

# Genesys ZU

Variant: 5EV

5/5/2021

Rev D.1

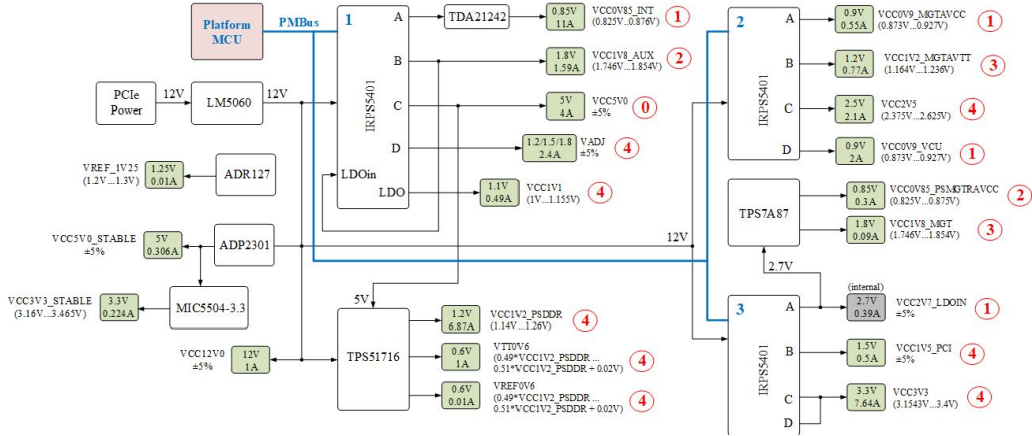
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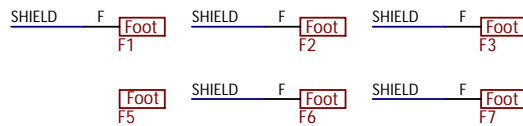
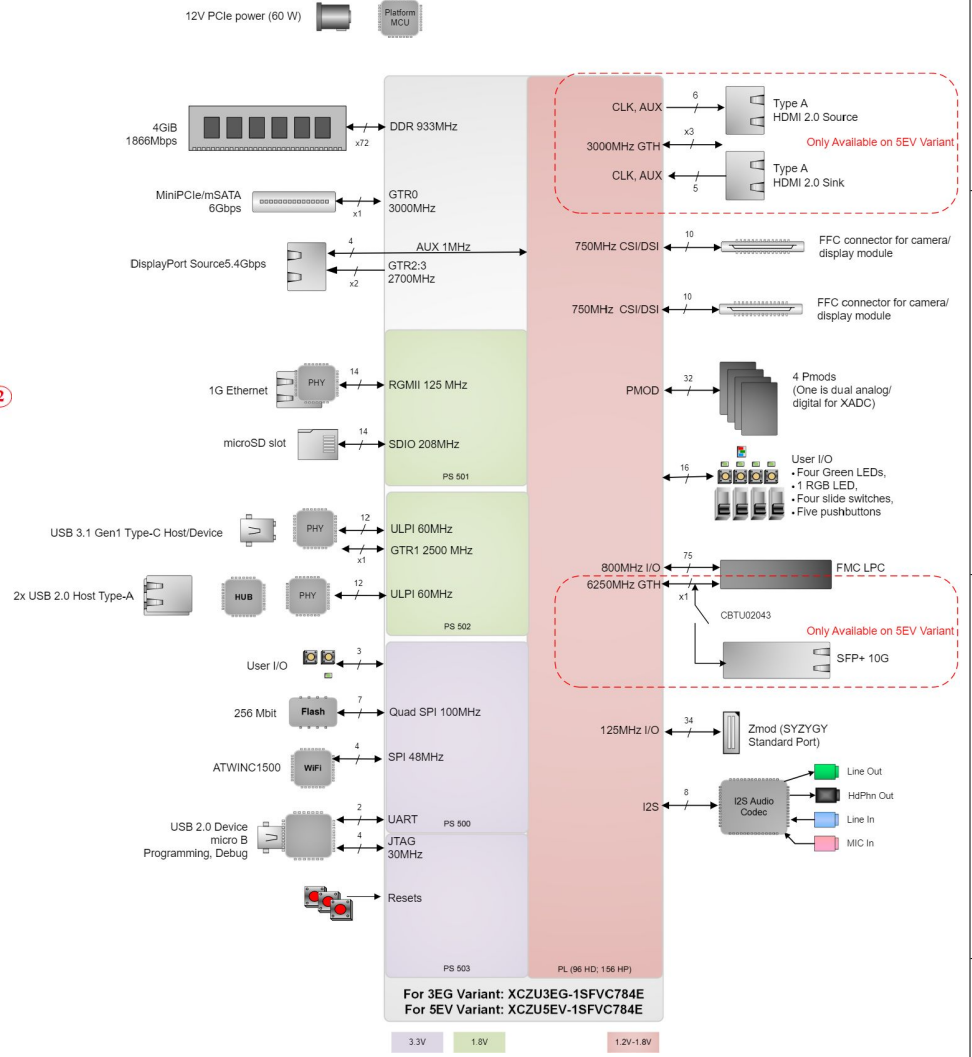
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# Power Tree



# Block Diagram



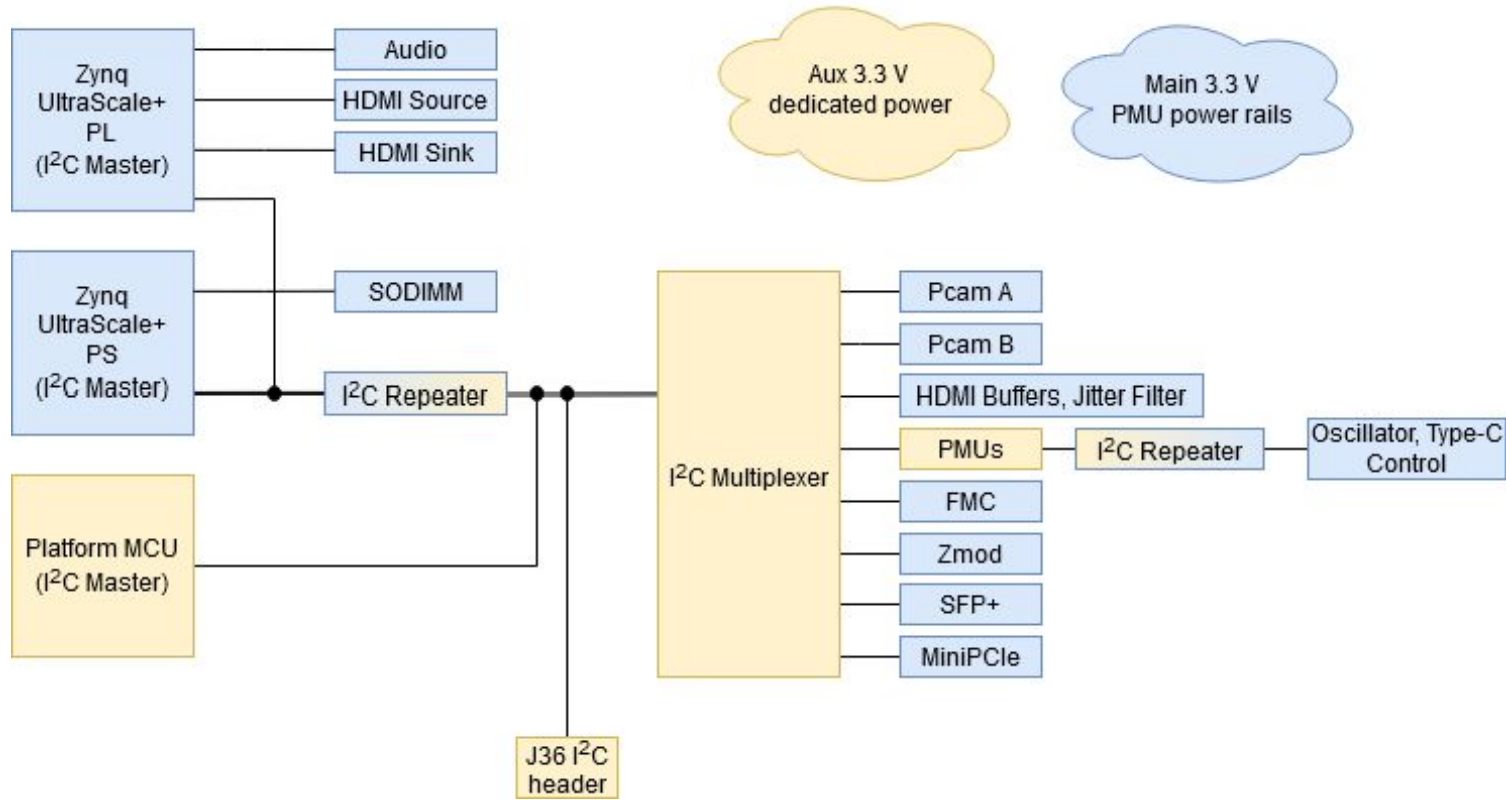
Foot F4

Foot F8

- Genesys ZU
- Insert Contacts Down
- UKCA
- Chinese ROHS
- ROHS
- Digilent Inc.
- CE
- Xilinx

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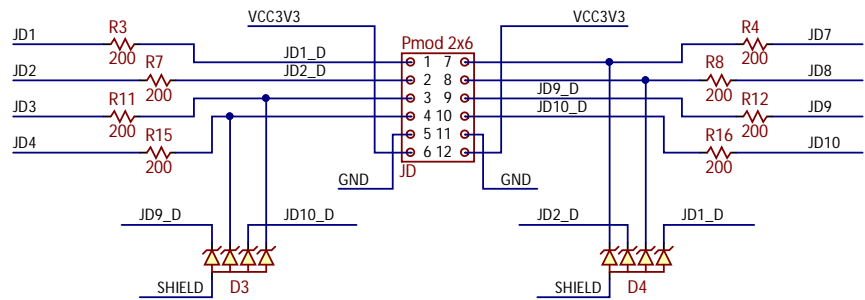
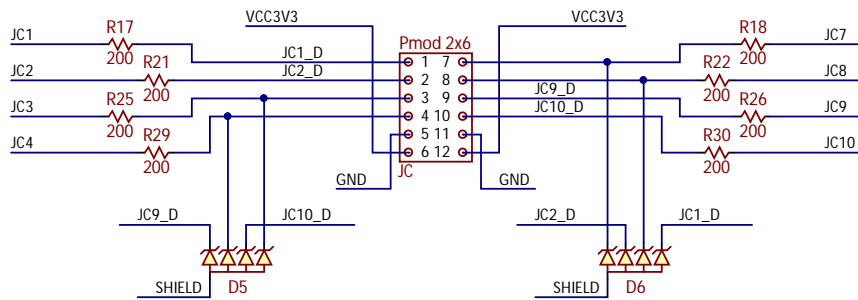
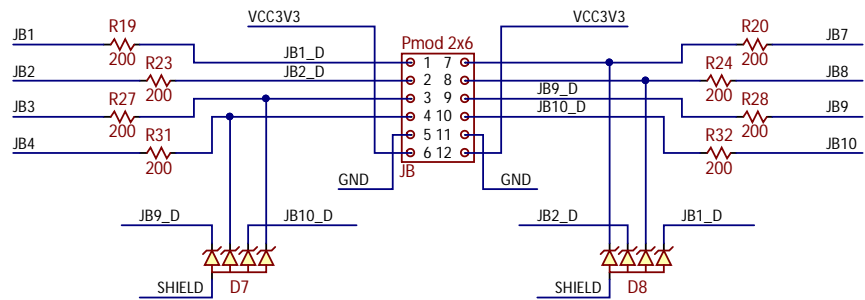
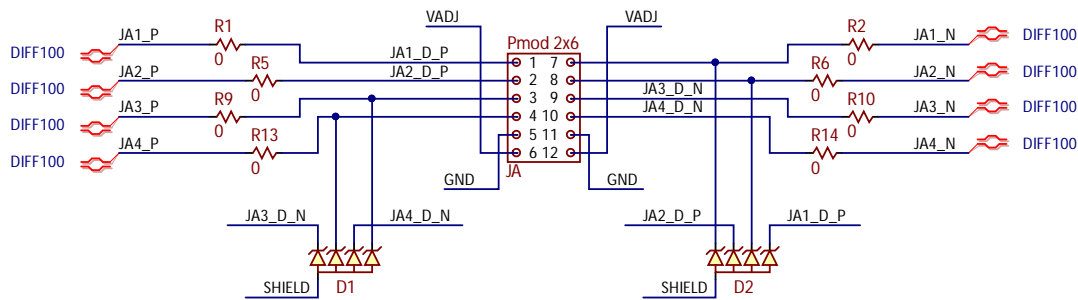
## I2C Diagram



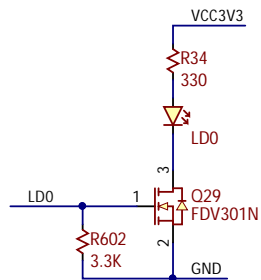
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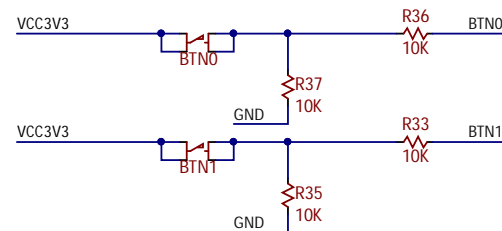
### XADC PMOD



### MIO LED



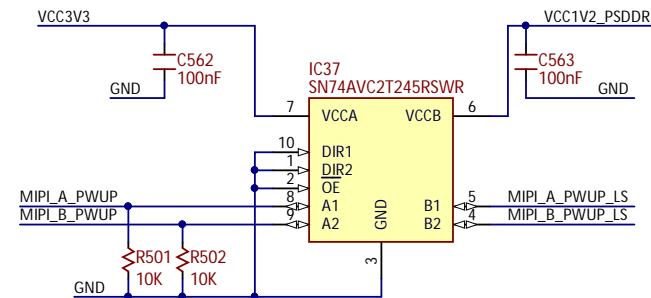
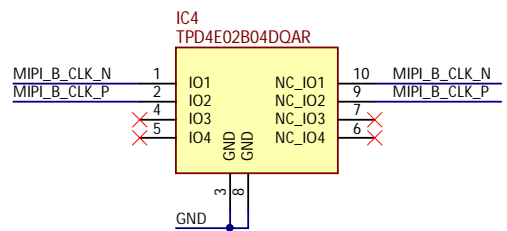
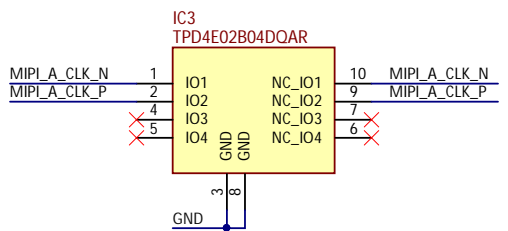
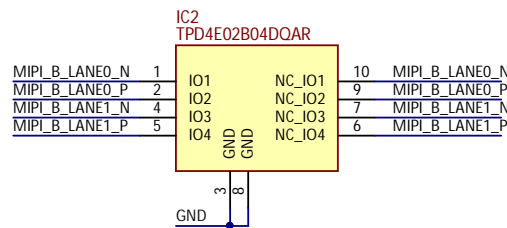
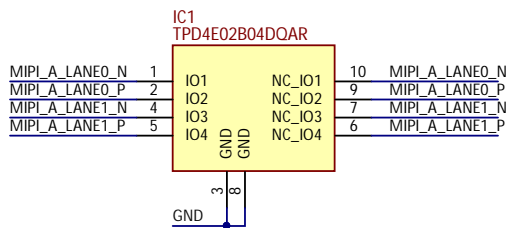
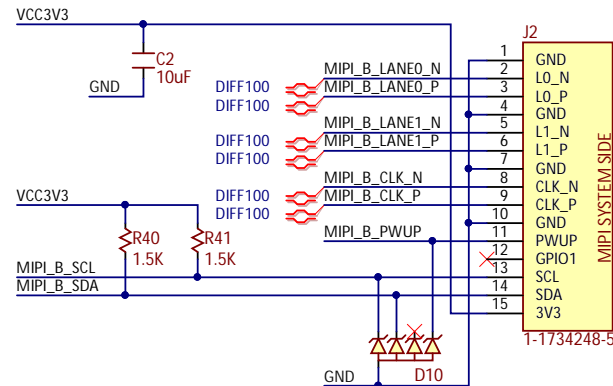
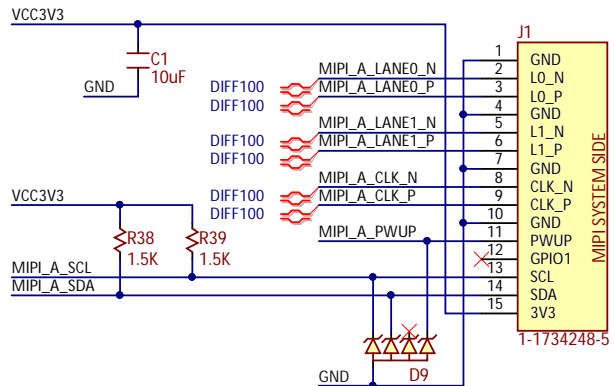
### MIO BUTTONS



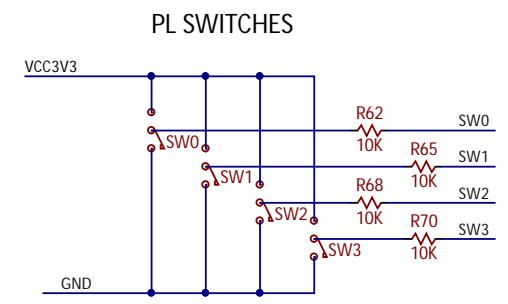
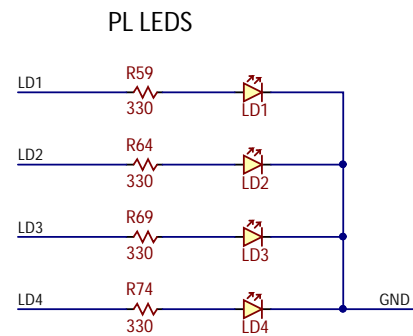
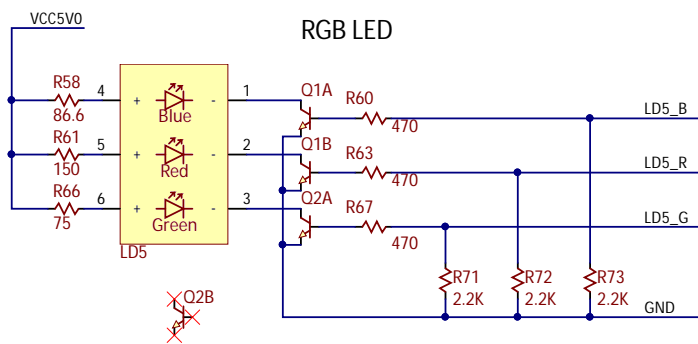
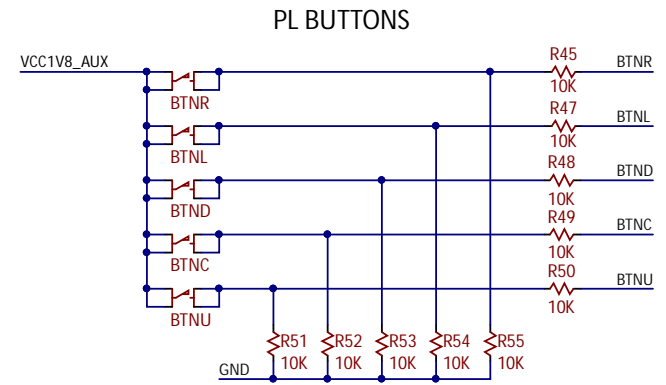
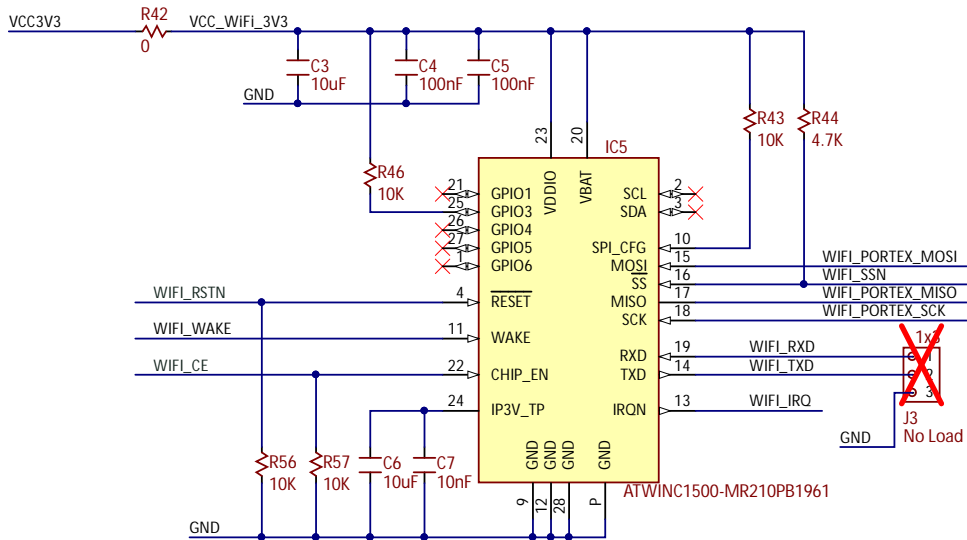
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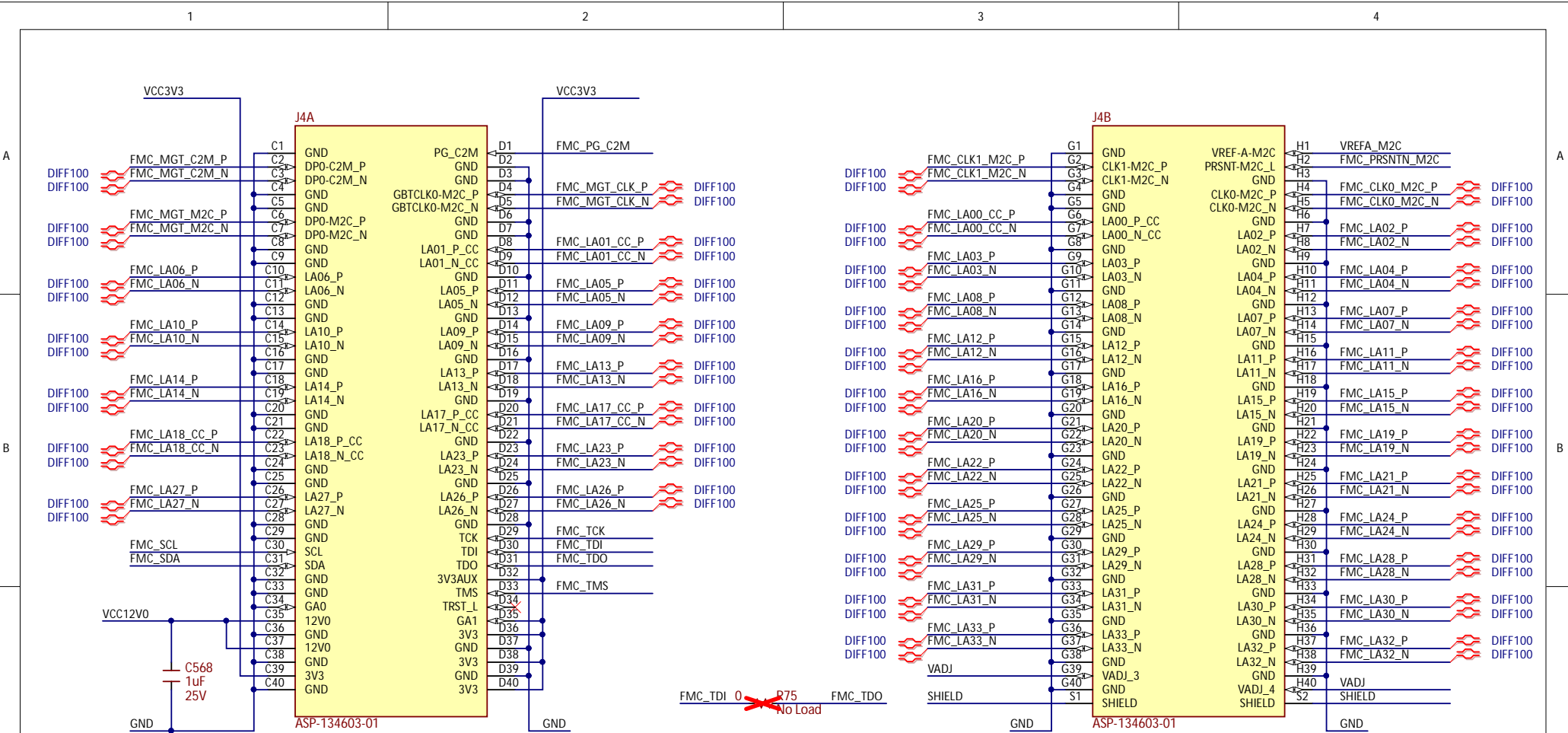


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Circuit	MIPI Interfaces	
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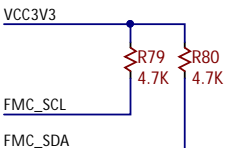
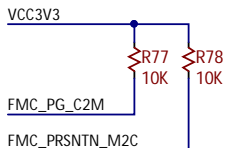
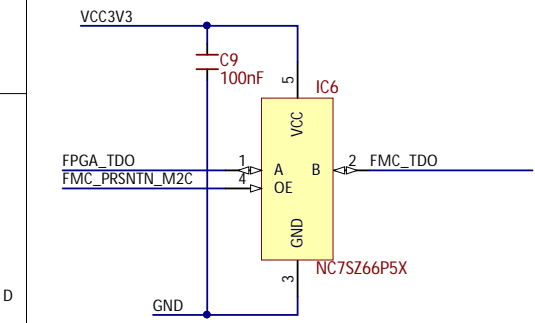
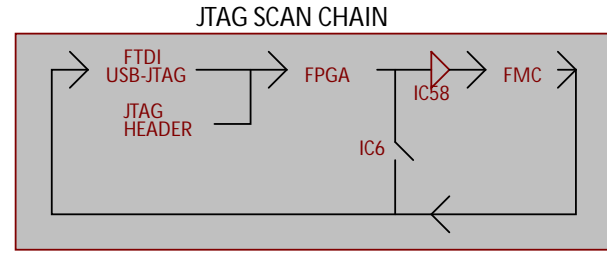


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Circuit		
WI-FI, LEDs, BUTTONS etc.		
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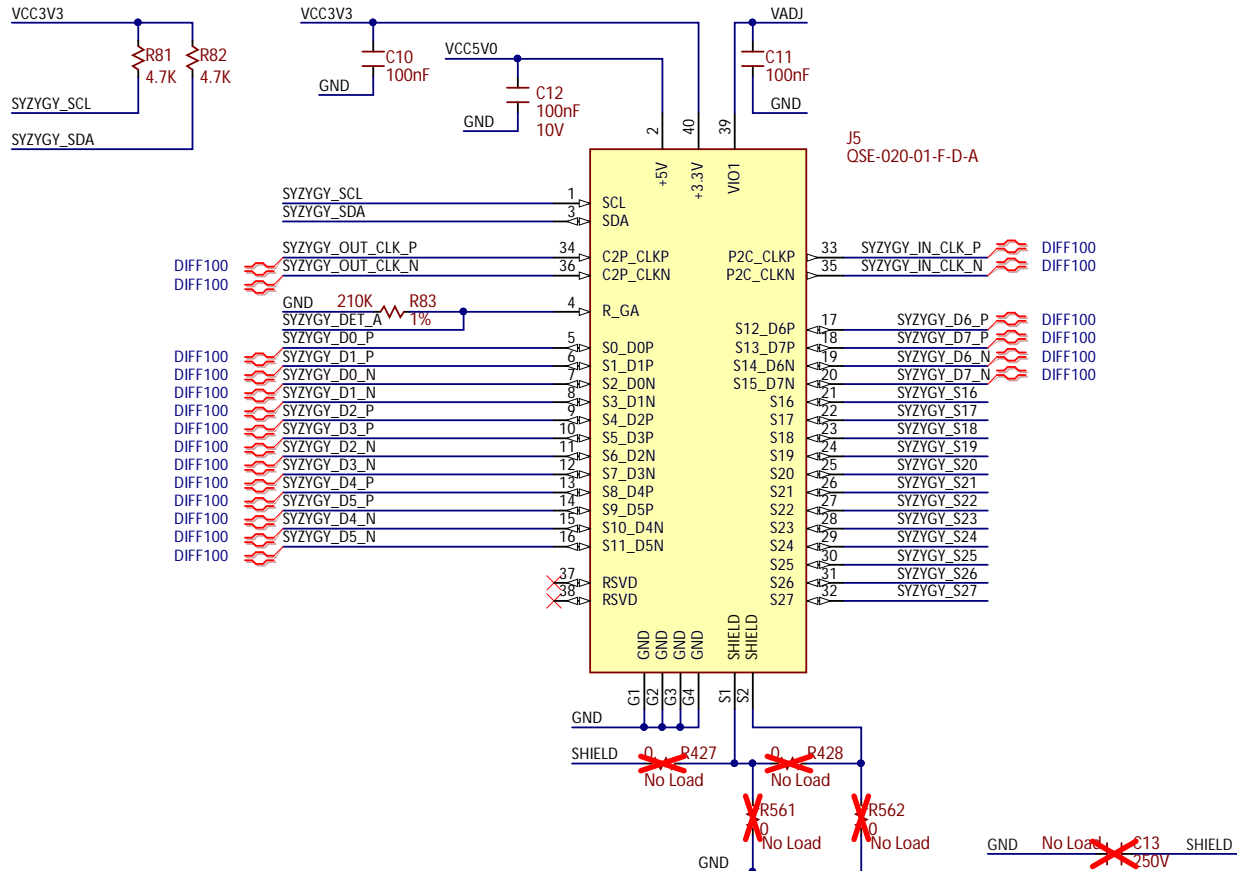


I2C 7-bit addresses ending with bits 01 (due to GAX pins).  
 E.g. FMC module EEPROM 7-bit address will be, in binary: 1010001.



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FMC LPC		
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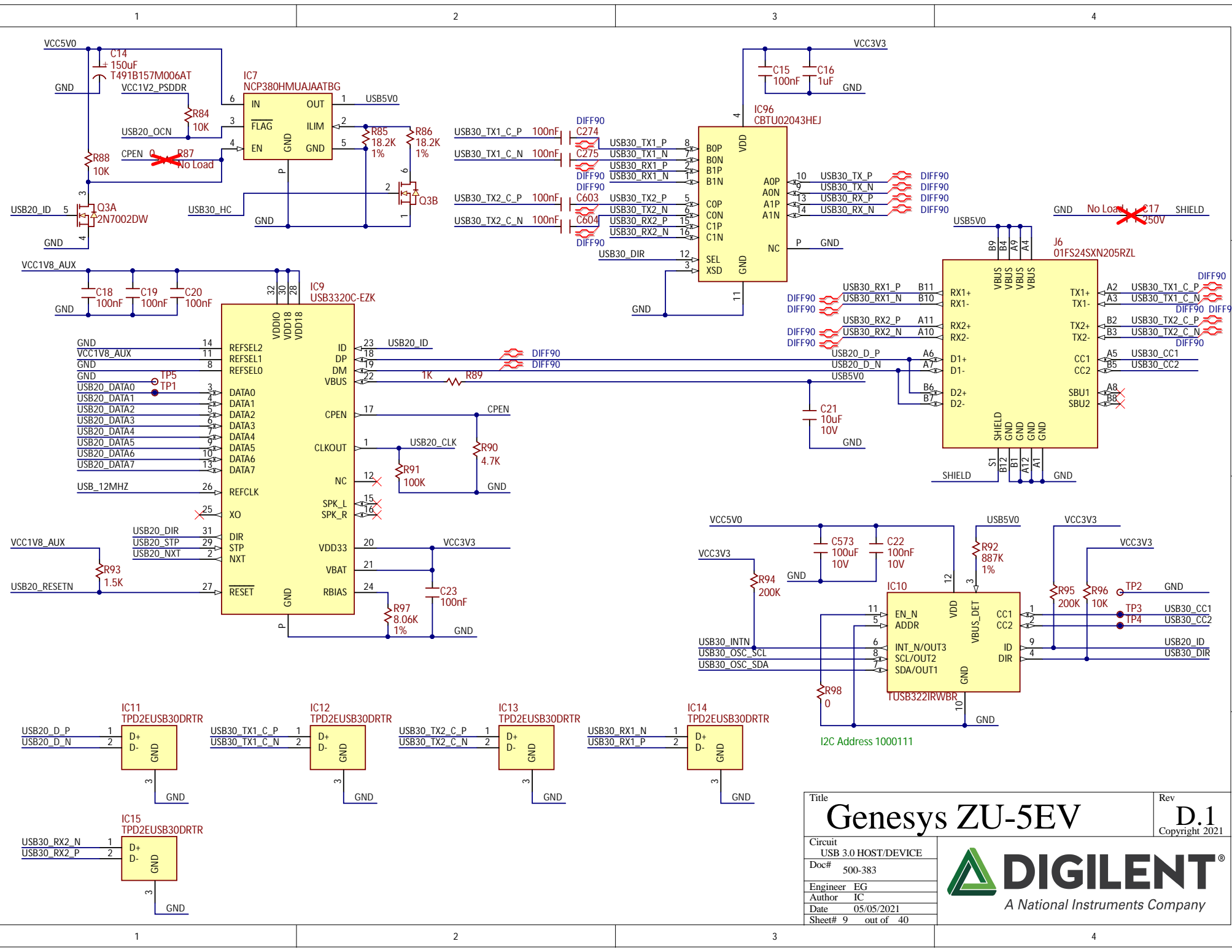




I2C Address 0110000 (due to R\_GA)

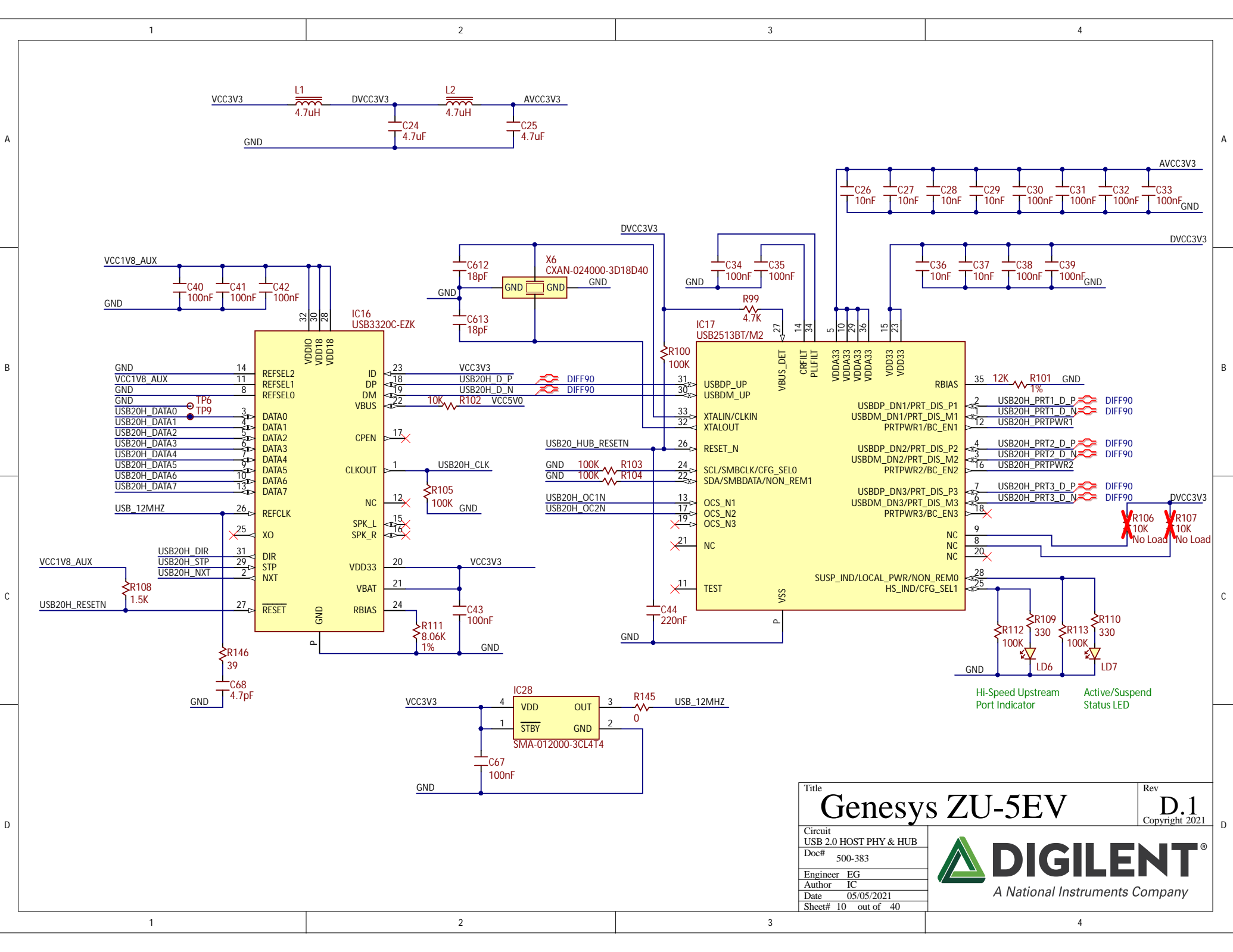
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Circuit		Copyright 2021	
ZMOD			
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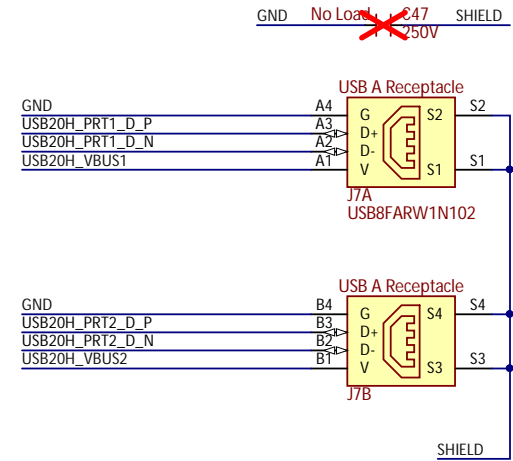
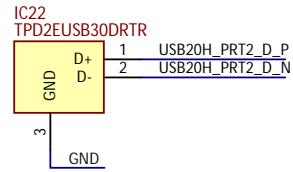
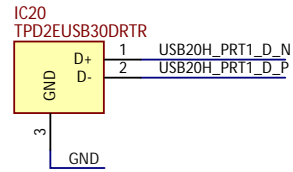
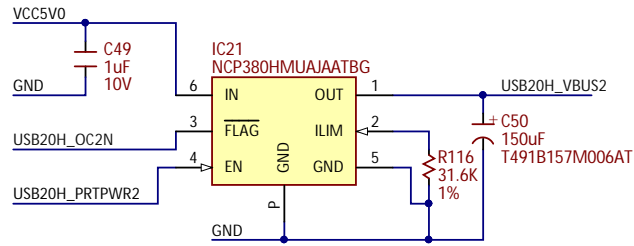
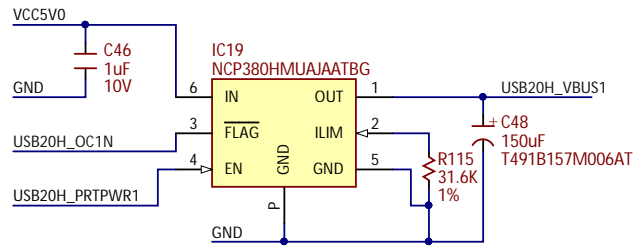
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USB 3.0 HOST/DEVICE		
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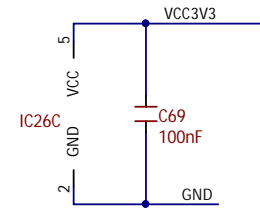
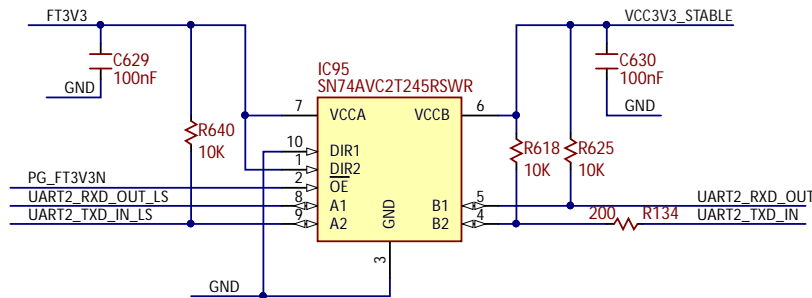
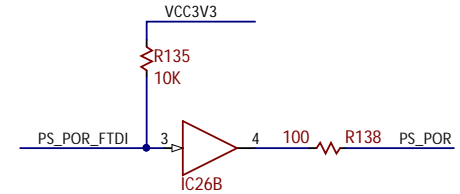
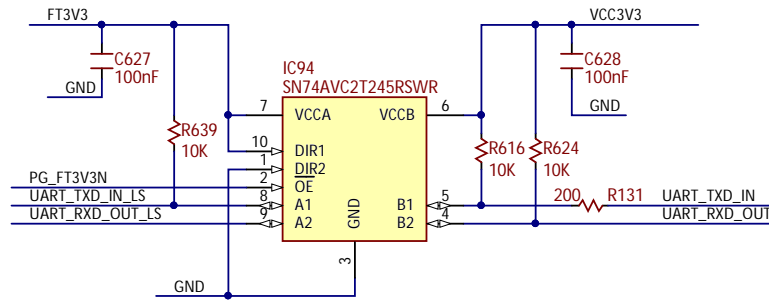
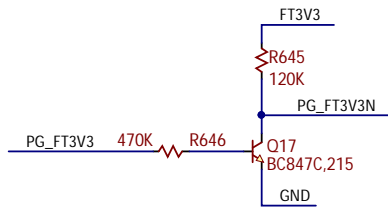
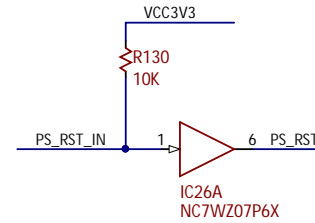
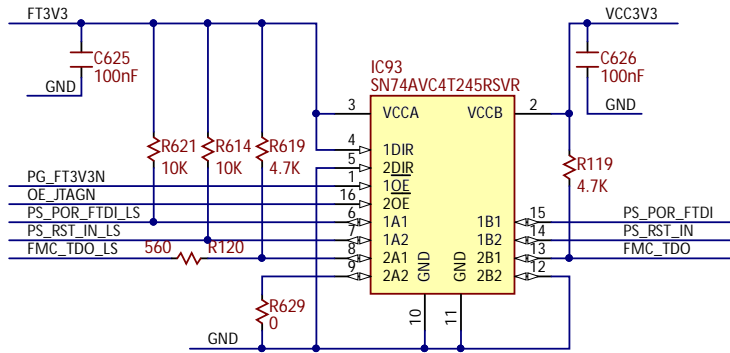
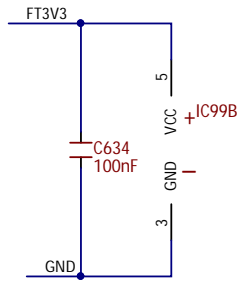
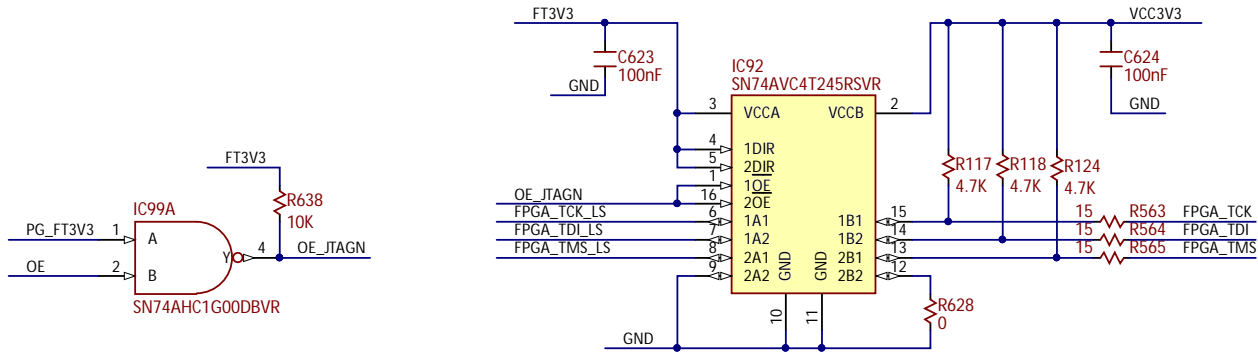


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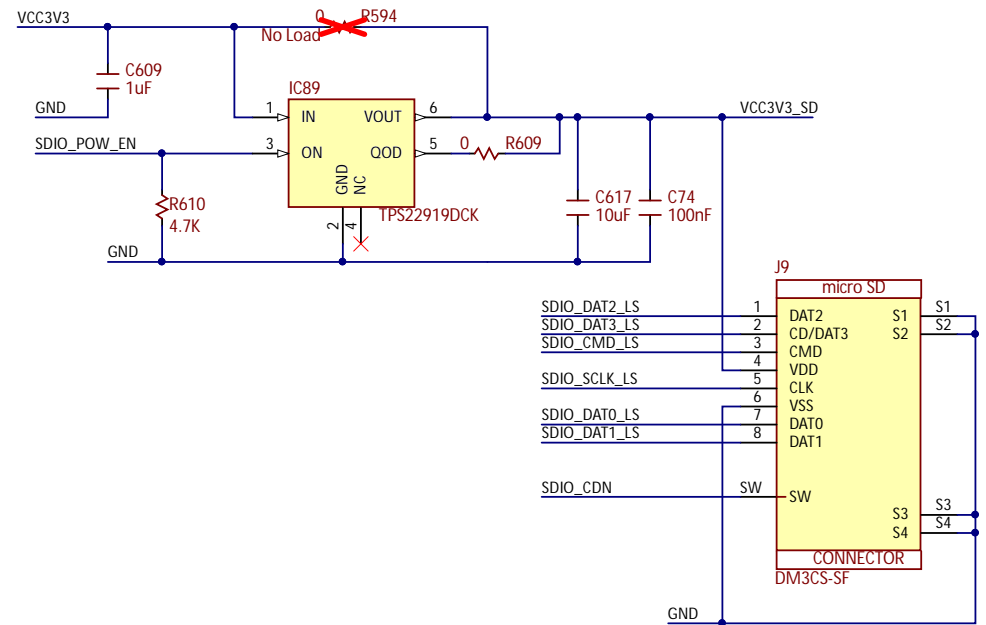
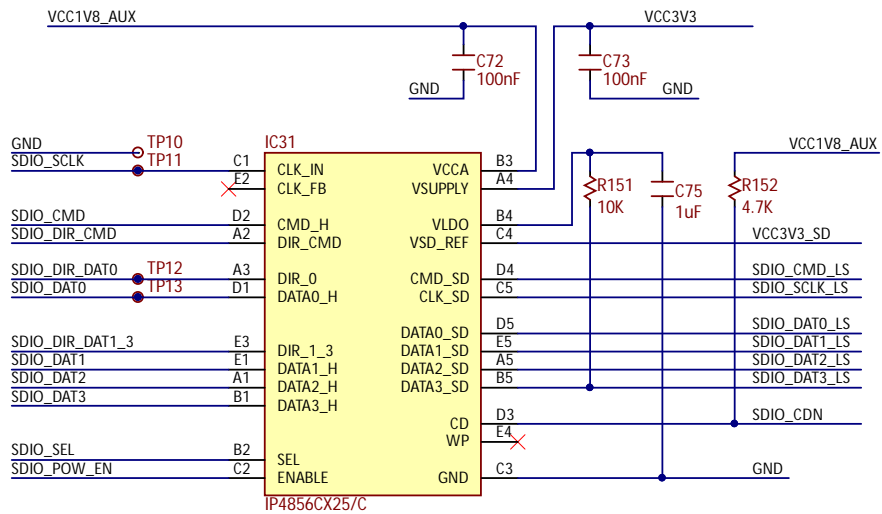
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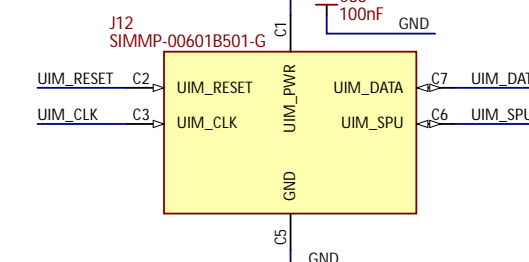
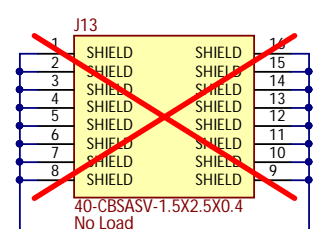
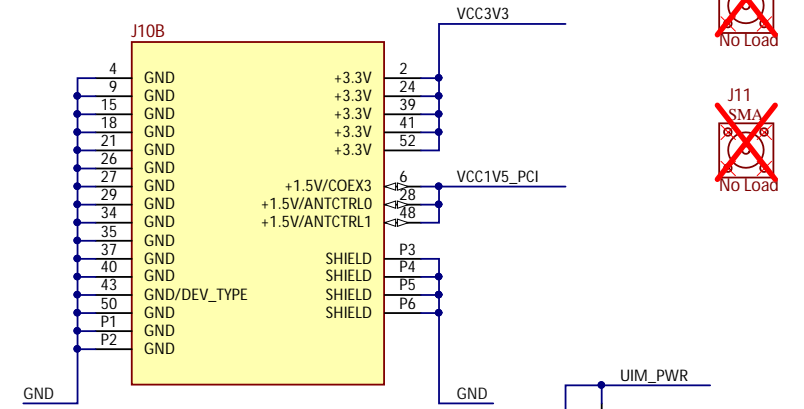
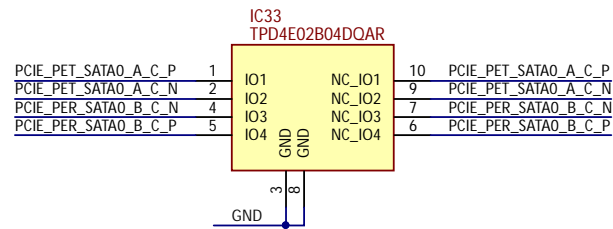
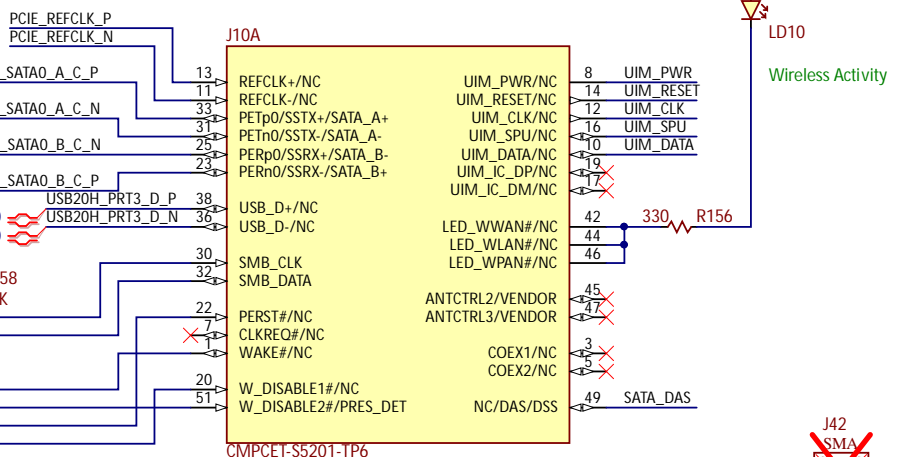
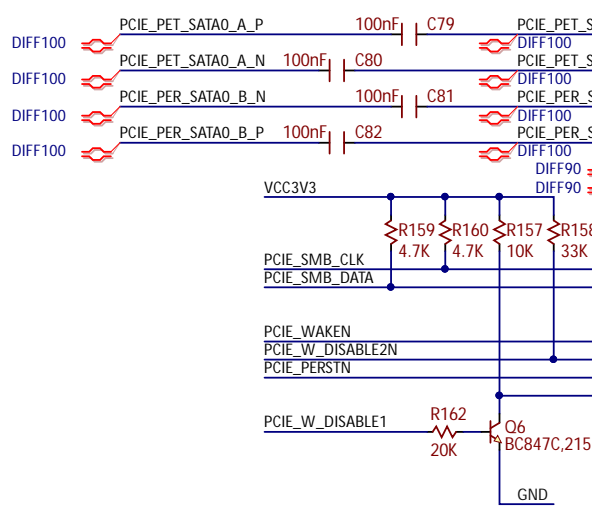
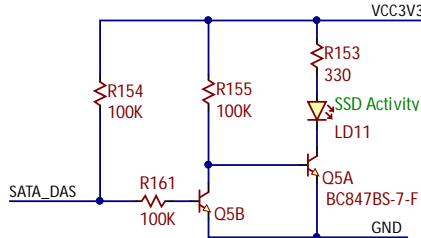
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Circuit	SD CARD	
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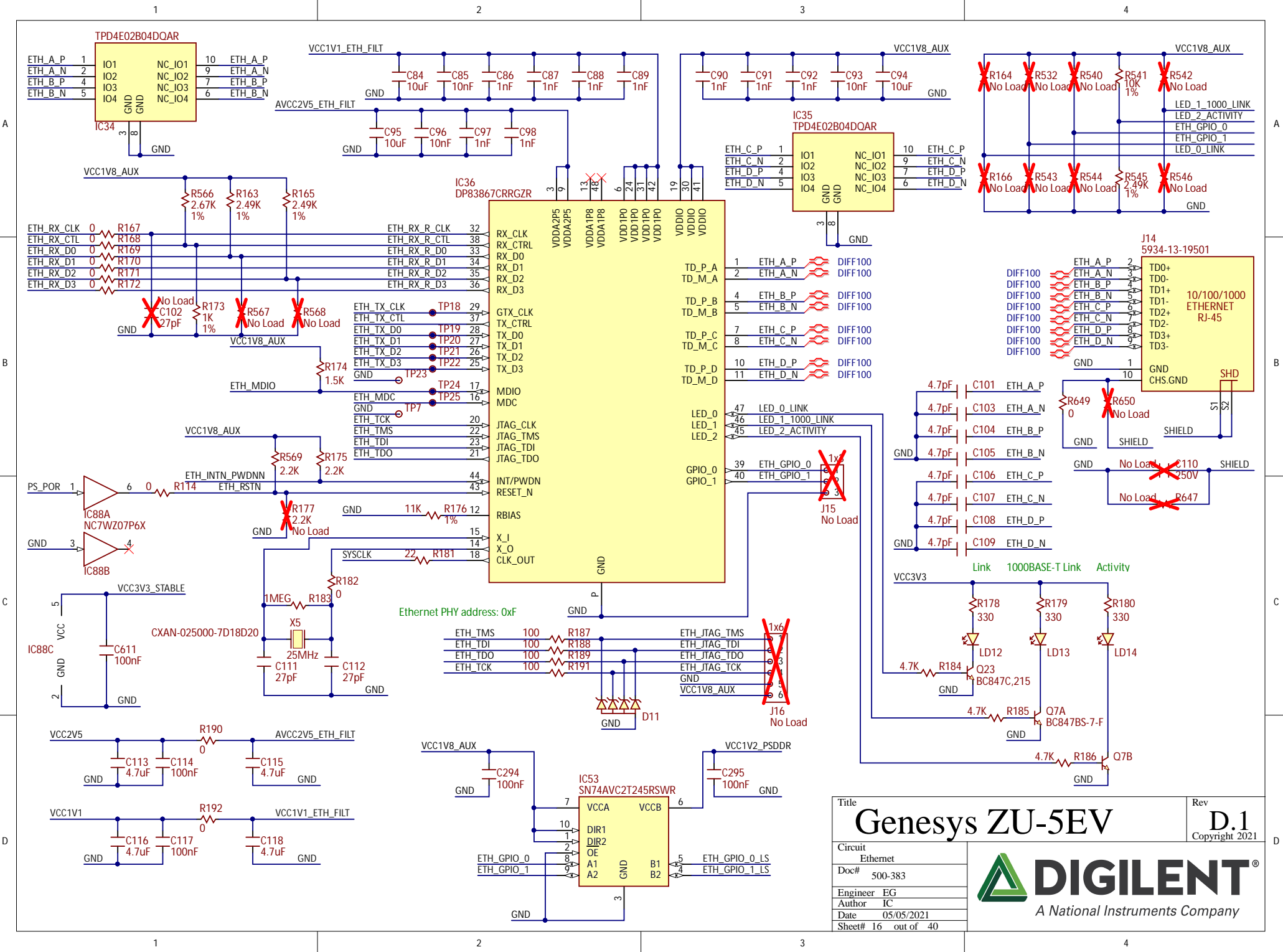


- F11 SMT Standoff S001-00001-B01
- F12 SMT Standoff S001-00001-B01
- F14 SMT Standoff S001-00001-B01
- F15 SMT Standoff S001-00001-B01

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Mini PCIe / SATA		
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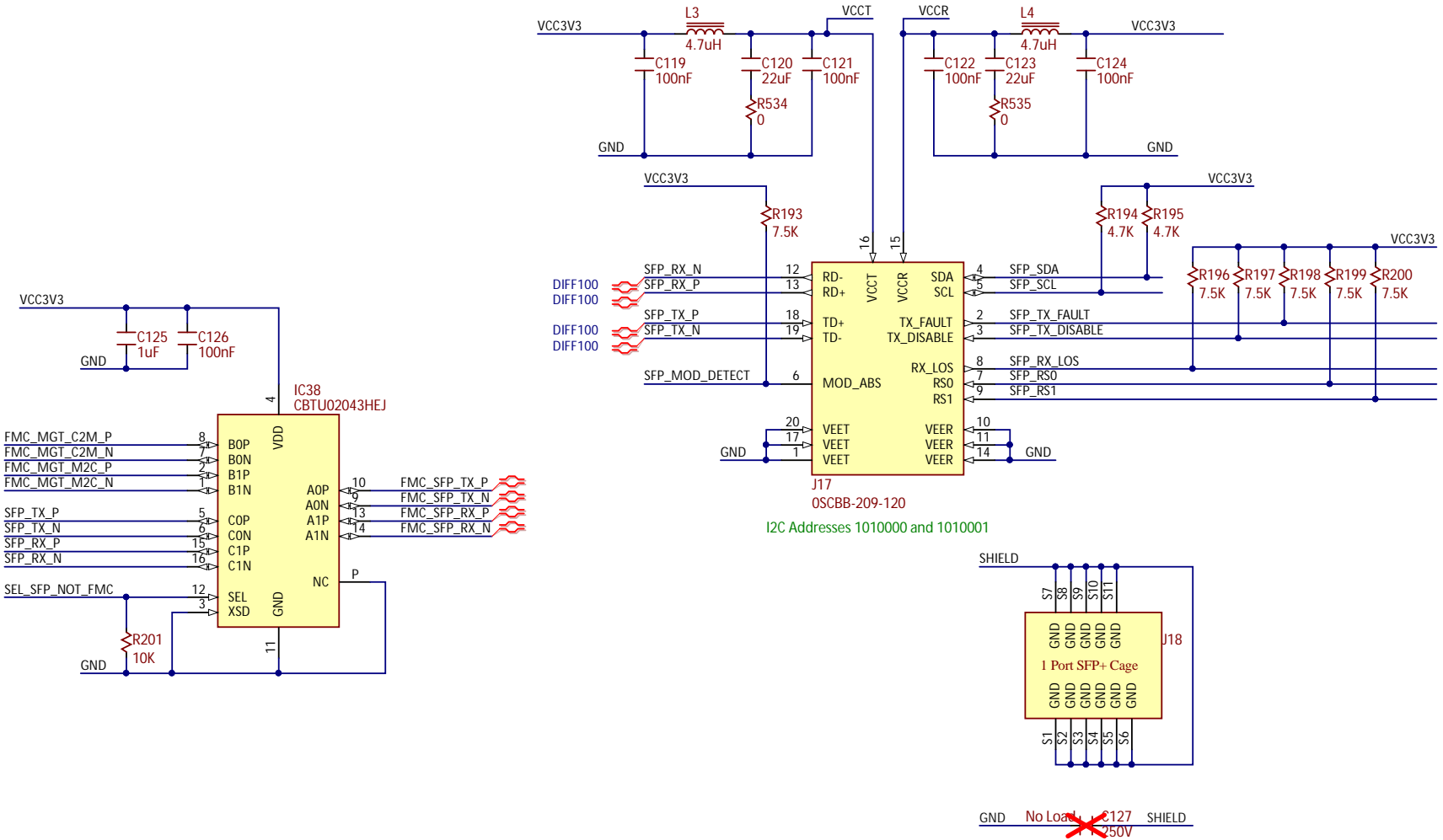


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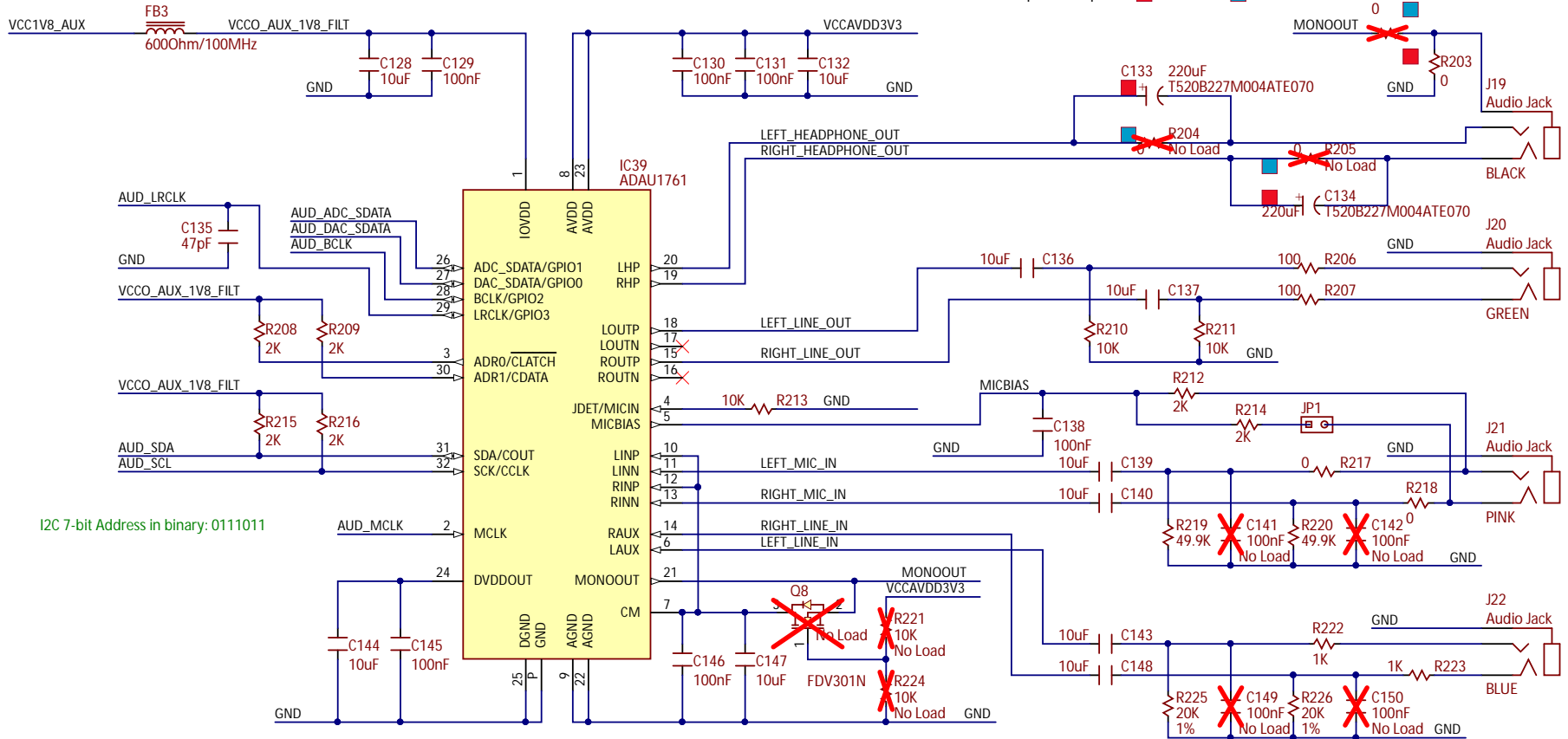
SFP+ cannot be used simultaneously with neither HDMI Source nor Sink due to the limited number of QPLL/CPLL primitives available in the GTH Quad.

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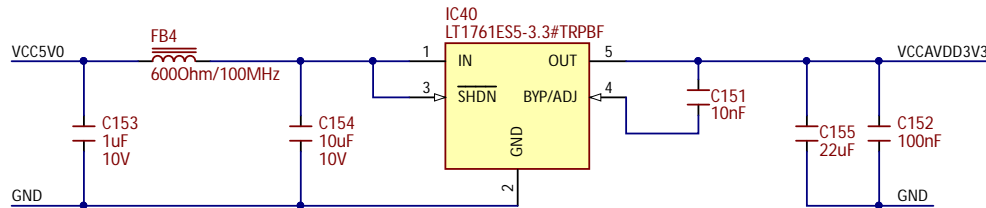


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NOTE: Load No Load  
 Capless Headphone ■ ■  
 AC-Coupled Headphone ■ ■

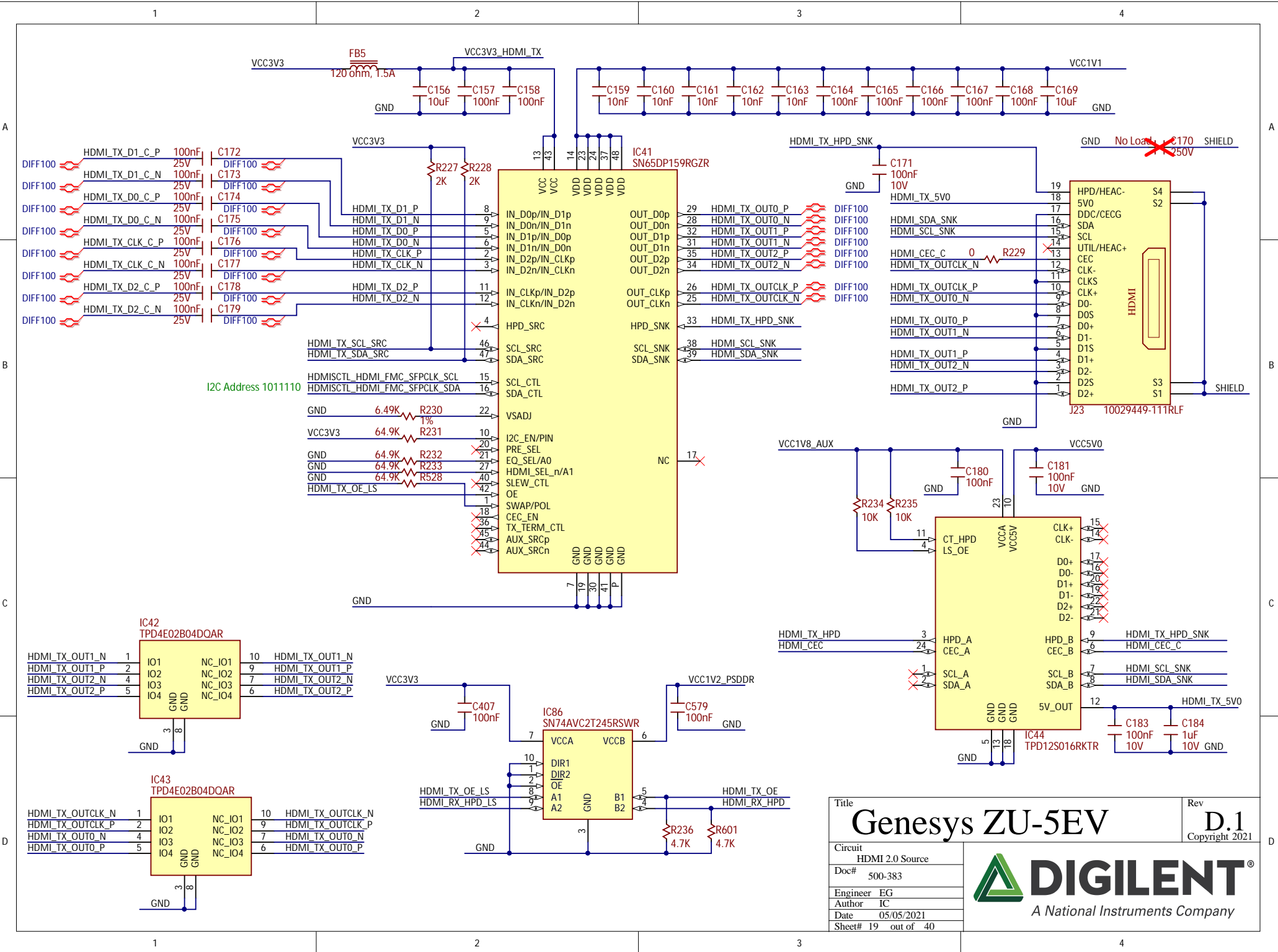


I2C 7-bit Address in binary: 0111011



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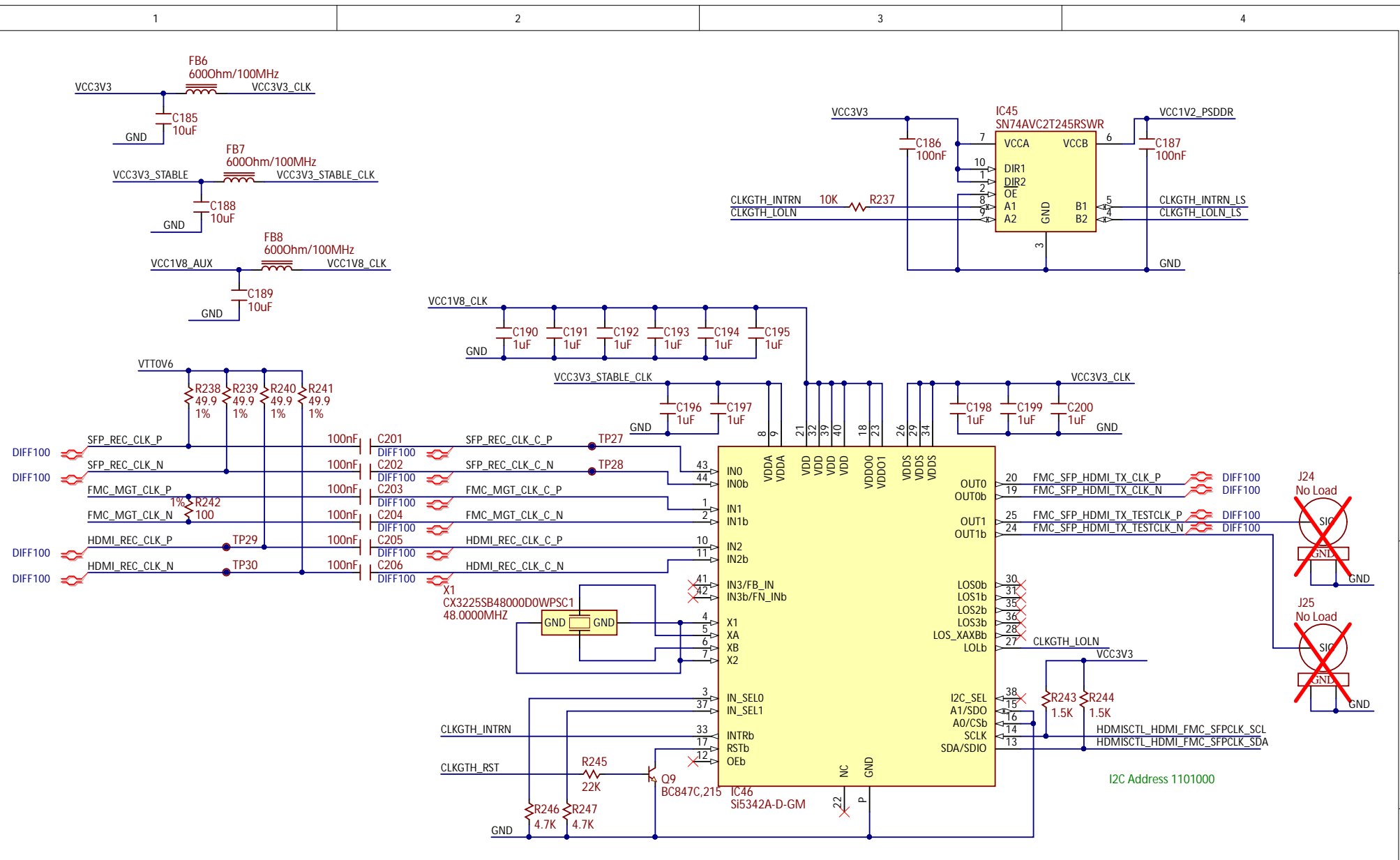




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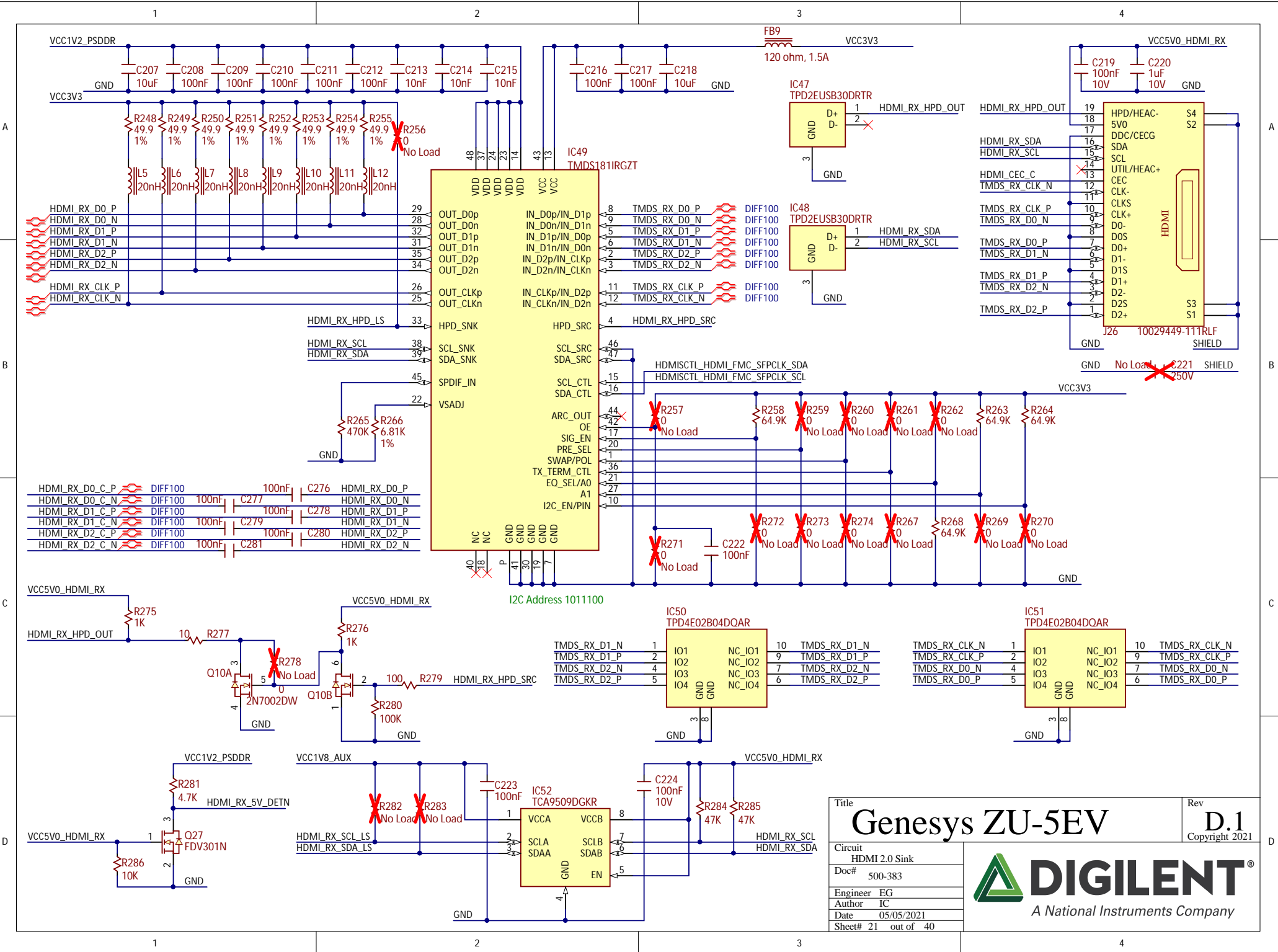
Upon board powerup, the first setting that must be done via I2C to the Si5342 is VDDIO level = 3.3V, by setting the IO\_VDD\_SEL bit to logic '1'.

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Circuit	FMC, SFP, HDMI Clock	
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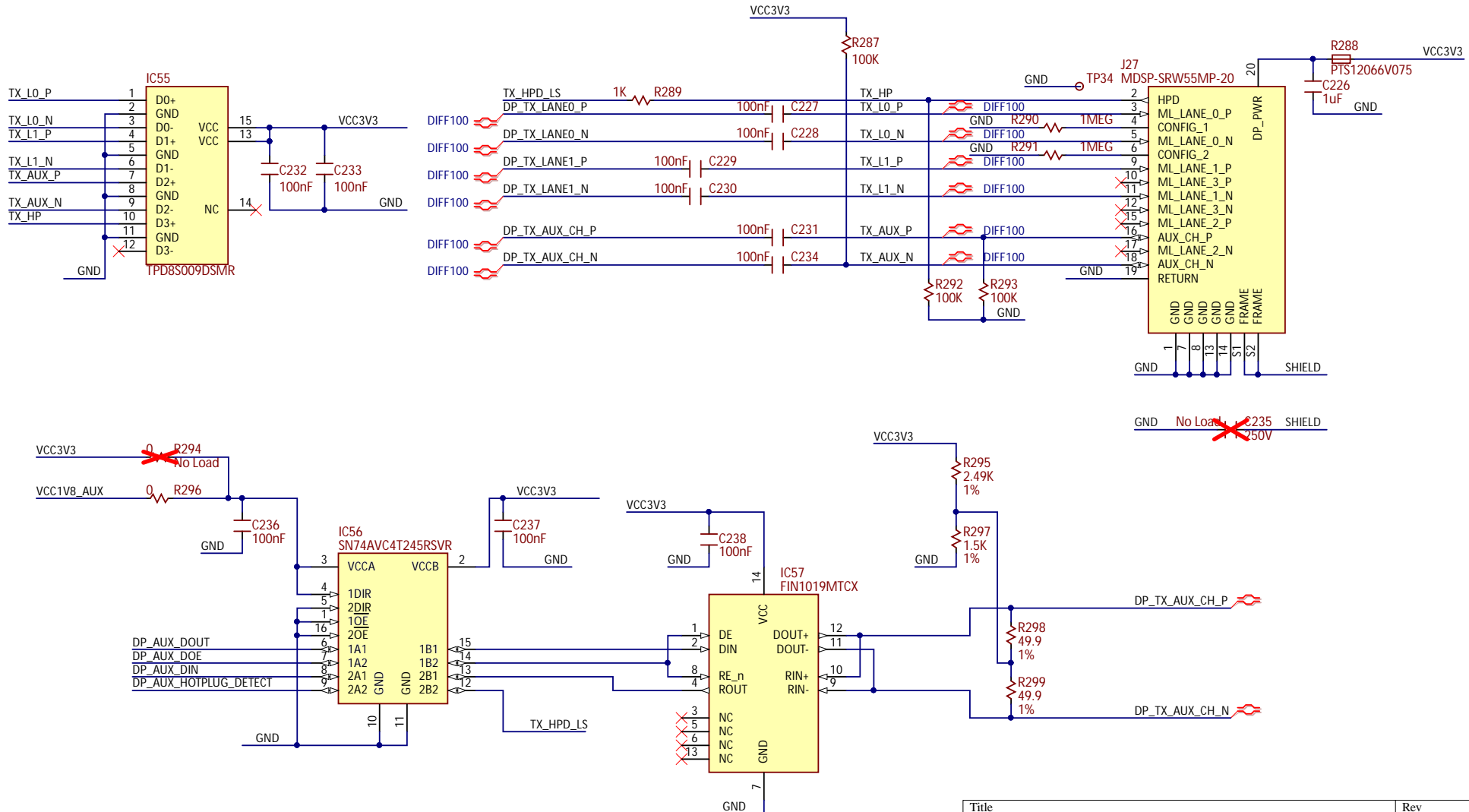
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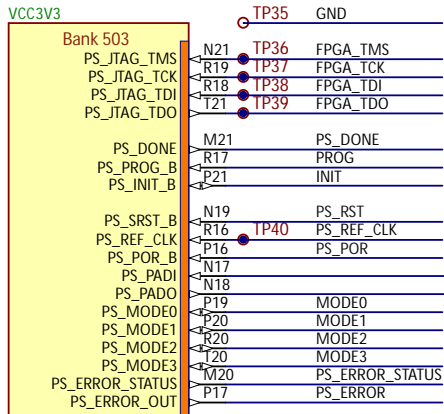
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Circuit		Copyright 2021	
HDMI 2.0 Sink			
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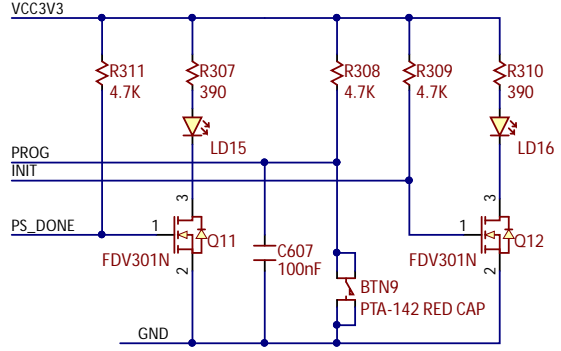
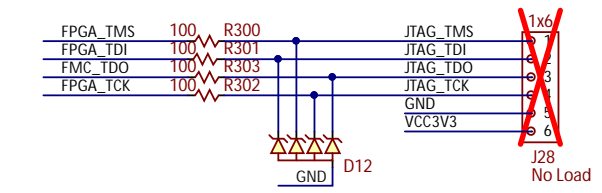
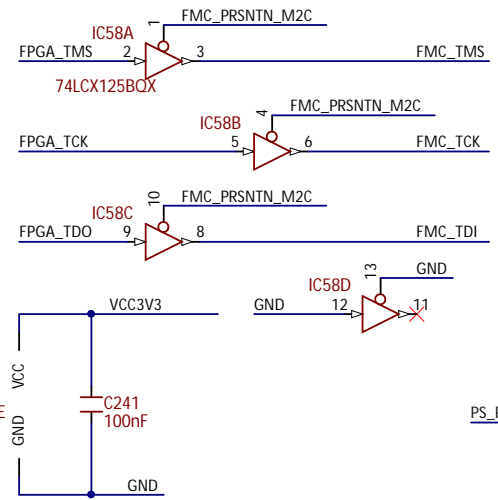
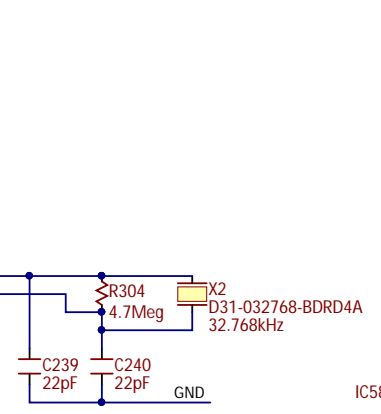


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Circuit		Copyright 2021
DisplayPort Source		
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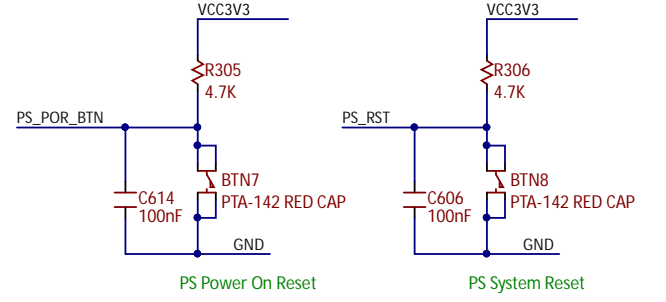
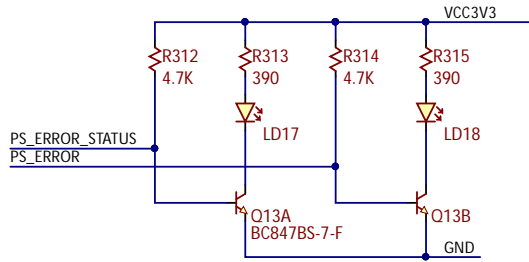




IC59L  
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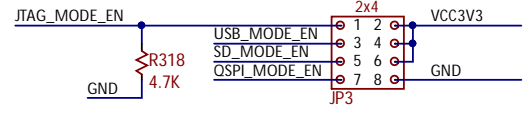
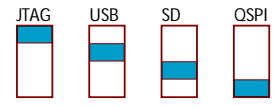
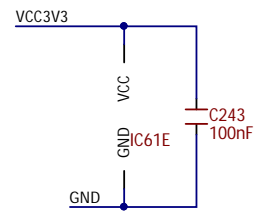
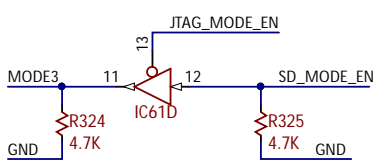
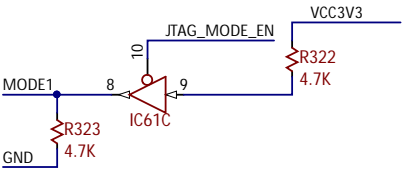
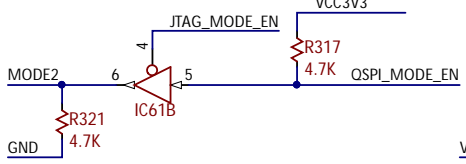
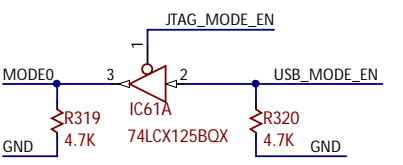
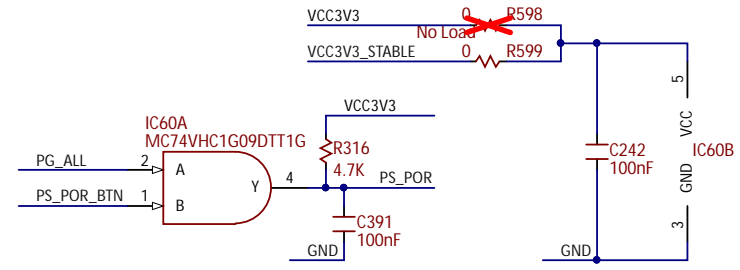


PL Configuration Reset



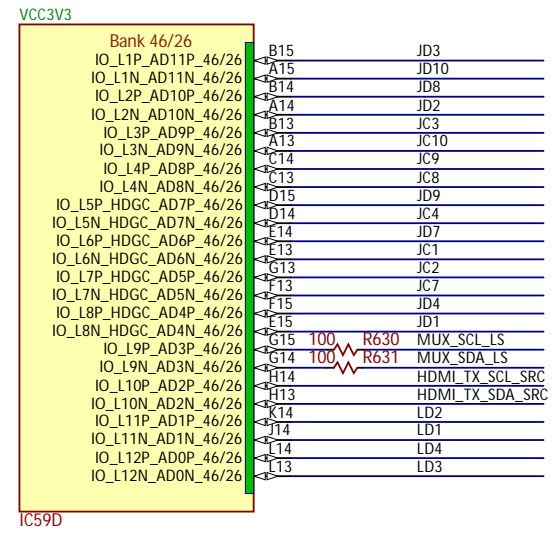
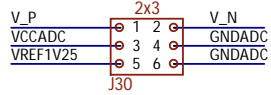
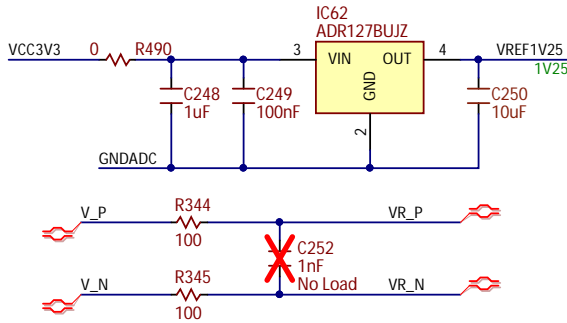
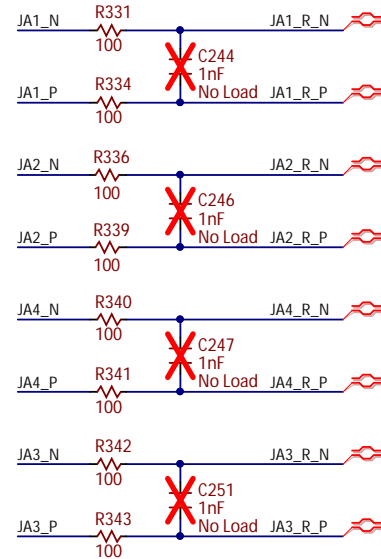
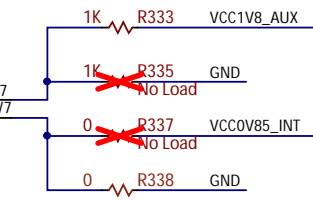
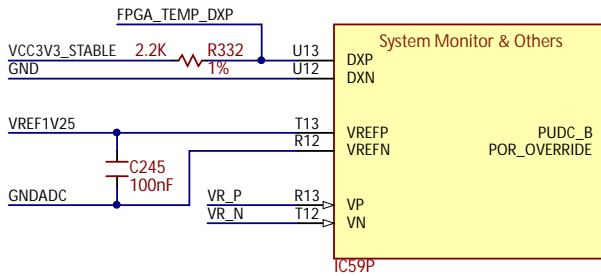
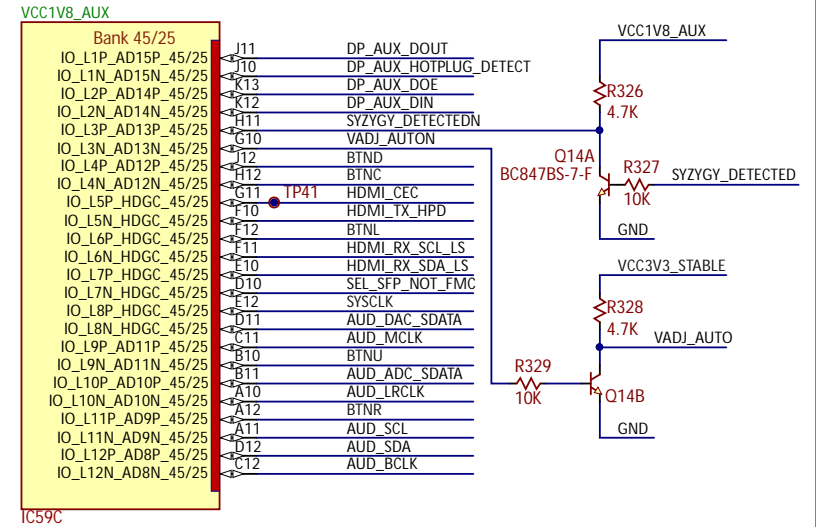
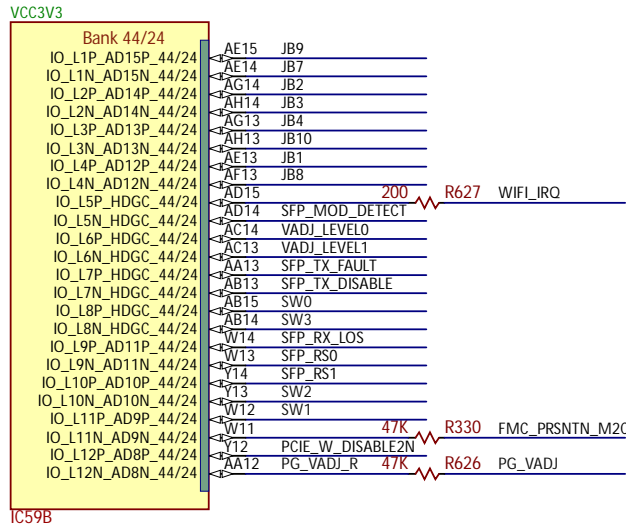
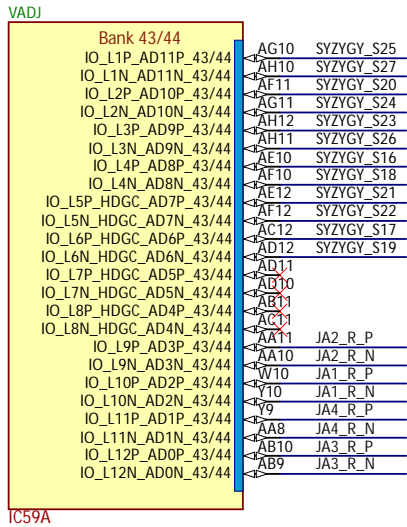
PS Power On Reset

PS System Reset



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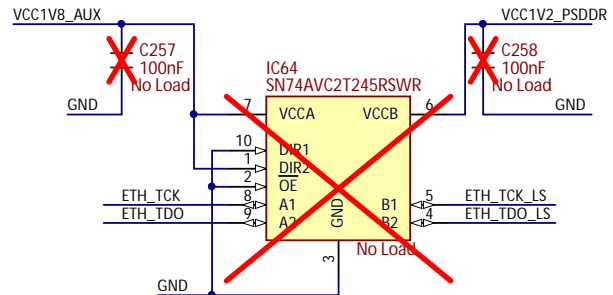
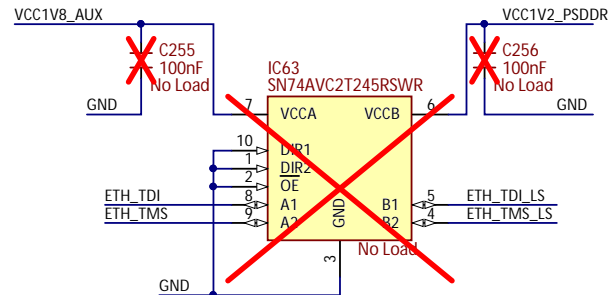
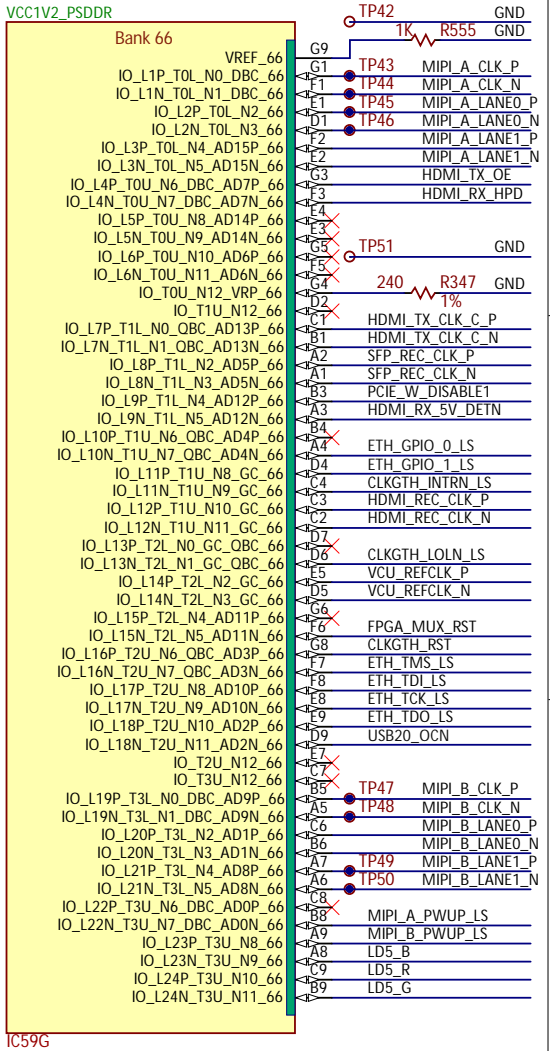
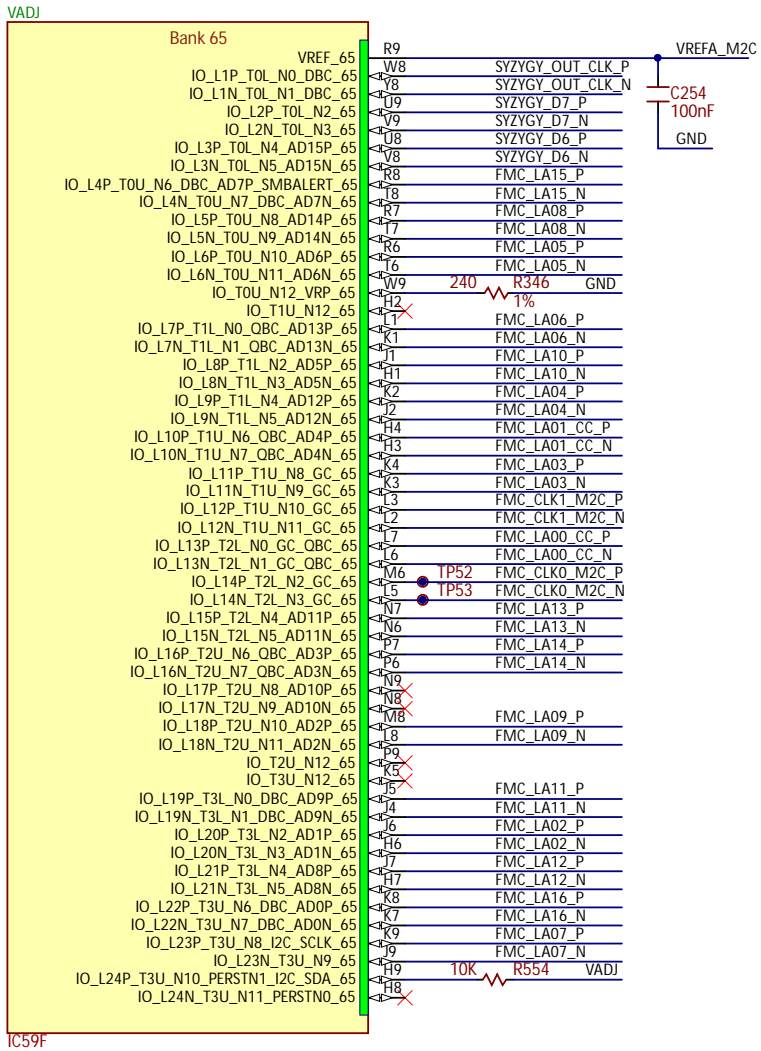
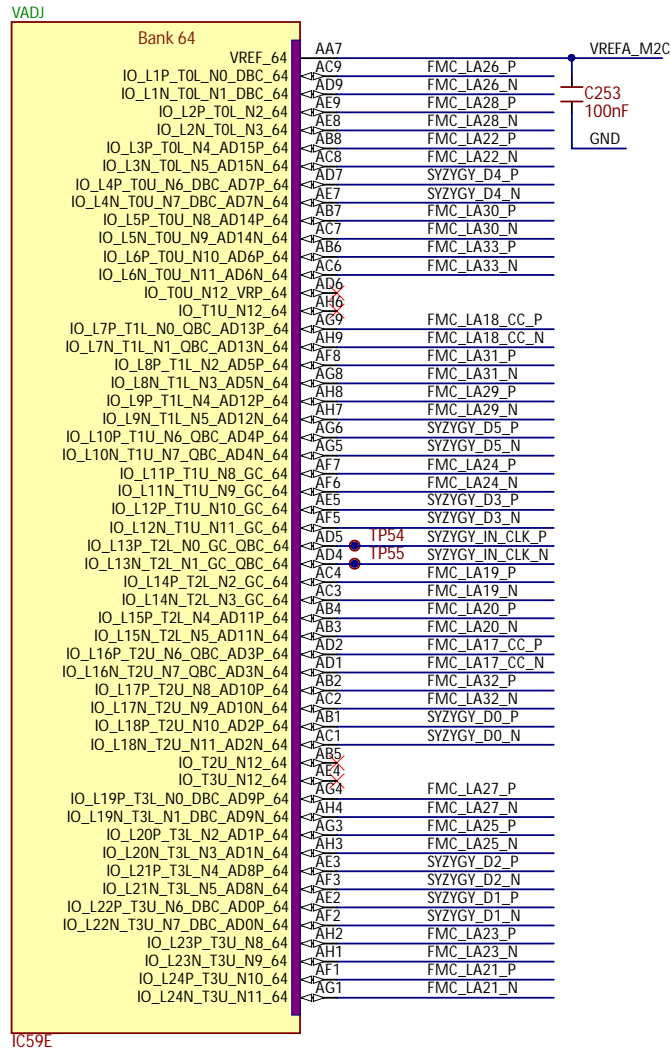
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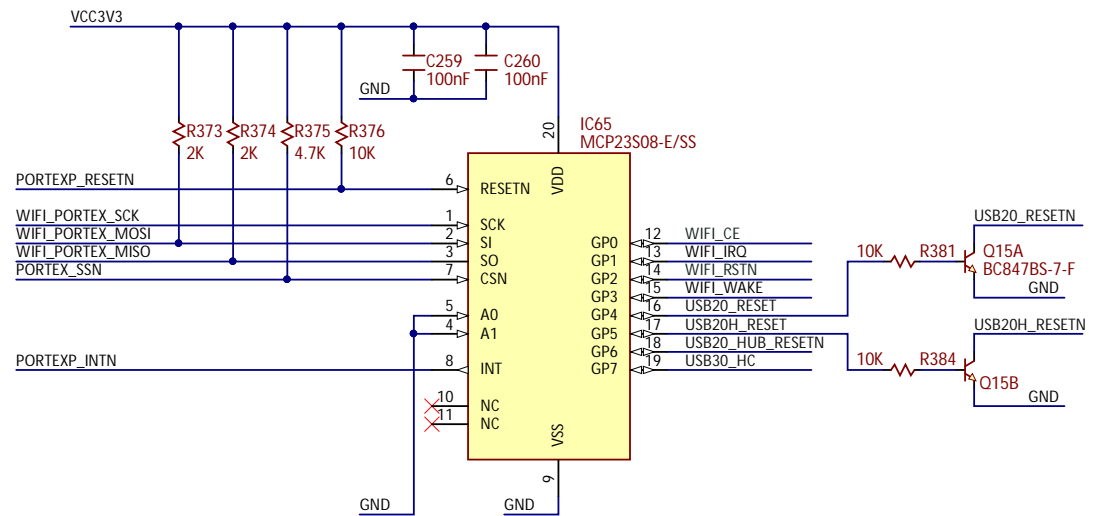
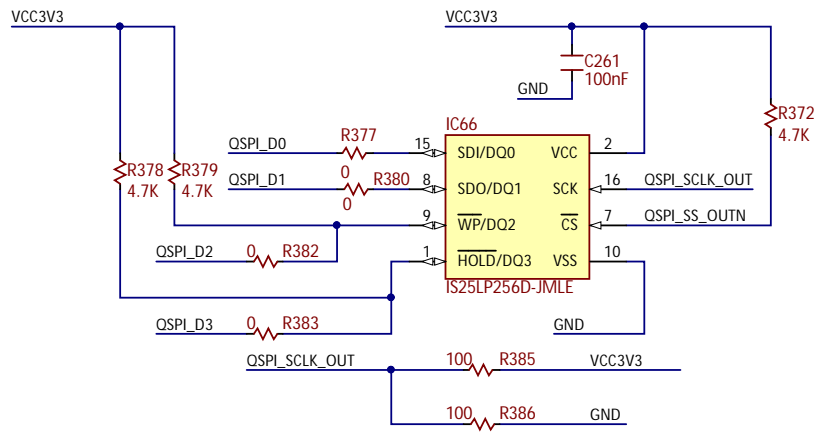
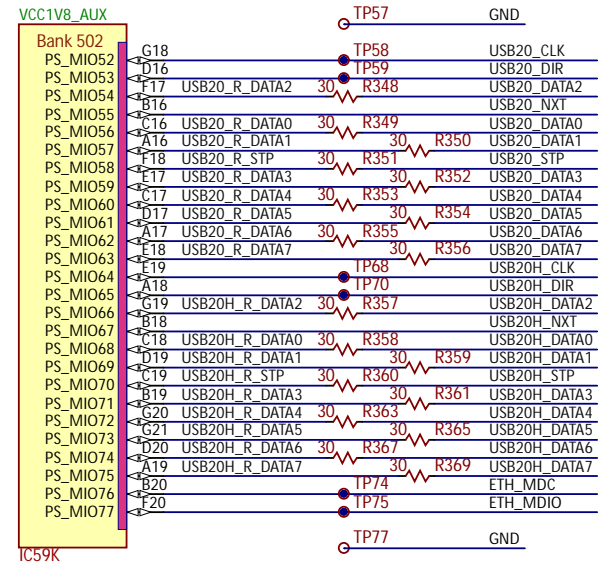
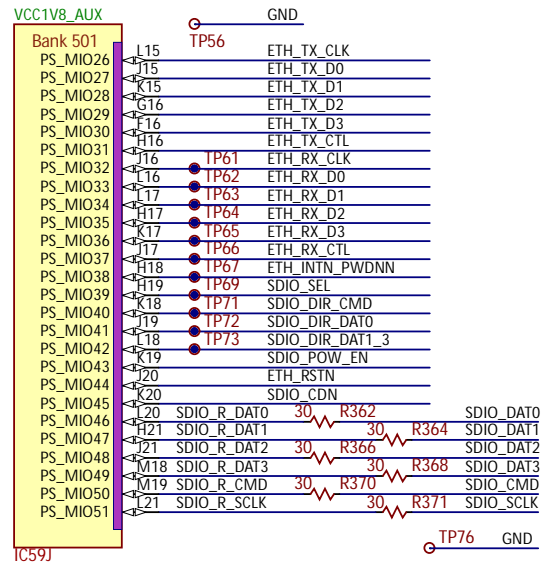
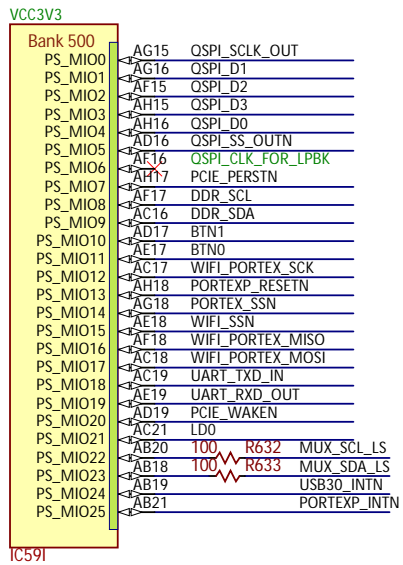
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If a DCI standard is required on FMC\_LA15\_P and/or FMC\_LA07\_P, follow the requirements outlined in UG571, under section "Special DCI Requirements in Some Banks".

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HP FPGA BANKS		
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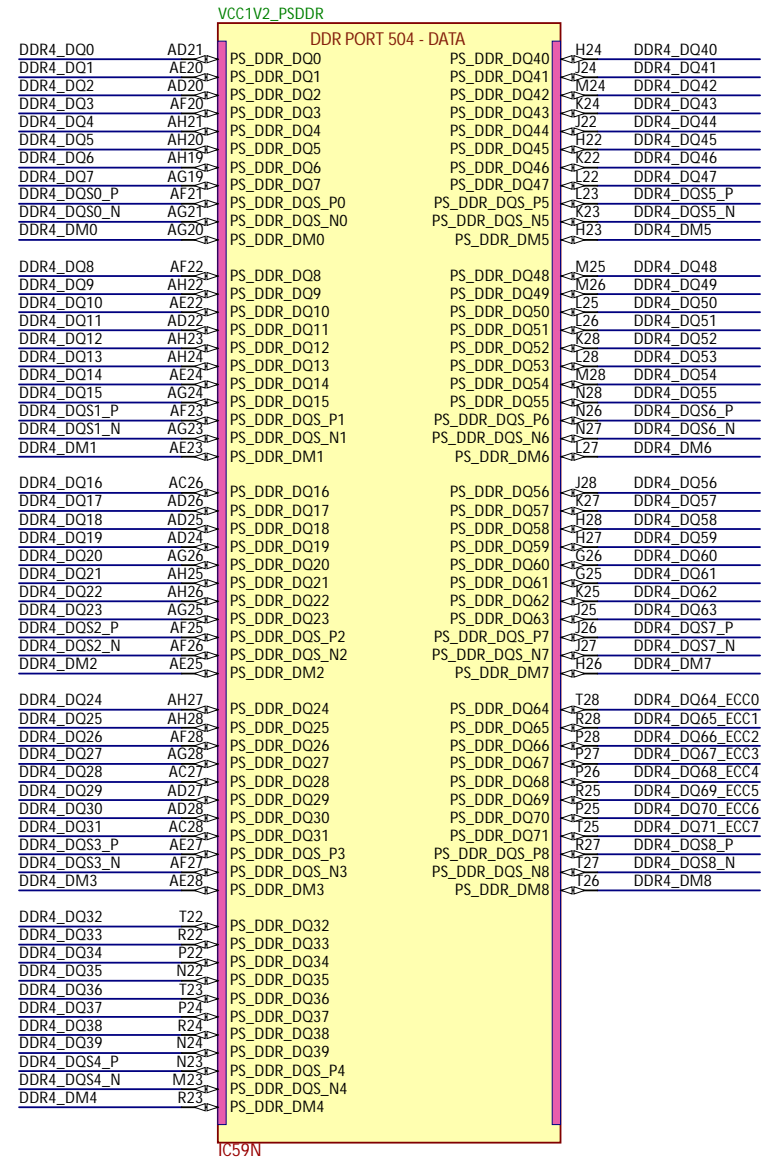
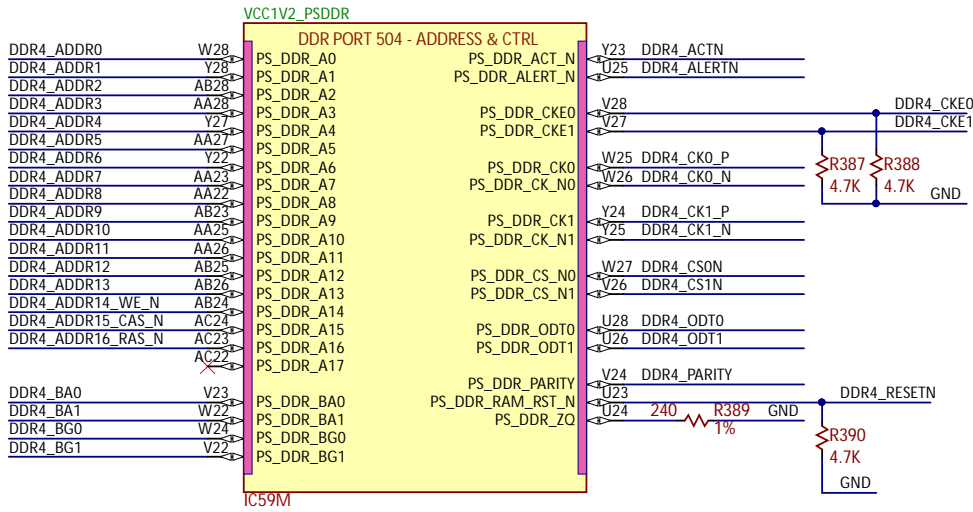


Title	Genesys ZU-5EV	Rev	D.1
			Copyright 2021
Circuit	MIO BANKS; SPI FLASH		
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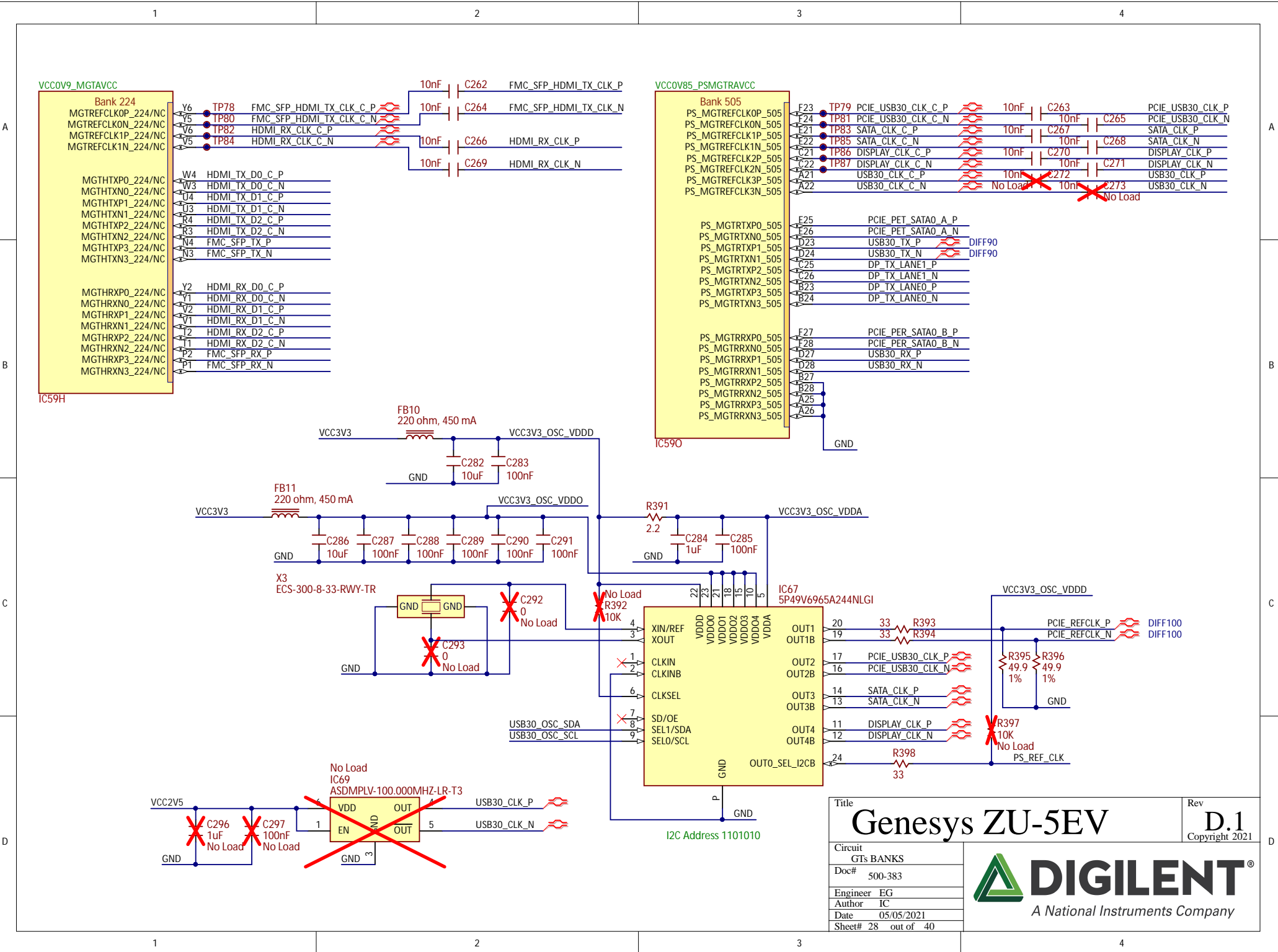




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Genesys ZU-5EV		D.1
		Copyright 2021
Circuit	DDR BANK	
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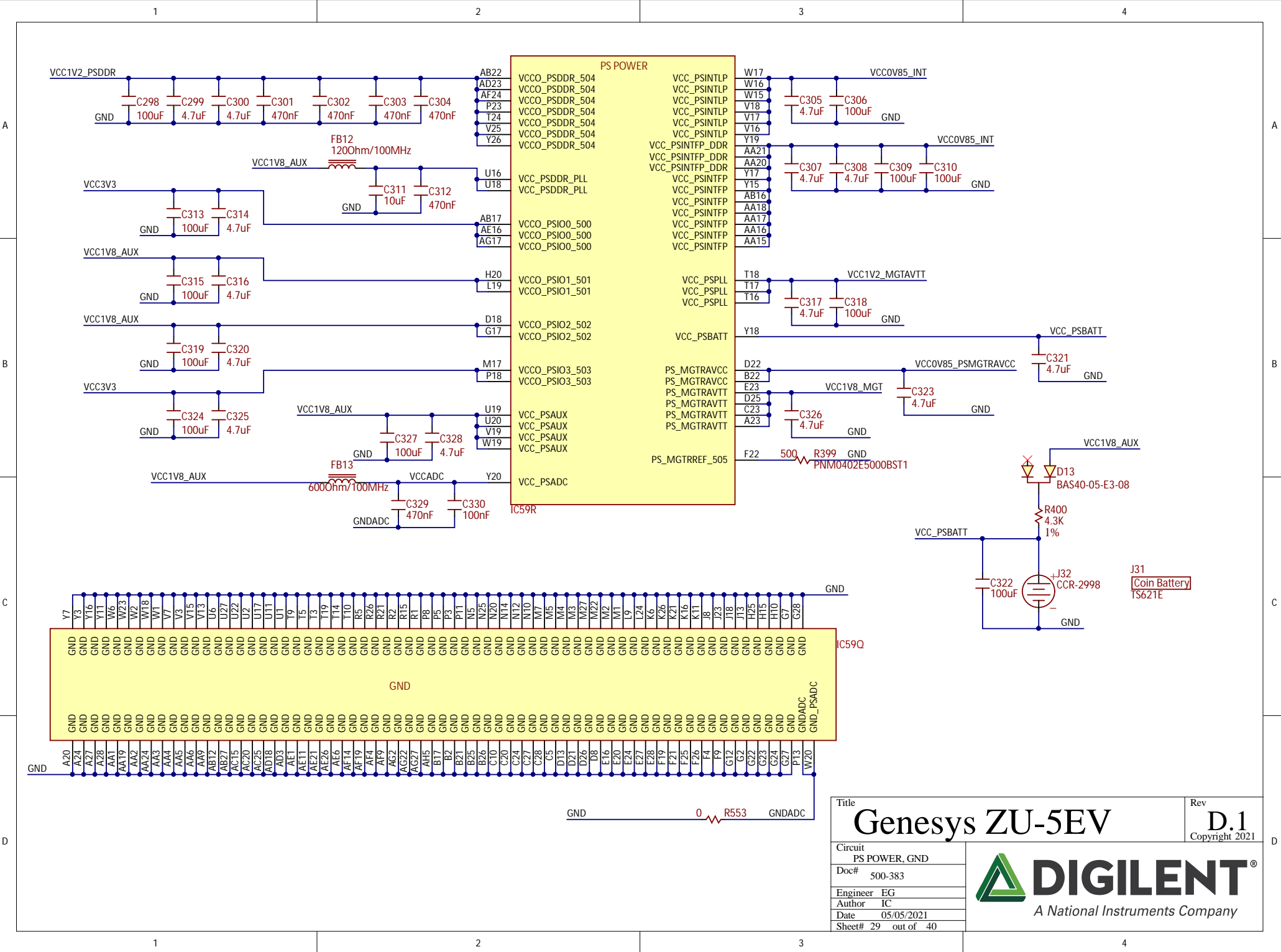
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Genesys ZU-5EV		D.1	
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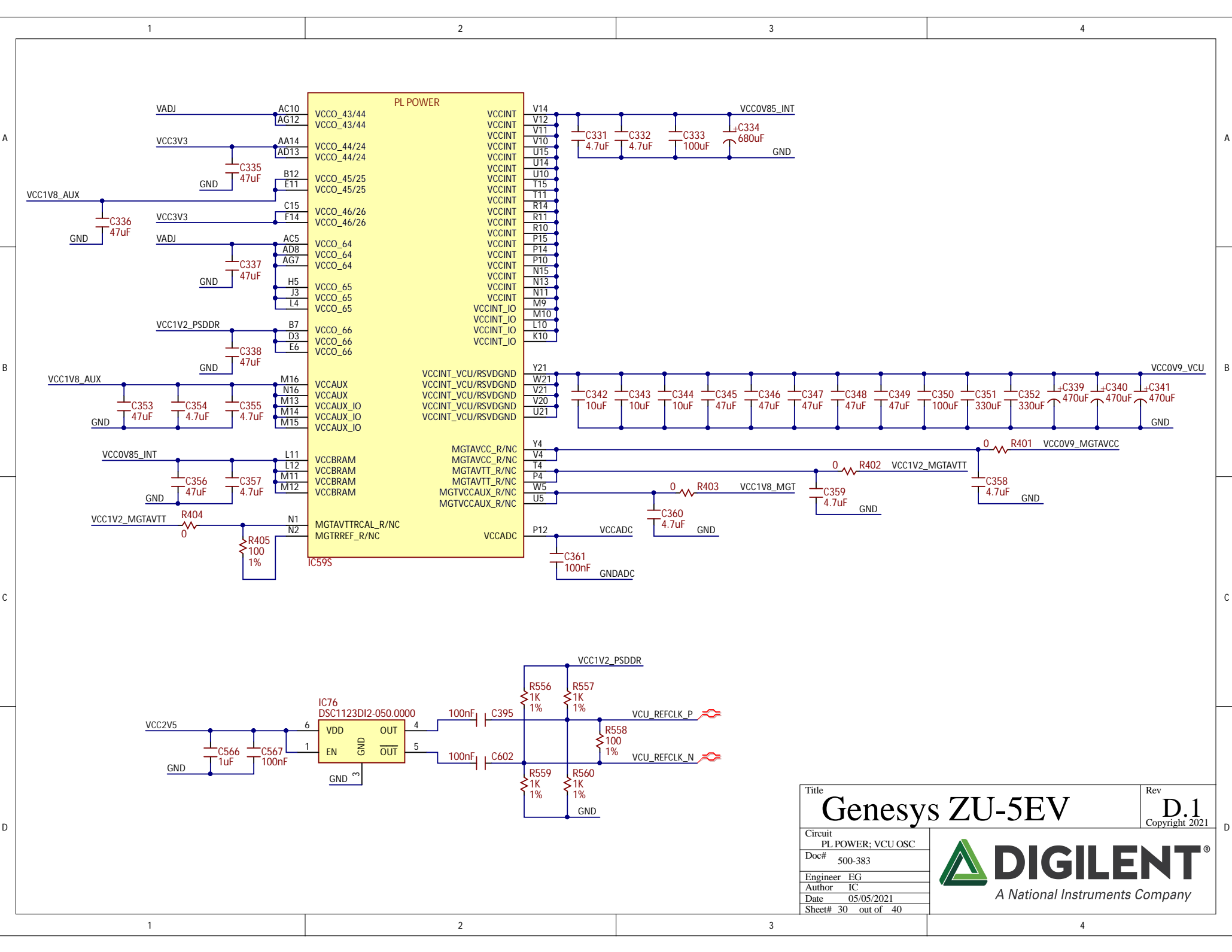
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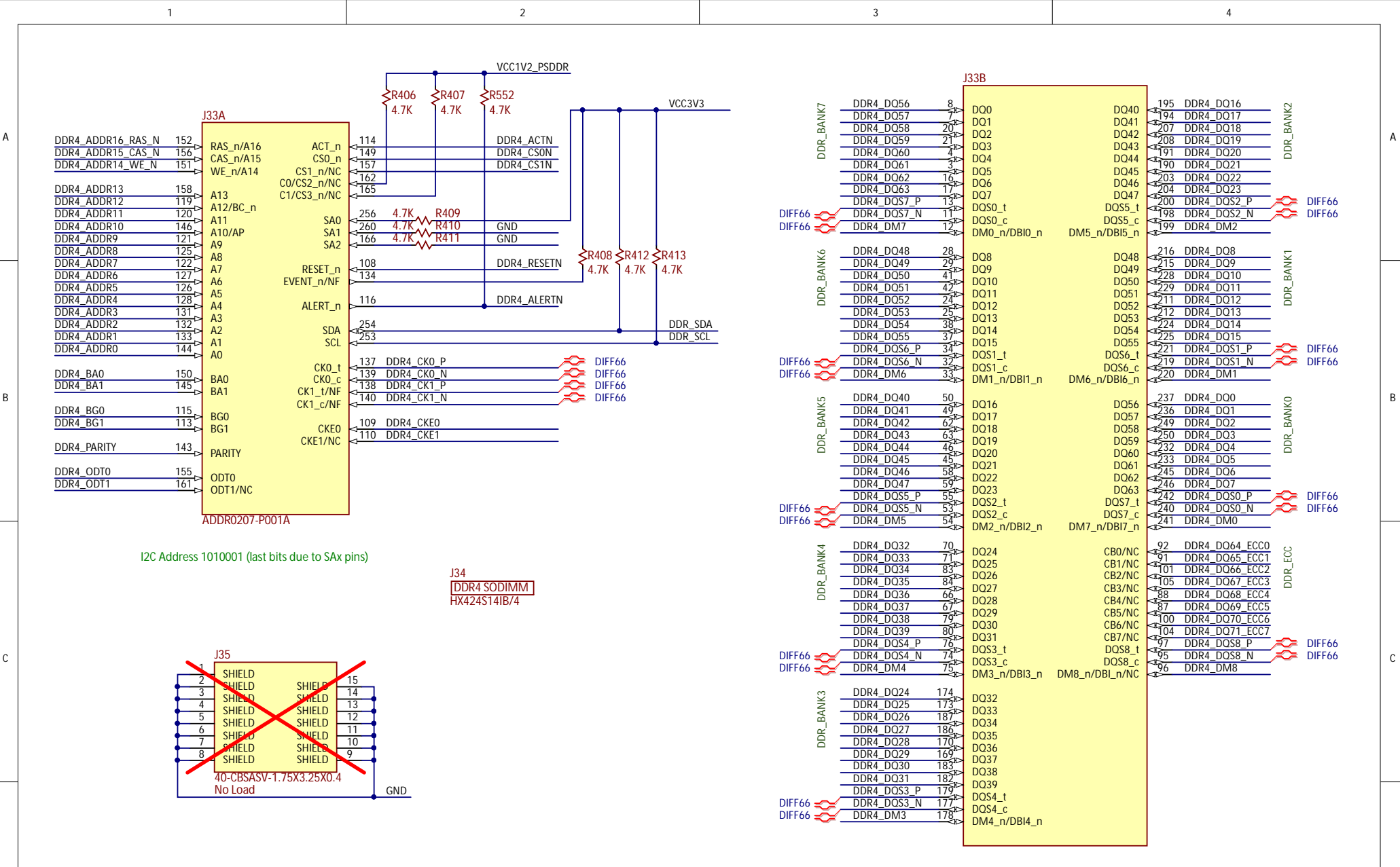
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Title	Genesys ZU-5EV	Rev	D.1
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Circuit	PL POWER: VCU OSC		
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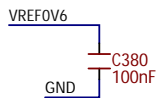
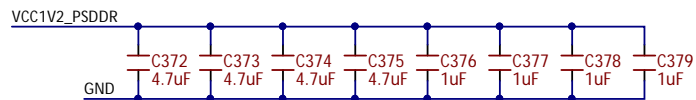
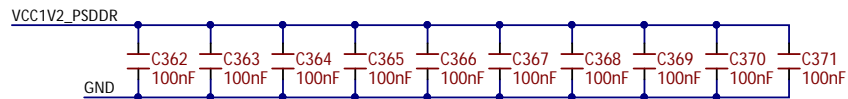
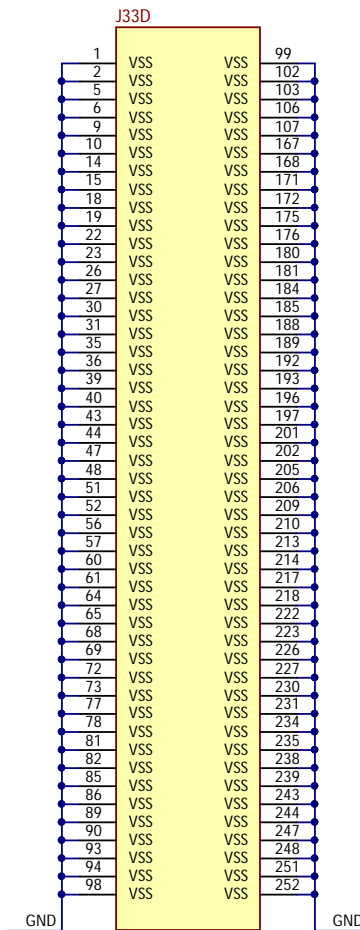
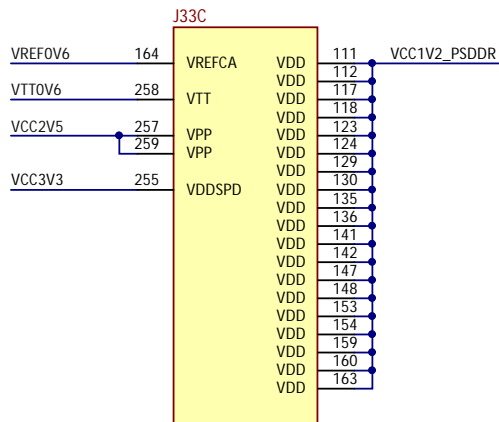




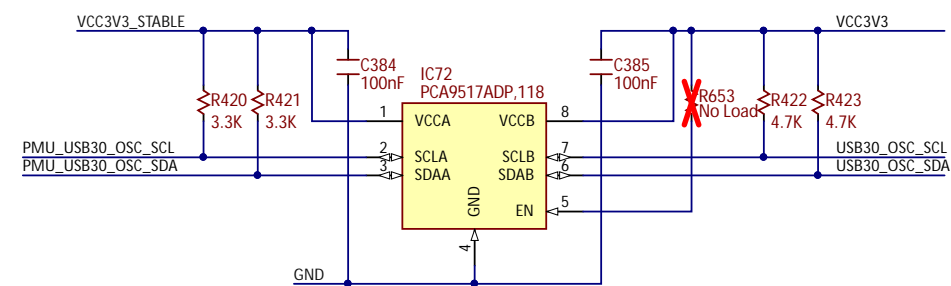
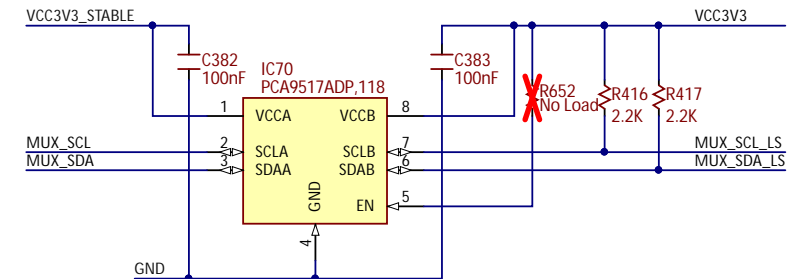
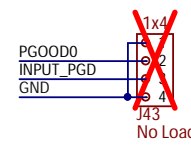
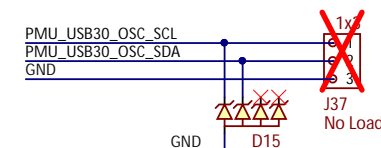
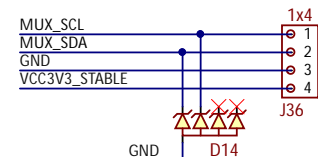
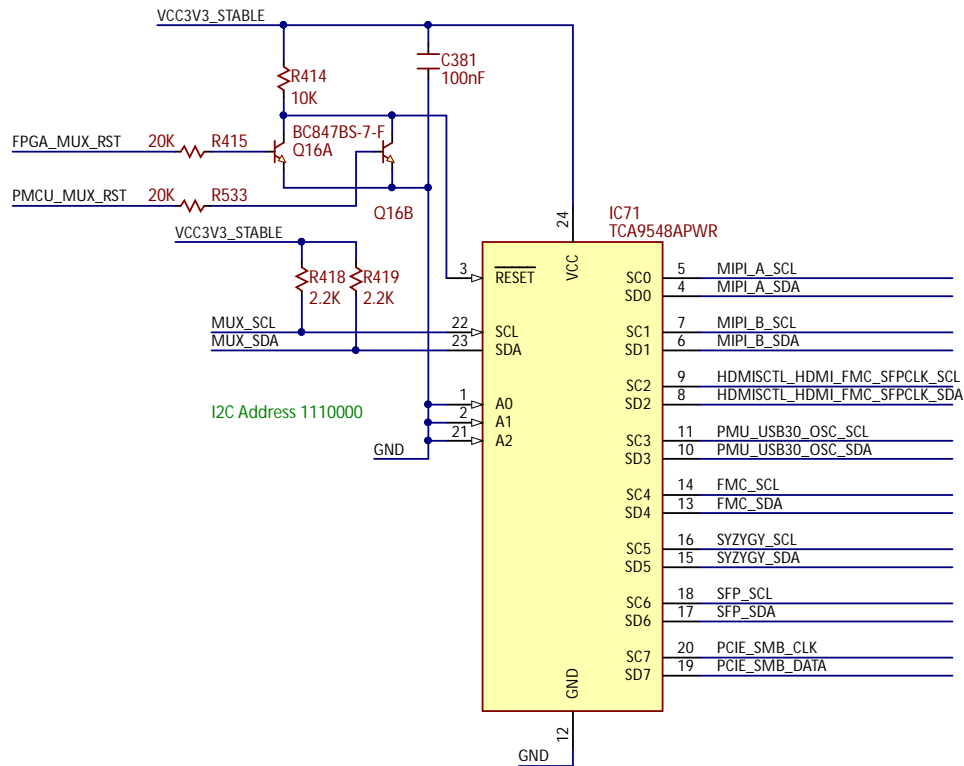
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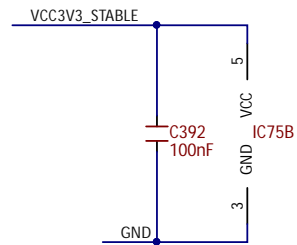
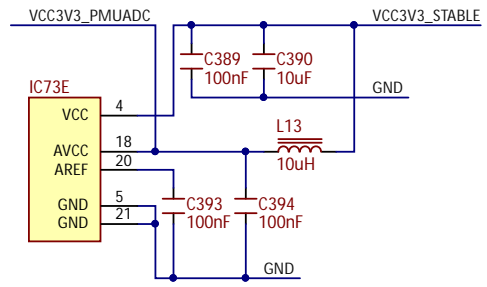
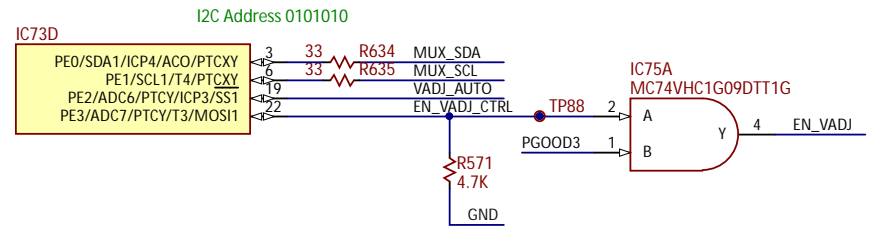
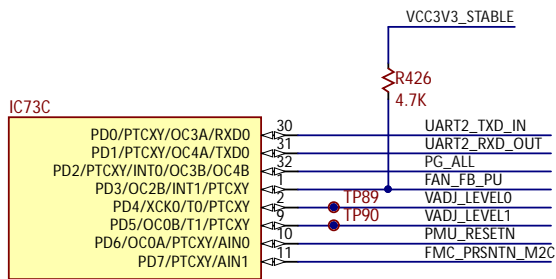
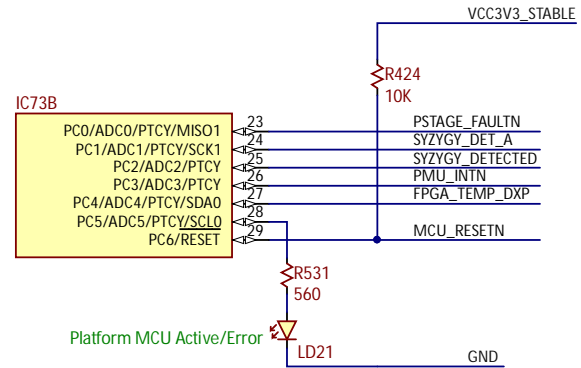
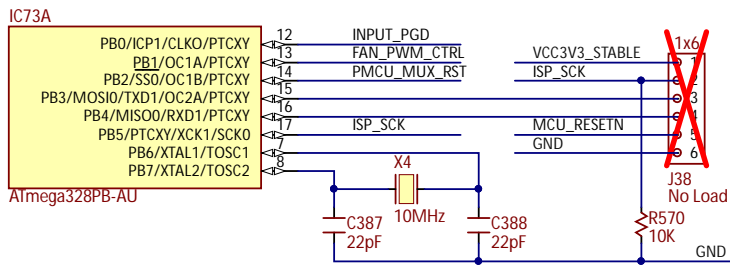
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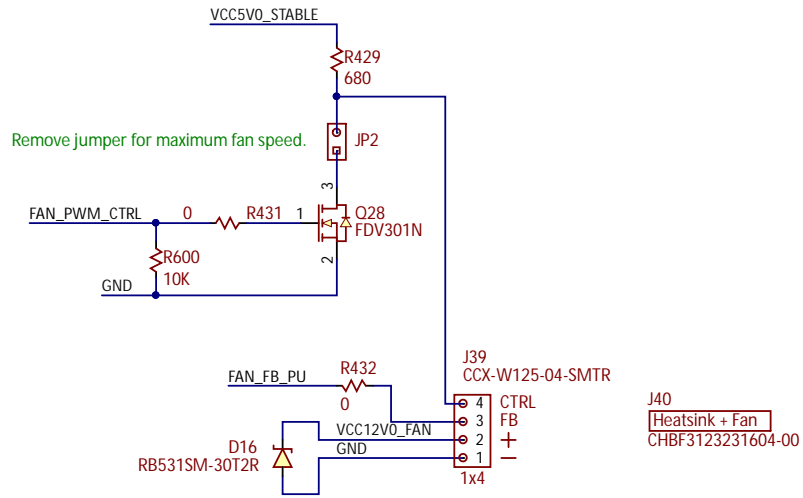
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Genesys ZU-5EV		D.1
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Circuit		
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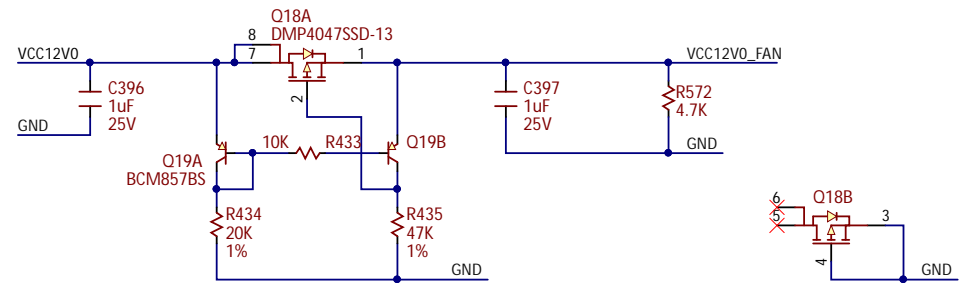
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Genesys ZU-5EV		D.1
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I2C Interfaces		
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Circuit Platform MCU	 <b>DIGILENT</b> A National Instruments Company	
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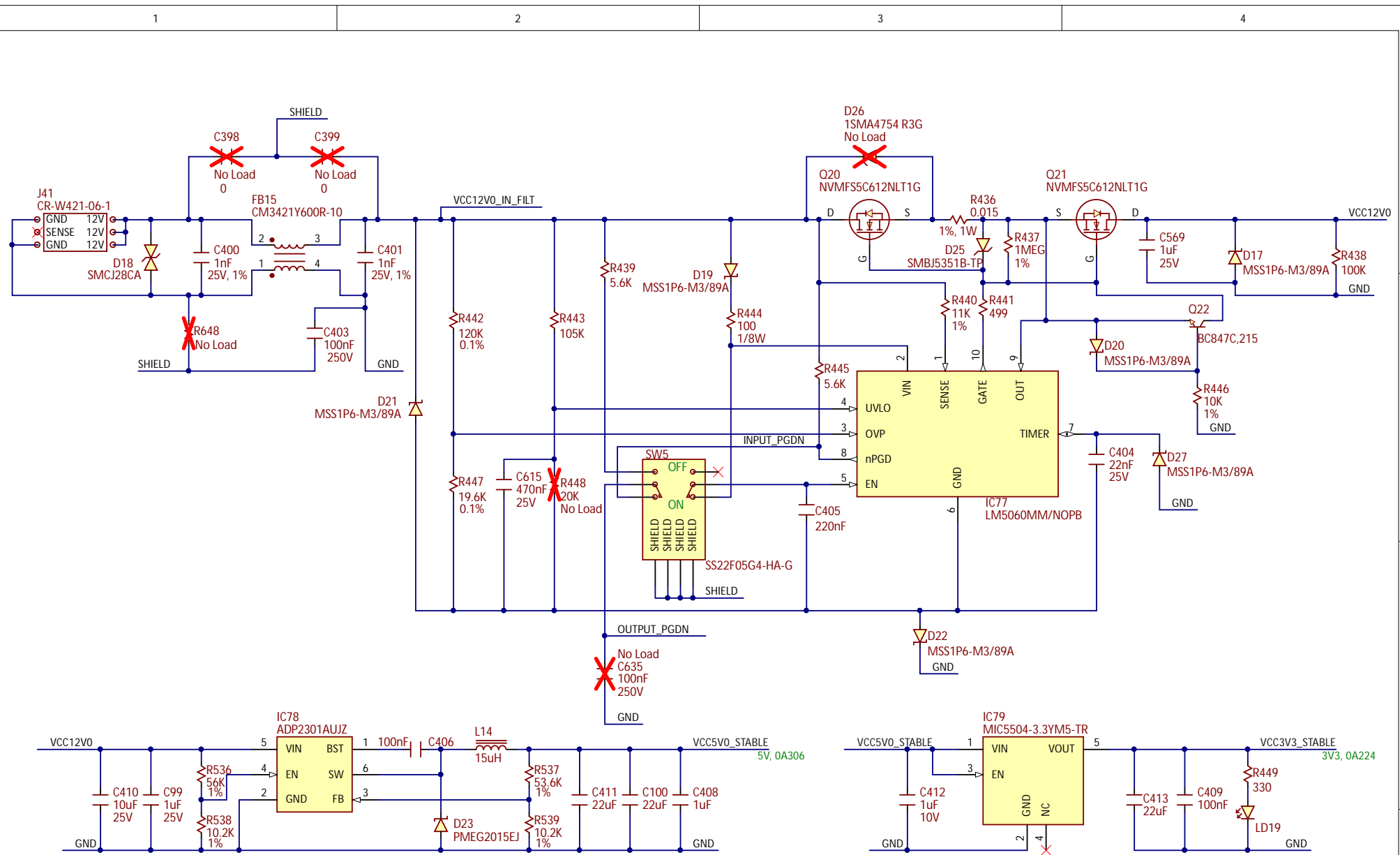


J40  
Heatsink + Fan  
CHBF3123231604-00



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				Copyright		2021	
Circuit		FAN Control		Doc#		500-383	
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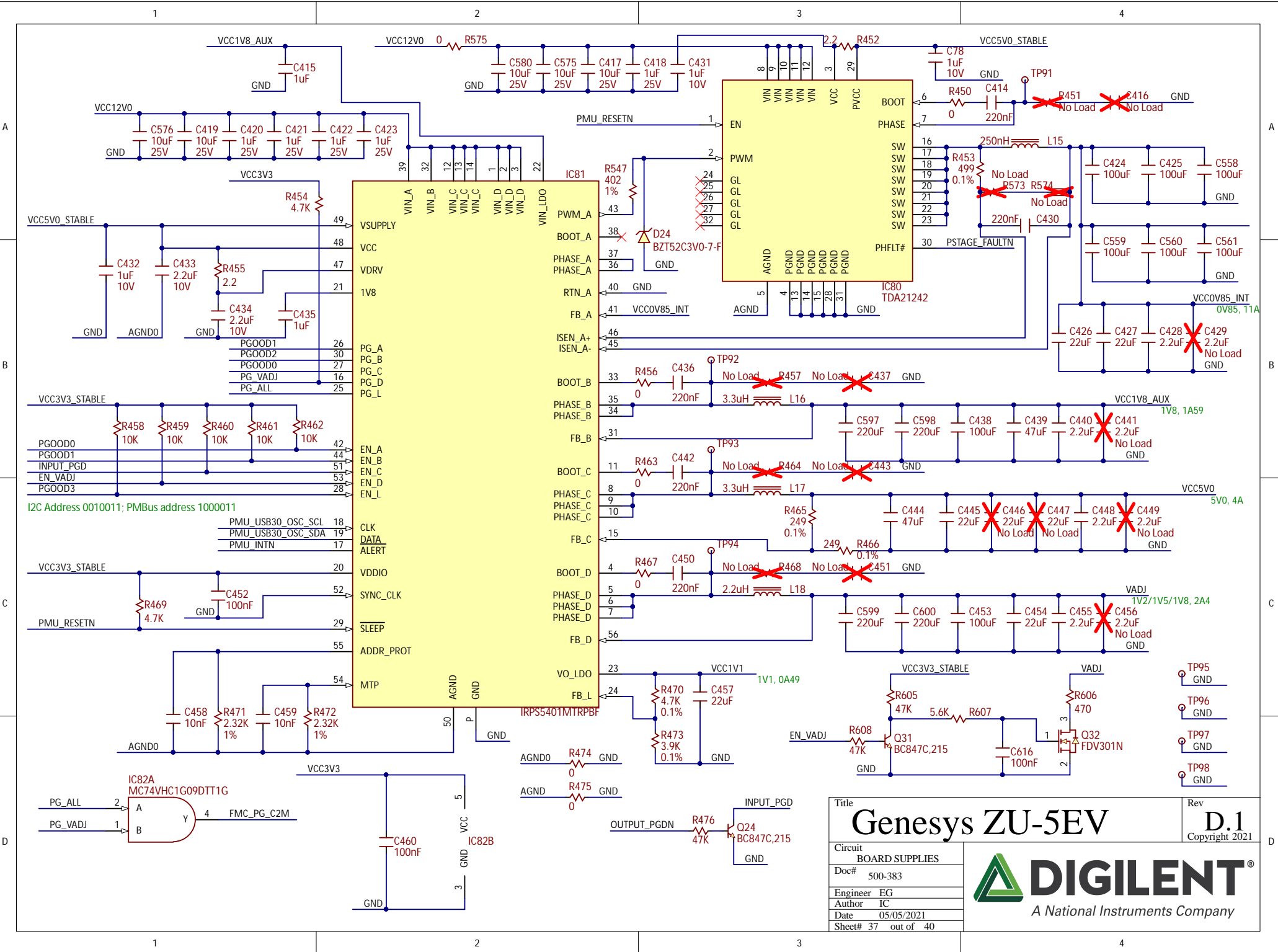




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Circuit		Copyright 2021
12V PROTECTION		
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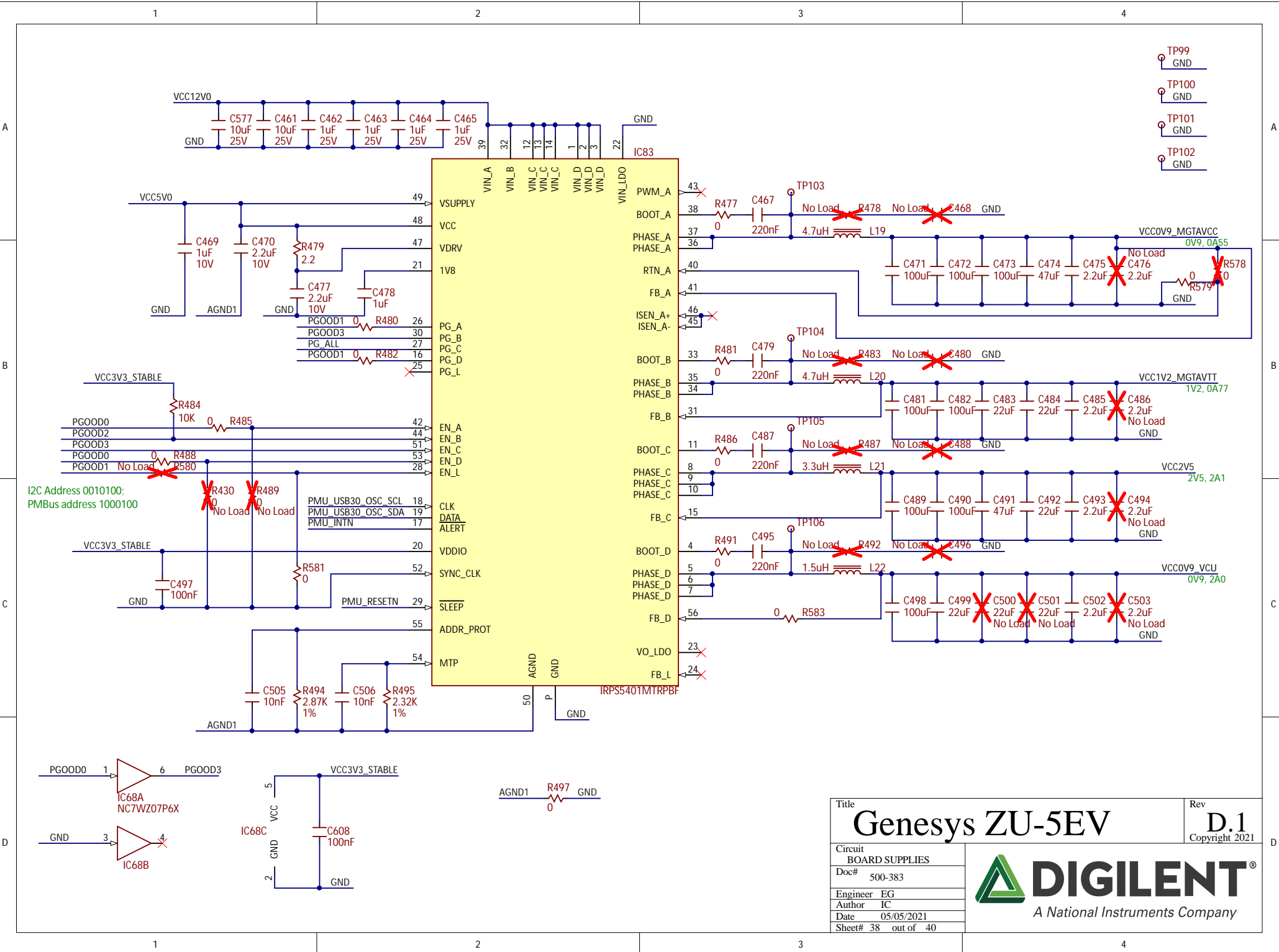






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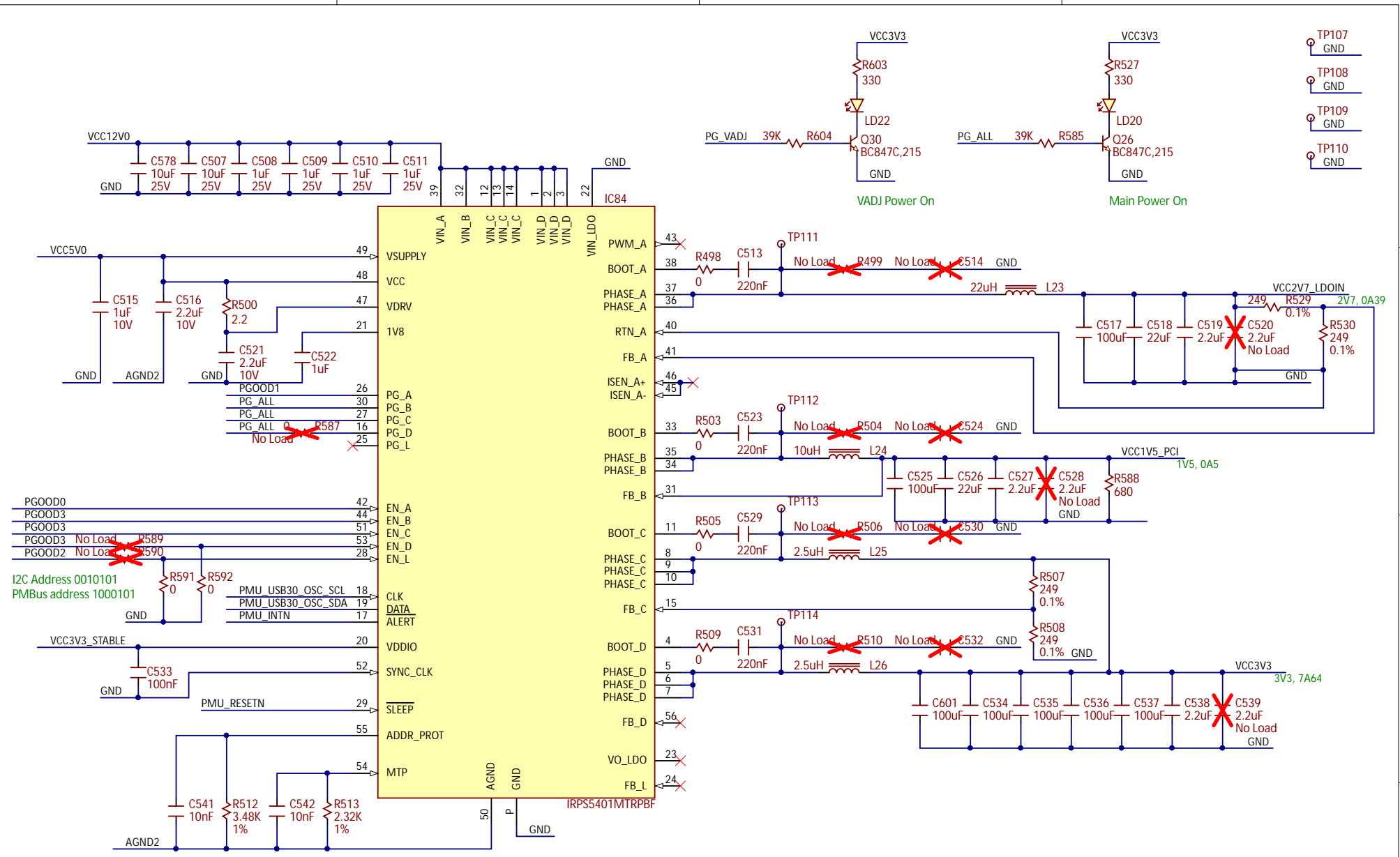
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Circuit	BOARD SUPPLIES	
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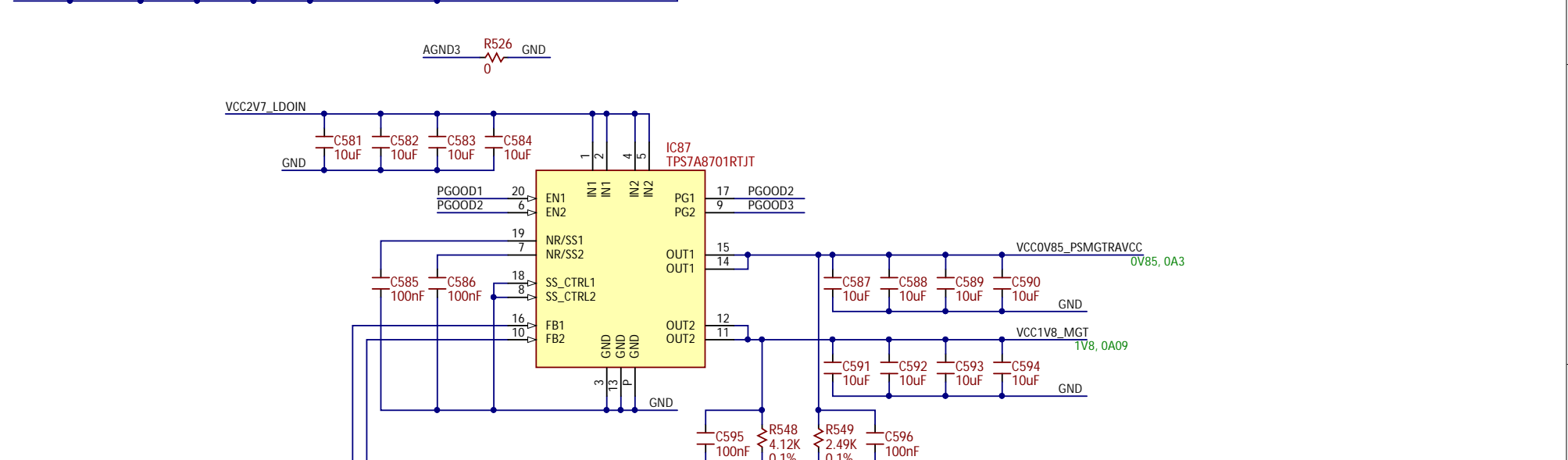
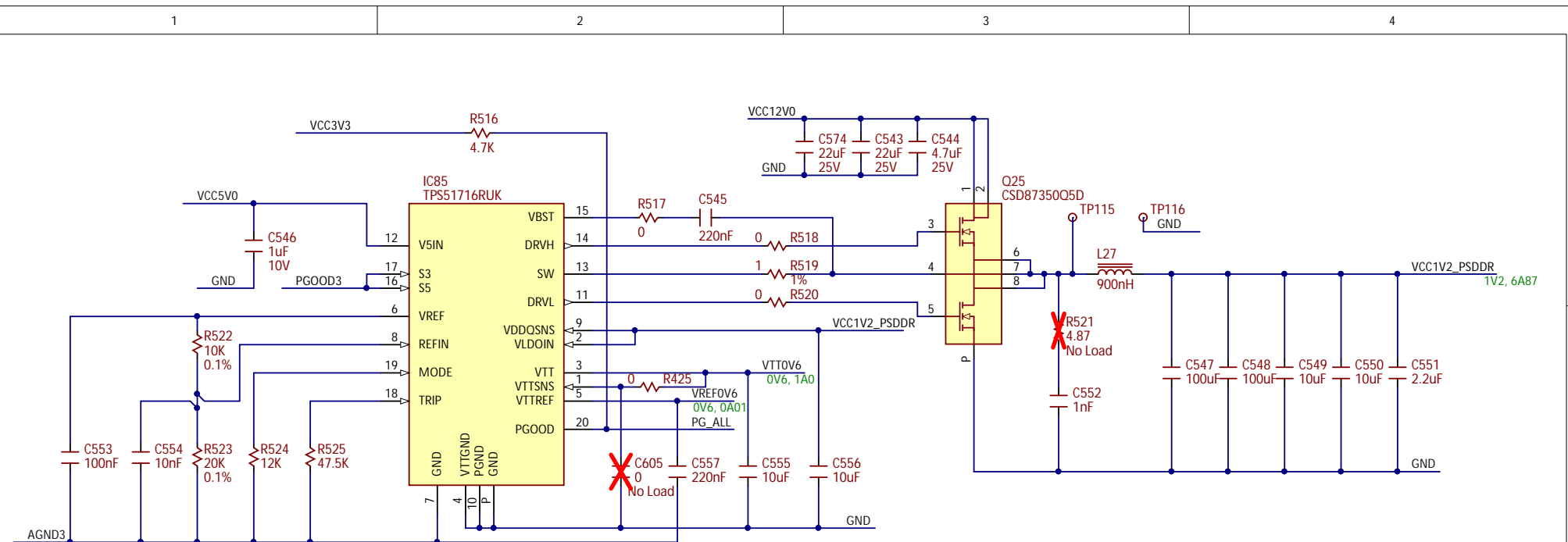
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Circuit		Copyright 2021
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