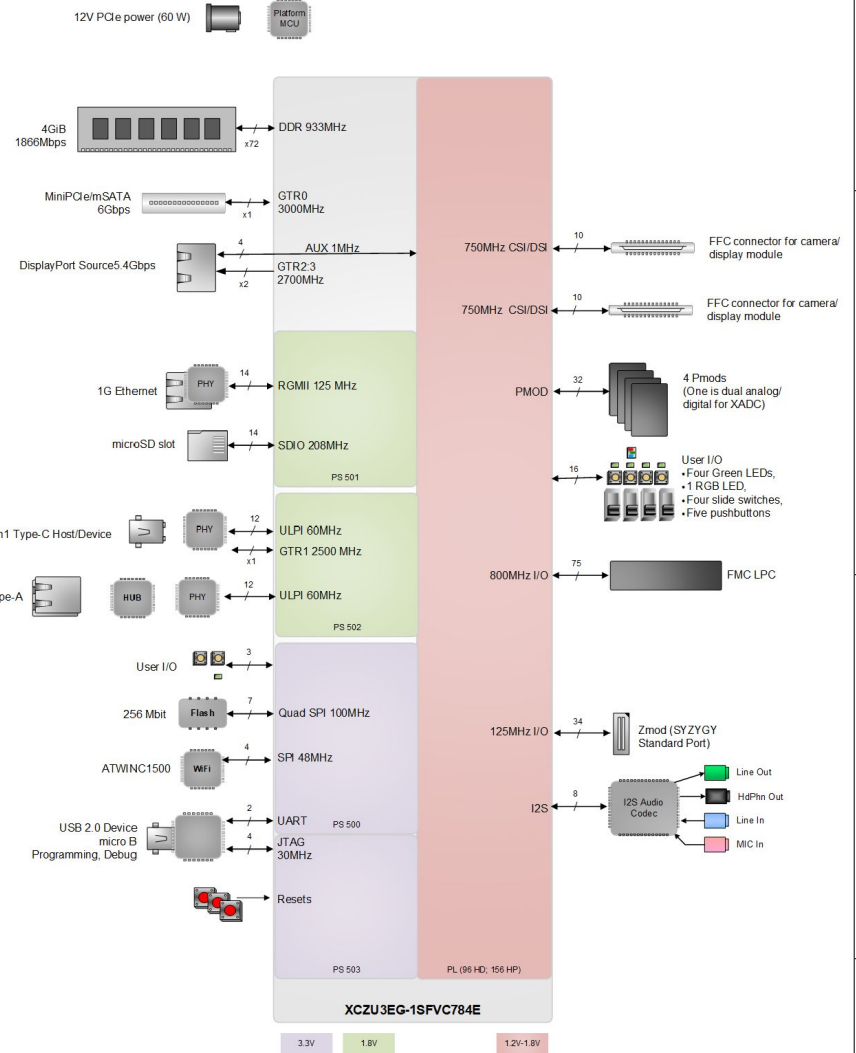
Sheet	Circuit	Sheet	Circuit	Sheet	Circuit
1	COVER PAGE	14	MINI PCIe / SATA	29	PL POWER
2	BLOCK DIAGRAM	15	ETHERNET	30	DDR4 SODIMM
3	I2C DIAGRAM	16	SFP+ INTERFACE	31	DDR4 SODIMM SUPPLIES
4	PMOD	17	AUDIO INTERFACE	32	I2C
	MIO BUTTONS; MIO LED	18	HDMI 2.0 SOURCE	33	PLATFORM MCU
5	MIPI (PCAM)	19	FMC, SFP, HDMI SOURCE CLOCK	34	FAN CONTROL
6	WI-FI MODULE	20	HDMI 2.0 SINK	35	12V PROTECTION
	PL BUTTONS, SWITCHES & LEDs	21	DISPLAYPORT SOURCE	36	BOARD SUPPLIES
7	FMC LPC	22	FPGA CONFIGURATION	37	BOARD SUPPLIES
8	SYZYGY	23	HD FPGA BANKS; XADC	38	BOARD SUPPLIES
9	USB 3.0 HOST/DEVICE	24	HP FPGA BANKS	39	DDR4 SUPPLY
10	USB 2.0 HOST PHY & HUB	25	MIO BANKS; SPI FLASH		GT SUPPLY
11	USB 2.0 HOST PORTS	26	DDR BANK	40	BOARD SUPPLIES TABLE
12	USB PROGRAMMING / UART	27	GTs BANKS		
13	SD CARD	28	PS POWER; GND		

Title	Genesys ZU-3EG	Rev	B.1
		Copyright	2019
Circuit			
Doc#	500-383		
Engineer	EG		
Author	IC		
Date	11/13/2019		
Sheet#	1 out of 39		

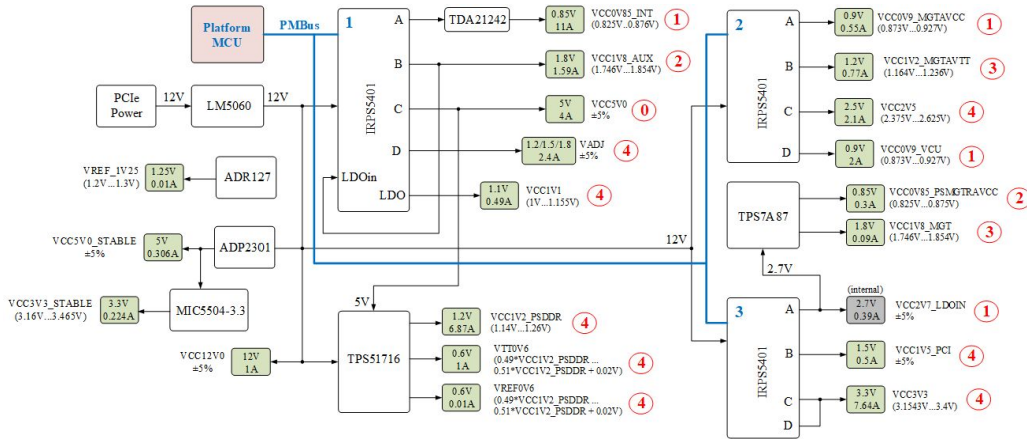


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Block Diagram



Power Tree



SHIELD F Foot F1

SHIELD F Foot F2

SHIELD F Foot F3

Foot F4

SHIELD F Foot F5

SHIELD F Foot F6

SHIELD F Foot F7

No Load F9

Foot F8

No Load F10

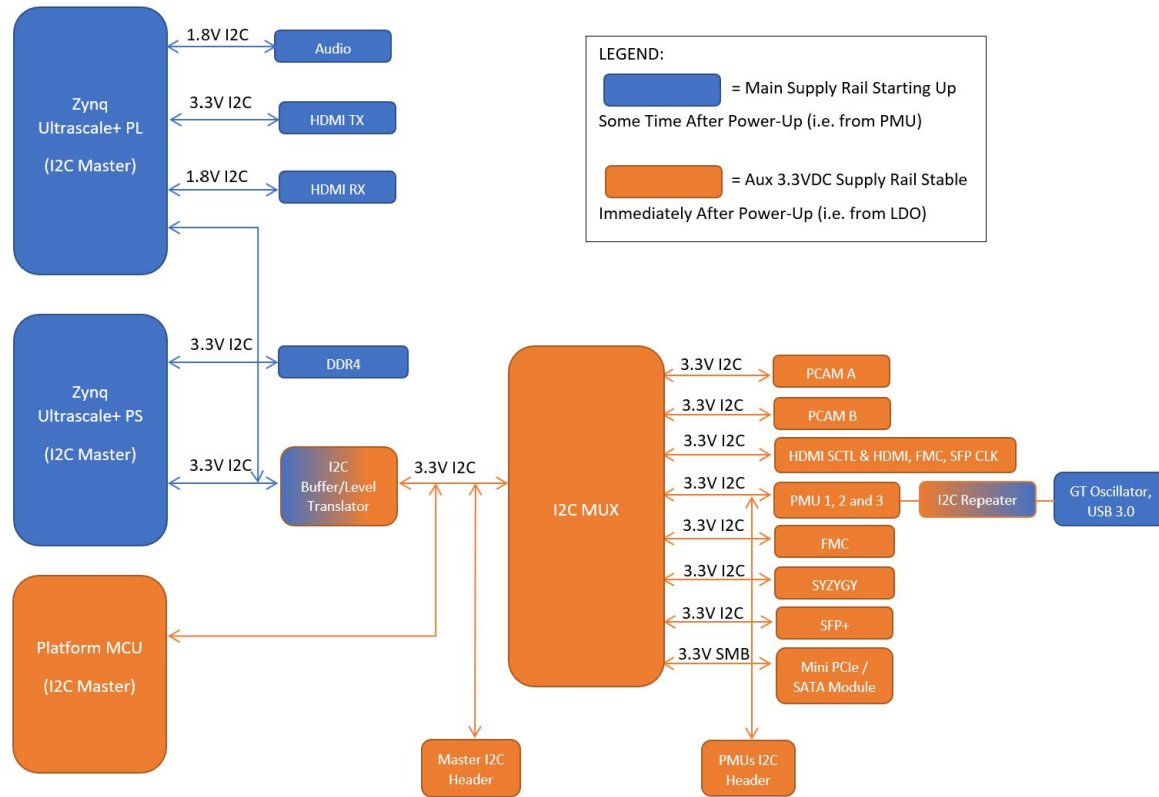
Title	Genesys ZU-3EG	Rev	B.1
Circuit	Block Diagram	Copyright	2019
Doc#	500-383		
Engineer	EG		
Author	IC		
Date	11/13/2019		
Sheet#	2 out of 39		



Genesys ZU Insert Contacts Down

Chinese ROHS ROHS Diligent Inc. CE Xilinx

I2C Diagram



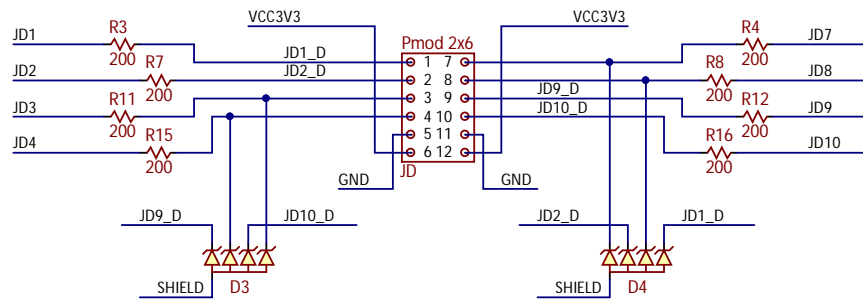
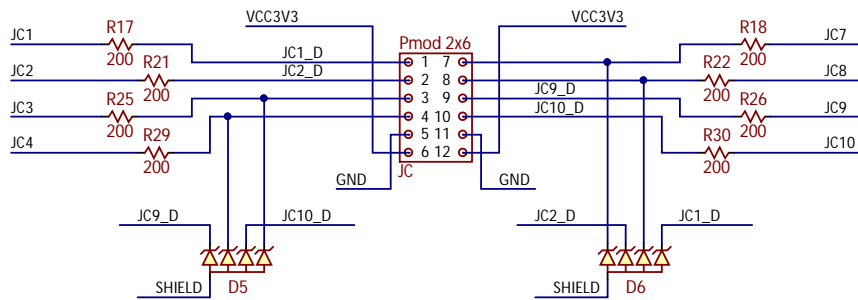
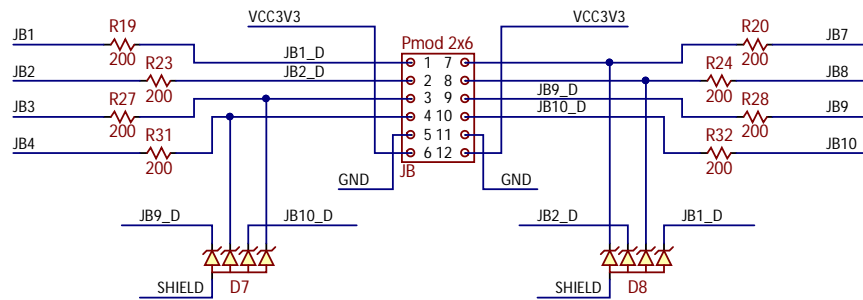
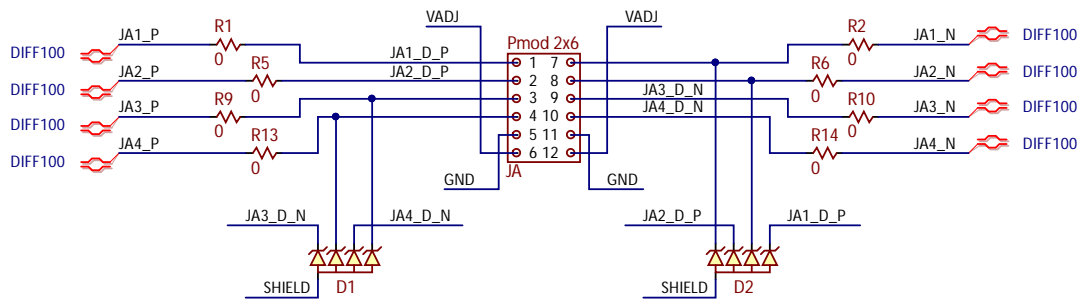
LEGEND:

- = Main Supply Rail Starting Up
Some Time After Power-Up (i.e. from PMU)
- = Aux 3.3VDC Supply Rail Stable
Immediately After Power-Up (i.e. from LDO)

Title Genesys ZU-3EG		Rev B.1 Copyright 2019
Circuit I2C Diagram		
Doc# 500-383		
Engineer EG		
Author IC		
Date 11/13/2019		
Sheet# 3 out of 39		



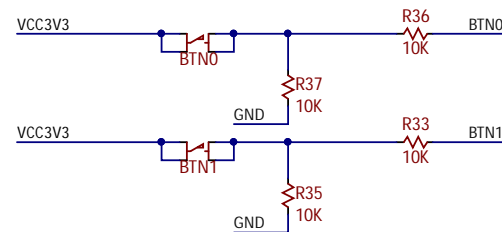
XADC PMOD



MIO LED

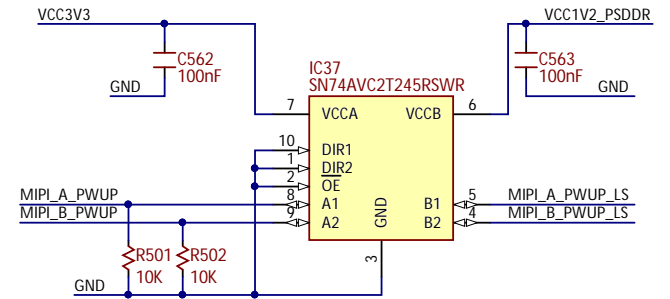
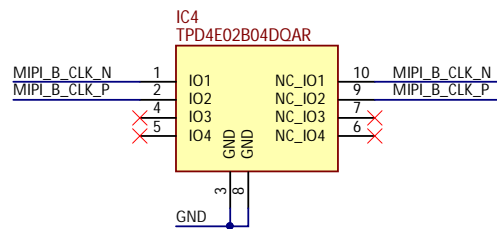
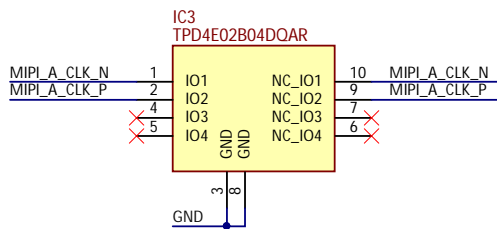
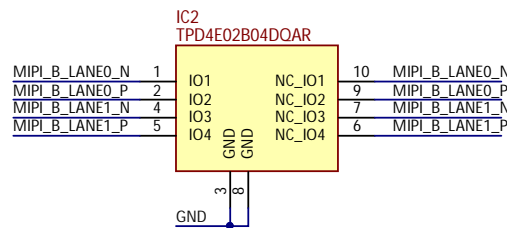
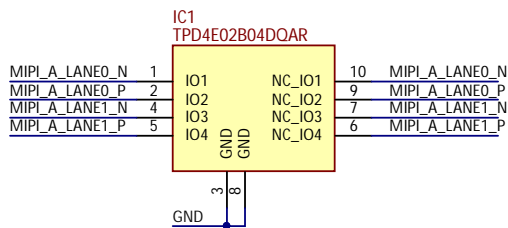
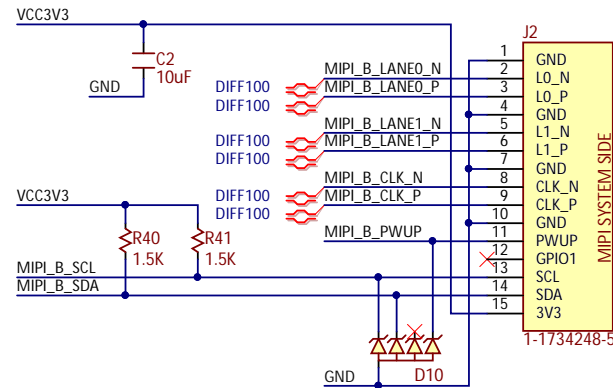
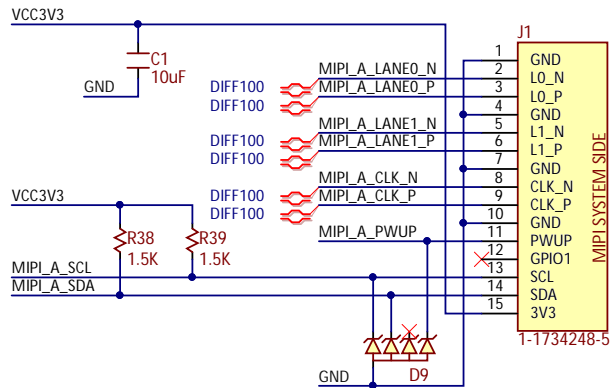


MIO BUTTONS

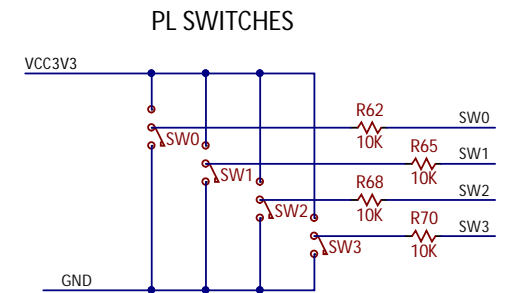
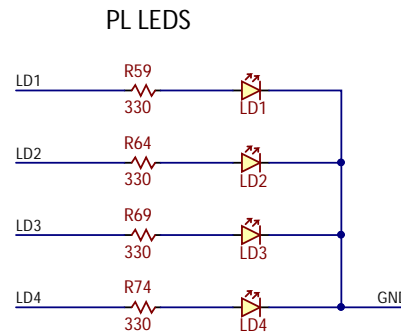
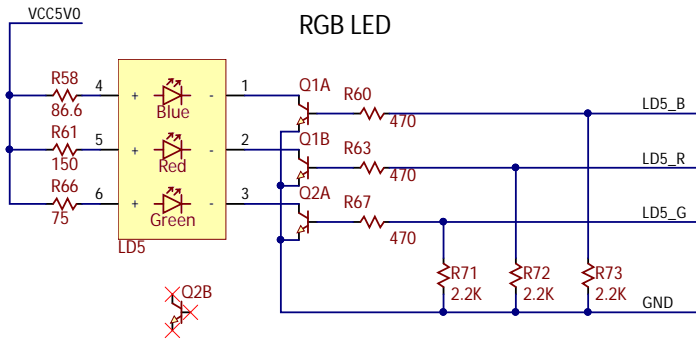
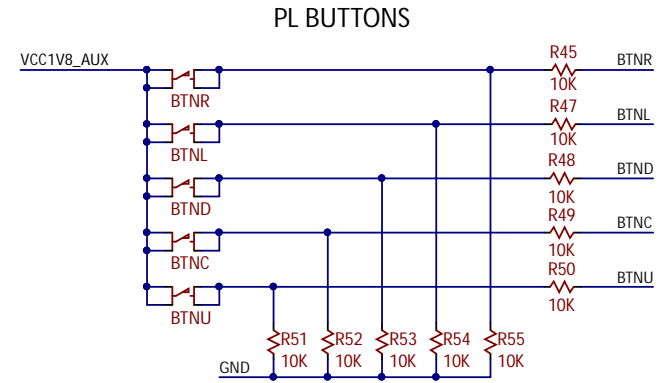
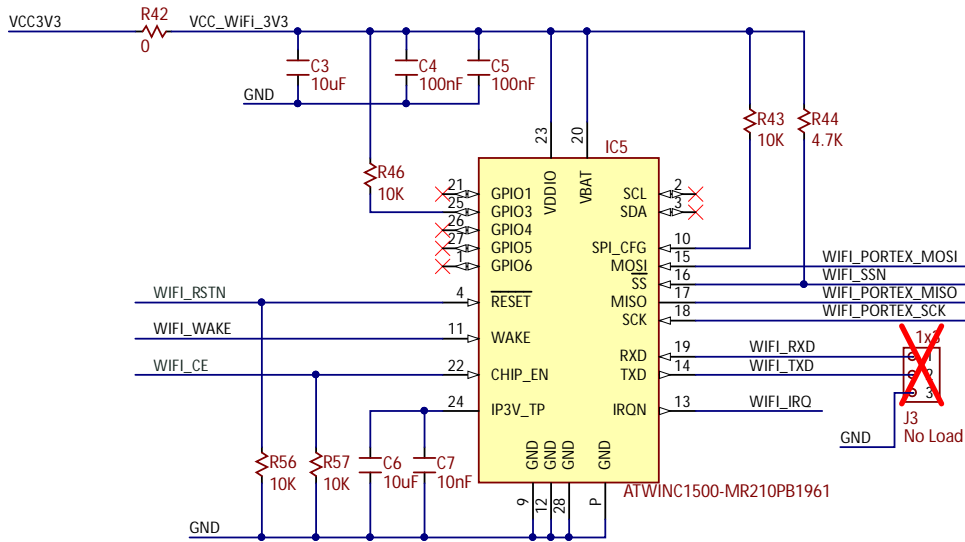


Title		Rev
Genesys ZU-3EG		B.1
Circuit PMODs, MIO BUTTON		Copyright 2019
Doc#	500-383	
Engineer	EG	
Author	IC	
Date	11/13/2019	
Sheet#	4 out of 39	



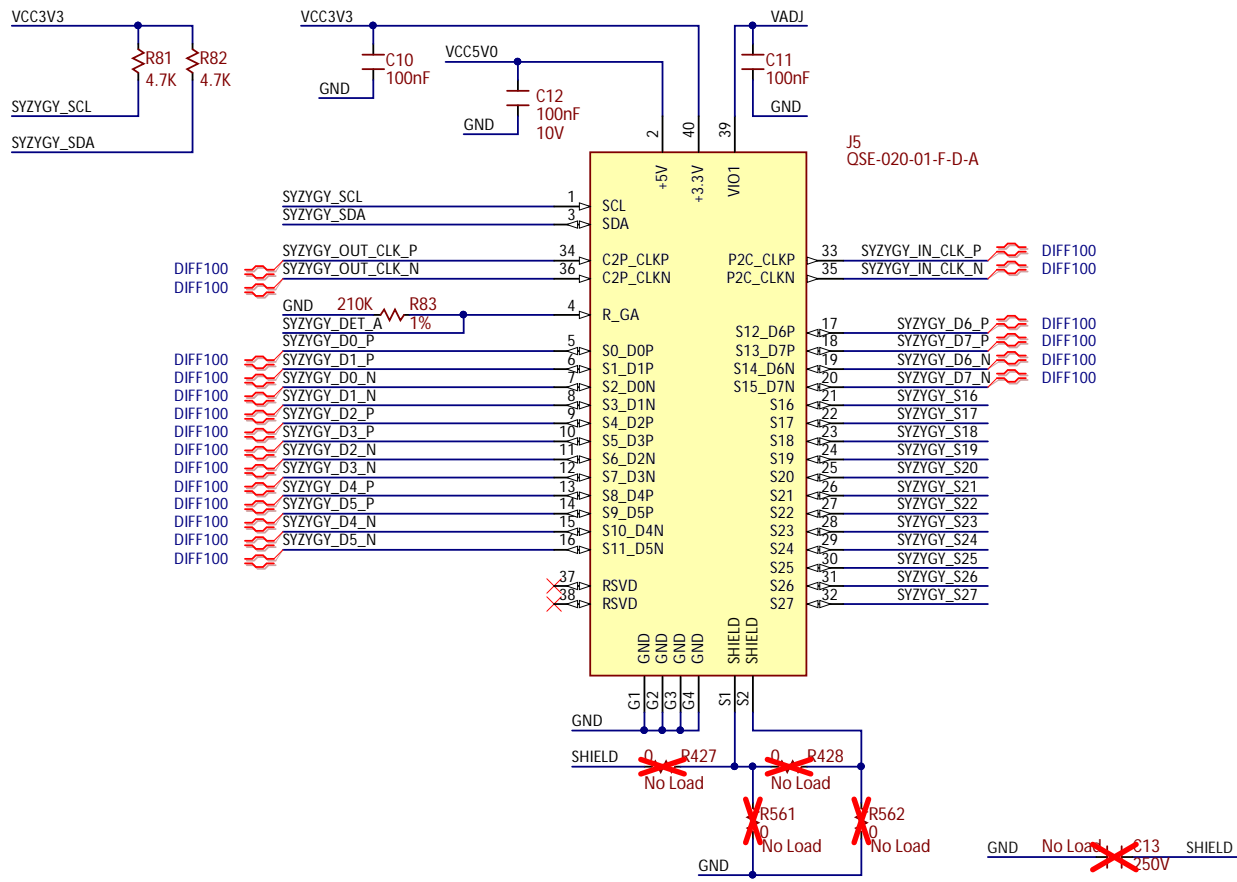


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Circuit	MIPI Interfaces	Copyright	2019
Doc#	500-383	 A National Instruments Company	
Engineer	EG		
Author	IC		
Date	11/13/2019		
Sheet#	5 out of 39		



Title		Rev
Genesys ZU-3EG		B.1
Circuit		Copyright 2019
WI-FI, LEDs, BUTTONS etc.		
Doc#	500-383	
Engineer	EG	
Author	IC	
Date	11/13/2019	
Sheet#	6 out of 39	

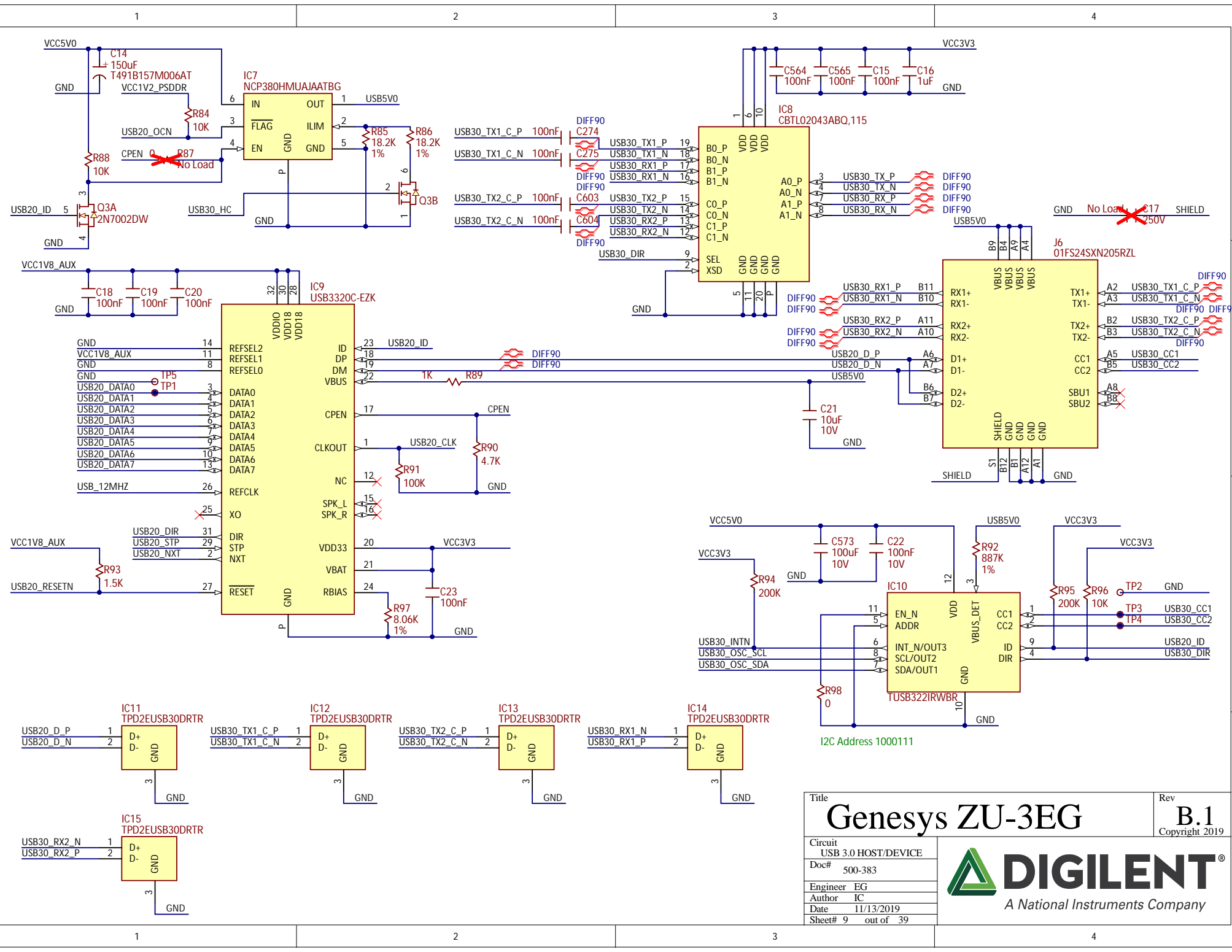




I2C Address 0110000 (due to R_GA)

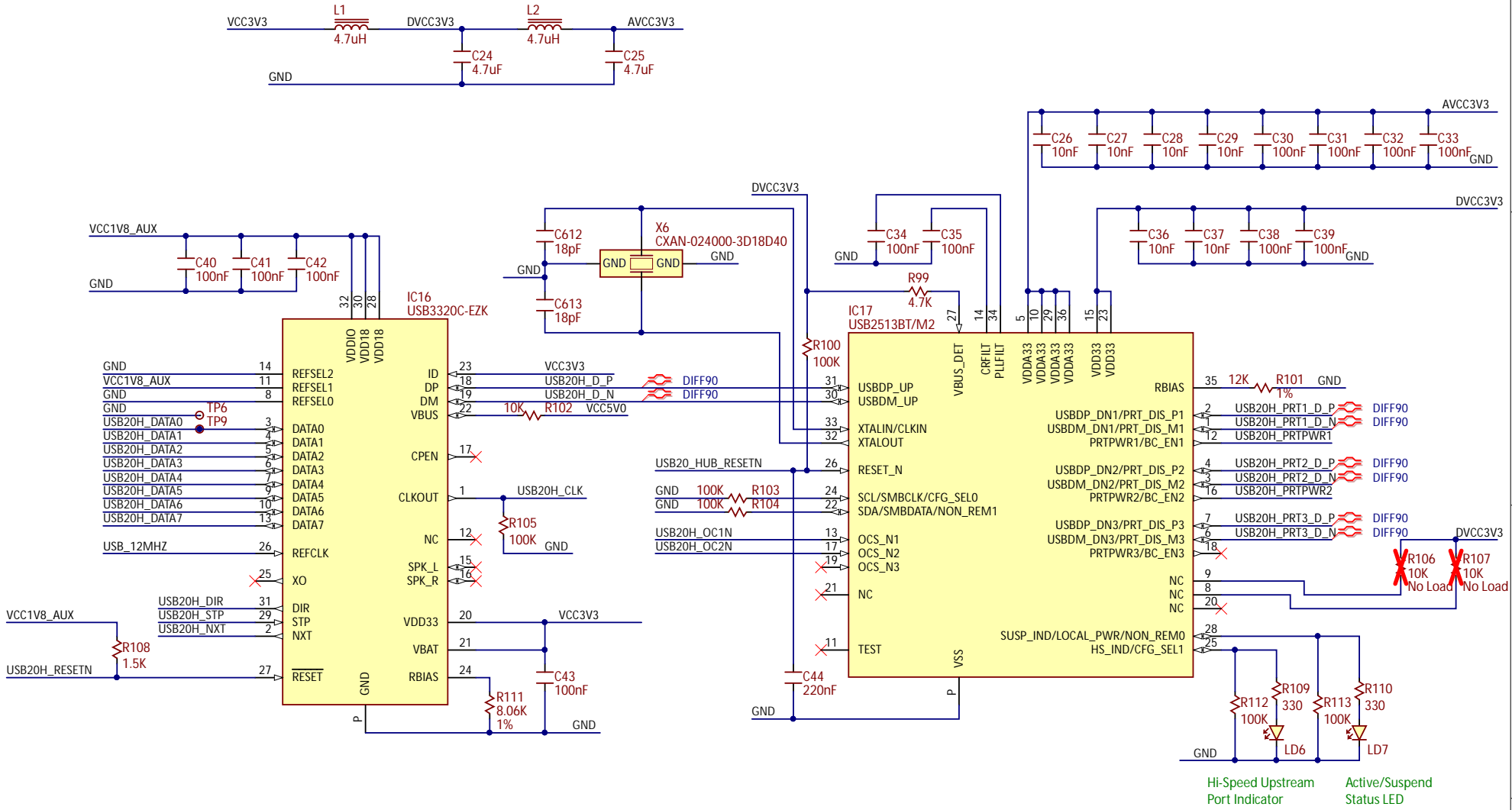
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Circuit		Copyright 2019
SYZYGY Standard Port		
Doc#	500-383	
Engineer	EG	
Author	IC	
Date	11/13/2019	
Sheet#	8 out of 39	





Title		Rev
Genesys ZU-3EG		B.1
Circuit		Copyright 2019
USB 3.0 HOST/DEVICE		
Doc#	500-383	
Engineer	EG	
Author	IC	
Date	11/13/2019	
Sheet#	9 out of 39	

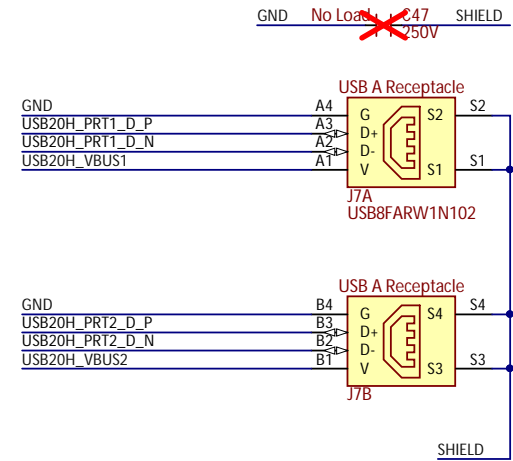
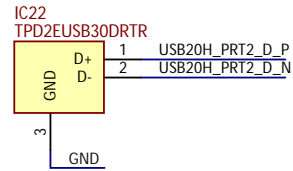
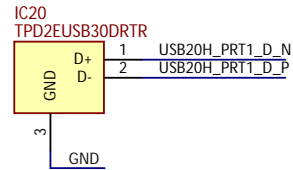
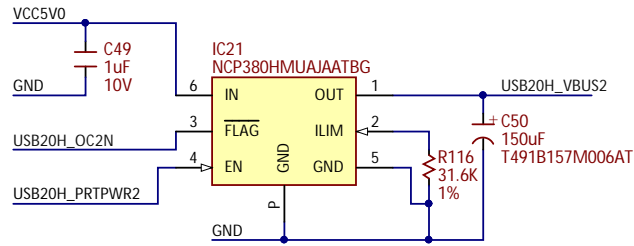
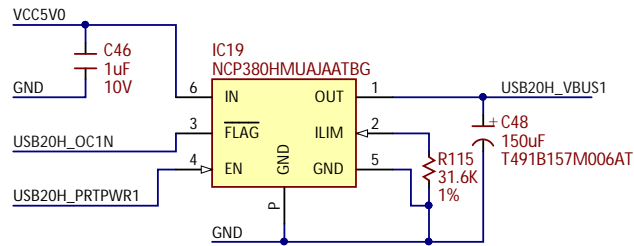




Title		Rev	
Genesys ZU-3EG		B.1	
Circuit		Copyright 2019	
USB 2.0 HOST PHY & HUB			
Doc#	500-383		
Engineer	EG		
Author	IC		
Date	11/13/2019		
Sheet#	10 out of 39		



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Title Genesys ZU-3EG		Rev B.1 Copyright 2019
Circuit USB 2.0 HUB CONN		 A National Instruments Company
Doc# 500-383		
Engineer EG		
Author IC		
Date 11/13/2019		
Sheet# 11 out of 39		

1

2

3

4

A

A

B

B

C

C

D

D

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Title		Rev
Genesys ZU-3EG		B.1
		Copyright 2019
Circuit	USB PROG/UART	
Doc#	500-383	
Engineer	EG	
Author	IC	
Date	11/13/2019	
Sheet#	12 out of 39	



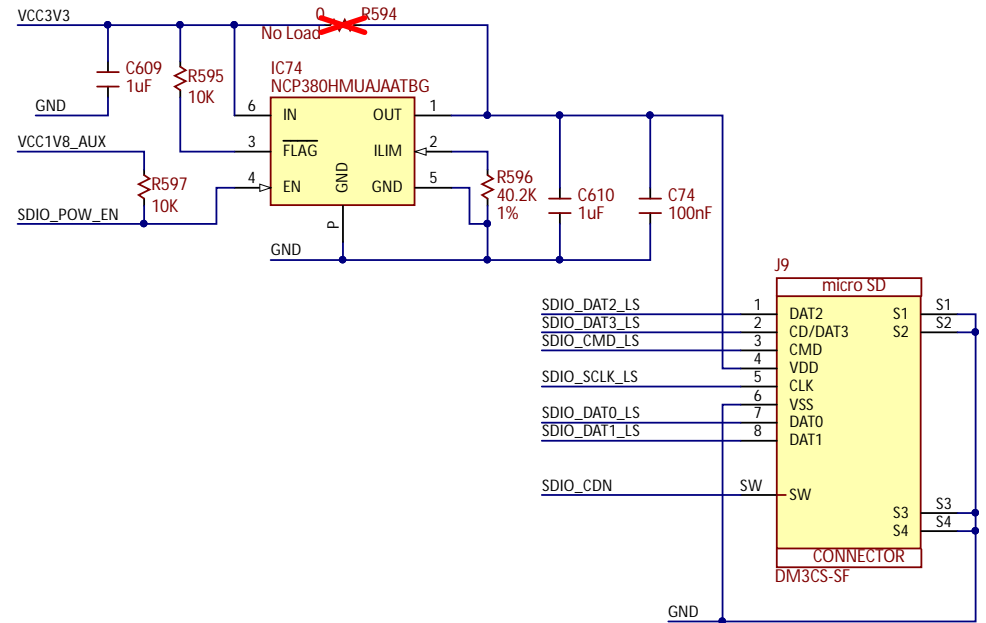
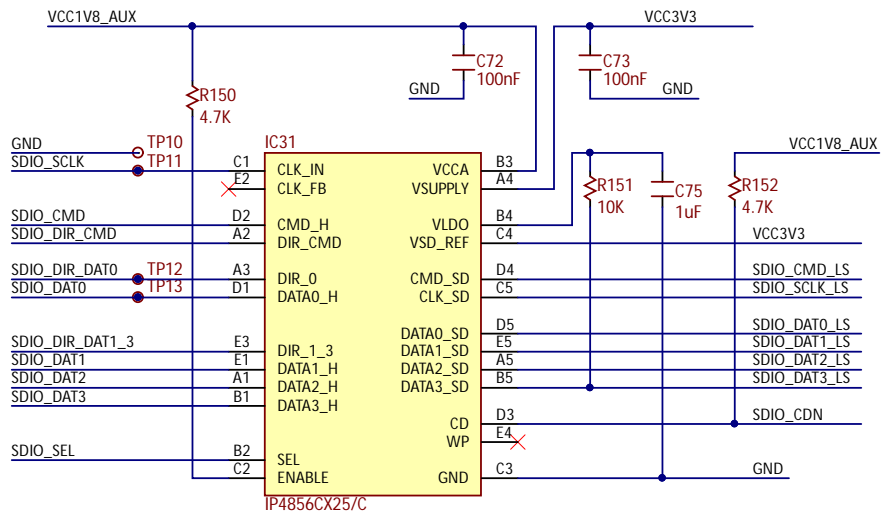
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1

2

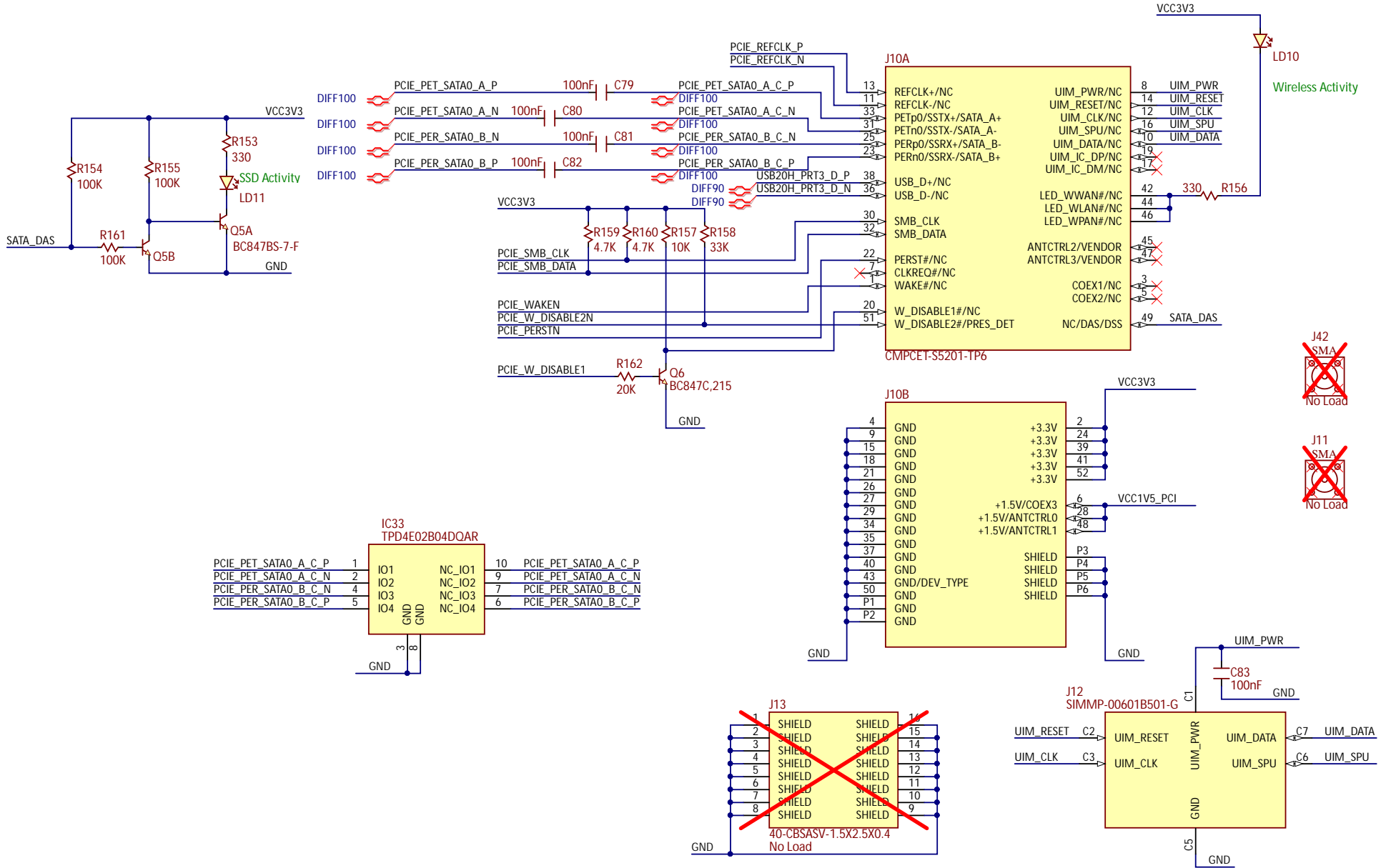
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4



Title		Rev
Genesys ZU-3EG		B.1
		Copyright 2019
Circuit	SD CARD	
Doc#	500-383	
Engineer	EG	
Author	IC	
Date	11/13/2019	
Sheet#	13 out of 39	



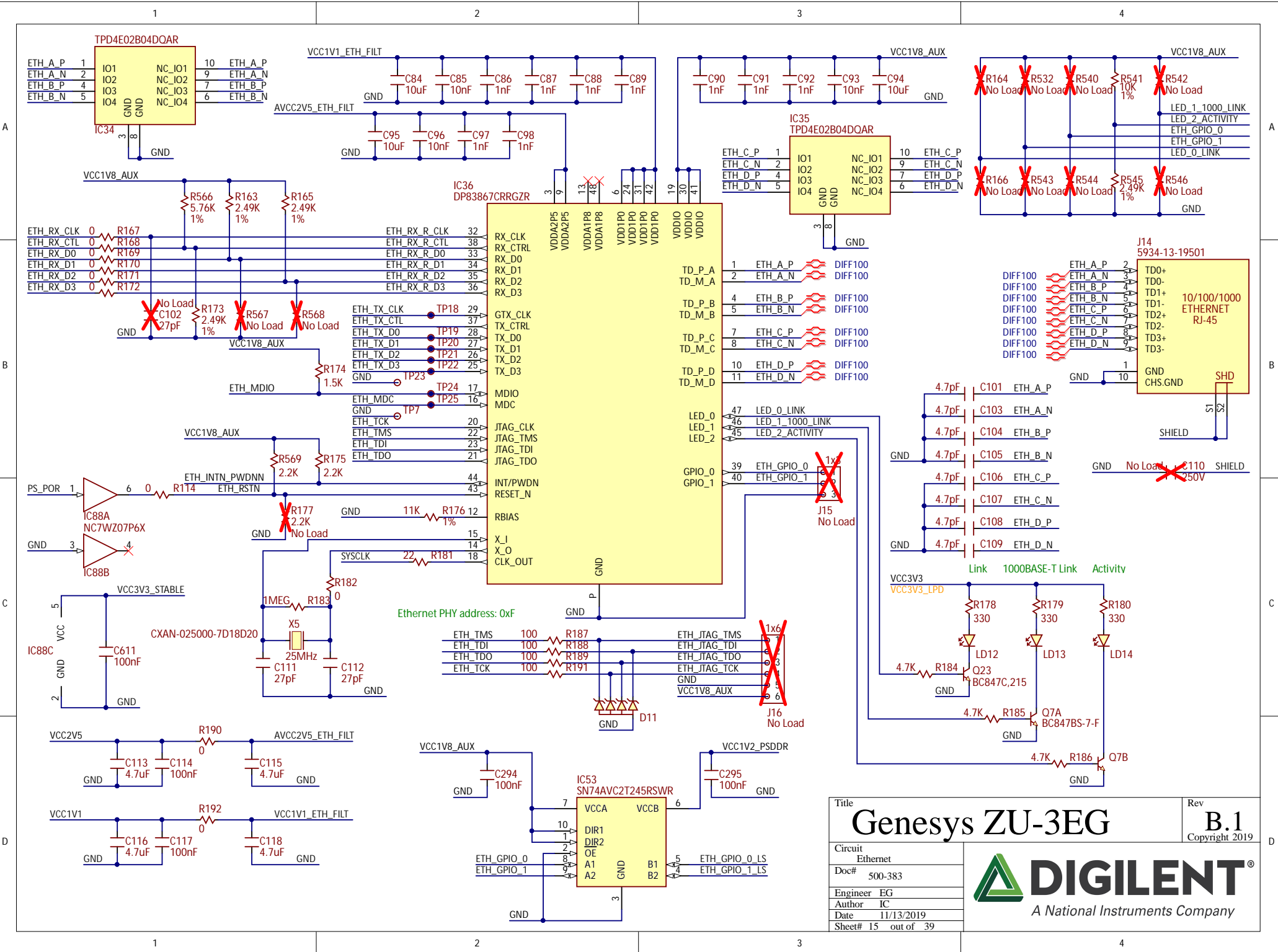


- F11 SMT Standoff 0001-00001-B01
- F12 SMT Standoff 0001-00001-B01
- F13 mini PCIe Screw I02003MN
- F14 SMT Standoff 0001-00001-B01
- F15 SMT Standoff 0001-00001-B01
- F16 mini PCIe Screw I02003MN
- F17 M-F Standoff RE025MN01
- F18 M-F Standoff RE025MN01

Title		Rev
Genesys ZU-3EG		B.1
Circuit		Copyright 2019
Mini PCIe / SATA		
Doc#	500-383	
Engineer	EG	
Author	IC	
Date	11/13/2019	
Sheet#	14 out of 39	



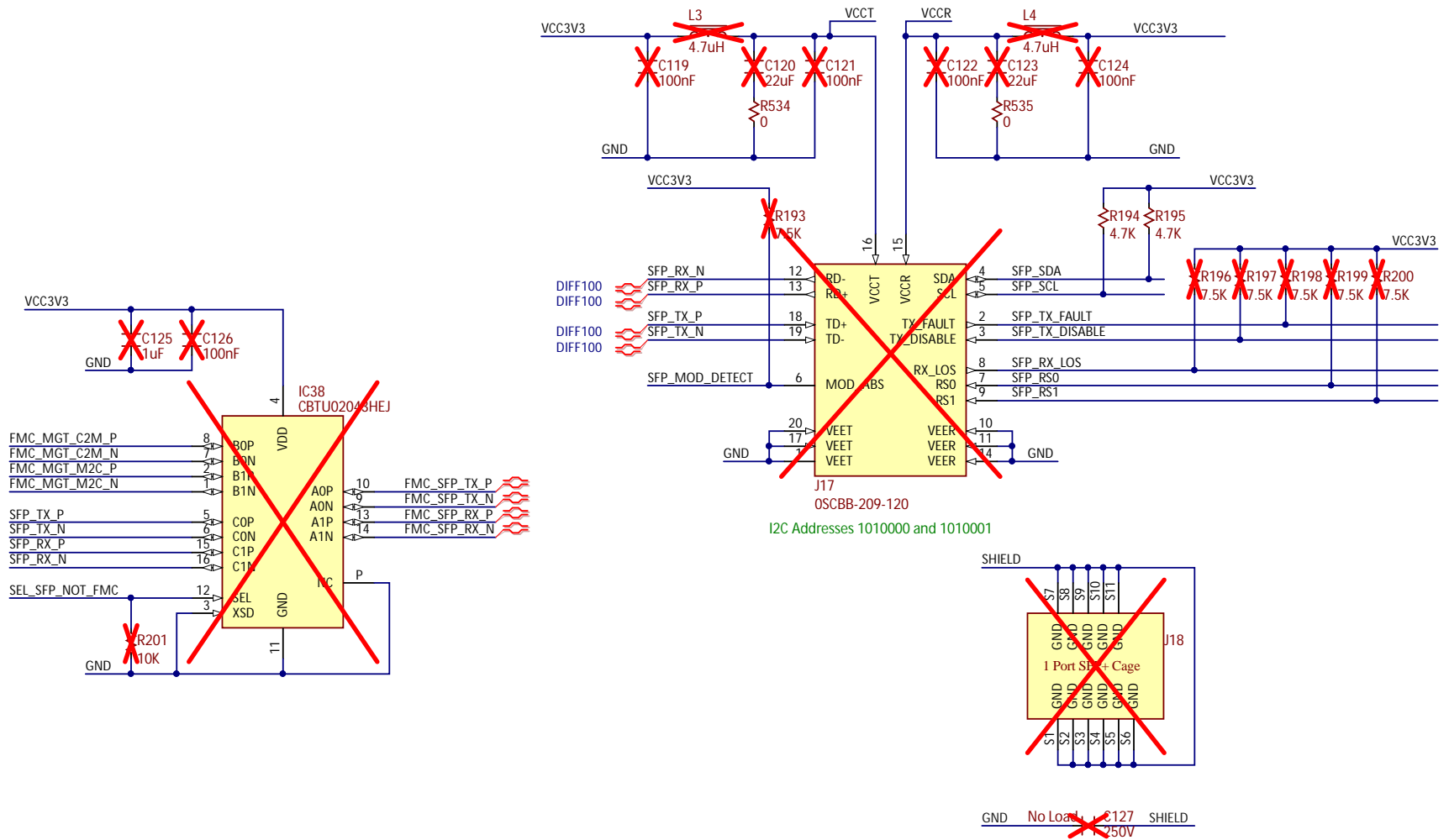
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Title		Rev	
Genesys ZU-3EG		B.1	
Circuit		Copyright 2019	
Ethernet			
Doc#	500-383		
Engineer	EG		
Author	IC		
Date	11/13/2019		
Sheet#	15 out of 39		



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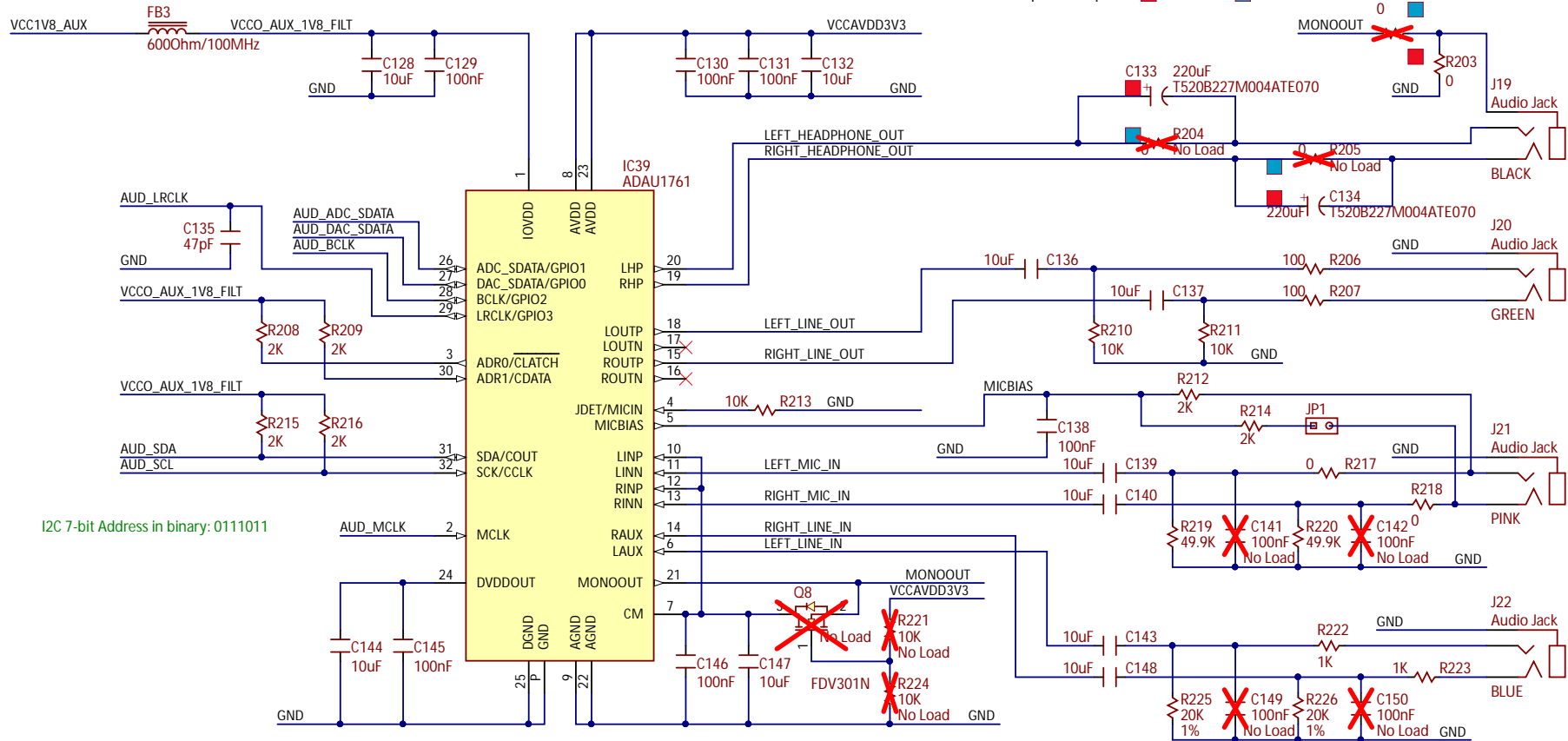
SFP+ cannot be used simultaneously with neither HDMI Source nor Sink due to the limited number of QPLL/CPLL primitives available in the GTH Quad.

Title		Rev
Genesys ZU-3EG		B.1
		Copyright 2019
Circuit	SFP+	
Doc#	500-383	
Engineer	EG	
Author	IC	
Date	11/13/2019	
Sheet#	16 out of 39	

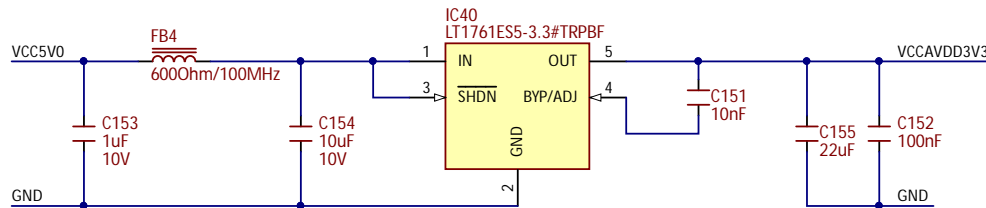
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NOTE: Load No Load
 Capless Headphone ■ ■
 AC-Coupled Headphone ■ ■

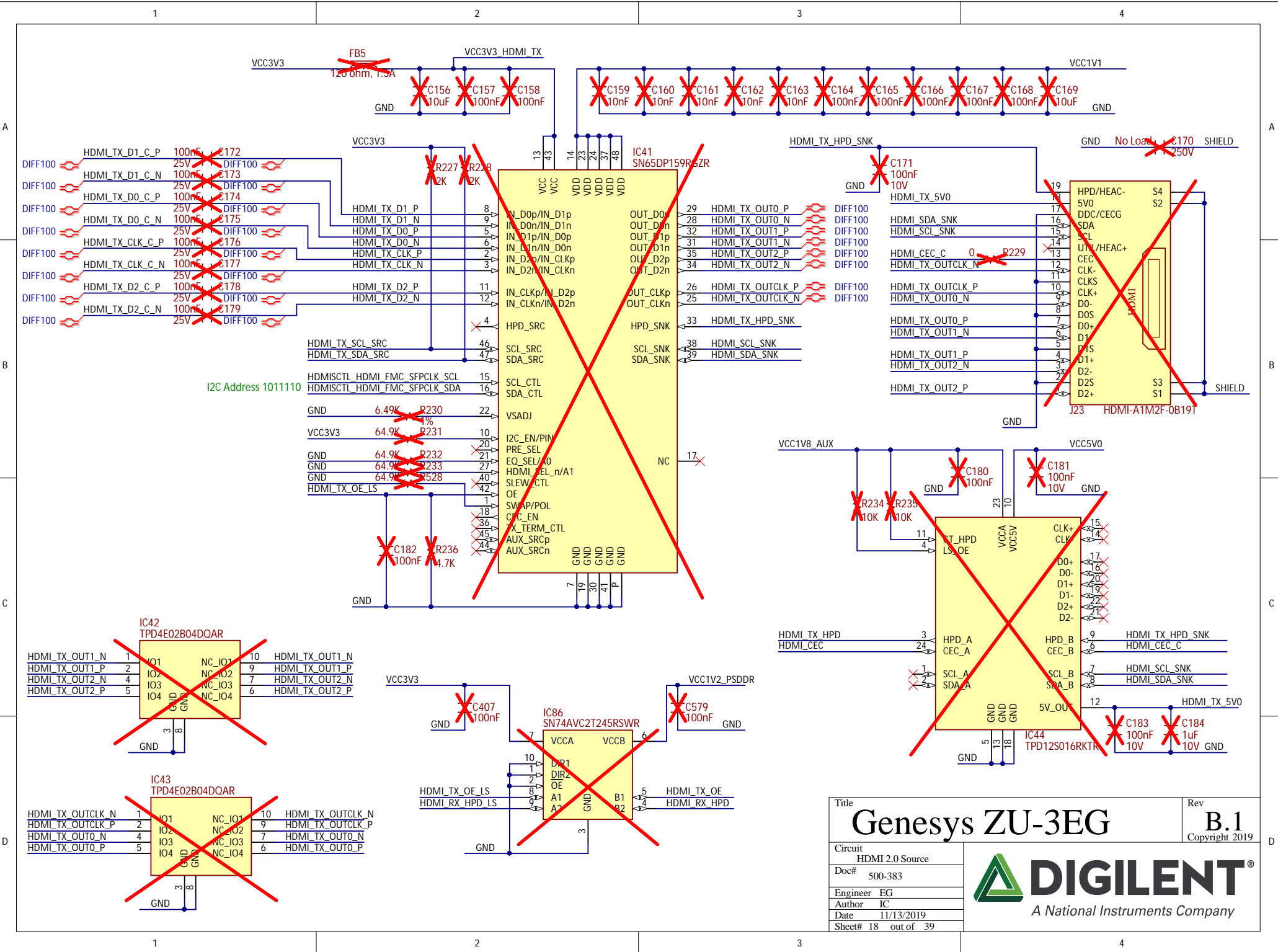


I2C 7-bit Address in binary: 0111011



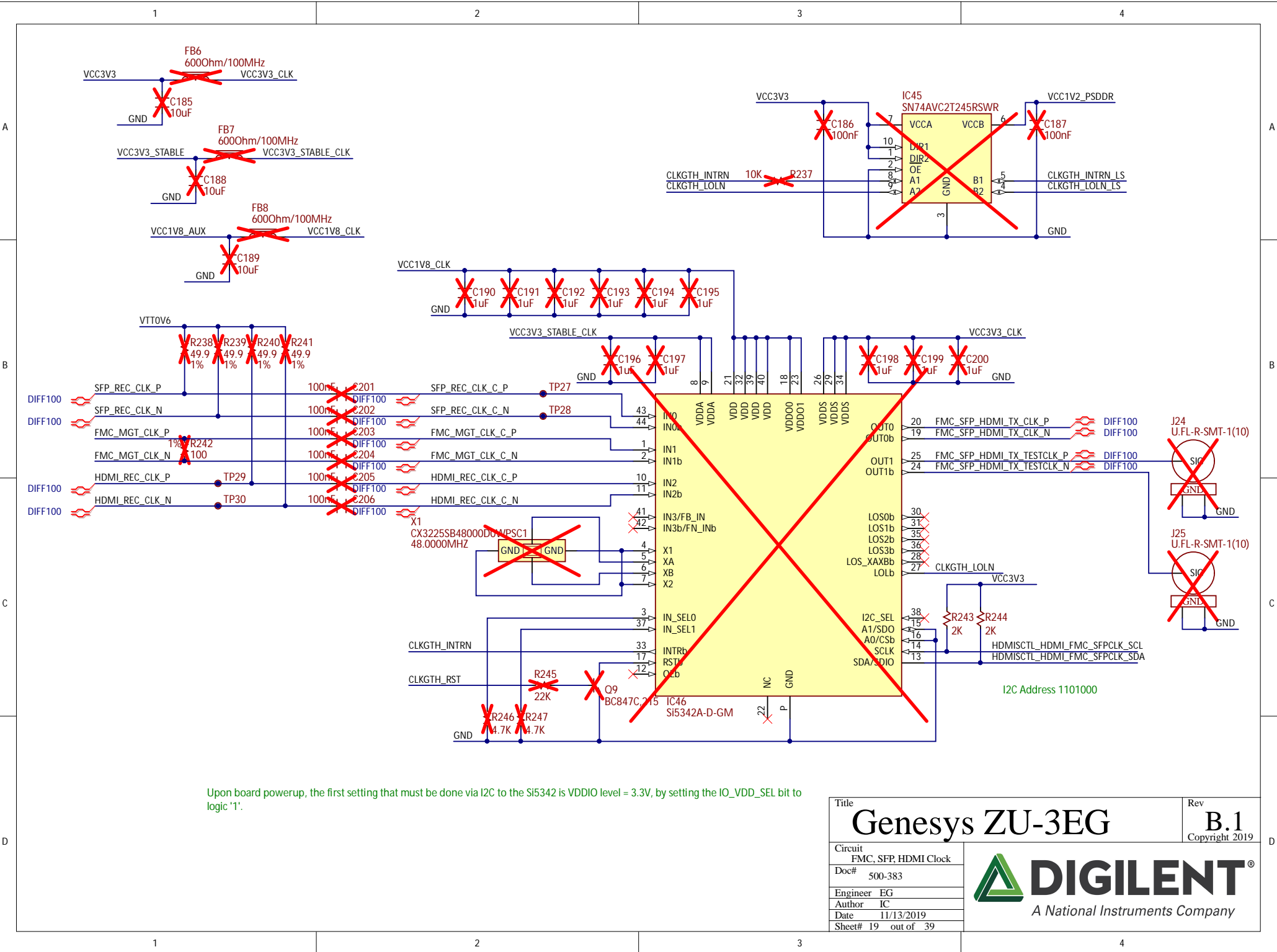
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Genesys ZU-3EG		B.1
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Circuit	AUDIO	
Doc#	500-383	
Engineer	EG	
Author	IC	
Date	11/13/2019	
Sheet#	17 out of 39	





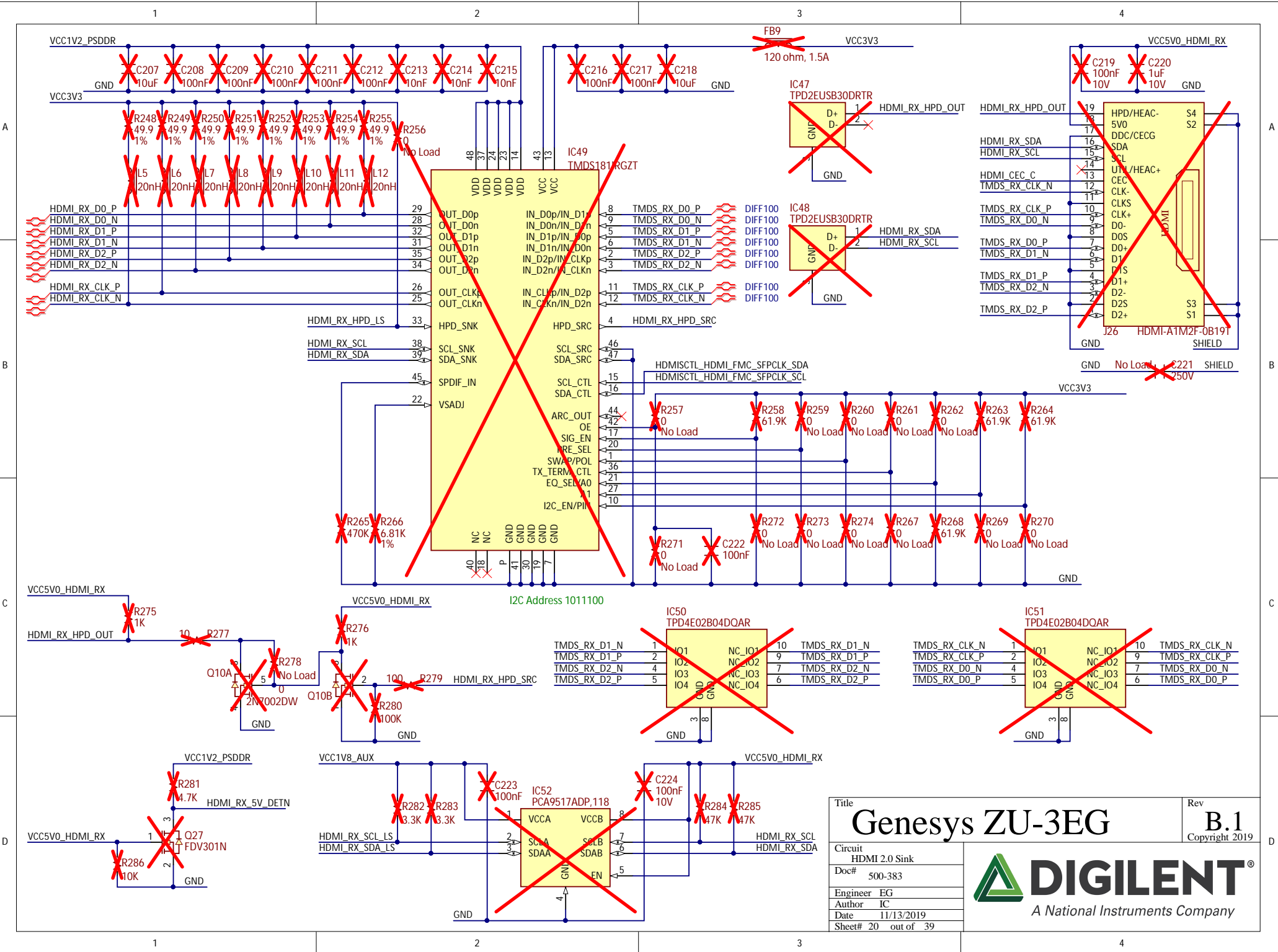
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Genesys ZU-3EG		B.1	
Circuit		Copyright 2019	
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Doc#	500-383		
Engineer	EG		
Author	IC		
Date	11/13/2019		
Sheet#	18 out of 39		





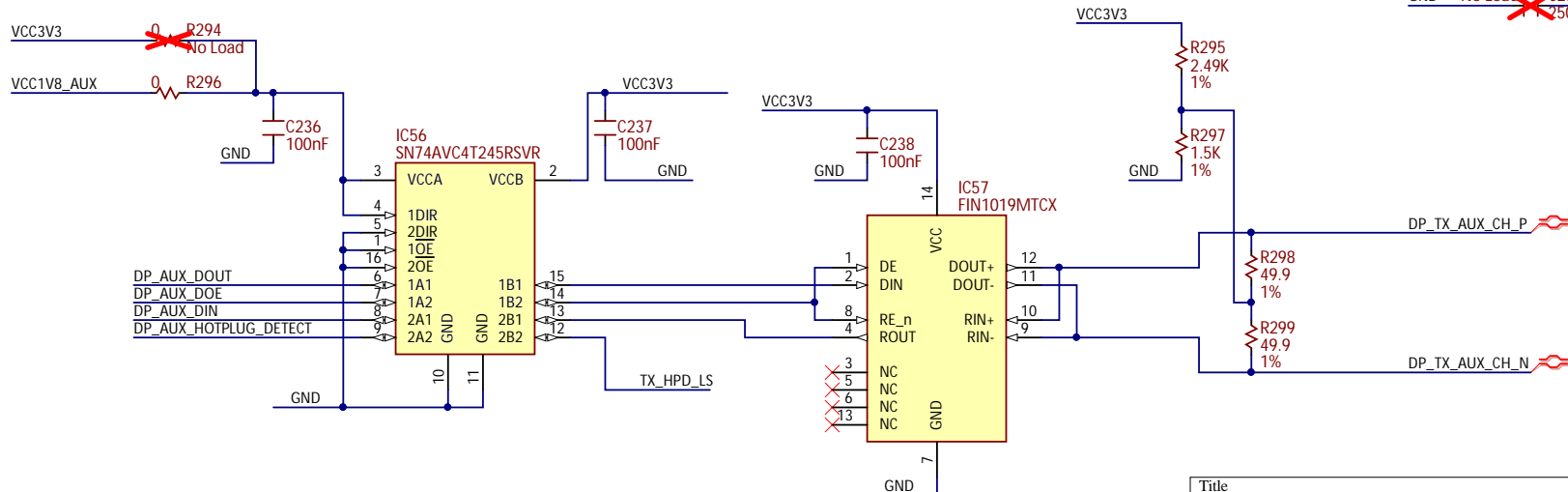
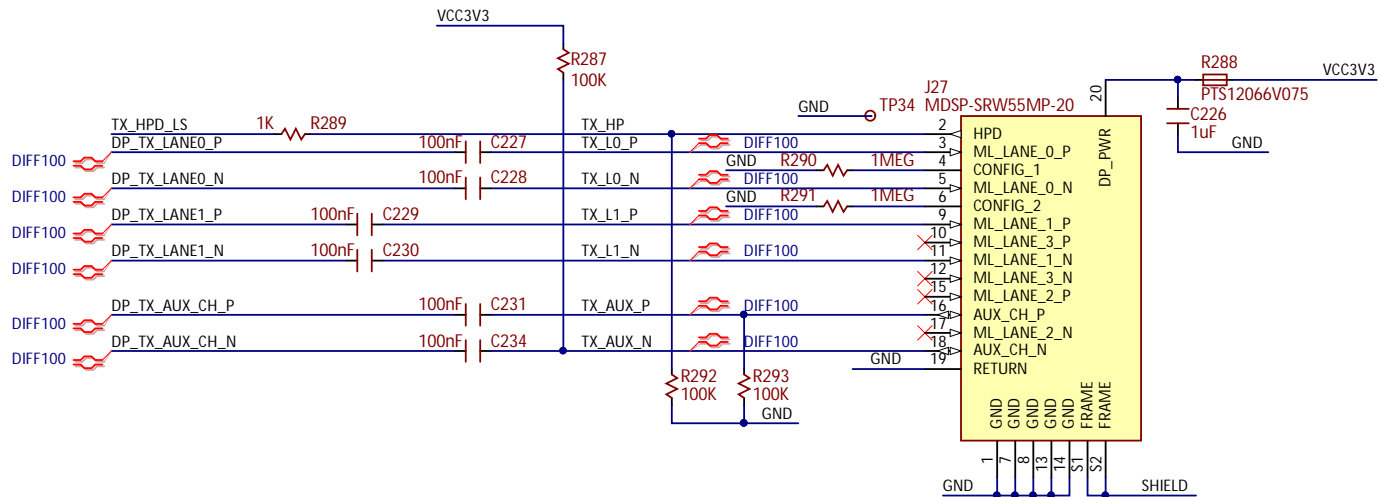
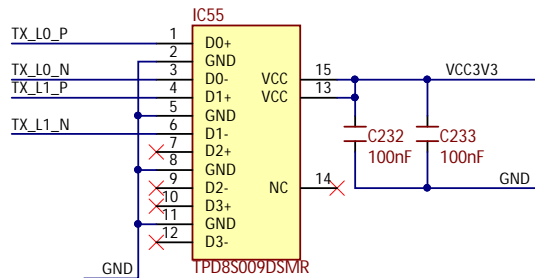
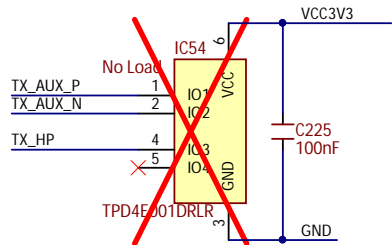
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Genesys ZU-3EG		B.1
Circuit		Copyright 2019
FMC, SFP, HDMI Clock		
Doc#	500-383	
Engineer	EG	
Author	IC	
Date	11/13/2019	
Sheet#	19 out of 39	





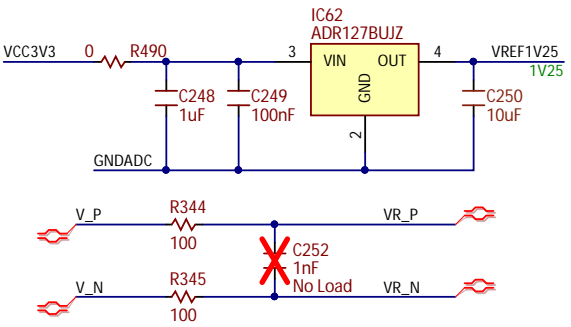
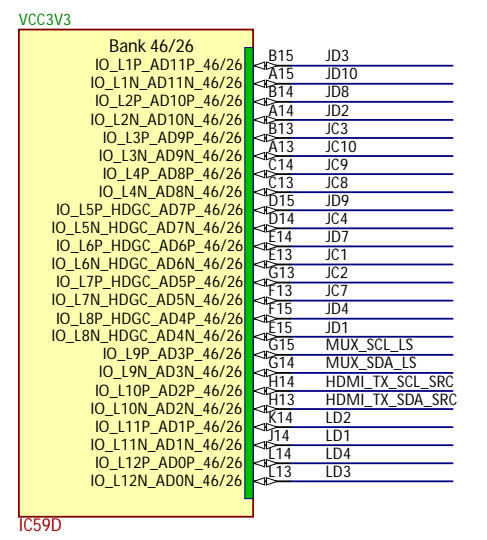
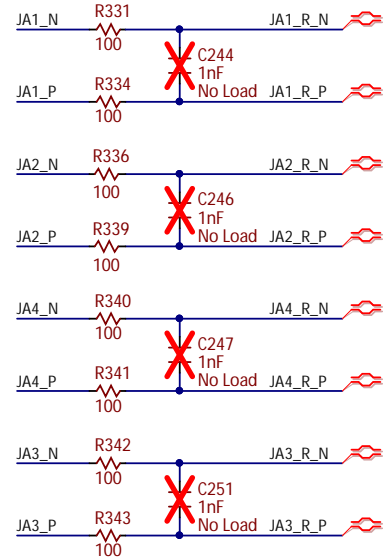
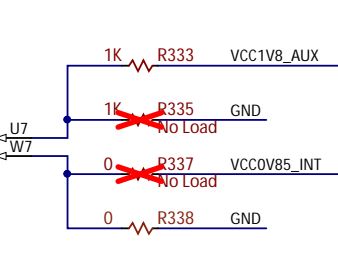
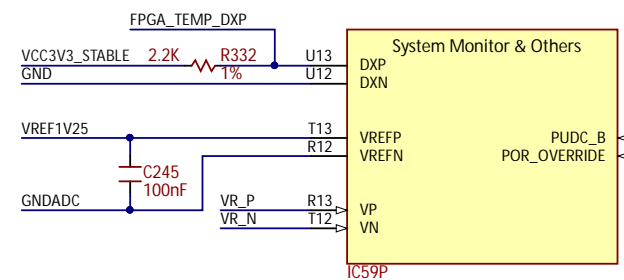
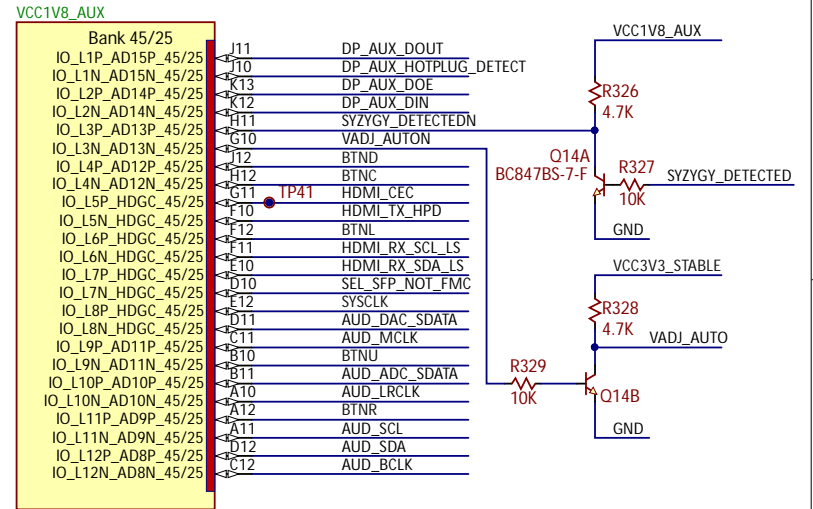
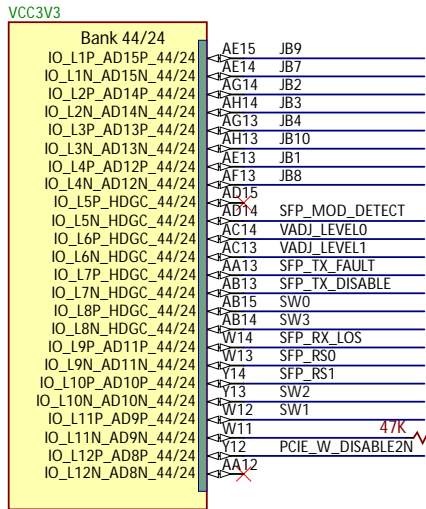
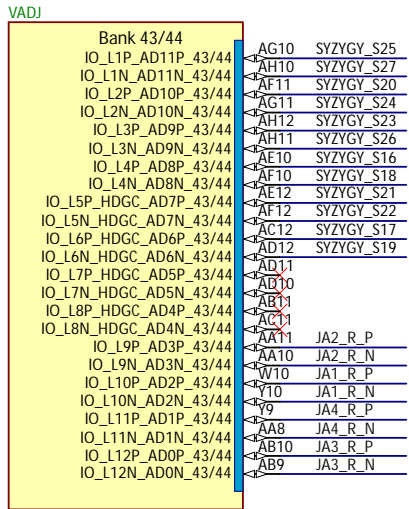
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Circuit		Copyright 2019	
HDMI 2.0 Sink			
Doc#	500-383		
Engineer	EG		
Author	IC		
Date	11/13/2019		
Sheet#	20 out of 39		





Title		Rev
Genesys ZU-3EG		B.1
Circuit DisplayPort Source		Copyright 2019
Doc#	500-383	
Engineer	EG	
Author	IC	
Date	11/13/2019	
Sheet#	21 out of 39	

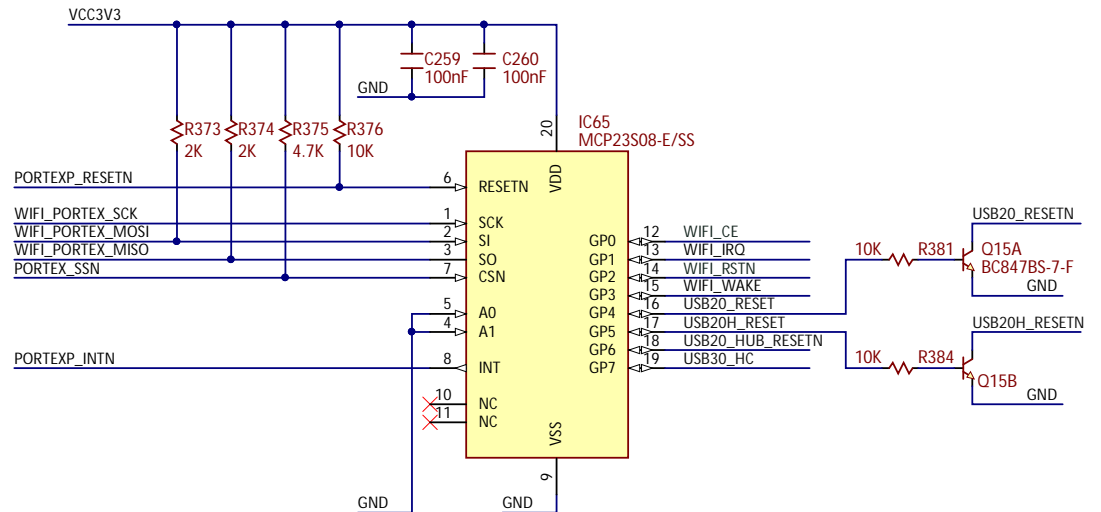
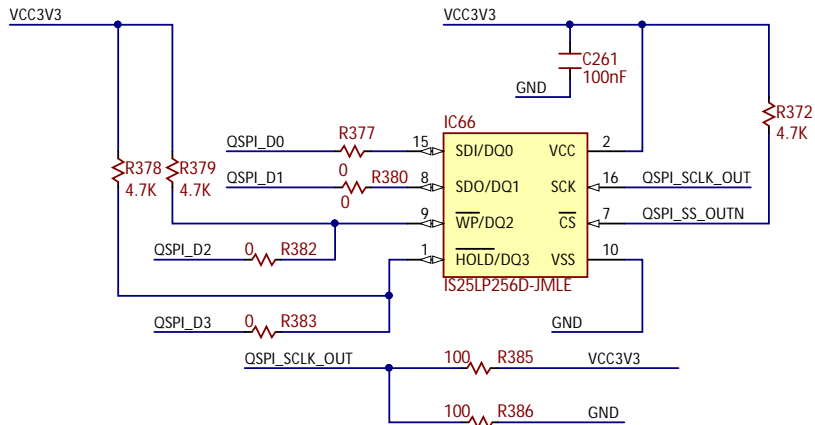
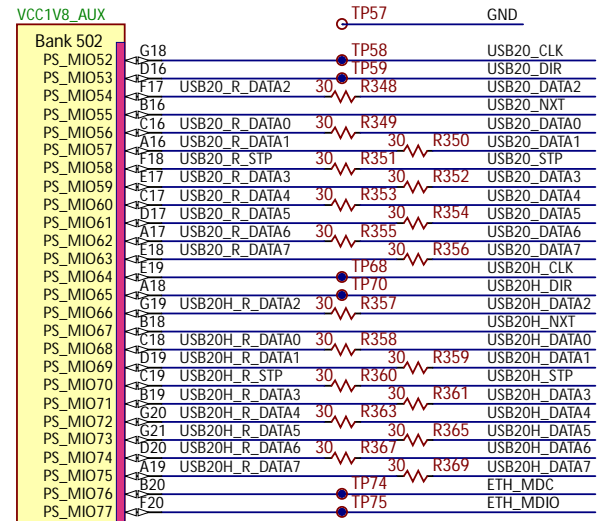
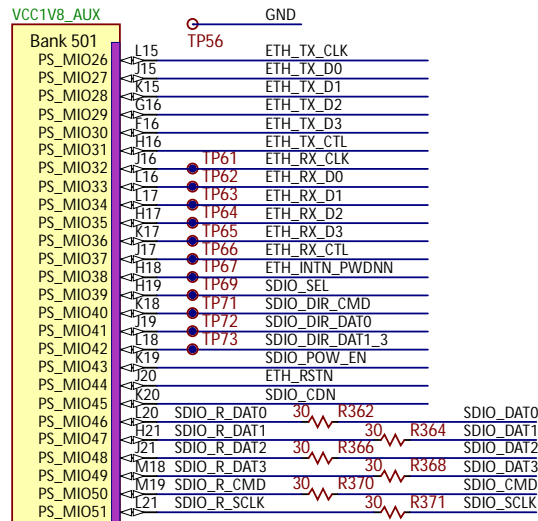
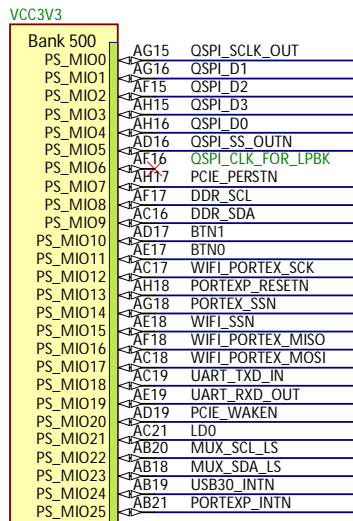




Title		Rev
Genesys ZU-3EG		B.1
		Copyright 2019
Circuit	HD FPGA BANKS; XADC	
Doc#	500-383	
Engineer	EG	
Author	IC	
Date	11/13/2019	
Sheet#	23 out of 39	



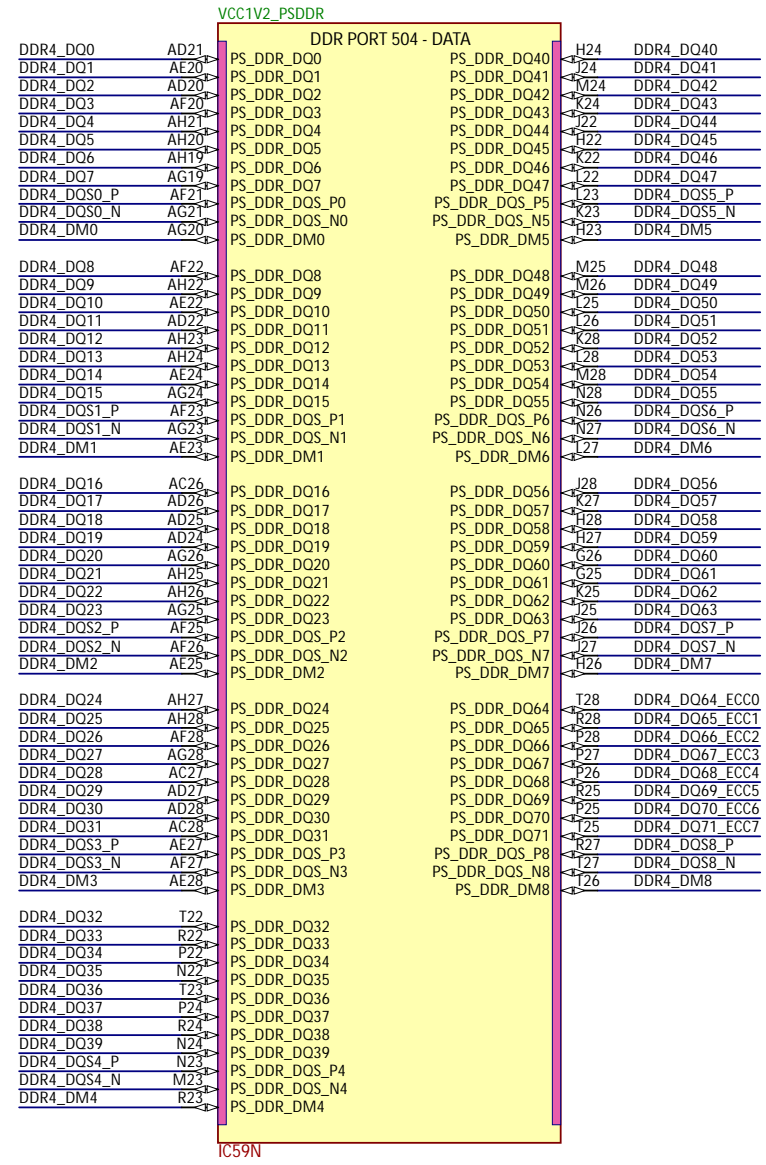
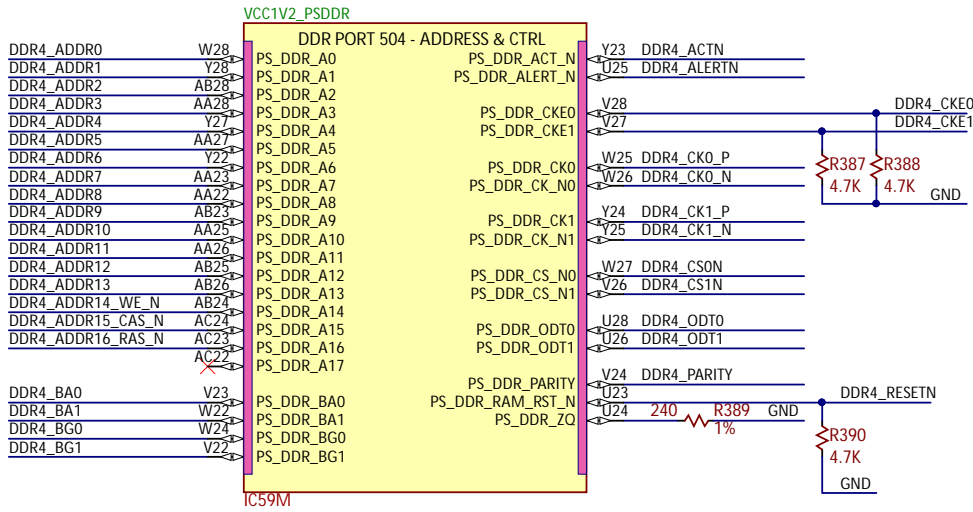
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Title	Genesys ZU-3EG	Rev	B.1
			Copyright 2019
Circuit	MIO BANKS; SPI FLASH		
Doc#	500-383		
Engineer	EG		
Author	IC		
Date	11/13/2019		
Sheet#	25 out of 39		



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Title	Genesys ZU-3EG	Rev	B.1
Circuit	DDR BANK	Copyright	2019
Doc#	500-383	 A National Instruments Company	
Engineer	EG		
Author	IC		
Date	11/13/2019		
Sheet#	26 out of 39		

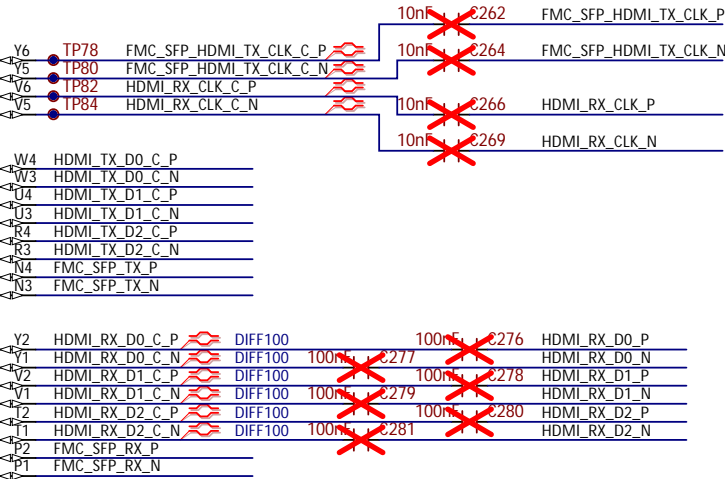
VCC0V9_MGTA VCC

Bank 224
 MGTREFCLK0P_224/NC
 MGTREFCLK0N_224/NC
 MGTREFCLK1P_224/NC
 MGTREFCLK1N_224/NC

MGTHTXP0_224/NC
 MGTHTXN0_224/NC
 MGTHTXP1_224/NC
 MGTHTXN1_224/NC
 MGTHTXP2_224/NC
 MGTHTXN2_224/NC
 MGTHTXP3_224/NC
 MGTHTXN3_224/NC

MGTHRXP0_224/NC
 MGTHRXN0_224/NC
 MGTHRXP1_224/NC
 MGTHRXN1_224/NC
 MGTHRXP2_224/NC
 MGTHRXN2_224/NC
 MGTHRXP3_224/NC
 MGTHRXN3_224/NC

IC59H



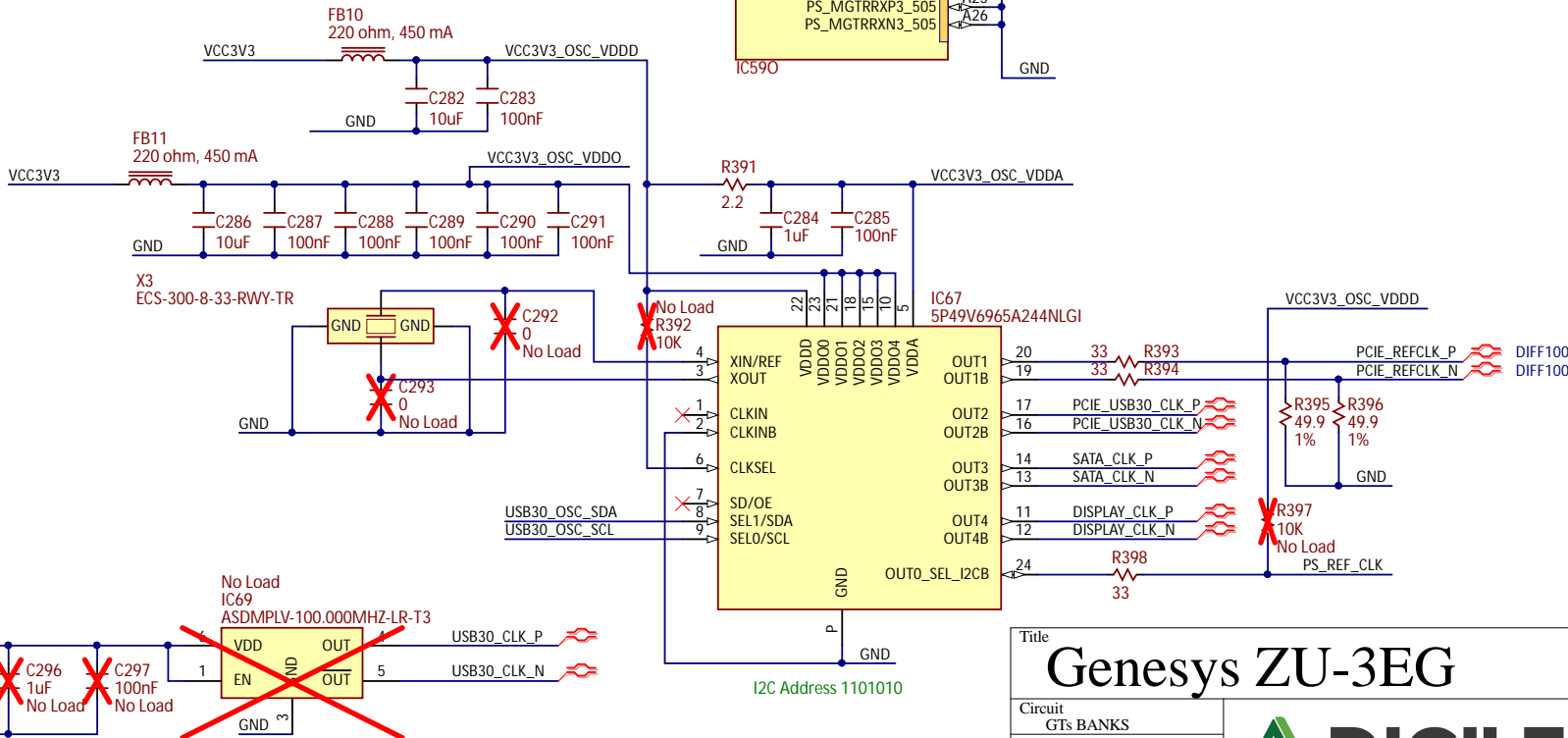
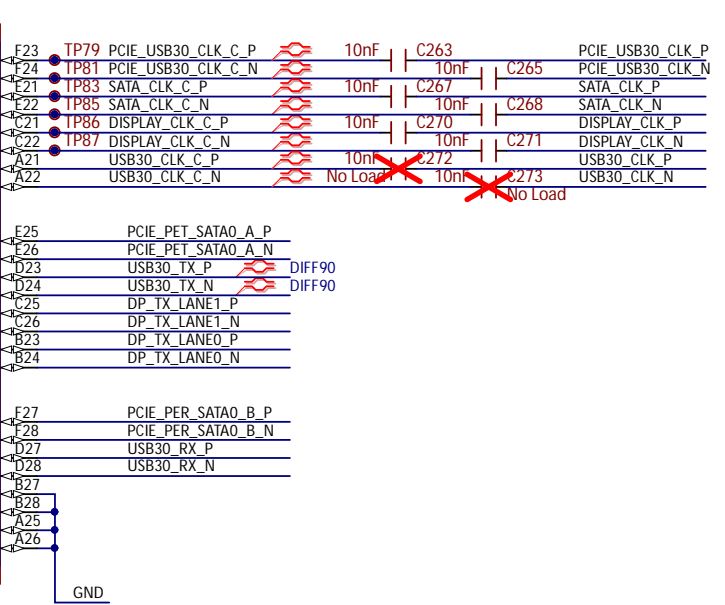
VCC0V85_PSMGTRAVCC

Bank 505
 PS_MGTREFCLK0P_505
 PS_MGTREFCLK0N_505
 PS_MGTREFCLK1P_505
 PS_MGTREFCLK1N_505
 PS_MGTREFCLK2P_505
 PS_MGTREFCLK2N_505
 PS_MGTREFCLK3P_505
 PS_MGTREFCLK3N_505

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 PS_MGTRTXN0_505
 PS_MGTRTXP1_505
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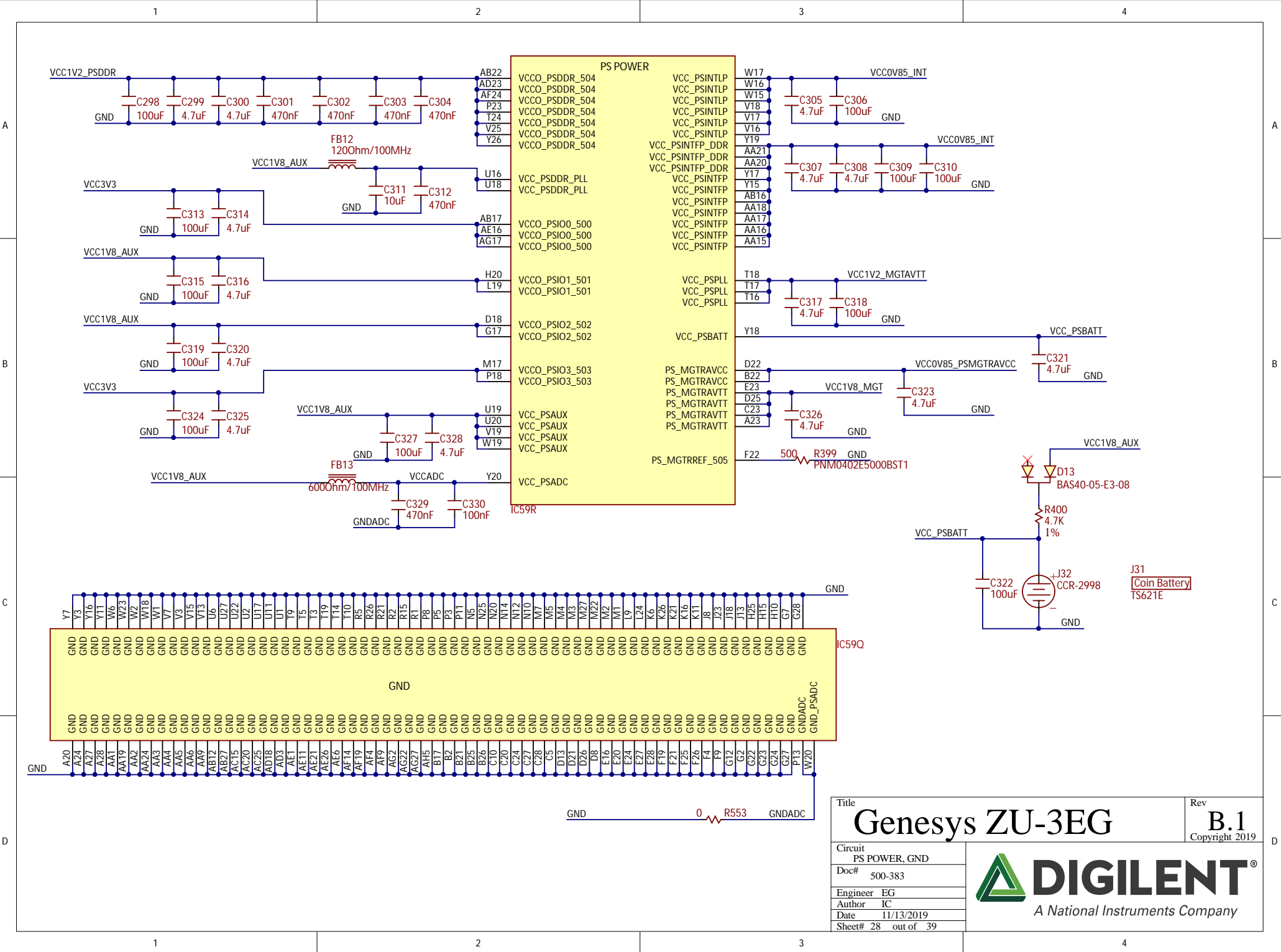
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IC590

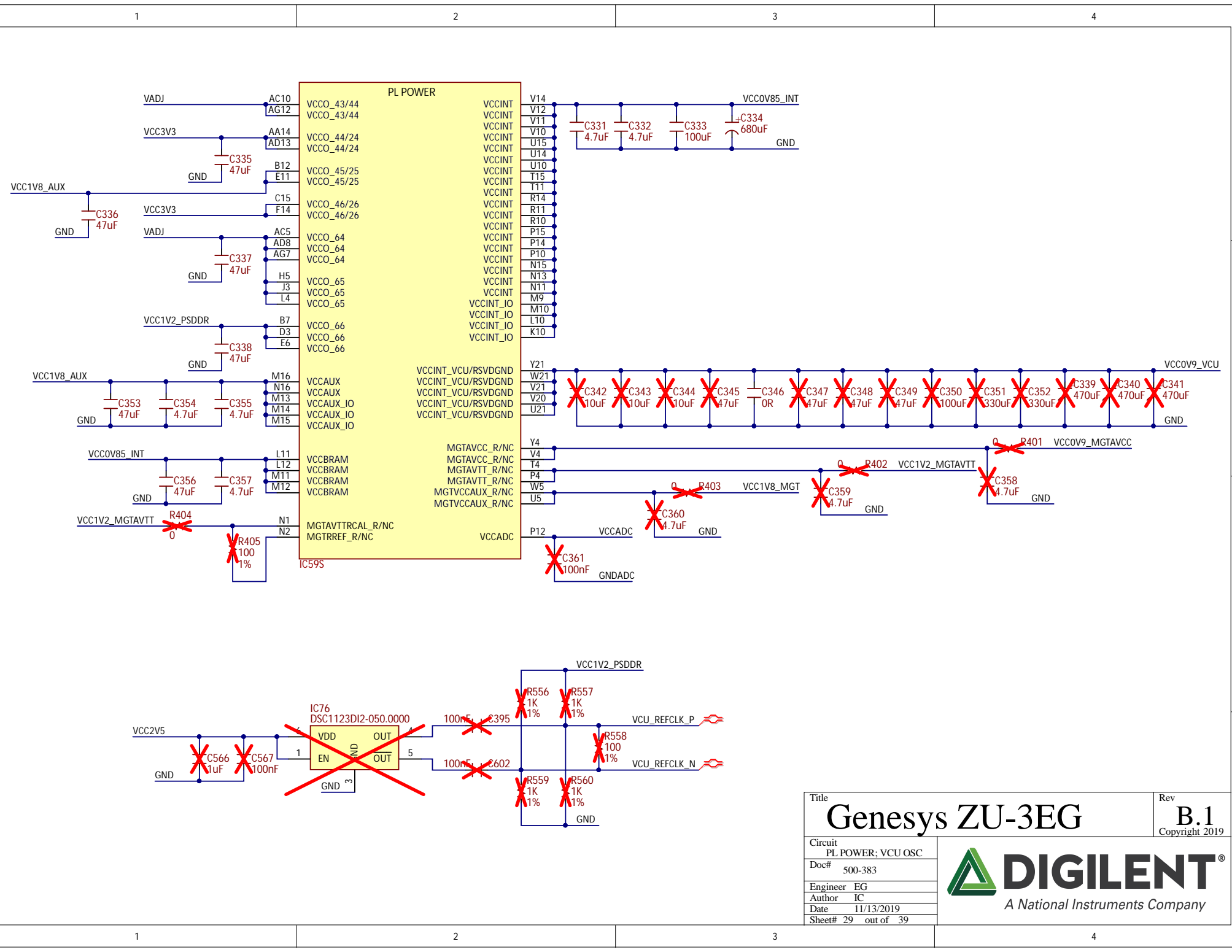


Title		Rev
Genesys ZU-3EG		B.1
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Circuit	GTs BANKS	
Doc#	500-383	
Engineer	EG	
Author	IC	
Date	11/13/2019	
Sheet#	27 out of 39	

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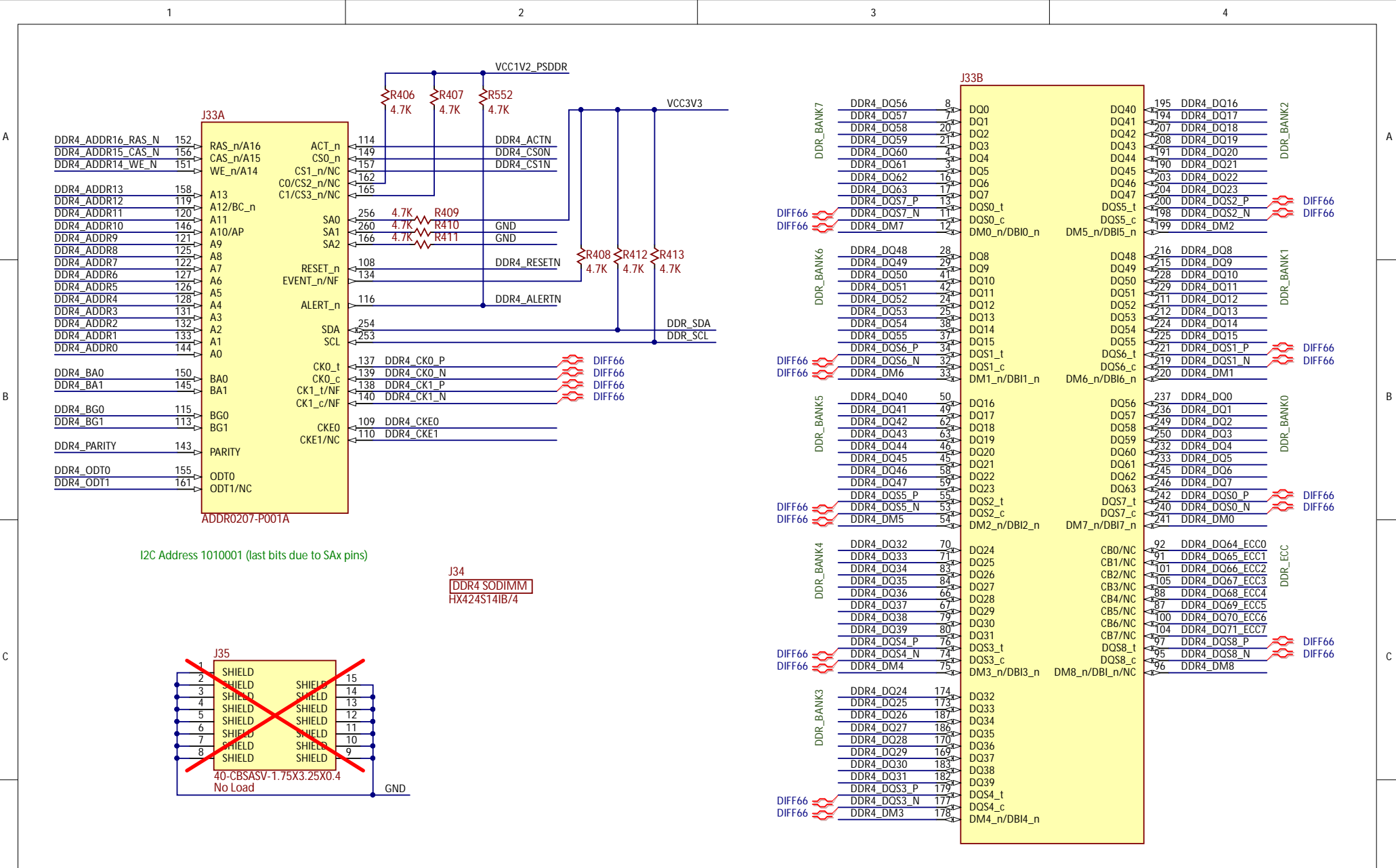


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Engineer EG			
Author IC			
Date 11/13/2019			
Sheet# 28 out of 39			



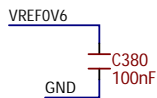
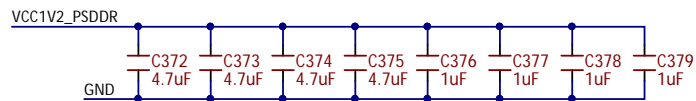
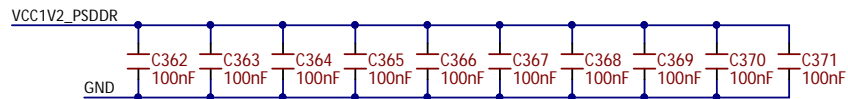
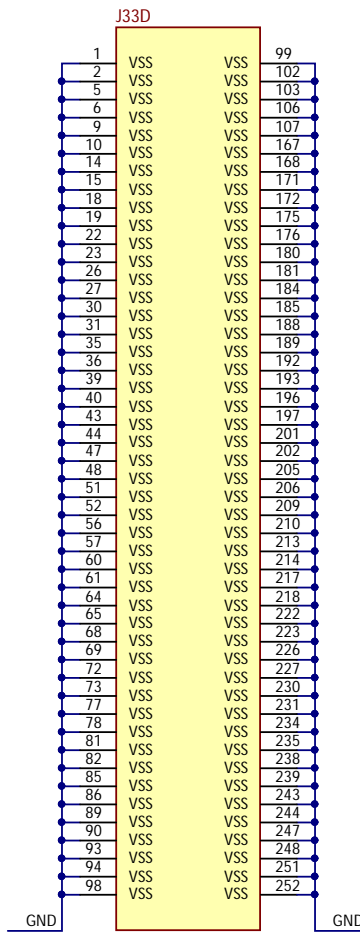
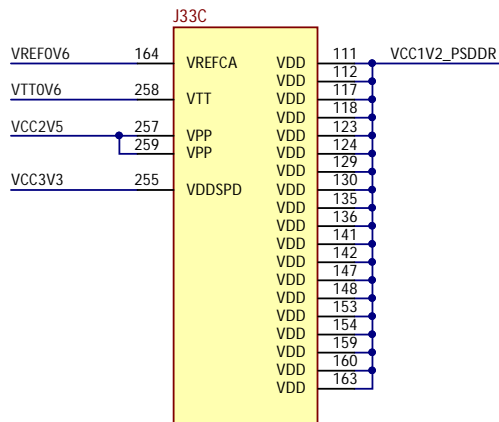
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Doc#	500-383	
Engineer	EG	
Author	IC	
Date	11/13/2019	
Sheet#	29 out of 39	



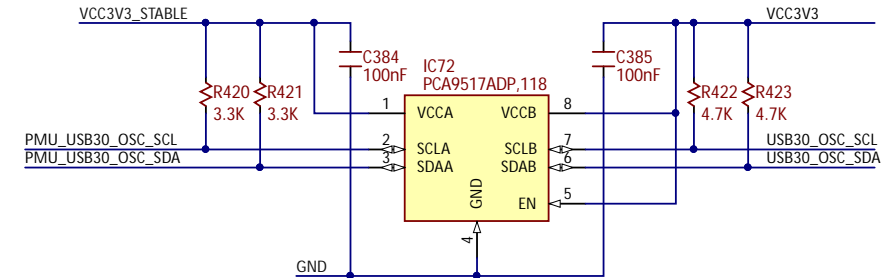
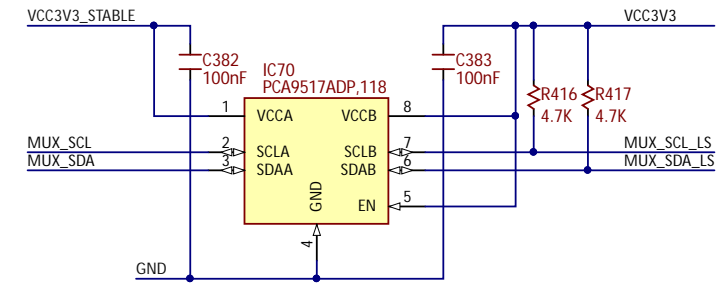
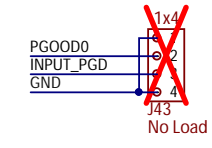
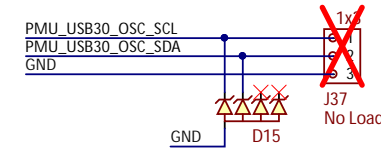
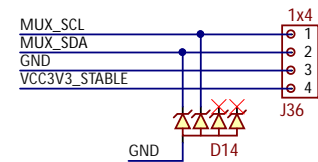
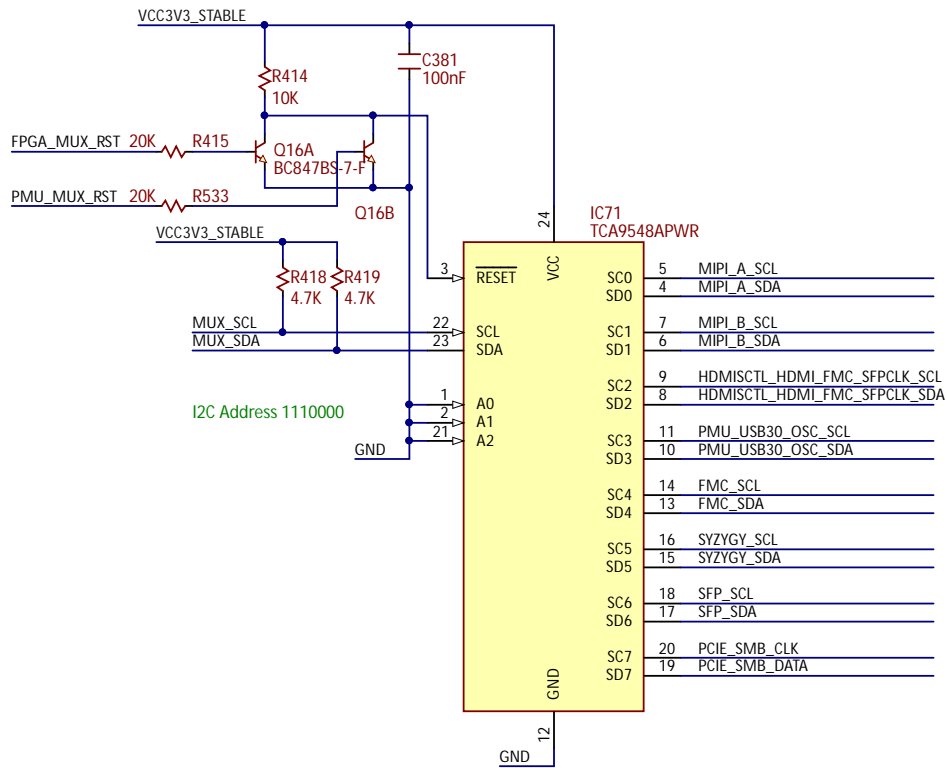


I2C Address 1010001 (last bits due to SAx pins)

Title	Genesys ZU-3EG		Rev	B.1
Circuit	DDR4 SODIMM INTFC		Copyright	2019
Doc#	500-383			
Engineer	EG			
Author	IC			
Date	11/13/2019			
Sheet#	30 out of 39			



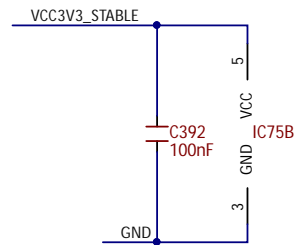
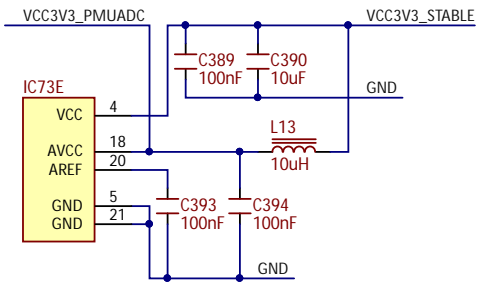
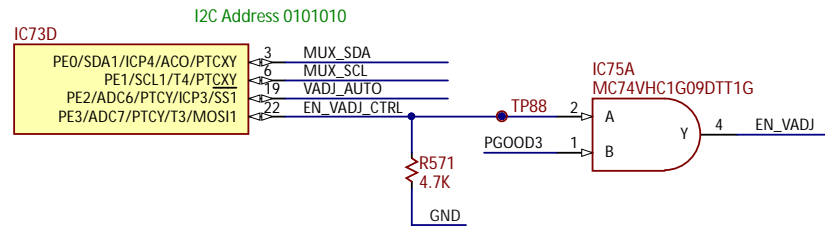
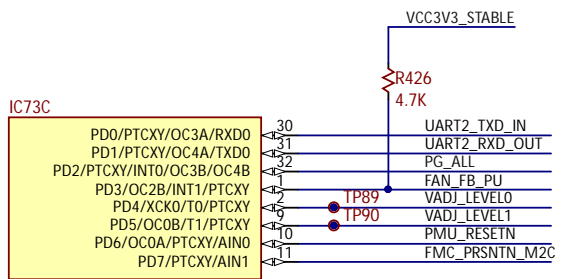
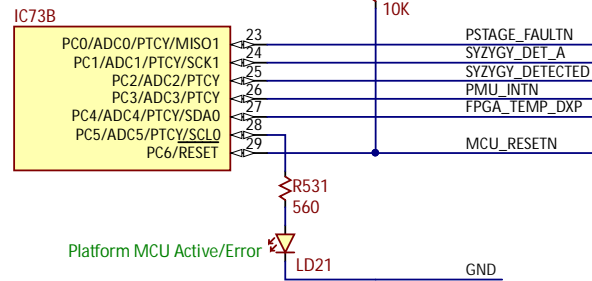
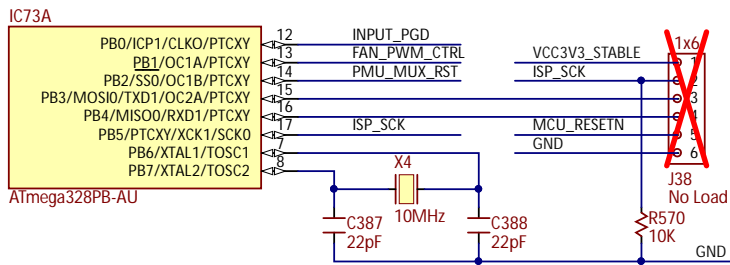
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Doc#	500-383	
Engineer	EG	
Author	IC	
Date	11/13/2019	
Sheet#	31 out of 39	



Title		Rev
Genesys ZU-3EG		B.1
		Copyright 2019
Circuit		
I2C Interfaces		
Doc#	500-383	
Engineer	EG	
Author	IC	
Date	11/13/2019	
Sheet#	32 out of 39	



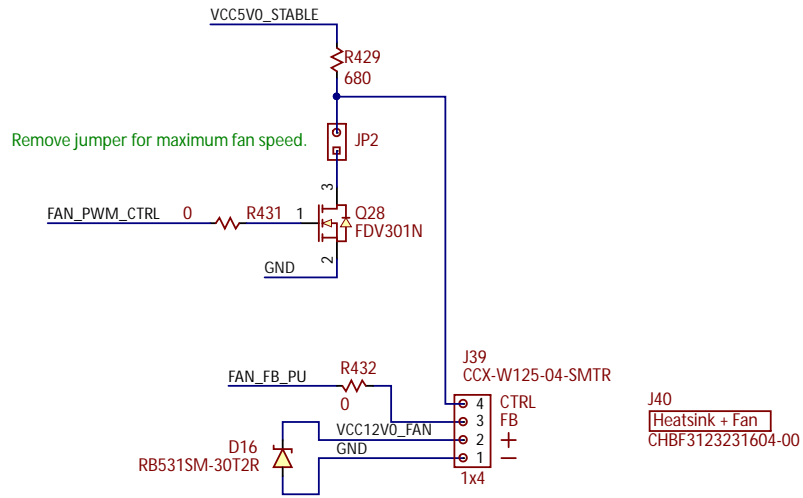
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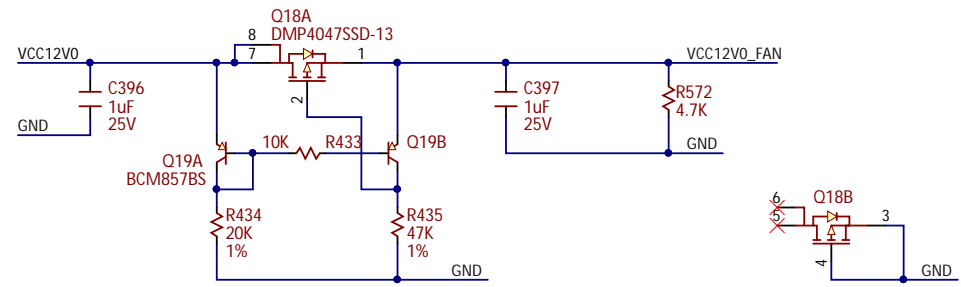
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Genesys ZU-3EG		B.1
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Doc#		500-383
Engineer		EG
Author		IC
Date		11/13/2019
Sheet#		33 out of 39



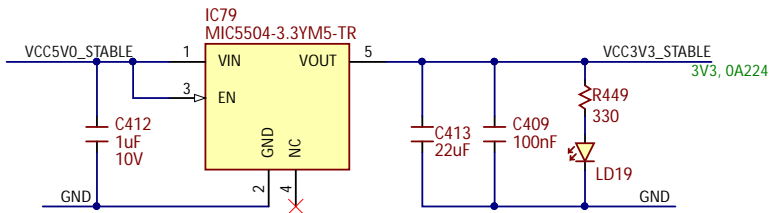
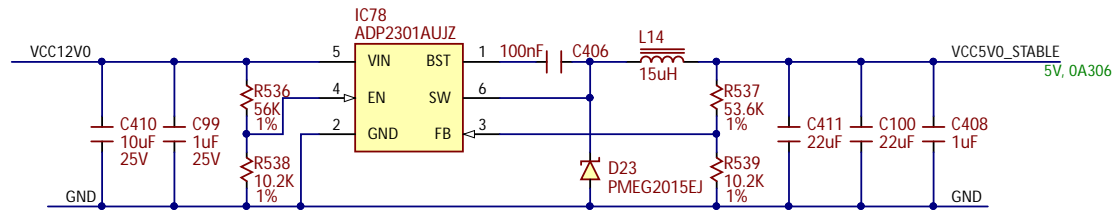
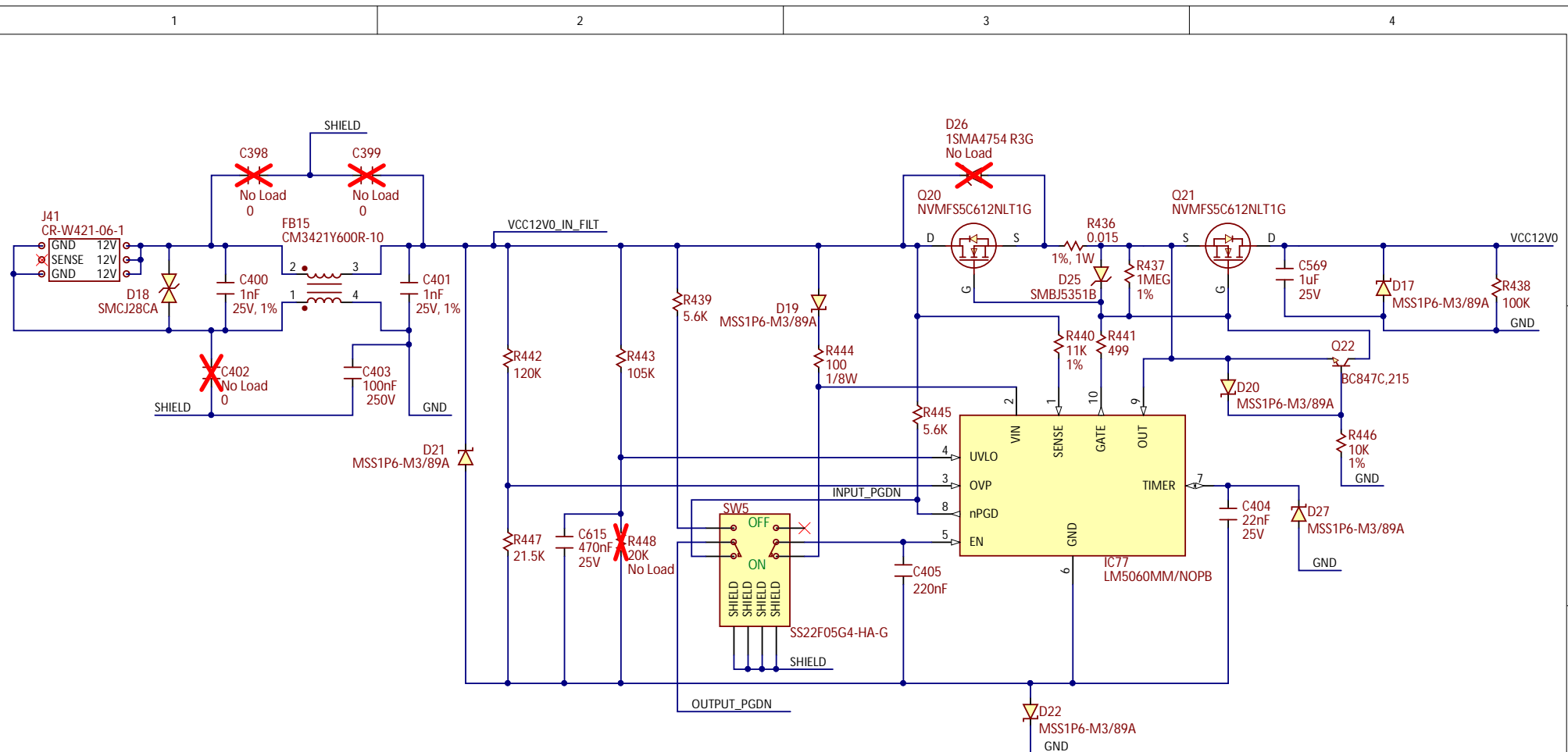
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J40
Heatsink + Fan
CHBF3123231604-00



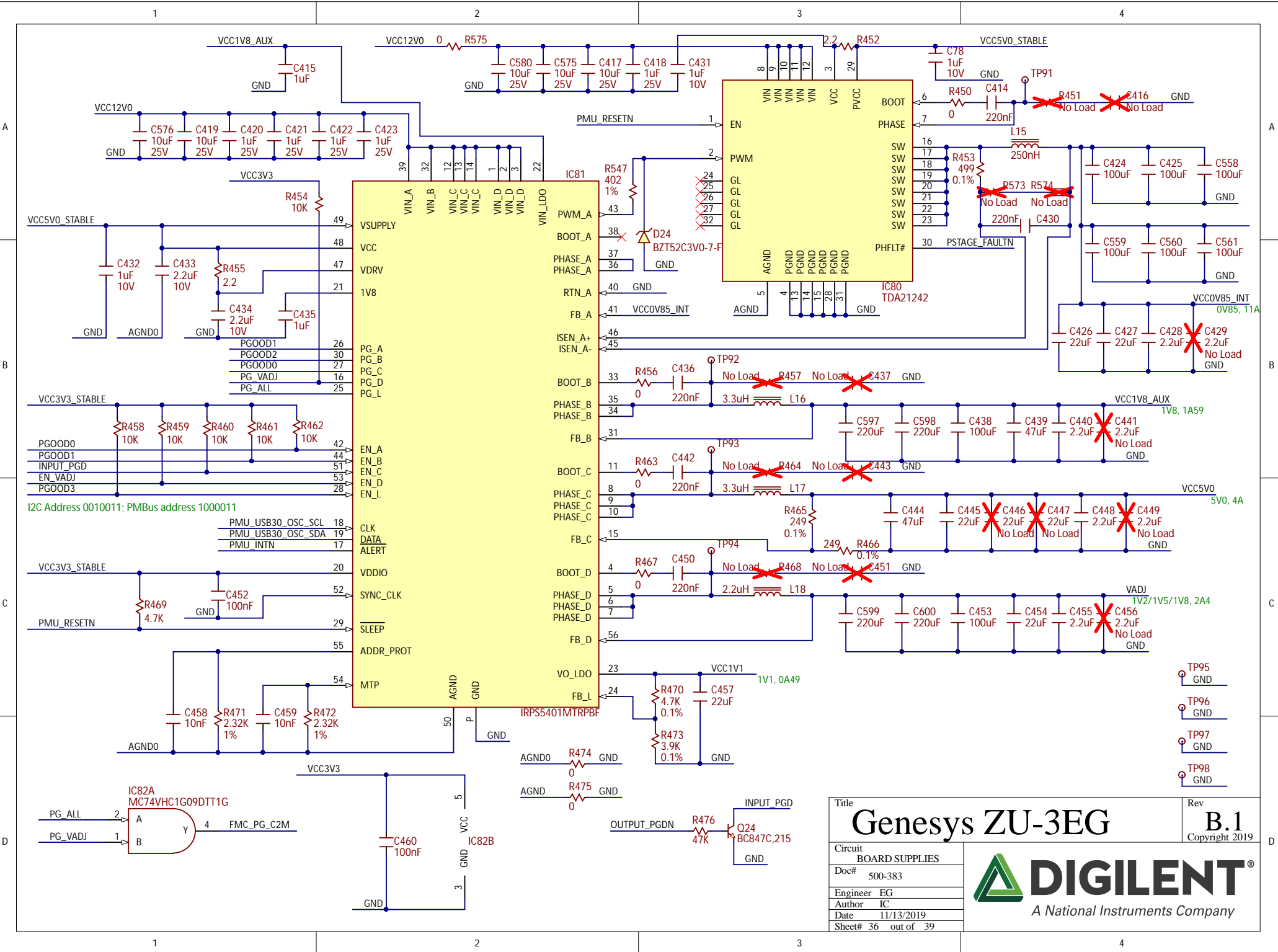
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Circuit FAN Control		 DIGILENT [®] A National Instruments Company
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Engineer EG		
Author IC		
Date 11/13/2019		
Sheet# 34 out of 39		



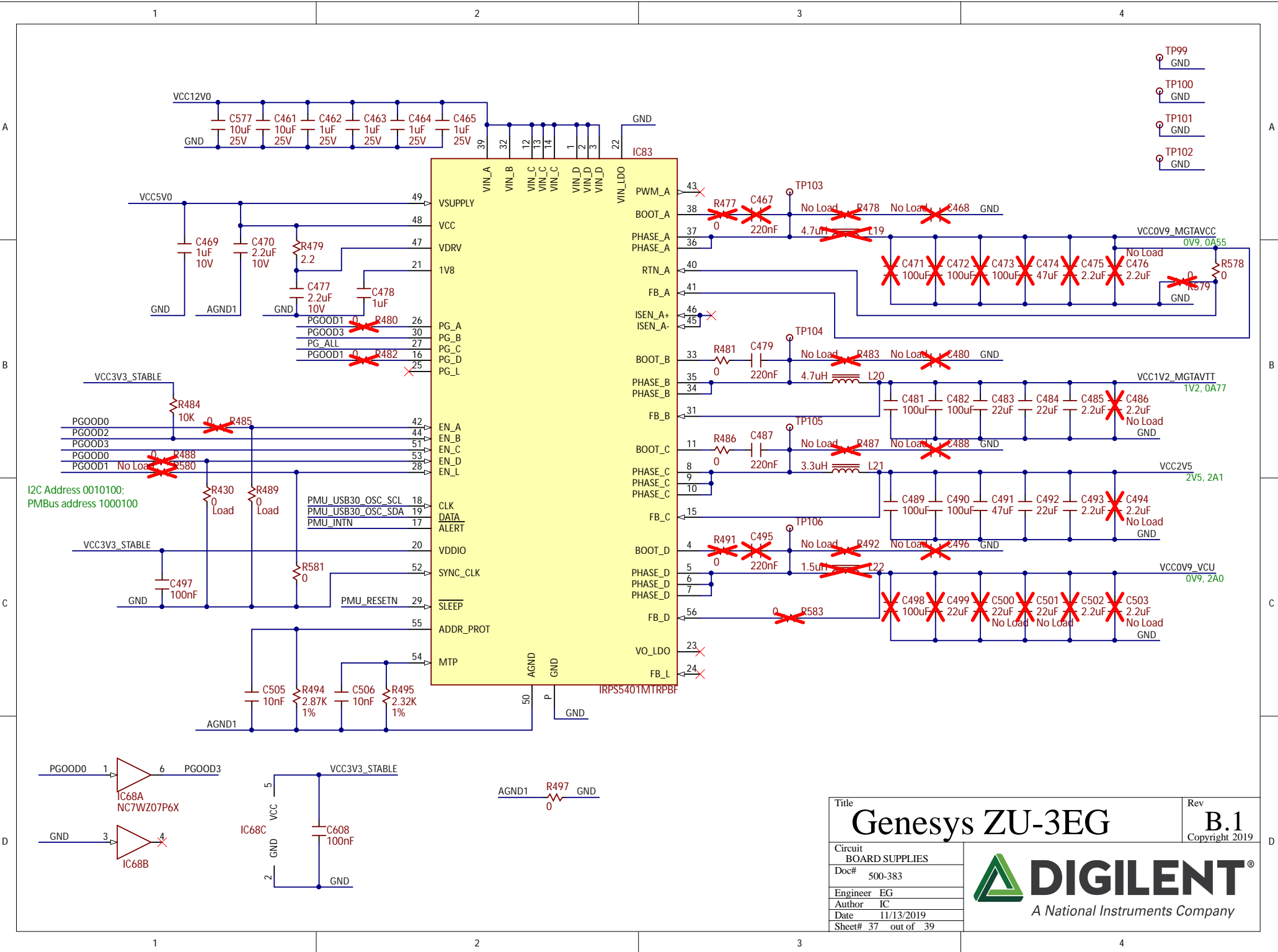
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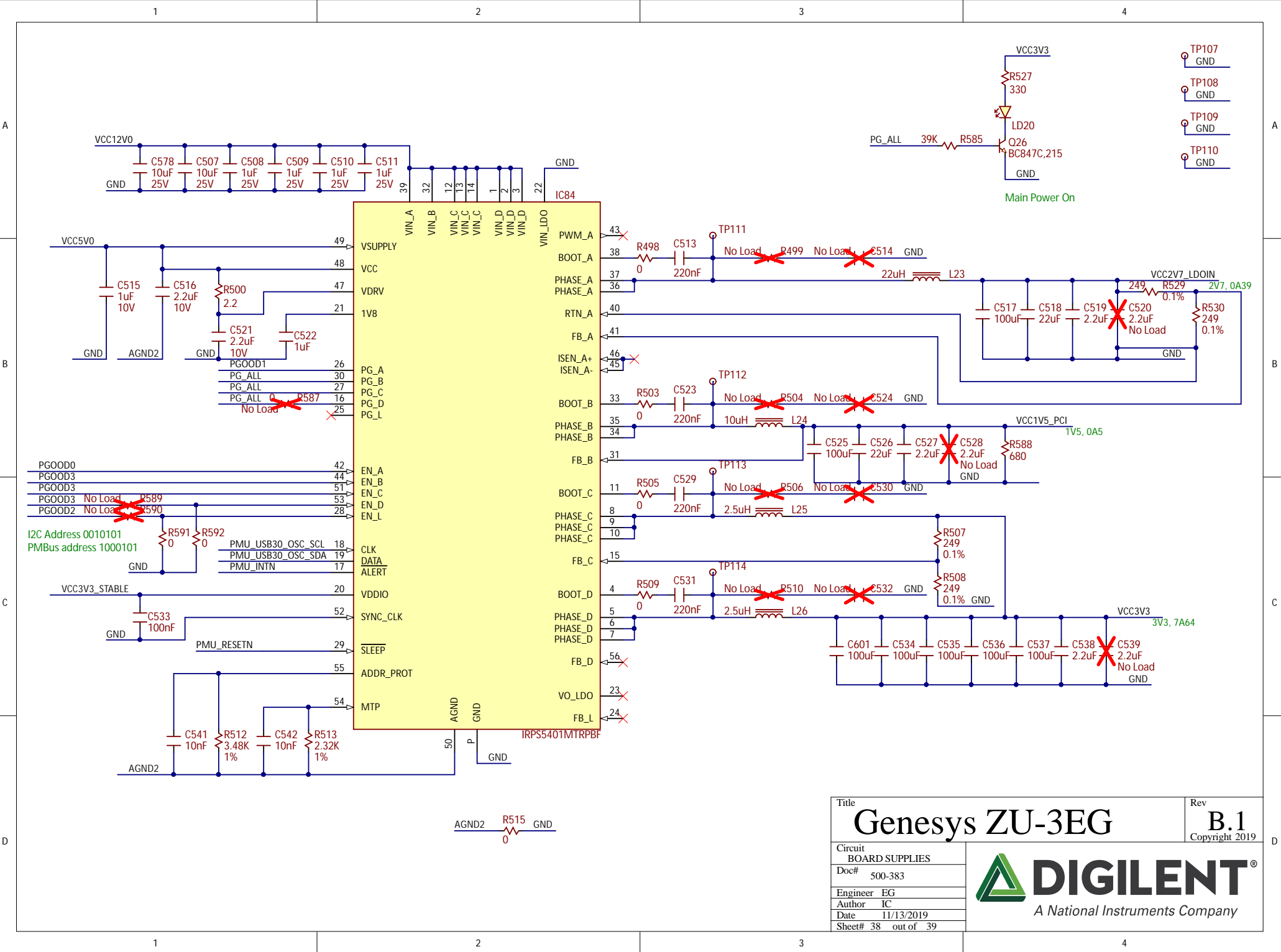
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Doc#	500-383	
Engineer	EG	
Author	IC	
Date	11/13/2019	
Sheet#	35 out of 39	





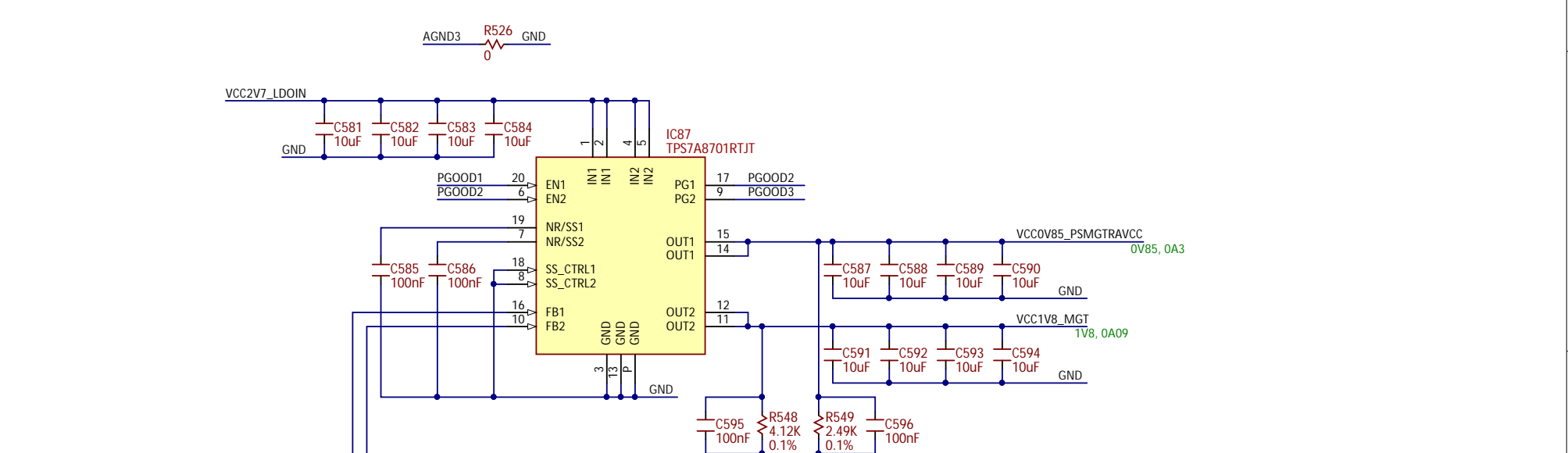
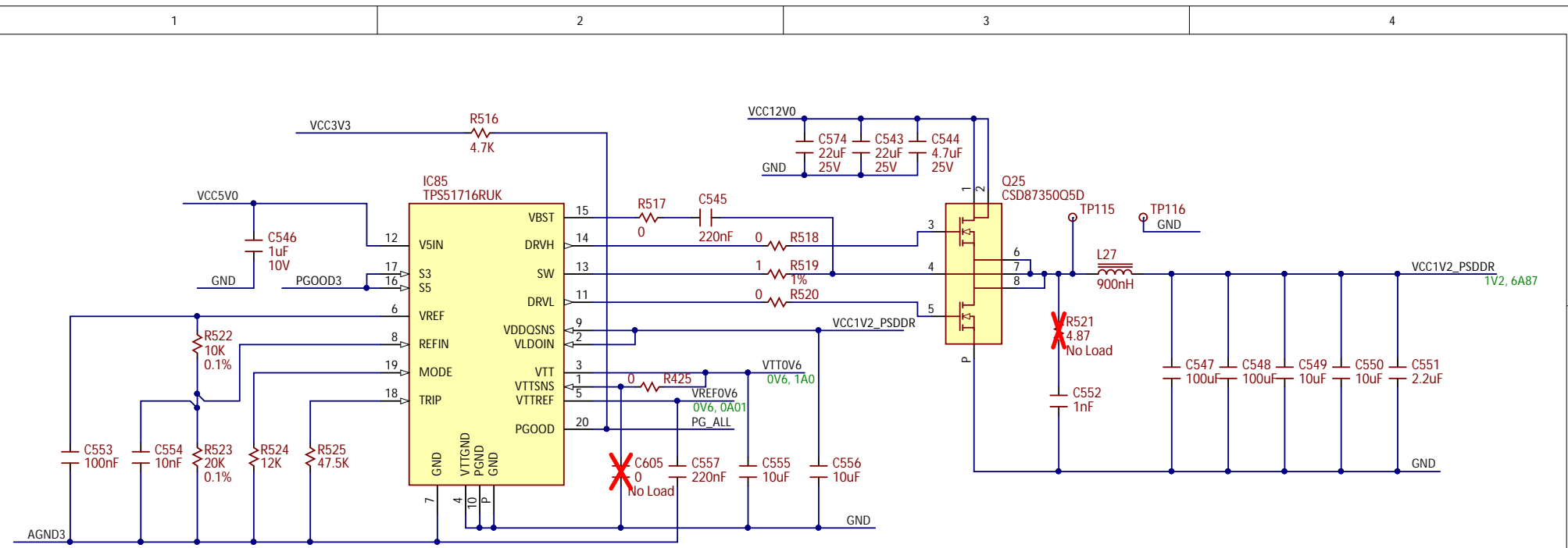
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Author		EG		Date		11/13/2019	
Sheet#		36		out of		39	
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Title		Rev
Genesys ZU-3EG		B.1
Circuit		Copyright 2019
BOARD SUPPLIES		
Doc#	500-383	
Engineer	EG	
Author	IC	
Date	11/13/2019	
Sheet#	38 out of 39	





Title		Rev
Genesys ZU-3EG		B.1
Circuit		Copyright 2019
DDR4 SUPPLY; GT SUPPLY		
Doc#	500-383	
Engineer	EG	
Author	IC	
Date	11/13/2019	
Sheet#	39 out of 39	



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