

Genesys ZU

Variant: 3EG

11/13/2019

Rev B.1

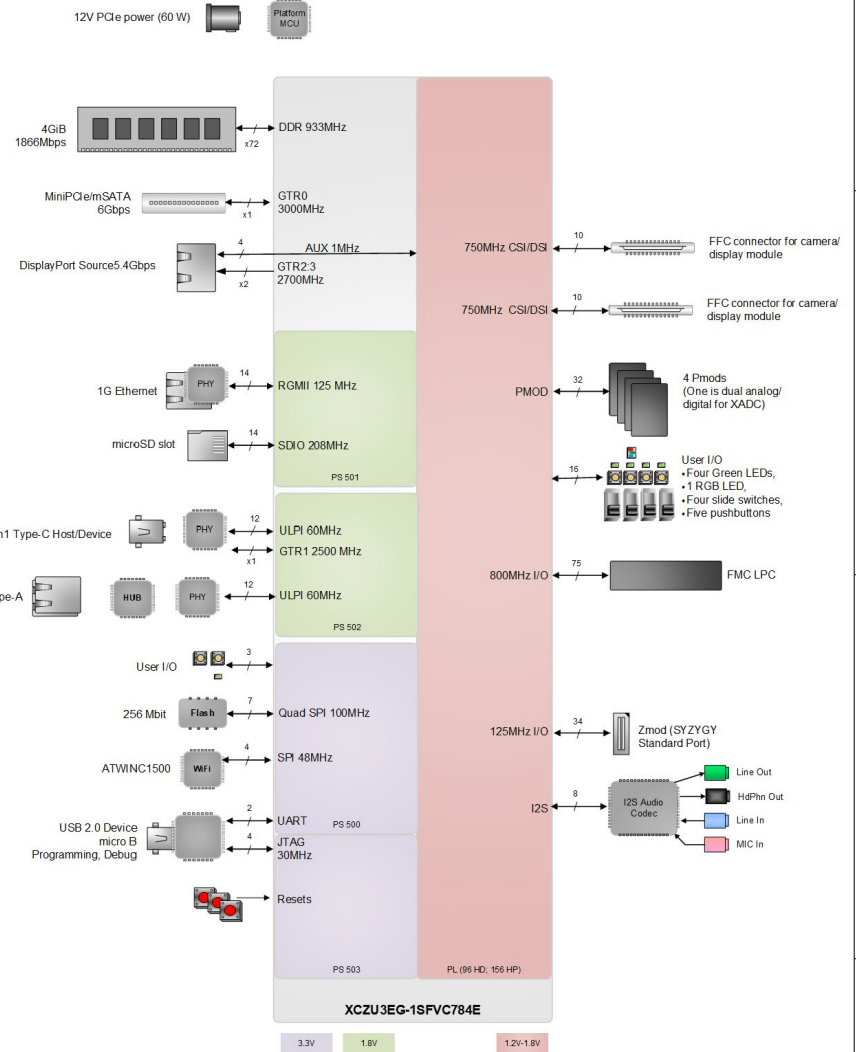
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Circuit			
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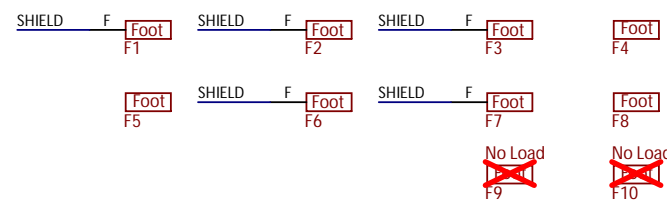
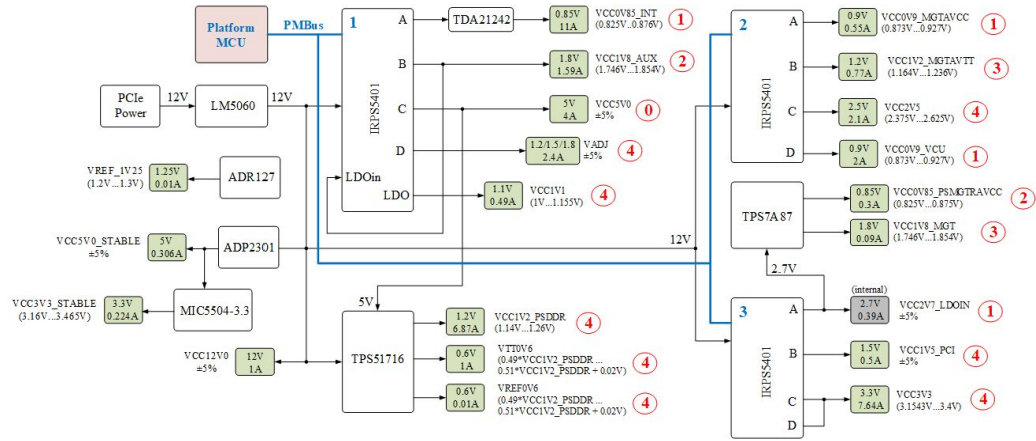


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Block Diagram



Power Tree



Genesys ZU Insert Contacts Down

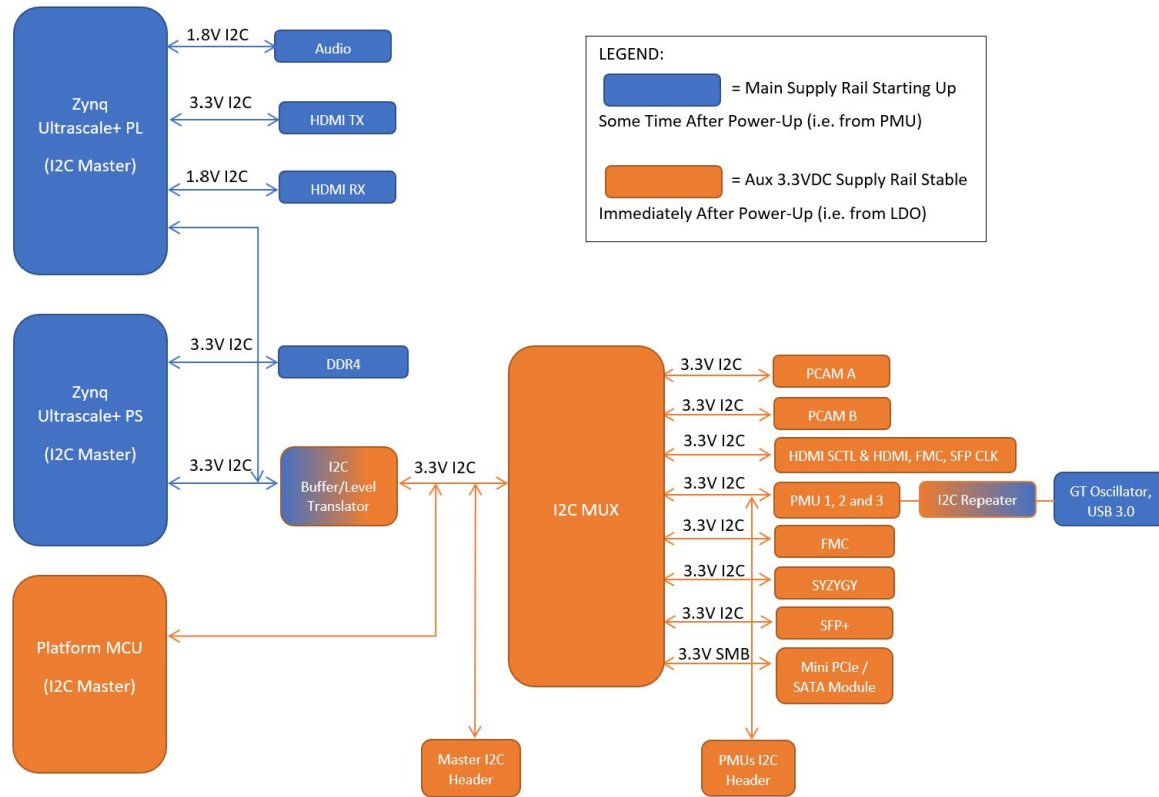
Chinese ROHS ROHS Diligent Inc. CE Xilinx

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Author	IC			
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I2C Diagram



LEGEND:

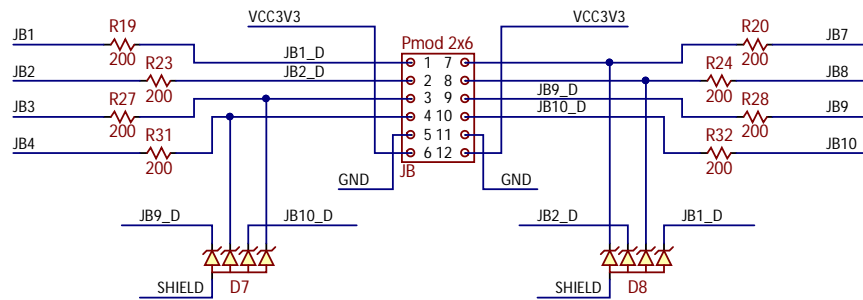
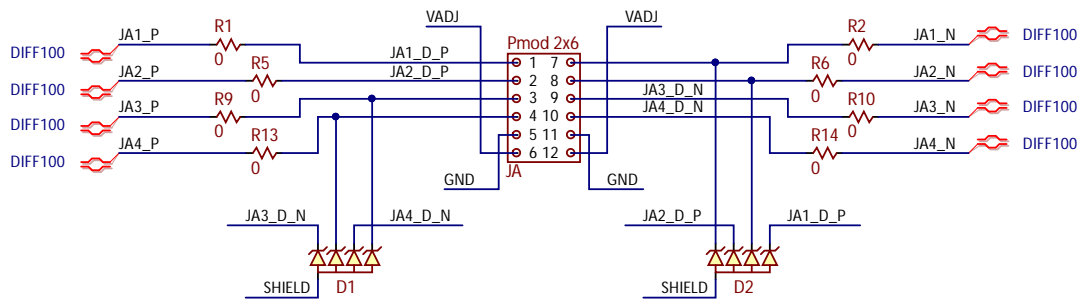
= Main Supply Rail Starting Up
Some Time After Power-Up (i.e. from PMU)

= Aux 3.3VDC Supply Rail Stable
Immediately After Power-Up (i.e. from LDO)

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Circuit I2C Diagram		
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Author IC		
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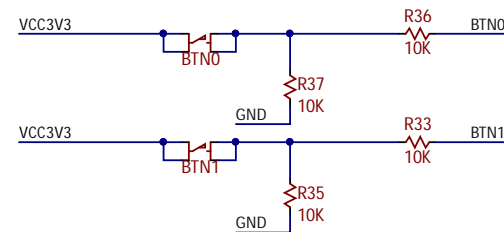
XADC PMOD



MIO LED

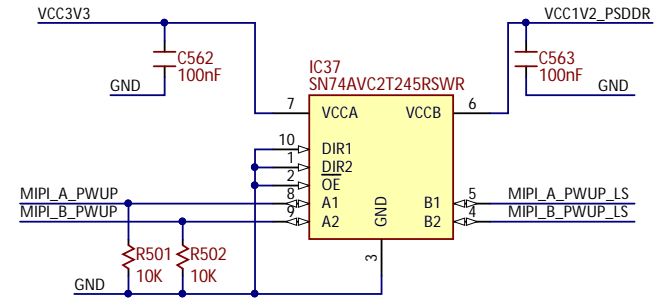
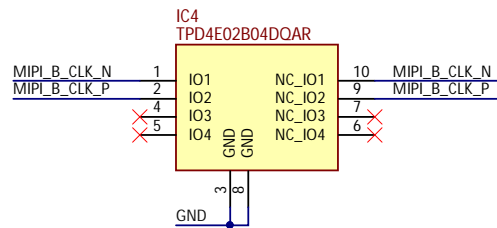
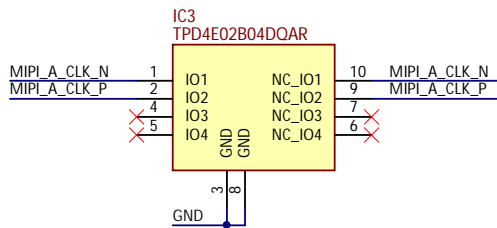
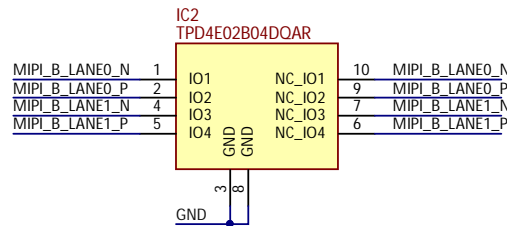
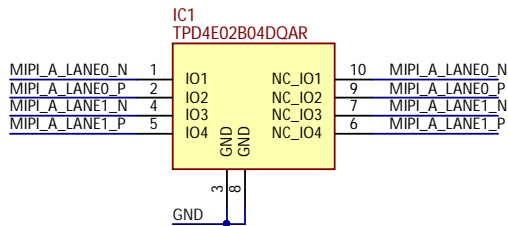
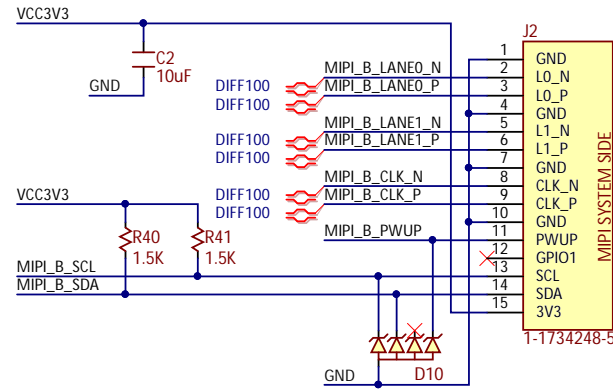
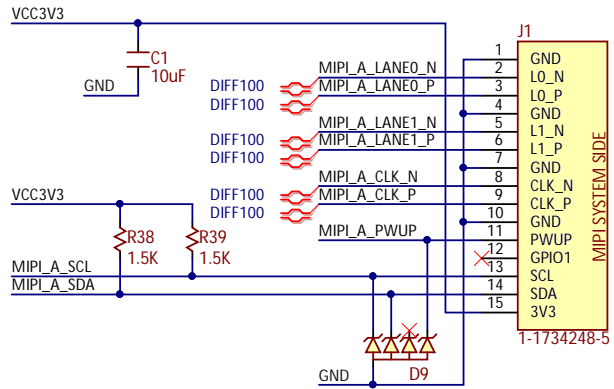


MIO BUTTONS



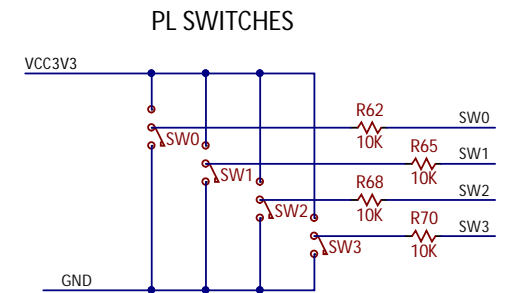
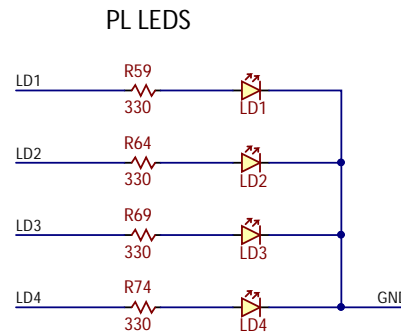
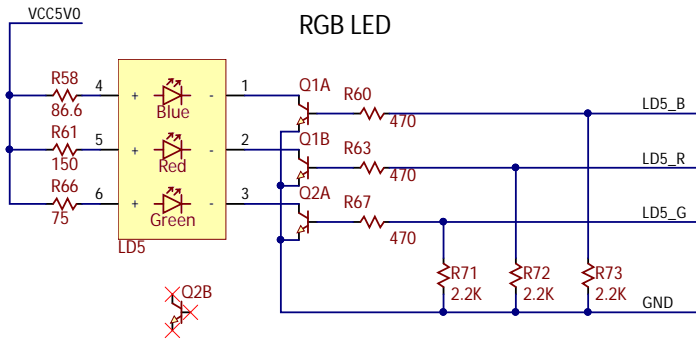
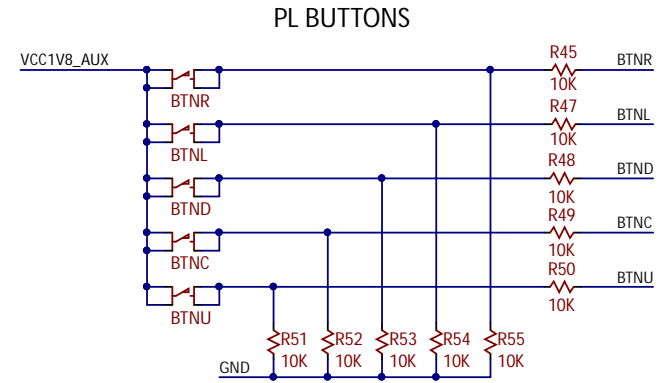
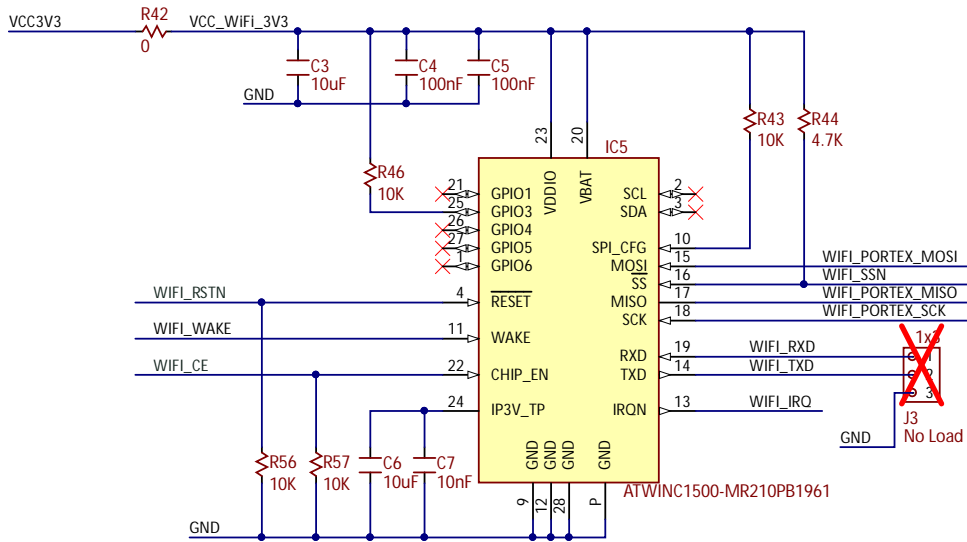
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PMODs, MIO BUTTON		
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Engineer EG		
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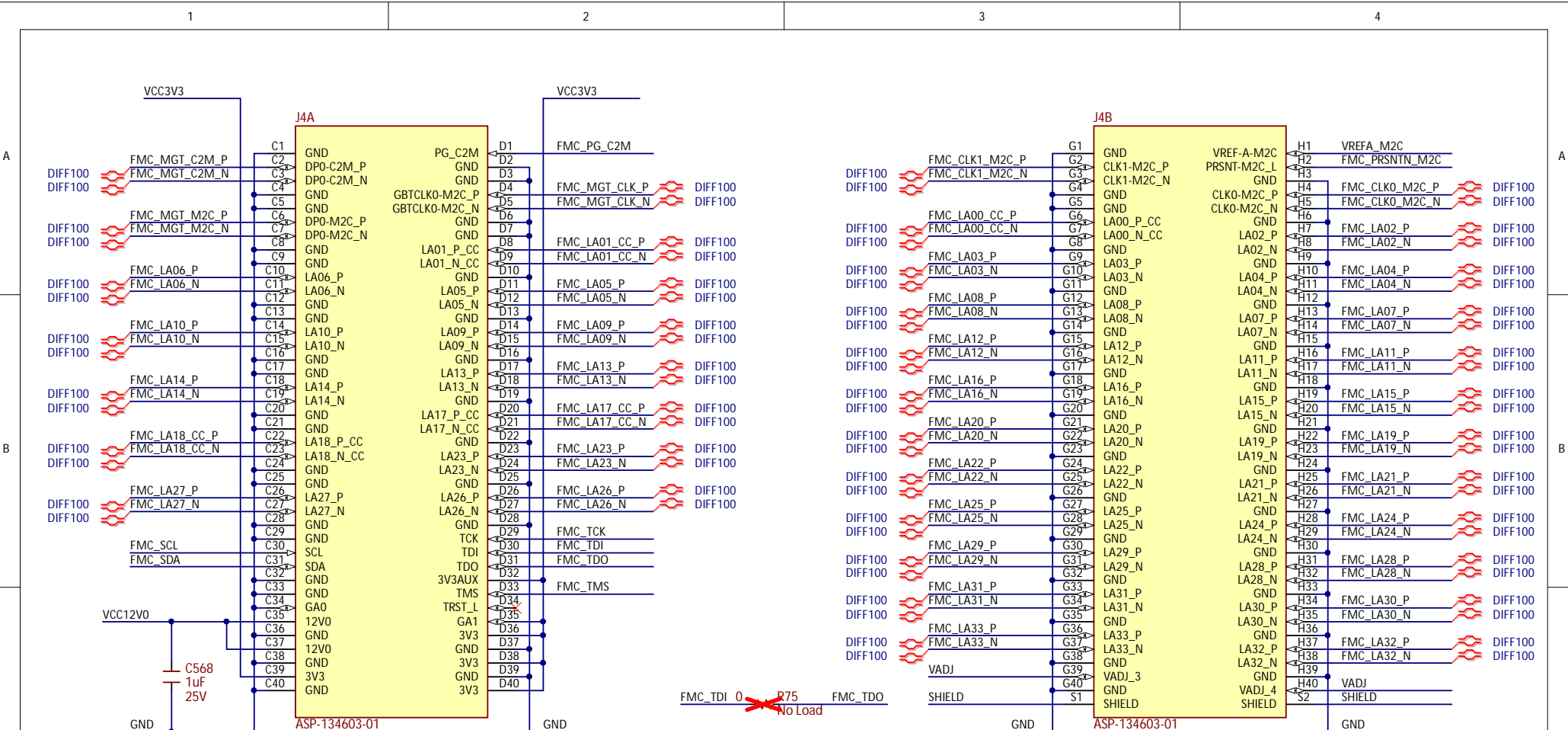
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Circuit		Copyright 2019
MIPI Interfaces		
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Circuit	WI-FI, LEDs, BUTTONS etc.	Copyright	2019
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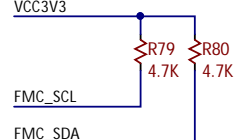
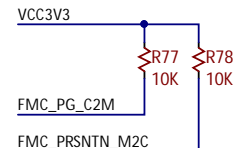
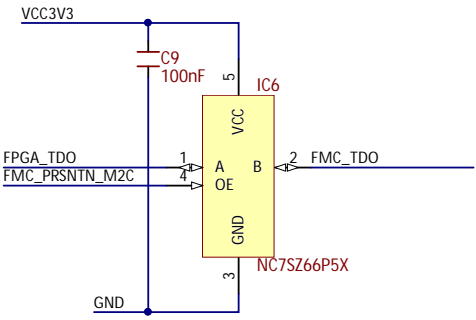
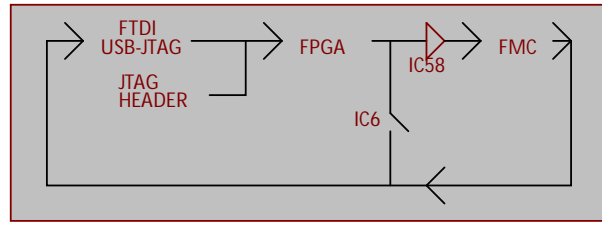




I2C 7-bit addresses ending with bits 01 (due to GAX pins).
 E.g. FMC module EEPROM 7-bit address will be, in binary: 1010001.

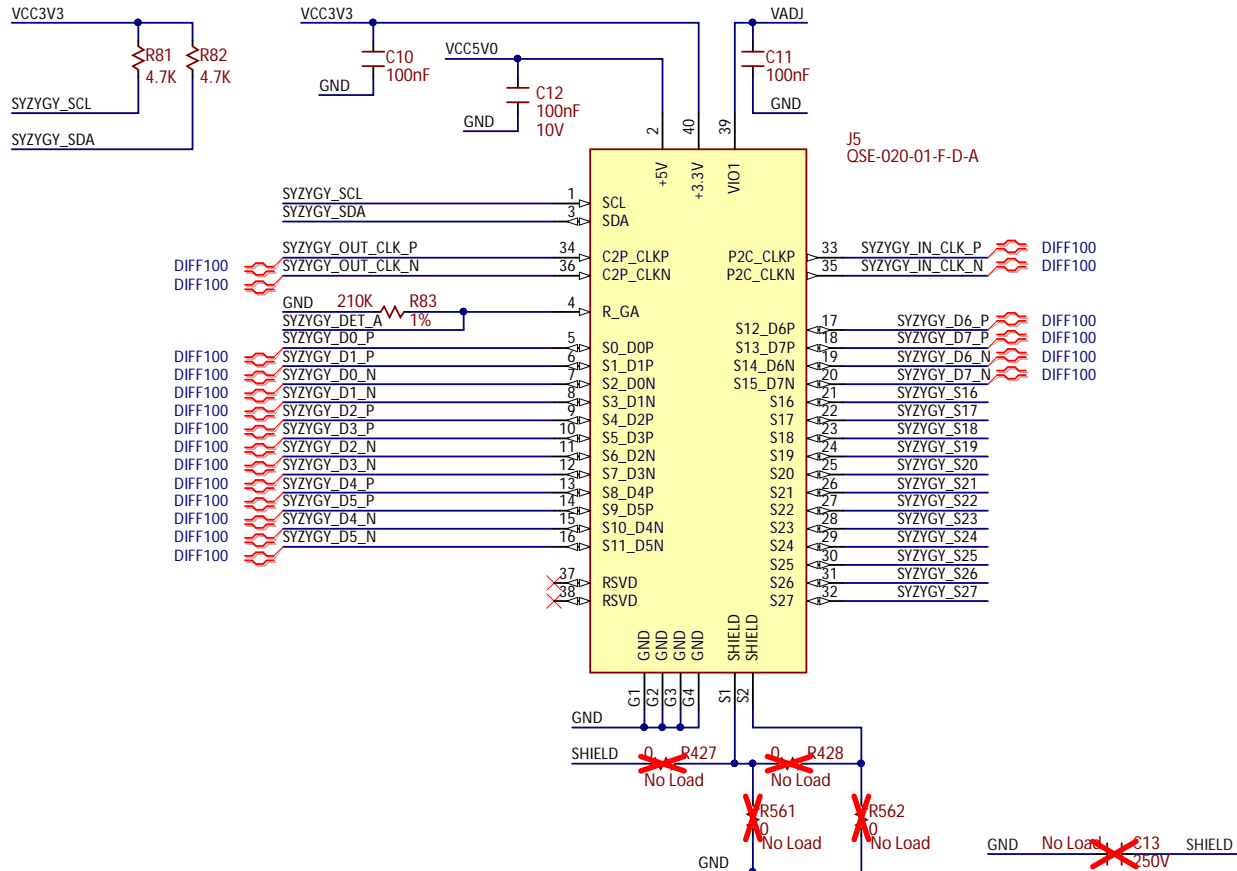


JTAG SCAN CHAIN



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Circuit		Copyright 2019	
FMC LPC			
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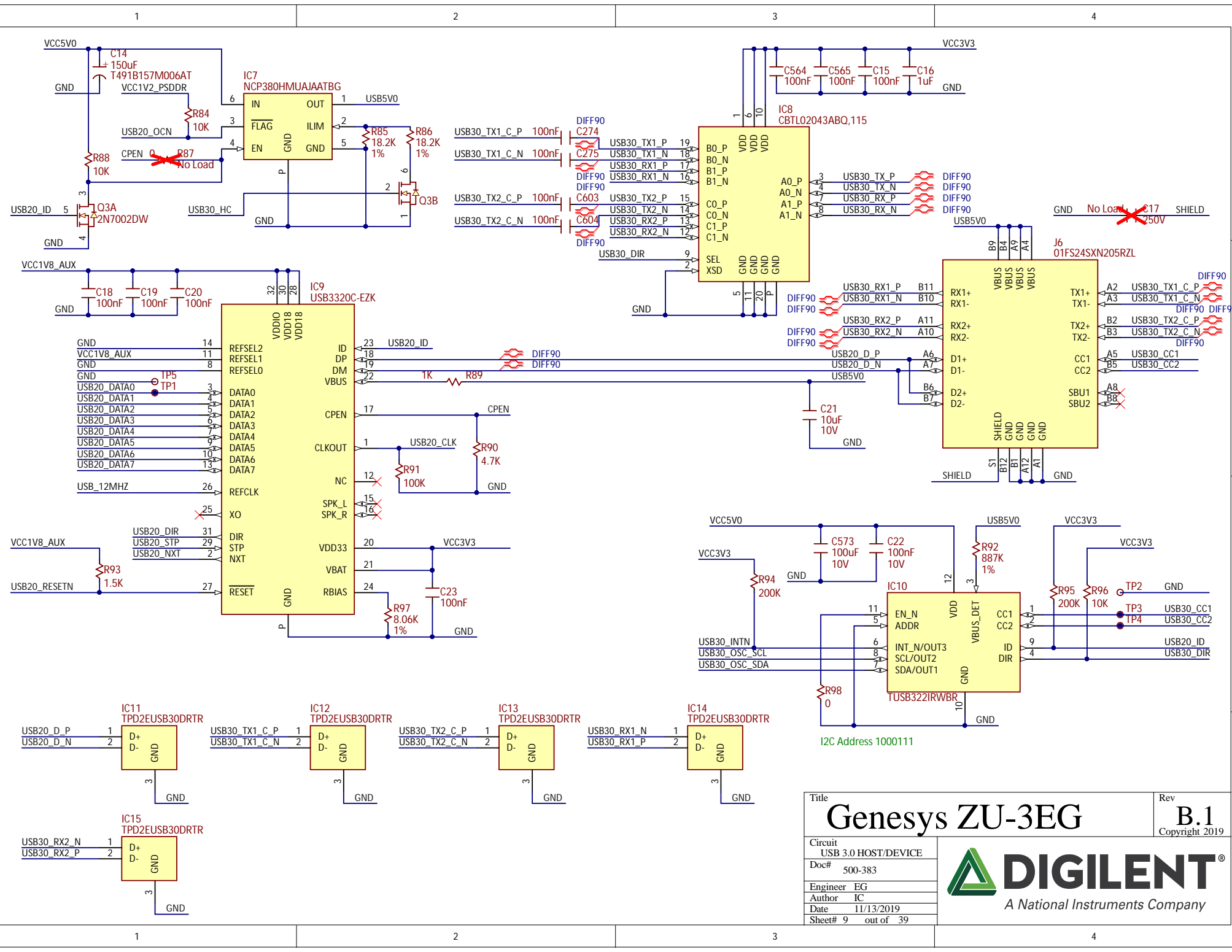




I2C Address 0110000 (due to R_GA)

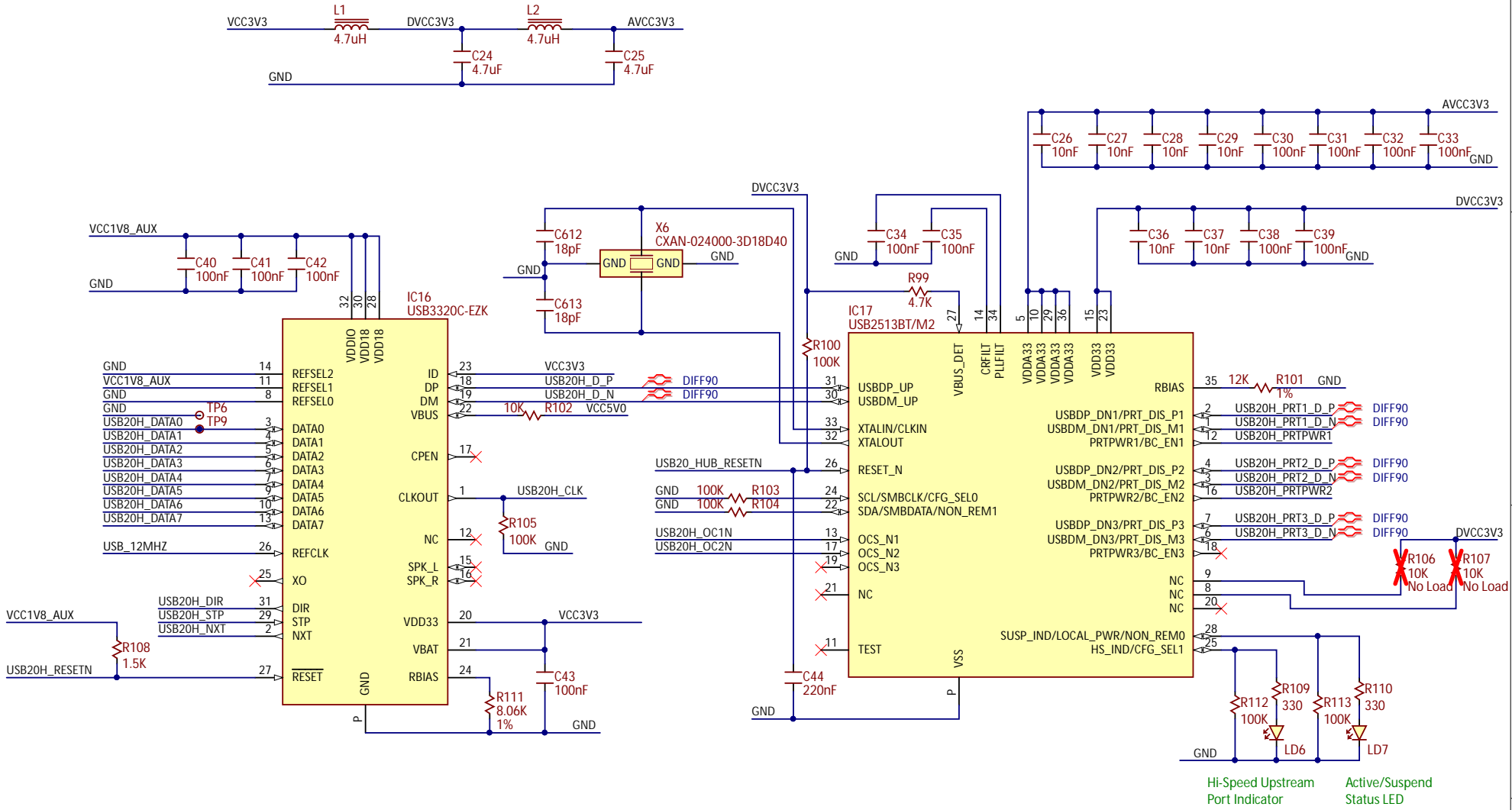
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Genesys ZU-3EG		B.1
Circuit		Copyright 2019
SYZYGY Standard Port		
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USB 3.0 HOST/DEVICE			
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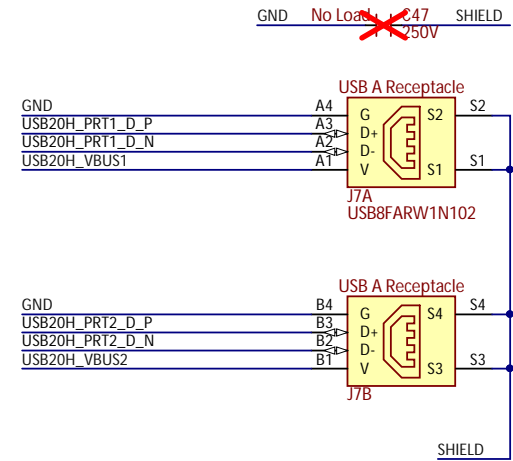
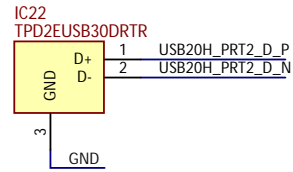
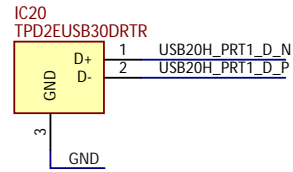
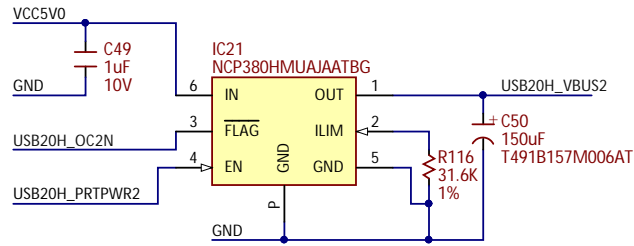
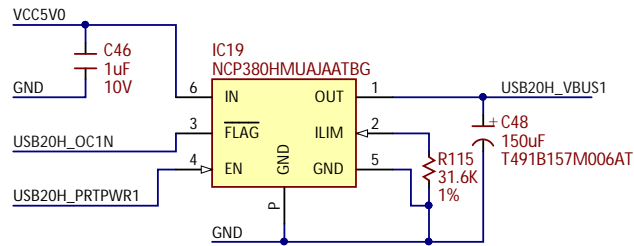


Title		Rev
Genesys ZU-3EG		B.1
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USB 2.0 HOST PHY & HUB		
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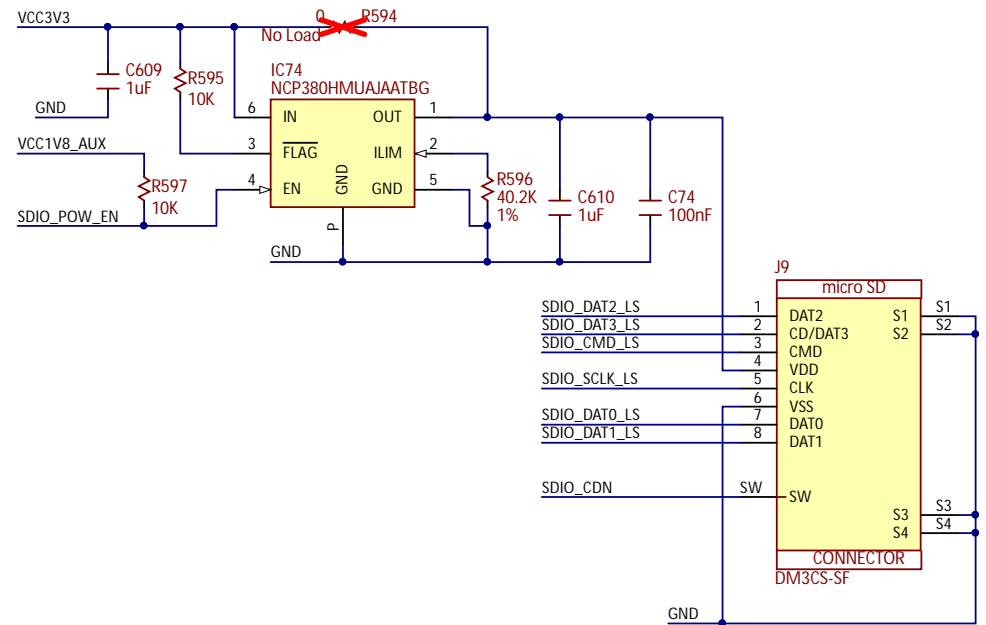
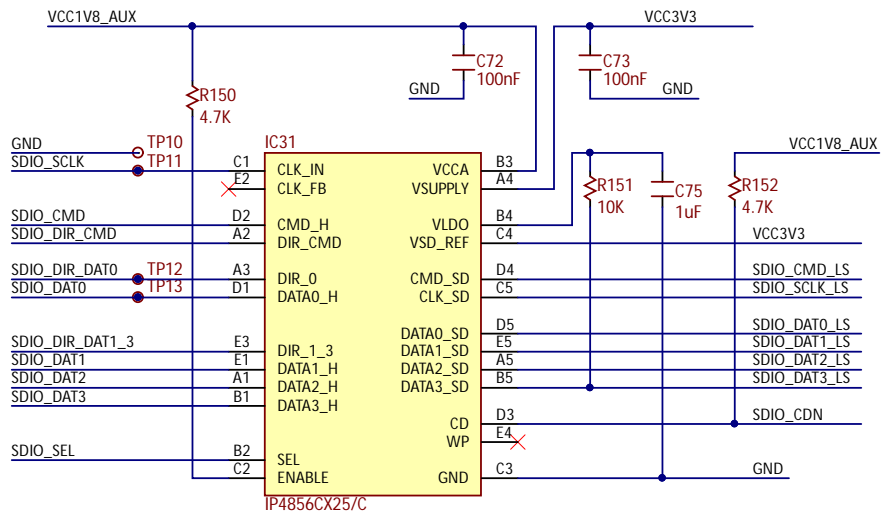
Hi-Speed Upstream Port Indicator Active/Suspend Status LED



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Circuit USB 2.0 HUB CONN		 A National Instruments Company
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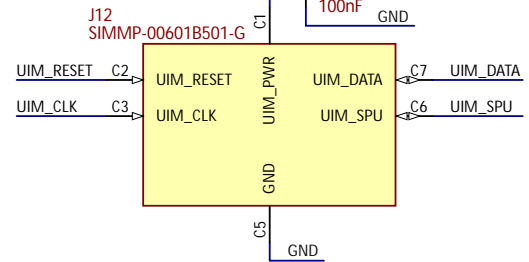
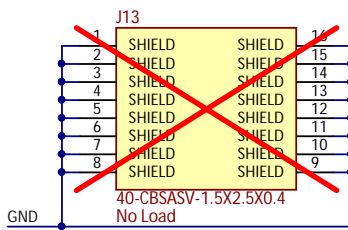
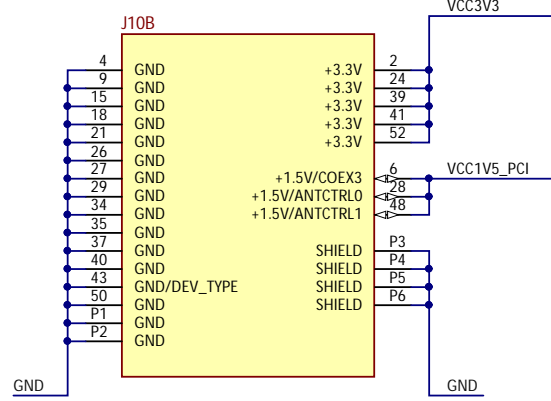
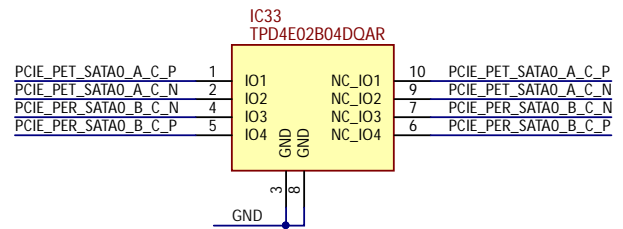
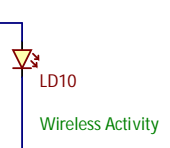
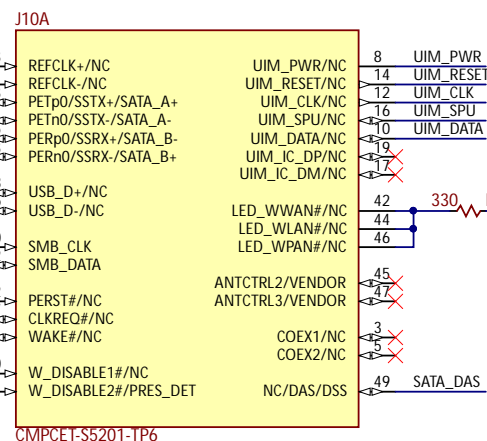
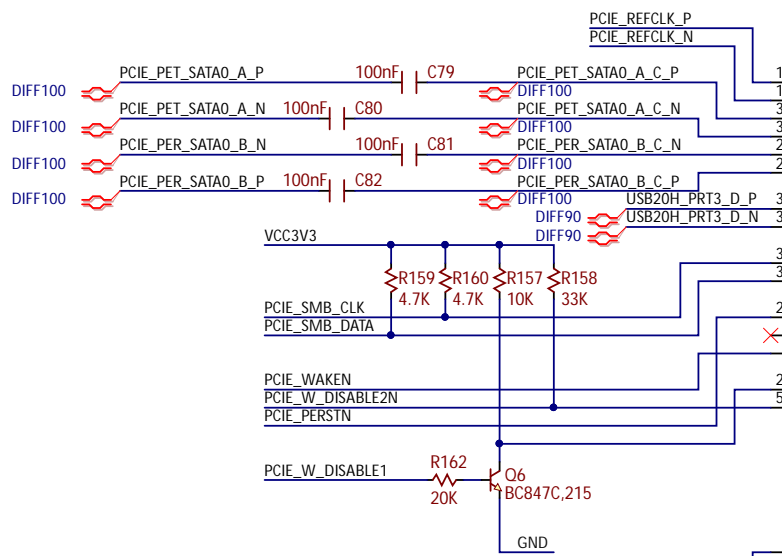
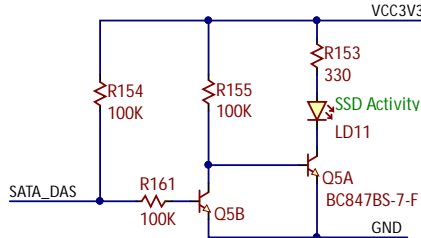
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Doc#	500-383		
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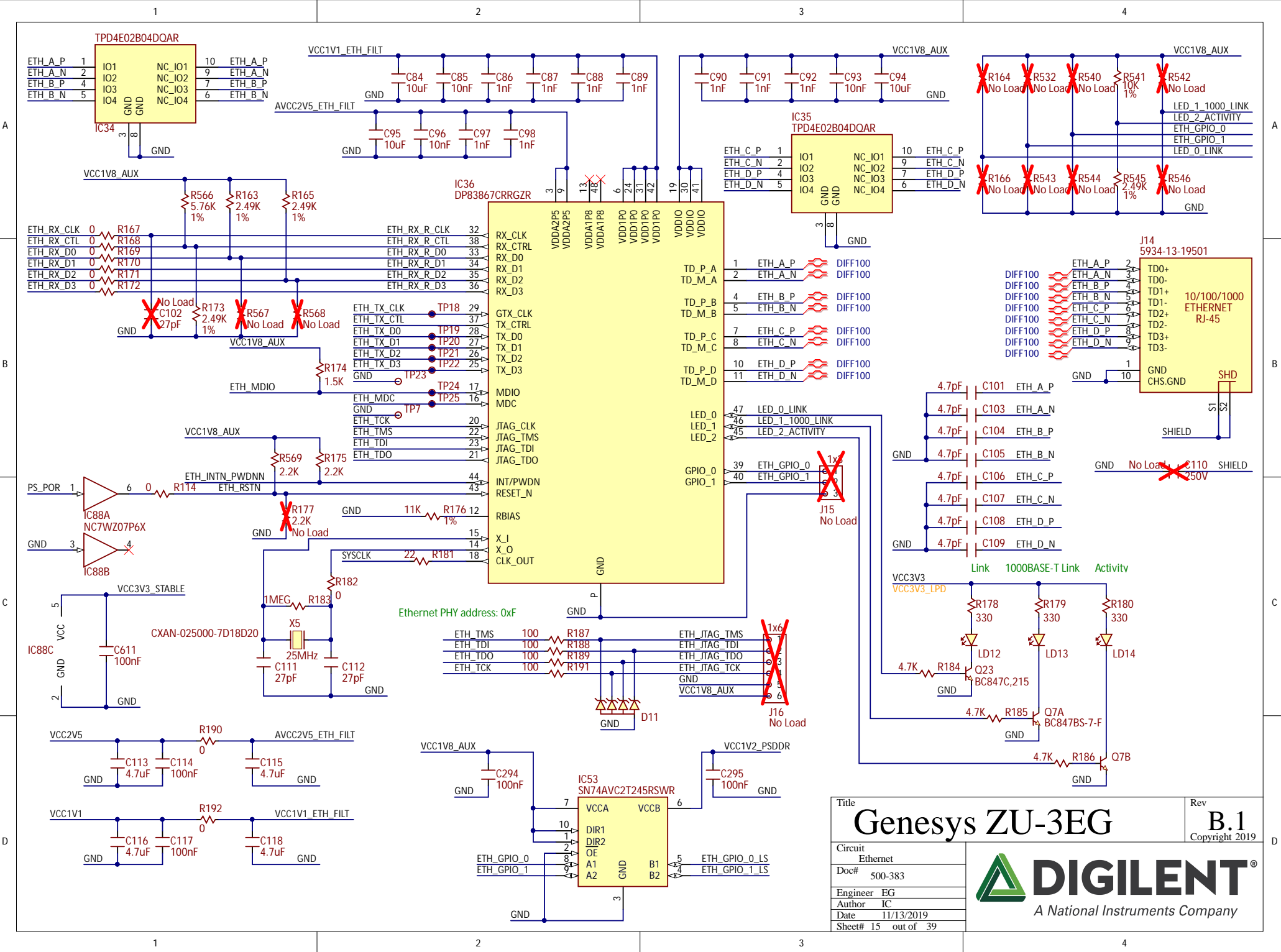
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		Copyright 2019	
Circuit	SD CARD		
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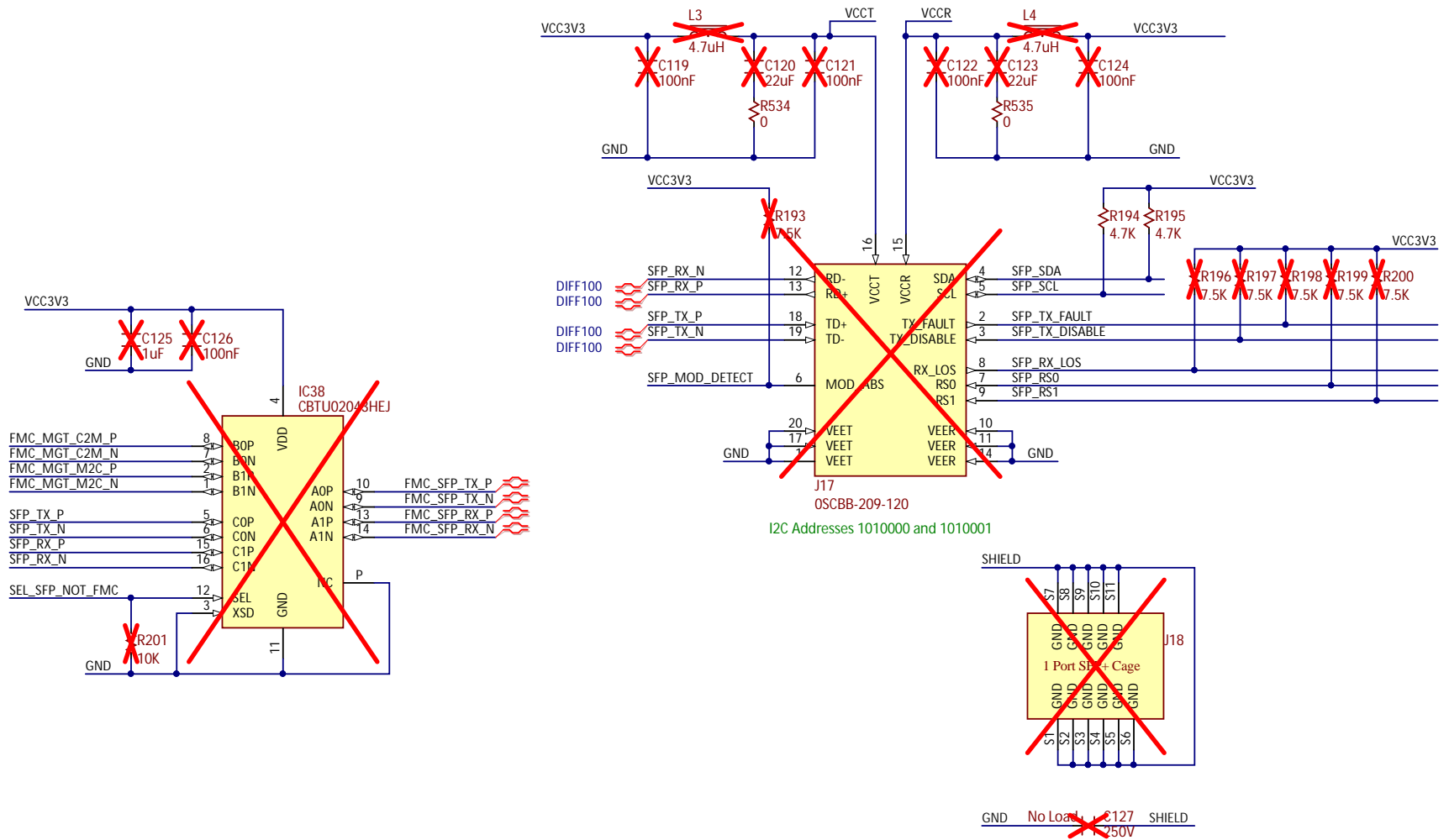
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- F12 SMT Standoff 0001-00001-B01
- F13 mini PCIe Screw I02003MN
- F14 SMT Standoff 0001-00001-B01
- F15 SMT Standoff 0001-00001-B01
- F16 mini PCIe Screw I02003MN
- F17 M-F Standoff RE025MN01
- F18 M-F Standoff RE025MN01

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Genesys ZU-3EG		B.1	
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Mini PCIe / SATA			
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Circuit		Copyright 2019	
Ethernet			
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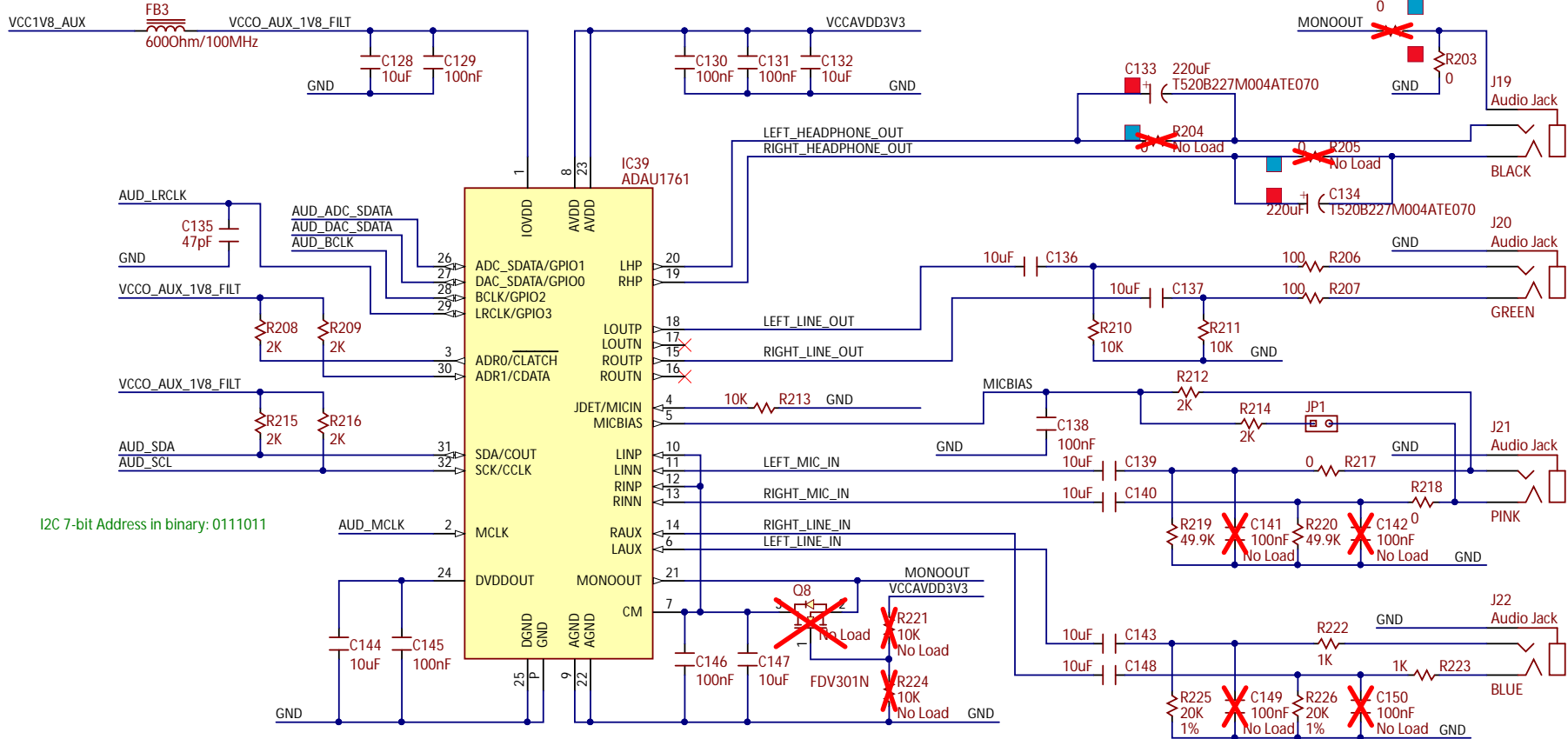
SFP+ cannot be used simultaneously with neither HDMI Source nor Sink due to the limited number of QPLL/CPLL primitives available in the GTH Quad.

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Genesys ZU-3EG		B.1
		Copyright 2019
Circuit	SFP+	
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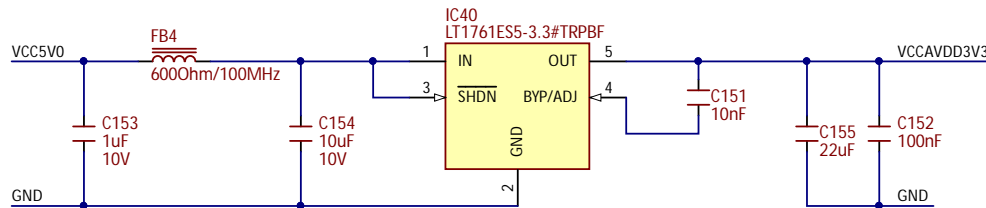


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NOTE: Load No Load
 Capless Headphone ■ ■
 AC-Coupled Headphone ■ ■

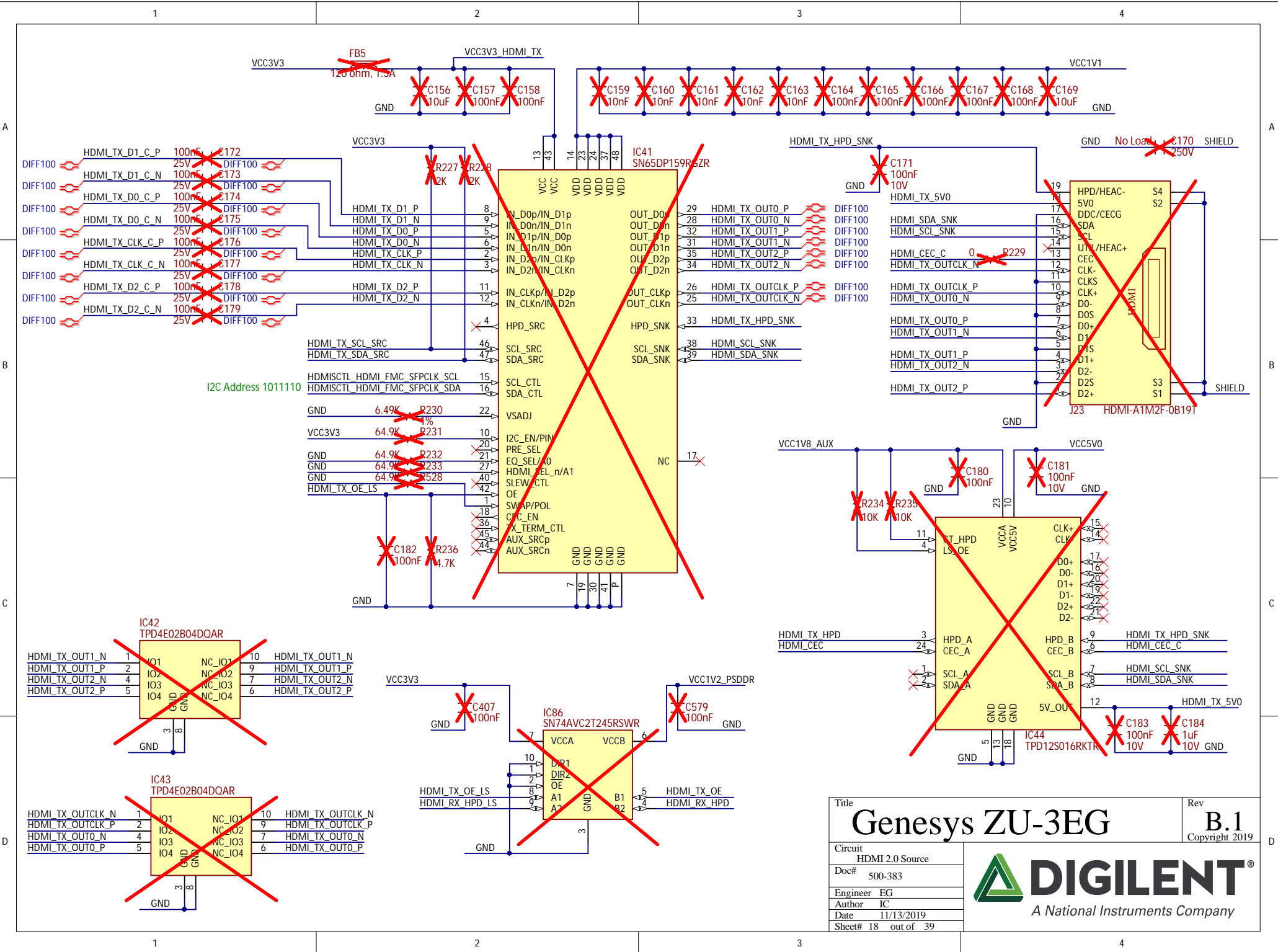


I2C 7-bit Address in binary: 0111011



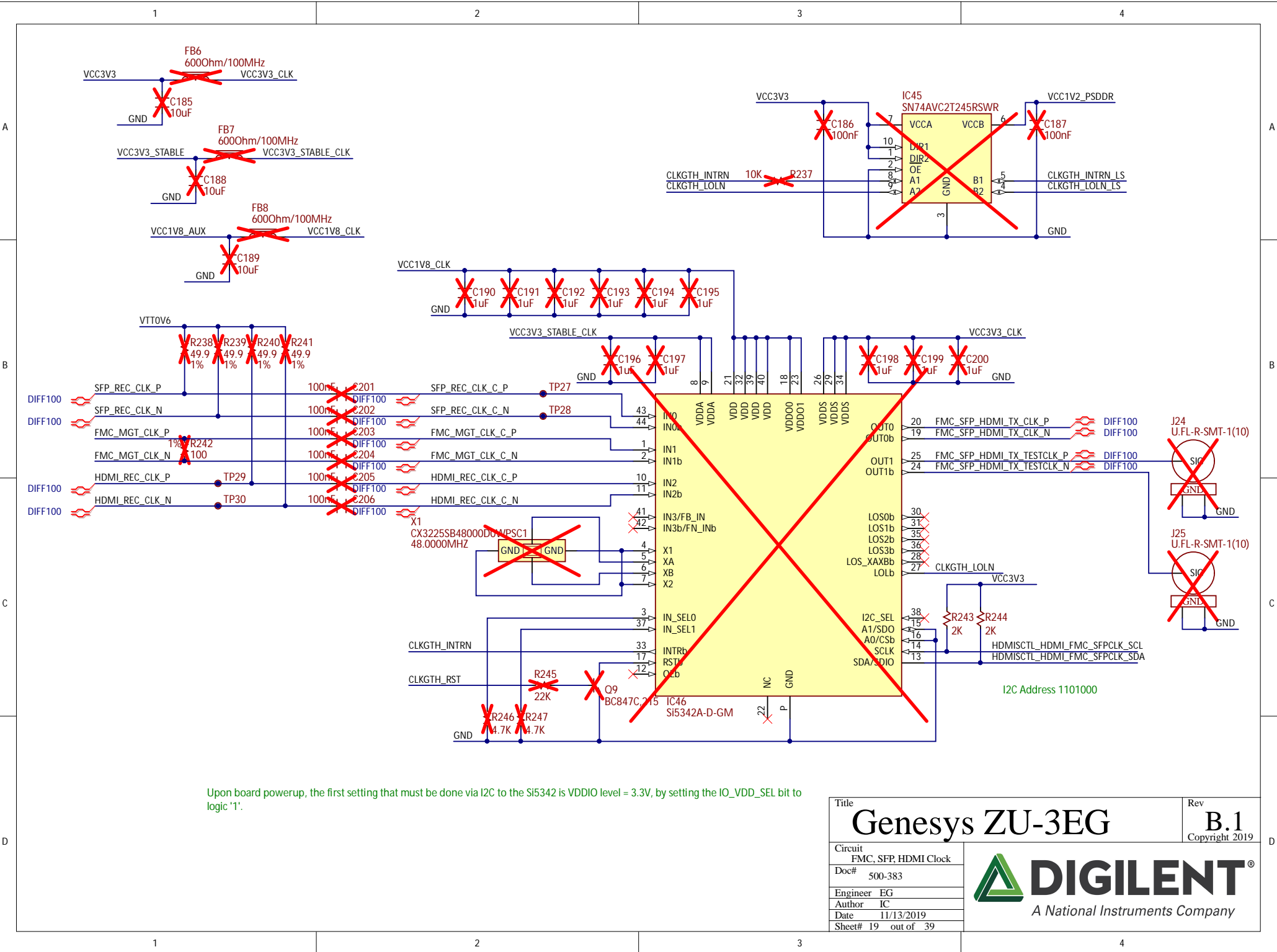
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Genesys ZU-3EG		B.1
Circuit		Copyright 2019
AUDIO		
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Engineer	EG	
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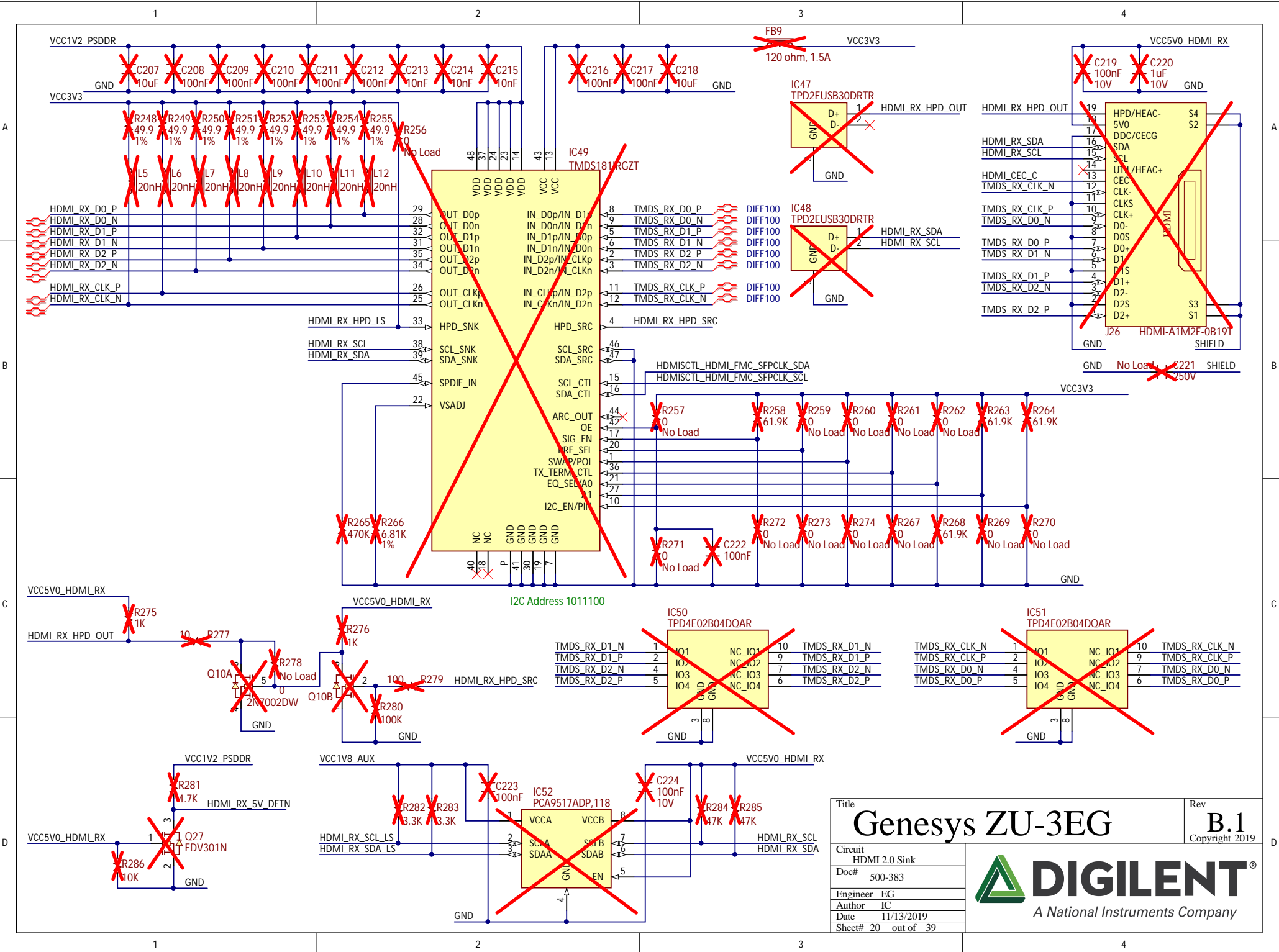
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Circuit		Copyright 2019	
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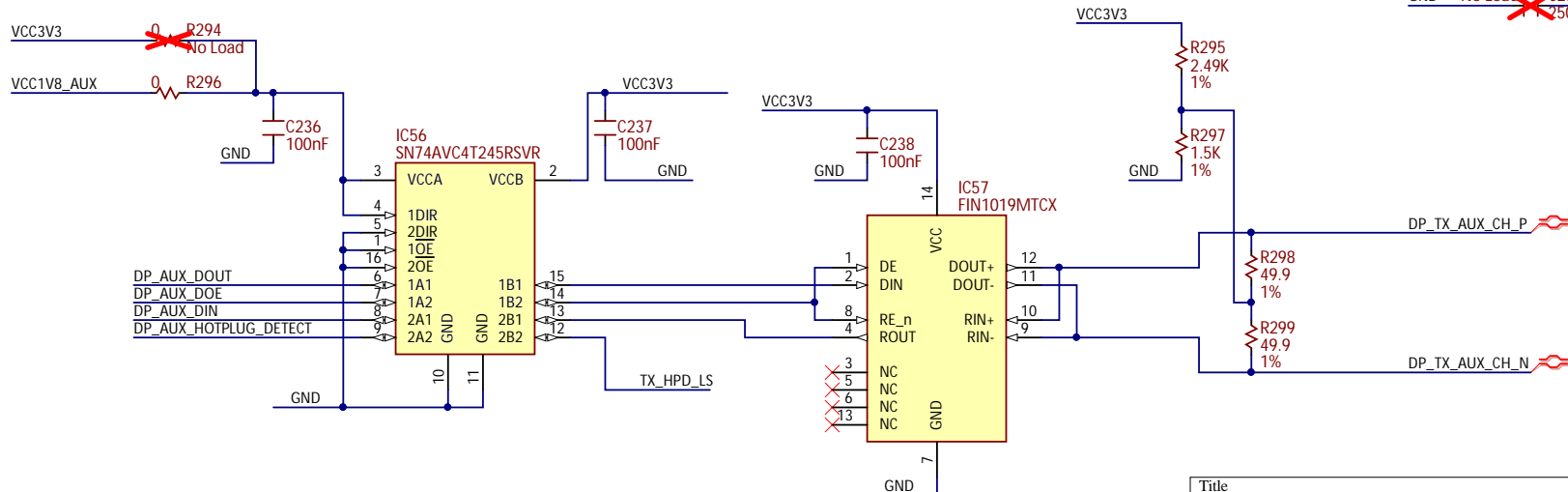
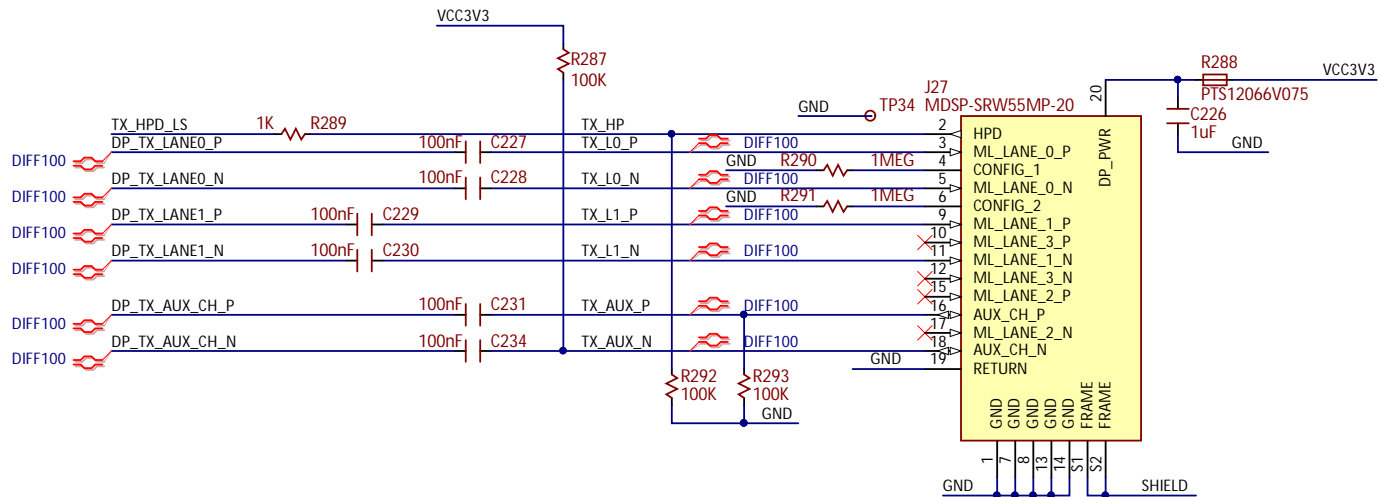
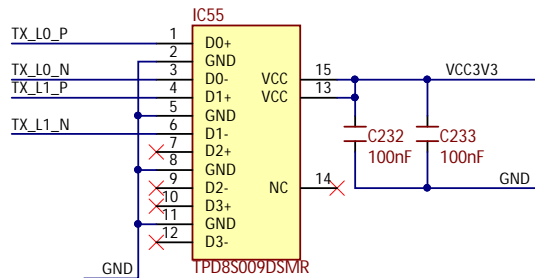
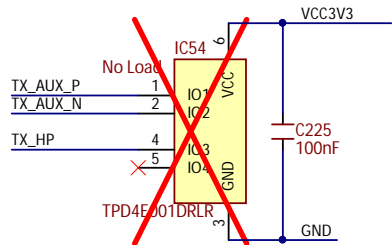
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Genesys ZU-3EG		B.1	
		Copyright 2019	
Circuit			
FMC, SFP, HDMI Clock			
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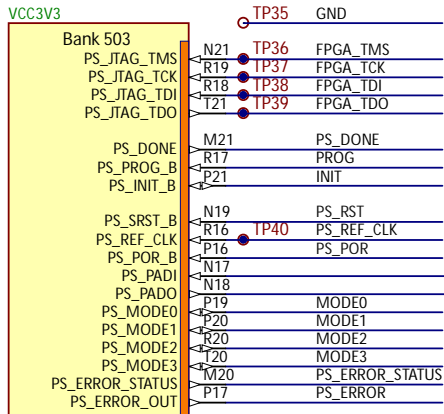
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Circuit		Copyright 2019	
HDMI 2.0 Sink			
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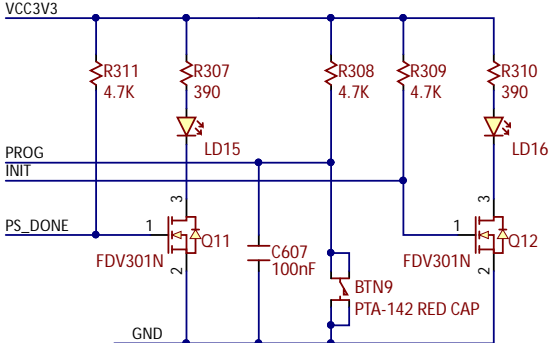
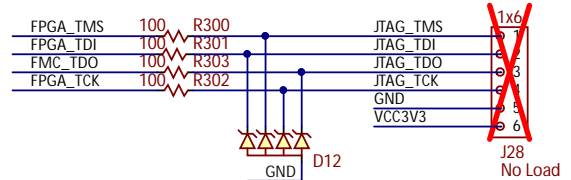
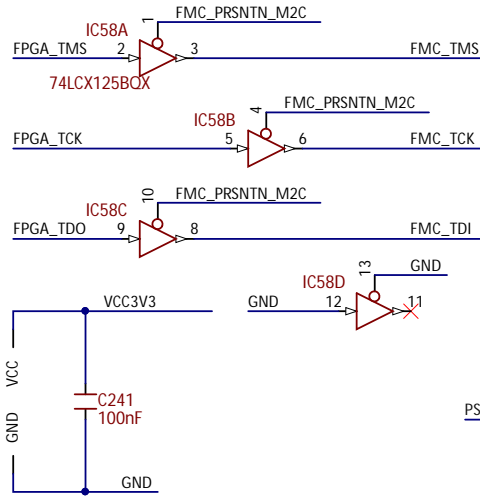


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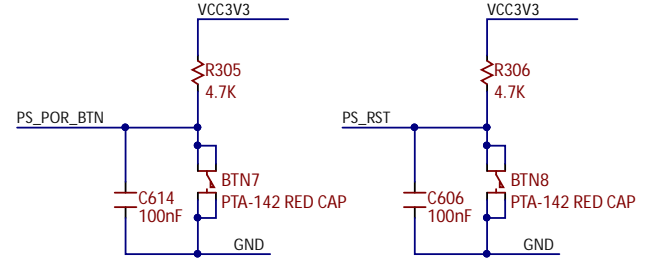
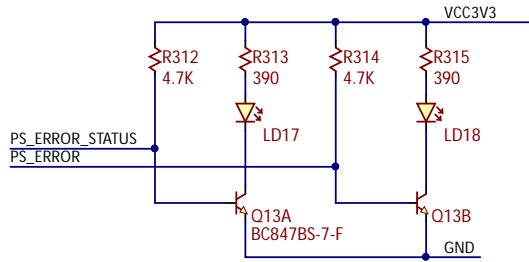




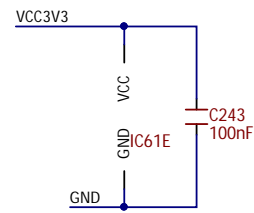
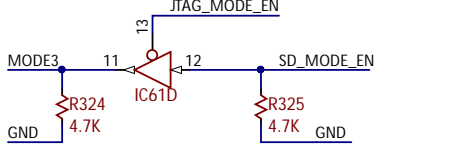
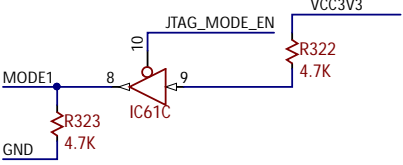
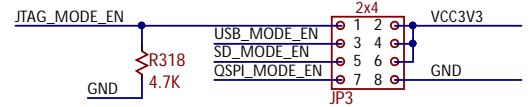
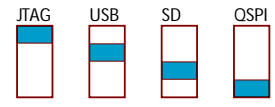
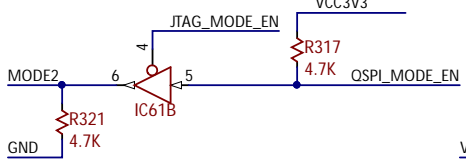
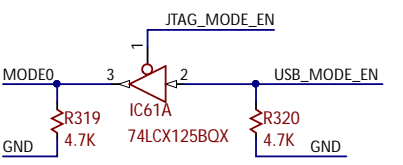
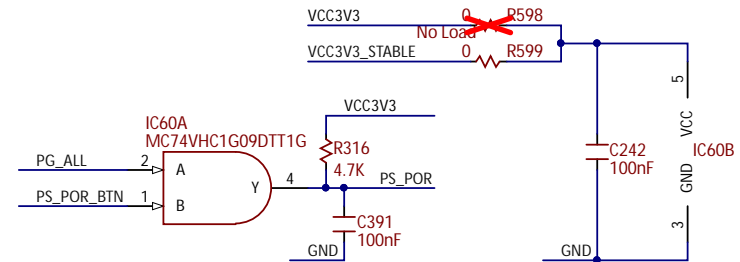
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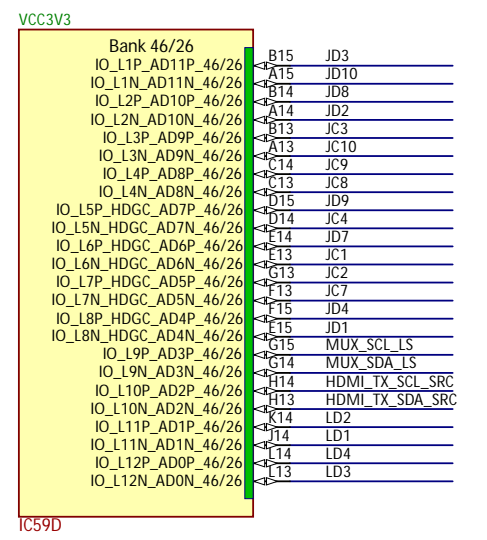
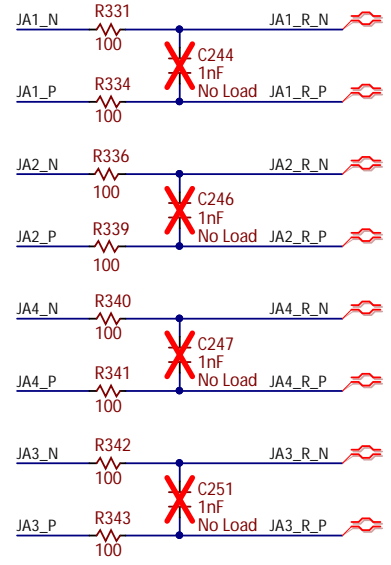
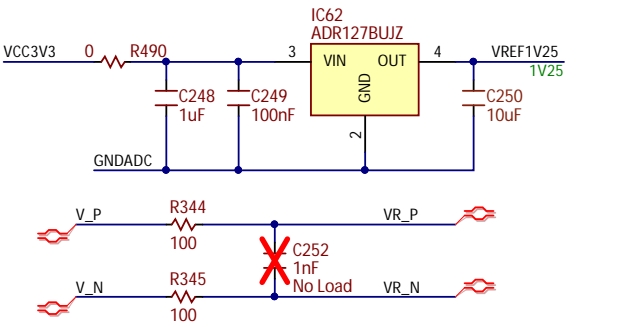
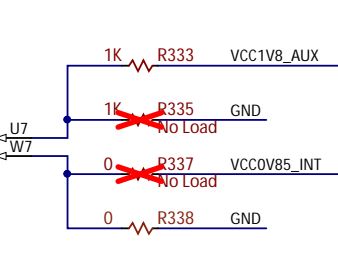
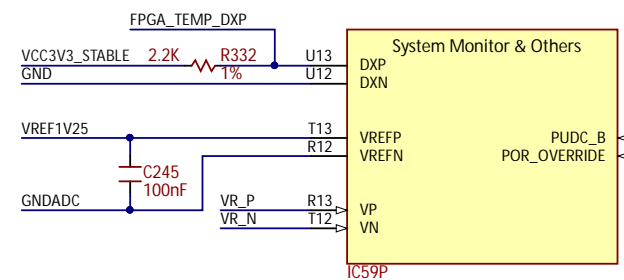
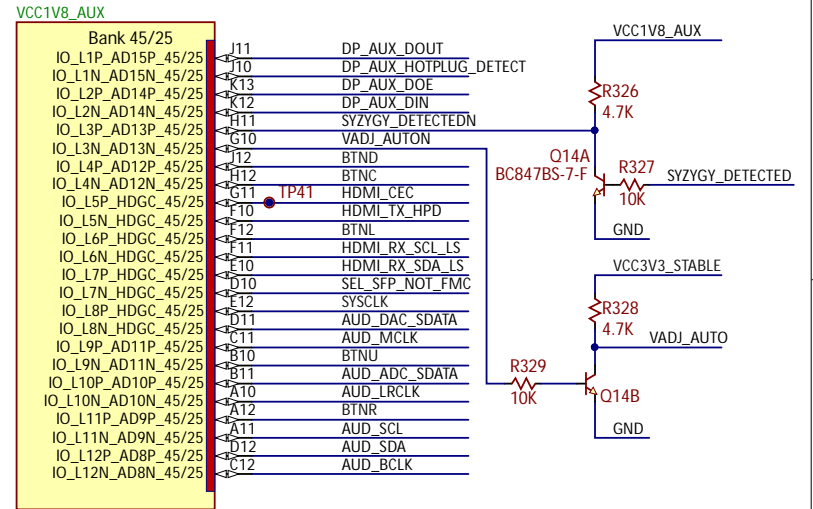
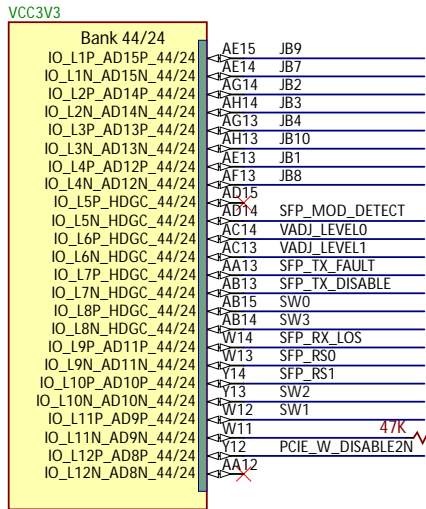
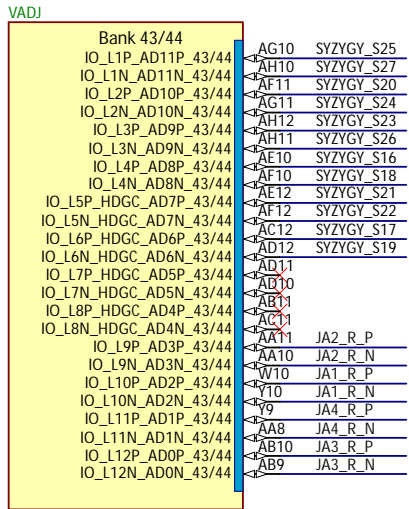
PL Configuration Reset



PS Power On Reset PS System Reset



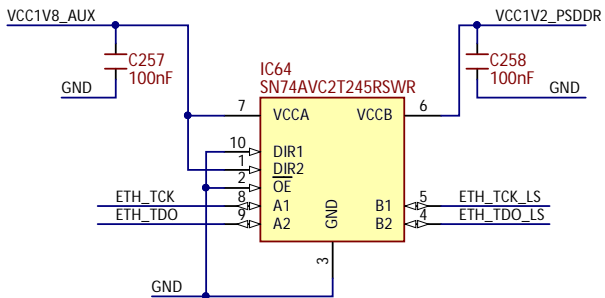
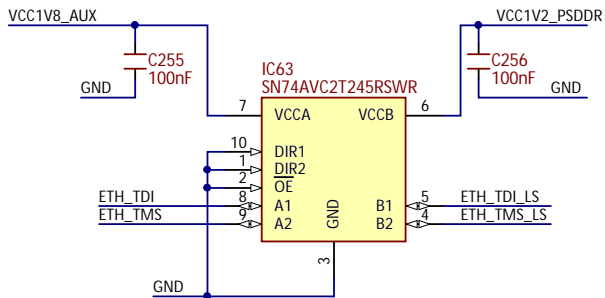
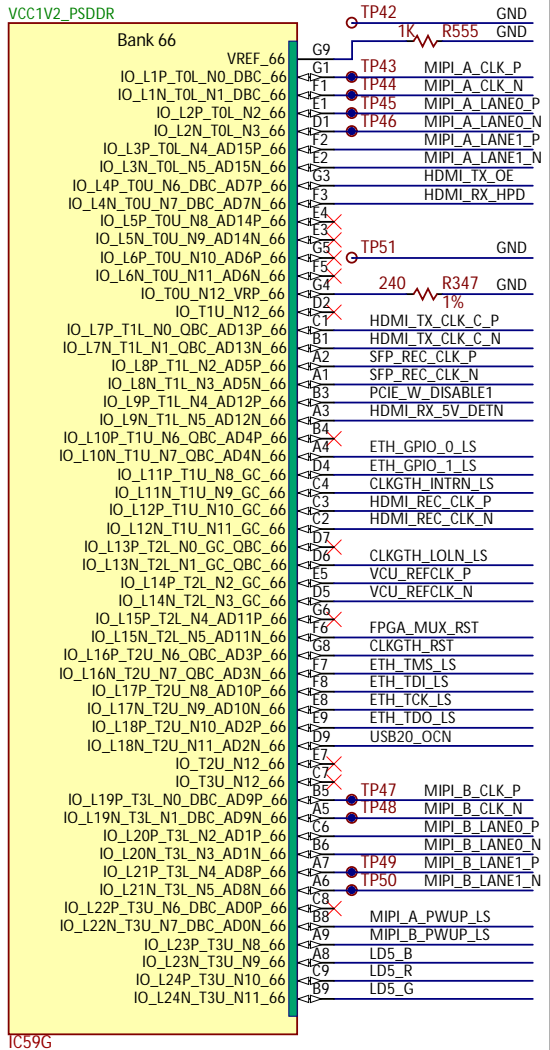
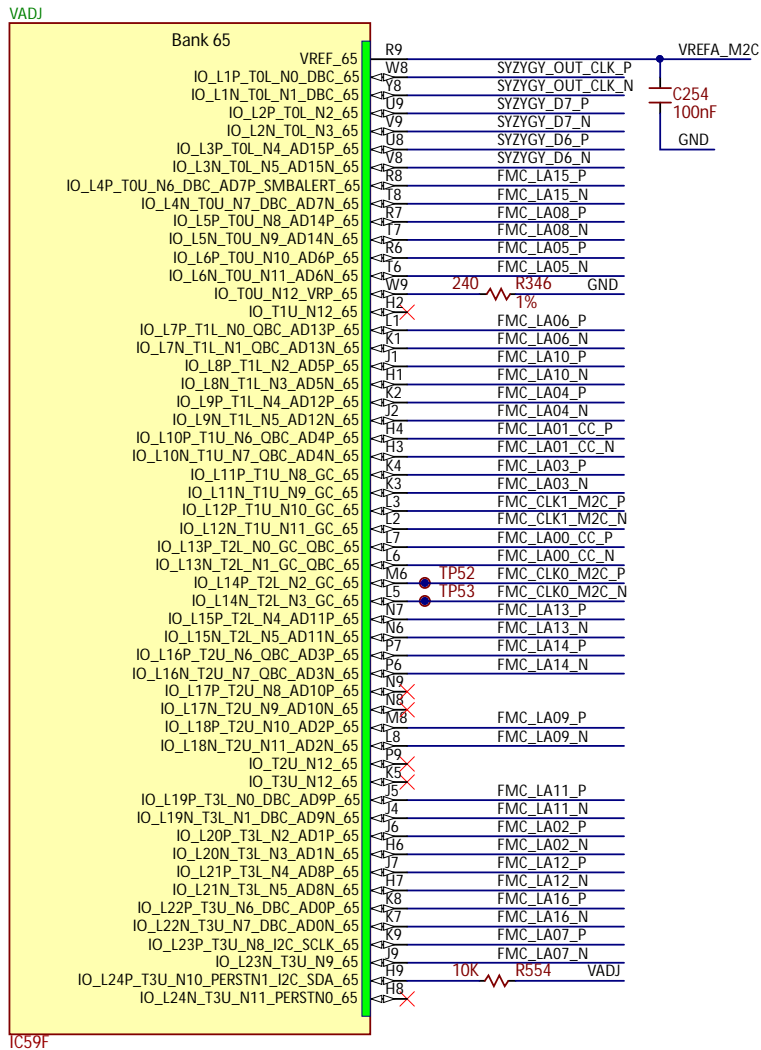
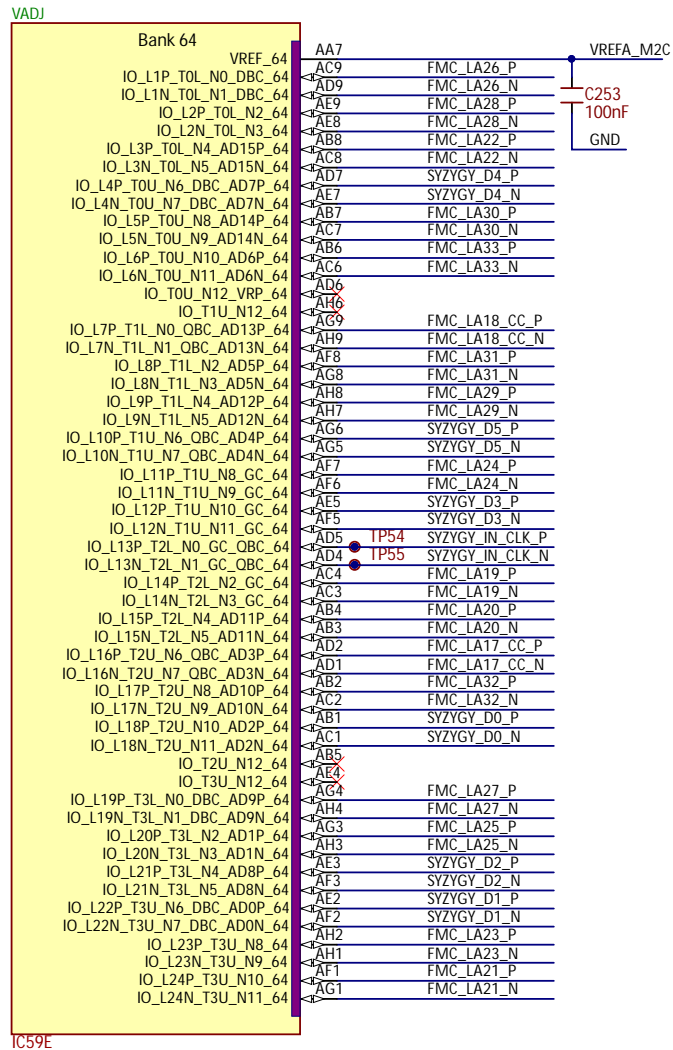
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Genesys ZU-3EG		B.1
Circuit		Copyright 2019
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Author	IC	
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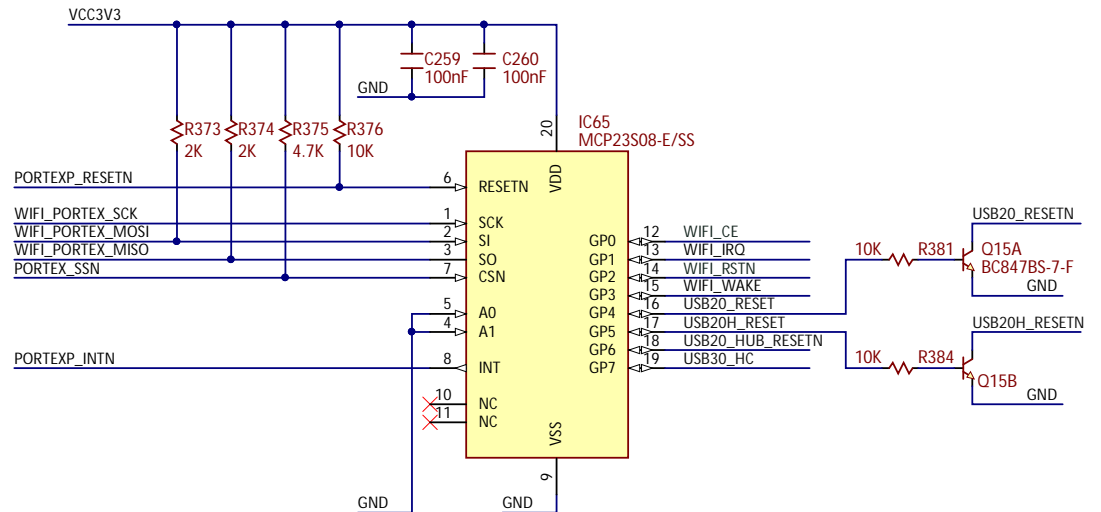
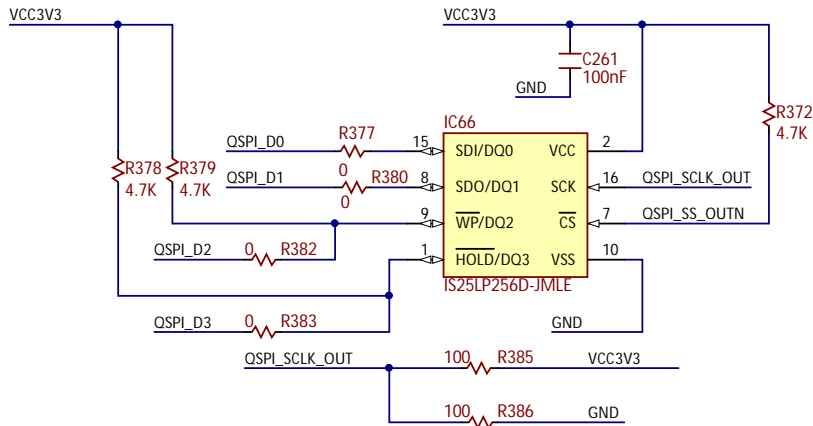
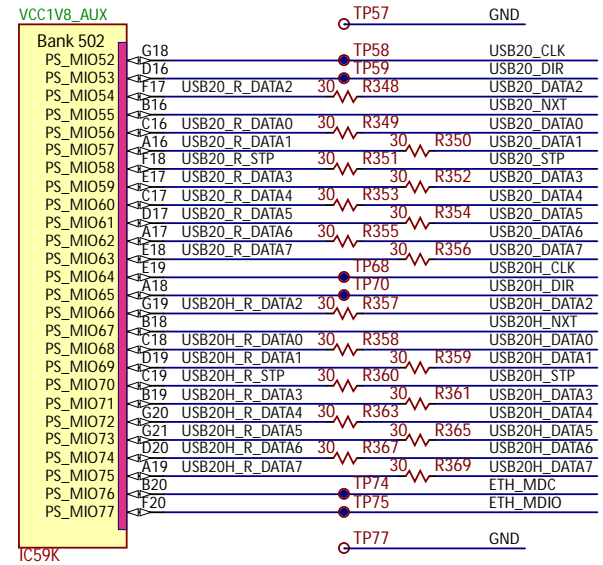
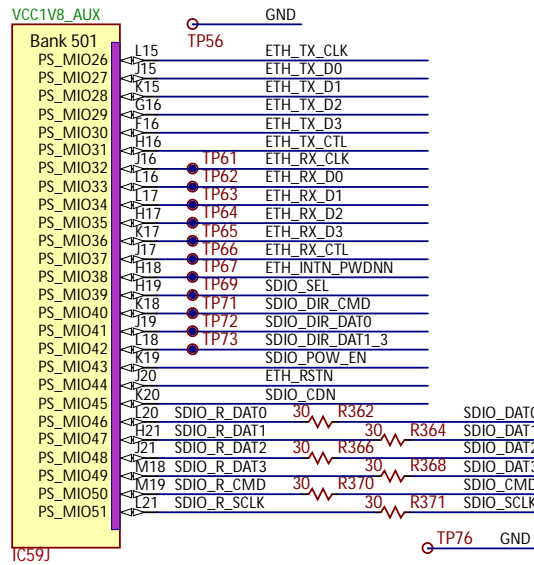
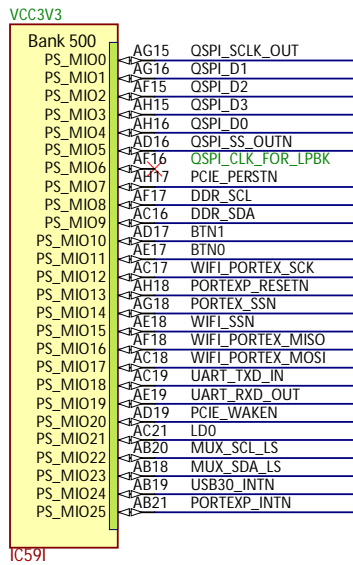


If a DCI standard is required on FMC_LA15_P and/or FMC_LA07_P, follow the requirements outlined in UG571, under section "Special DCI Requirements in Some Banks".

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	Copyright 2019
Circuit	HP FPGA BANKS
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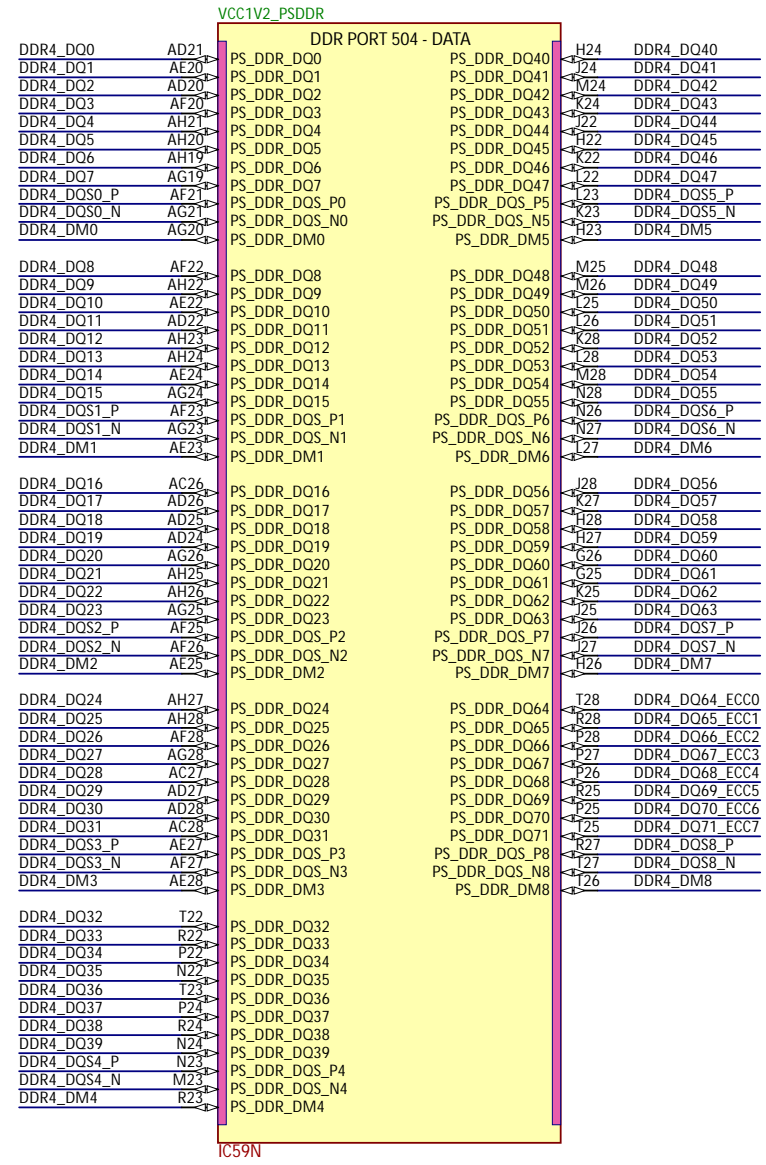
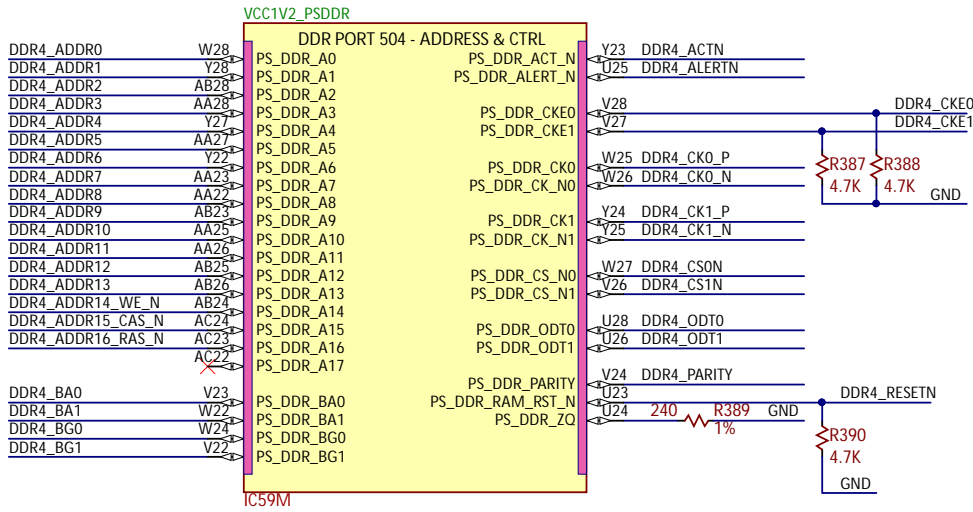
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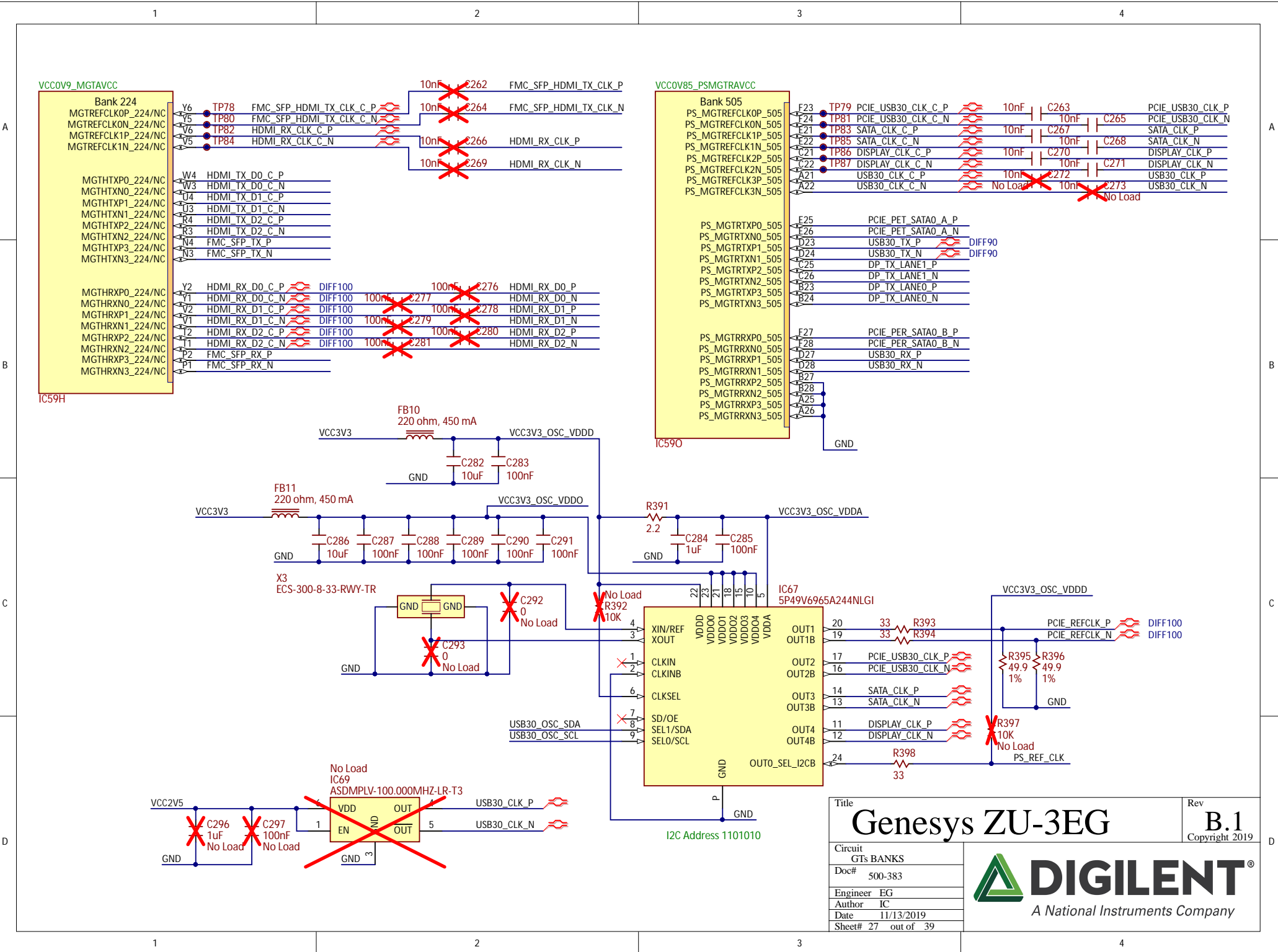
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			Copyright 2019
Circuit	MIO BANKS; SPI FLASH		
Doc#	500-383		
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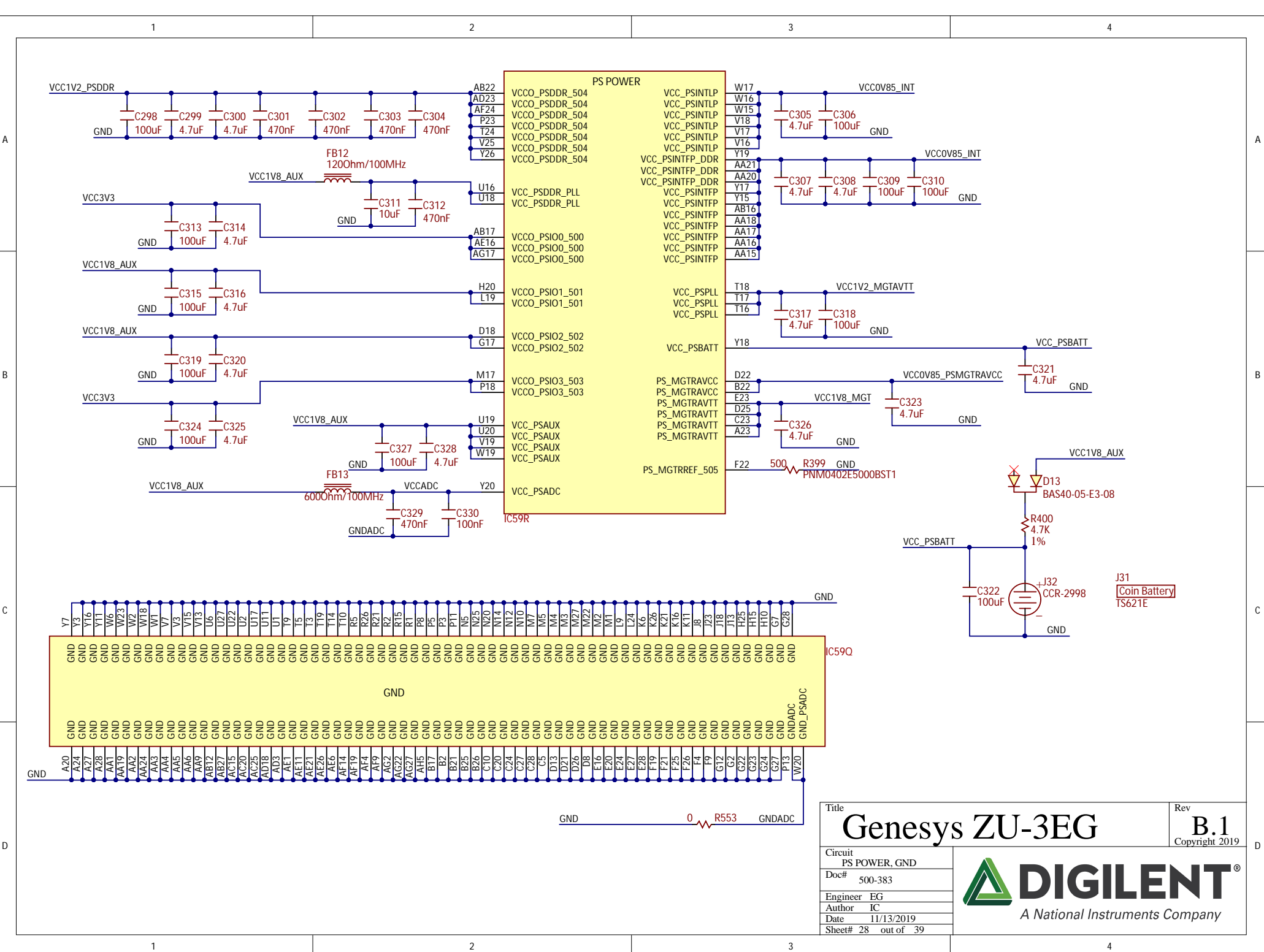


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Circuit	DDR BANK	 DIGILENT ® A National Instruments Company	
Doc#	500-383		
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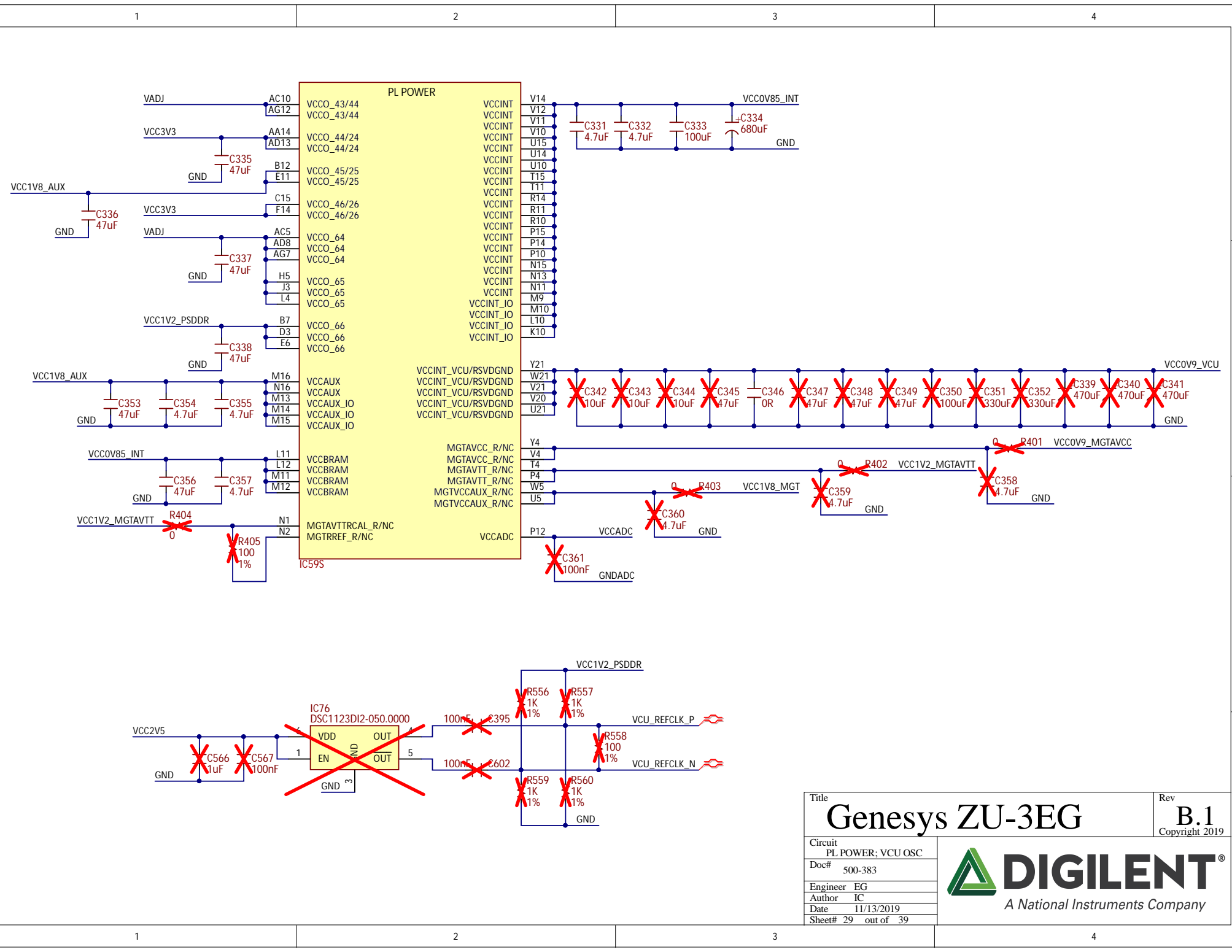
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Doc#	500-383	
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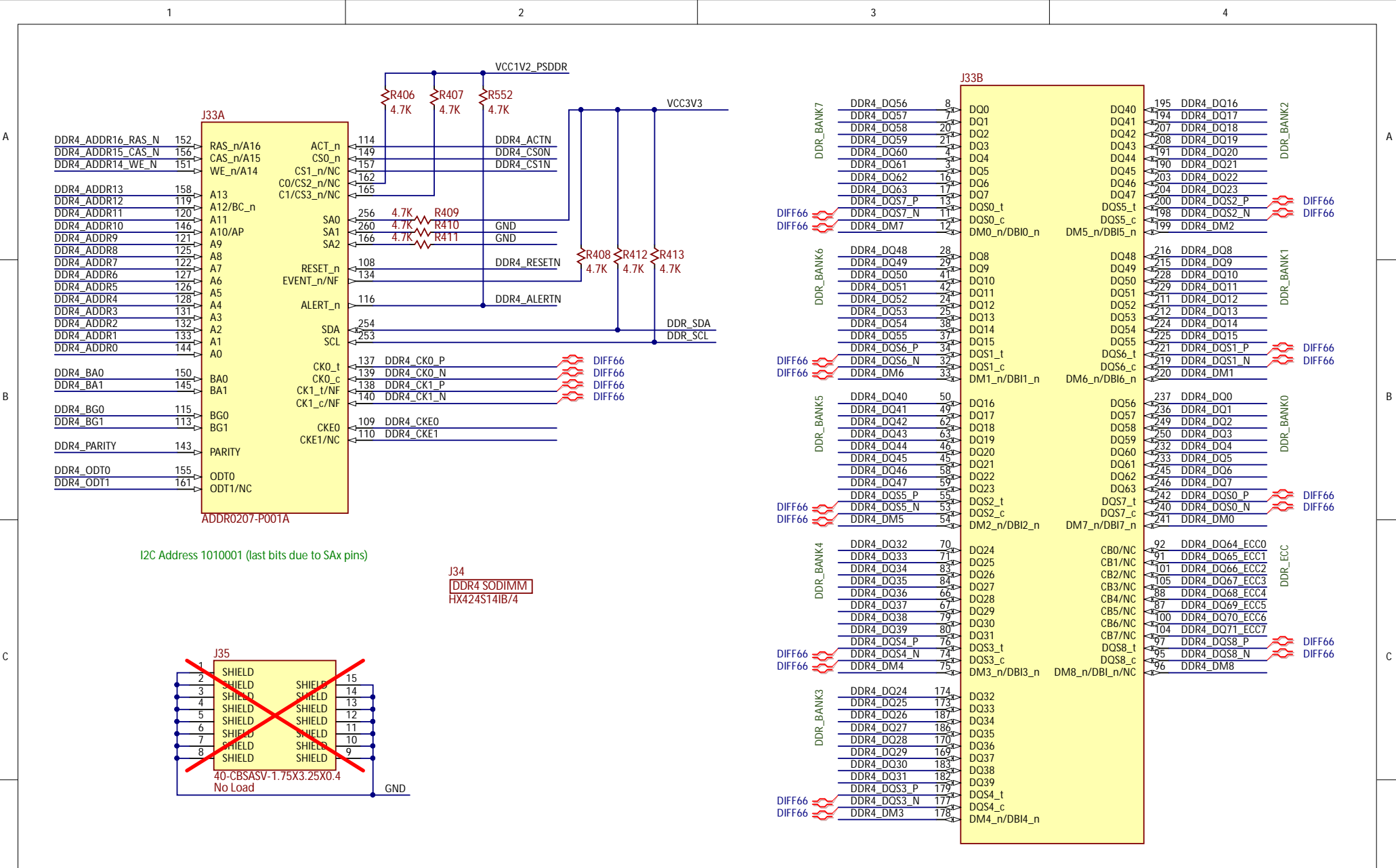
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Circuit		Copyright 2019	
PS POWER_GND			
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Circuit		
PL POWER; VCU OSC		
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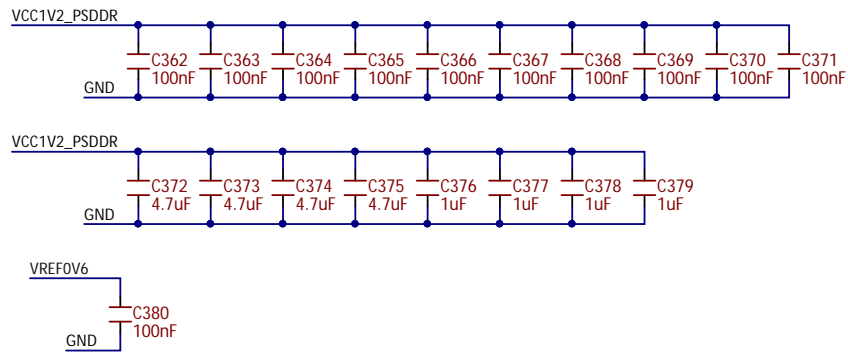
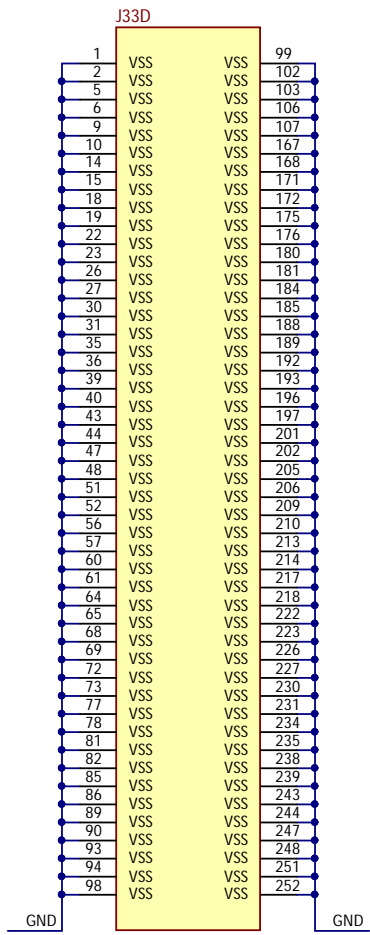
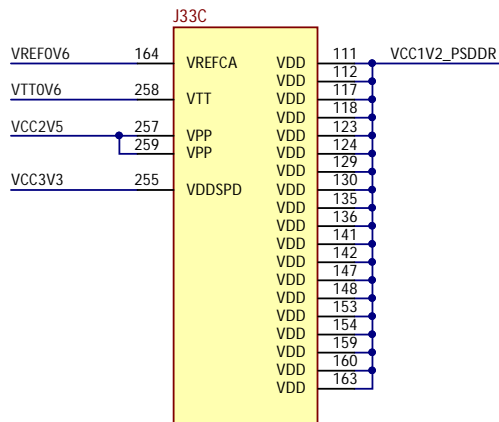


I2C Address 1010001 (last bits due to SAx pins)

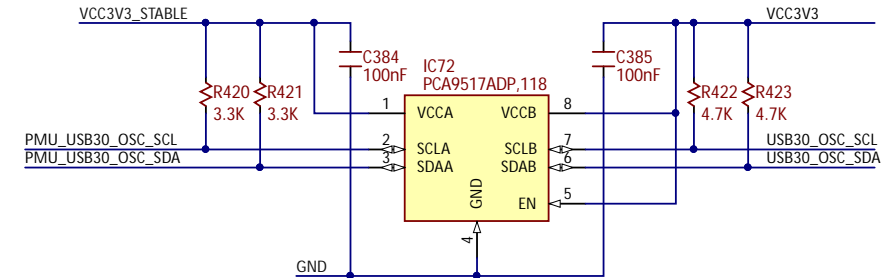
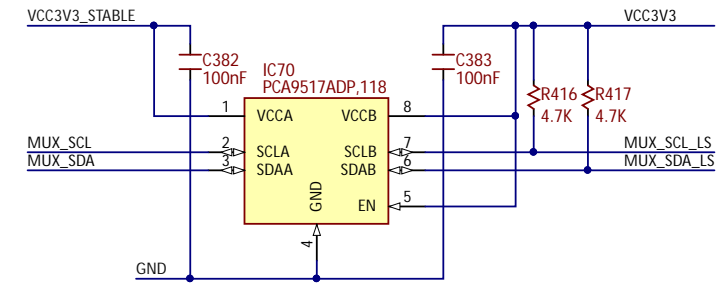
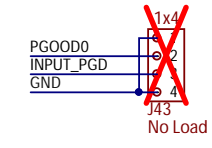
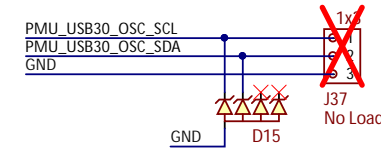
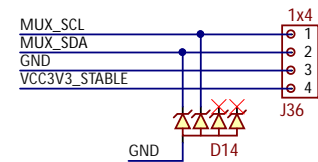
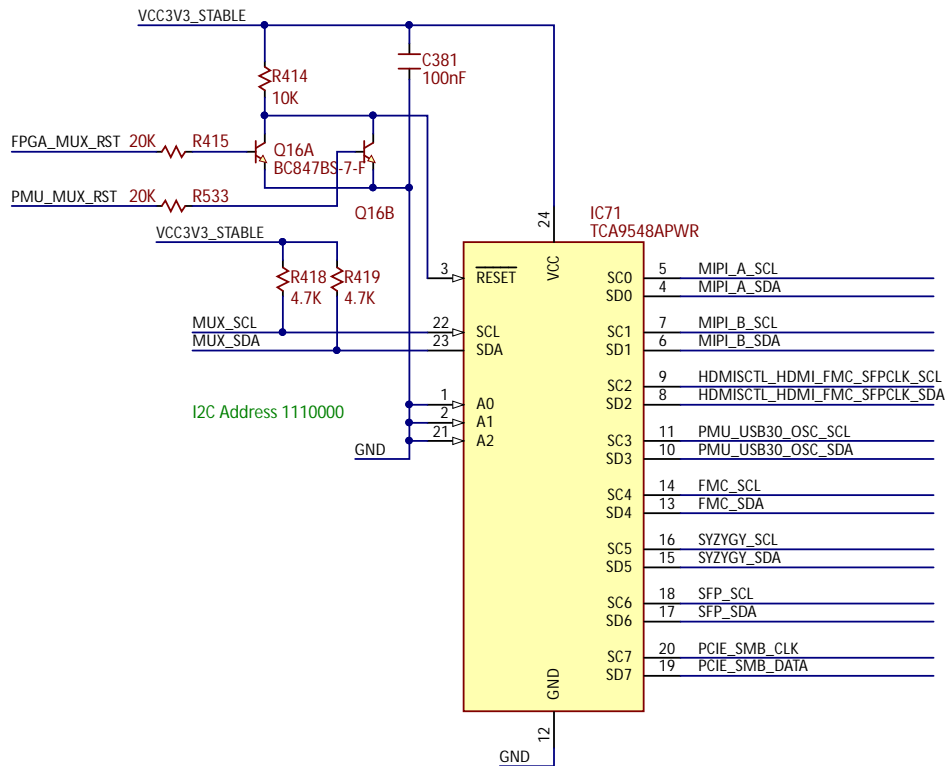
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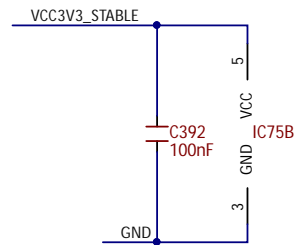
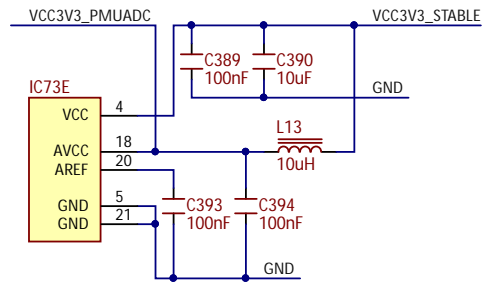
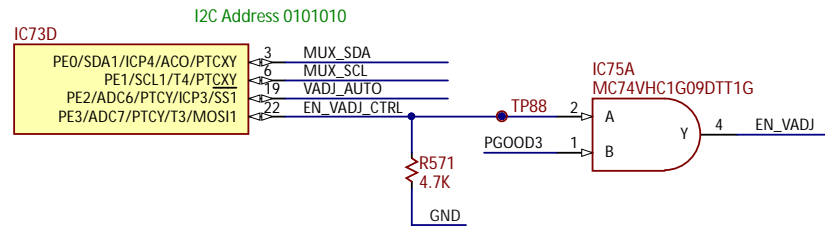
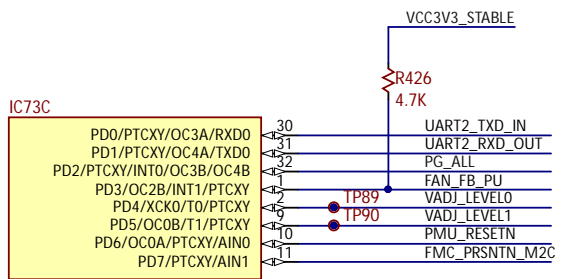
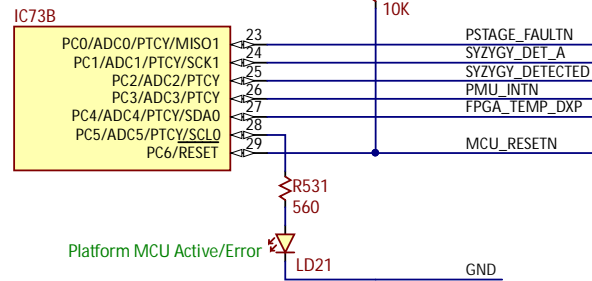
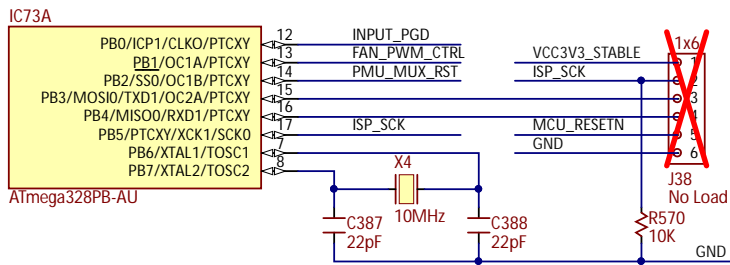
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Genesys ZU-3EG		B.1
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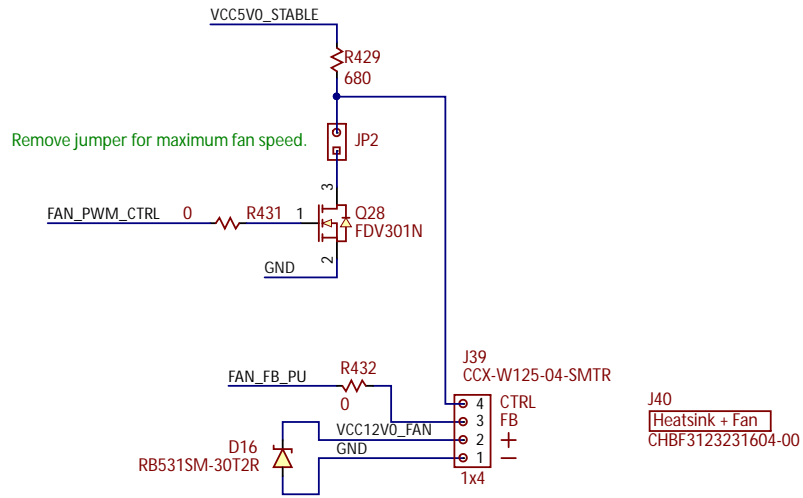
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Genesys ZU-3EG		B.1	
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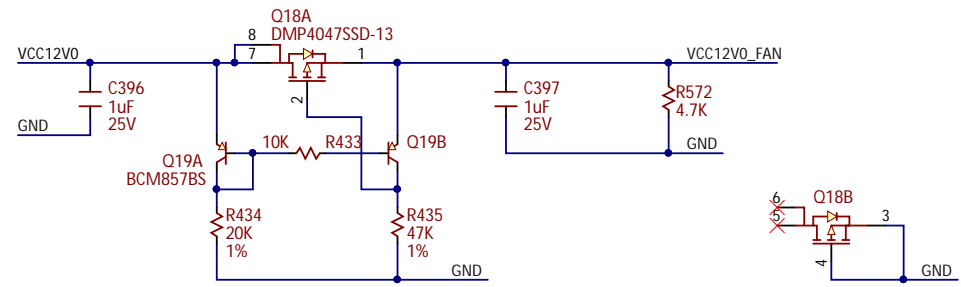
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Circuit Platform MCU	 DIGILENT A National Instruments Company	
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J40
Heatsink + Fan
CHBF3123231604-00



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1

2

3

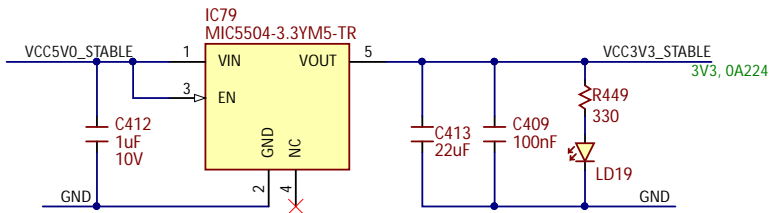
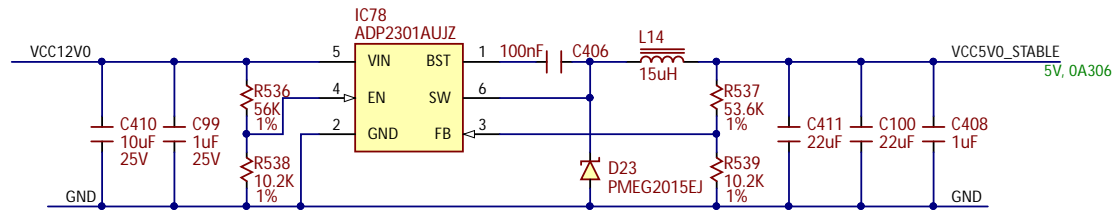
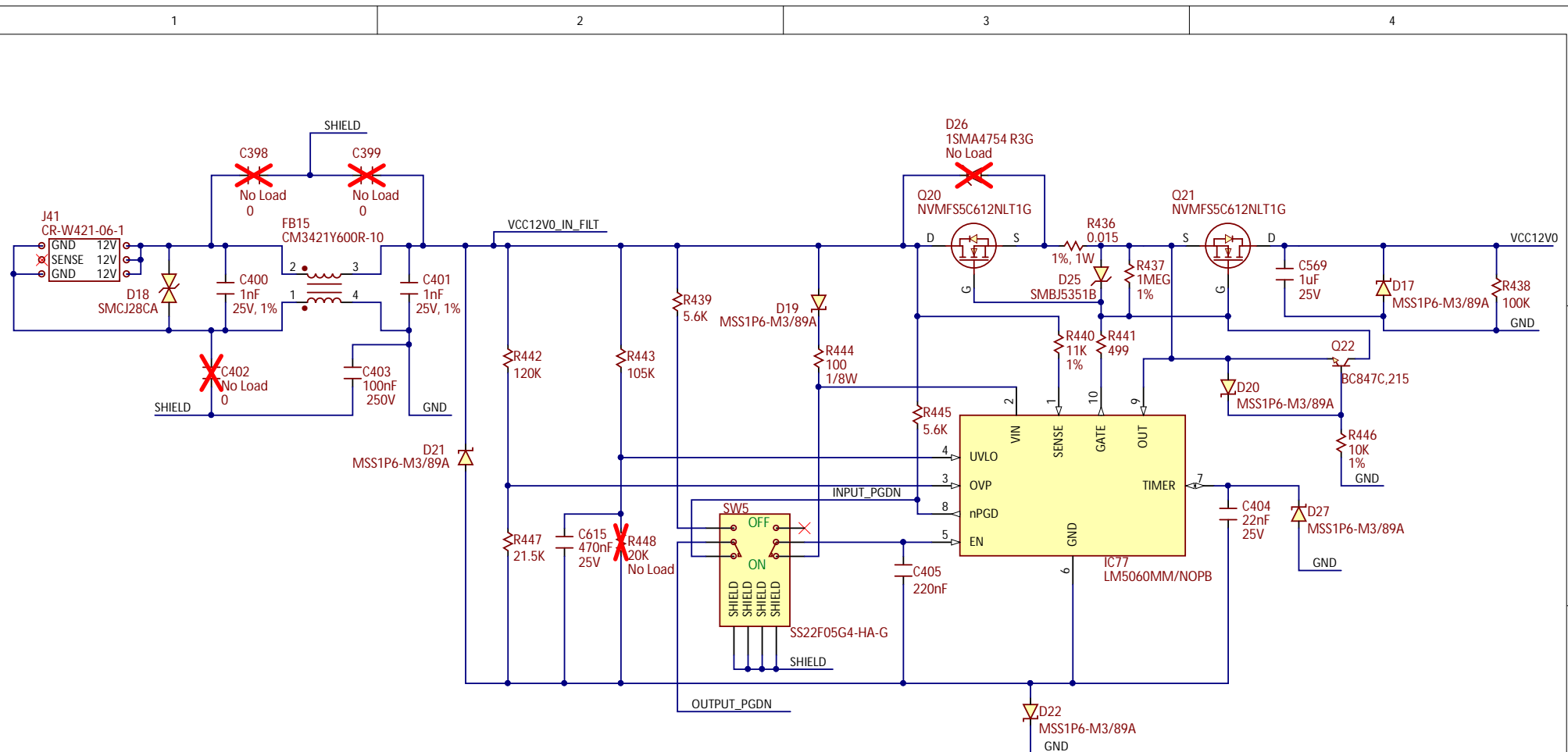
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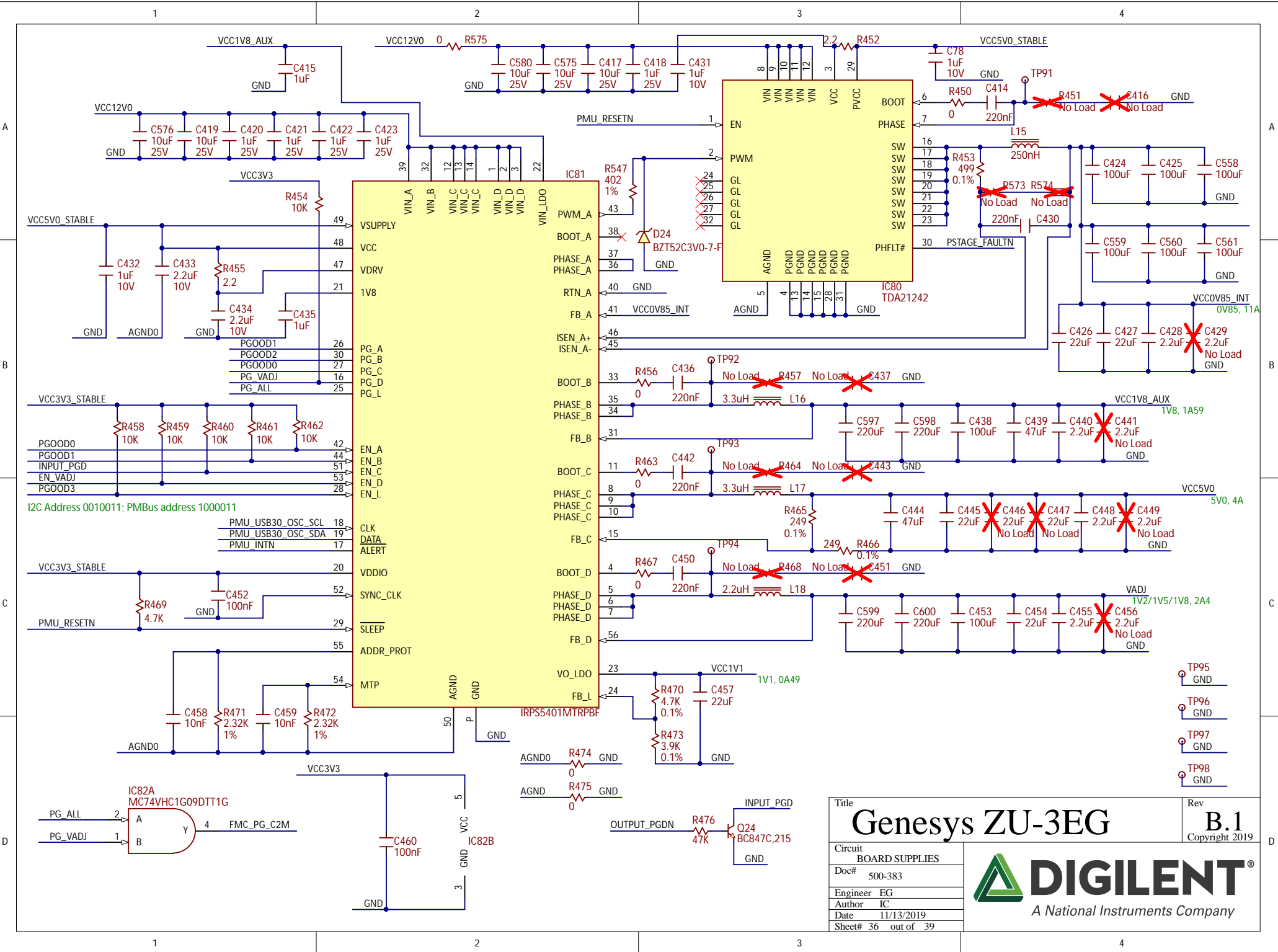
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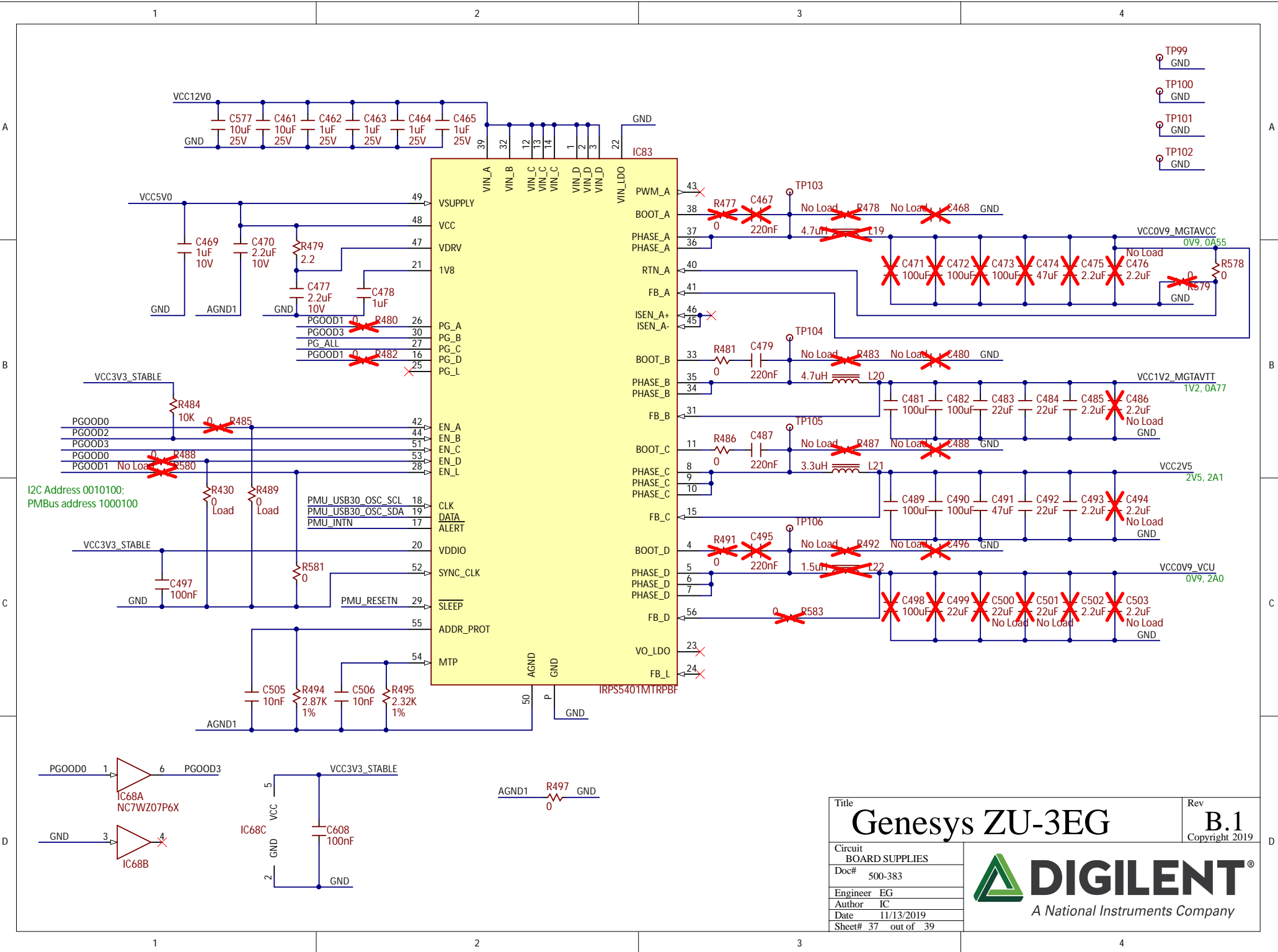
Config Power On

Title		Rev
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Circuit		Copyright 2019
12V PROTECTION		
Doc#	500-383	
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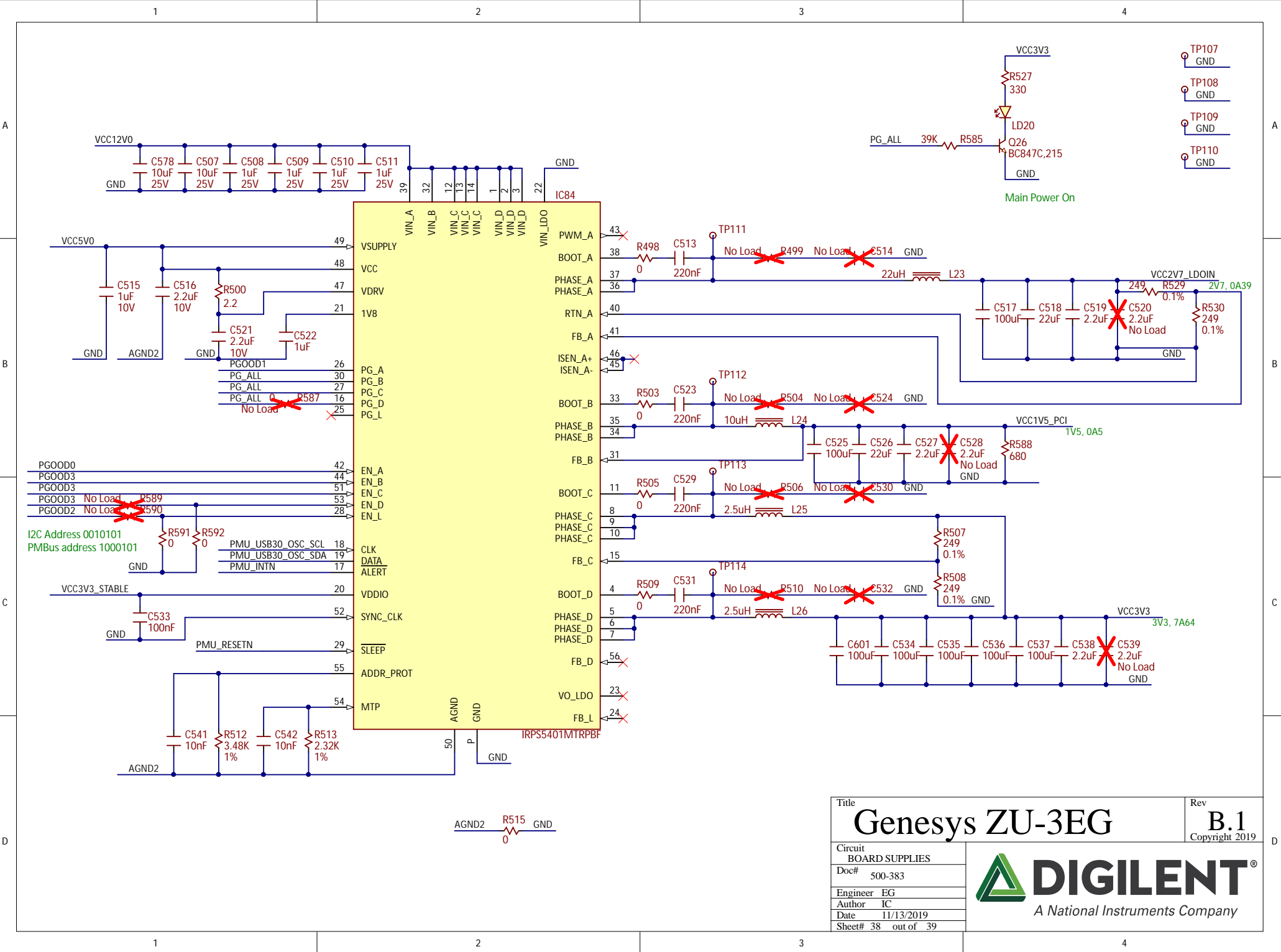


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Circuit		BOARD SUPPLIES		Doc#		500-383	
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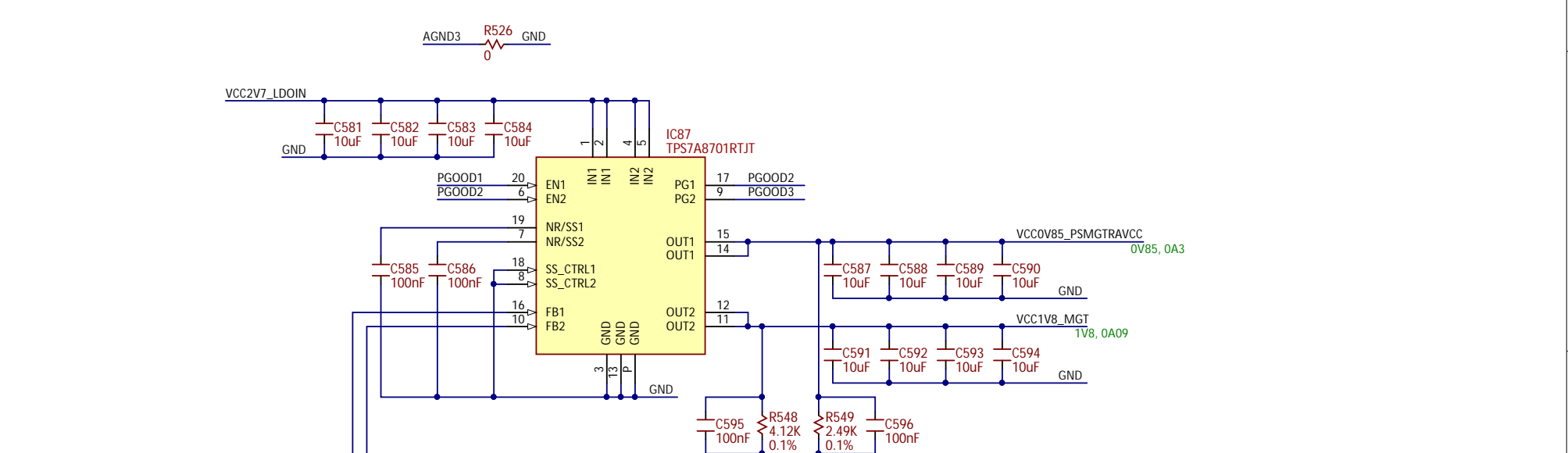
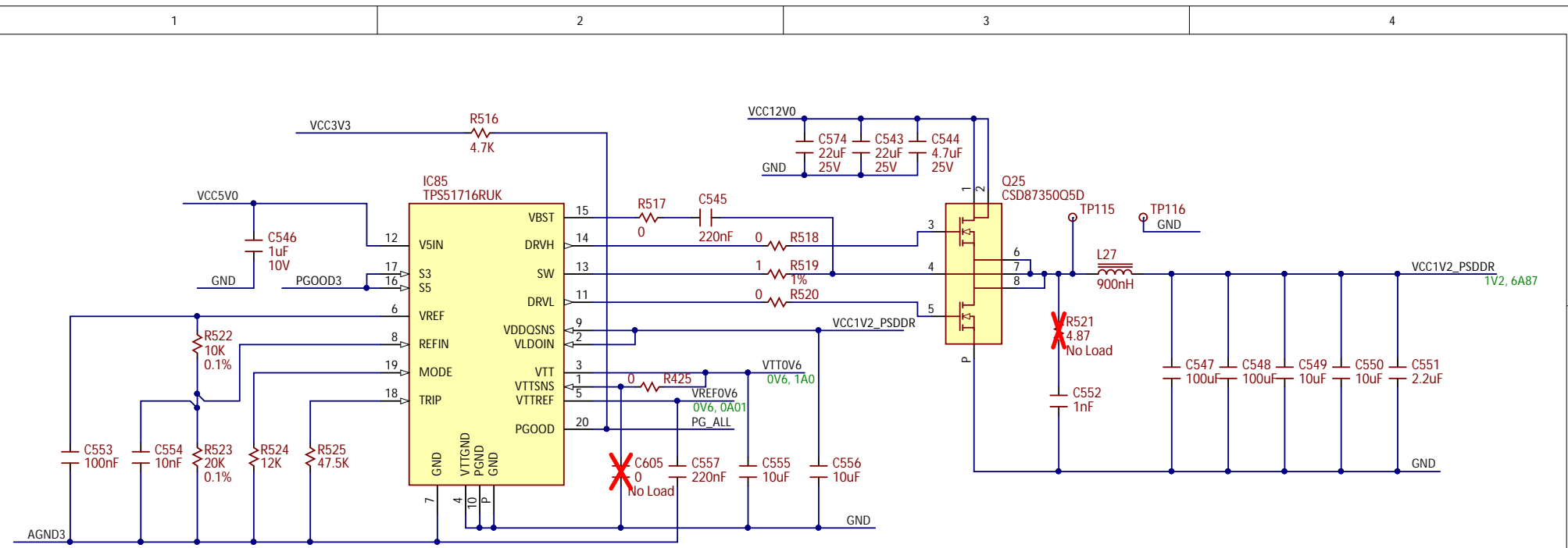
Title		Rev
Genesys ZU-3EG		B.1
Circuit BOARD SUPPLIES		Copyright 2019
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