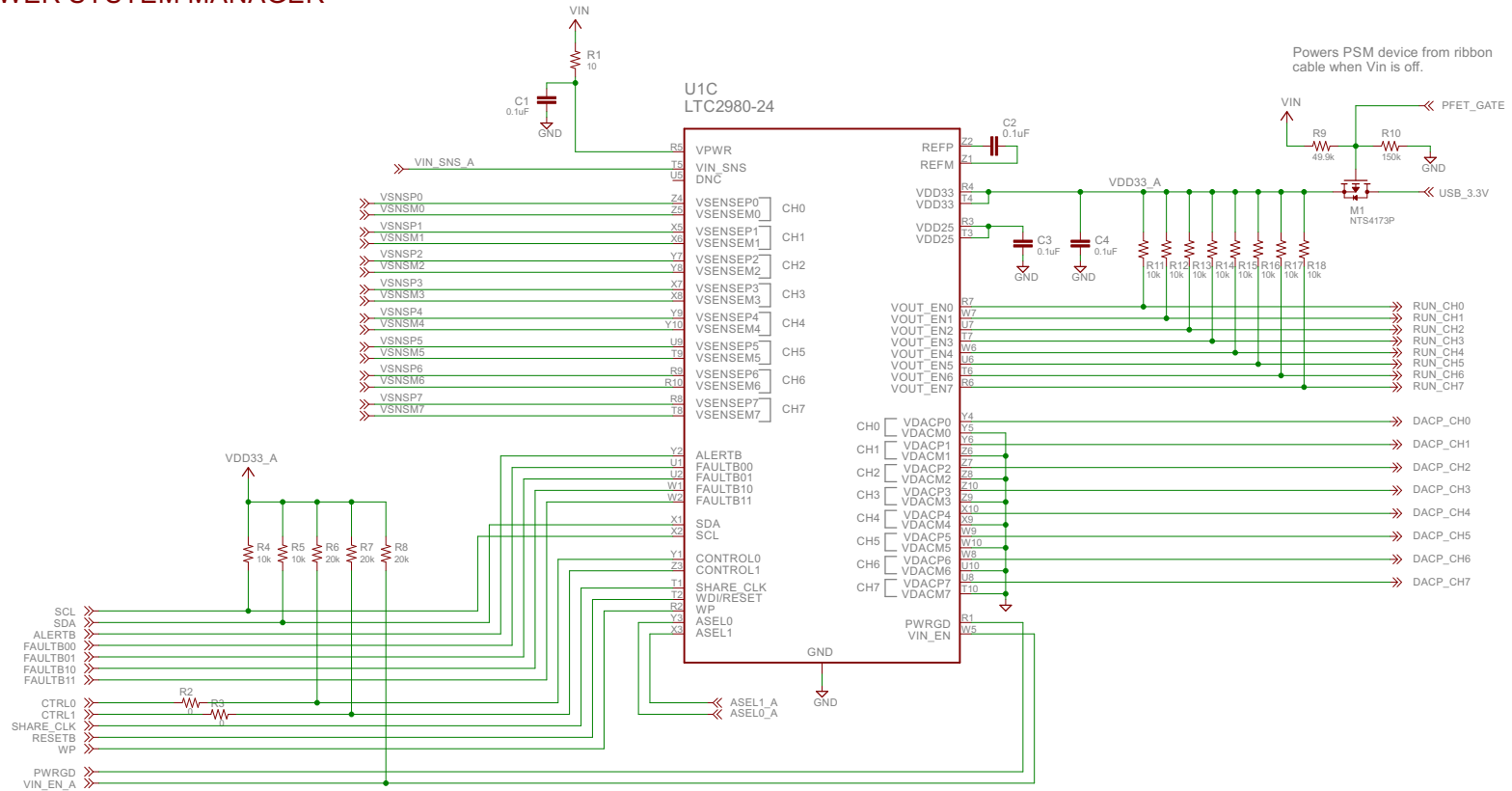




[illegible]

REVISION HISTORY				
ECO	REV	DESCRIPTION	APPROVED	DATE
-	1	PRODUCTION	MIKE P.	



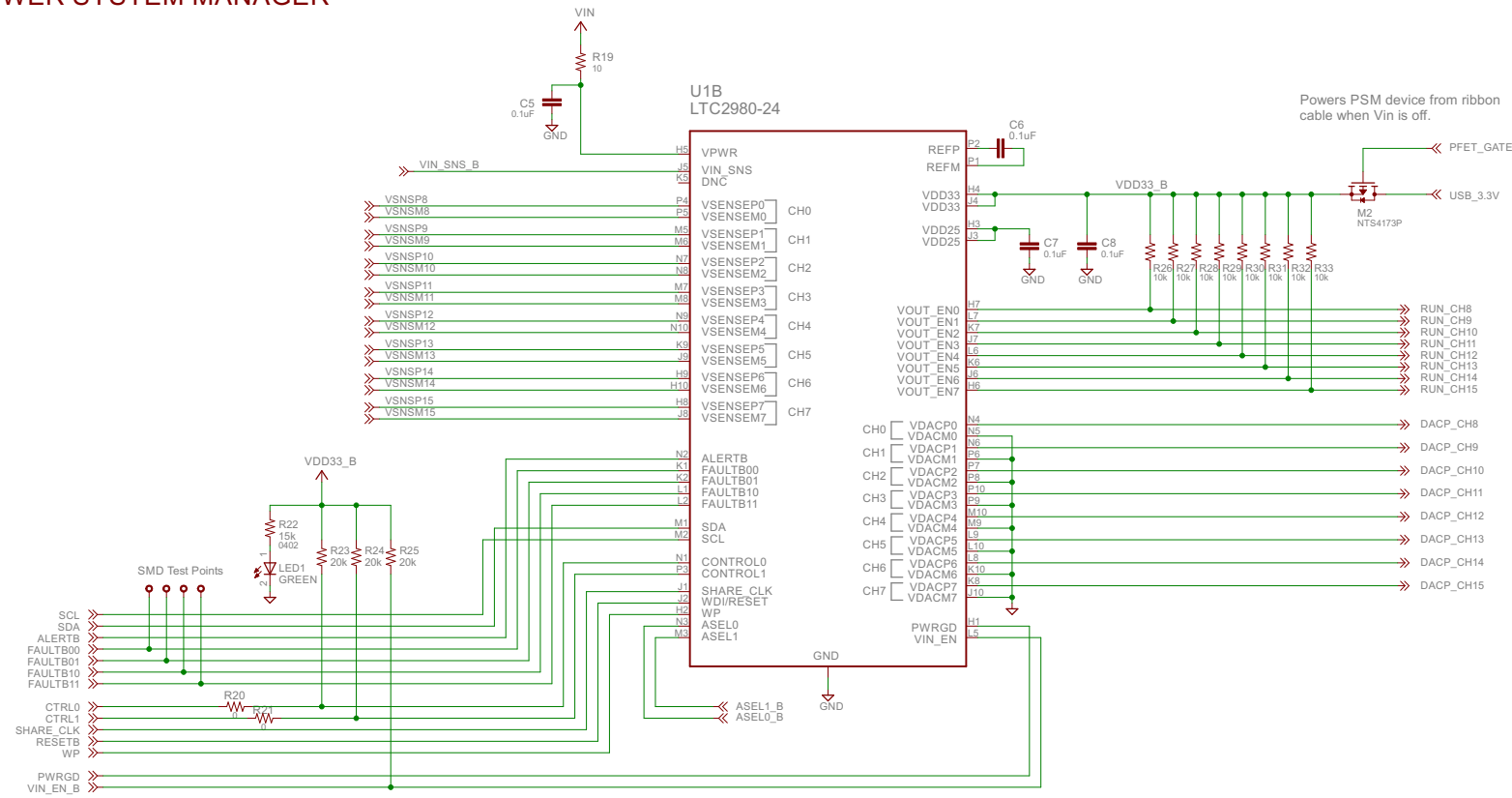
NOTES: UNLESS OTHERWISE SPECIFIED:
1. ALL RESISTORS ARE 1% 0603.
2. ALL CAPACITORS ARE 0603.

<h1>CUSTOMER NOTICE</h1> <p>LINEAR TECHNOLOGY HAS MADE A BEST EFFORT TO DESIGN A CIRCUIT THAT MEETS CUSTOMER-SUPPLIED SPECIFICATIONS; HOWEVER, IT REMAINS THE CUSTOMER'S RESPONSIBILITY TO VERIFY PROPER AND RELIABLE CIRCUITRY IN ACTUAL APPLICATION. COMPONENT SUBSTITUTION AND PRINTED CIRCUIT BOARD LAYOUT MAY SIGNIFICANTLY EFFECT CIRCUIT PERFORMANCE OR RELIABILITY. CONTACT LINEAR TECHNOLOGY APPLICATIONS ENGINEERING FOR ASSISTANCE</p> <p>THIS CIRCUIT IS PROPRIETARY TO LINEAR TECHNOLOGY AND SUPPLIED FOR USE WITH LINEAR TECHNOLOGY PARTS</p>		APPROVALS PCB DES. MIKE P. APPENG. MIKE P.		 		1630 McCarthy Blvd. Milpitas, CA 95035 Phone: (408) 432-1988 www.analog.com	
		TITLE: 24-CHANNEL Digital PSB Board that Controls 3 DC1361B Boards		SIZE IC NO. DC12980-24 REV: 1		DATE: 9/29/2020 2:04:12 PM SHEET: 2 / 8	

LTC2980-24 Device B

DIGITAL POWER SYSTEM MANAGER

REVISION HISTORY				
ECO	REV	DESCRIPTION	APPROVED	DATE
-	1	PRODUCTION	MIKE P.	



NOTES: UNLESS OTHERWISE SPECIFIED:

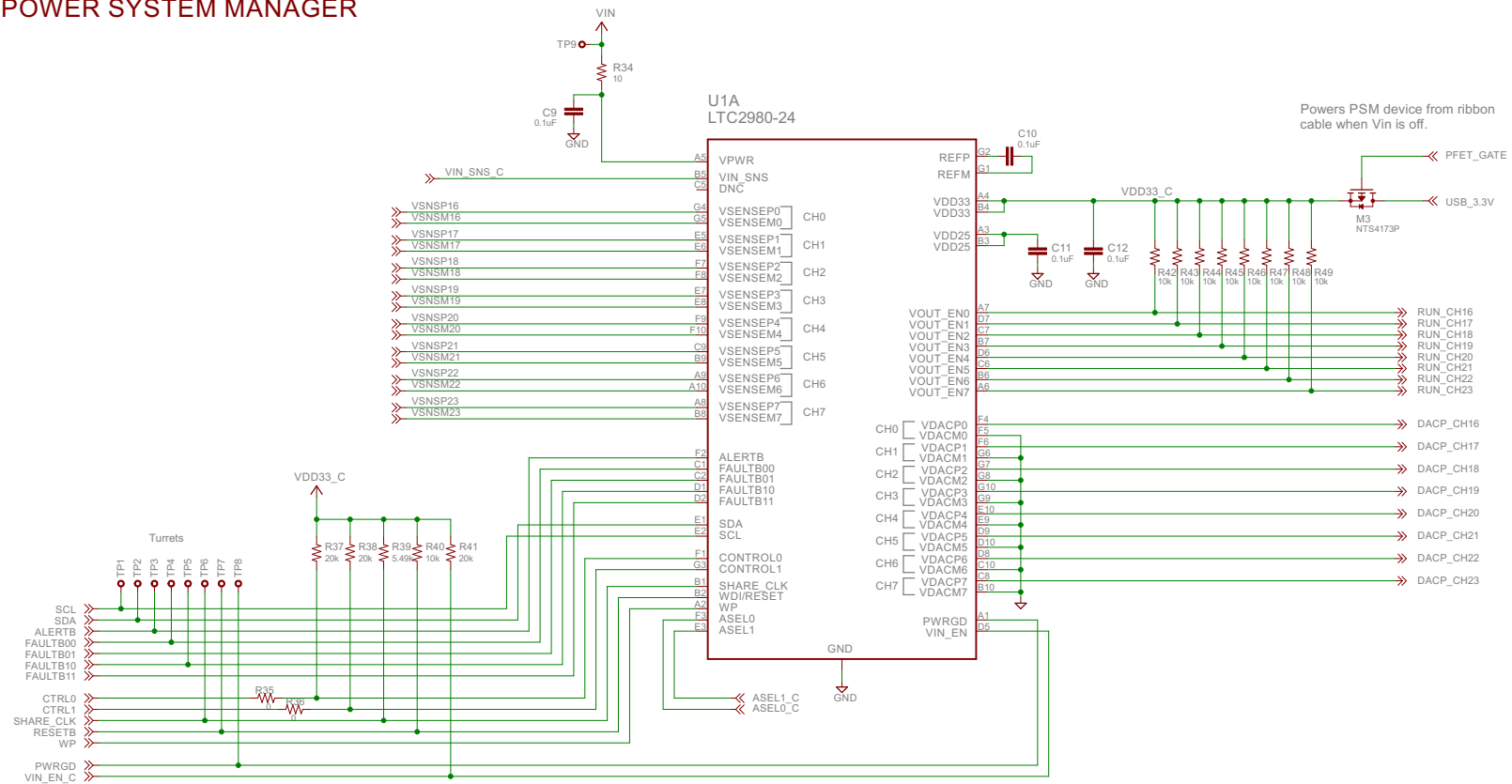
1. ALL RESISTORS ARE 1% 0603.
2. ALL CAPACITORS ARE 0603.

CUSTOMER NOTICE		APPROVALS		ANALOG DEVICES		POWER BY LINEAR		1630 McCarthy Blvd. Milpitas, CA 95035 Phone: (408) 422-1900 www.analog.com	
LINEAR TECHNOLOGY HAS MADE A BEST EFFORT TO DESIGN A CIRCUIT THAT MEETS CUSTOMER-SUPPLIED SPECIFICATIONS; HOWEVER, IT REMAINS THE CUSTOMER'S RESPONSIBILITY TO VERIFY PROPER AND RELIABLE OPERATION IN THE ACTUAL APPLICATION. COMPONENT SUBSTITUTION AND PRINTED CIRCUIT BOARD LAYOUT MAY SIGNIFICANTLY AFFECT CIRCUIT PERFORMANCE OR RELIABILITY. CONTACT LINEAR TECHNOLOGY APPLICATIONS ENGINEERING FOR ASSISTANCE.		PCB DES.	MIKE P.	APP ENG.	MIKE P.	TITLE: 24-CHANNEL Digital PSM Board that Controls 3 DC1361B Boards		SIZE: B	
THIS CIRCUIT IS PROPRIETARY TO LINEAR TECHNOLOGY AND SUPPLIED FOR USE WITH LINEAR TECHNOLOGY PARTS		SCALE = NONE		DATE: 9/29/2020 2:04:12 PM		SHEET: 3/8		REV: 1	

LTC2980-24 Device C

DIGITAL POWER SYSTEM MANAGER

REVISION HISTORY				
ECO	REV	DESCRIPTION	APPROVED	DATE
-	1	PRODUCTION	MIKE P.	



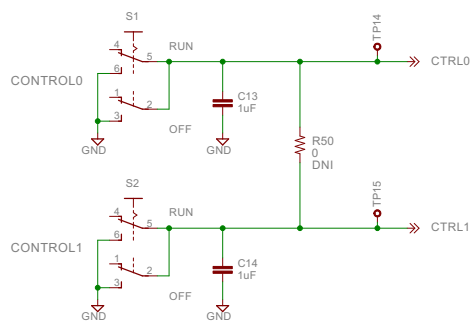
NOTES: UNLESS OTHERWISE SPECIFIED:

1. ALL RESISTORS ARE 1% 0603.
2. ALL CAPACITORS ARE 0603.

CUSTOMER NOTICE				APPROVALS		ANALOG DEVICES		POWER BY LINEAR		1630 McCarthy Blvd. Milpitas, CA 95035 Phone: (408) 422-1000 www.analog.com	
LINEAR TECHNOLOGY HAS MADE A BEST EFFORT TO DESIGN A CIRCUIT THAT MEETS CUSTOMER-SUPPLIED SPECIFICATIONS; HOWEVER, IT REMAINS THE CUSTOMER'S RESPONSIBILITY TO VERIFY PROPER AND RELIABLE OPERATION IN THE ACTUAL APPLICATION. COMPONENT SUBSTITUTION AND PRINTED CIRCUIT BOARD LAYOUT MAY SIGNIFICANTLY AFFECT CIRCUIT PERFORMANCE OR RELIABILITY. CONTACT LINEAR TECHNOLOGY APPLICATIONS ENGINEERING FOR ASSISTANCE.				PCB DES.	MIKE P.	TITLE: 24-CHANNEL Digital PSM Board that Controls 3 DC1361B Boards		SIZE IC NO. LTC2980-24 DEMO CIRCUIT 3094A		REV: 1	
				APP ENG.	MIKE P.						
THIS CIRCUIT IS PROPRIETARY TO LINEAR TECHNOLOGY AND SUPPLIED FOR USE WITH LINEAR TECHNOLOGY PARTS				SCALE = NONE		DATE: 9/29/2020 2:04:12 PM		SHEET: 4/8			

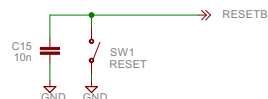
REVISION HISTORY				
ECO	REV	DESCRIPTION	APPROVED	DATE
-	1	PRODUCTION	MIKE P.	

CTRL Switches

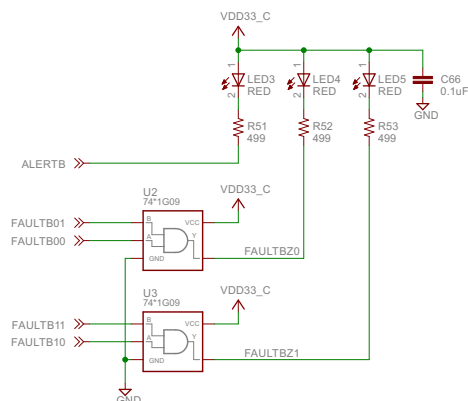


Install R21 to allow one switch to control all channels.
One RUN switch set to 'off' will disable all channels.

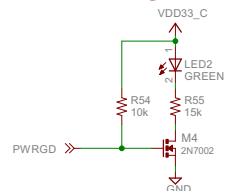
WDI/RESETB Pushbutton



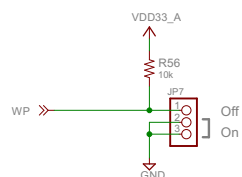
Fault LED Indication



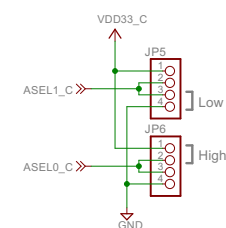
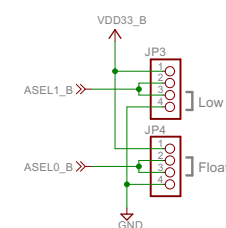
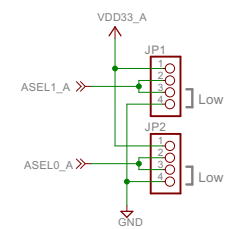
PWRGD Indicator



Write-Protect



Address Select Jumpers



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APPROVALS

PCB DES. MIKE P.

APP. ENG. MIKE P.



1630 McCarthy Blvd.
Milpitas, CA 95035
Phone: (408) 422-1000
www.analog.com

TITLE: 24-CHANNEL Digital PSM Board
that Controls 3 DC1361B Boards

SIZE B IC NO. LTC2980-24
DEMO CIRCUIT 3094A

REV: 1

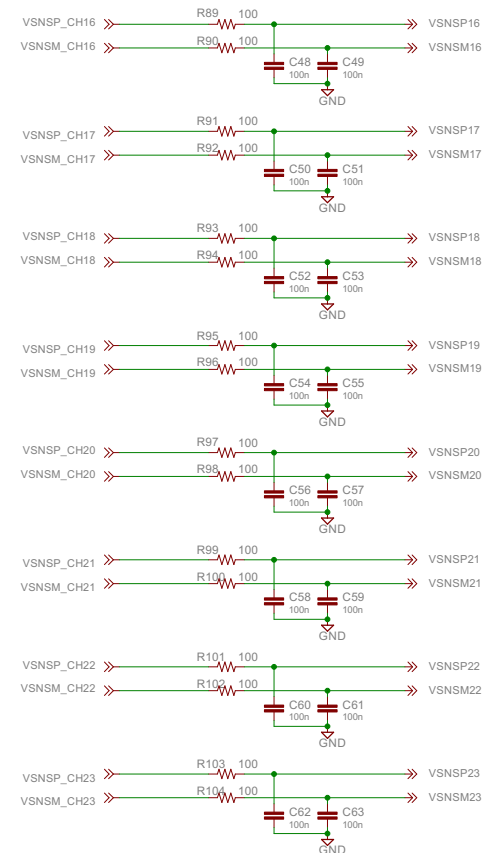
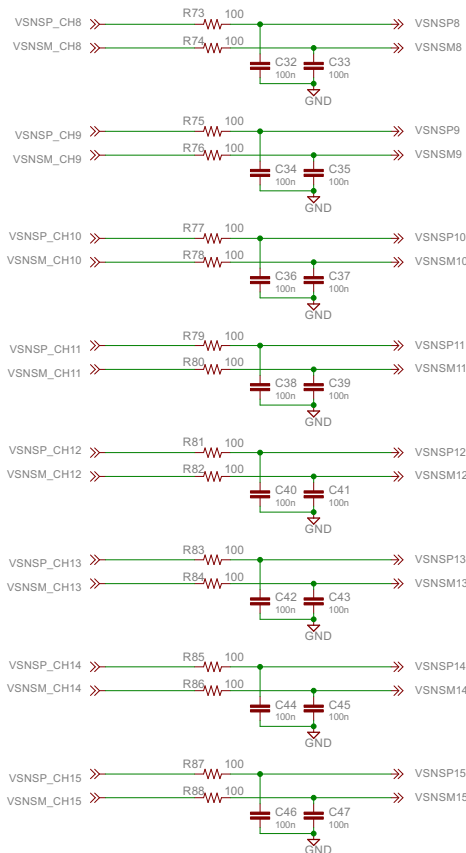
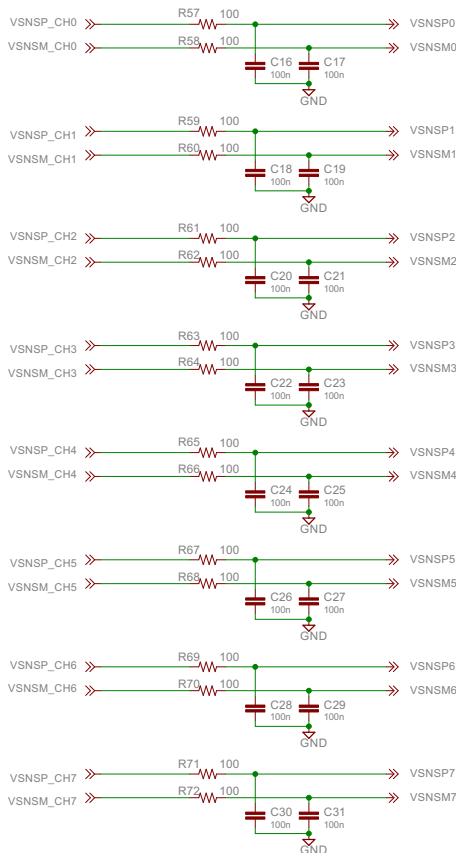
DATE: 9/29/2020 2:04:12 PM

SHEET: 5/8

SCALE = NONE

Voltage Sense Filtering

REVISION HISTORY				
ECO	REV	DESCRIPTION	APPROVED	DATE
-	1	PRODUCTION	MIKE P.	



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APPROVALS

PCB DES. MIKE P.
APP. ENG. MIKE P.



1630 McCarthy Blvd.
Milpitas, CA 95035
Phone: (408) 422-1988
www.analog.com

TITLE: 24-CHANNEL Digital PSM Board
that Controls 3 DC1361B Boards

SIZE B IC NO. LTC2980-24
DEMO CIRCUIT 3094A

REV: 1

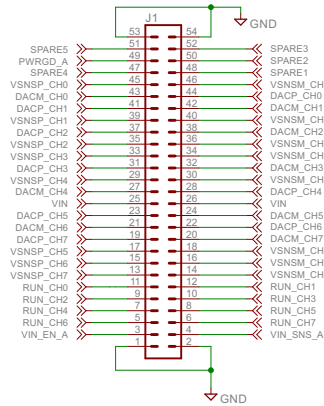
SCALE = NONE

DATE: 9/29/2020 2:04:12 PM

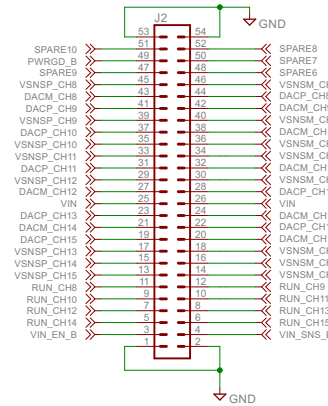
SHEET: 6/8

REVISION HISTORY				
ECO	REV	DESCRIPTION	APPROVED	DATE
-	1	PRODUCTION	MIKE P.	

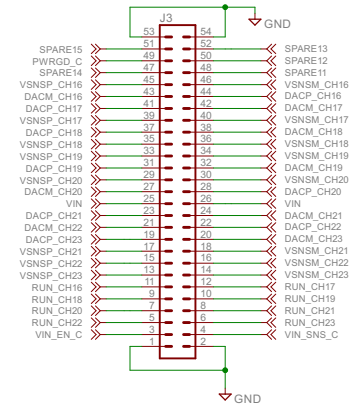
Card A DC1361B Connector



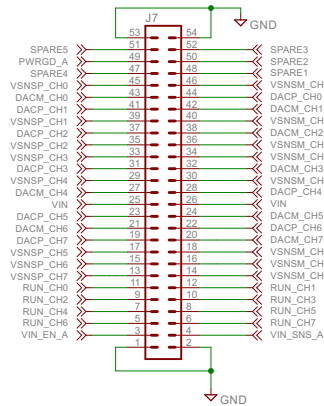
Card B DC1361B Connector



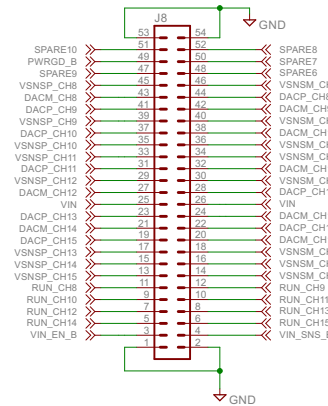
Card C DC1361B Connector



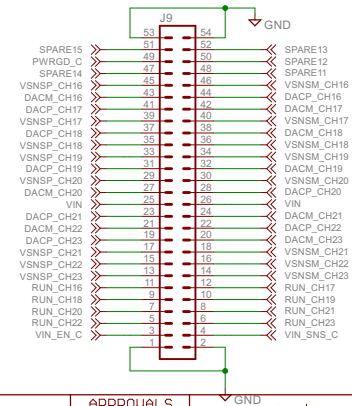
Test Points (CardA)



Test Points (CardB)



Test Points (CardC)



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APPROVALS

PCB DES. MIKE P.

APP ENG. MIKE P.



1630 McCarthy Blvd.
Milpitas, CA 95035
Phone: (408) 422-1900
www.analog.com

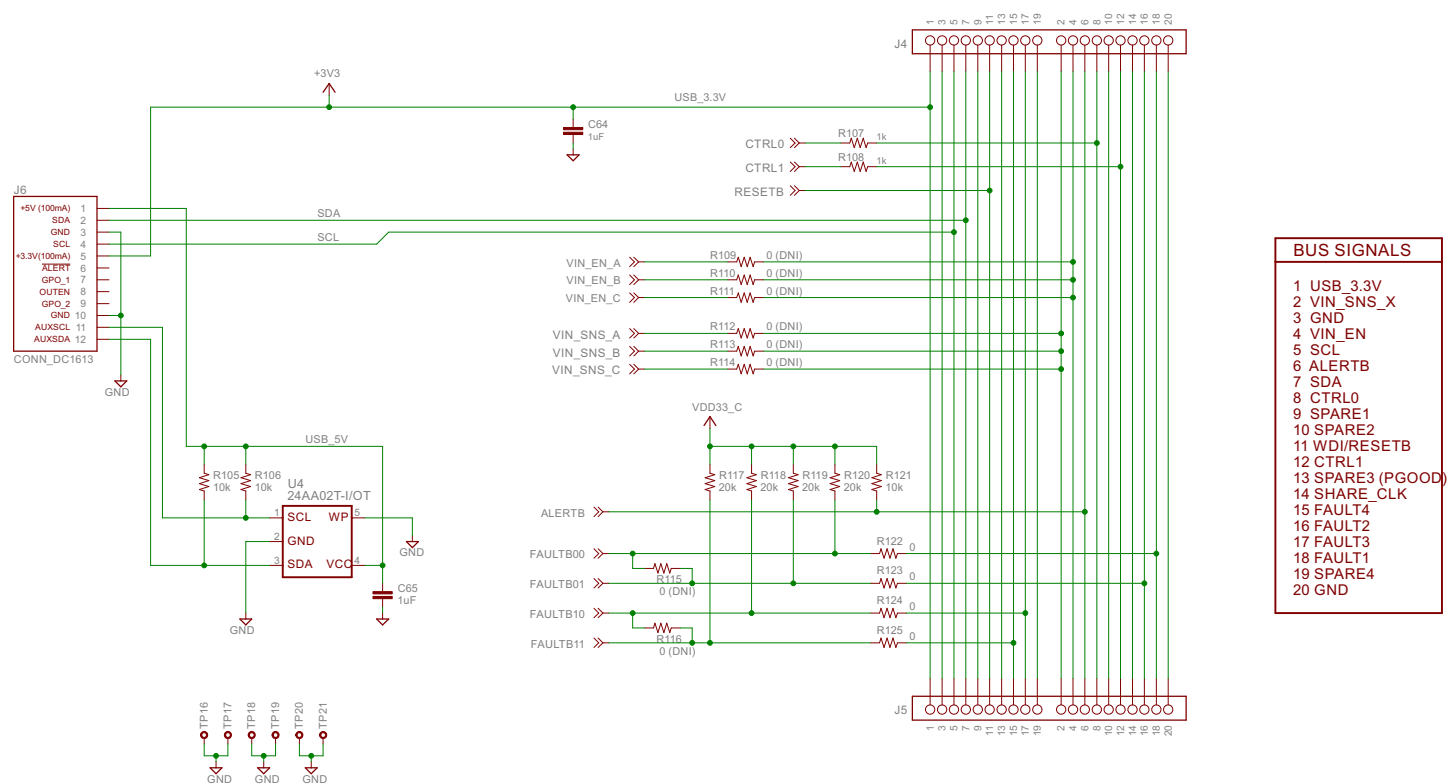
TITLE: 24-CHANNEL Digital PSM Board
that Controls 3 DC1361B Boards

SIZE: B IC NO. LTC2980-24
DEMO CIRCUIT 3094A

DATE: 9/29/2020 2:04:12 PM SHEET: 7/8

SCALE: NONE

Board-to-Board Expansion Connectors



BUS SIGNALS	
1	USB_3.3V
2	VIN_SNS_X
3	GND
4	VIN_EN
5	SCL
6	ALERTB
7	SDA
8	CTRL0
9	SPARE1
10	SPARE2
11	WDI/RESETB
12	CTRL1
13	SPARE3 (PGOOD)
14	SHARE_CLK
15	FAULT4
16	FAULT2
17	FAULT3
18	FAULT1
19	SPARE4
20	GND

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THIS CIRCUIT IS PROPRIETARY TO LINEAR TECHNOLOGY AND SUPPLIED FOR USE WITH LINEAR TECHNOLOGY PARTS		APP ENG.	MIKE P.	SCALE: NONE		DATE: 9/29/2020 2:04:12 PM		SHEET: 8/8	