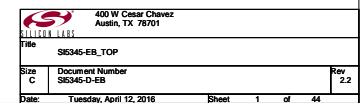



To ascend from a block schematic, right click and select "Previous View".



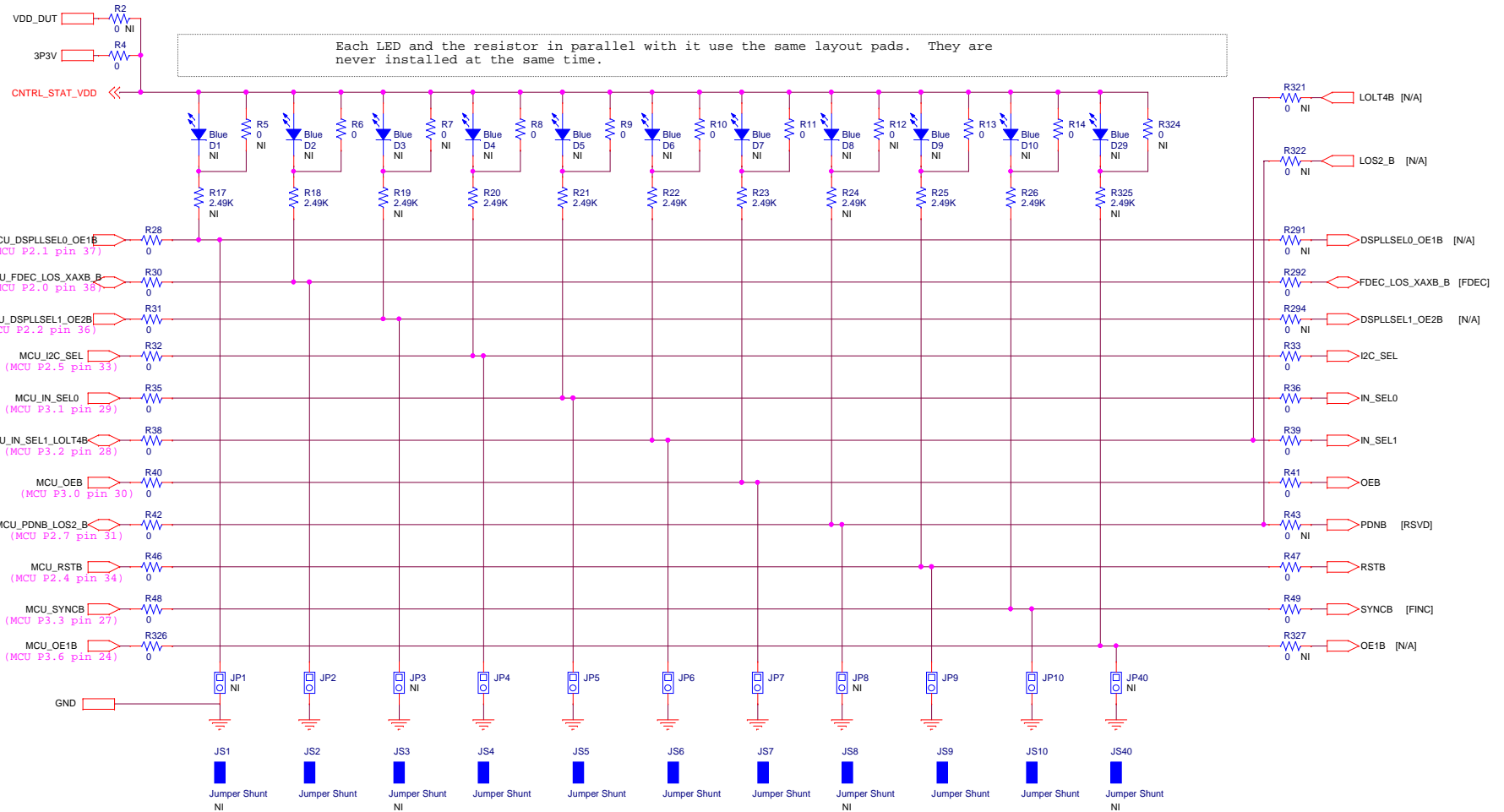
REVISION CONTROL

Rev 2.1 - Jan 12, 2014, Initial Board Release
Includes PCB and label on BOM.

Rev 2.2 - April 13, 2016, changed U6 to custom
part number CF380P0997AGQ

		400 W Cesar Chavez Austin, TX 78701	
SILICON LABS			
Title SI5345-EB_TOP_REVISION			
Size B	Document Number SI5345-D-EB		Rev 2.2
Date: Wednesday, April 13, 2016		Sheet 2 of 44	1

CONTROL PINS CONNECTIONS



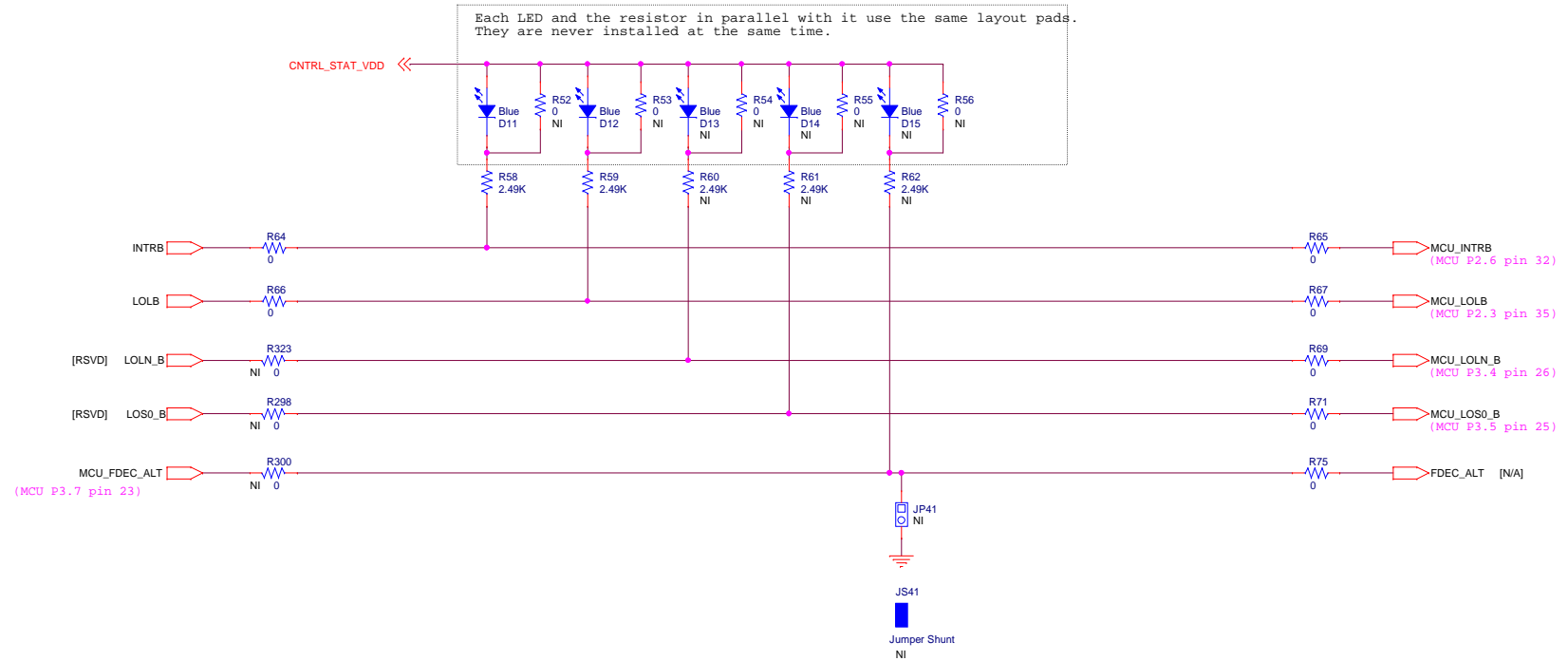
Note:

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]

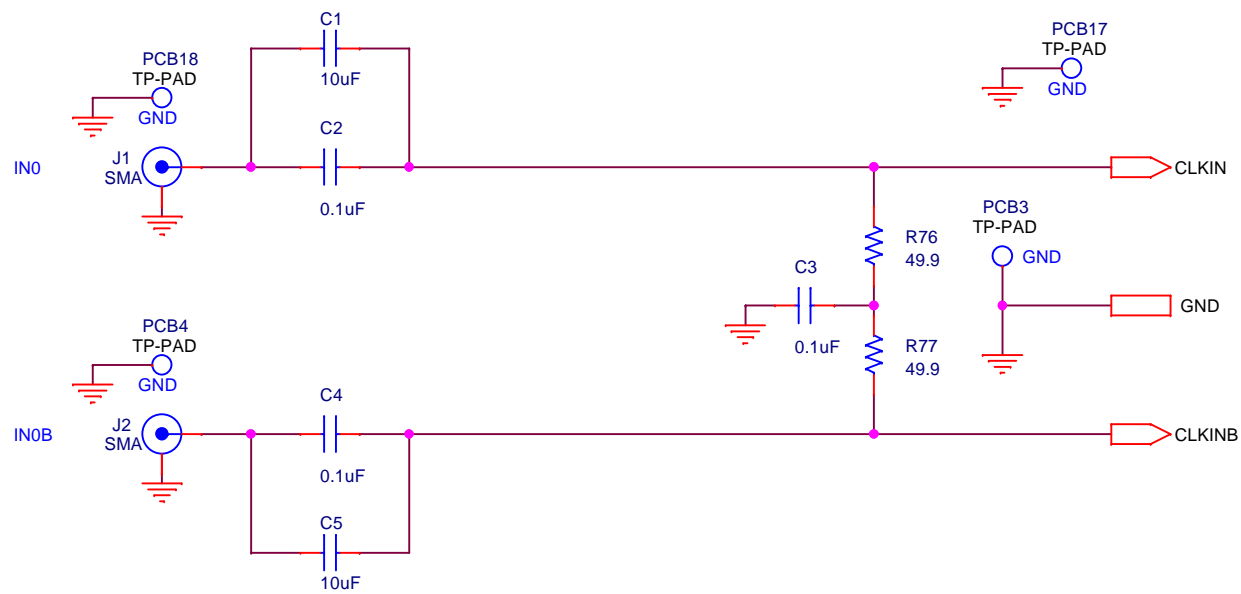
400 W Cesar Chavez Austin, TX 78701		
Title CONTROL PINS_P1		
Size B	Document Number SI5345-D-EB	Rev 2.2
Date: Monday, April 11, 2016	Sheet 3	of 44

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: SI5345-D-EB	Rev: 2.2
Date: Monday, April 11, 2016	Sheet: 4	of 44



400 W Cesar Chavez
Austin, TX 78701

Title

DIFF_INPUT_CLK

Size

A

Document Number

SI5345-D-EB

Rev

2.2

Date:

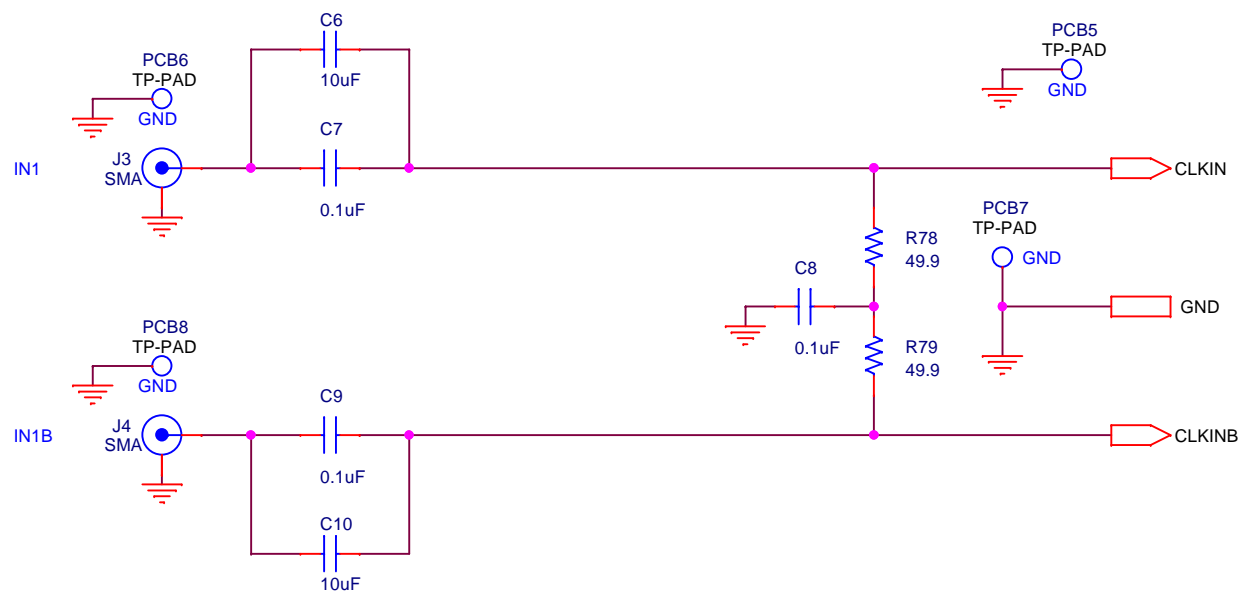
Monday, April 11, 2016

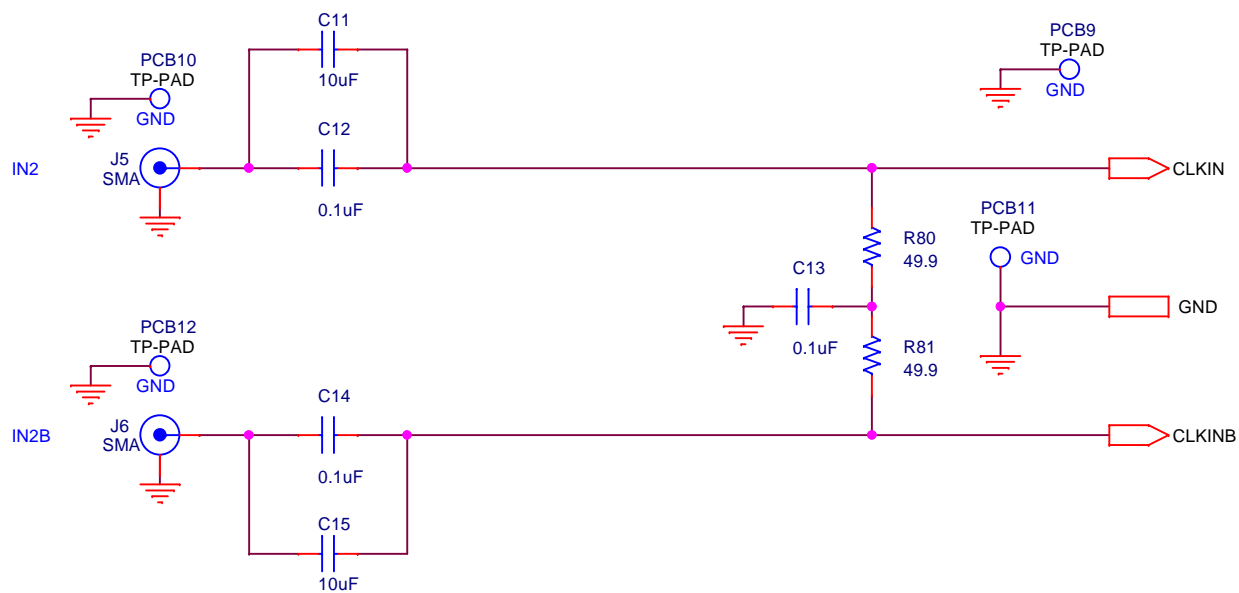
Sheet


5

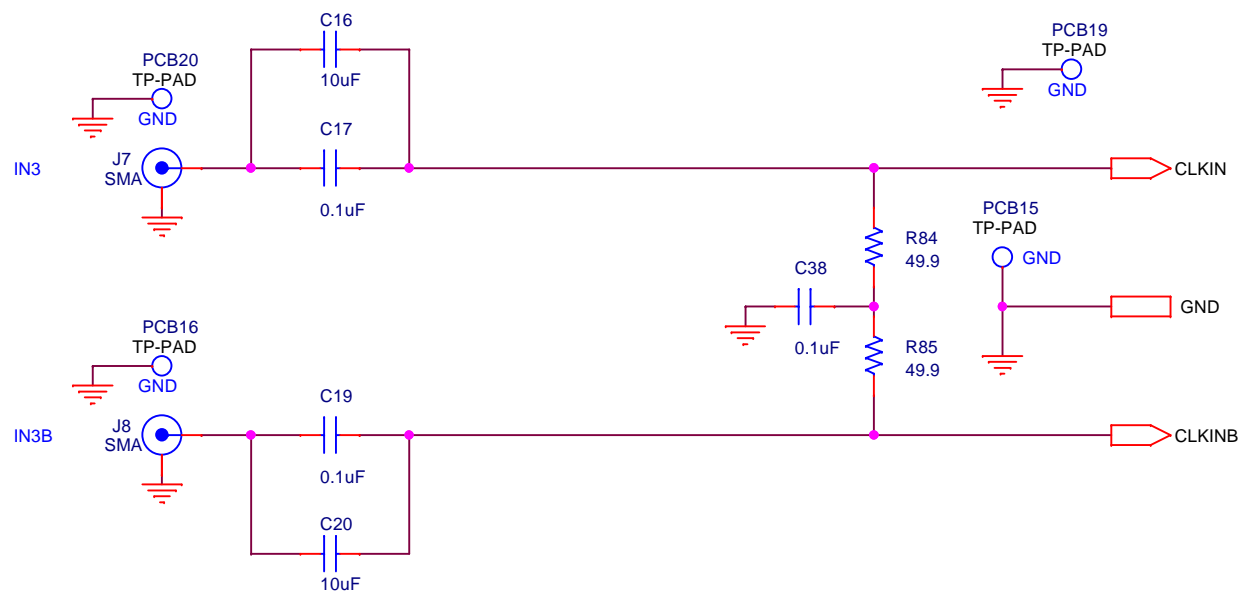
of


44



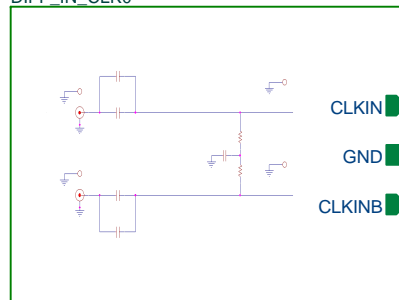


 400 W Cesar Chavez Austin, TX 78701		
Title DIFF_INPUT_CLK		
Size A	Document Number SI5345-D-EB	Rev 2.2
Date:	Monday, April 11, 2016	Sheet 7 of 44



 400 W Cesar Chavez Austin, TX 78701		
Title DIFF_INPUT_CLK		
Size A	Document Number SI5345-D-EB	Rev 2.2
Date:	Monday, April 11, 2016	Sheet 8 of 44

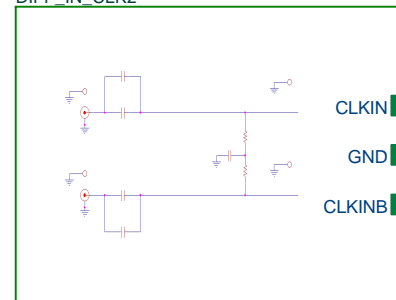
DIFF_IN_CLK0



CLKIN → CLKIN0
 GND → GND
 CLKINB → CLKIN0B

DIFF_INPUT_CLK

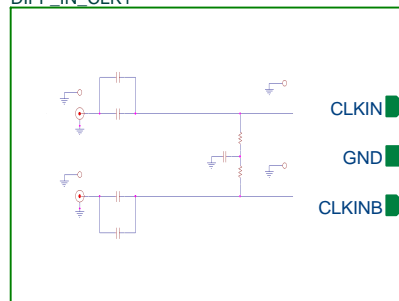
DIFF_IN_CLK2



CLKIN → CLKIN2
 GND → GND
 CLKINB → CLKIN2B

DIFF_INPUT_CLK

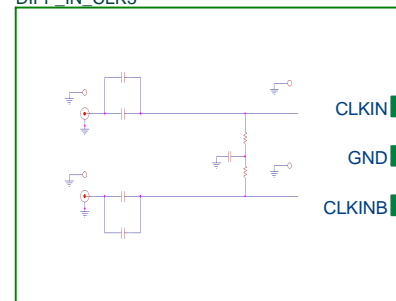
DIFF_IN_CLK1



CLKIN → CLKIN1
 GND → GND
 CLKINB → CLKIN1B

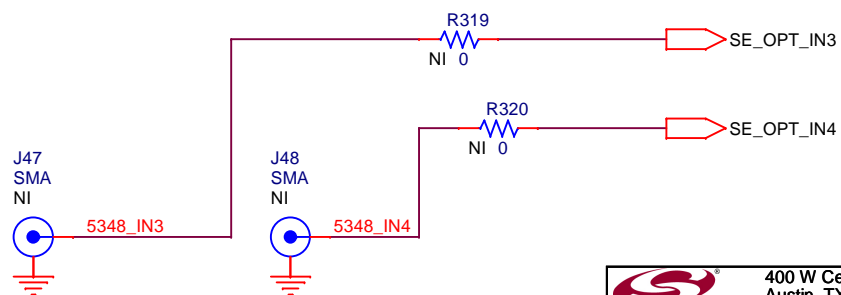
DIFF_INPUT_CLK

DIFF_IN_CLK3



CLKIN → CLKIN3
 GND → GND
 CLKINB → CLKIN3B

DIFF_INPUT_CLK



Single-ended clocks only.



400 W Cesar Chavez
 Austin, TX 78701

Title

DIFF_INPUT_CLOCKS_4

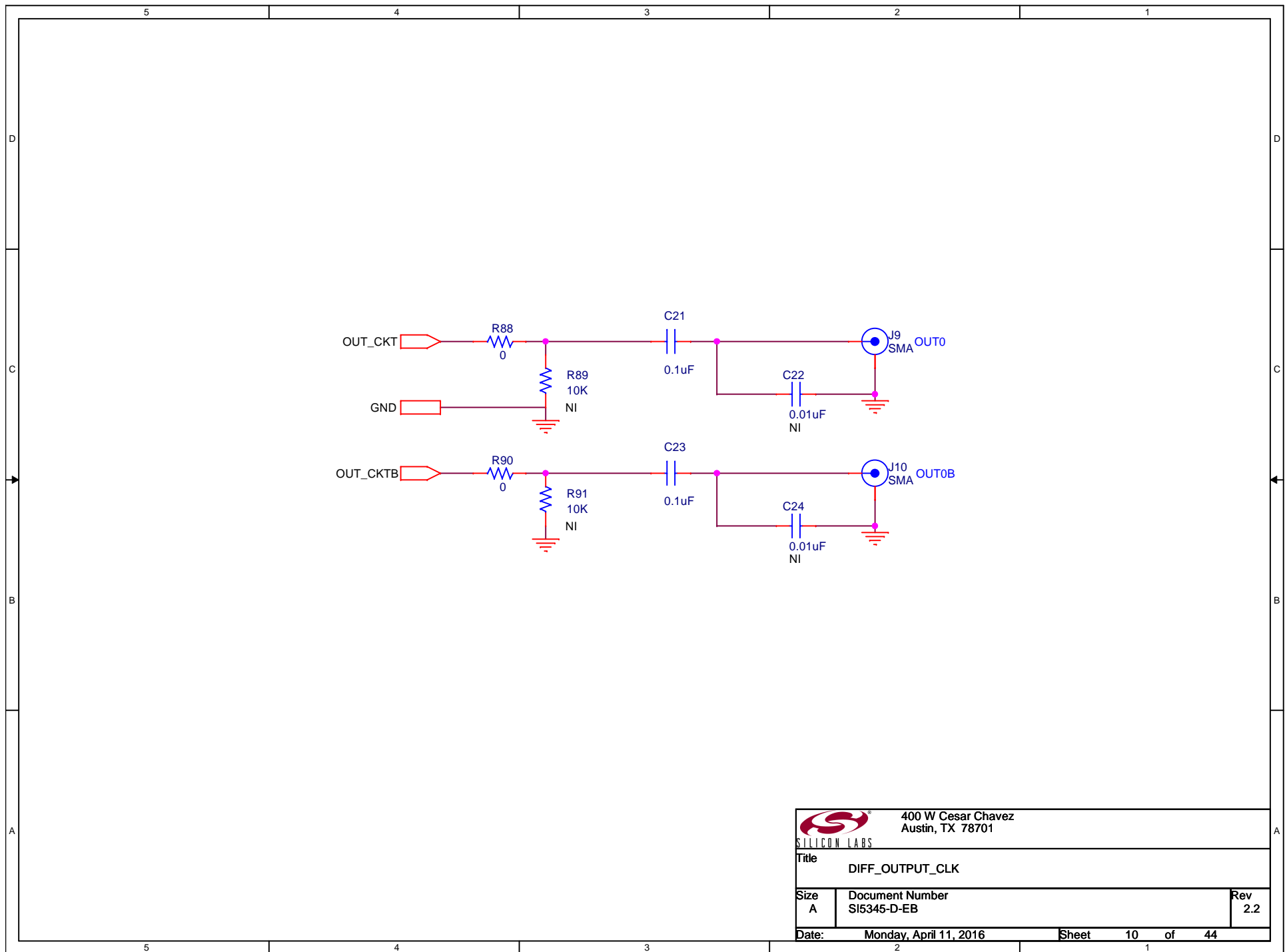
Size
 A

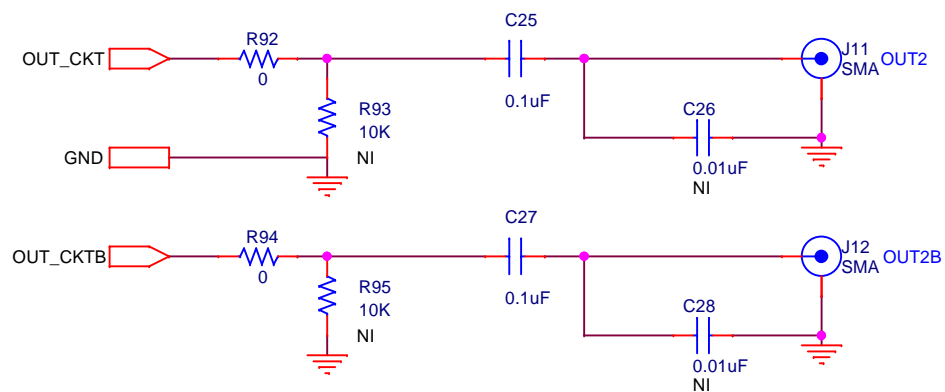
Document Number
 SI5345-D-EB


Rev
 2.2

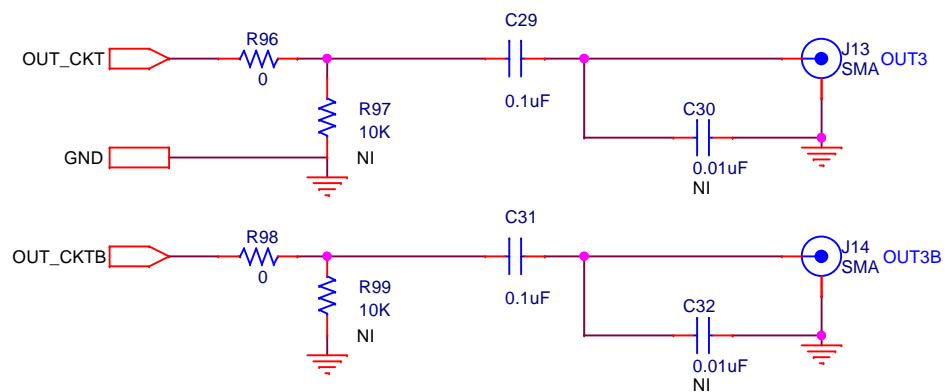
Date: Monday, April 11, 2016


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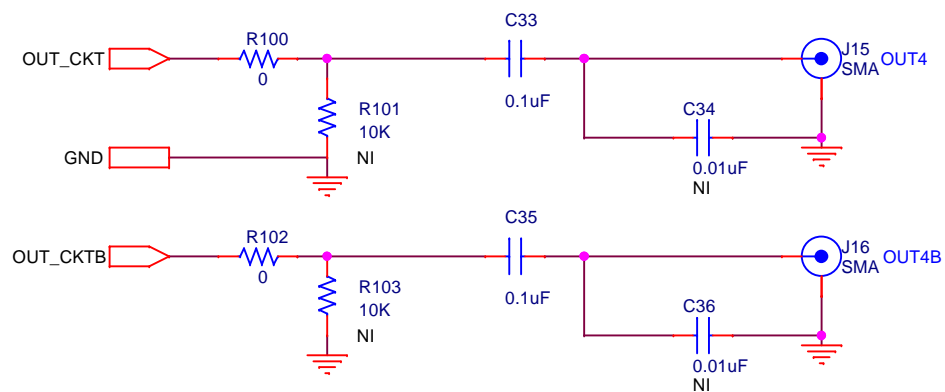





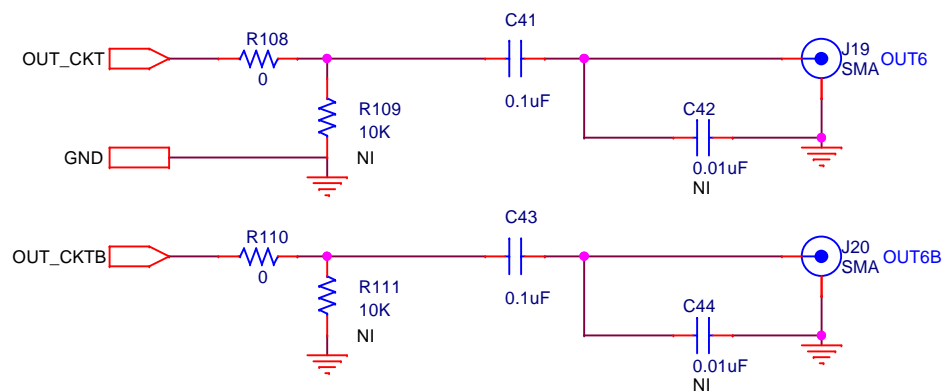
 400 W Cesar Chavez Austin, TX 78701		
Title DIFF_OUTPUT_CLK		
Size A	Document Number SI5345-D-EB	Rev 2.2
Date:	Monday, April 11, 2016	Sheet 11 of 44




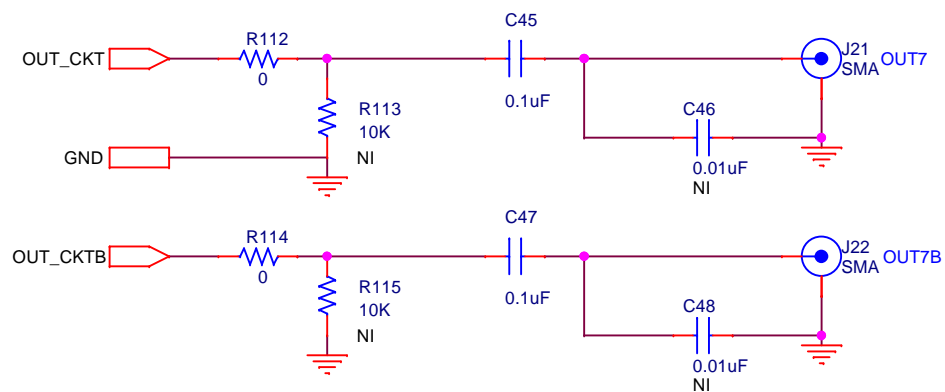
 400 W Cesar Chavez Austin, TX 78701		
Title DIFF_OUTPUT_CLK		
Size A	Document Number SI5345-D-EB	Rev 2.2
Date:	Monday, April 11, 2016	Sheet 12 of 44




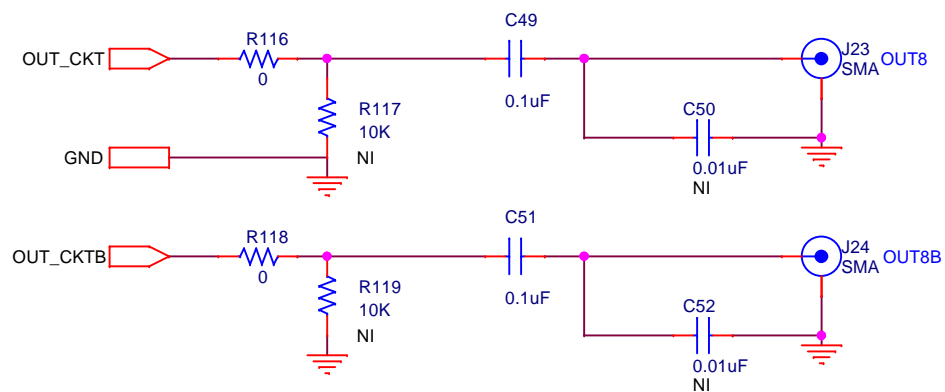
 400 W Cesar Chavez Austin, TX 78701		
Title DIFF_OUTPUT_CLK		
Size A	Document Number SI5345-D-EB	Rev 2.2
Date:	Monday, April 11, 2016	Sheet 13 of 44




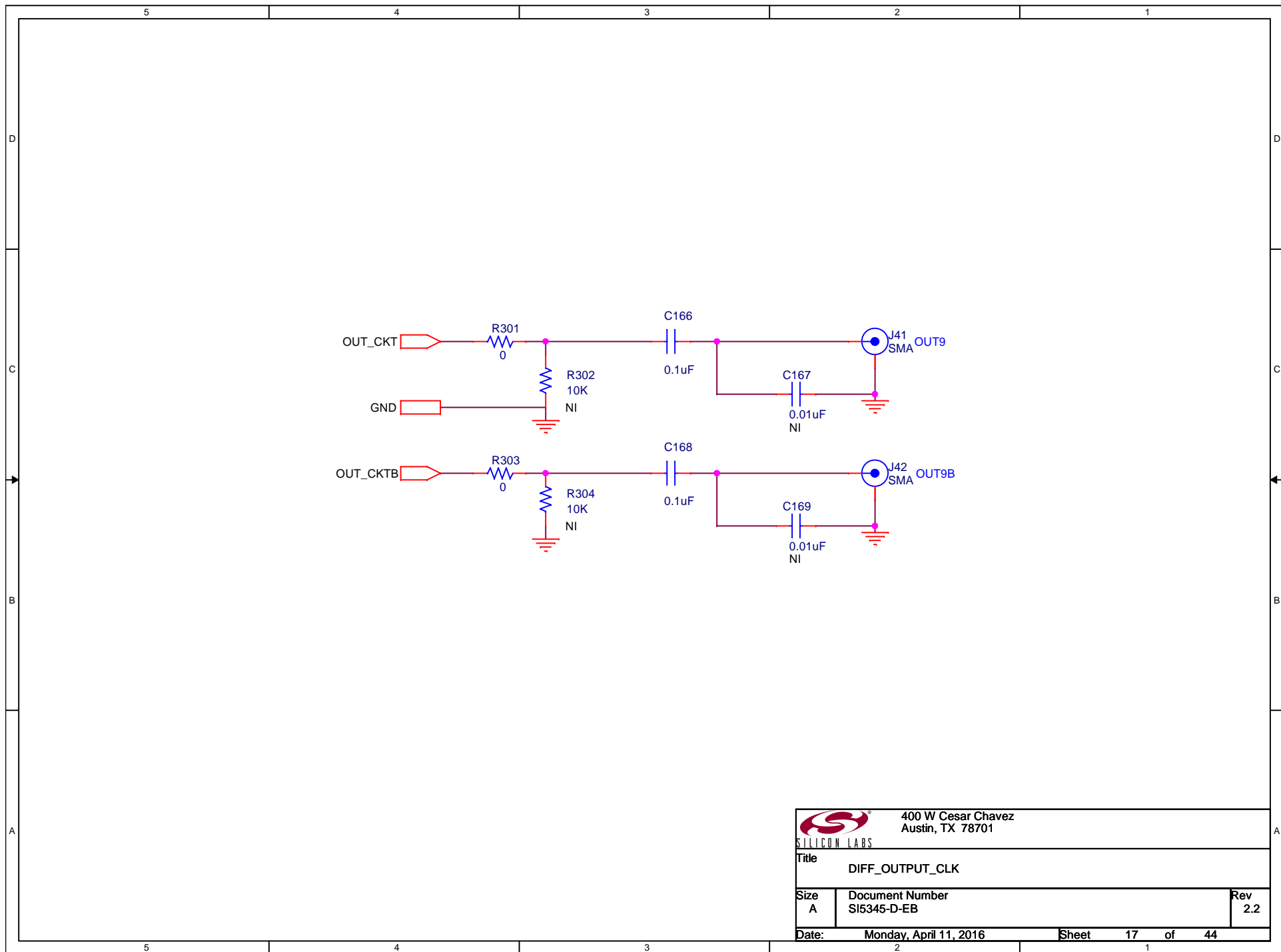
 400 W Cesar Chavez Austin, TX 78701		
Title DIFF_OUTPUT_CLK		
Size A	Document Number SI5345-D-EB	Rev 2.2
Date:	Monday, April 11, 2016	Sheet 14 of 44



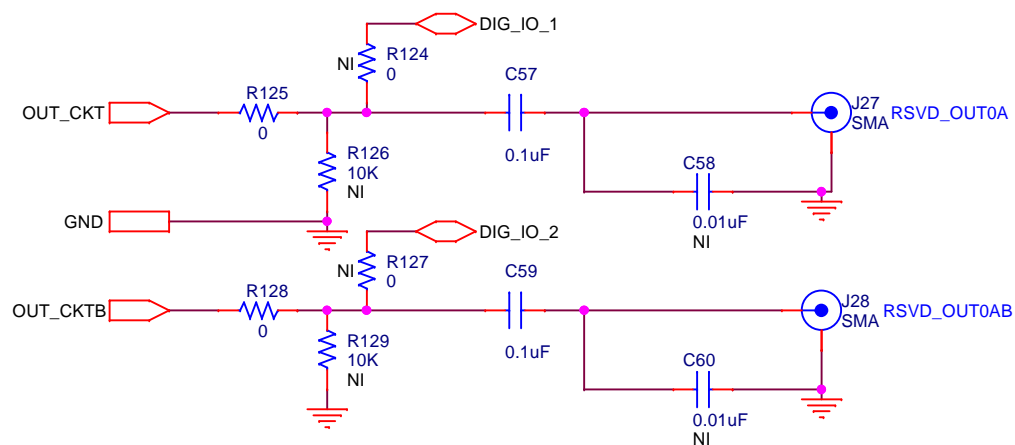
 400 W Cesar Chavez Austin, TX 78701		
Title DIFF_OUTPUT_CLK		
Size A	Document Number SI5345-D-EB	Rev 2.2
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 400 W Cesar Chavez Austin, TX 78701		
Title DIFF_OUTPUT_CLK		
Size A	Document Number SI5345-D-EB	Rev 2.2
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DIFF_OUTPUT_CLK_DIG_IO



400 W Cesar Chavez
Austin, TX 78701

Title

DIFF_OUTPUT_CLK_DIG_IO

Size

A

Document Number

SI5345-D-EB

Rev

2.2

Date:

Monday, April 11, 2016

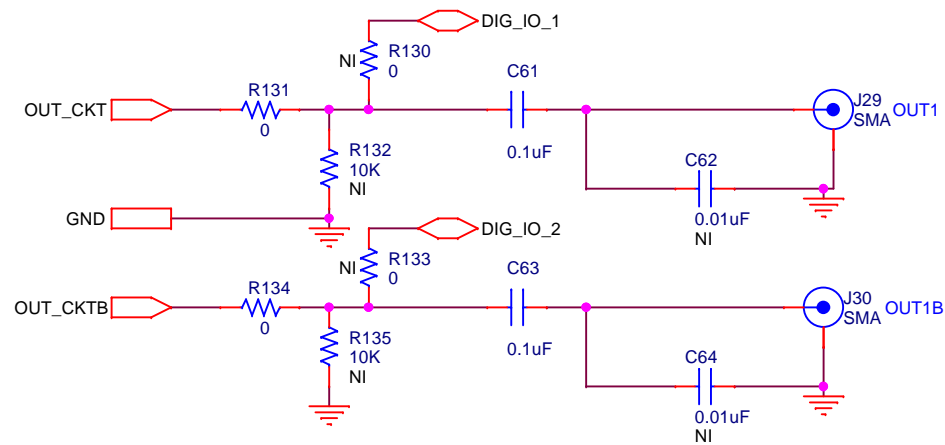
Sheet

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of

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DIFF_OUTPUT_CLK_DIG_IO



400 W Cesar Chavez
Austin, TX 78701

Title

DIFF_OUTPUT_CLK_DIG_IO

Size
A

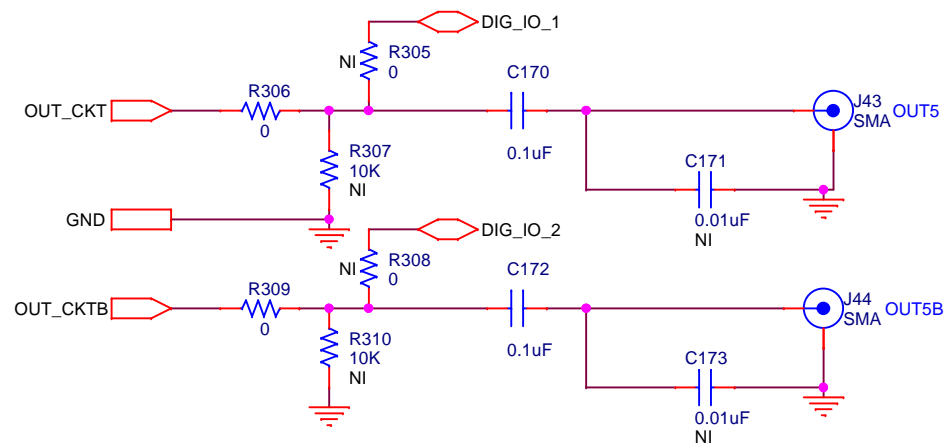
Document Number
SI5345-D-EB

Rev
2.2

Date: Monday, April 11, 2016

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DIFF_OUTPUT_CLK_DIG_IO



400 W Cesar Chavez
Austin, TX 78701

Title

DIFF_OUTPUT_CLK_DIG_IO

Size
A

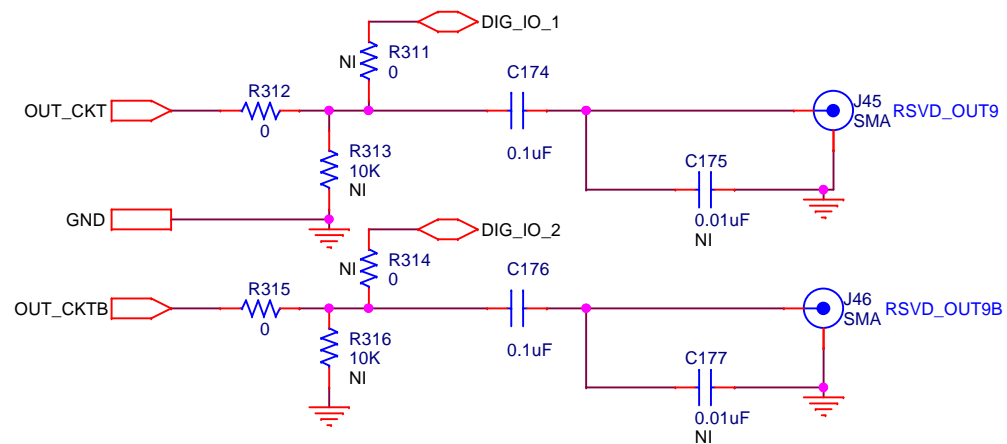
Document Number
SI5345-D-EB

Rev
2.2

Date: Monday, April 11, 2016

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DIFF_OUTPUT_CLK_DIG_IO



400 W Cesar Chavez
Austin, TX 78701

Title

DIFF_OUTPUT_CLK_DIG_IO

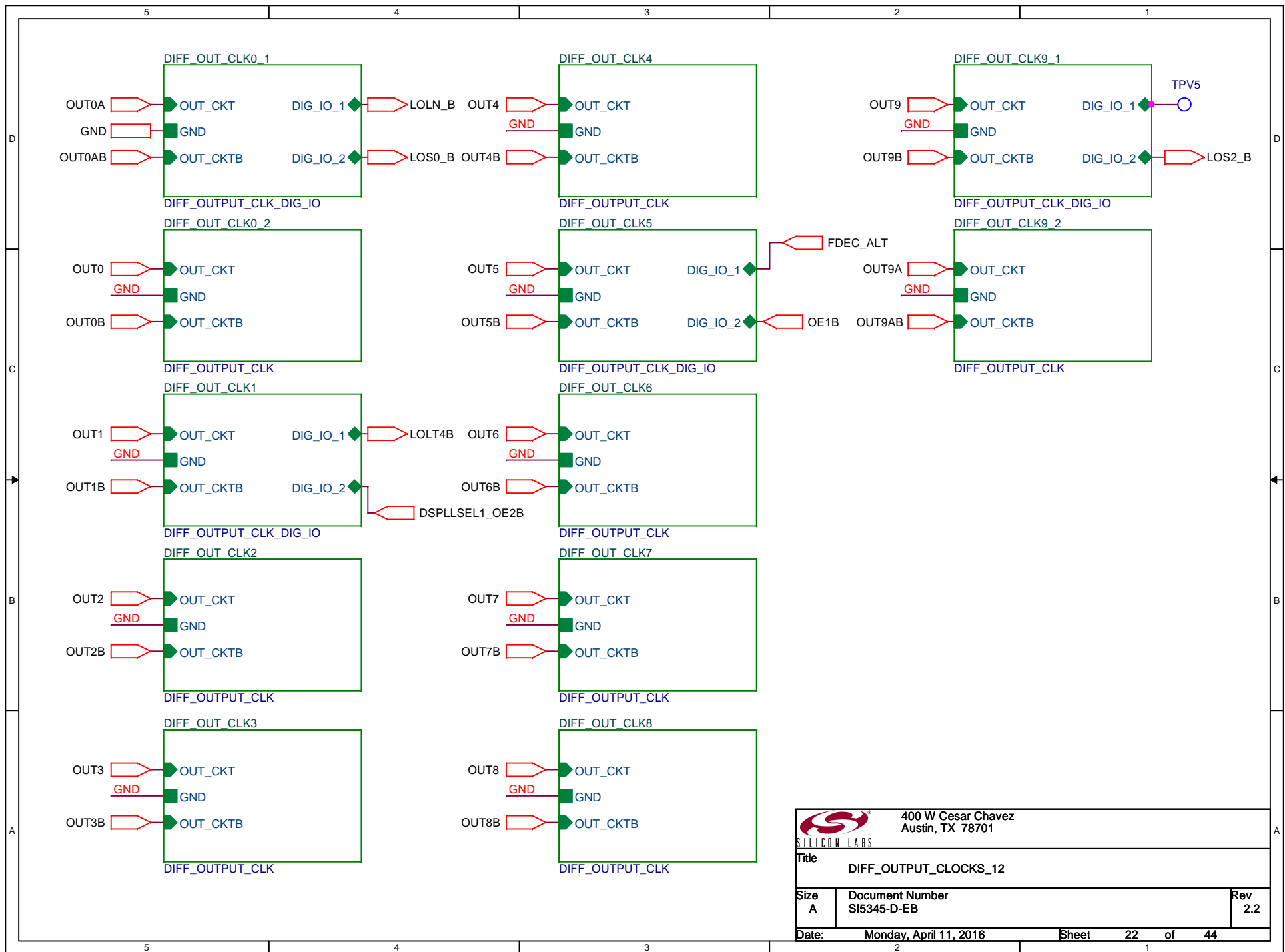
Size
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Document Number
SI5345-D-EB

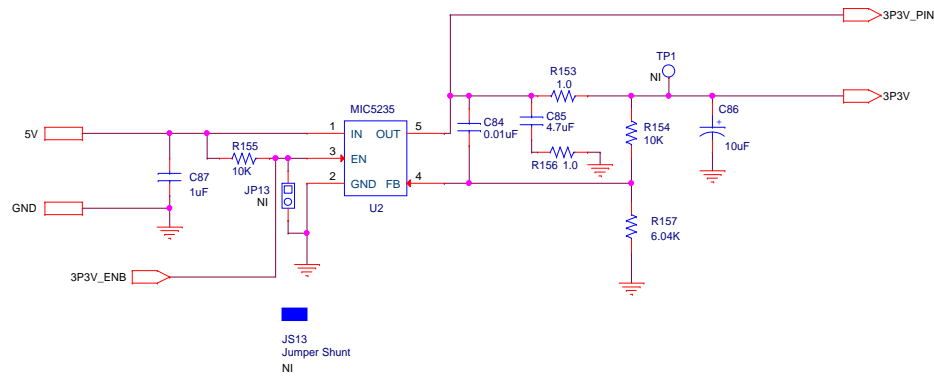
Rev
2.2

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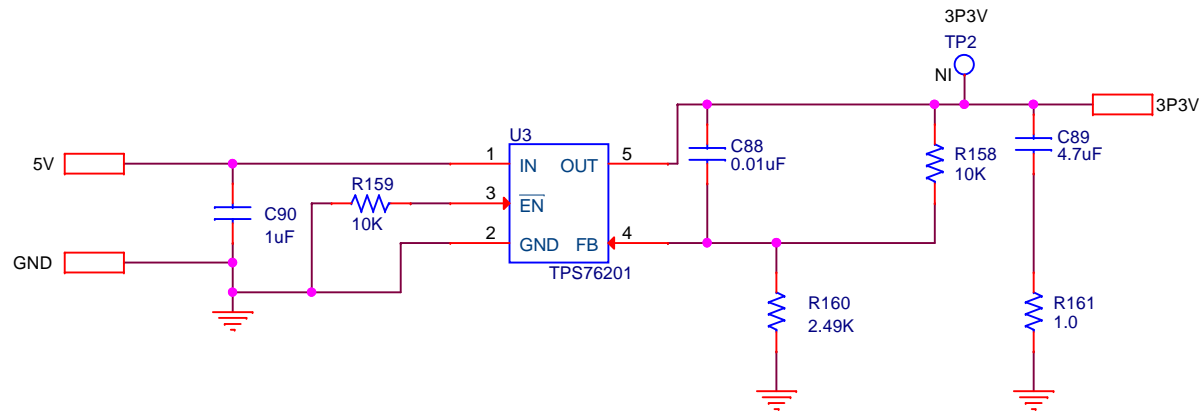
Fixed 3.3V 150 mA Voltage Regulator




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

		400 W Cesar Chavez Austin, TX 78701	
Title		VDD_REG_MIC5235	
Size	Document Number	Rev	
B	SI5345-D-EB	2.2	
Date:	Monday, April 11, 2016	Sheet	23 of 44

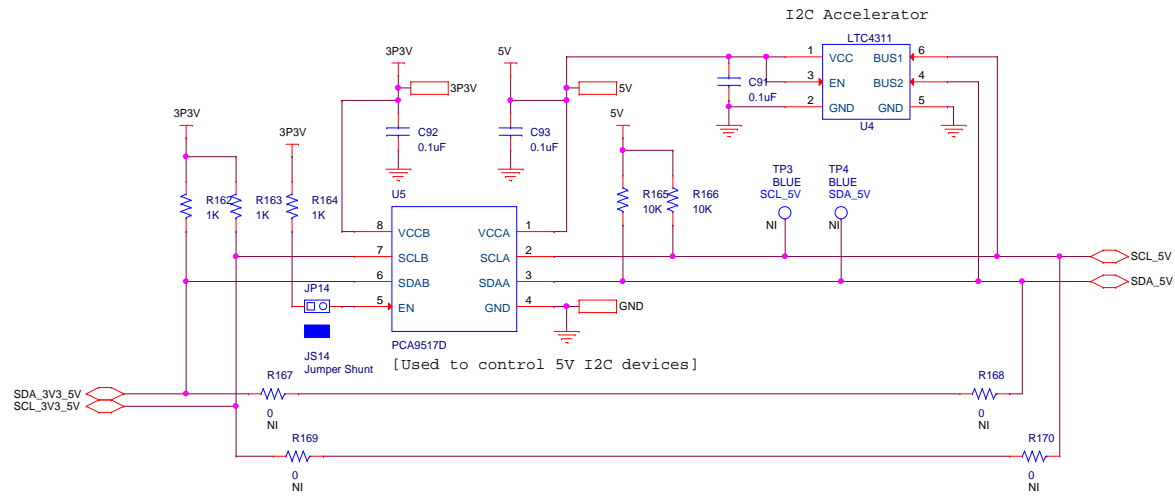
Fixed 3.3V 100 mA Voltage Regulator (Enabled, no current measurement supported.)



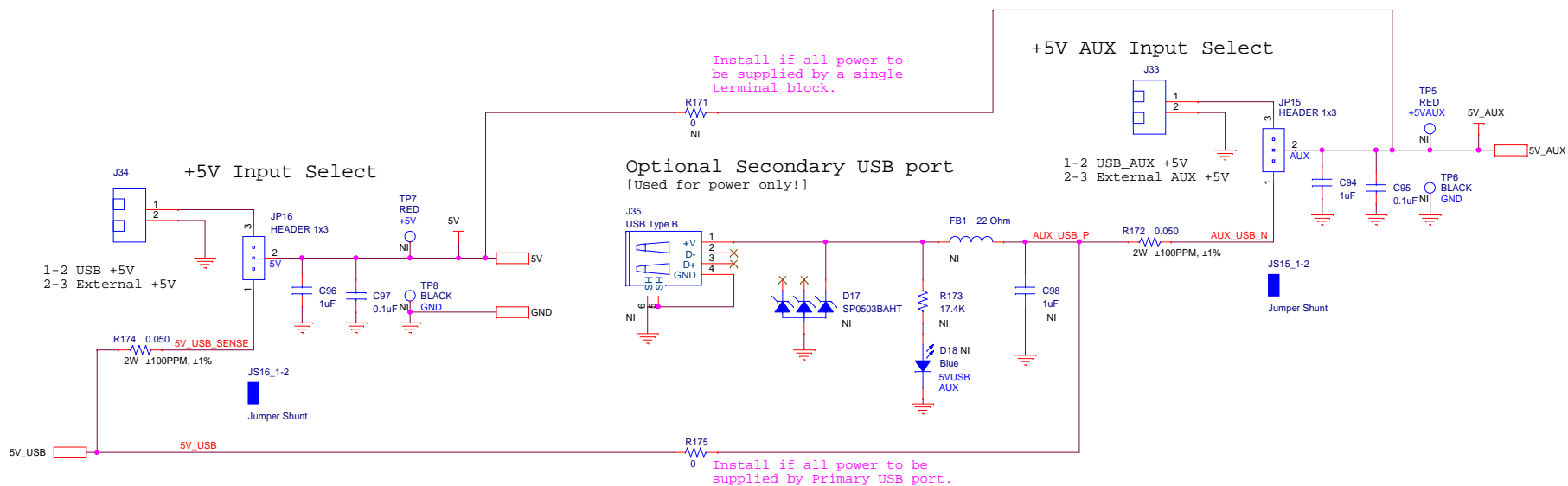
3P3V (In Schematic)
3P3V (Board Silkscreen)

 SILICON LABS		400 W Cesar Chavez Austin, TX 78701	
Title FIXED_3V3_REG_TPS76201_EN_NO_IM			
Size A	Document Number SI5345-D-EB <Variant Name>		Rev 2.2
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I2C LEVEL TRANSLATORS



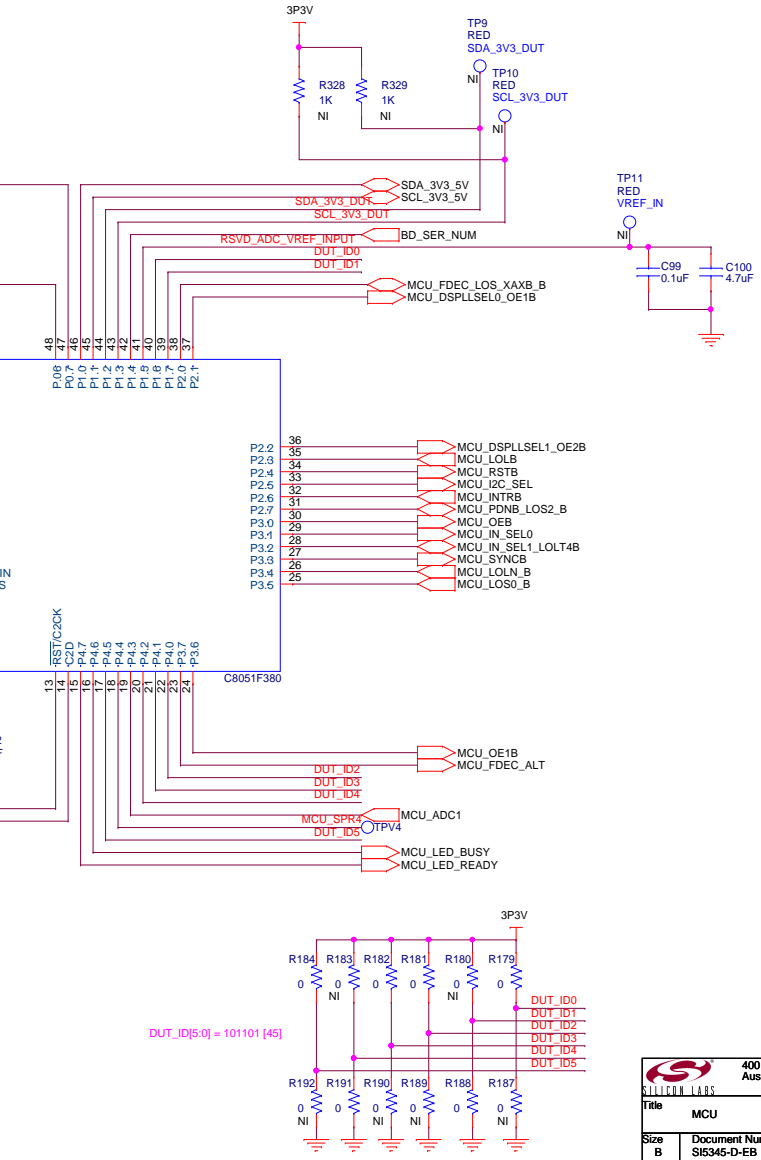
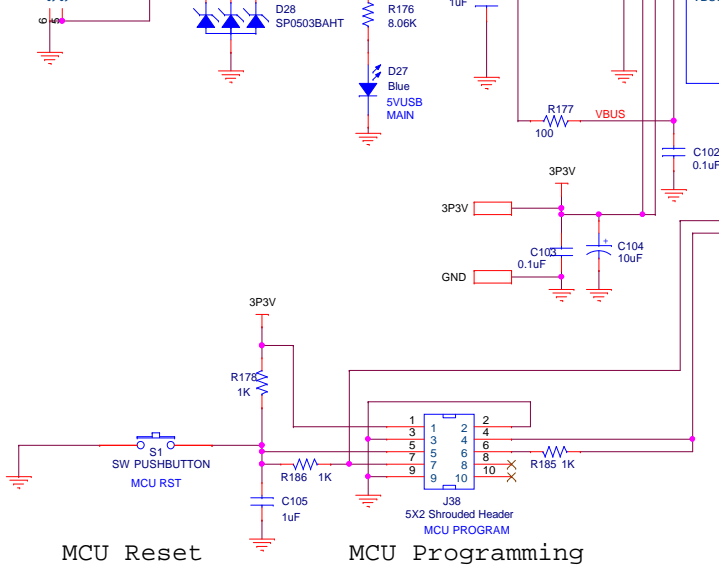
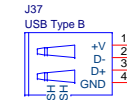
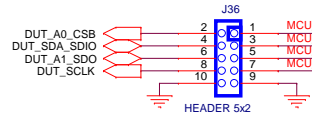
MAIN POWER INPUT SELECTS EXTERNAL OR USB



8051 MCU

Jumper Shunts

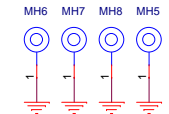
- JS36_1-2
- JS36_3-4
- JS36_5-6
- JS36_7-8
- JS36_9-10



Mounting Holes, Screws, and Standoffs



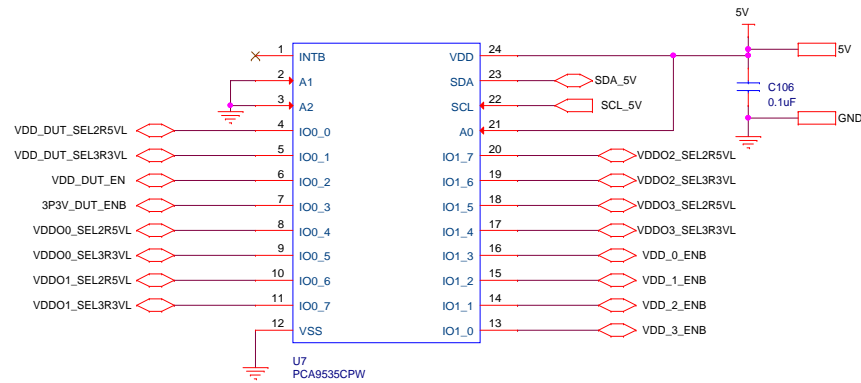
Mounting Holes



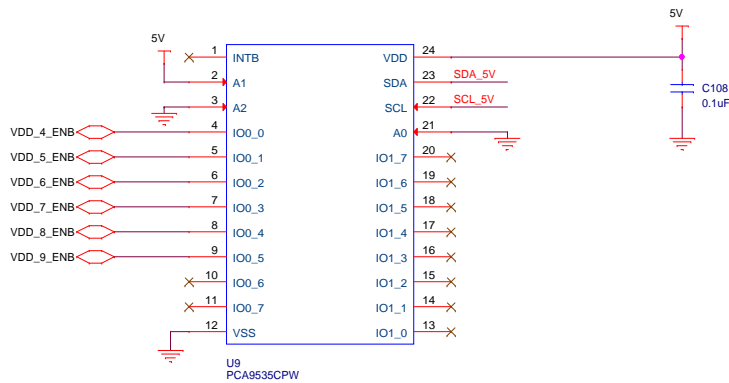
Removed "toe tag" MH9.

400 W Cesar Chavez Austin, TX 78701			
Title MCU			
Size B	Document Number SI5345-D-EB	Rev 2.2	
Date:	Wednesday, April 13, 2016	Sheet 27	of 44

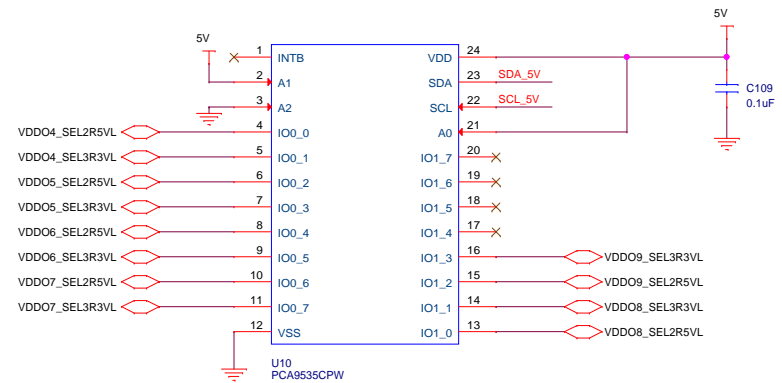
PERIPHERALS



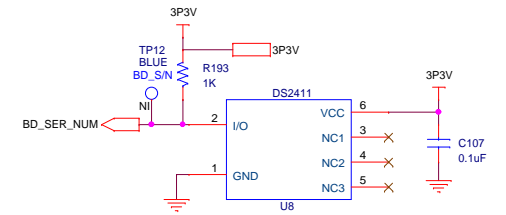
I2C VDD ENABLES/SELECTS FOR REGULATORS
I2C address: 0100001




I2C VDD ENABLES/SELECTS FOR REGULATORS
I2C address: 0100010

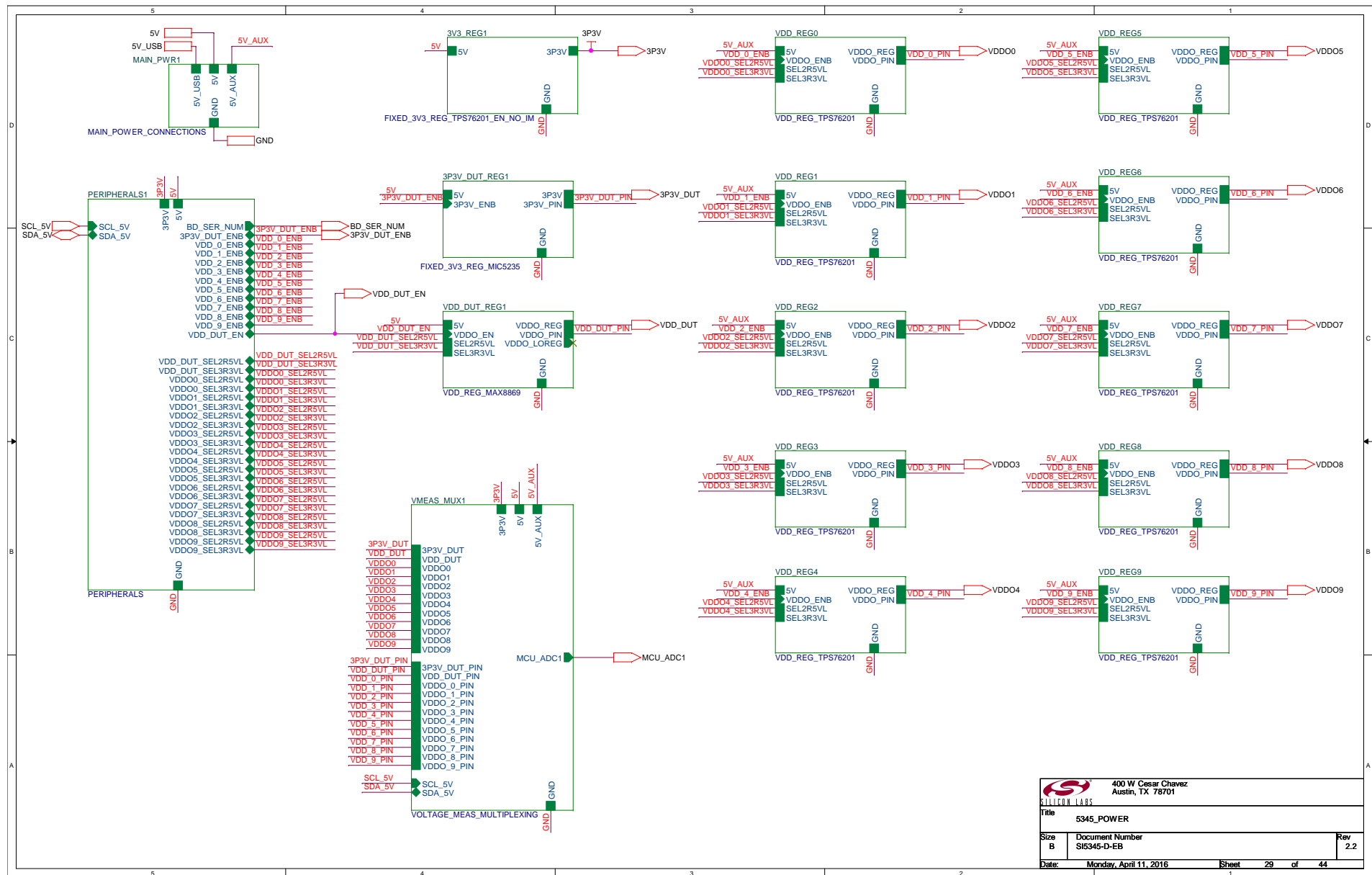


I2C VDD ENABLES/SELECTS FOR REGULATORS
I2C address: 0100011

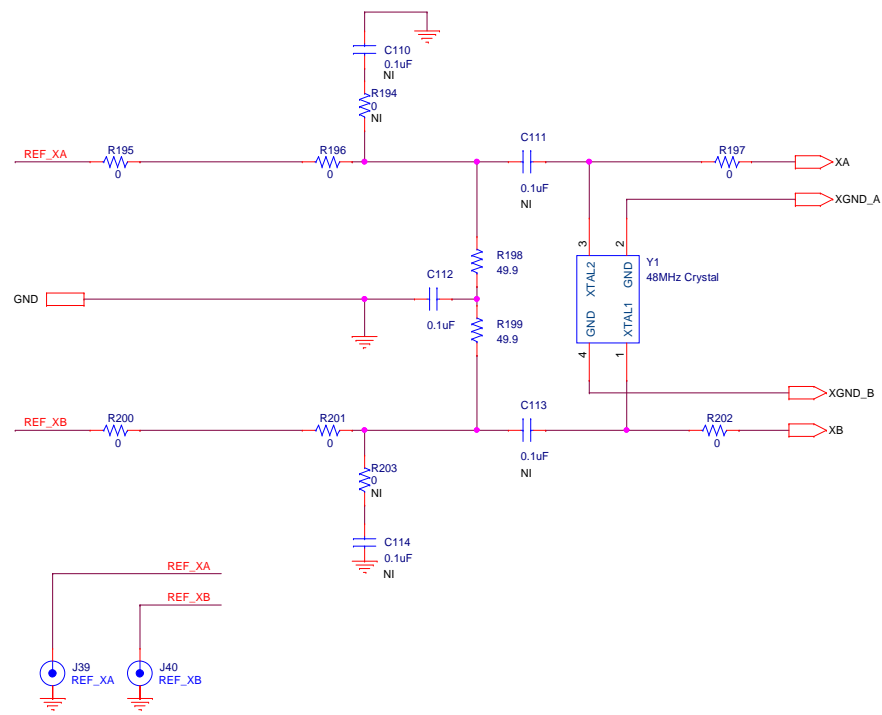


Board Serial Number

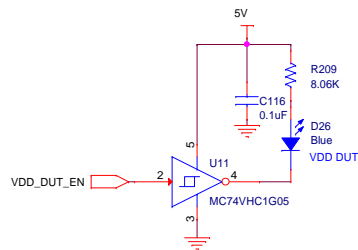
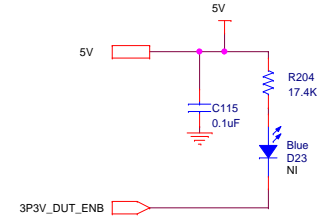
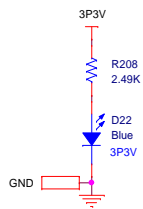
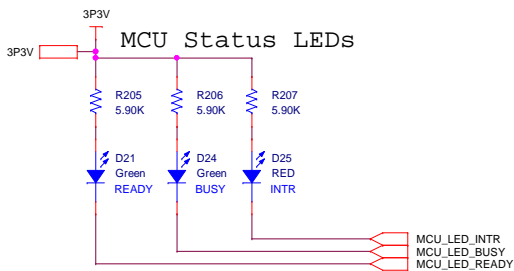
		400 W Cesar Chavez Austin, TX 78701	
Title PERIPHERALS			
Size B	Document Number SI5345-D-EB		Rev 2.2
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REFERENCE INPUT CONNECTIONS

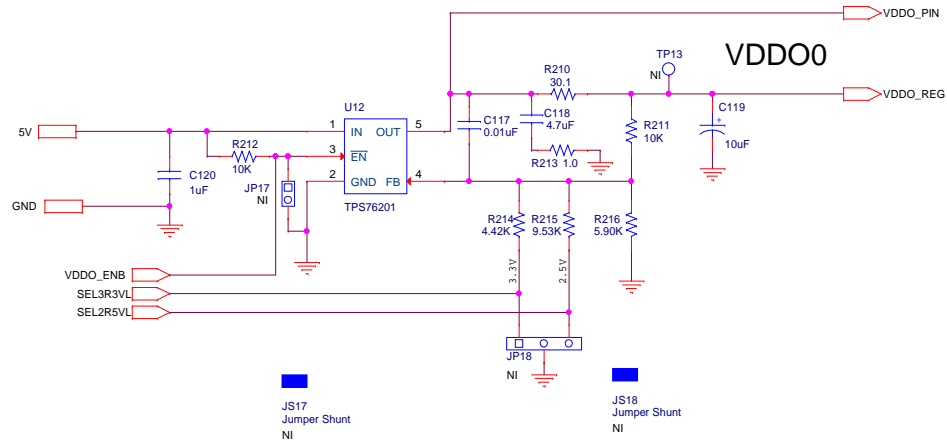



LEDS - SUPPLIES & STATUS



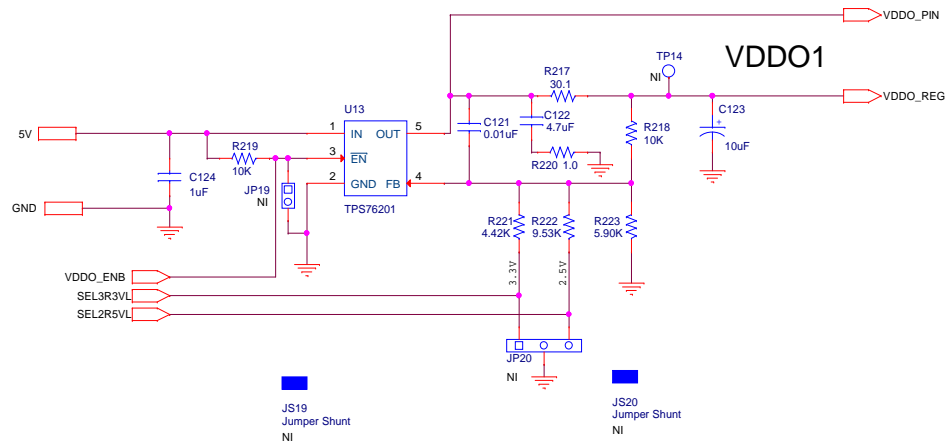
 400 W Cesar Chavez Austin, TX 78701		
Title STATUS_MAIN_SUPPLY_LEDS		
Size B	Document Number SI5345-D-EB	Rev 2.2
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100 mA Adjustable Voltage Regulator



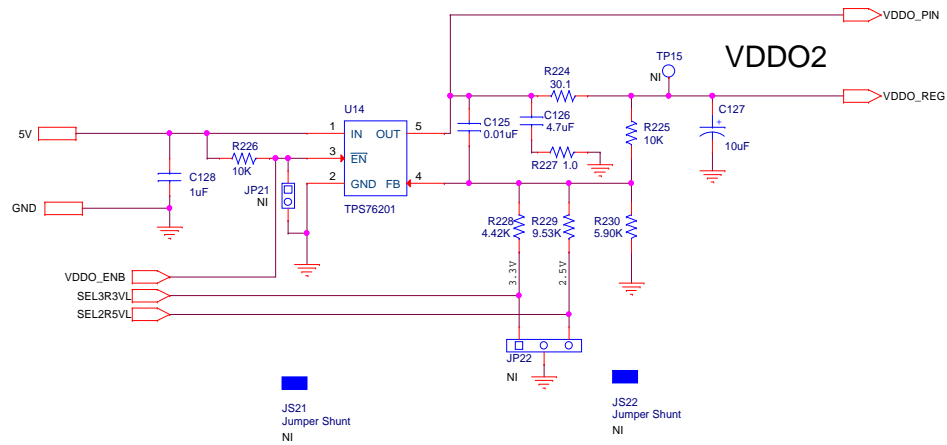
 400 W Cesar Chavez Austin, TX 78701	
Title	
VDD_REG_TPS76201	
Size	Document Number
B	SI5345-D-EB
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Rev	2.2


100 mA Adjustable Voltage Regulator



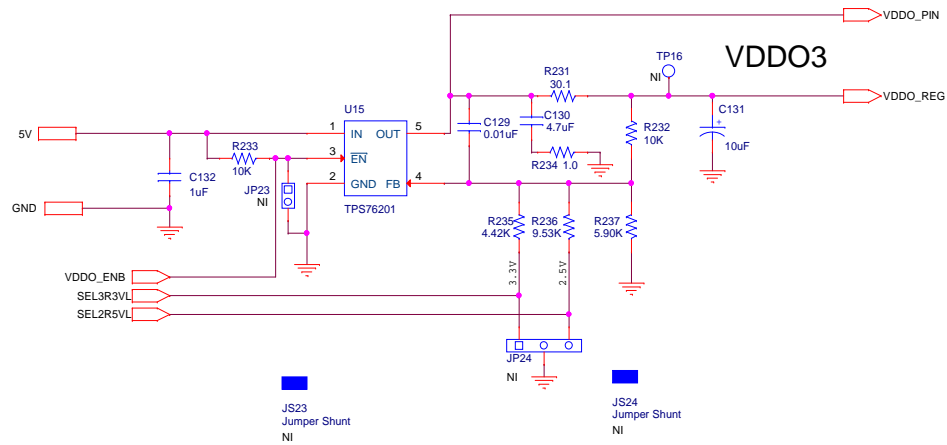
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Title		VDD_REG_TPS76201	
Size	Document Number	Rev	
B	SI5345-D-EB	2.2	
Date:	Monday, April 11, 2016	Sheet	34 of 44


100 mA Adjustable Voltage Regulator



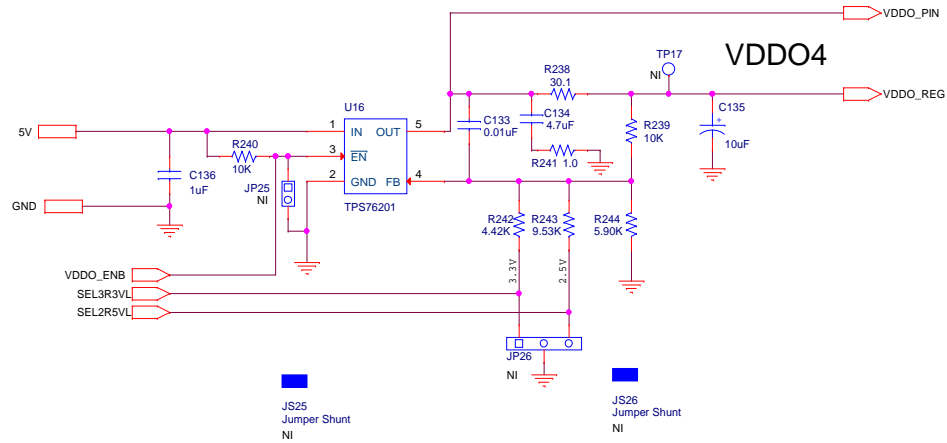
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Title		VDD_REG_TPS76201	
Size	Document Number	Rev	
B	SI5345-D-EB	2.2	
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100 mA Adjustable Voltage Regulator



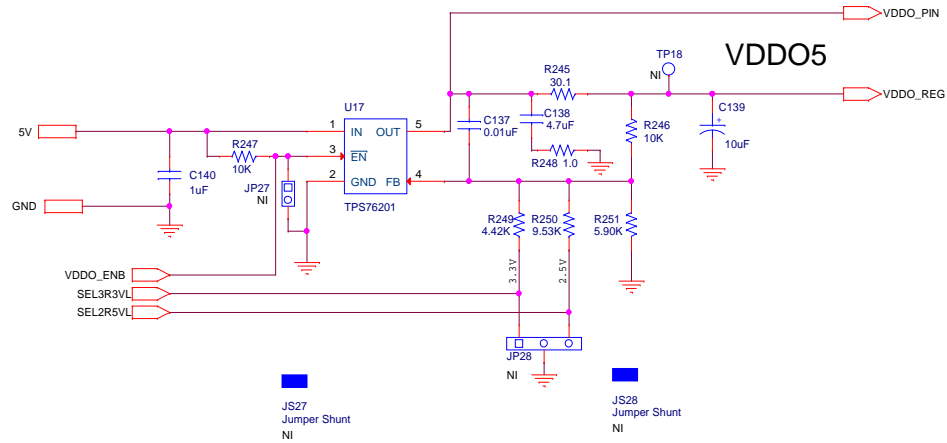
		400 W Cesar Chavez Austin, TX 78701	
Title		VDD_REG_TPS76201	
Size	Document Number	Rev	
B	SI5345-D-EB	2.2	
Date:	Monday, April 11, 2016	Sheet	36 of 44


100 mA Adjustable Voltage Regulator



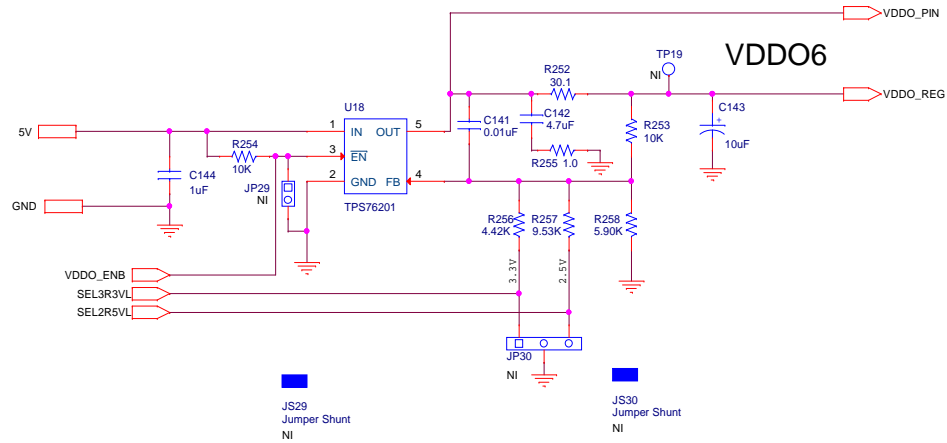
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Title		VDD_REG_TPS76201	
Size	Document Number	Rev	
B	SI5345-D-EB	2.2	
Date:	Monday, April 11, 2016	Sheet	37 of 44


100 mA Adjustable Voltage Regulator



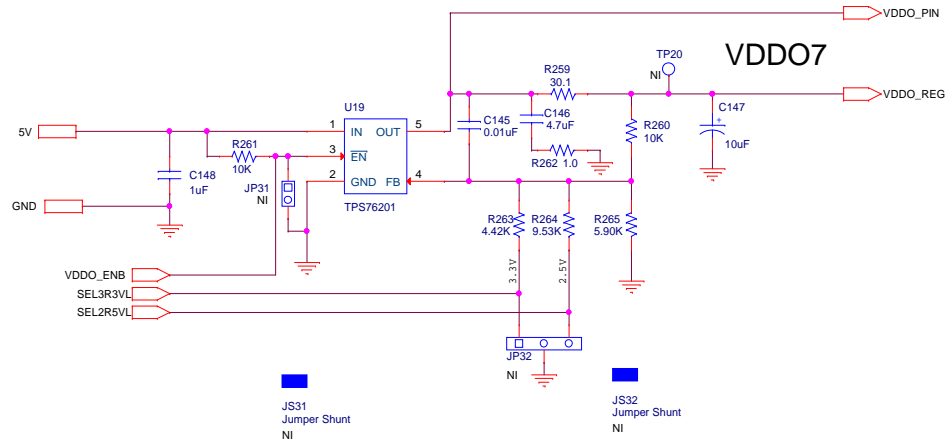
 400 W Cesar Chavez Austin, TX 78701		
Title		
VDD_REG_TPS76201		
Size	Document Number	Rev
B	SI5345-D-EB	2.2
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100 mA Adjustable Voltage Regulator



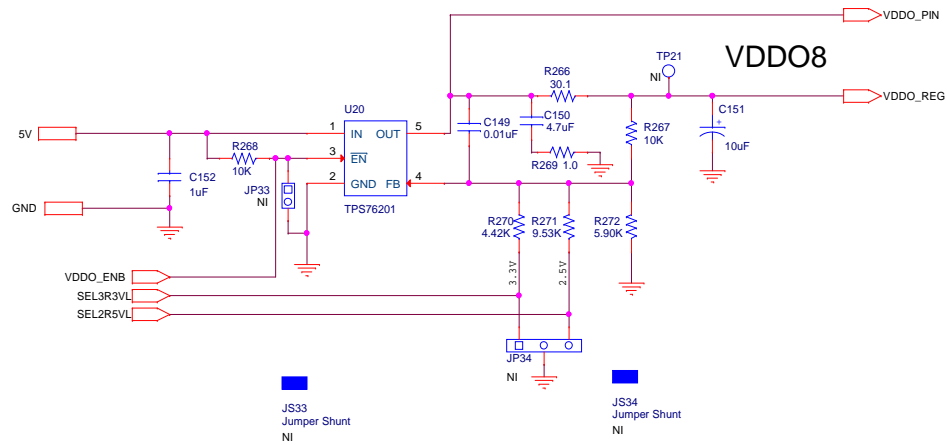
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Title		VDD_REG_TPS76201	
Size	Document Number	Rev	
B	SI5345-D-EB	2.2	
Date:	Monday, April 11, 2016	Sheet	39 of 44


100 mA Adjustable Voltage Regulator



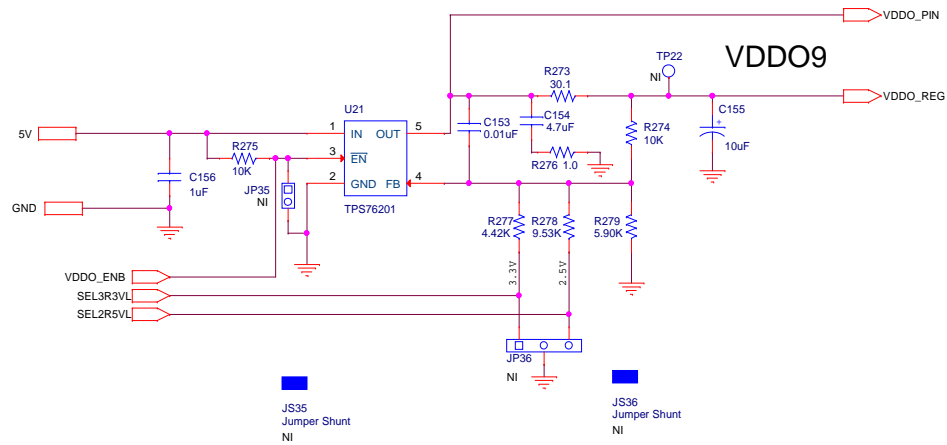
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Title		VDD_REG_TPS76201	
Size	Document Number	Rev	
B	SI5345-D-EB	2.2	
Date:	Monday, April 11, 2016	Sheet	40 of 44


100 mA Adjustable Voltage Regulator

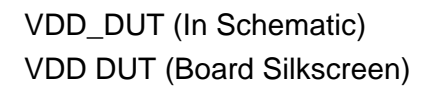


 400 W Cesar Chavez Austin, TX 78701	
Title	
VDD_REG_TPS76201	
Size	Document Number
B	SI5345-D-EB
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100 mA Adjustable Voltage Regulator



 SILICON LABS		400 W Cesar Chavez Austin, TX 78701	
Title VDD_REG_TPS76201			
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VOLTAGE MEASUREMENT MULTIPLEXING

