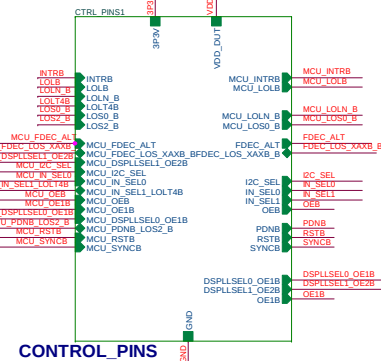
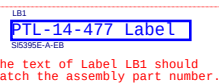
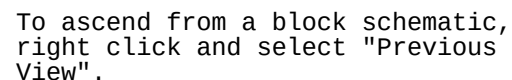
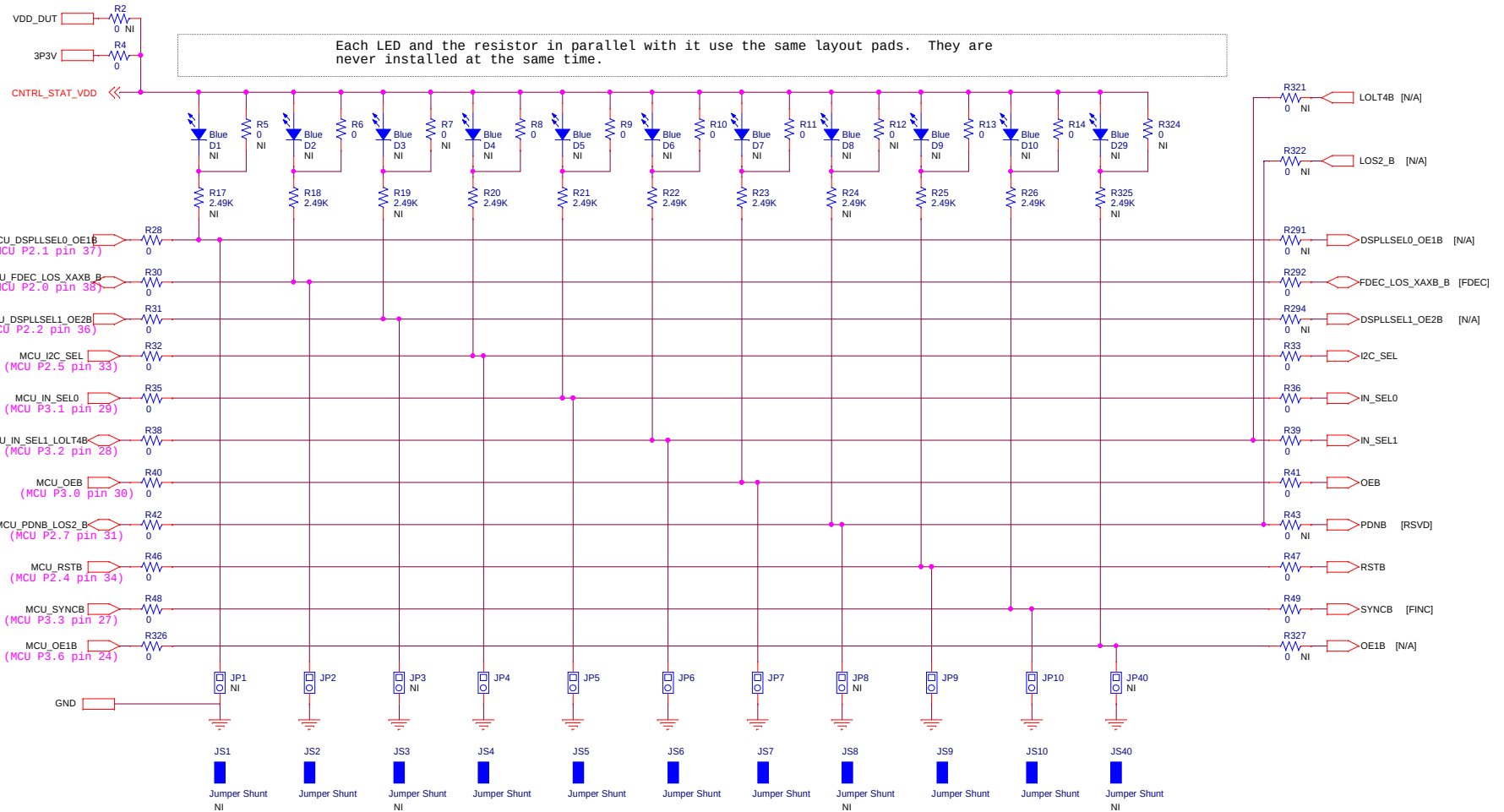


REVISION CONTROL

- Rev 1.0 - Jan 10, 2018, Initial Board Release
Started with a copy of the Si5395A-A-EB
schematic. Replaced DUT and label. 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)
- Rev 1.2 - June 19, 2018, Made all components for the reference
input Not Installed, updated the 5395E symbol to change
reference pins to NC.

		400 W Cesar Chavez Austin, TX 78701	
SILICON LABS			
Title SI5345-EB_TOP_REVISION			
Size B	Document Number SI5395E-A-EB		Rev 1.2
Date: Tuesday, June 19, 2018		Sheet 2 of 44	

CONTROL PINS CONNECTIONS



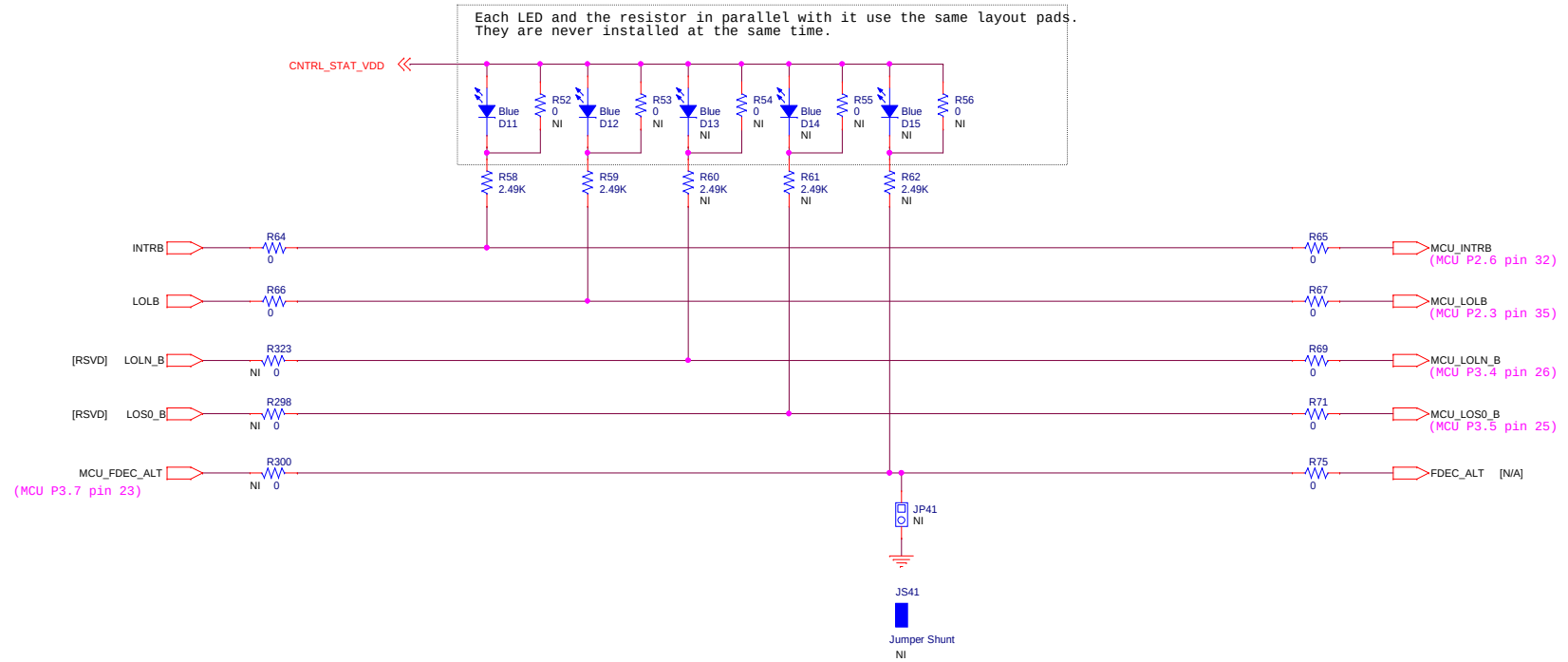
Note:

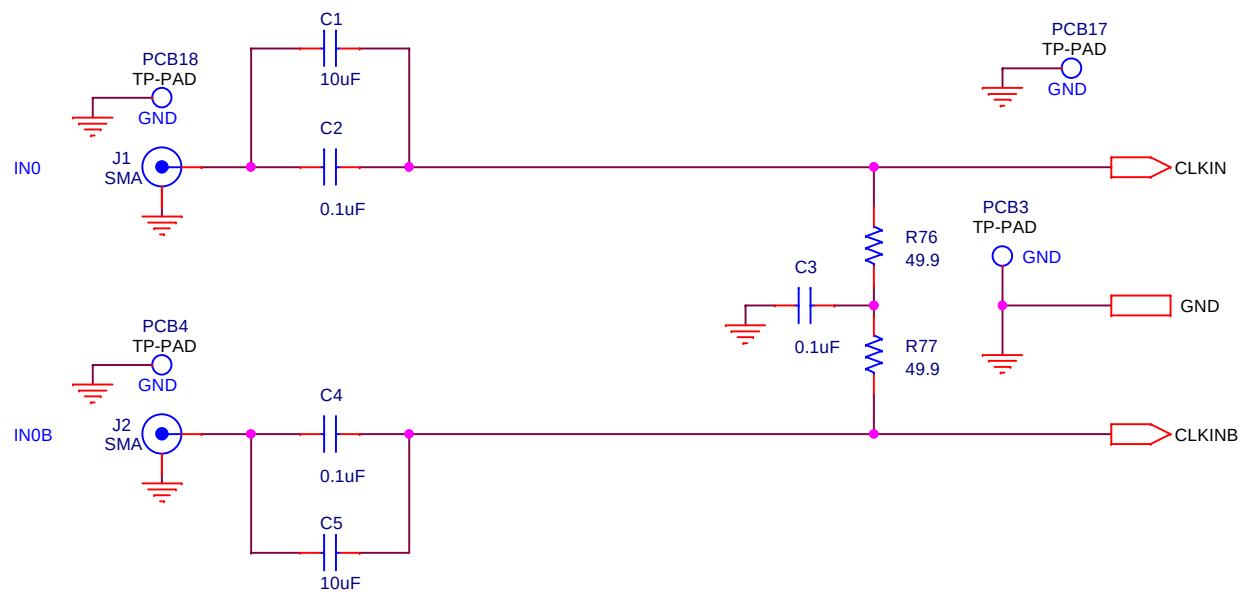
1. If the net name differs from the DUT pin name, the corresponding DUT pin name is enclosed in brackets. [DUT Pin Name]

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: B	Document Number: SI5395E-A-EB	Rev: 1.2
Date: Tuesday, June 19, 2018	Sheet: 3	of 44

CONTROL PINS CONNECTIONS





400 W Cesar Chavez
Austin, TX 78701

Title

DIFF_INPUT_CLK

Size

A

Document Number

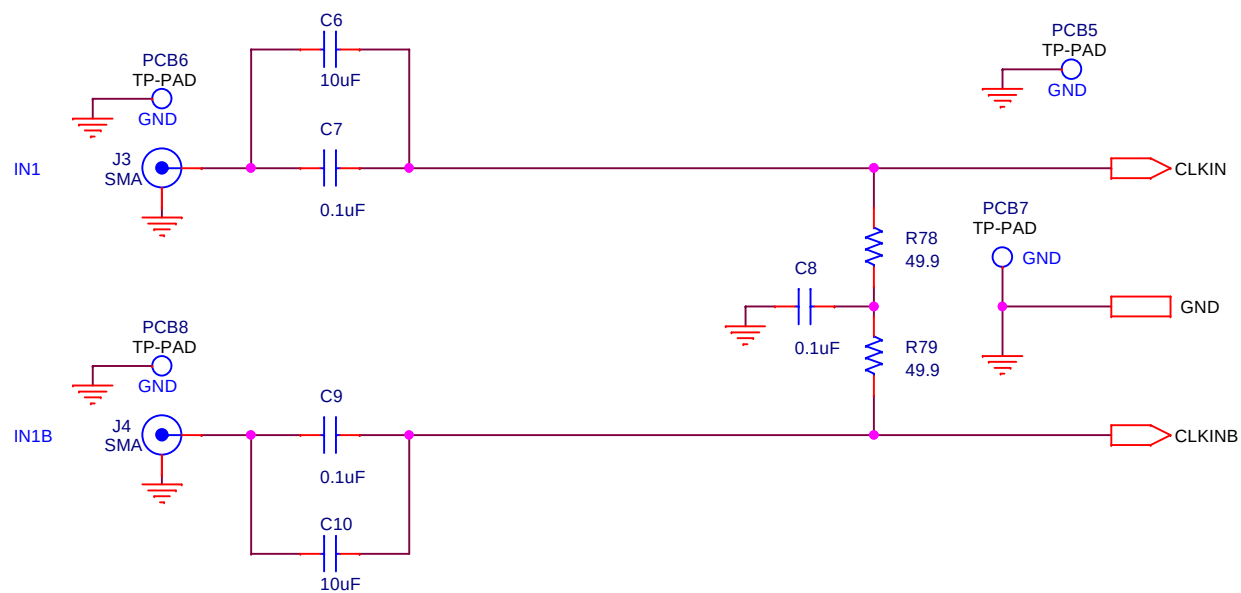
SI5395E-A-EB

Rev

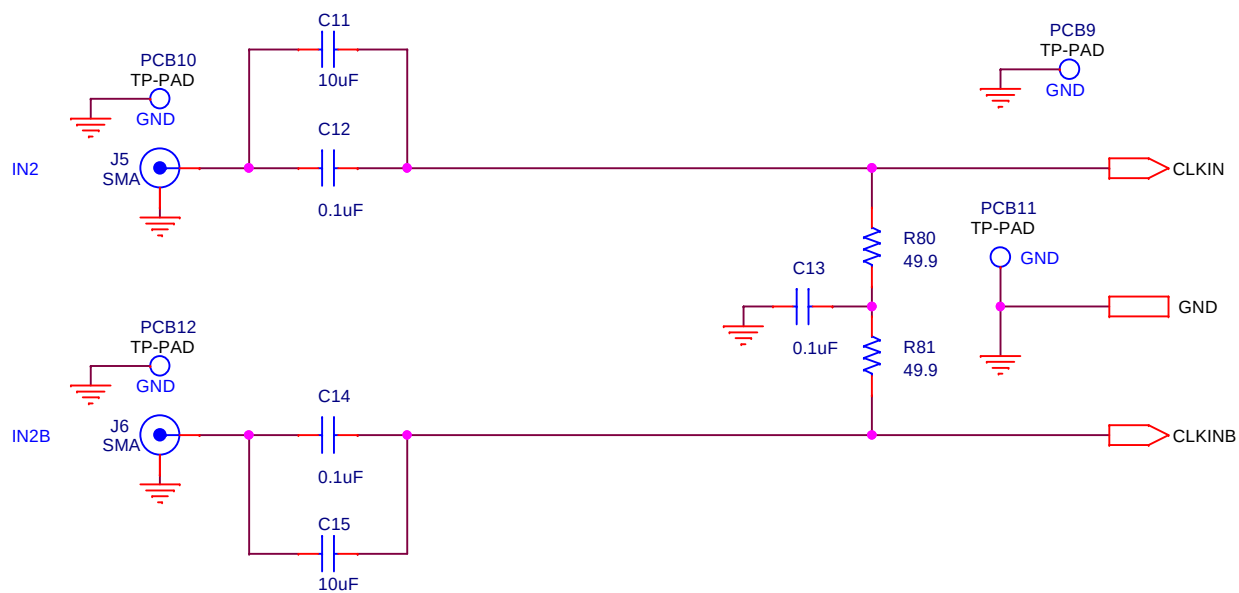
1.2

Date: Tuesday, June 19, 2018

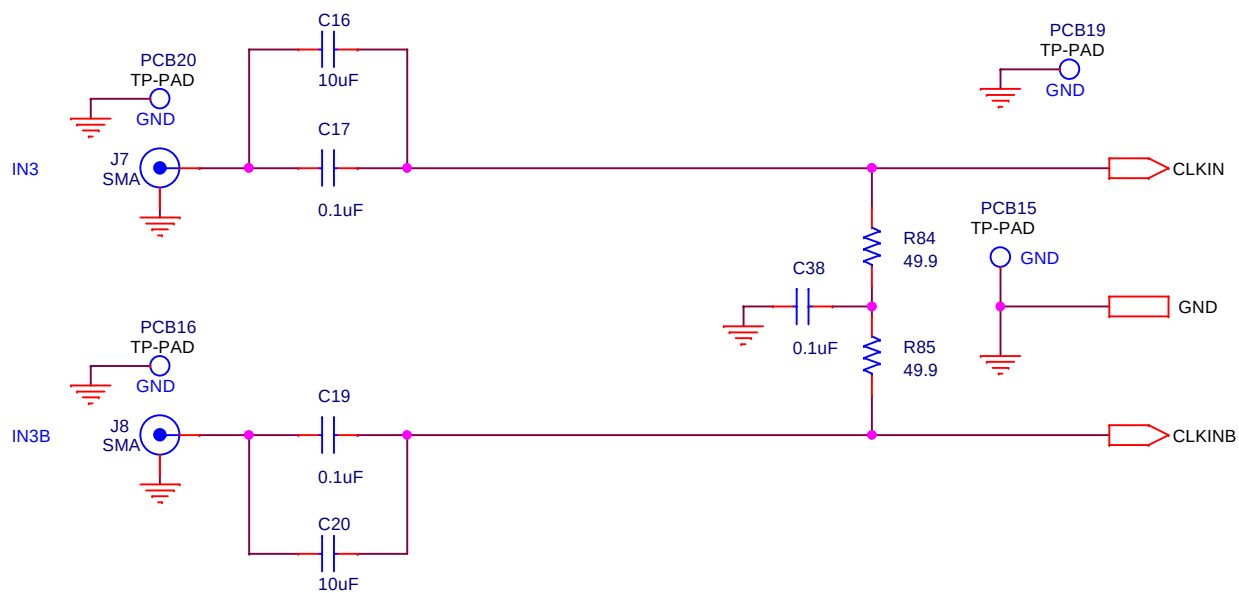
Sheet 5 of 44



 400 W Cesar Chavez Austin, TX 78701		
Title DIFF_INPUT_CLK		
Size A	Document Number SI5395E-A-EB	Rev 1.2
Date:	Tuesday, June 19, 2018	Sheet 6 of 44

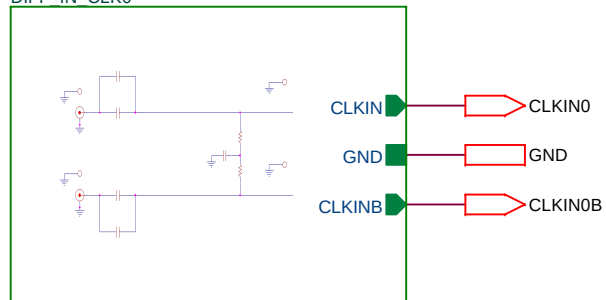


 400 W Cesar Chavez Austin, TX 78701		
Title DIFF_INPUT_CLK		
Size A	Document Number SI5395E-A-EB	Rev 1.2
Date:	Tuesday, June 19, 2018	Sheet 7 of 44



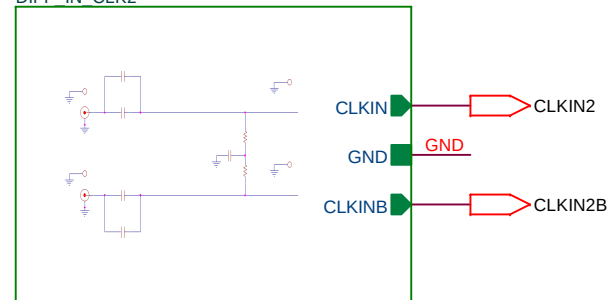
 400 W Cesar Chavez Austin, TX 78701		
Title DIFF_INPUT_CLK		
Size A	Document Number SI5395E-A-EB	Rev 1.2
Date:	Tuesday, June 19, 2018	Sheet 8 of 44

DIFF IN CLK0



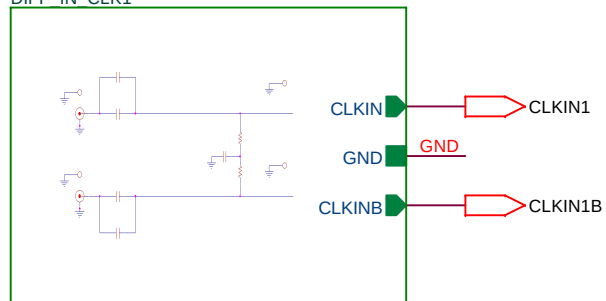
DIFF_INPUT_CLK

DIFF IN CLK2



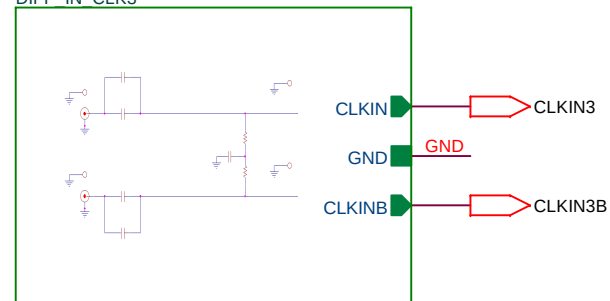
DIFF_INPUT_CLK

DIFF IN CLK1

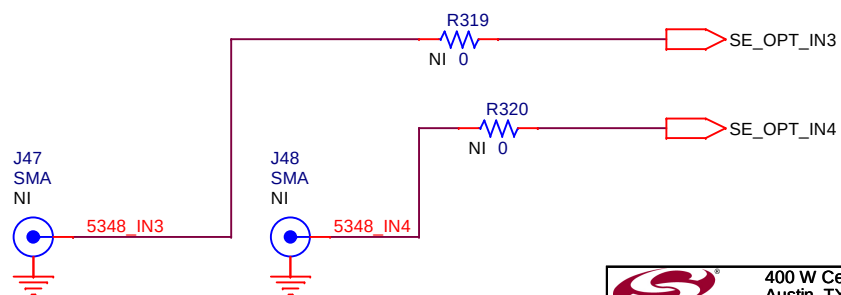


DIFF_INPUT_CLK

DIFF IN CLK3



DIFF_INPUT_CLK



Single-ended clocks only.



400 W Cesar Chavez
Austin, TX 78701

Title

DIFF_INPUT_CLOCKS_4

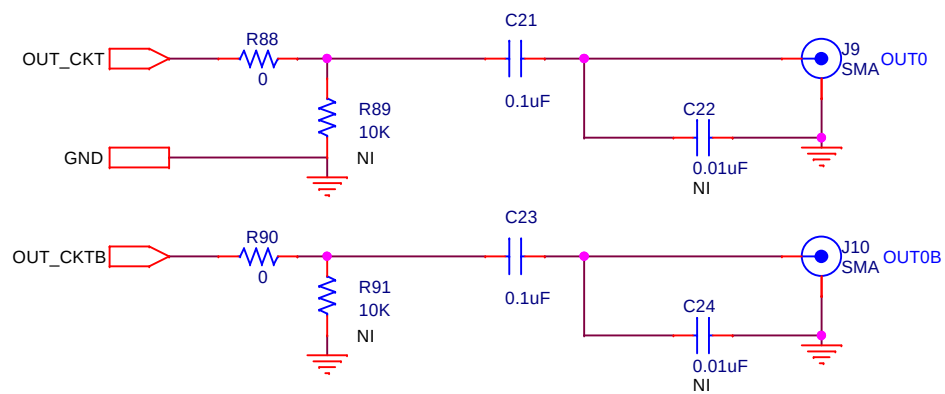
Size
A

Document Number
SI5395E-A-EB

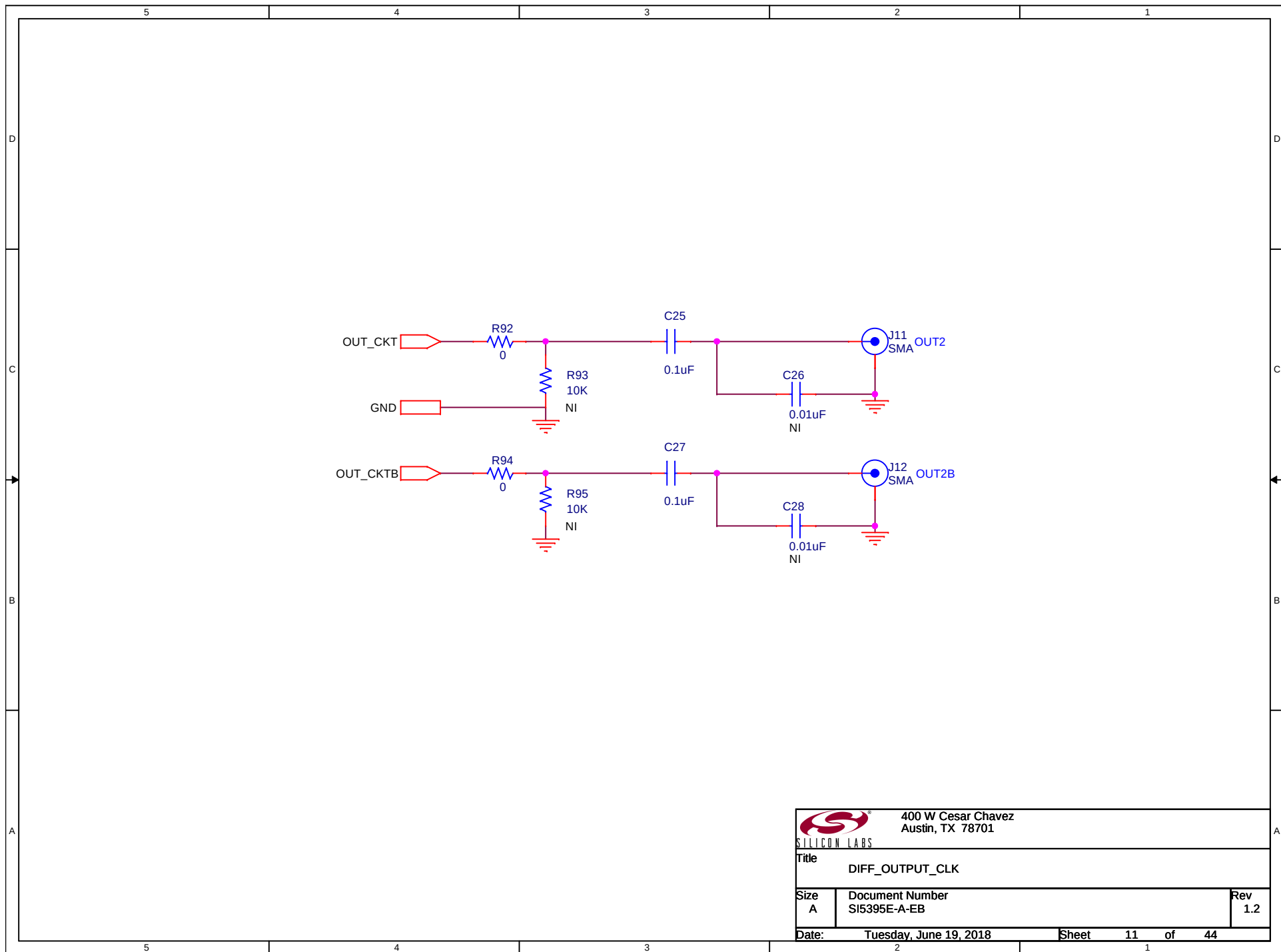
Rev
1.2

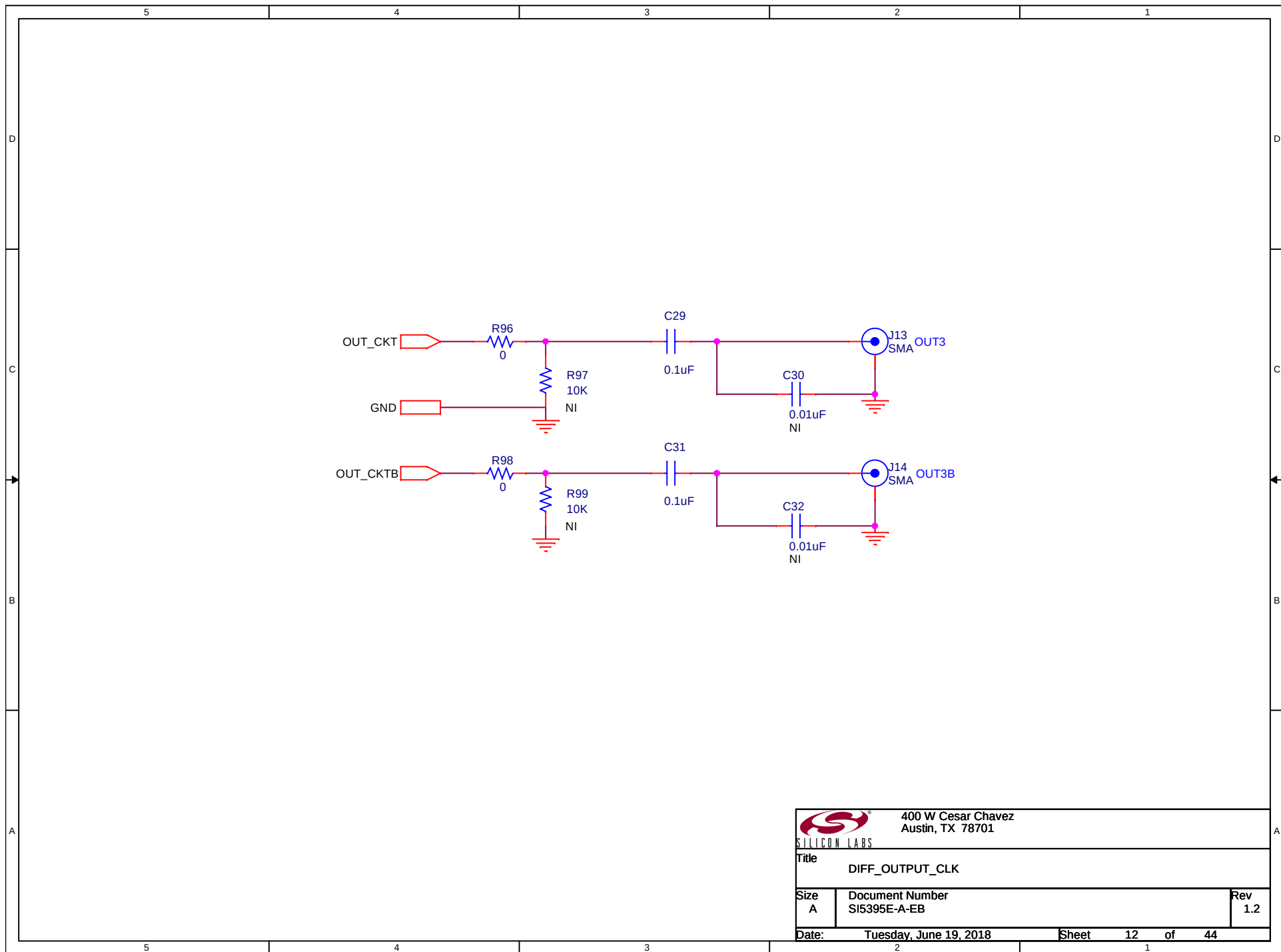
Date: Tuesday, June 19, 2018

Sheet 9 of 44

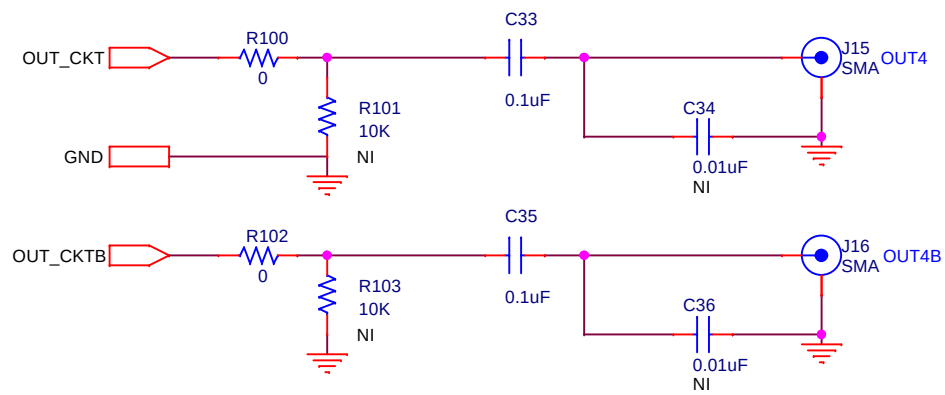


 400 W Cesar Chavez Austin, TX 78701		
Title DIFF_OUTPUT_CLK		
Size A	Document Number SI5395E-A-EB	Rev 1.2
Date:	Tuesday, June 19, 2018	Sheet 10 of 44





 400 W Cesar Chavez Austin, TX 78701		
Title DIFF_OUTPUT_CLK		
Size A	Document Number SI5395E-A-EB	Rev 1.2
Date: Tuesday, June 19, 2018	Sheet 12	of 44



400 W Cesar Chavez
Austin, TX 78701

Title

DIFF_OUTPUT_CLK

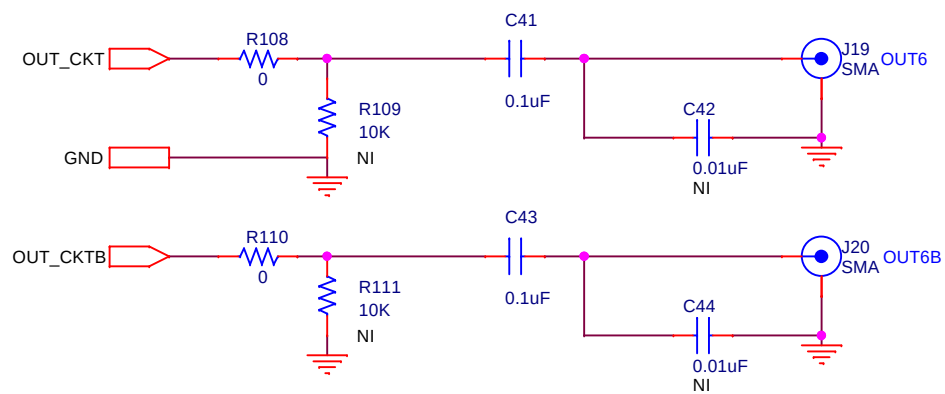
Size
A

Document Number
SI5395E-A-EB

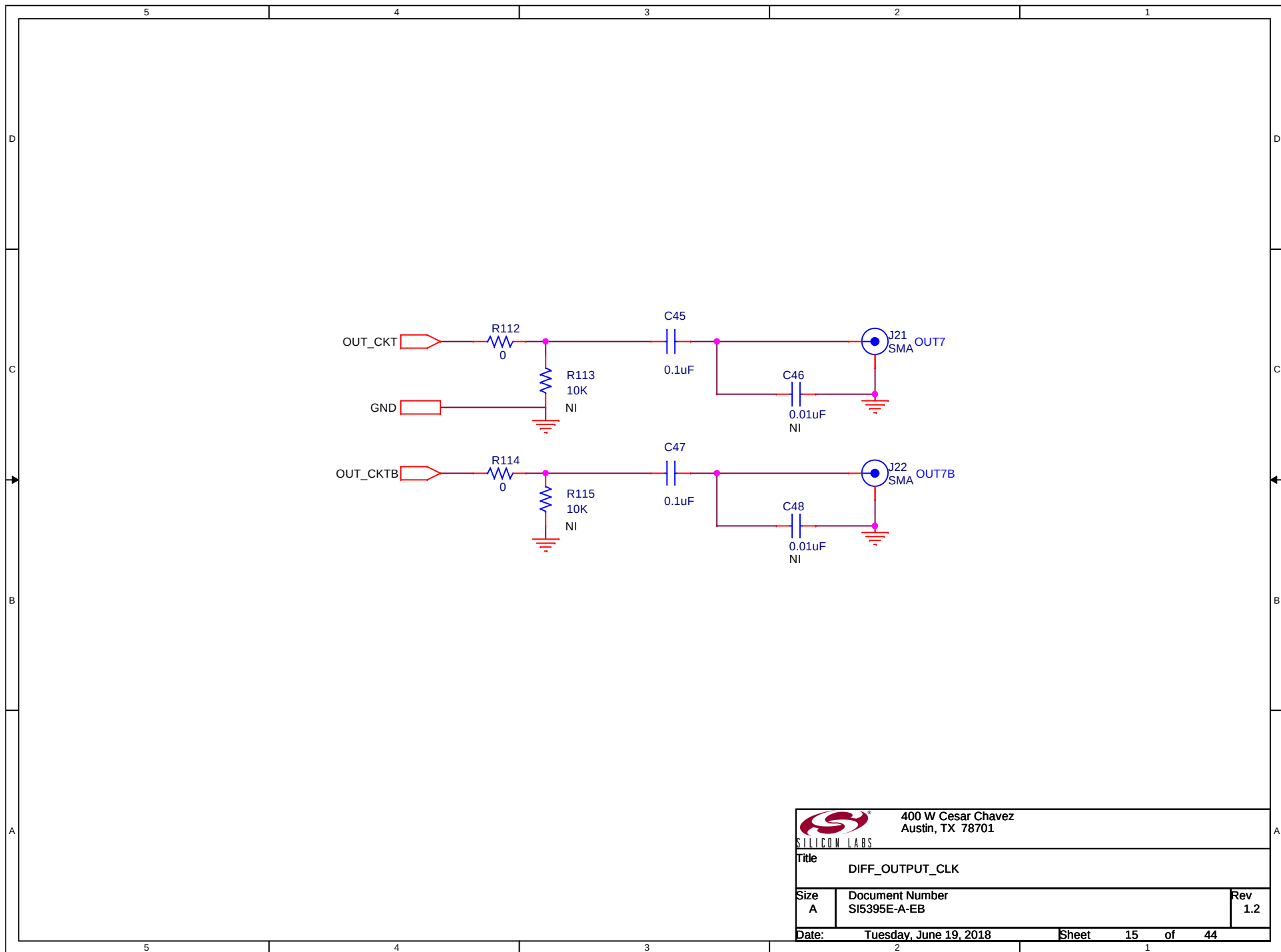
Rev
1.2

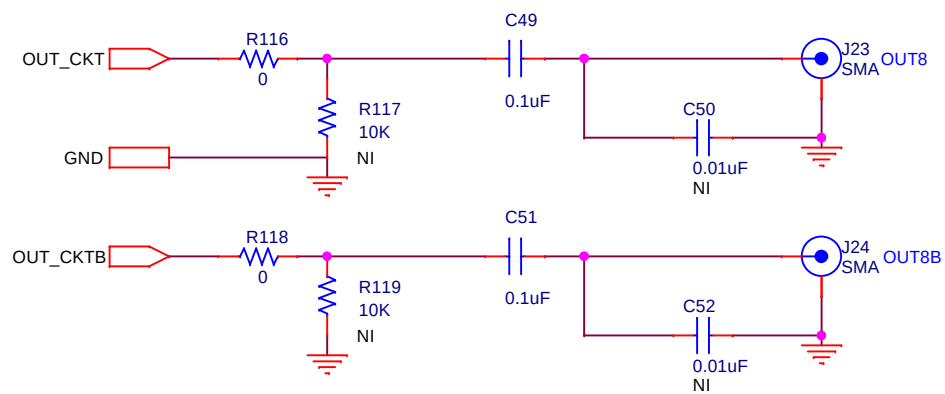
Date: Tuesday, June 19, 2018

Sheet 13 of 44

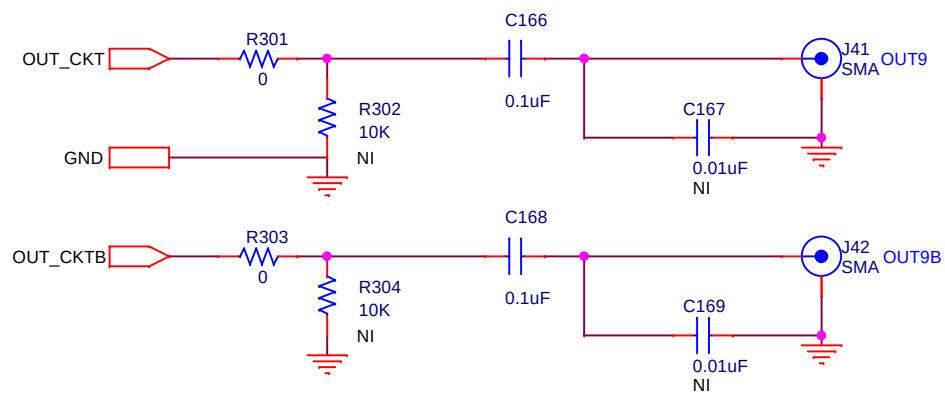


 400 W Cesar Chavez Austin, TX 78701		
Title DIFF_OUTPUT_CLK		
Size A	Document Number SI5395E-A-EB	Rev 1.2
Date:	Tuesday, June 19, 2018	Sheet 14 of 44



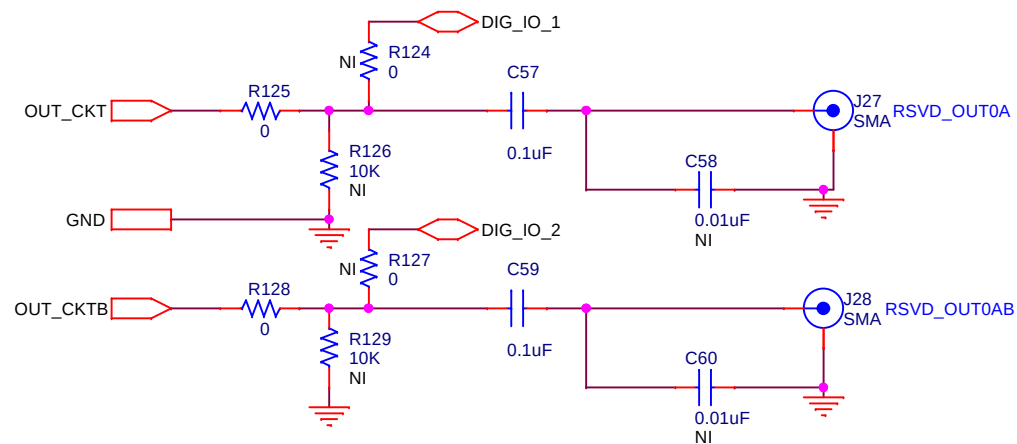


 400 W Cesar Chavez Austin, TX 78701		
Title DIFF_OUTPUT_CLK		
Size A	Document Number SI5395E-A-EB	Rev 1.2
Date:	Tuesday, June 19, 2018	Sheet 16 of 44



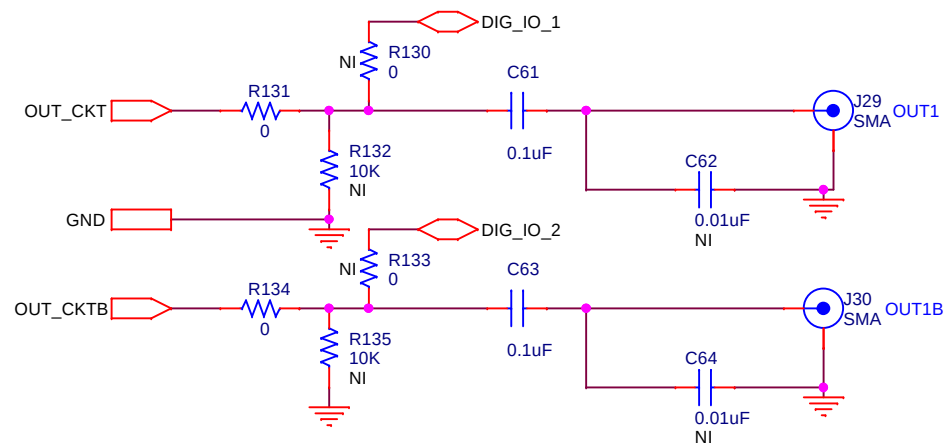
 400 W Cesar Chavez Austin, TX 78701		
Title DIFF_OUTPUT_CLK		
Size A	Document Number SI5395E-A-EB	Rev 1.2
Date:	Tuesday, June 19, 2018	Sheet 17 of 44

DIFF_OUTPUT_CLK_DIG_IO



 400 W Cesar Chavez Austin, TX 78701		
Title DIFF_OUTPUT_CLK_DIG_IO		
Size A	Document Number SI5395E-A-EB	Rev 1.2
Date: Tuesday, June 19, 2018	Sheet 18	of 44

DIFF_OUTPUT_CLK_DIG_IO



400 W Cesar Chavez
Austin, TX 78701

Title

DIFF_OUTPUT_CLK_DIG_IO

Size
A

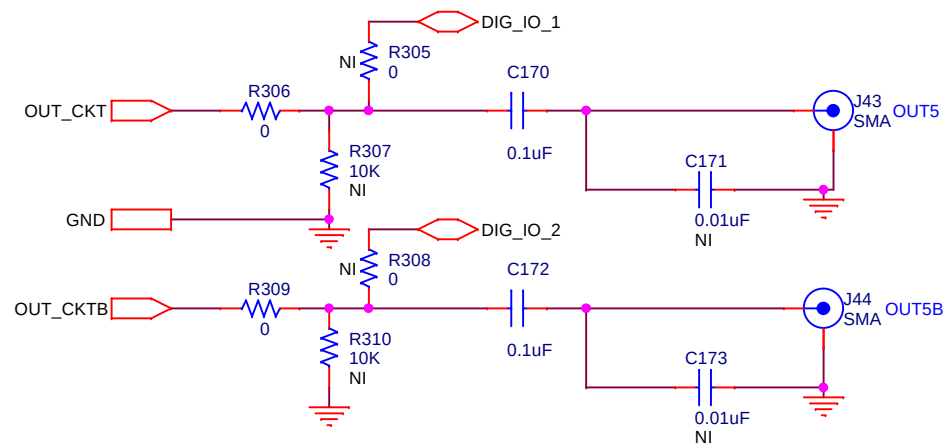
Document Number
SI5395E-A-EB

Rev
1.2

Date: Tuesday, June 19, 2018

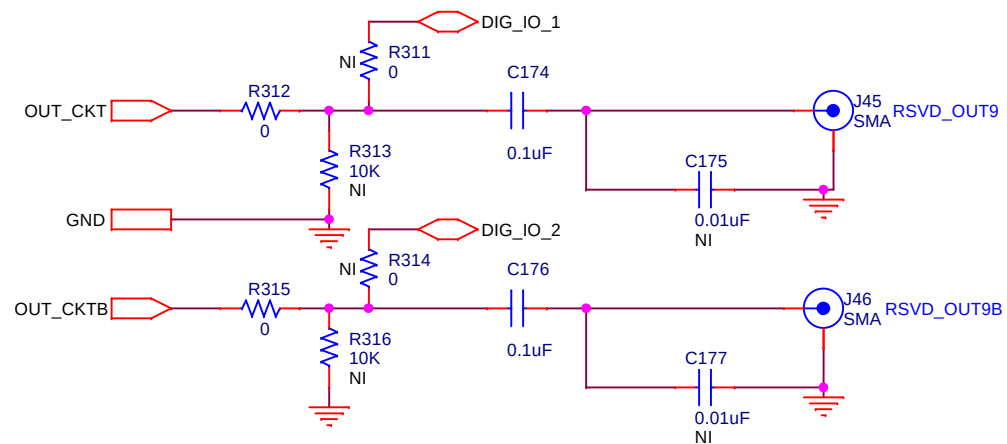
Sheet 19 of 44

DIFF_OUTPUT_CLK_DIG_IO



 400 W Cesar Chavez Austin, TX 78701		
Title DIFF_OUTPUT_CLK_DIG_IO		
Size A	Document Number SI5395E-A-EB	Rev 1.2
Date: Tuesday, June 19, 2018		
Sheet 20 of 44		

DIFF_OUTPUT_CLK_DIG_IO



400 W Cesar Chavez
Austin, TX 78701

Title

DIFF_OUTPUT_CLK_DIG_IO

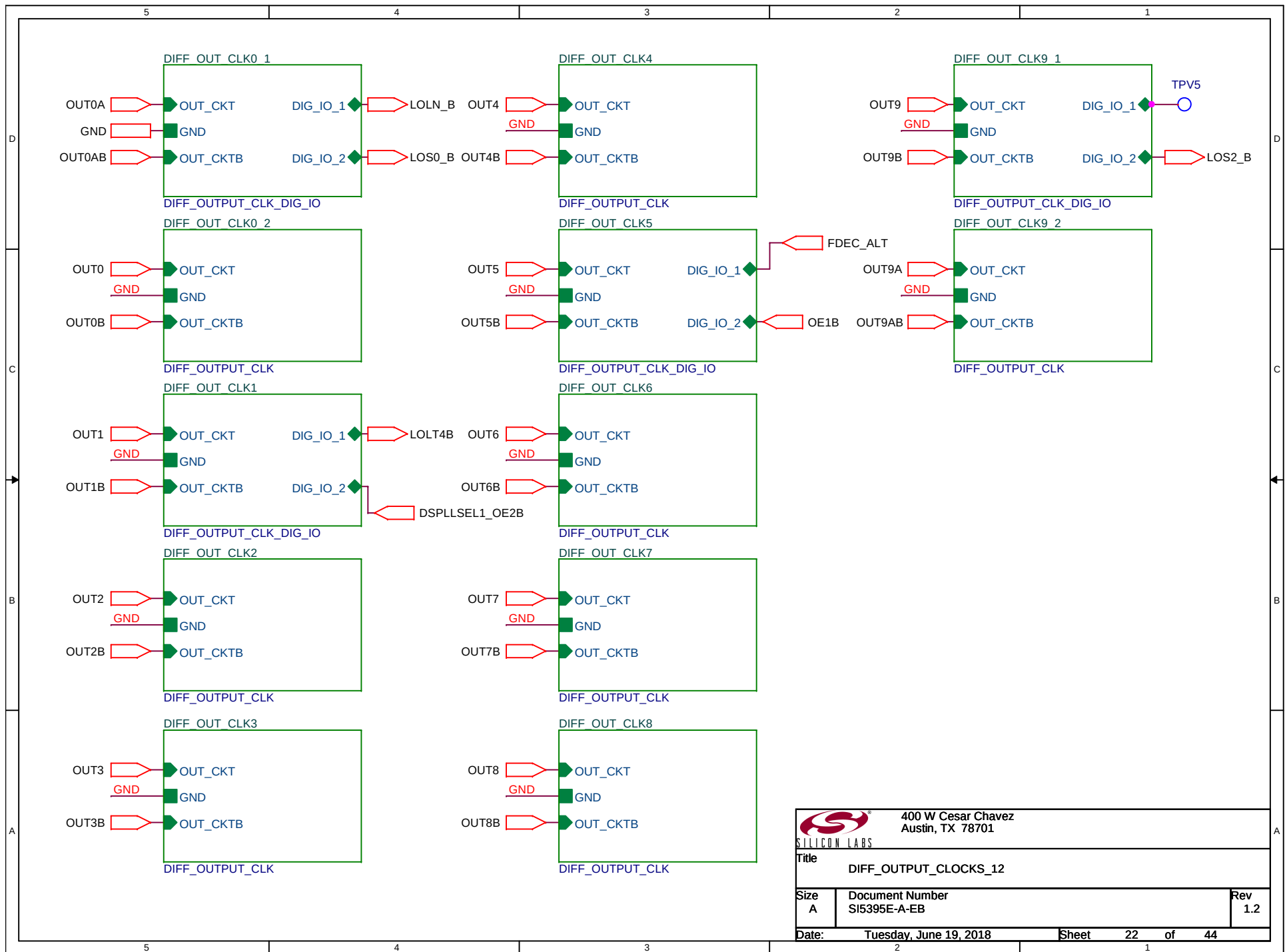
Size
A

Document Number
SI5395E-A-EB

Rev
1.2

Date: Tuesday, June 19, 2018

Sheet 21 of 44



D



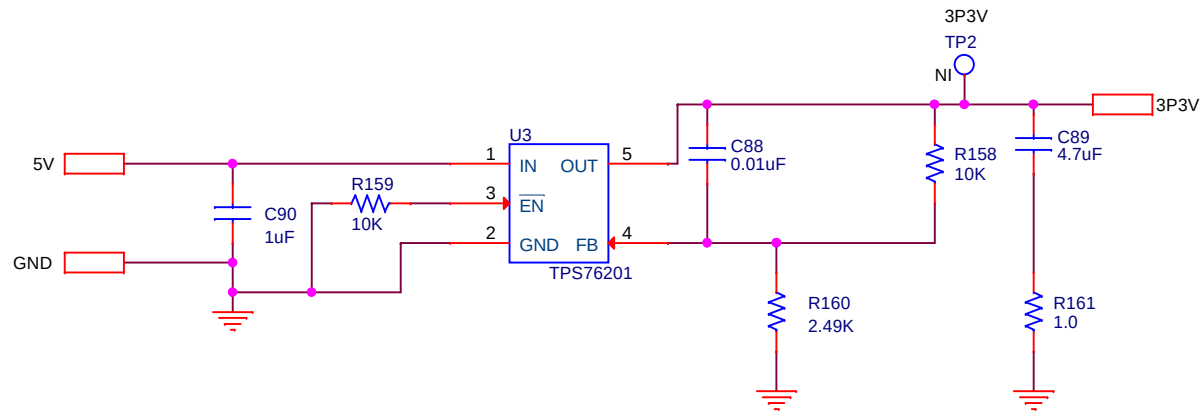
D

2

1

5

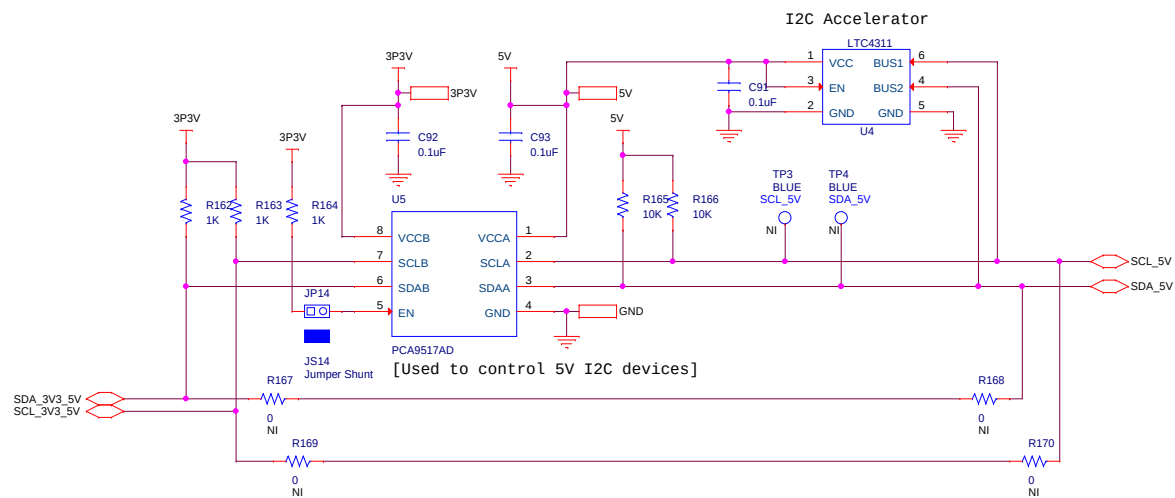
Fixed 3.3V 100 mA Voltage Regulator (Enabled, no current measurement supported.)



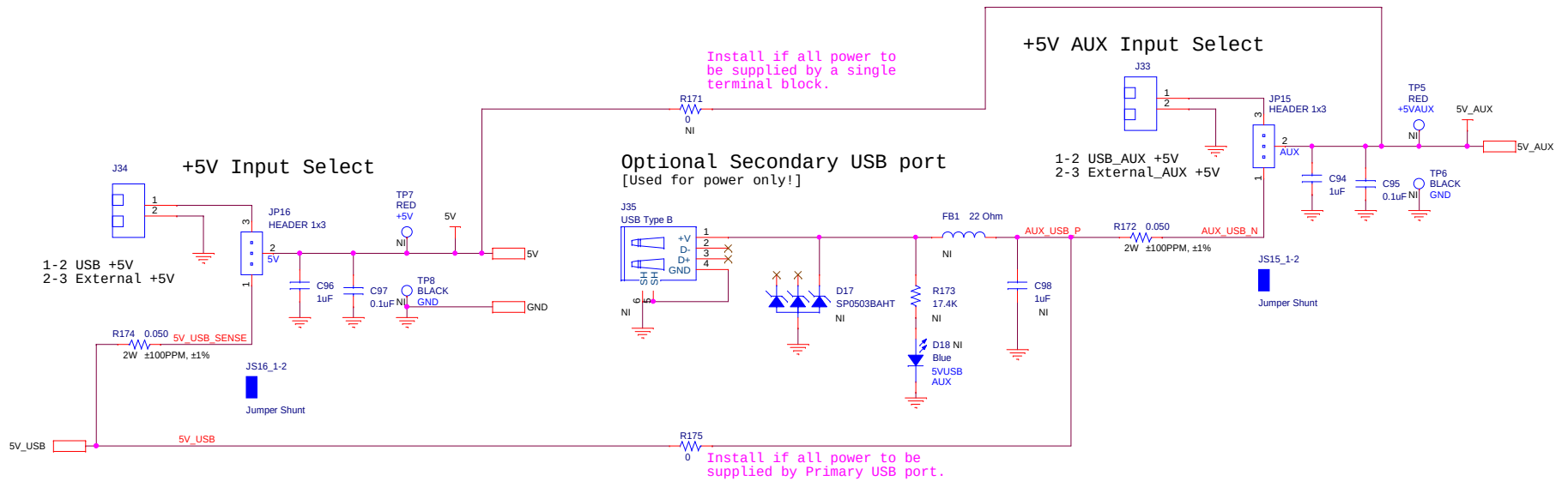
3P3V (In Schematic)
3P3V (Board Silkscreen)

 SILICON LABS		400 W Cesar Chavez Austin, TX 78701	
Title			
FIXED_3V3_REG_TPS76201_EN_NO_IM			
Size	Document Number		Rev
A	SI5395E-A-EB		1.2
		<Variant Name>	
Date:	Tuesday, June 19, 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	SI5395E-A-EB
Date:	Tuesday, June 19, 2018
Sheet	26 of 44
Rev	1.2

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.

8051F380 Pinout:

Pin	Signal
1	P0.5
2	P0.4
3	P0.3
4	P0.2
5	P0.1
6	P0.0
7	GND
8	D-
9	D+
10	VDD
11	REGIN
12	VBUS
13	RST/C2CK
14	C2D
15	P4.7
16	P4.6
17	P4.5
18	P4.4
19	P4.3
20	P4.2
21	P4.1
22	P4.0
23	P3.7
24	P3.6
25	P3.5
26	P3.4
27	P3.3
28	P3.2
29	P3.1
30	P3.0
31	MCU_OEB
32	MCU_IN_SEL0
33	MCU_IN_SEL1_LOLT4B
34	MCU_IN_SEL0
35	MCU_LOLB
36	MCU_DSPLLSEL1_OE2B
37	MCU_LOSB
38	MCU_FDEC_ALT
39	MCU_OE1B
40	MCU_FDEC_NUM
41	MCU_DSPLLSEL0_OE1B
42	MCU_FDEC_LOS_XAXB_B
43	MCU_DSPLLSEL0_OE1B
44	MCU_DSPLLSEL0_OE1B
45	MCU_DSPLLSEL0_OE1B
46	MCU_DSPLLSEL0_OE1B
47	MCU_DSPLLSEL0_OE1B
48	MCU_DSPLLSEL0_OE1B
49	MCU_DSPLLSEL0_OE1B
50	MCU_DSPLLSEL0_OE1B
51	MCU_DSPLLSEL0_OE1B
52	MCU_DSPLLSEL0_OE1B
53	MCU_DSPLLSEL0_OE1B
54	MCU_DSPLLSEL0_OE1B
55	MCU_DSPLLSEL0_OE1B
56	MCU_DSPLLSEL0_OE1B
57	MCU_DSPLLSEL0_OE1B
58	MCU_DSPLLSEL0_OE1B
59	MCU_DSPLLSEL0_OE1B
60	MCU_DSPLLSEL0_OE1B
61	MCU_DSPLLSEL0_OE1B
62	MCU_DSPLLSEL0_OE1B
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64	MCU_DSPLLSEL0_OE1B
65	MCU_DSPLLSEL0_OE1B
66	MCU_DSPLLSEL0_OE1B
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68	MCU_DSPLLSEL0_OE1B
69	MCU_DSPLLSEL0_OE1B
70	MCU_DSPLLSEL0_OE1B
71	MCU_DSPLLSEL0_OE1B
72	MCU_DSPLLSEL0_OE1B
73	MCU_DSPLLSEL0_OE1B
74	MCU_DSPLLSEL0_OE1B
75	MCU_DSPLLSEL0_OE1B
76	MCU_DSPLLSEL0_OE1B
77	MCU_DSPLLSEL0_OE1B
78	MCU_DSPLLSEL0_OE1B
79	MCU_DSPLLSEL0_OE1B
80	MCU_DSPLLSEL0_OE1B
81	MCU_DSPLLSEL0_OE1B
82	MCU_DSPLLSEL0_OE1B
83	MCU_DSPLLSEL0_OE1B
84	MCU_DSPLLSEL0_OE1B
85	MCU_DSPLLSEL0_OE1B
86	MCU_DSPLLSEL0_OE1B
87	MCU_DSPLLSEL0_OE1B
88	MCU_DSPLLSEL0_OE1B
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90	MCU_DSPLLSEL0_OE1B
91	MCU_DSPLLSEL0_OE1B
92	MCU_DSPLLSEL0_OE1B
93	MCU_DSPLLSEL0_OE1B
94	MCU_DSPLLSEL0_OE1B
95	MCU_DSPLLSEL0_OE1B
96	MCU_DSPLLSEL0_OE1B
97	MCU_DSPLLSEL0_OE1B
98	MCU_DSPLLSEL0_OE1B
99	MCU_DSPLLSEL0_OE1B
100	MCU_DSPLLSEL0_OE1B

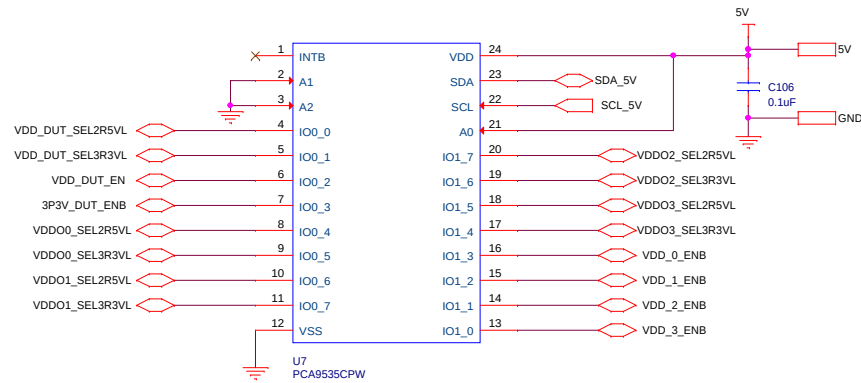
Components and Values:

- R176: 8.06K
- R177: 100
- R178: 1K
- R185: 1K
- R186: 1K
- R187: 0
- R188: 0
- R189: 0
- R190: 0
- R191: 0
- R192: 0
- R193: 0
- R194: 0
- R195: 0
- R196: 0
- R197: 0
- R198: 0
- R199: 0
- R200: 0
- R201: 0
- R202: 0
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- R209: 0
- R210: 0
- R211: 0
- R212: 0
- R213: 0
- R214: 0
- R215: 0
- R216: 0
- R217: 0
- R218: 0
- R219: 0
- R220: 0
- R221: 0
- R222: 0
- R223: 0
- R224: 0
- R225: 0
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- R229: 0
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- R241: 0
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- R243: 0
- R244: 0
- R245: 0
- R246: 0
- R247: 0
- R248: 0
- R249: 0
- R250: 0
- R251: 0
- R252: 0
- R253: 0
- R254: 0
- R255: 0
- R256: 0
- R257: 0
- R258: 0
- R259: 0
- R260: 0
- R261: 0
- R262: 0
- R263: 0
- R264: 0
- R265: 0
- R266: 0
- R267: 0
- R268: 0
- R269: 0
- R270: 0
- R271: 0
- R272: 0
- R273: 0
- R274: 0
- R275: 0
- R276: 0
- R277: 0
- R278: 0
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- R281: 0
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- R286: 0
- R287: 0
- R288: 0
- R289: 0
- R290: 0

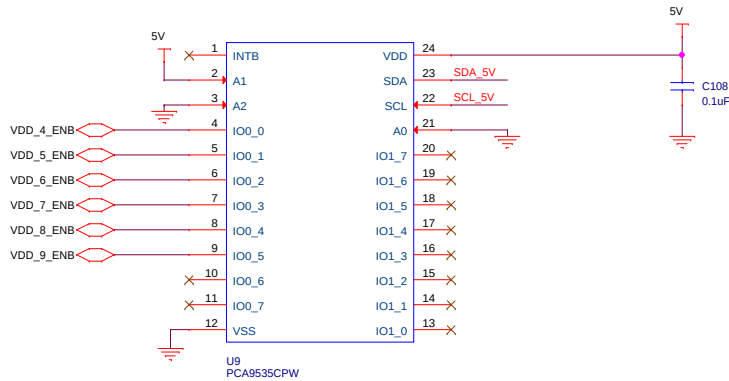
Removed "toe tag" MH9.

		400 W Cesar Chavez Austin, TX 78701	
Title MCU			
Size B	Document Number SI5395E-A-EB		Rev 1.
Date Tuesday, June 19, 2018		Sheet 27	of 44

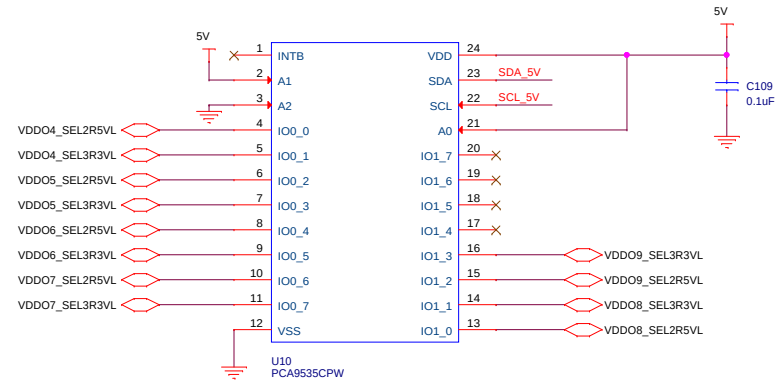
PERIPHERALS



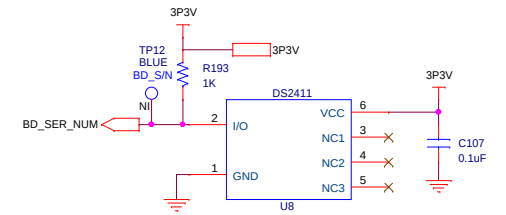
I2C VDD ENABLES/SELECTS FOR REGULATORS
I2C address: 0100001



I2C VDD ENABLES/SELECTS FOR REGULATORS
I2C address: 0100010

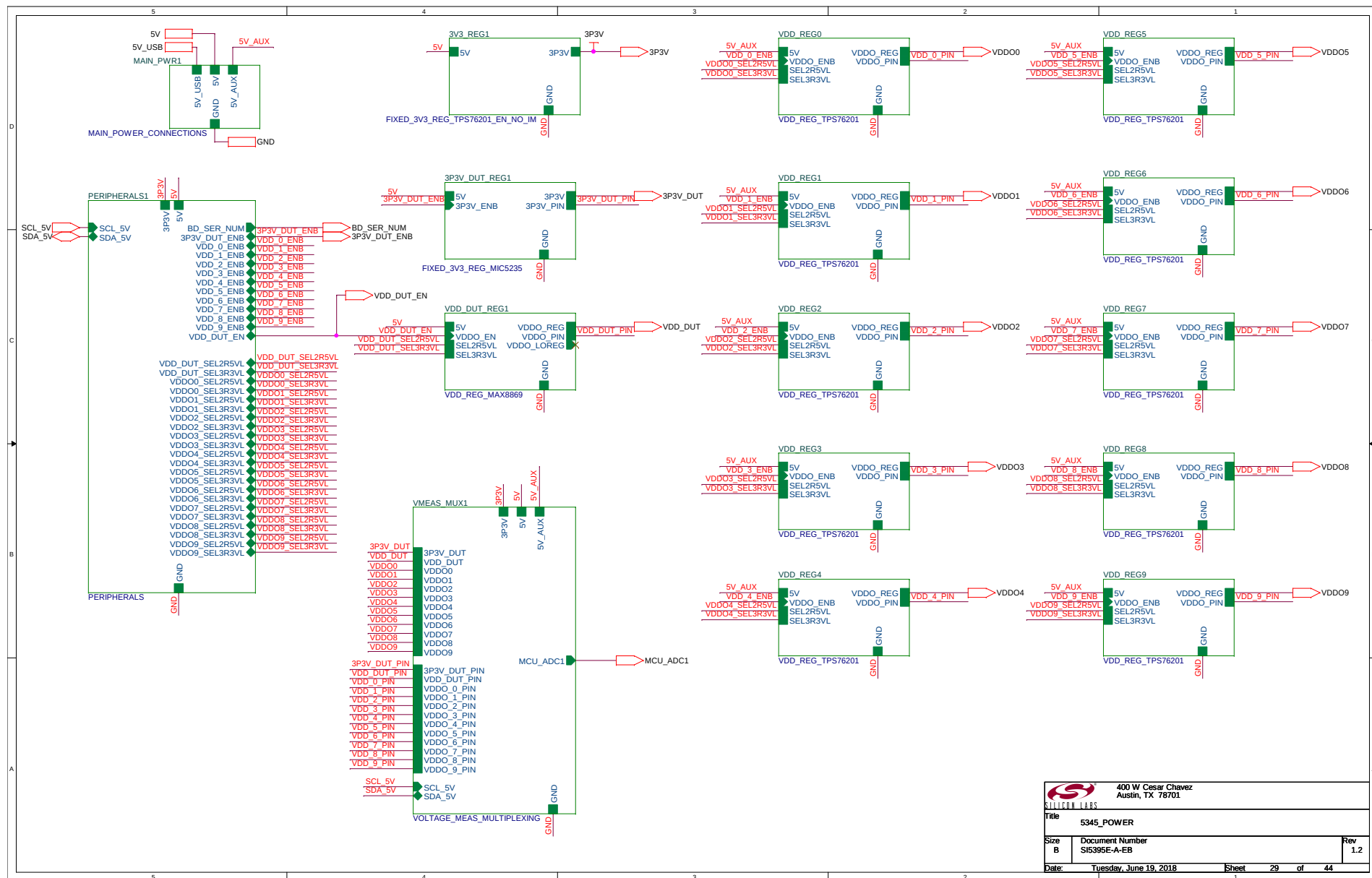


I2C VDD ENABLES/SELECTS FOR REGULATORS
I2C address: 0100011

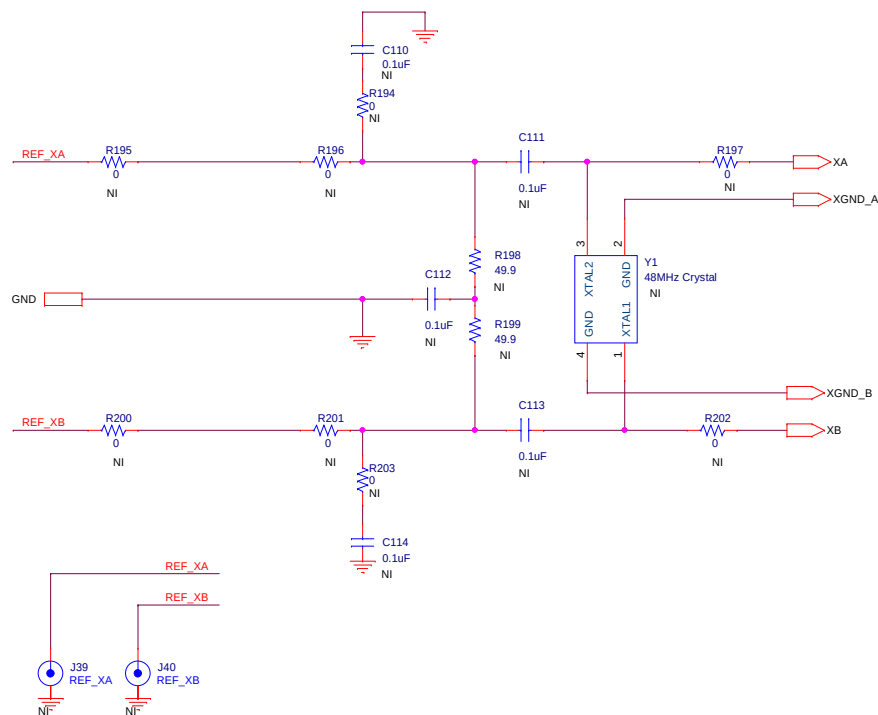


Board Serial Number

 400 W Cesar Chavez Austin, TX 78701		
Title PERIPHERALS		
Size B	Document Number SI5395E-A-EB	Rev 1.2
Date: Tuesday, June 19, 2018	Sheet 28	of 44

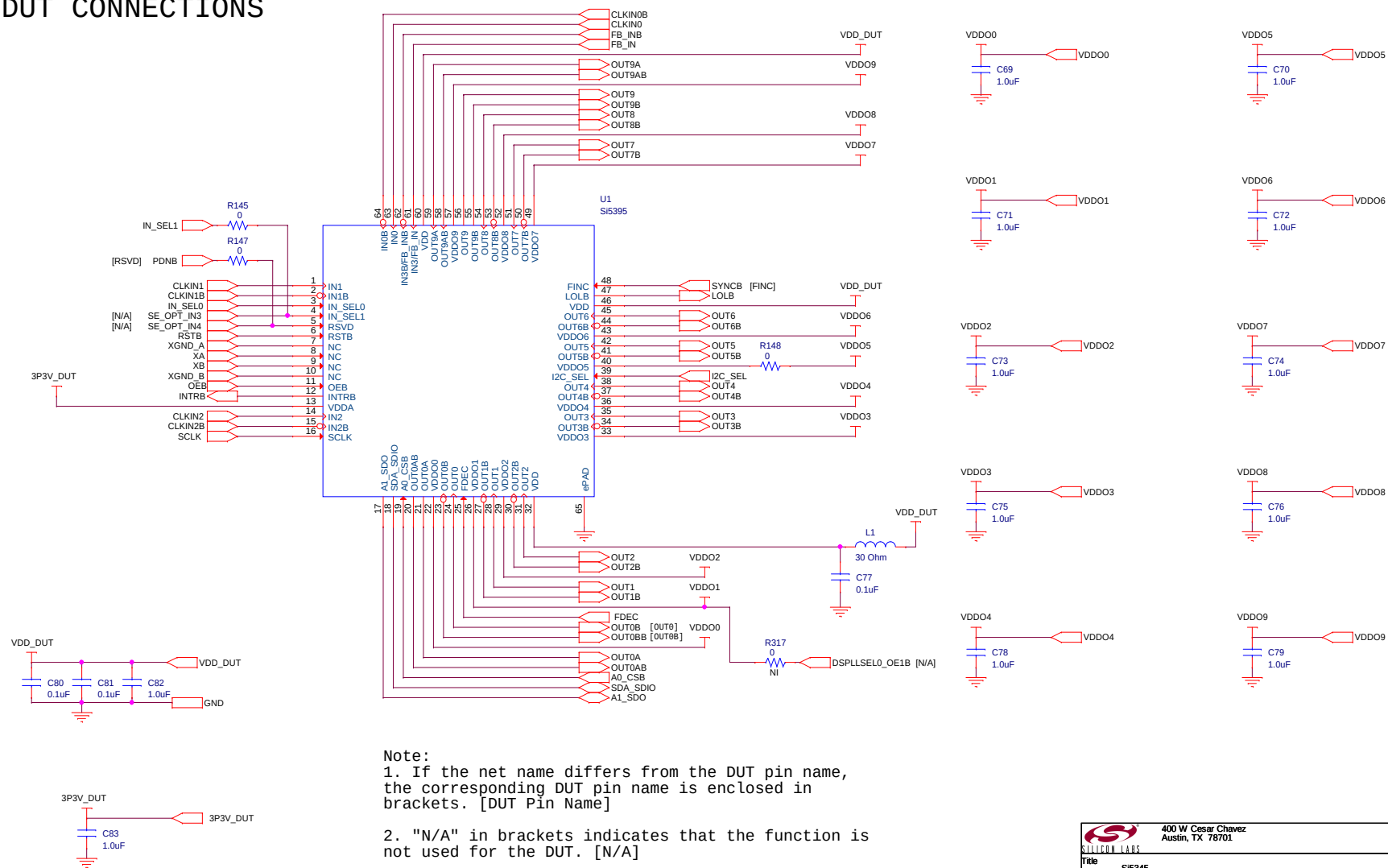


REFERENCE INPUT CONNECTIONS



 400 W Cesar Chavez Austin, TX 78701		
Title REFERENCE		
Size B	Document Number SI5395E-A-EB	Rev 1.2
Date: Tuesday, June 19, 2018	Sheet 30 of 44	

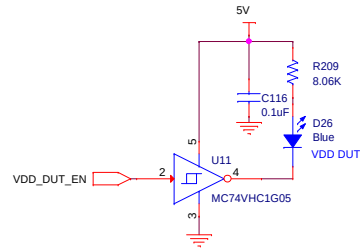
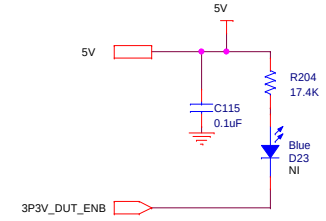
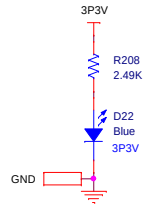
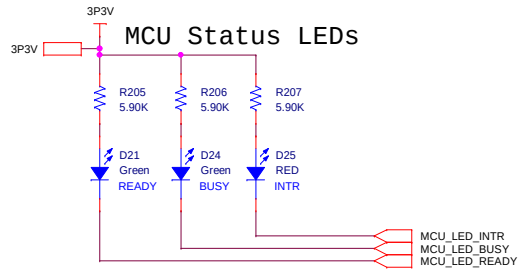
DUT CONNECTIONS



Note:

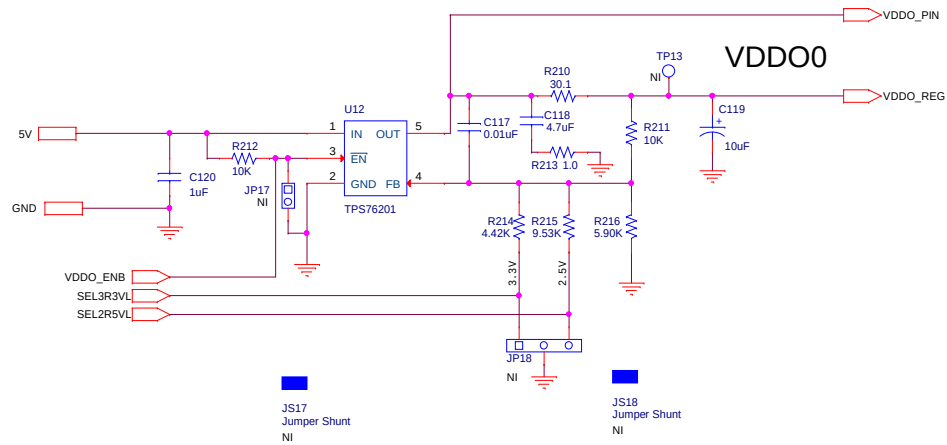
1. If the net name differs from the DUT pin name, the corresponding DUT pin name is enclosed in brackets. [DUT Pin Name]
2. "N/A" in brackets indicates that the function is not used for the DUT. [N/A]

LEDS - SUPPLIES & STATUS



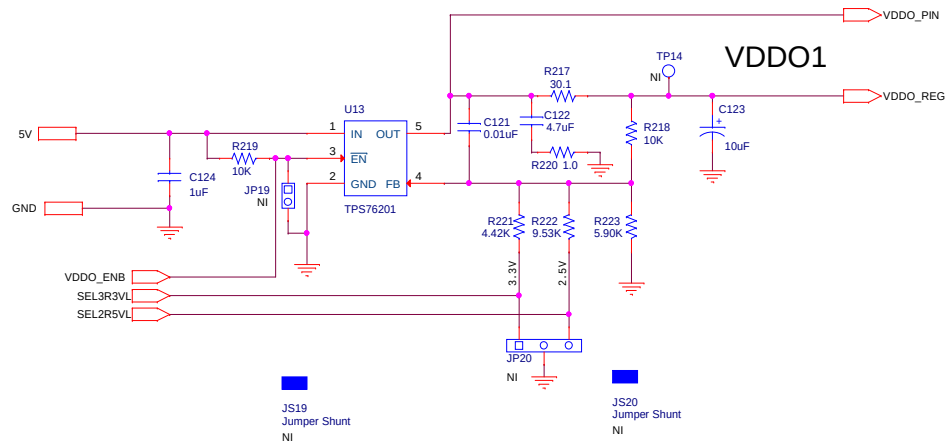
		400 W Cesar Chavez Austin, TX 78701	
Title		STATUS_MAIN_SUPPLY_LEDS	
Size	Document Number	Rev	
B	SI5395E-A-EB	1.2	
Date:	Tuesday, June 19, 2018	Sheet	32 of 44

100 mA Adjustable Voltage Regulator



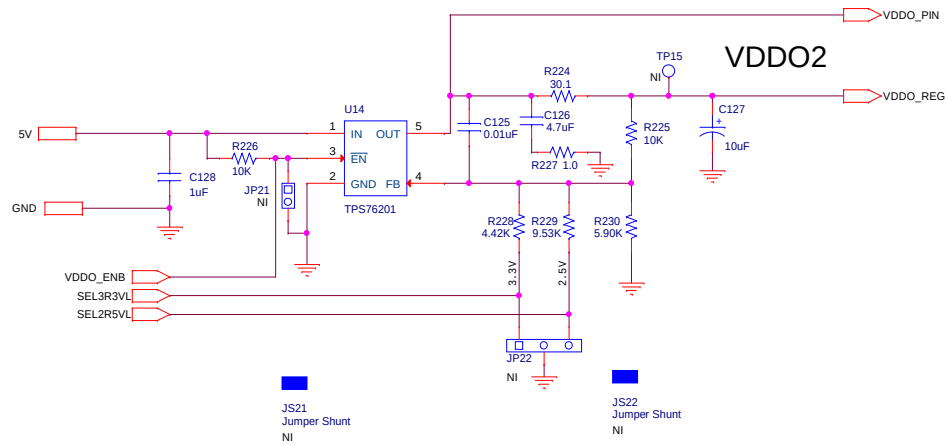
 400 W Cesar Chavez Austin, TX 78701	
Title	
VDD_REG_TPS76201	
Size	Document Number
B	SI5395E-A-EB
Date:	Tuesday, June 19, 2018
Sheet	33 of 44
Rev	1.2

100 mA Adjustable Voltage Regulator



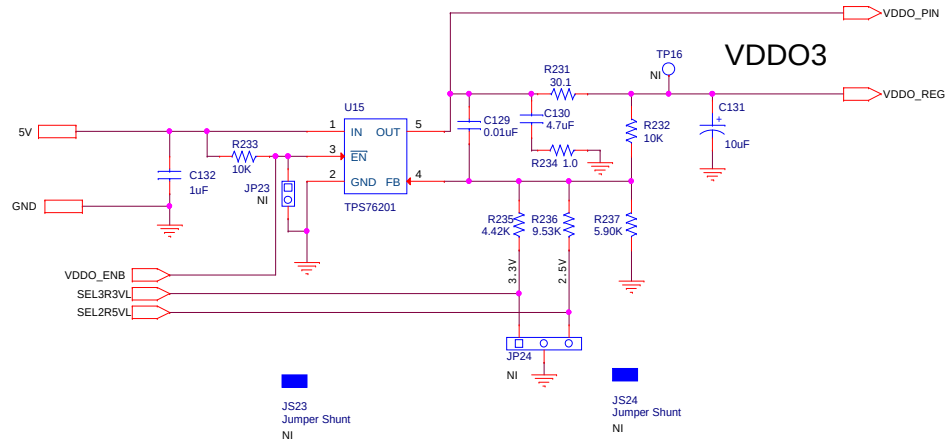
 400 W Cesar Chavez Austin, TX 78701	
Title	
VDD_REG_TPS76201	
Size	Document Number
B	SI5395E-A-EB
Date:	Tuesday, June 19, 2018
Sheet	34 of 44
Rev	
1.2	

100 mA Adjustable Voltage Regulator



 400 W Cesar Chavez Austin, TX 78701		
Title		
VDD_REG_TPS76201		
Size	Document Number	Rev
B	SI5395E-A-EB	1.2
Date:	Tuesday, June 19, 2018	Sheet 35 of 44

100 mA Adjustable Voltage Regulator

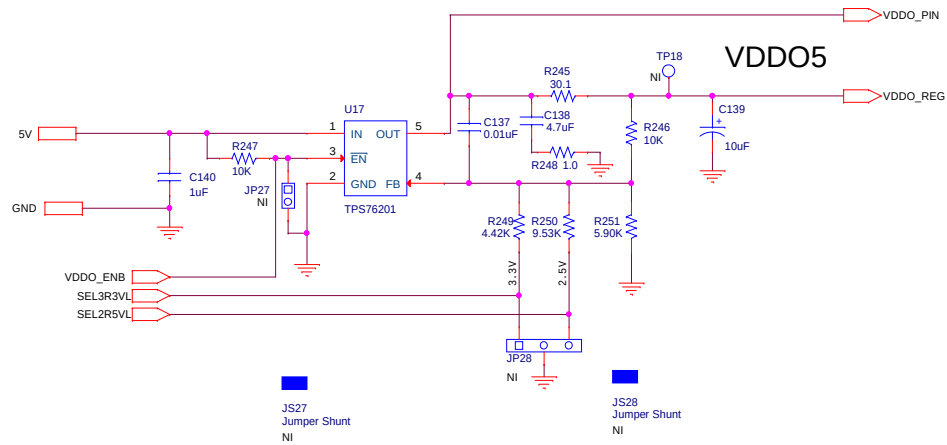


 400 W Cesar Chavez Austin, TX 78701	
Title	
VDD_REG_TPS76201	
Size	Document Number
B	SI5395E-A-EB
Date:	Tuesday, June 19, 2018
Sheet	36 of 44
Rev	1.2

JS25
Jumper Shunt
NI

JS26
Jumper Shunt
NI

100 mA Adjustable Voltage Regulator

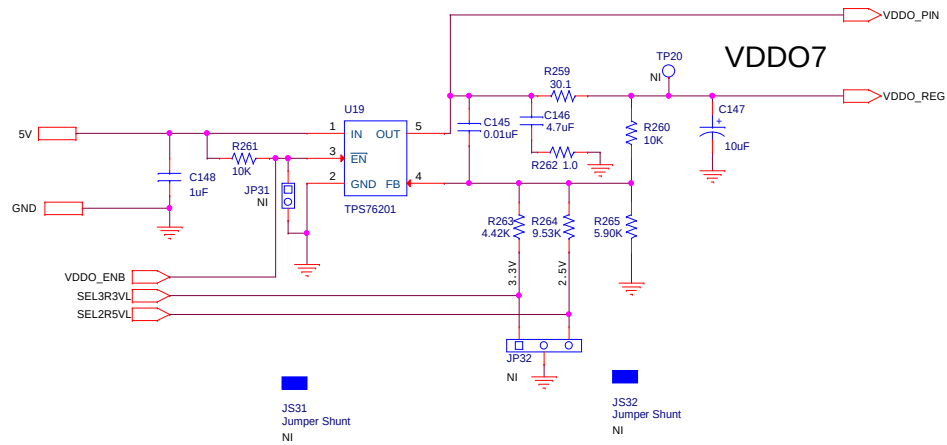


 400 W Cesar Chavez Austin, TX 78701	
Title	
VDD_REG_TPS76201	
Size	Document Number
B	SI5395E-A-EB
Date:	Tuesday, June 19, 2018
Sheet	38 of 44
Rev	1.2

A vertical bar is divided into four segments labeled A, B, C, and D from bottom to top. An arrow points to the boundary between segments B and C.

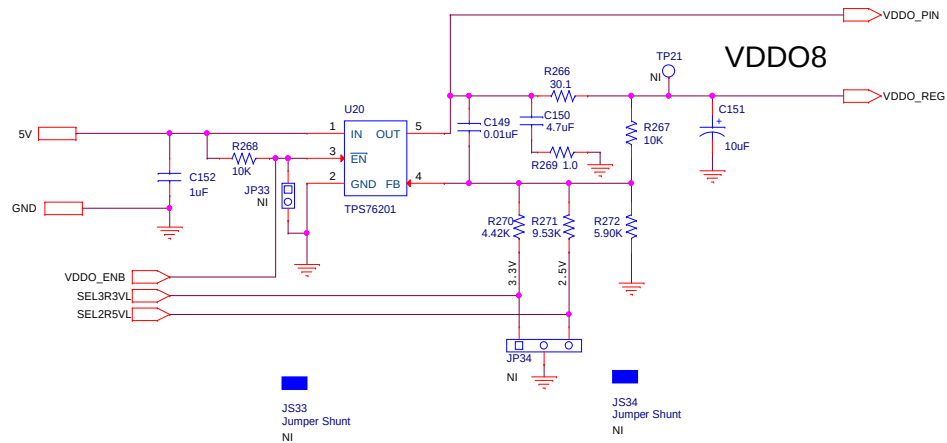
A

100 mA Adjustable Voltage Regulator



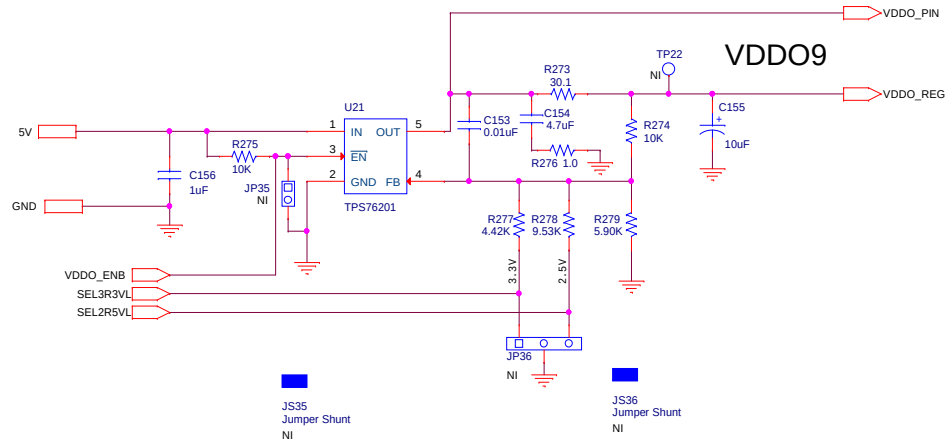
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Title	
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Size	Document Number
B	SI5395E-A-EB
Date:	Tuesday, June 19, 2018
Sheet	40 of 44
Rev	
1.2	

100 mA Adjustable Voltage Regulator



 400 W Cesar Chavez Austin, TX 78701	
Title	
VDD_REG_TPS76201	
Size	Document Number
B	SI5395E-A-EB
Date:	Tuesday, June 19, 2018
Sheet	41 of 44
Rev	1.2

100 mA Adjustable Voltage Regulator



 400 W Cesar Chavez Austin, TX 78701	
Title	
VDD_REG_TPS76201	
Size	Document Number
B	SI5395E-A-EB
Date:	Tuesday, June 19, 2018
Sheet	42 of 44
Rev	1.2

VOLTAGE MEASUREMENT MULTIPLEXING

