


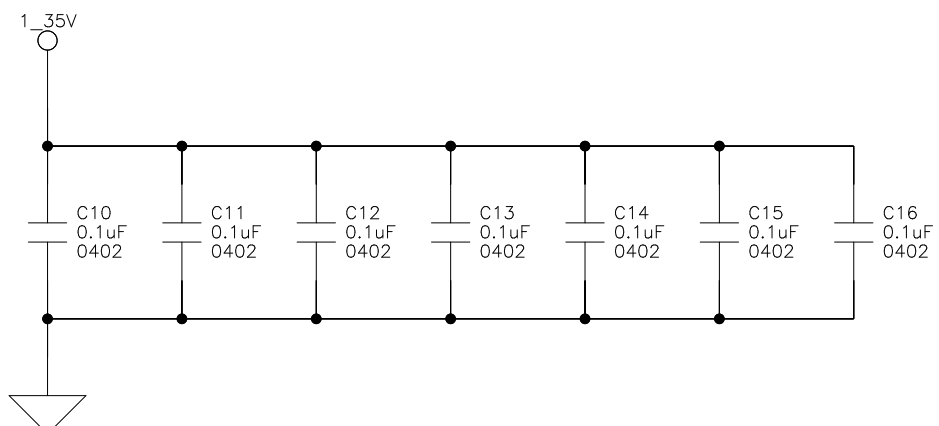
# ADSP-21569 System on Module

## EV-21569-SOM Schematic

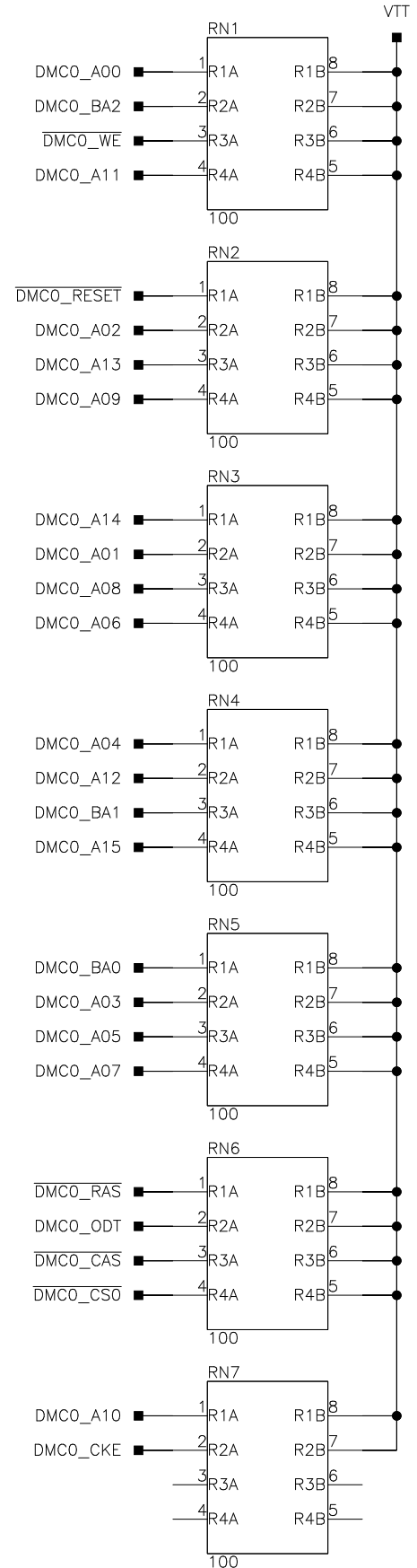
		2 Elizabeth Drive Chelmsford, MA 01824 PH: 1-800-ANALOGD	
Title		ADSP-21569 SoM Title Block	
Size C	Board No.	EV-21569-SOM	Rev A
Date	1/29/2020	Sheet	1 of 12



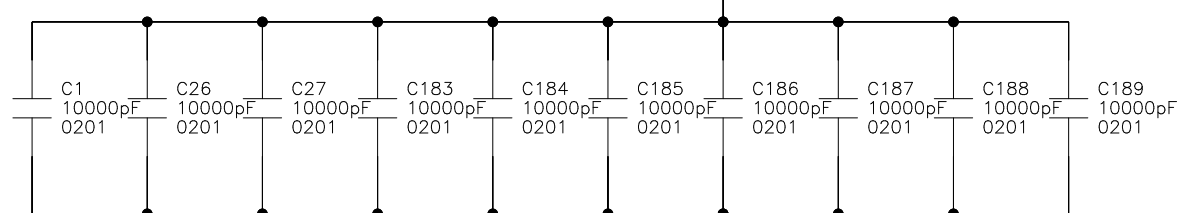
Place R2 and C17 close to U1



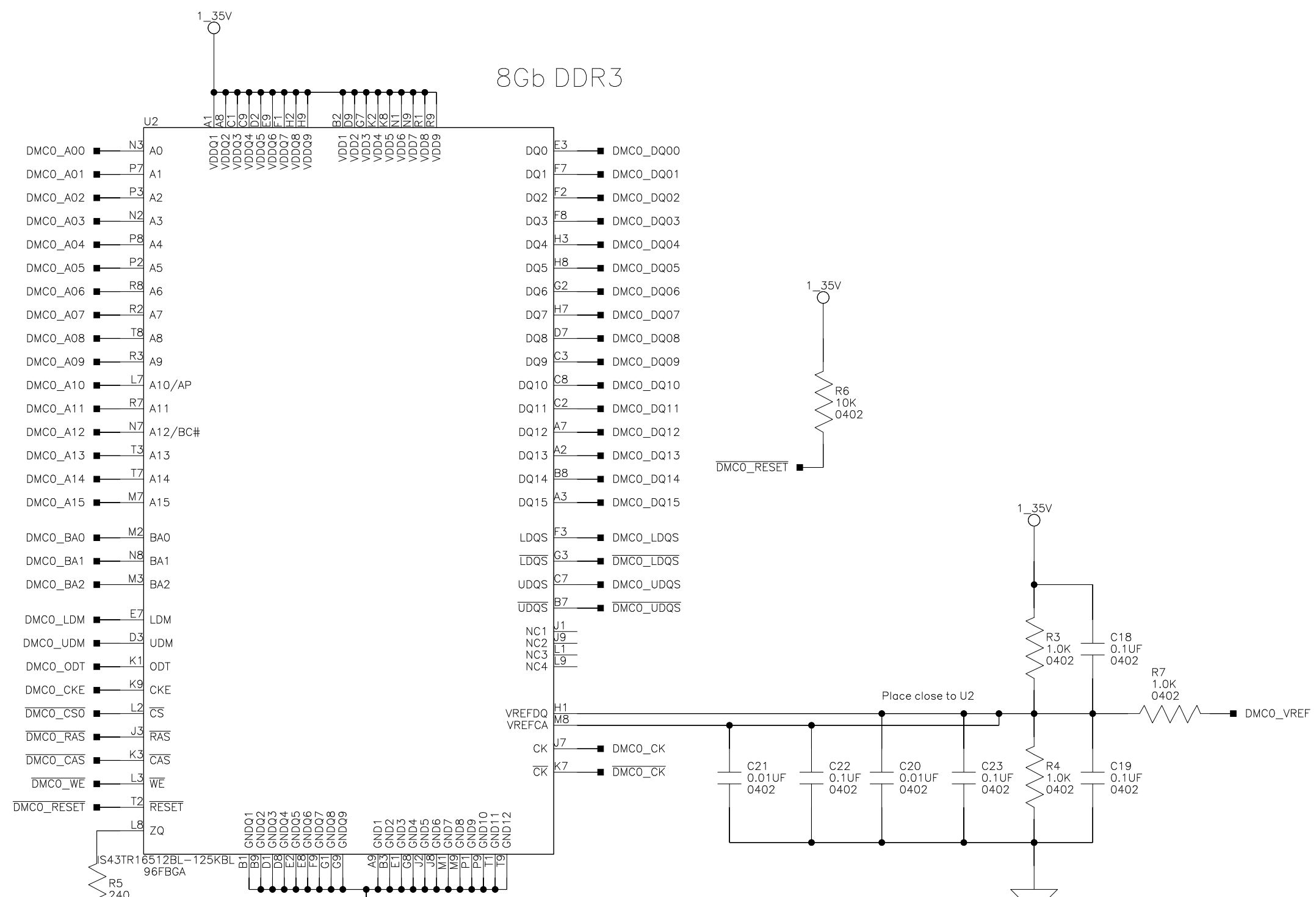
Place at end of line



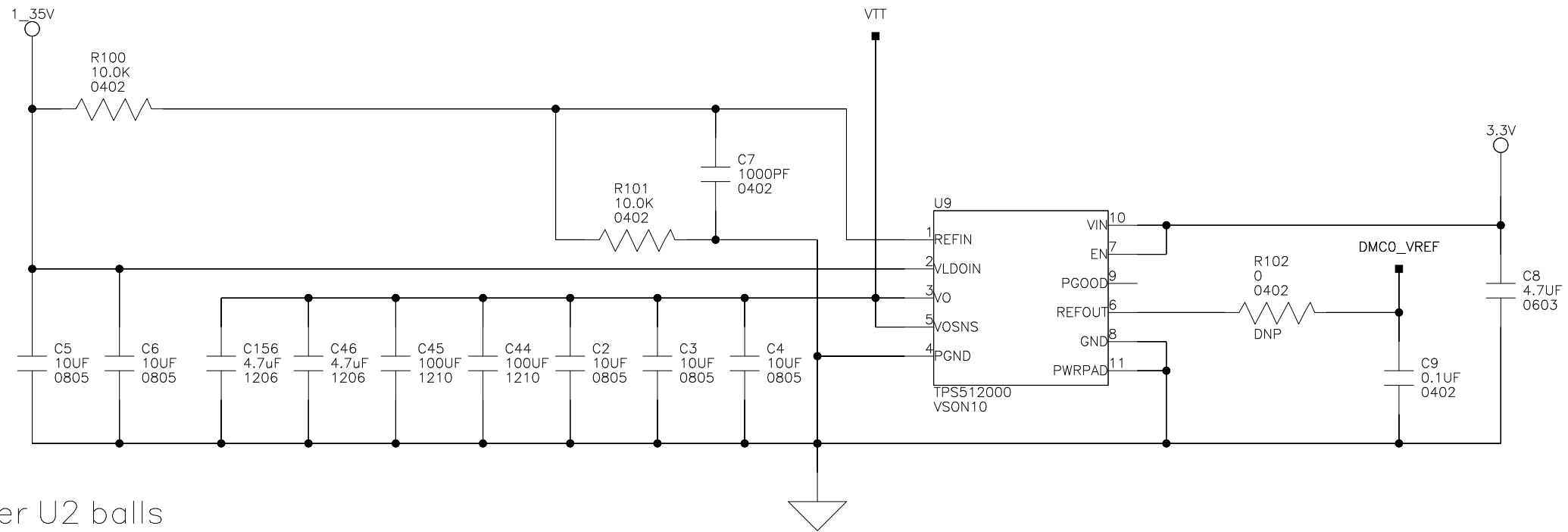
Place inbetween U2 and U1 or under U2 balls



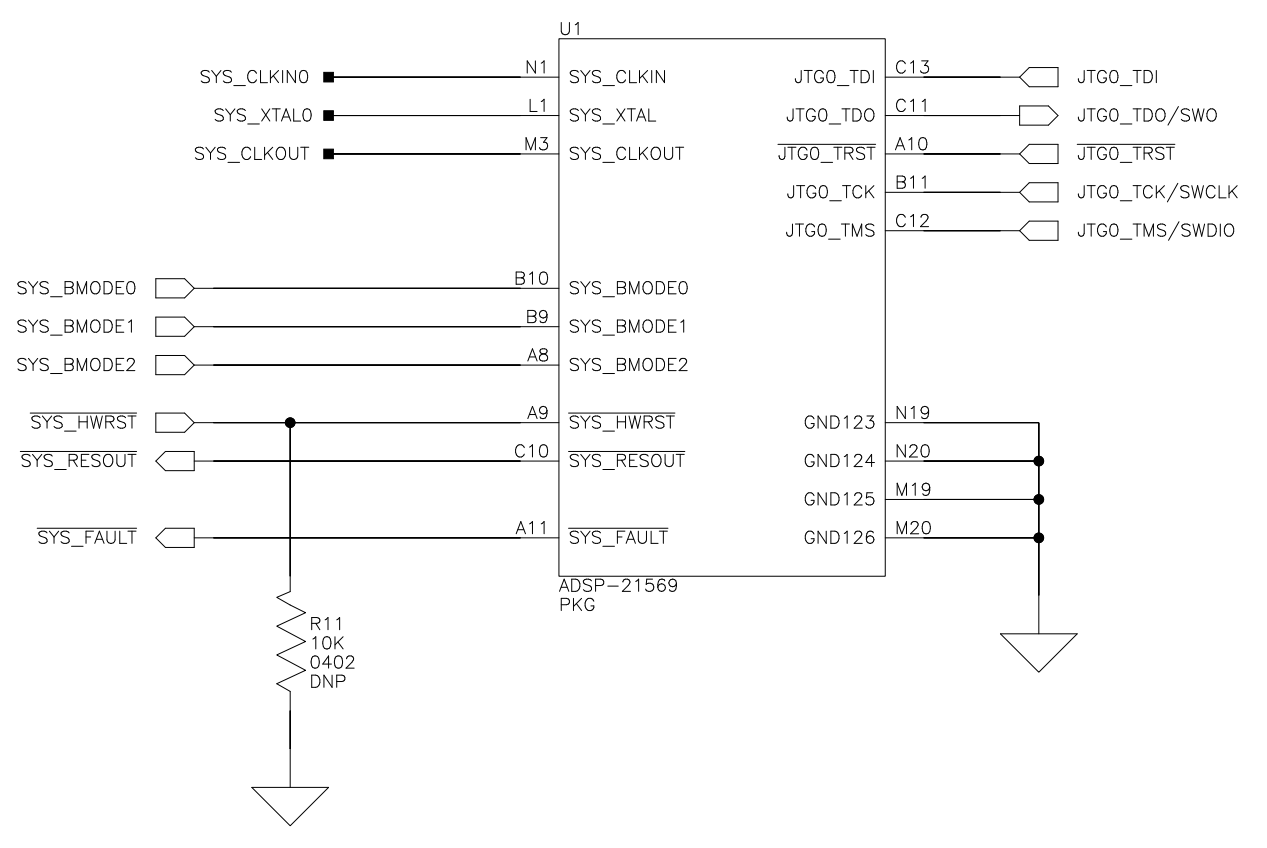
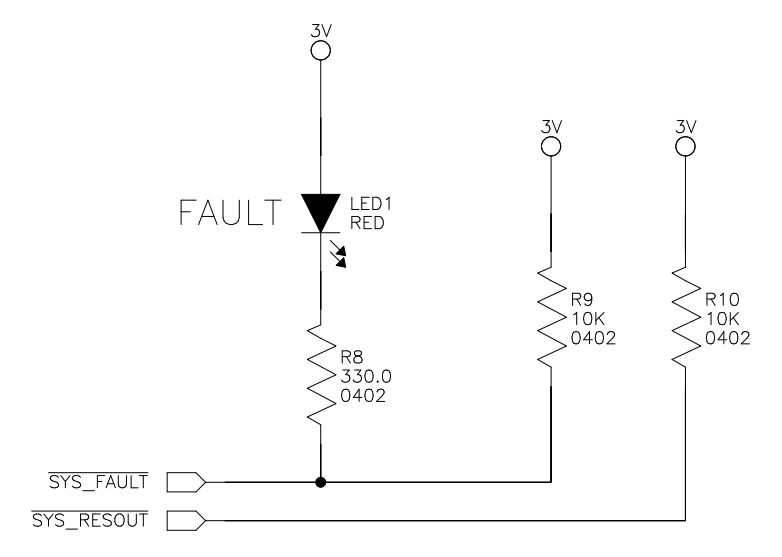
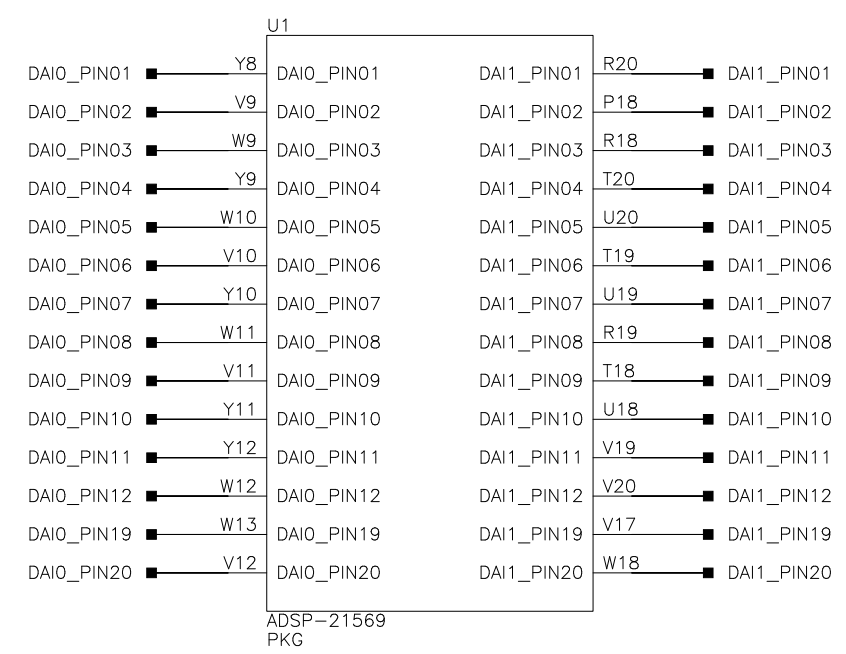
### 8Gb DDR3



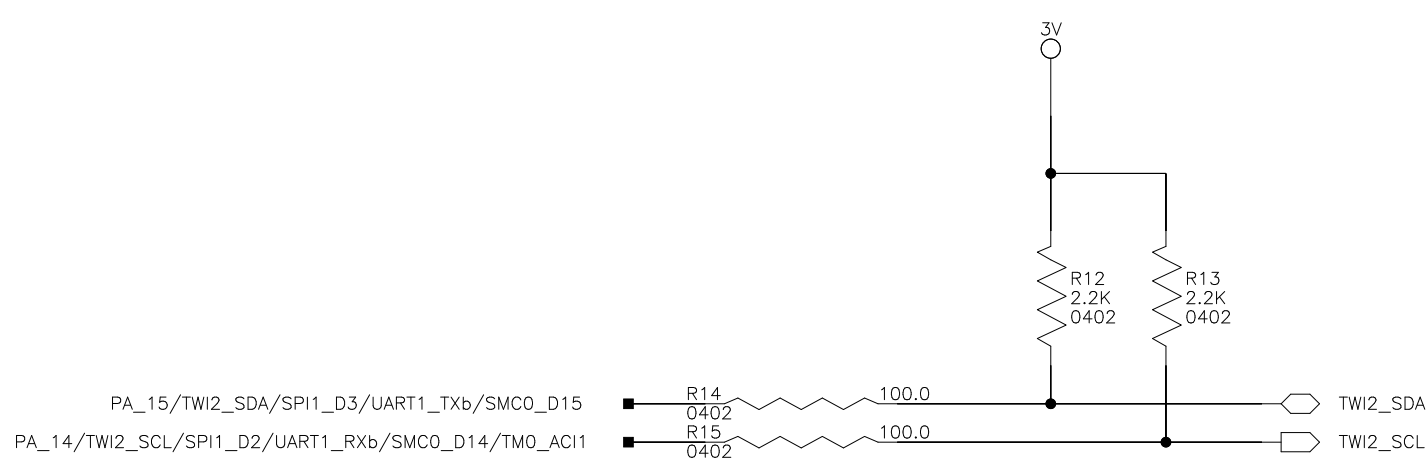
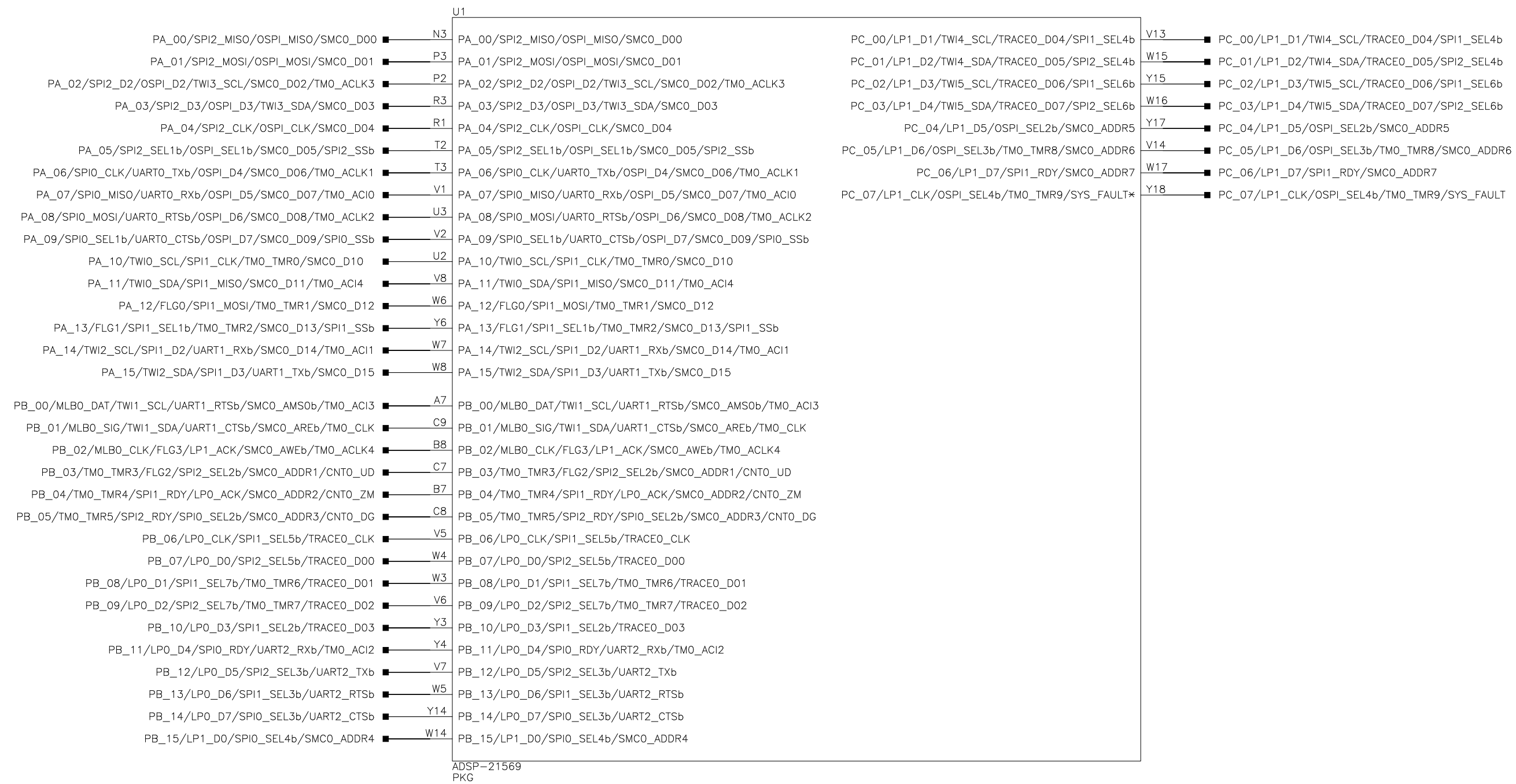
Place close to U2




		2 Elizabeth Drive Chelmsford, MA 01824 PH: 1-800-ANALOGD	
		Title: ADSP-21569 SoM DDR3 Interface	
Size C	Board No. EV-21569-SOM	Rev A	
Date 1/29/2020	Sheet 2 of 12		



		2 Elizabeth Drive Chelmsford, MA 01824 PH: 1-800-ANALOGD	
Title ADSP-21569 SoM Non-Mux Ports			
Size C	Board No.	EV-21569-SOM	Rev A
Date	1/29/2020	Sheet 3 of 12	



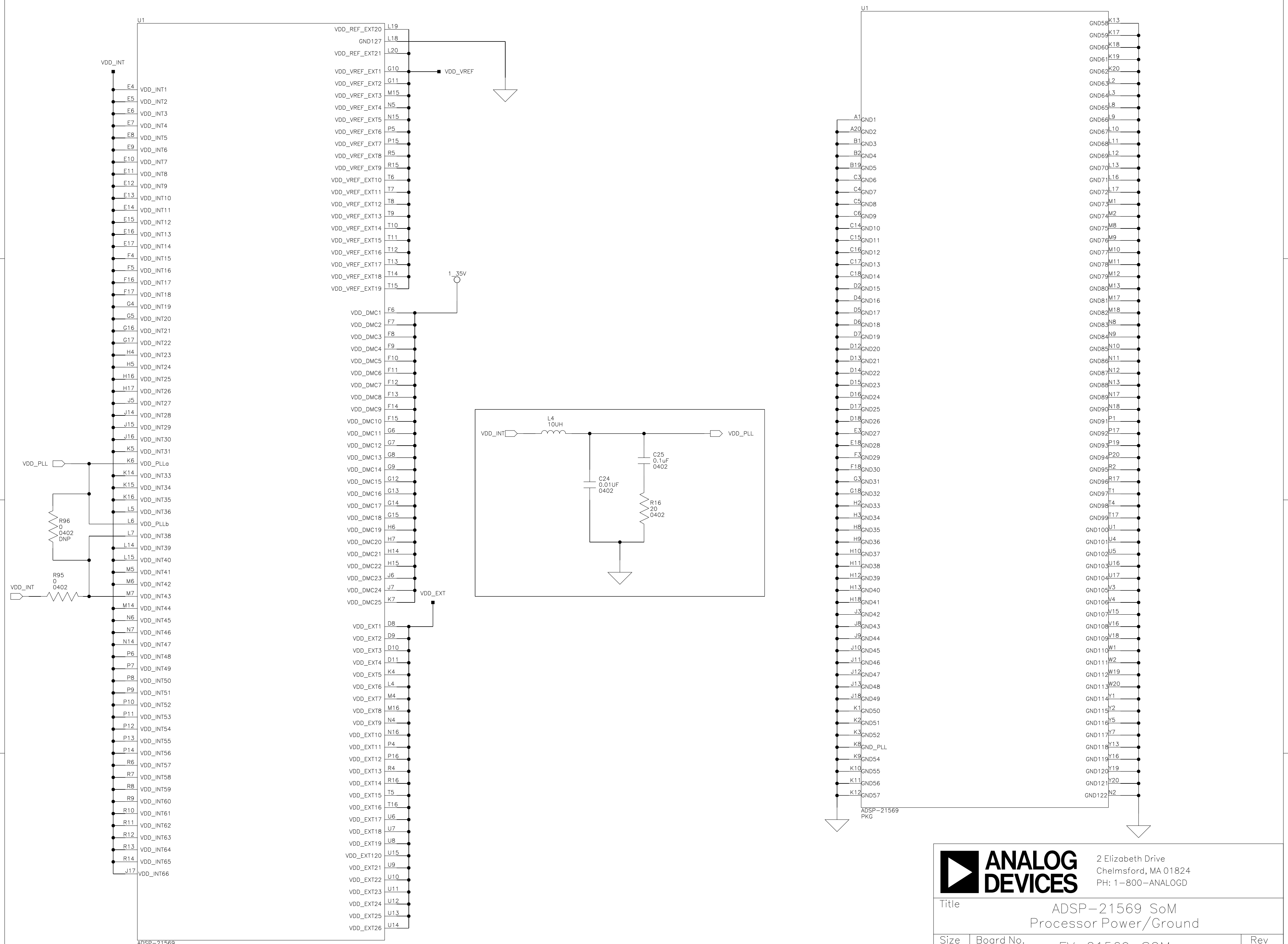
		2 Elizabeth Drive Chelmsford, MA 01824 PH: 1-800-ANALOGD	
Title ADSP-21569 SoM Mux Ports			
Size C	Board No. EV-21569-SOM	Rev A	
Date 1/29/2020	Sheet 4 of 12		

A

B


C

D



ADSP-21569  
PKG

ADSP-21569  
PKG

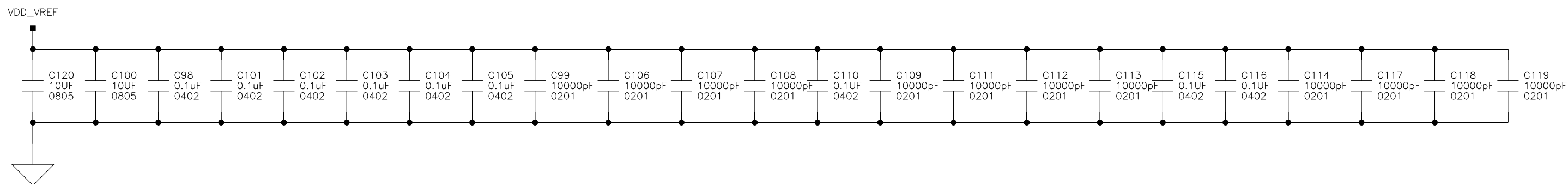
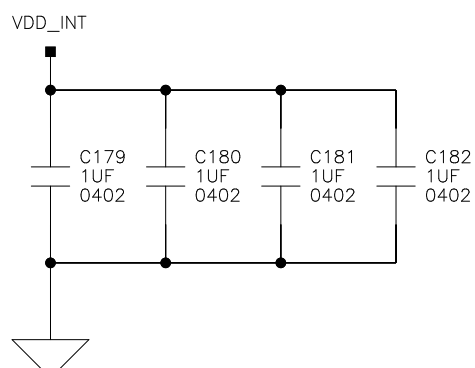
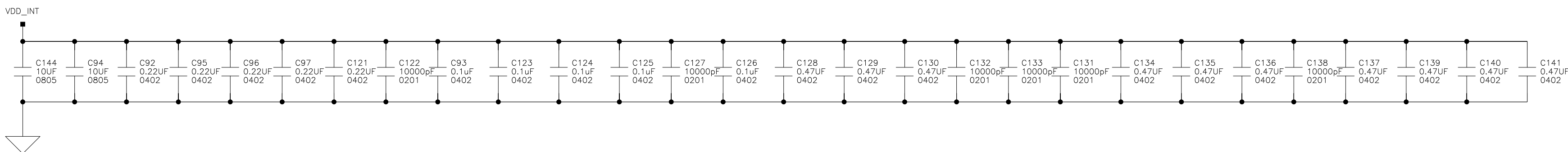
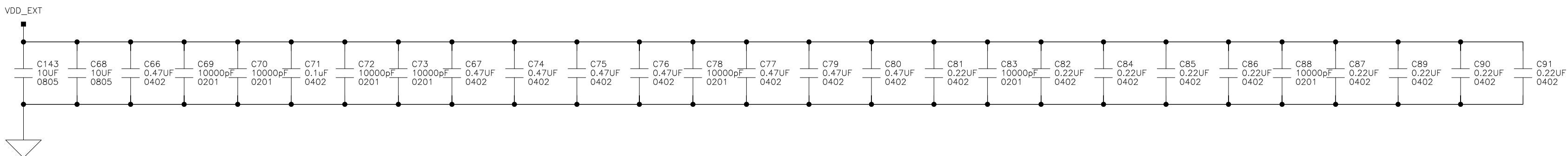
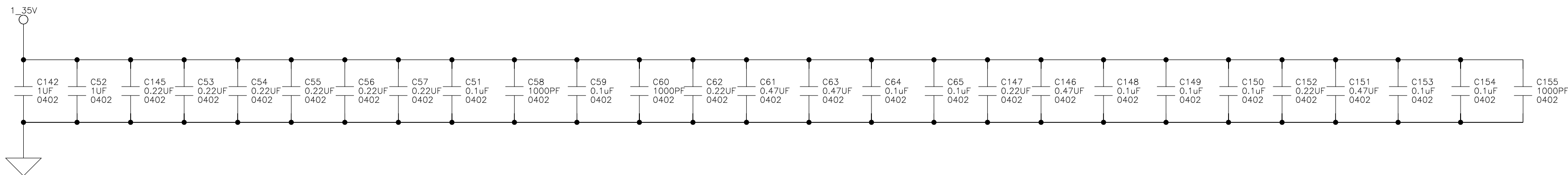
		2 Elizabeth Drive Chelmsford, MA 01824 PH: 1-800-ANALOGD	
		Title ADSP-21569 SoM Processor Power/Ground	
Size C	Board No. EV-21569-SOM	Rev A	
Date	1/29/2020	Sheet	5 of 12

A

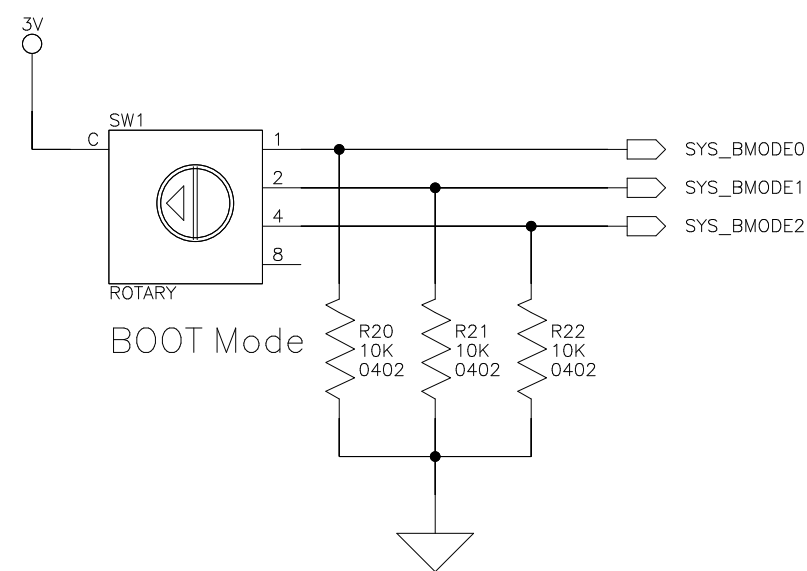
B

C

D

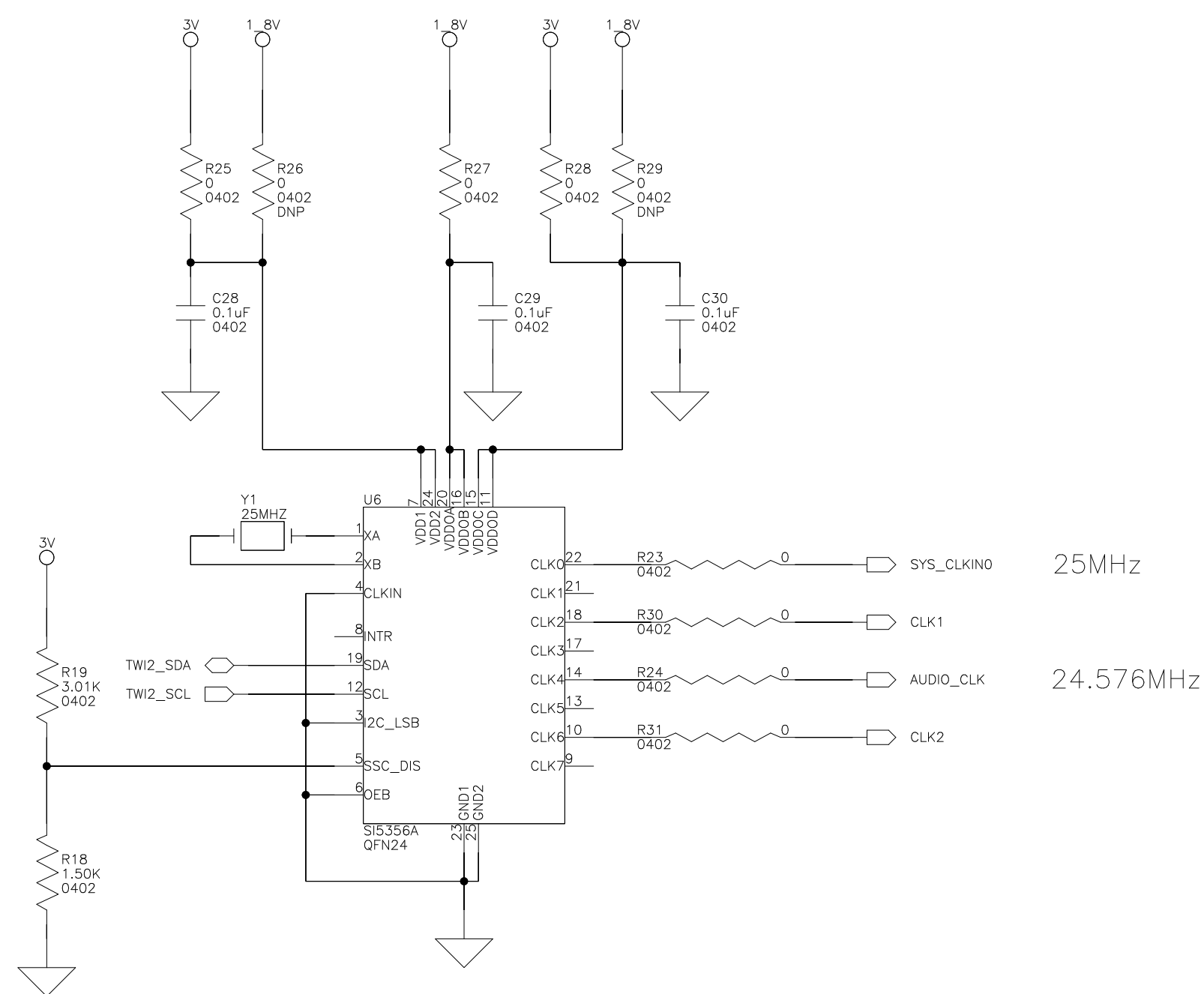


		2 Elizabeth Drive Chelmsford, MA 01824 PH: 1-800-ANALOGD	
Title		ADSP-21569 SoM Proc Bypass Caps	
Size C	Board No.	EV-21569-SOM	Rev A
Date	1/29/2020	Sheet	6 of 12



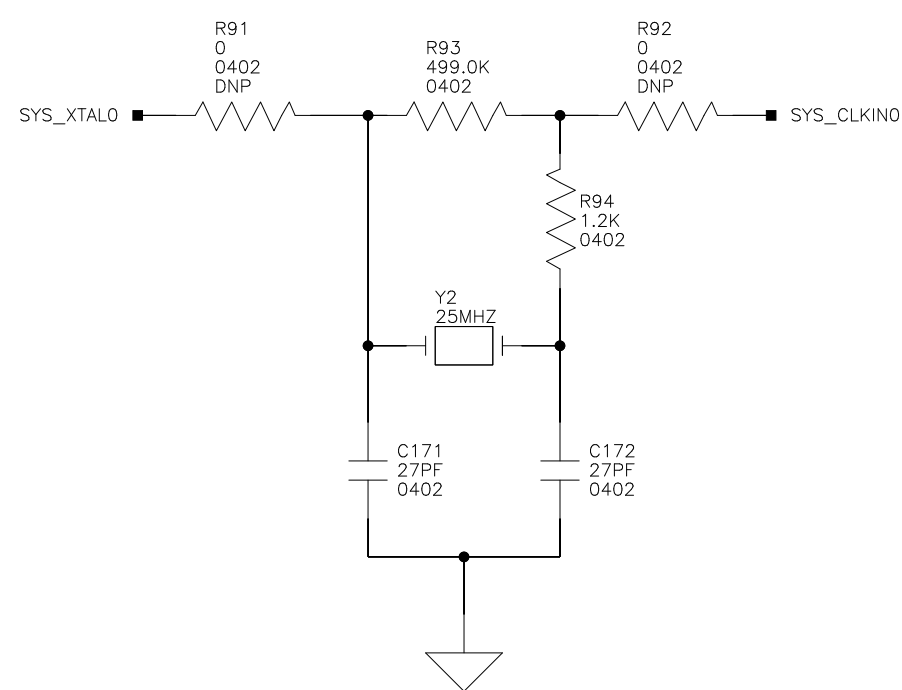
SW1: Boot mode selection switch

BMODE[2:0]	Boot Source	DEFAULT
000	No boot/Custom ROM	
001	SPI2 master boot	
010	SPI2 slave boot	
011	UART0 slave boot	
100	LP0 slave boot	
101	OSPI Boot	
110	Reserved	
111	Reserved	



OPTIONAL DSP CRYSTALS

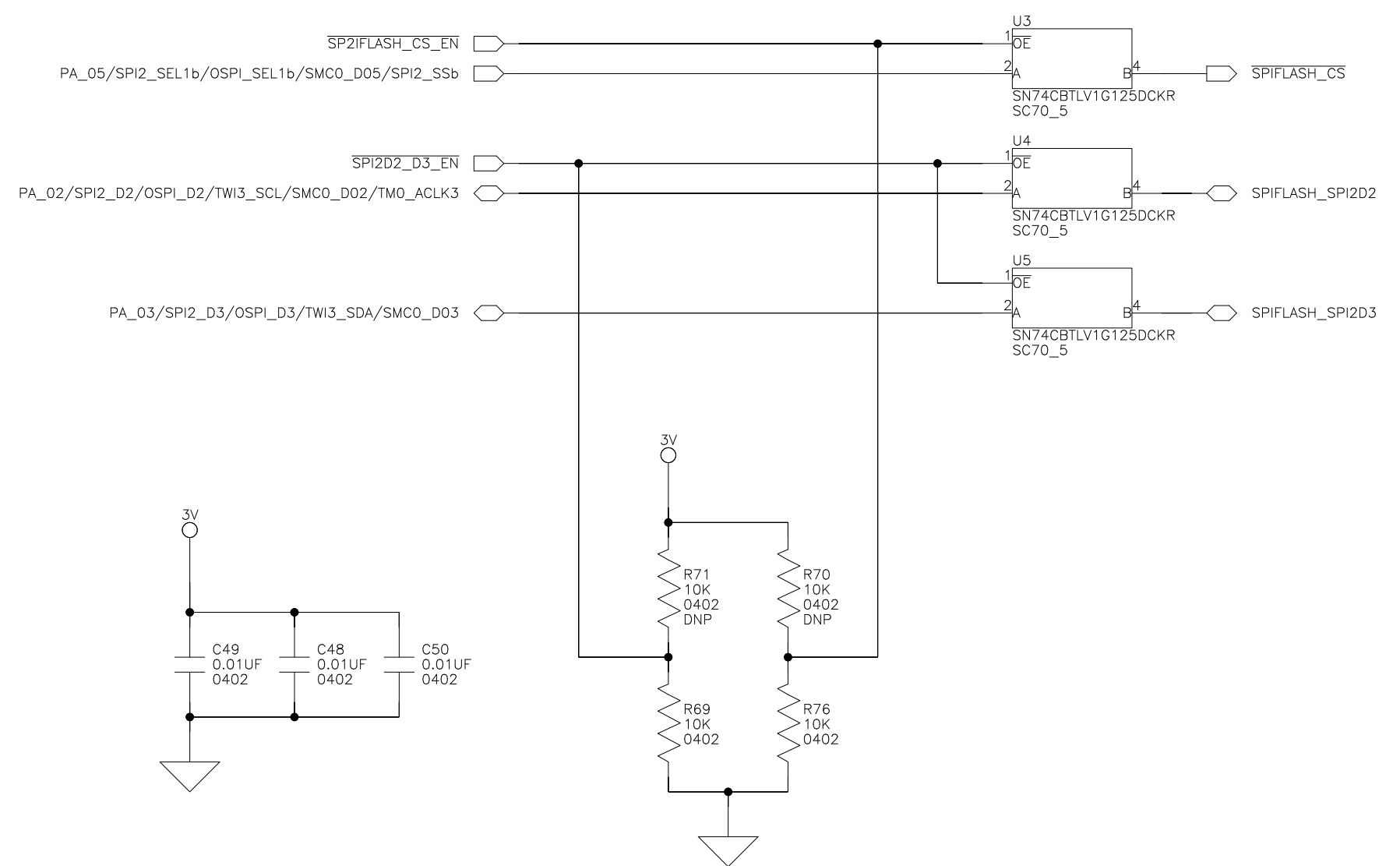
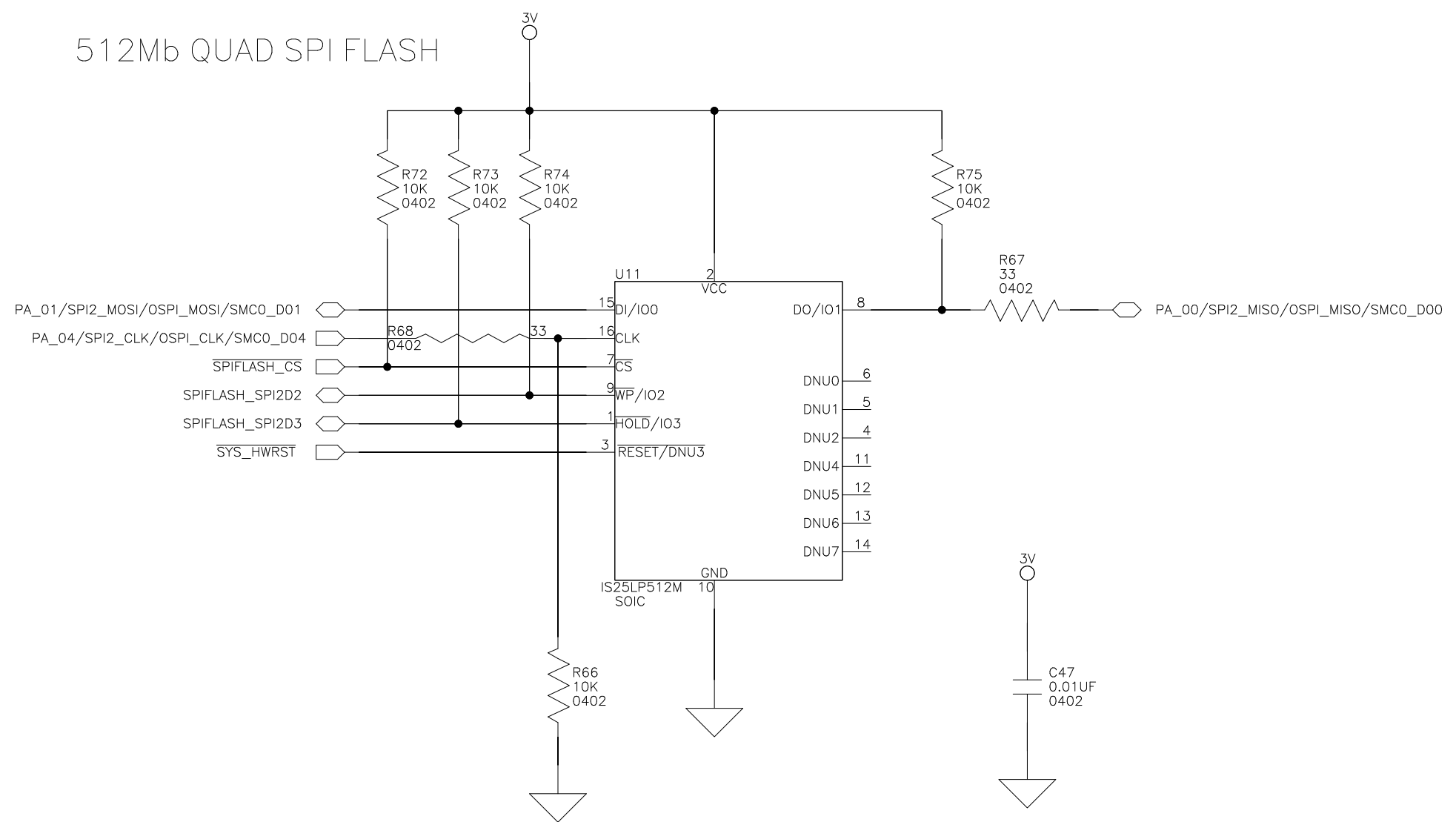
R23 should be depopulated when using the optional circuit




TWI Address 1110000x  
x is the R/W bit. Read - 1, Write - 0

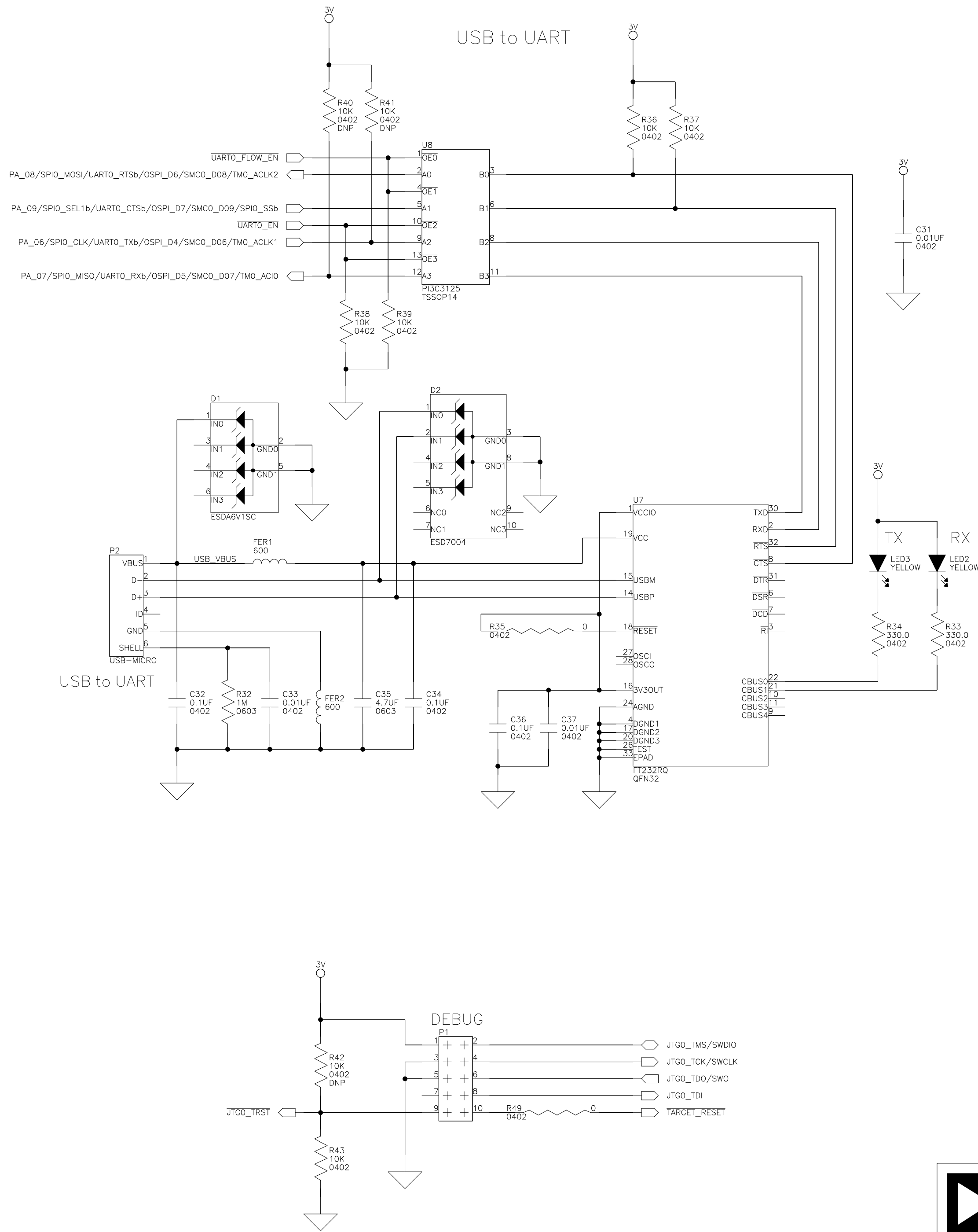
		2 Elizabeth Drive Chelmsford, MA 01824 PH: 1-800-ANALOGD	
		Title ADSP-21569 SoM Clocks/Boot Mode	
Size C	Board No.	EV-21569-SOM	Rev A
Date	1/29/2020	Sheet 7	of 12


### 512Mb QUAD SPI FLASH



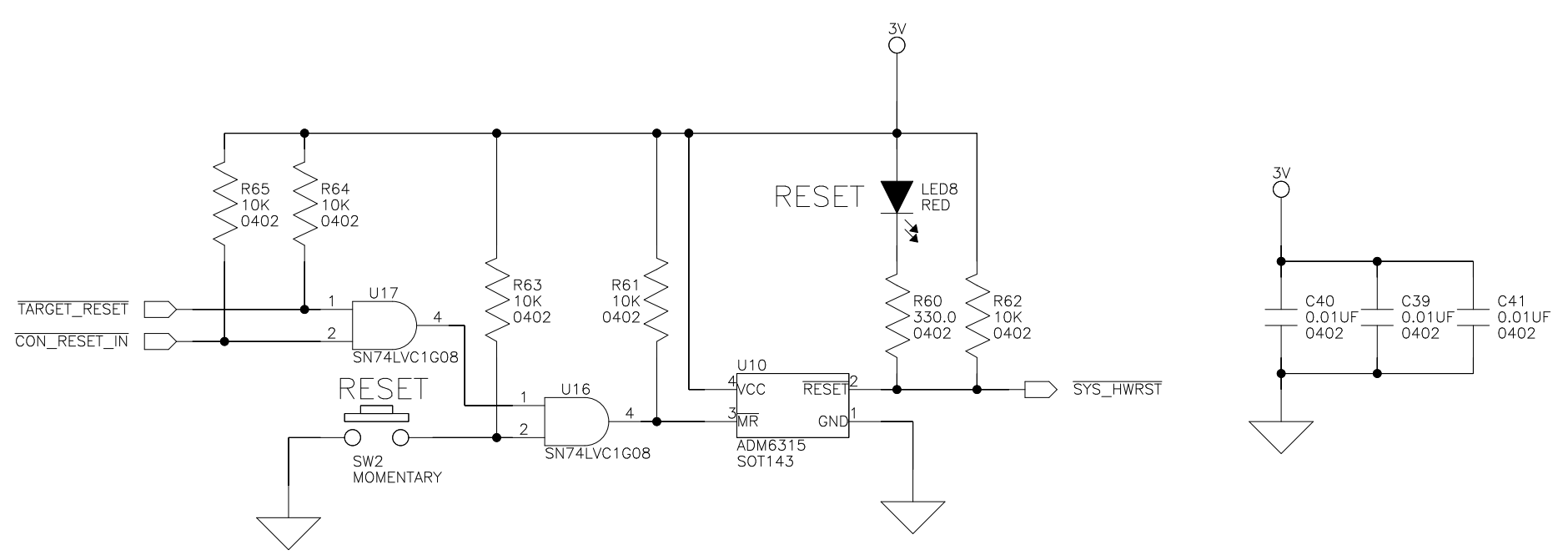
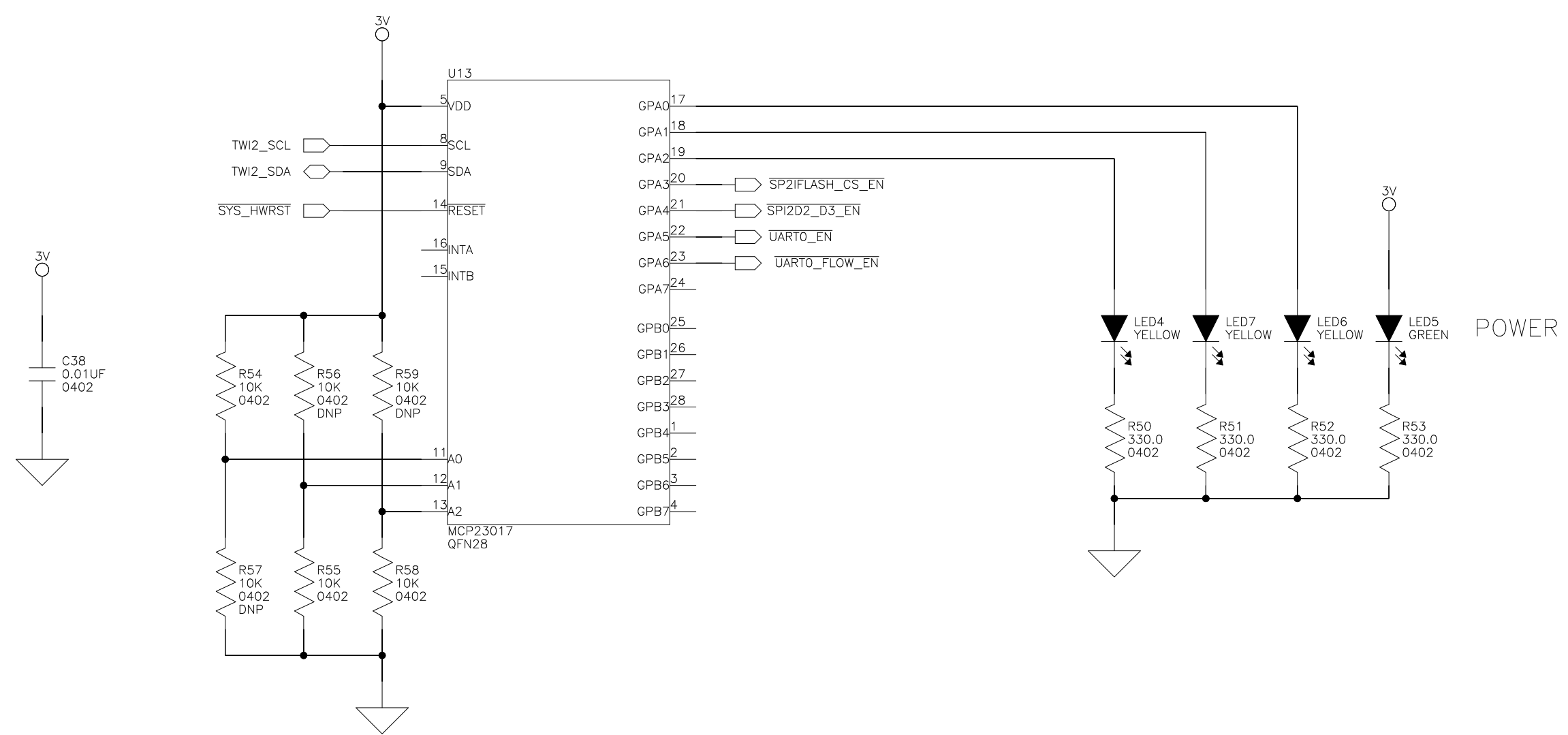
		2 Elizabeth Drive Chelmsford, MA 01824 PH: 1-800-ANALOGD	
		Title ADSP-21569 SoM SPI Flash	
Size C	Board No.	EV-21569-SOM	Rev A
Date	1/29/2020	Sheet 8	of 12






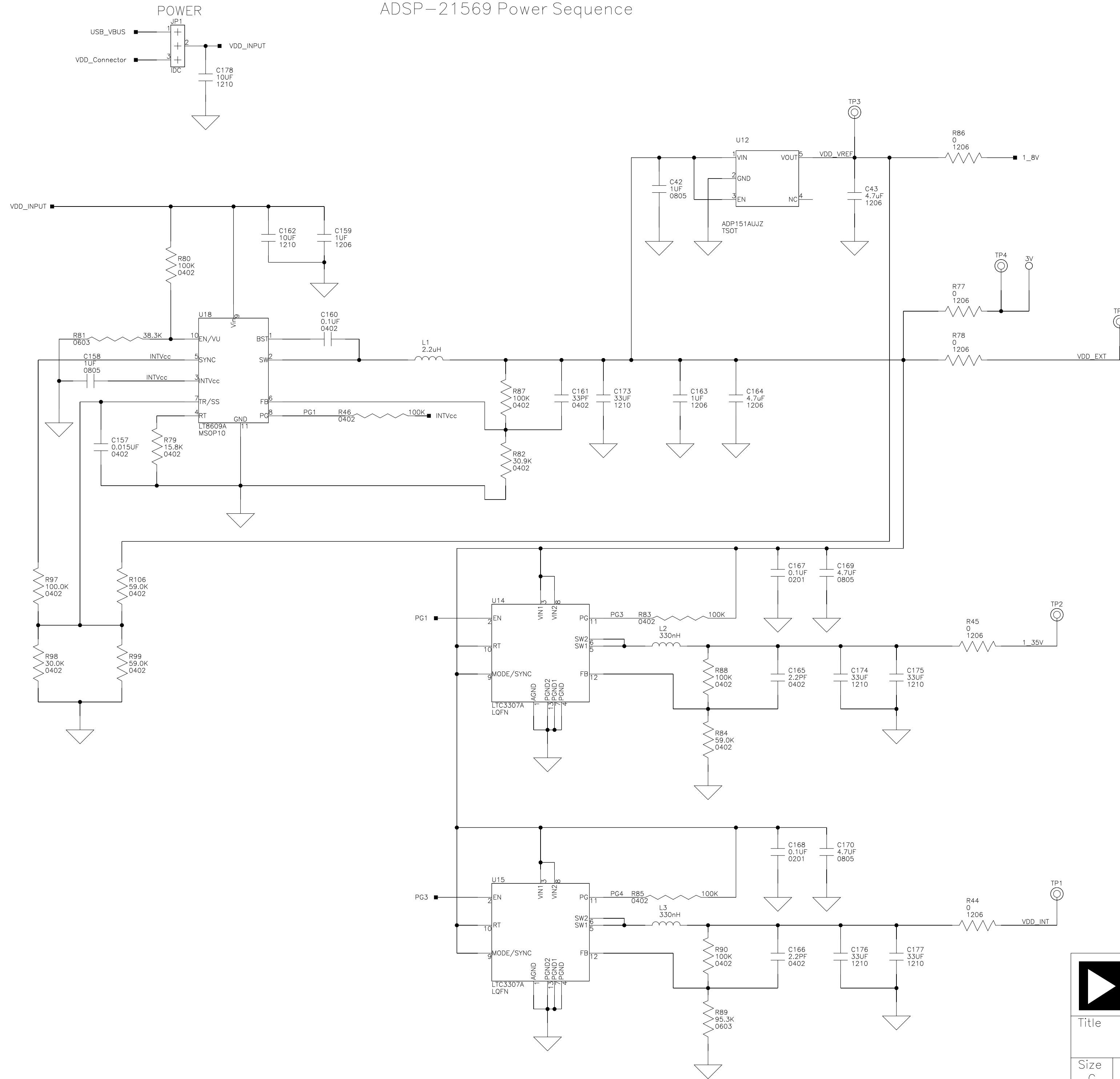
		2 Elizabeth Drive Chelmsford, MA 01824 PH: 1-800-ANALOGD	
		Title ADSP-21569 SoM UART/JTAG	
Size C	Board No. EV-21569-SOM	Rev A	
Date	1/29/2020	Sheet	9 of 12


TWI Address 0100001x  
 x is the R/W bit. Read - 1, Write - 0

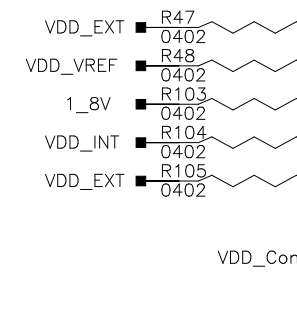
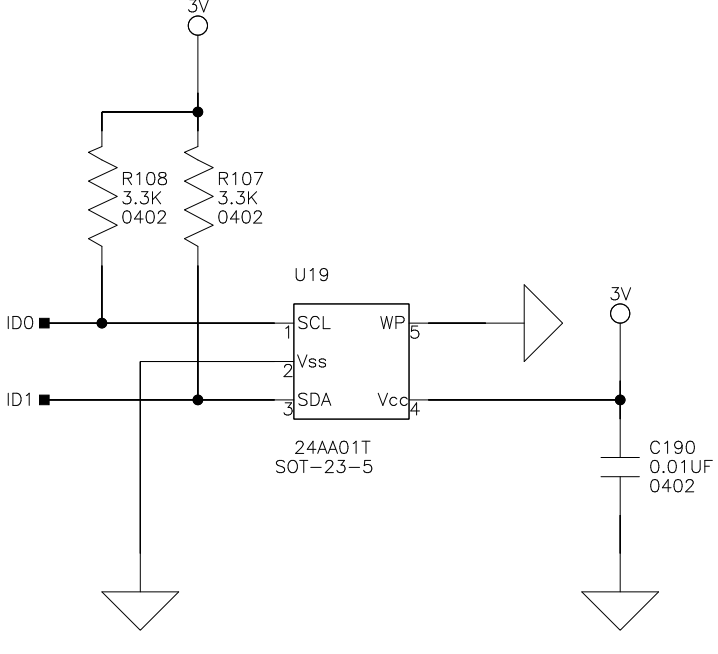
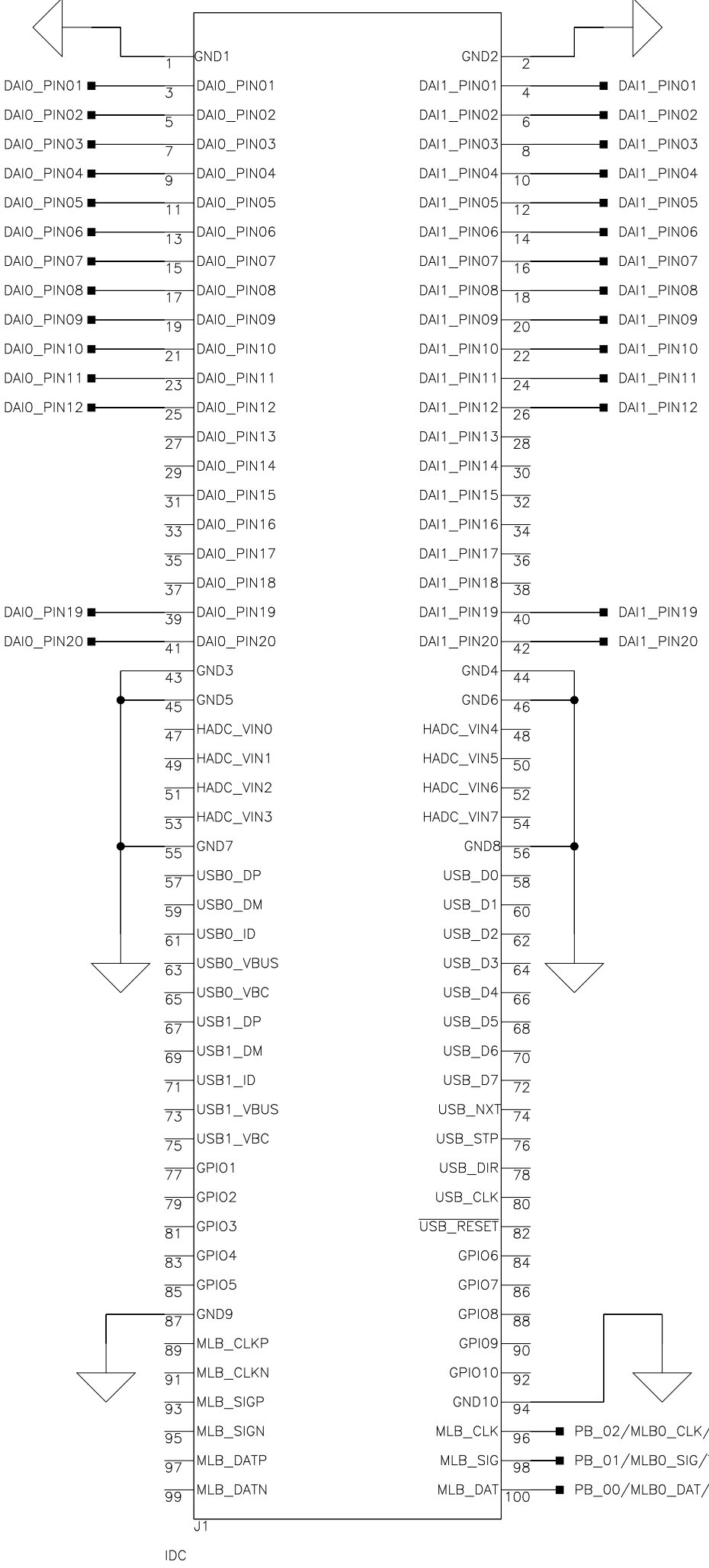
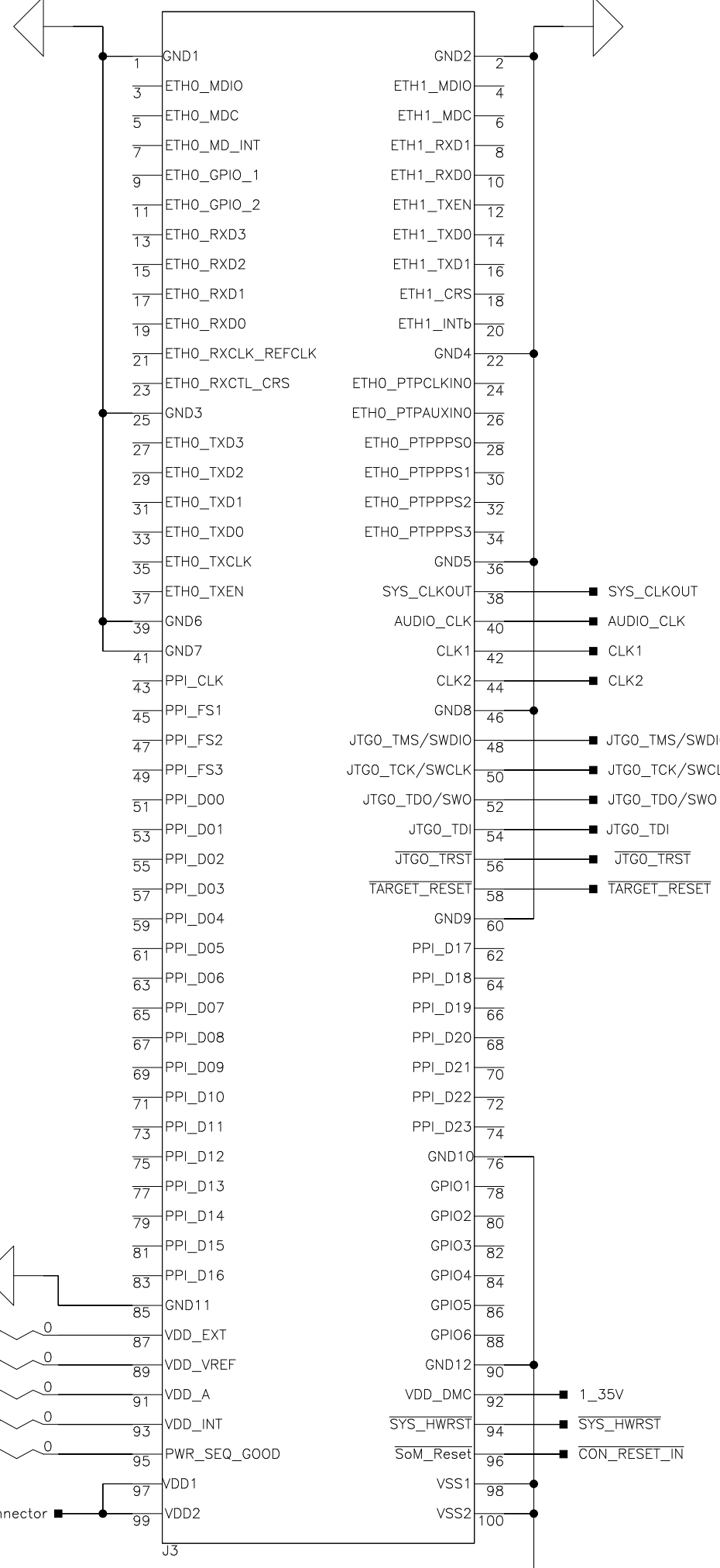
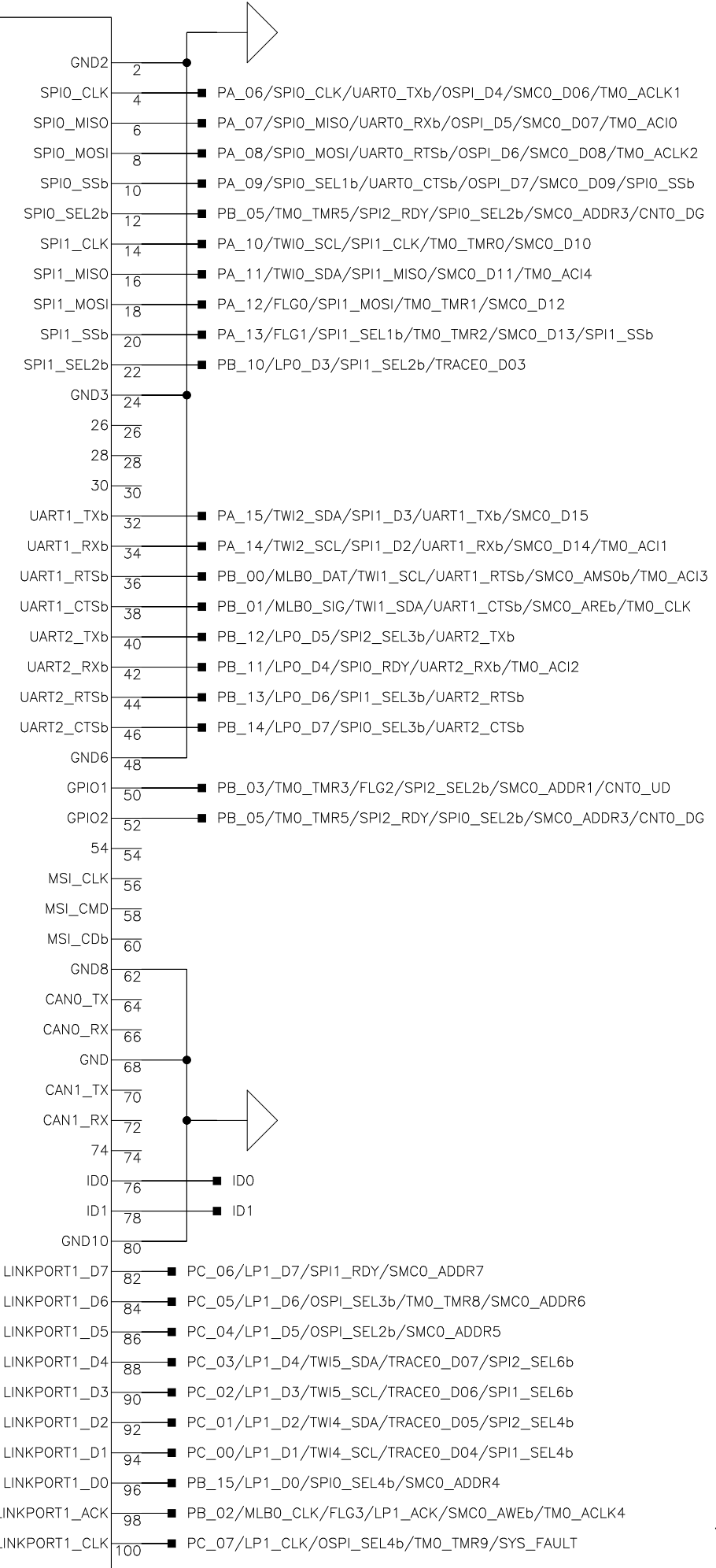
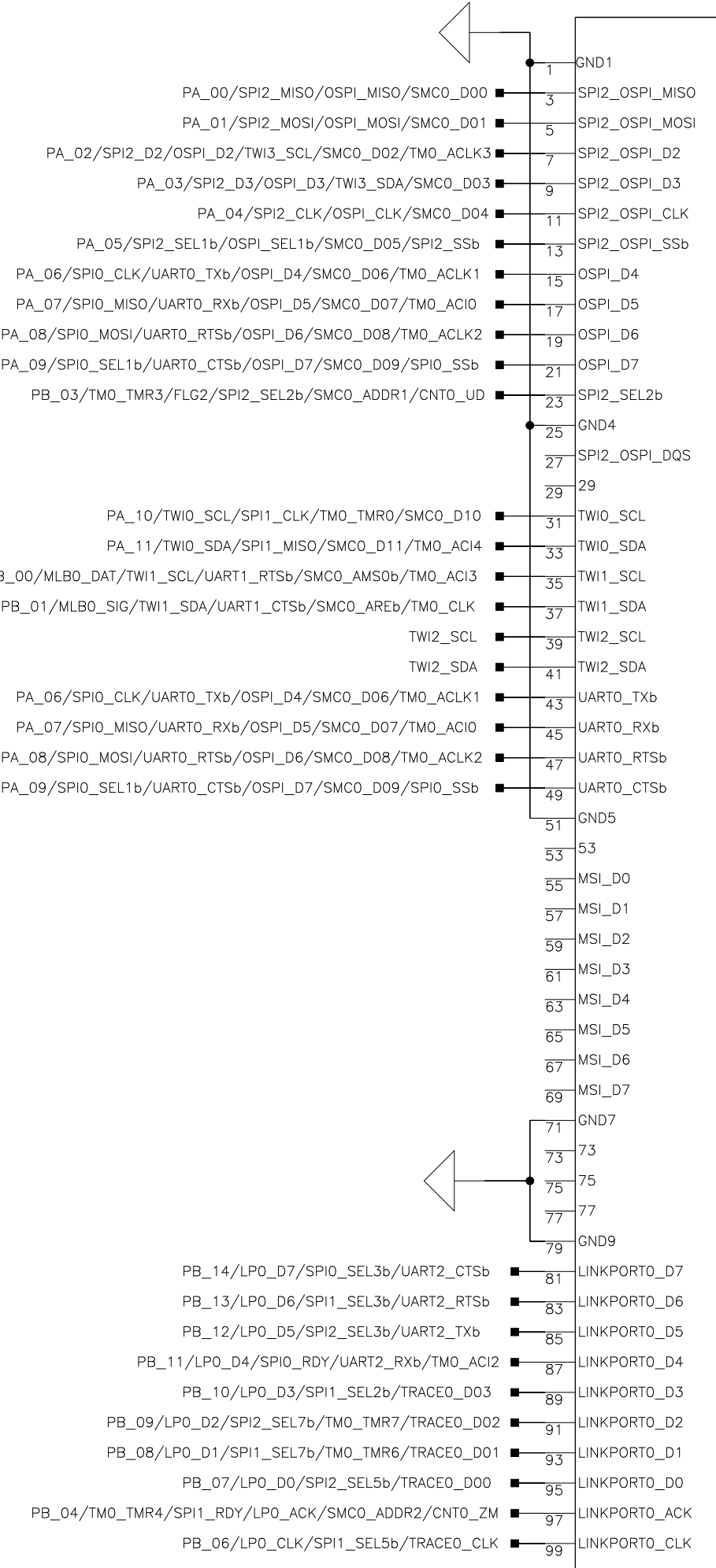


		2 Elizabeth Drive Chelmsford, MA 01824 PH: 1-800-ANALOGD	
		Title ADSP-21569 SoM LEDs/Reset/SoftConfig	
Size C	Board No. EV-21569-SOM	Rev A	
Date	1/29/2020	Sheet	10 of 12

# ADSP-21569 Power Sequence



		2 Elizabeth Drive Chelmsford, MA 01824 PH: 1-800-ANALOGD	
		Title ADSP-21569 SoM Power	
Size C	Board No.	EV-21569-SOM	Rev A
Date	1/29/2020	Sheet 11	of 12



2 Elizabeth Drive  
Chelmsford, MA 01824  
PH: 1-800-ANALOGD

Title		ADSP-21569 SoM High Speed Connectors	
Size	Board No.	EV-21569-SOM	
Date	1/29/2020	Sheet	12 of 12
		Rev	A