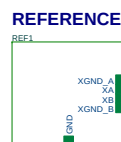
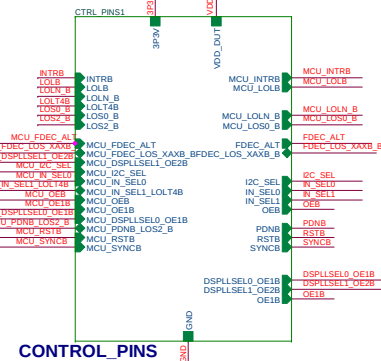
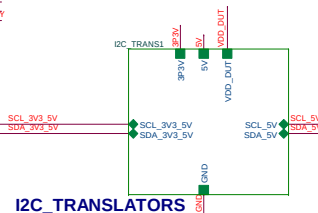
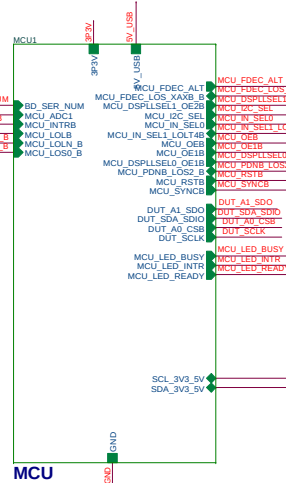
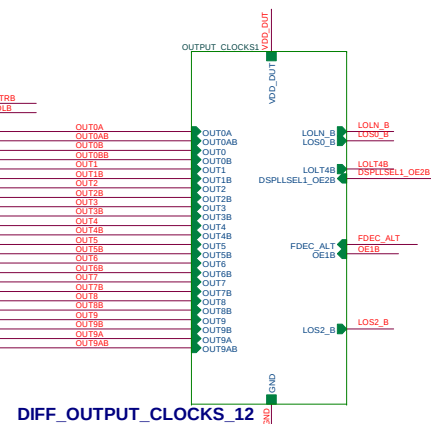
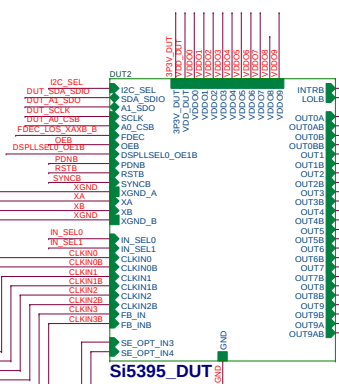


To ascend from a block schematic, right click and select "Previous View".



DIFF INPUT CLOCKS 4

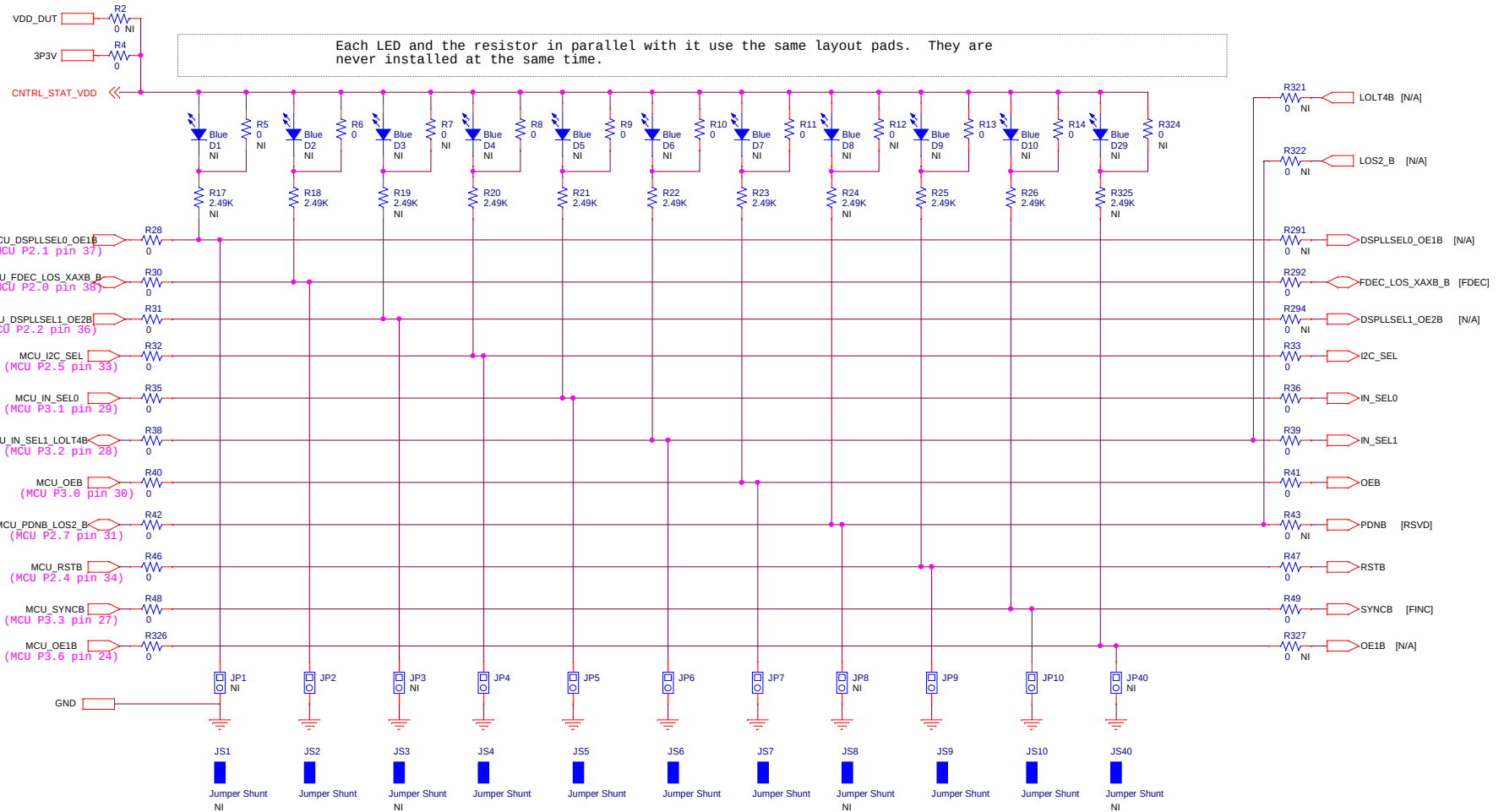


REVISION CONTROL

- Rev 1.0 - Nov 15, 2017, Initial Board Release
Started with a copy of the Si5345-E-EB
schematic. Replaced DUT, PCB, label and Board ID
resistors. tturner
- Rev 1.1 - May 29, 2018, Changed U5 from PCA9517D to
PCA9517AD,118 (this was needed to make sure the NXP
part is ordered instead of the TI version)

		400 W Cesar Chavez Austin, TX 78701	
Title			
SI5345-EB_TOP_REVISION			
Size	Document Number		Rev
B	SI5395P-A-EB		1.1
Date:	Tuesday, May 29, 2018		Sheet 2 of 44

CONTROL PINS CONNECTIONS



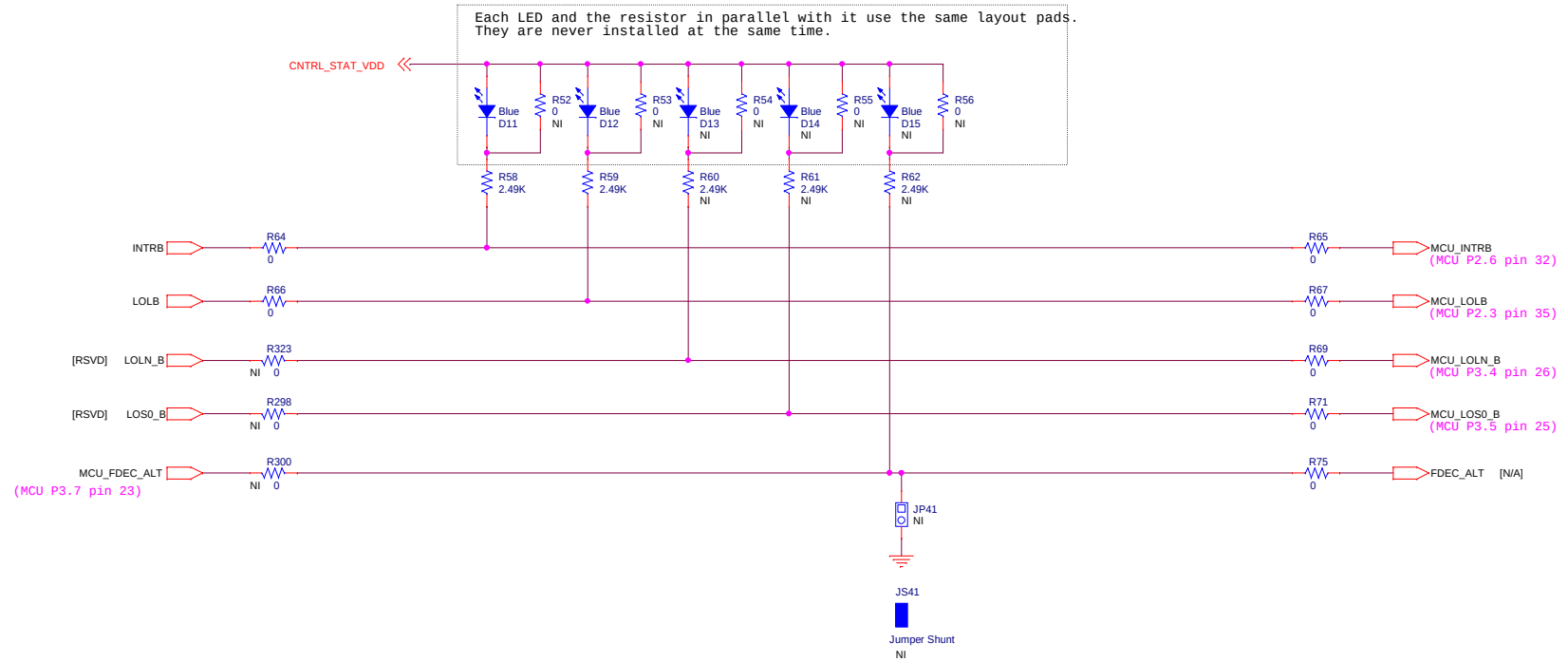
Note:

1. If the net name differs from the DUT pin name, the corresponding DUT pin name is enclosed in brackets. [DUT Pin Name]

2. "N/A" in brackets indicates that the function is not used for the DUT. [N/A]

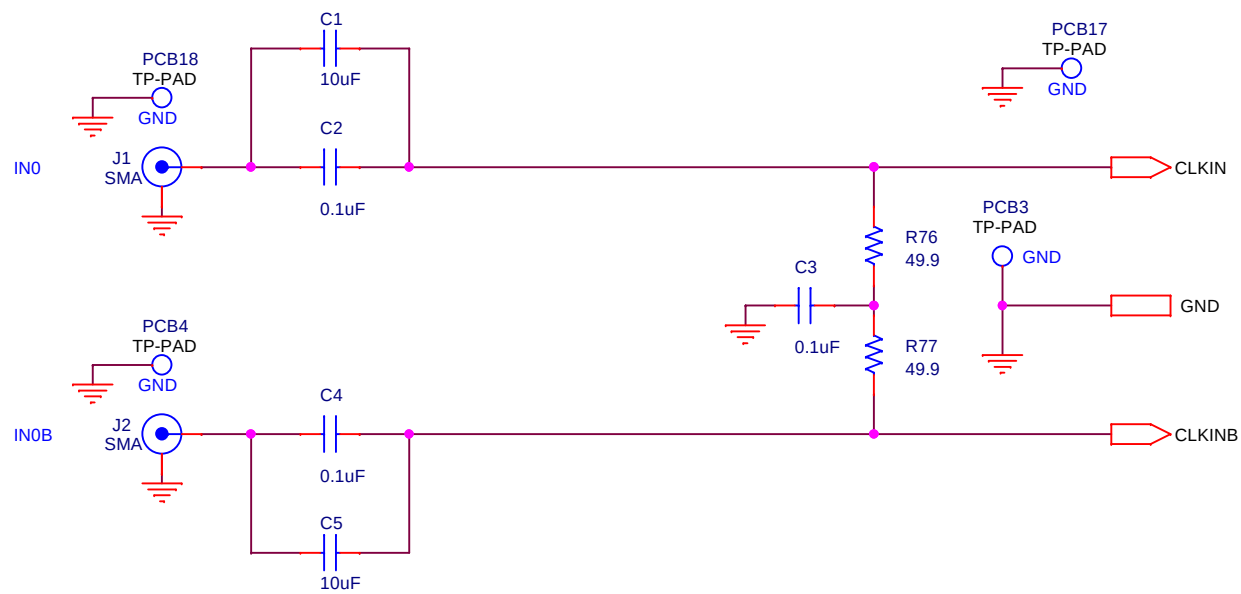
400 W Cesar Chavez Austin, TX 78701		
Title		
CONTROL PINS_P1		
Size	Document Number	Rev
B	SI5395P-A-EB	1.1
Date:	Tuesday, May 29, 2018	Sheet 3 of 44

CONTROL PINS CONNECTIONS



Note:
1. "N/A" in brackets indicates that the function is not used for the DUT. [N/A]

400 W Cesar Chavez Austin, TX 78701		
Title CONTROL_PINS_P2		
Size B	Document Number SI5395P-A-EB	Rev 1.1
Date: Tuesday, May 29, 2018	Sheet 4	of 44



400 W Cesar Chavez
Austin, TX 78701

Title

DIFF_INPUT_CLK

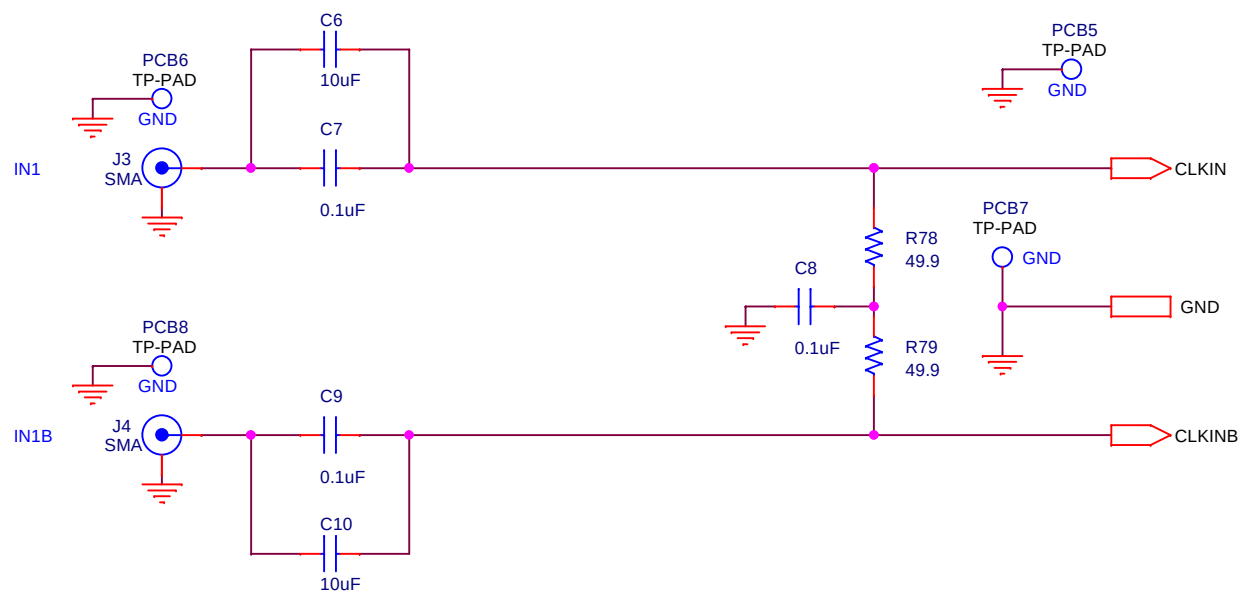
Size
A

Document Number
SI5395P-A-EB

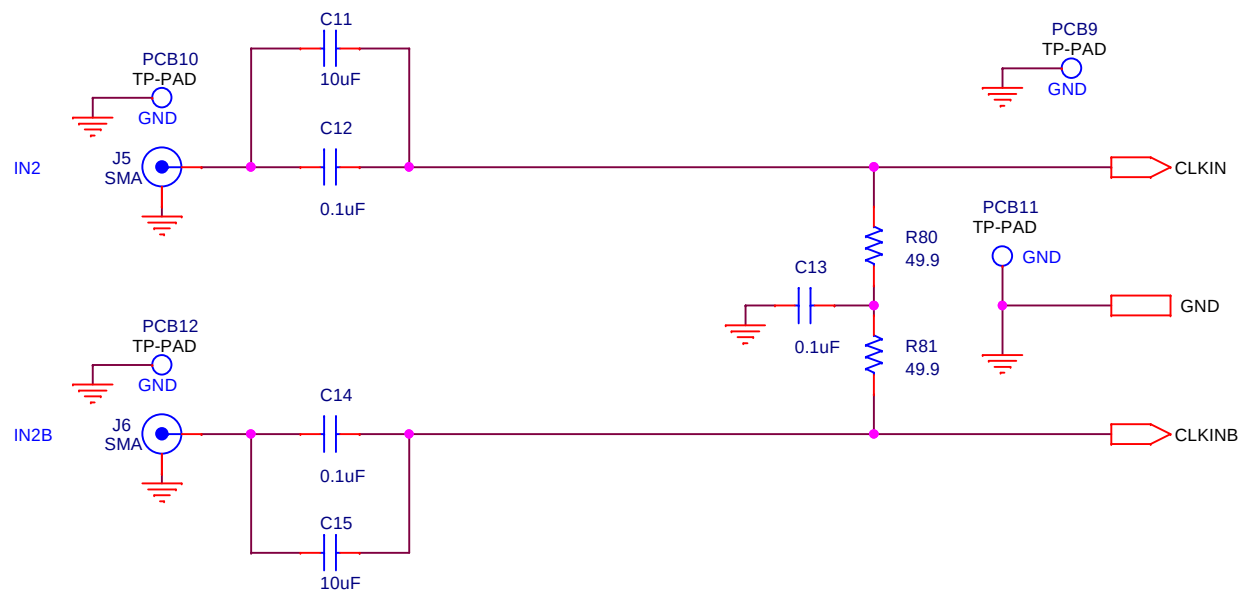
Rev
1.1

Date: Tuesday, May 29, 2018

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 400 W Cesar Chavez Austin, TX 78701		
Title DIFF_INPUT_CLK		
Size A	Document Number SI5395P-A-EB	Rev 1.1
Date:	Tuesday, May 29, 2018	Sheet 6 of 44



400 W Cesar Chavez
Austin, TX 78701

Title

DIFF_INPUT_CLK

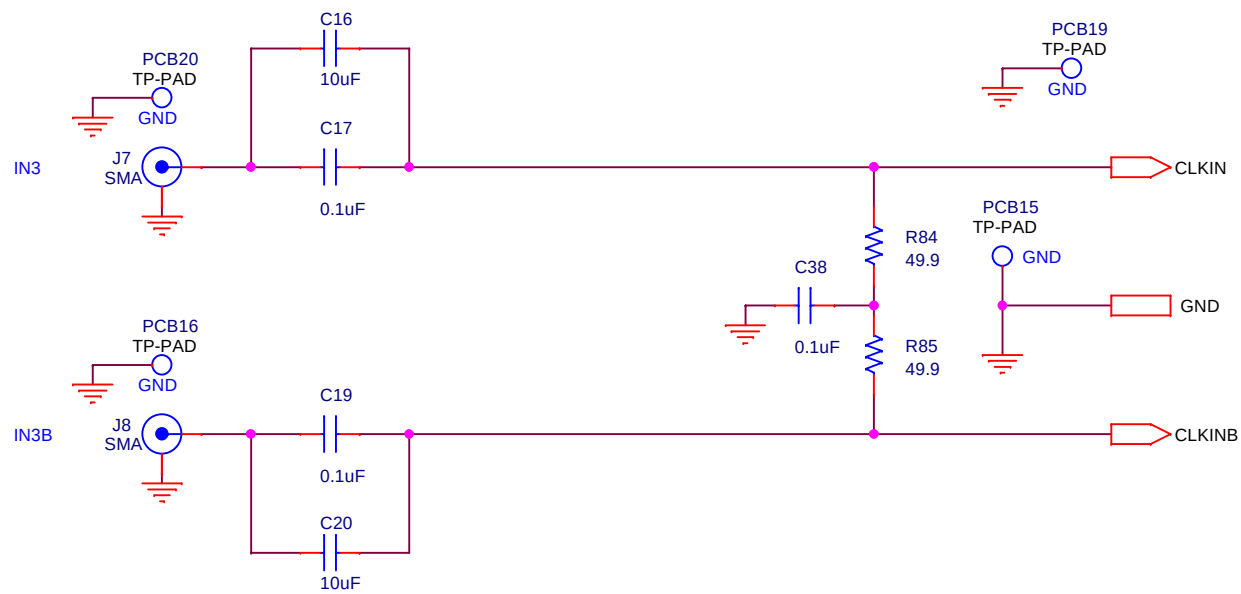
Size
A

Document Number
SI5395P-A-EB

Rev
1.1

Date: Tuesday, May 29, 2018

Sheet 7 of 44



400 W Cesar Chavez
Austin, TX 78701

Title

DIFF_INPUT_CLK

Size
A

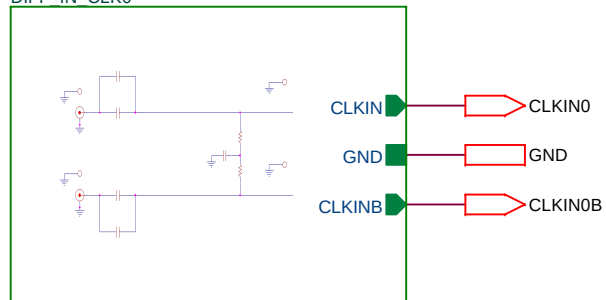
Document Number
SI5395P-A-EB

Rev
1.1

Date: Tuesday, May 29, 2018

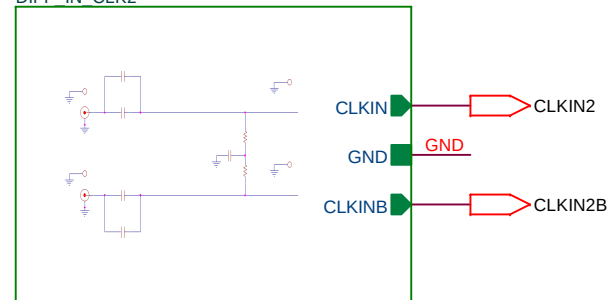
Sheet 8 of 44

DIFF IN CLK0



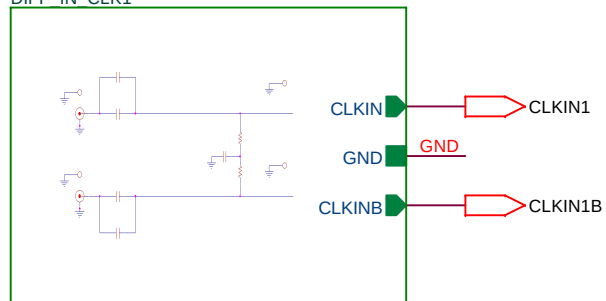
DIFF_INPUT_CLK

DIFF IN CLK2



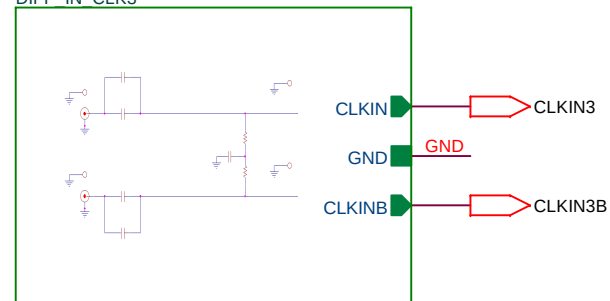
DIFF_INPUT_CLK

DIFF IN CLK1

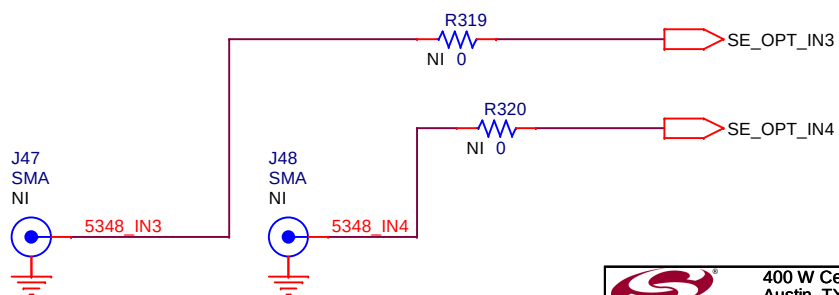


DIFF_INPUT_CLK

DIFF IN CLK3



DIFF_INPUT_CLK



Single-ended clocks only.



400 W Cesar Chavez
Austin, TX 78701

Title

DIFF_INPUT_CLOCKS_4

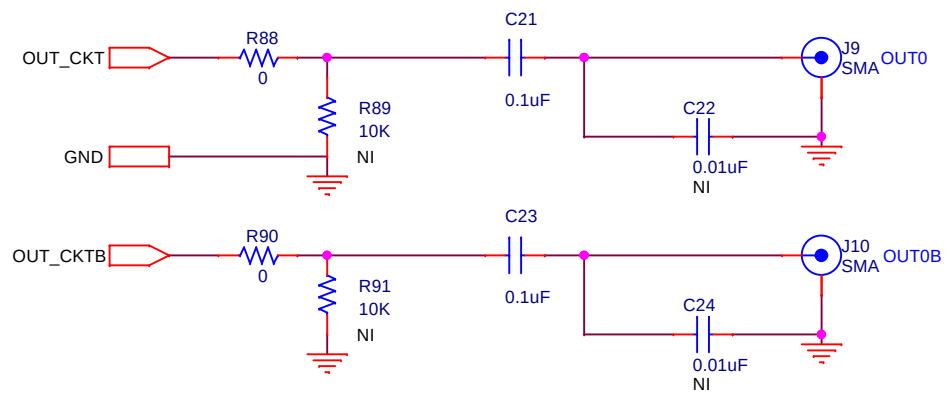
Size
A

Document Number
SI5395P-A-EB

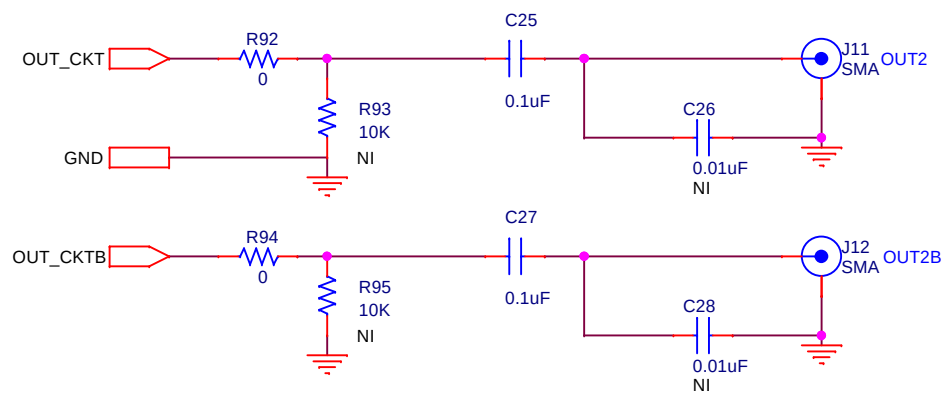
Rev
1.1

Date: Tuesday, May 29, 2018

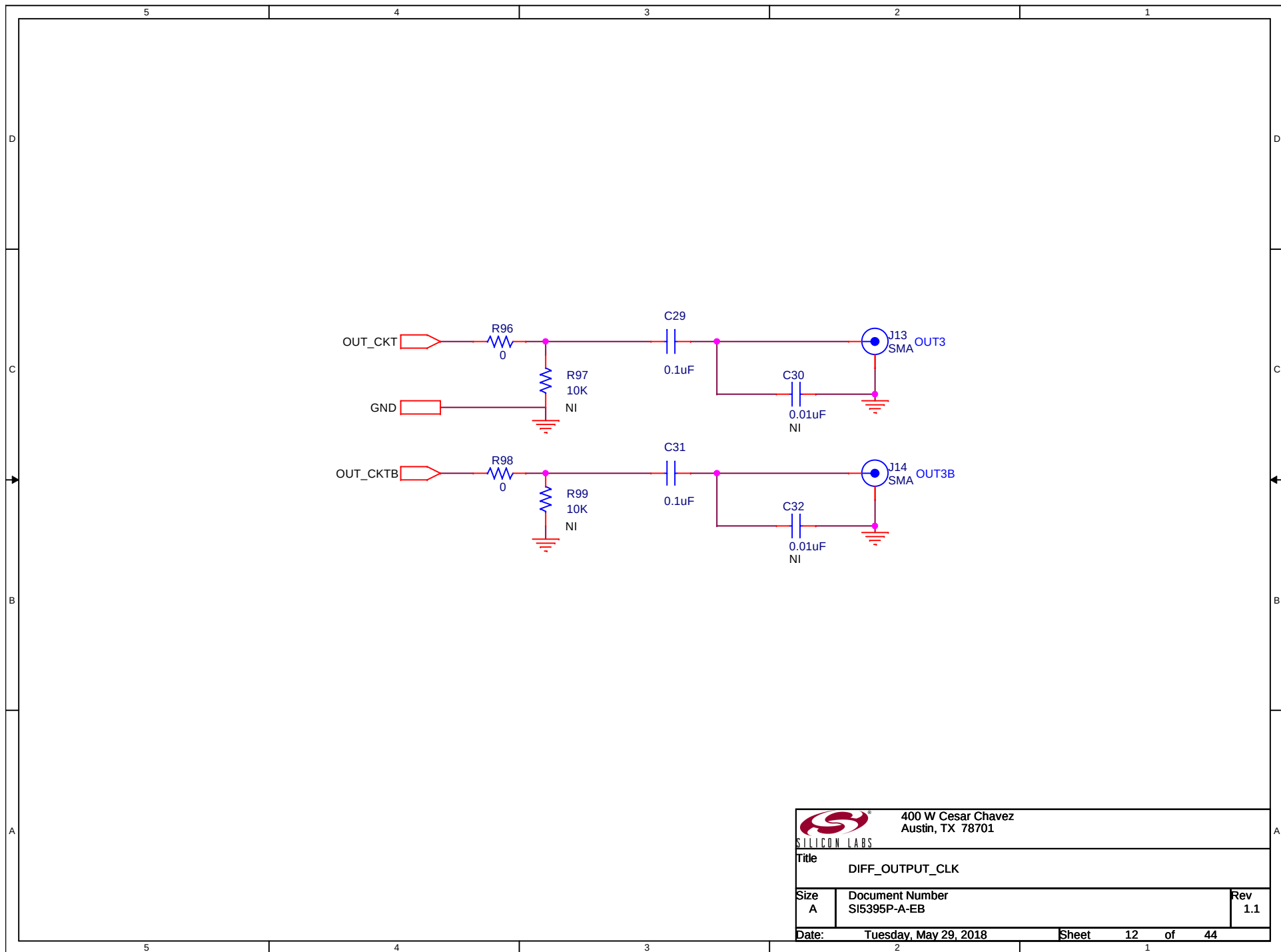
Sheet 9 of 44

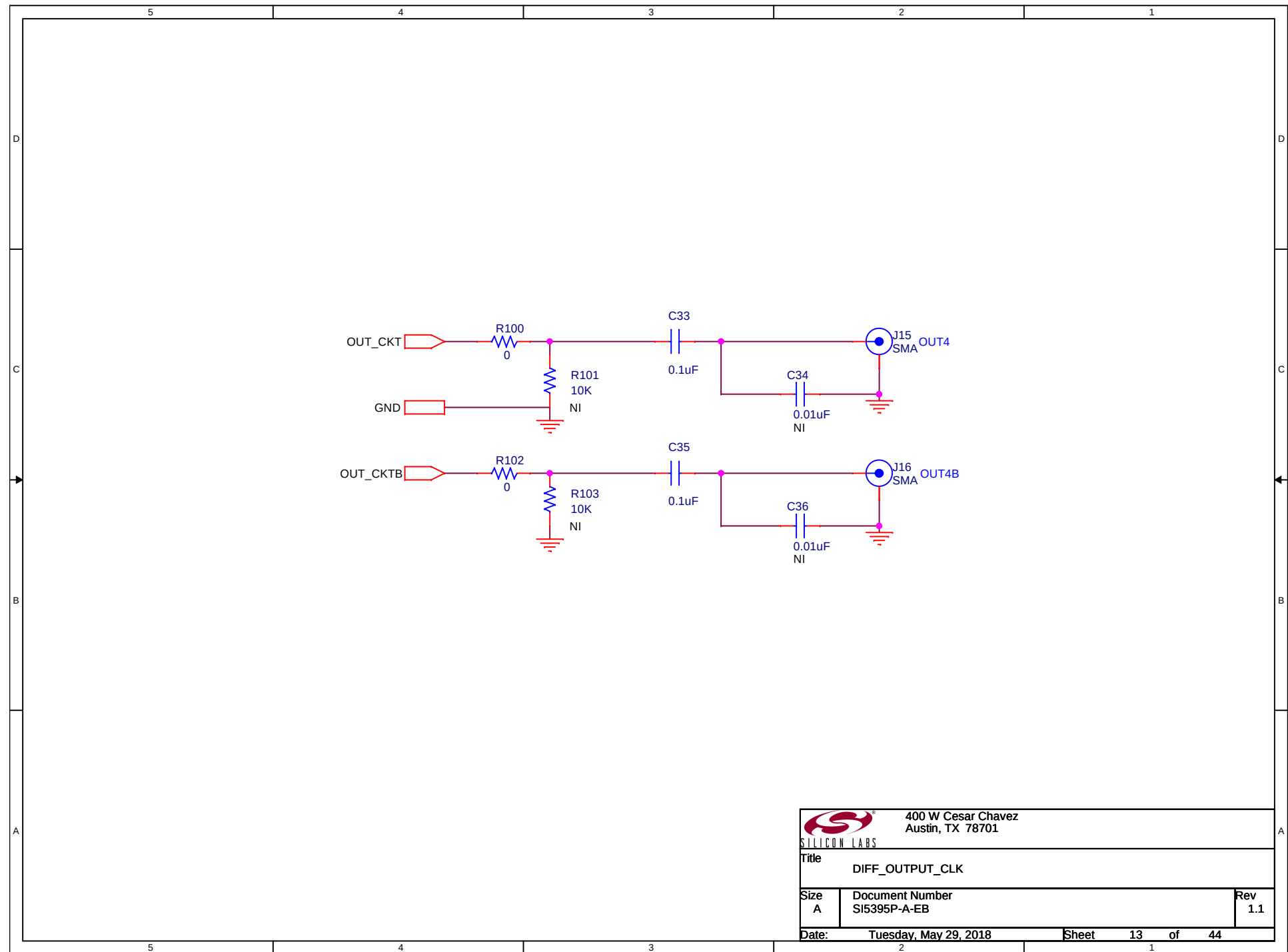


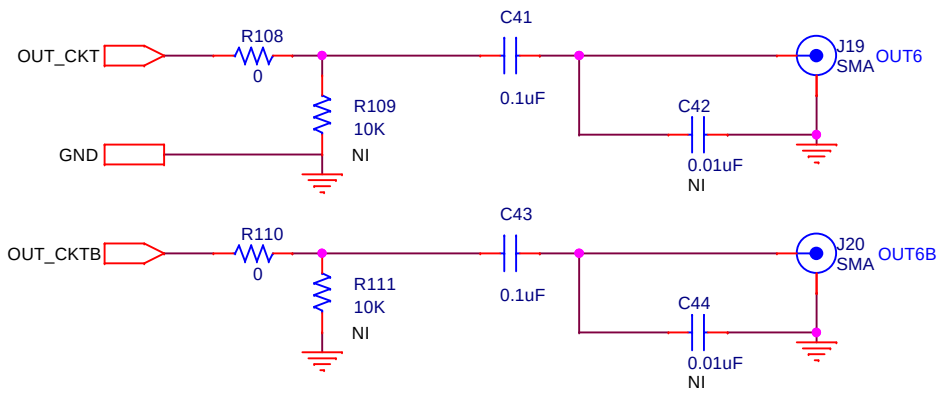
 400 W Cesar Chavez Austin, TX 78701		
Title DIFF_OUTPUT_CLK		
Size A	Document Number SI5395P-A-EB	Rev 1.1
Date:	Tuesday, May 29, 2018	Sheet 10 of 44



 400 W Cesar Chavez Austin, TX 78701		
Title DIFF_OUTPUT_CLK		
Size A	Document Number SI5395P-A-EB	Rev 1.1
Date:	Tuesday, May 29, 2018	Sheet 11 of 44





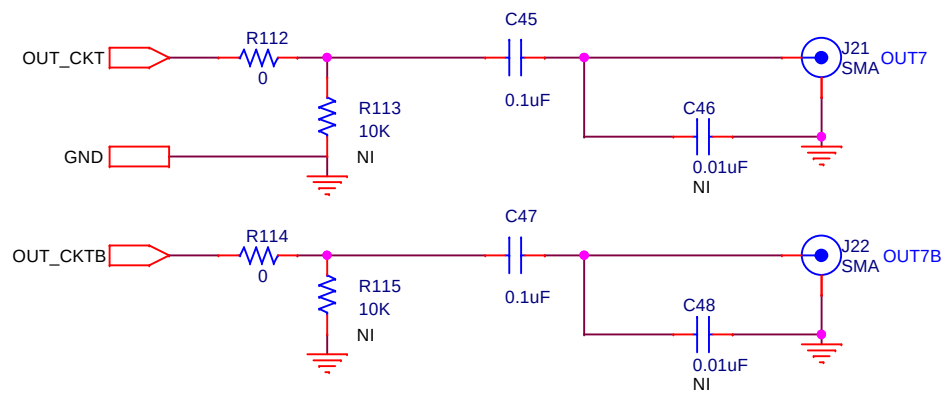


400 W Cesar Chavez
Austin, TX 78701

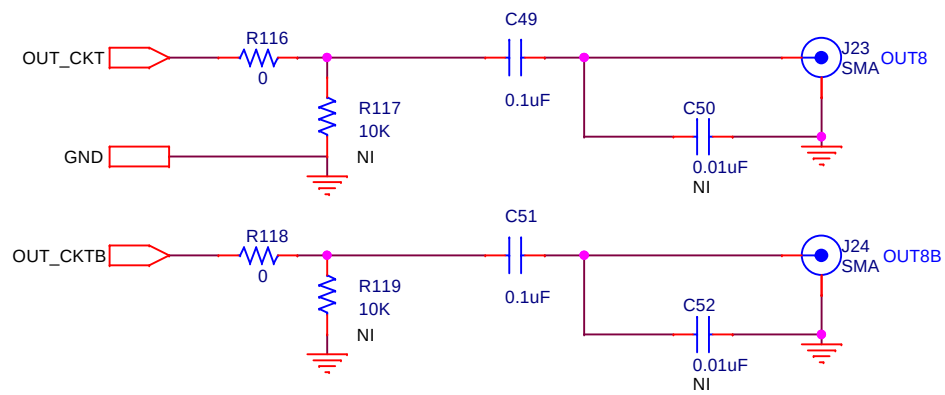
Title
DIFF_OUTPUT_CLK

Size A	Document Number SI5395P-A-EB	Rev 1.1
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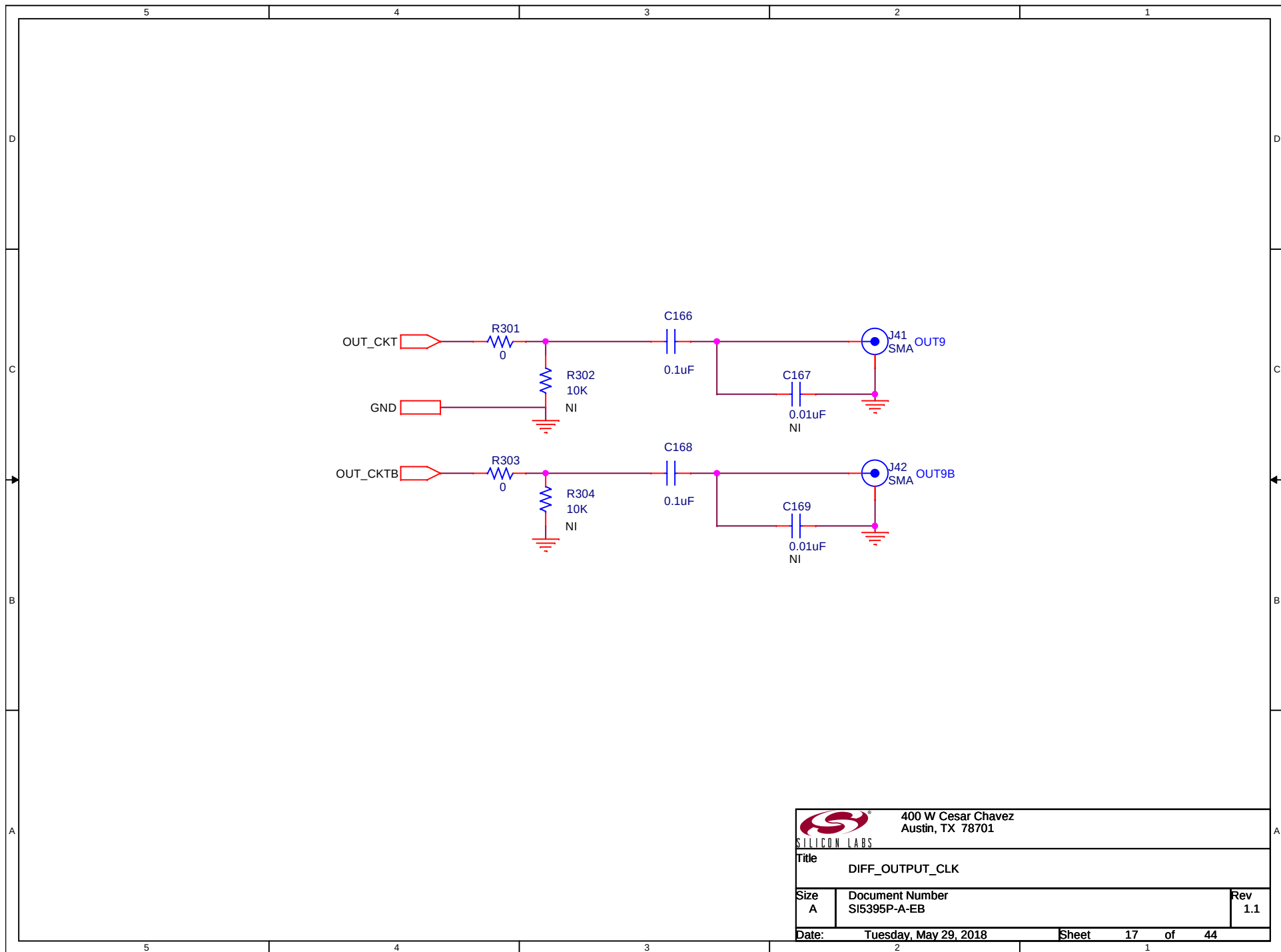
Date: Tuesday, May 29, 2018 Sheet 14 of 44



 400 W Cesar Chavez Austin, TX 78701		
Title DIFF_OUTPUT_CLK		
Size A	Document Number SI5395P-A-EB	Rev 1.1
Date:	Tuesday, May 29, 2018	Sheet 15 of 44

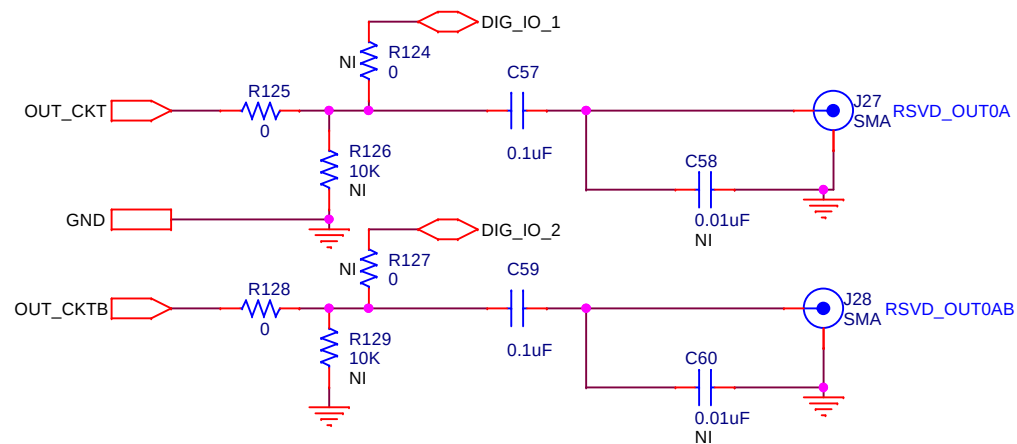


 400 W Cesar Chavez Austin, TX 78701		
Title DIFF_OUTPUT_CLK		
Size A	Document Number SI5395P-A-EB	Rev 1.1
Date:	Tuesday, May 29, 2018	Sheet 16 of 44



 400 W Cesar Chavez Austin, TX 78701		
Title DIFF_OUTPUT_CLK		
Size A	Document Number SI5395P-A-EB	Rev 1.1
Date: Tuesday, May 29, 2018	Sheet 17	of 44

DIFF_OUTPUT_CLK_DIG_IO



400 W Cesar Chavez
Austin, TX 78701

Title

DIFF_OUTPUT_CLK_DIG_IO

Size
A

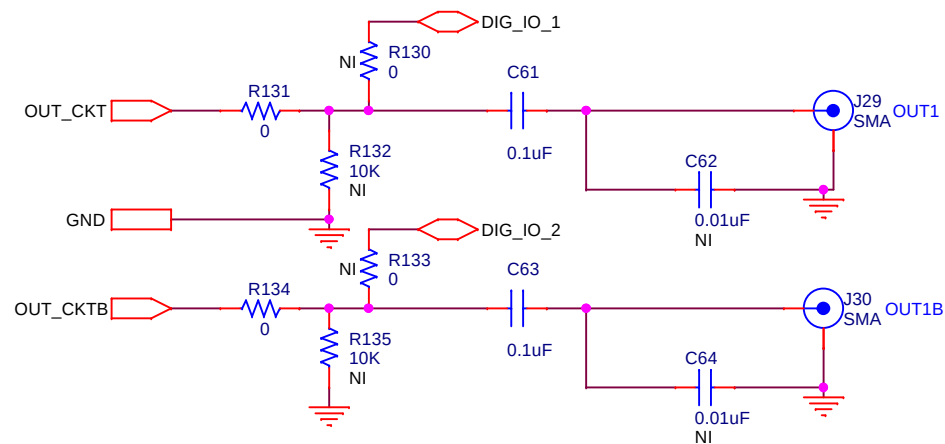
Document Number
SI5395P-A-EB

Rev
1.1

Date: Tuesday, May 29, 2018

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DIFF_OUTPUT_CLK_DIG_IO



400 W Cesar Chavez
Austin, TX 78701

Title

DIFF_OUTPUT_CLK_DIG_IO

Size
A

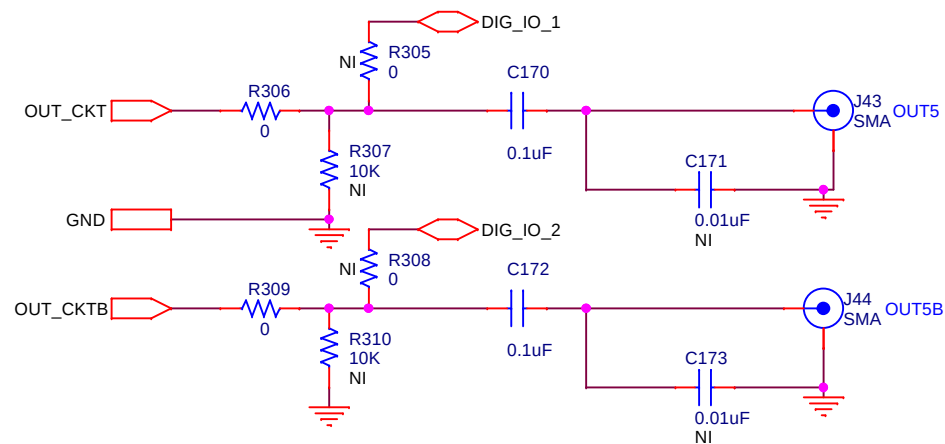
Document Number
SI5395P-A-EB

Rev
1.1

Date: Tuesday, May 29, 2018

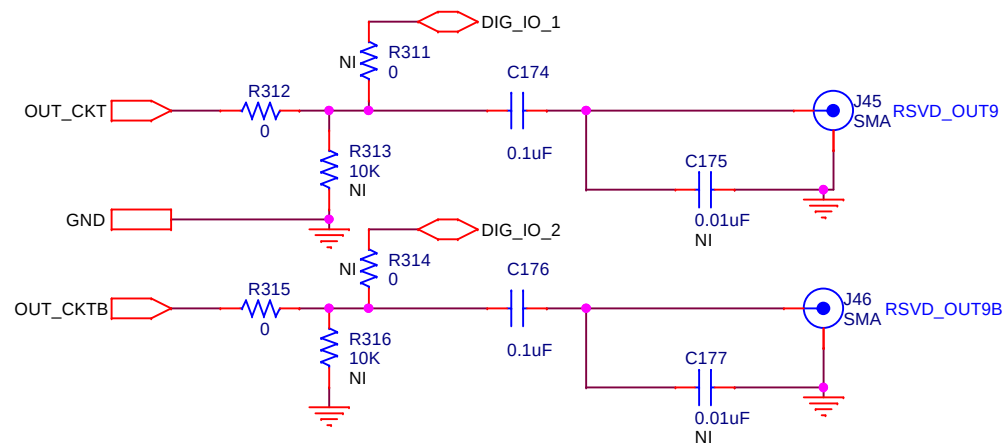
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DIFF_OUTPUT_CLK_DIG_IO



 400 W Cesar Chavez Austin, TX 78701		
Title DIFF_OUTPUT_CLK_DIG_IO		
Size A	Document Number SI5395P-A-EB	Rev 1.1
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DIFF_OUTPUT_CLK_DIG_IO



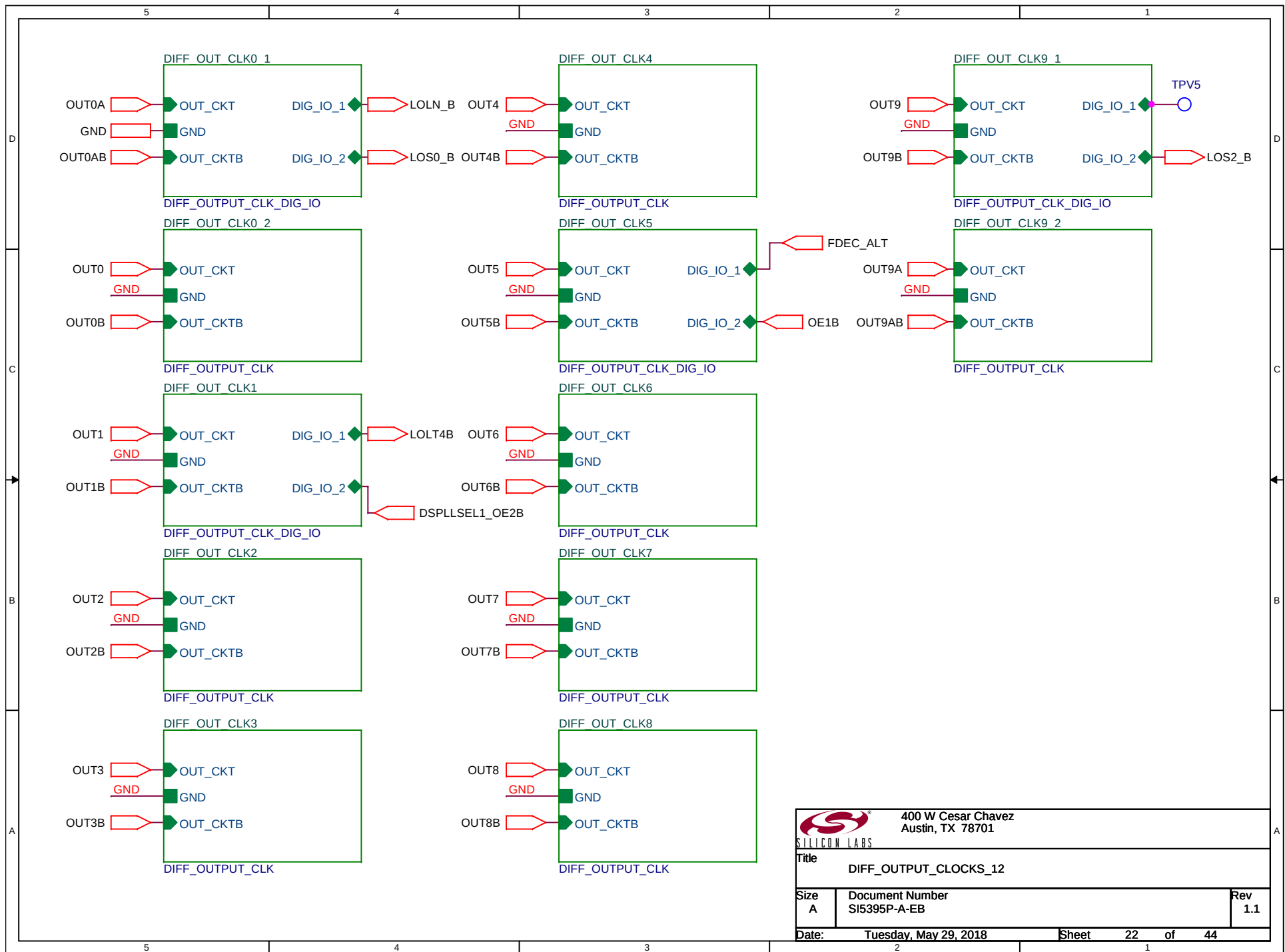
400 W Cesar Chavez
Austin, TX 78701

Title
DIFF_OUTPUT_CLK_DIG_IO

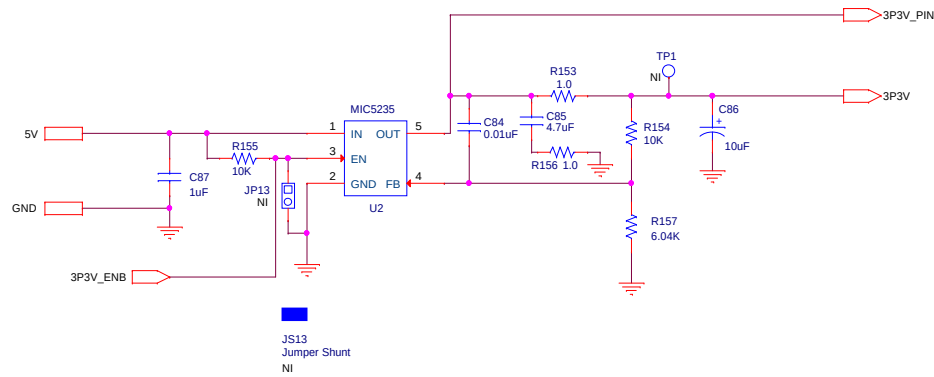
Size A Document Number
SI5395P-A-EB

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1.1

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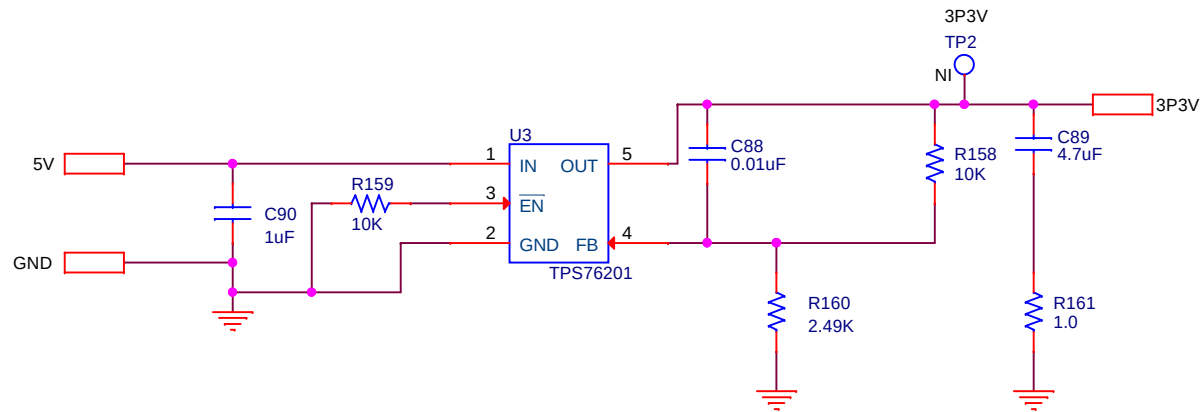
Fixed 3.3V 150 mA Voltage Regulator



3P3V_DUT (In Schematic)
VDDA DUT (Board Silkscreen)

		400 W Cesar Chavez Austin, TX 78701	
Title		VDD_REG_MIC5235	
Size	Document Number	Rev	
B	SI5395P-A-EB	1.1	
Date:	Tuesday, May 29, 2018	Sheet	23 of 44

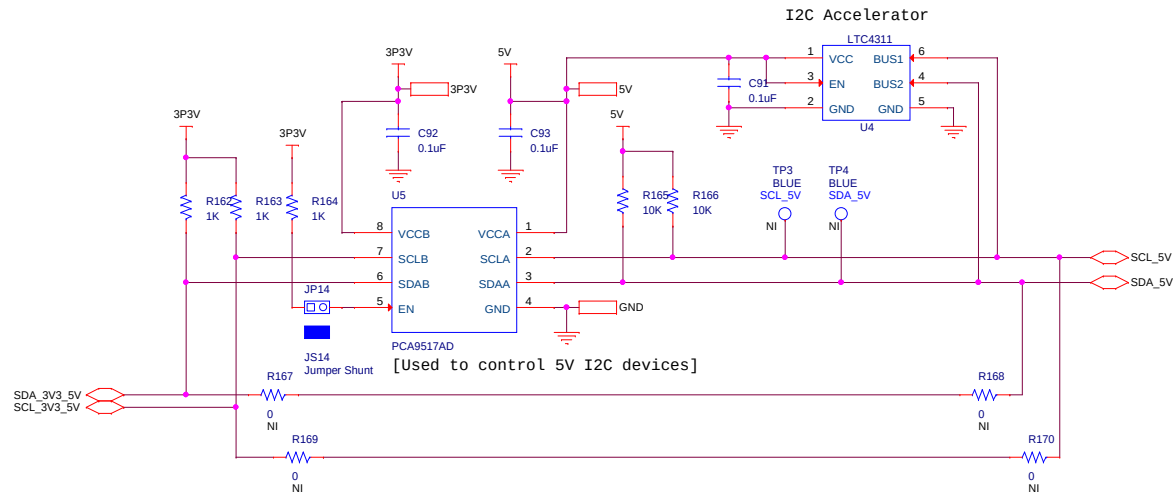
Fixed 3.3V 100 mA Voltage Regulator (Enabled, no current measurement supported.)



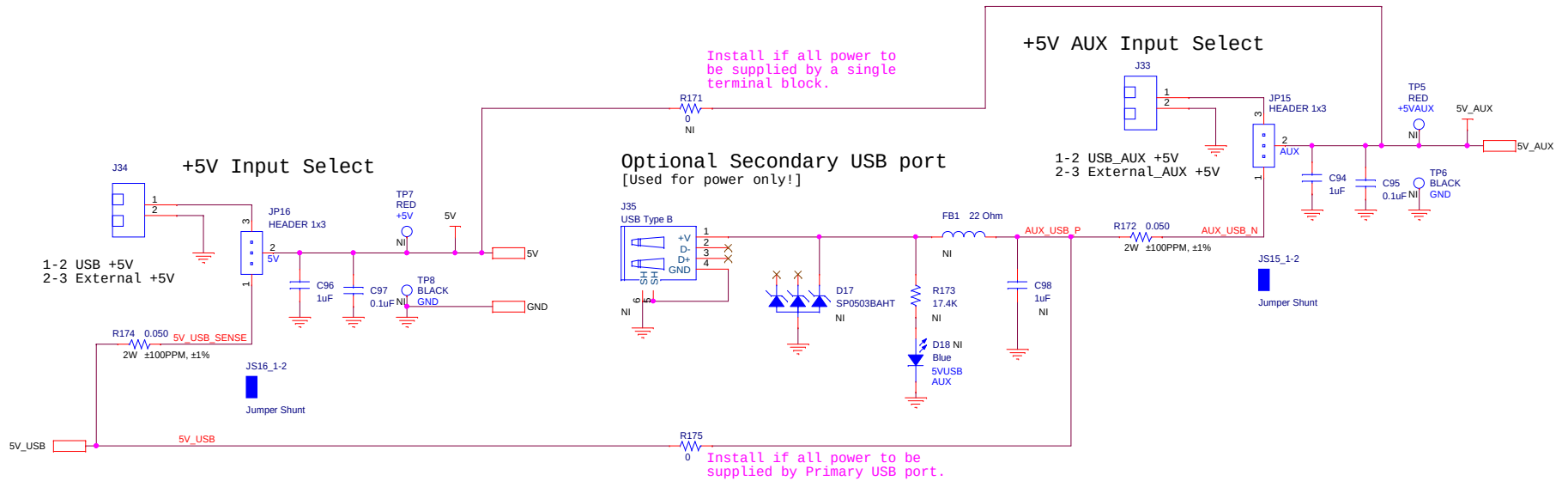
3P3V (In Schematic)
3P3V (Board Silkscreen)

		400 W Cesar Chavez Austin, TX 78701	
Title			
FIXED_3V3_REG_TPS76201_EN_NO_IM			
Size A	Document Number SI5395P-A-EB <Variant Name>		Rev 1.1
Date:	Tuesday, May 29, 2018	Sheet	24 of 44

I2C LEVEL TRANSLATORS



MAIN POWER INPUT SELECTS EXTERNAL OR USB

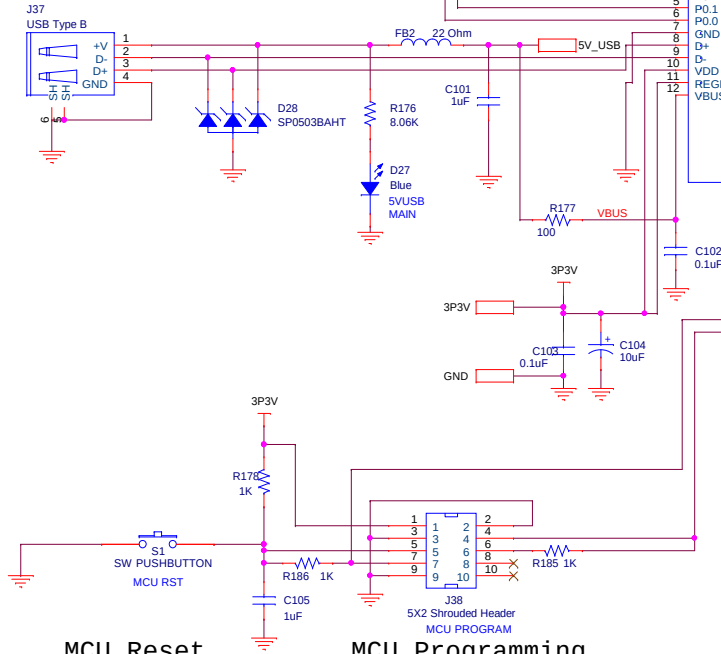
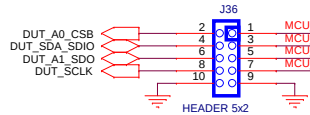


 400 W Cesar Chavez Austin, TX 78701	
Title	
MAIN_POWER_CONNECTIONS	
Size	Document Number
B	SI5395P-A-EB
Date:	Tuesday, May 29, 2018
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Rev	1.1

8051 MCU

Jumper Shunts

- JS36_1-2
- JS36_3-4
- JS36_5-6
- JS36_7-8
- JS36_9-10



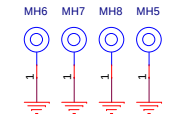
MCU Reset

MCU Programming

Mounting Holes, Screws, and Standoffs

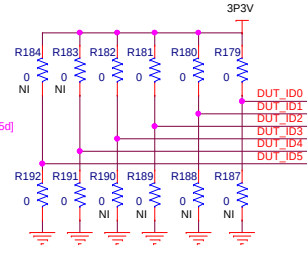


Mounting Holes



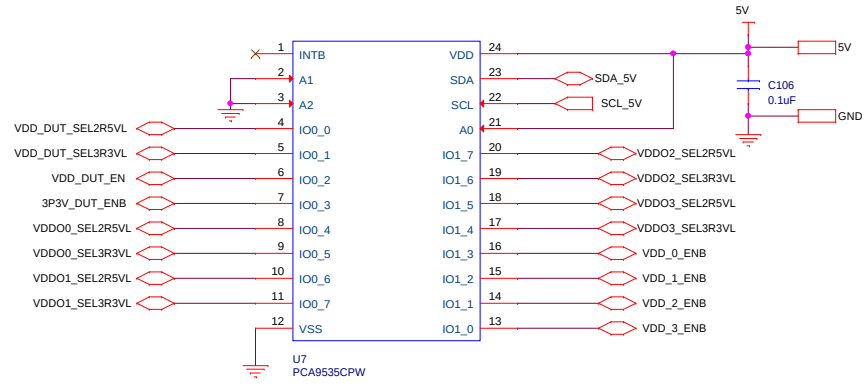
Removed "toe tag" MH9.

DUT_ID[5:0] = 001111 [15d]

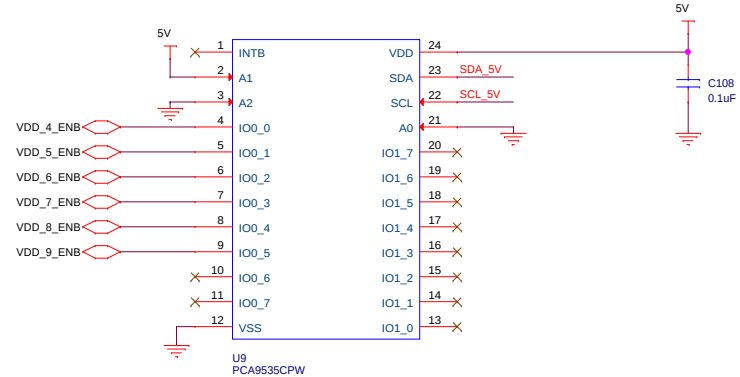


400 W Cesar Chavez Austin, TX 78701			
Title MCU			
Size B	Document Number SI5395P-A-EB		Rev 1.1
Date:	Tuesday, May 29, 2018	Sheet	27 of 44

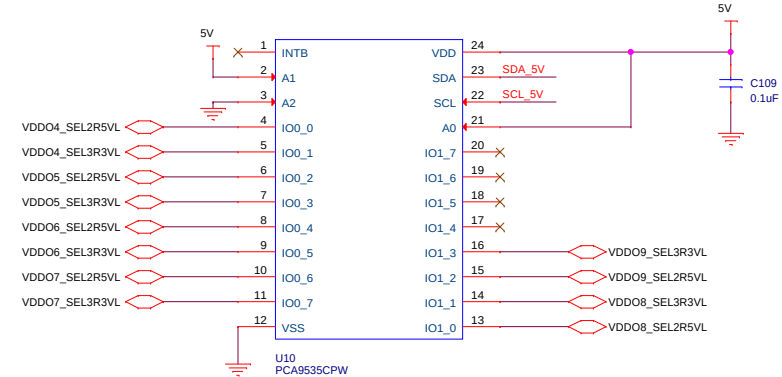
PERIPHERALS



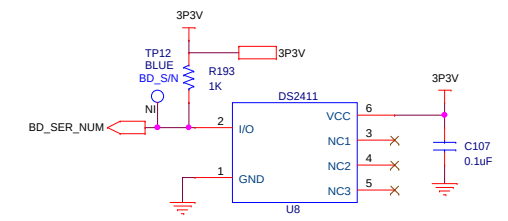
I2C VDD ENABLES/SELECTS FOR REGULATORS
I2C address: 0100001



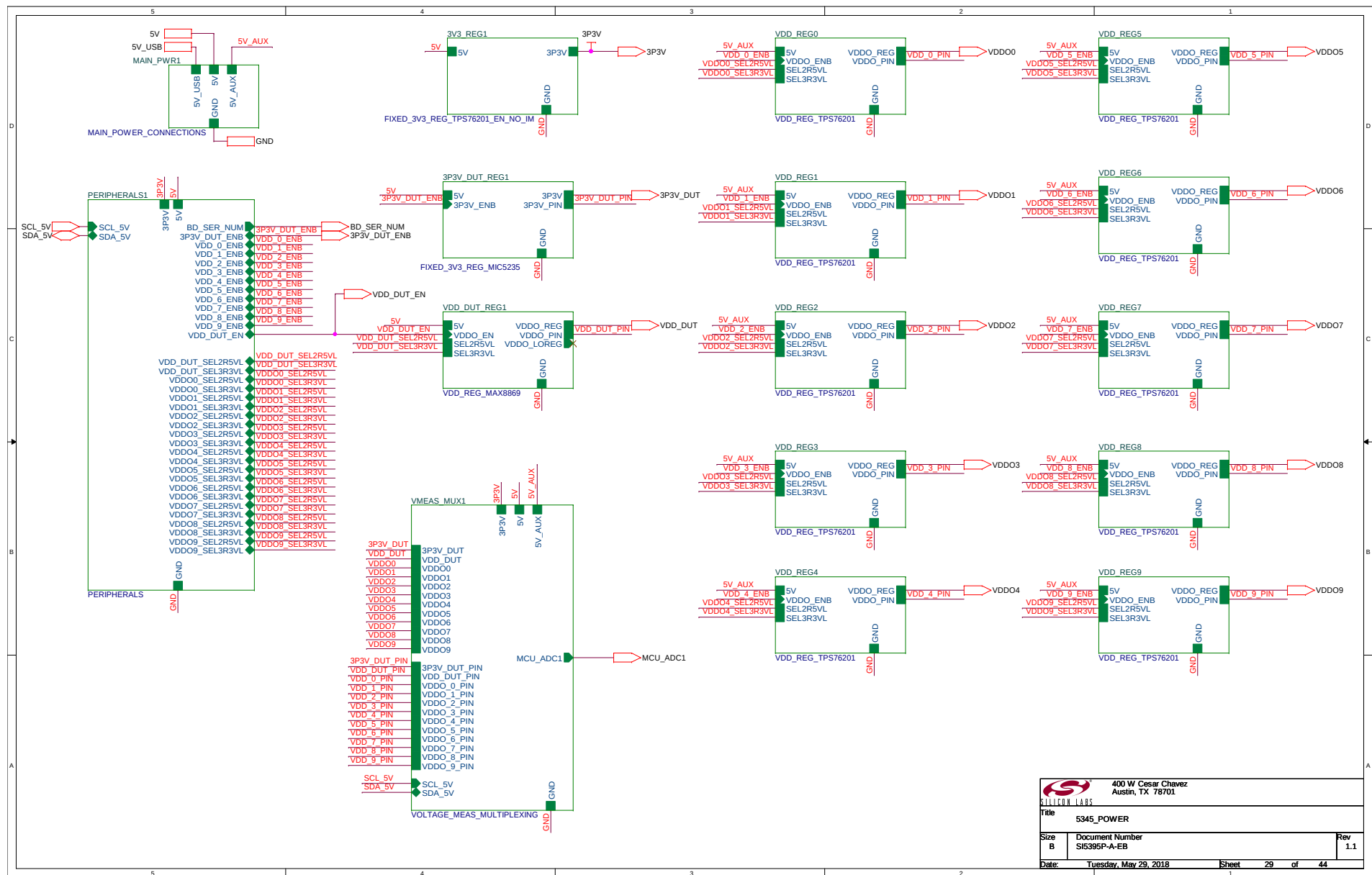
I2C VDD ENABLES/SELECTS FOR REGULATORS
I2C address: 0100010



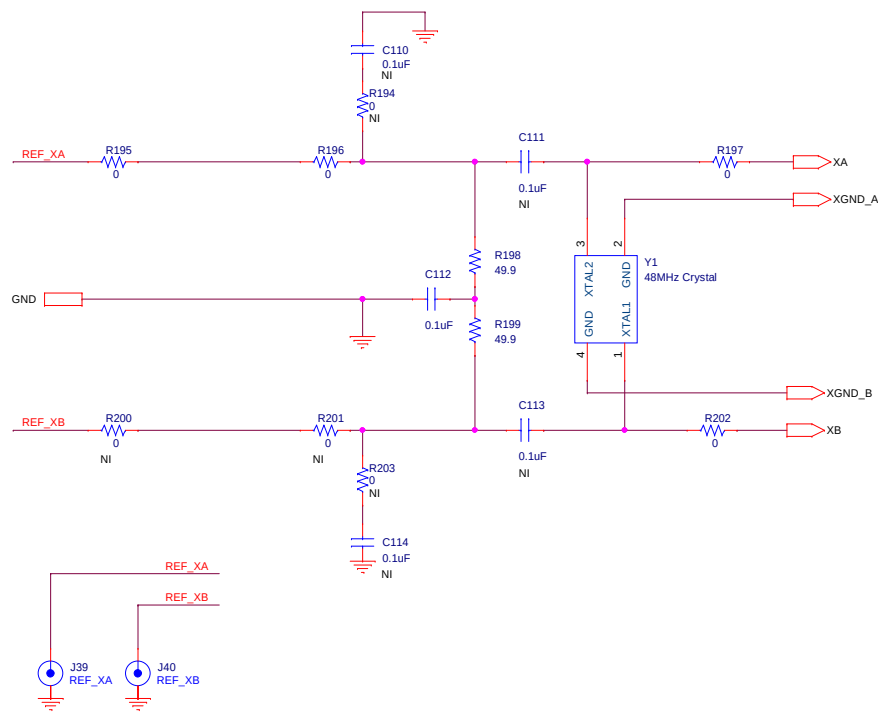
I2C VDD ENABLES/SELECTS FOR REGULATORS
I2C address: 0100011



Board Serial Number

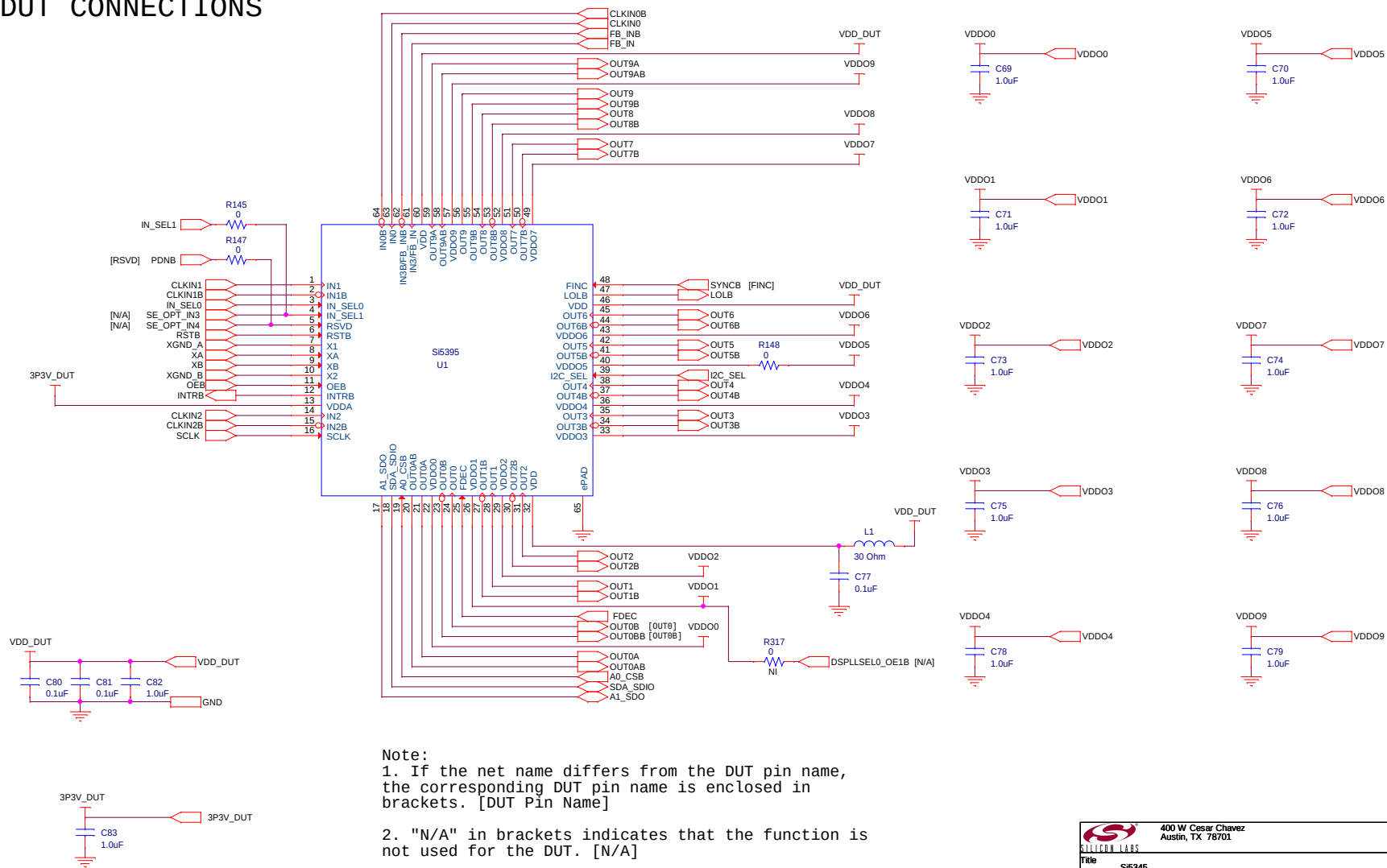


REFERENCE INPUT CONNECTIONS



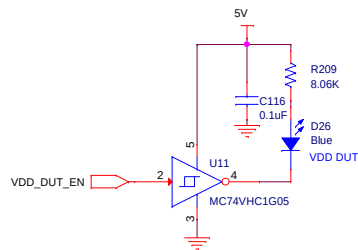
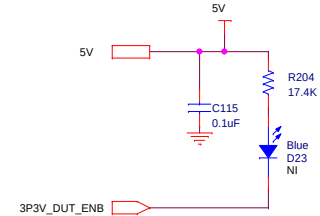
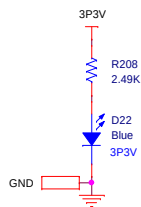
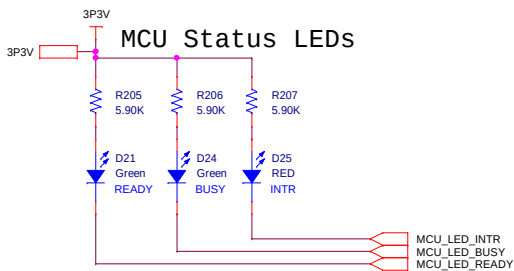
 400 W Cesar Chavez Austin, TX 78701	
Title REFERENCE	
Size B	Document Number SI5395P-A-EB
Date: Tuesday, May 29, 2018	Rev 1.1
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DUT CONNECTIONS



 400 W Cesar Chavez Austin, TX 78701		
Title S5345		
Size B	Document Number S5395P-A-EB	Rev 1.1
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LEDS - SUPPLIES & STATUS



 400 W Cesar Chavez Austin, TX 78701		
Title STATUS_MAIN_SUPPLY_LEDS		
Size B	Document Number SI5395P-A-EB	Rev 1.1
Date: Tuesday, May 29, 2018	Sheet 32	of 44

100 mA Adjustable Voltage Regulator

VDDO0

VDDO_REG

VDDO_PIN

VDDO_ENB

SEL3R3VL

SEL2R5VL

JS17 Jumper Shunt NI

JS18 Jumper Shunt NI

TP13 NI

TPS76201

U12

IN OUT

EN

GND FB

5V

GND

C120 1uF

R212 10K

JP17 NI

C117 0.01uF

R210 30.1

C118 4.7uF

R213 1.0

R211 10K

C119 10uF

R214 4.42K

R215 9.53K

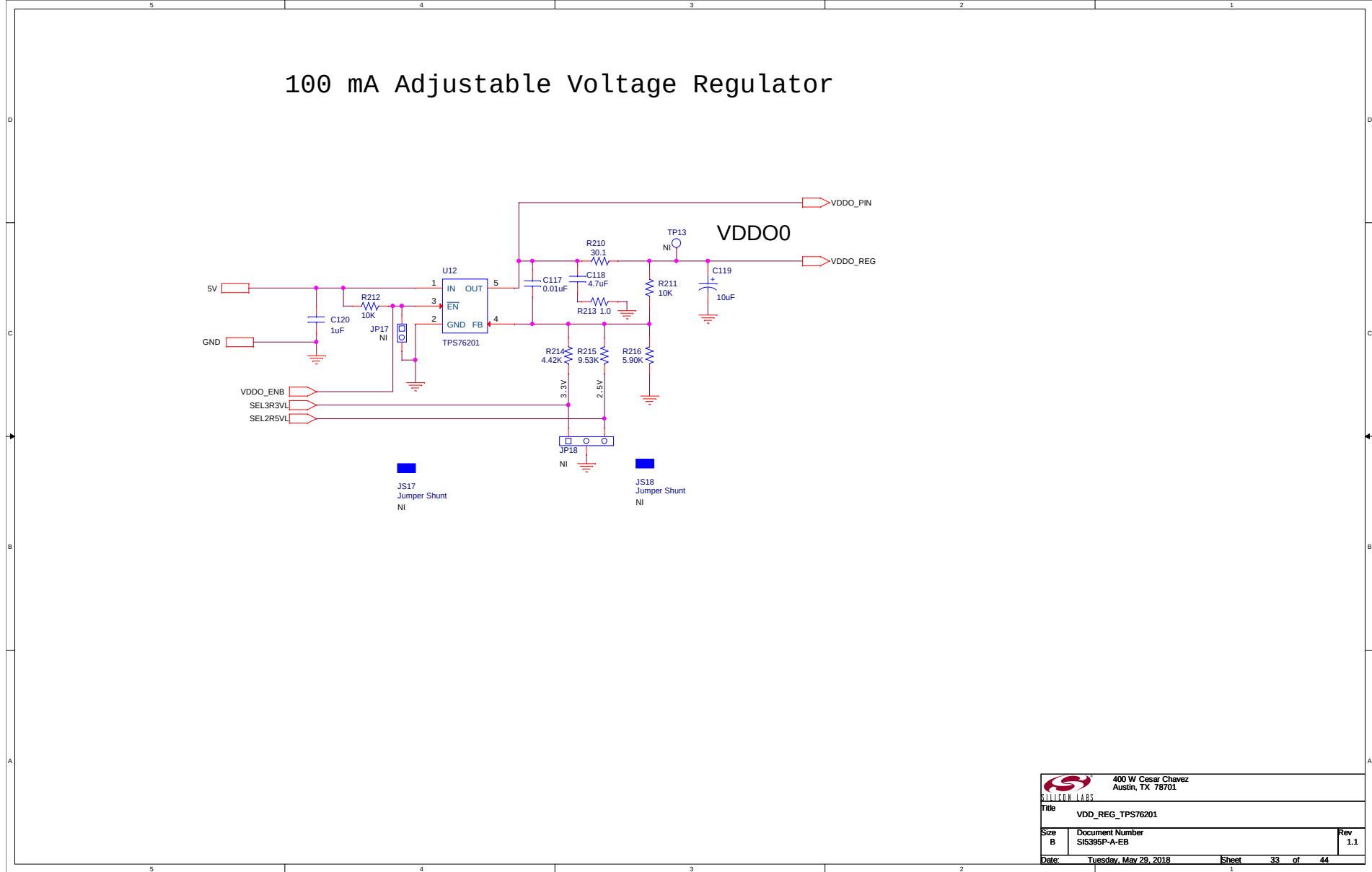
R216 5.90K

3.3V

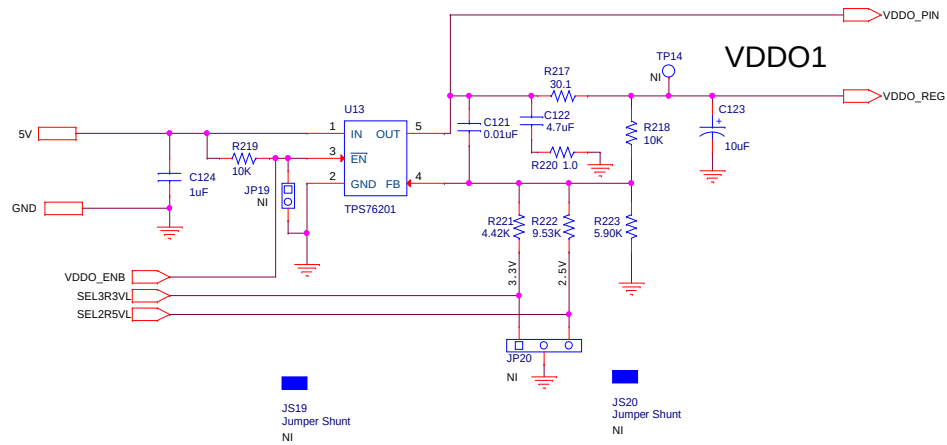
2.5V

JP18 NI

SILICON LABS		400 W Cesar Chavez Austin, TX 78701	
Title VDD_REG_TPS76201			
Size B	Document Number SI5395P-A-EB		Rev 1.1
Date:	Tuesday, May 29, 2018	Sheet	33 of 44

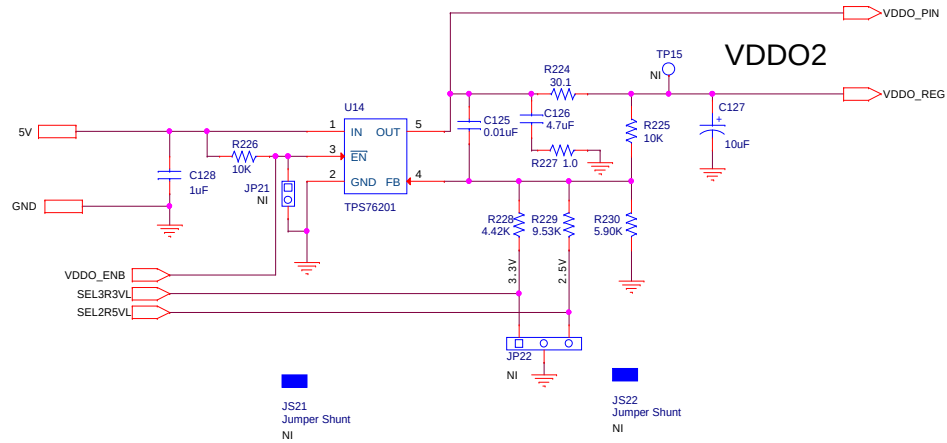


100 mA Adjustable Voltage Regulator



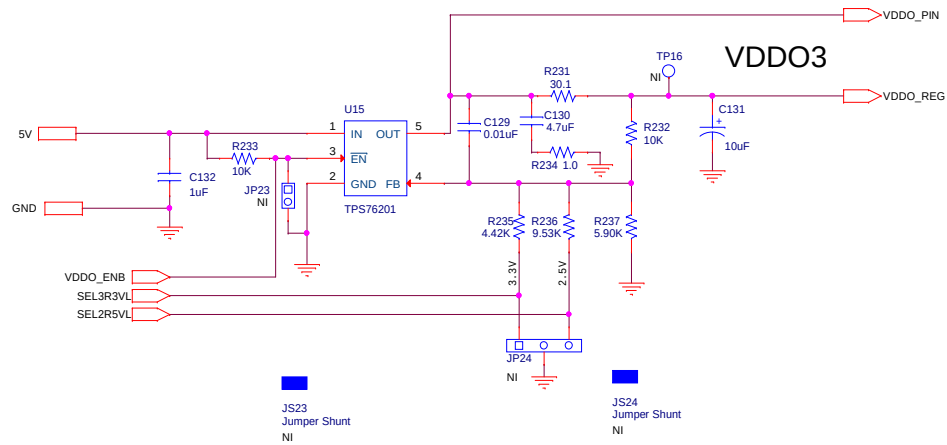
 400 W Cesar Chavez Austin, TX 78701	
Title	
VDD_REG_TPS76201	
Size	Document Number
B	SI5395P-A-EB
Date:	Tuesday, May 29, 2018
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100 mA Adjustable Voltage Regulator



 400 W Cesar Chavez Austin, TX 78701		
Title		
VDD_REG_TPS76201		
Size	Document Number	Rev
B	SI5395P-A-EB	1.1
Date:	Tuesday, May 29, 2018	Sheet 35 of 44

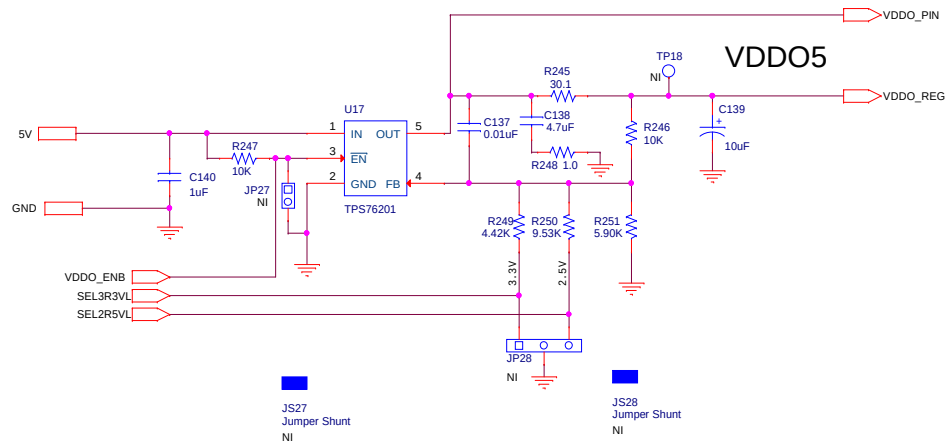
100 mA Adjustable Voltage Regulator



 400 W Cesar Chavez Austin, TX 78701	
Title	
VDD_REG_TPS76201	
Size	Document Number
B	SI5395P-A-EB
Date:	Tuesday, May 29, 2018
Sheet	36 of 44
Rev	1.1

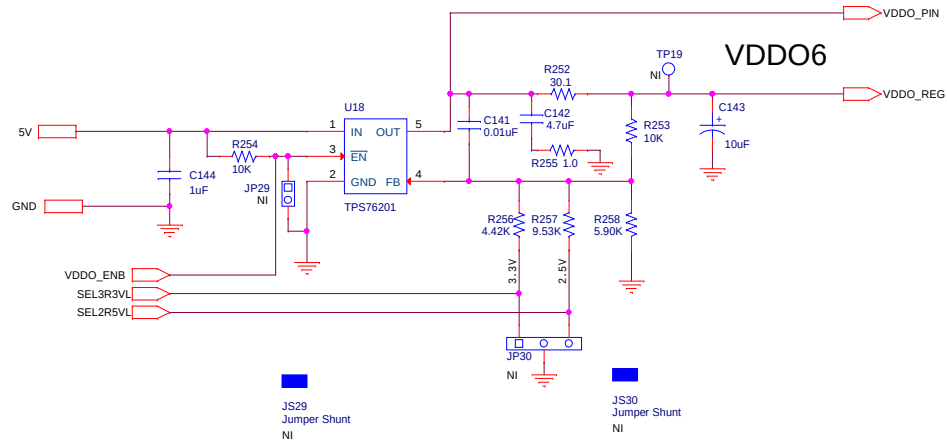
[illegible]

100 mA Adjustable Voltage Regulator



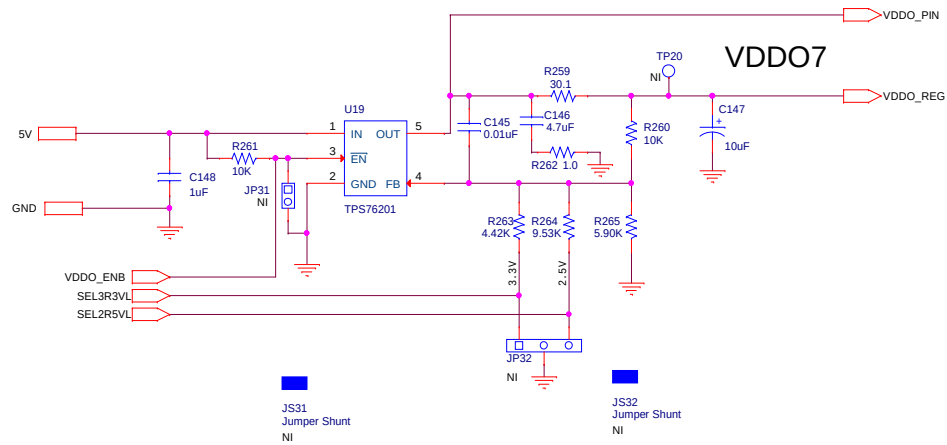
		400 W Cesar Chavez Austin, TX 78701	
Title		VDD_REG_TPS76201	
Size	Document Number	Rev	
B	SI5395P-A-EB	1.1	
Date:	Tuesday, May 29, 2018	Sheet	38 of 44

100 mA Adjustable Voltage Regulator



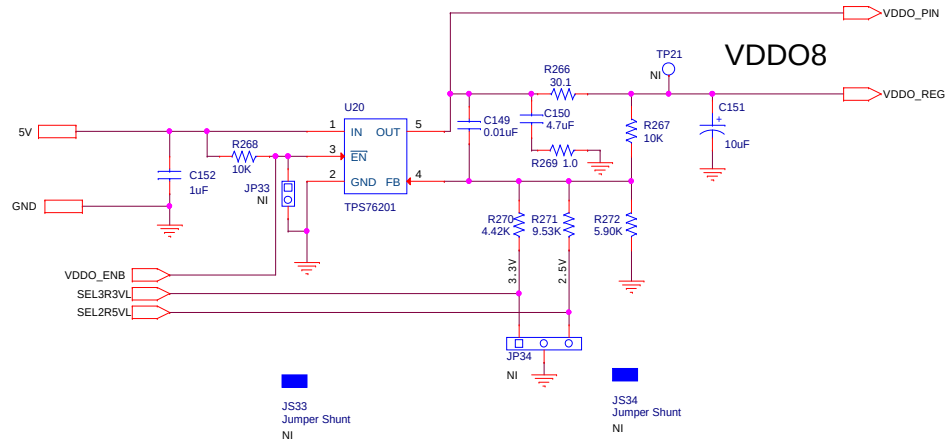
 400 W Cesar Chavez Austin, TX 78701		
Title		
VDD_REG_TPS76201		
Size	Document Number	Rev
B	SI5395P-A-EB	1.1
Date:	Tuesday, May 29, 2018	Sheet 39 of 44

100 mA Adjustable Voltage Regulator



		400 W Cesar Chavez Austin, TX 78701	
Title		VDD_REG_TPS76201	
Size	Document Number	Rev	
B	SI5395P-A-EB	1.1	
Date:	Tuesday, May 29, 2018	Sheet	40 of 44

100 mA Adjustable Voltage Regulator



 400 W Cesar Chavez Austin, TX 78701	
Title	
VDD_REG_TPS76201	
Size	Document Number
B	SI5395P-A-EB
Date:	Tuesday, May 29, 2018
Sheet	41 of 44
Rev	1.1

100 mA Adjustable Voltage Regulator

VDDO9

VDDO_REG

TPS76201

TP22

TP35

TP36

TP37

TP38

TP39

TP40

TP41

TP42

TP43

TP44

TP45

TP46

TP47

TP48

TP49

TP50

TP51

TP52

TP53

TP54

TP55

TP56

TP57

TP58

TP59

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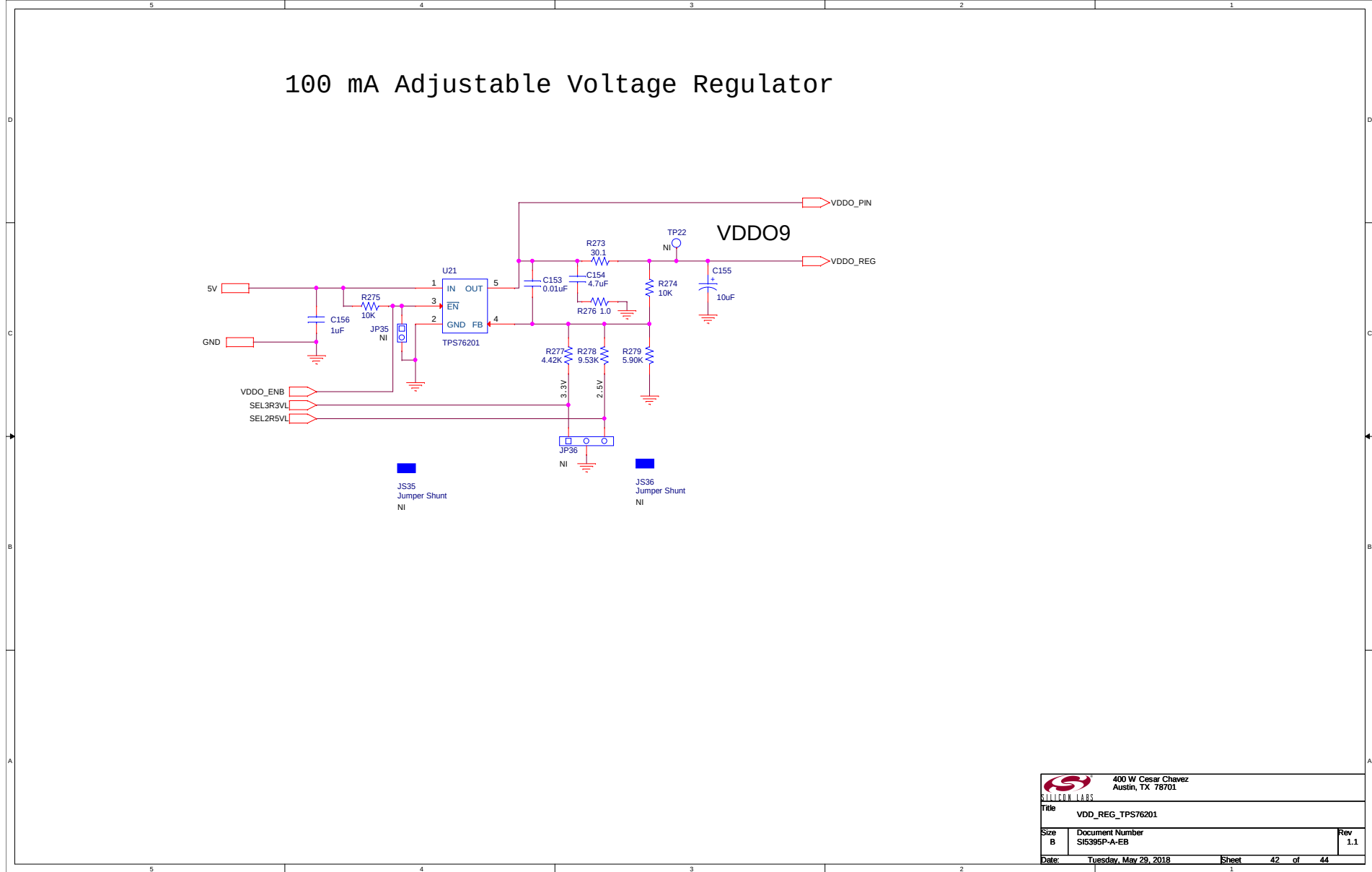
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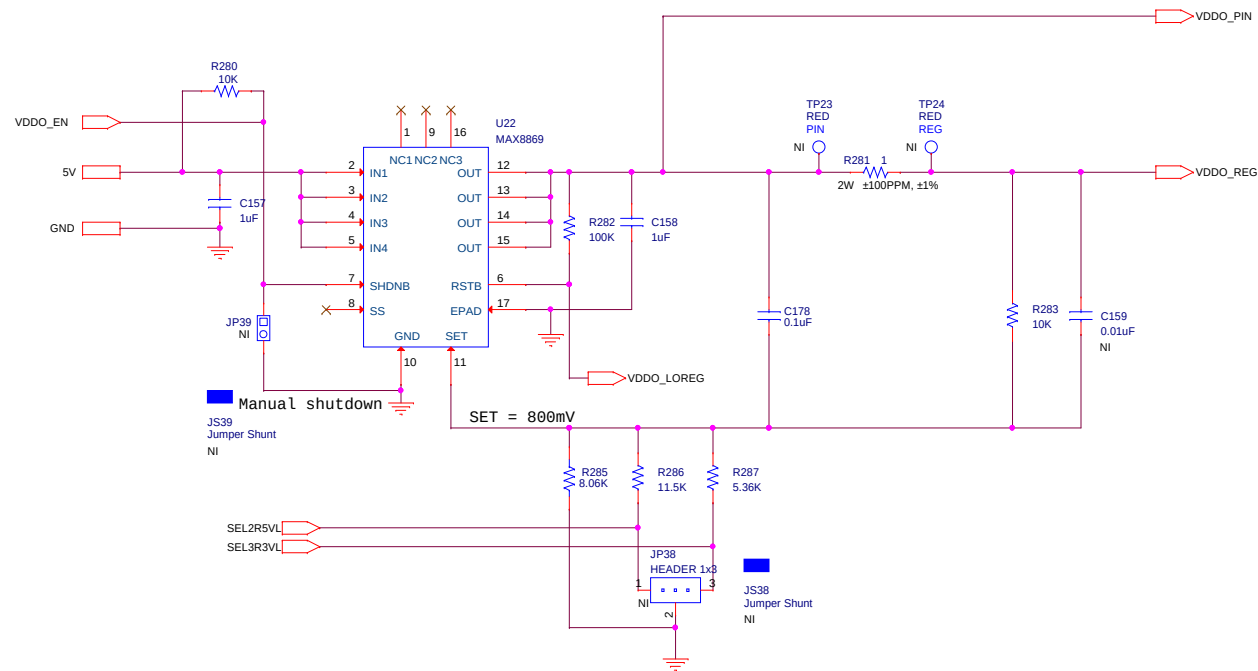
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VDD_DUT (In Schematic)
VDD DUT (Board Silkscreen)

 400 W Cesar Chavez Austin, TX 78701		
Title VDD_REG_MAX8869		
Size B	Document Number SI5395P-A-EB	Rev 1.1
Date: Tuesday, May 29, 2018	Sheet 43 of 44	

VOLTAGE MEASUREMENT MULTIPLEXING

