

US082-SSCALINTRPEVZ

Interposer Board

Description

The US082-SSCALINTRPEVZ interposer board provides an economical method to calibrate the Pmod resistive sensor. Using the interposer board ensures reliable connection, in contrast to using a jumper wire.

The US082-SSCALINTRPEVZ board features the Pmod connector on one side and a 50-pin dual row socket header on the other side to plug to SSC Communication board, providing flexibility to rapidly calibrate the Pmod sensor board.

Features

- SSC Communication board to standard Pmod pinout

Board Contents

US082-SSCALINTRPEVZ Interposer Board

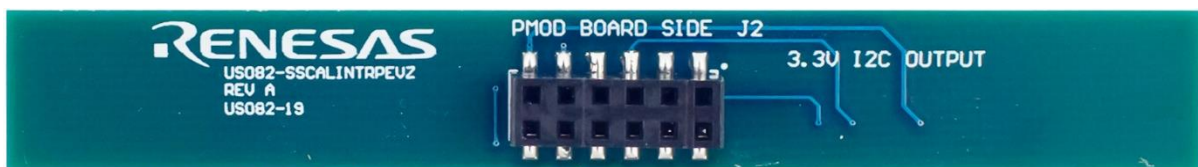


Figure 1. US082-SSCALINTRPEVZ Interposer Board

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1. Functional Description

1.1 Setup and Configuration

The US082-SSCALINTRPEVZ board is used with the SSC Comm board kits to calibrate a resistive sensor Pmod.

Table 1. Required Equipment and Board for Calibration

Demo Board	Description
SSC Comm Board V4.1 Kit	Used for communication between user's computer and resistive Pmod sensor.
US082-ZSSC3240EVZ	Pmod board with resistive sensor signal conditioner IC
US082-SSCALINTRPEVZ	Interposer Board

Equipment	Description
Capacitive Sensor	Calibration and testing
Calibration Standard (OPTIONAL)	Provide reference stimulus signal for calibration

1.1.1 1.2 Kit Hardware Connections

Complete the following procedures to set up the kit as shown in Figure 2.

1. Plug the US082-SSCALINTRPEVZ board into the SSC Communication board kit connector, K6.
2. Plug the US082-ZSSC3240EVZ PMOD board into the other side of the US082-SSCALINTRPEVZ connector, J2.
3. The system is now ready for use.

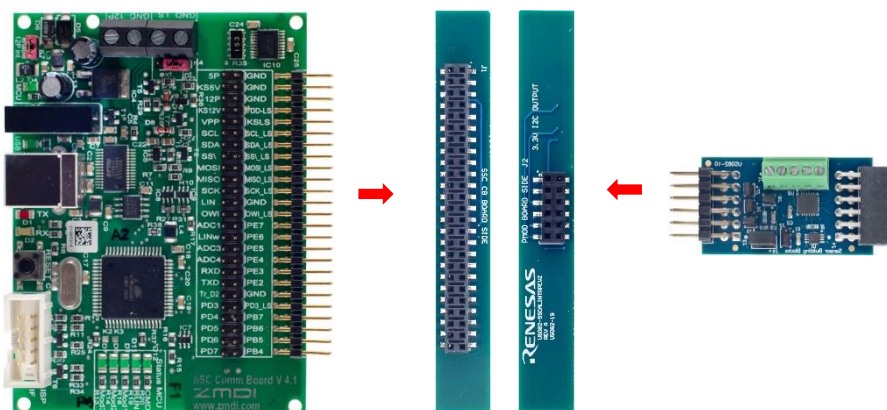


Figure 2. US082-SSCALINTRPEVZ Board (Middle)

(Same board showing connector on each side. Placed between SSC Comm board and US082-ZSSC3240EVZ.)

2. Board Design

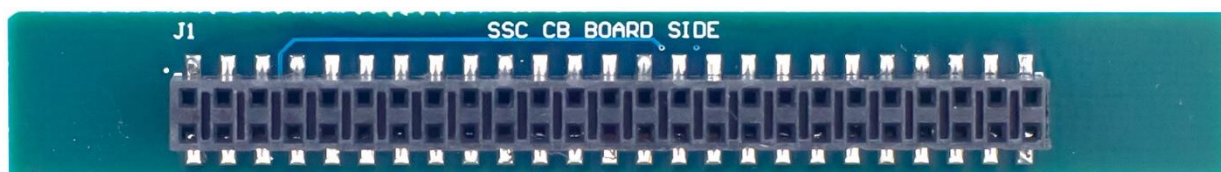


Figure 3. US082-SSCALINTRPEVZ Board (Top)



Figure 4. US082-SSCALINTRPEVZ Board (Bottom)

Table 1. US082-SSCALINTRPEVZ Pin Mapping

SSC Comm Board Pin	SSC Comm Board K6 Side (50 Pin)	Pmod Pin	US082-ZSSC3240EVZ J3 Side (12 Pin)
2	GND	1	INTn
4	GND	2	RESETn
6	GND	3	SCL
24	GND	4	SDA
8	VDD-LS	5	GND
12	SCL-LS	6	VDD
14	SDA-LS	7	GPIO1
32	RESET	8	GPIO2
41	PD3/INT1	9	GPIO3
44	PB7	10	GPIO4
46	PB6	11	GND
48	PB5	12	VDD
50	PB4	-	-

2.1 Schematic Diagrams

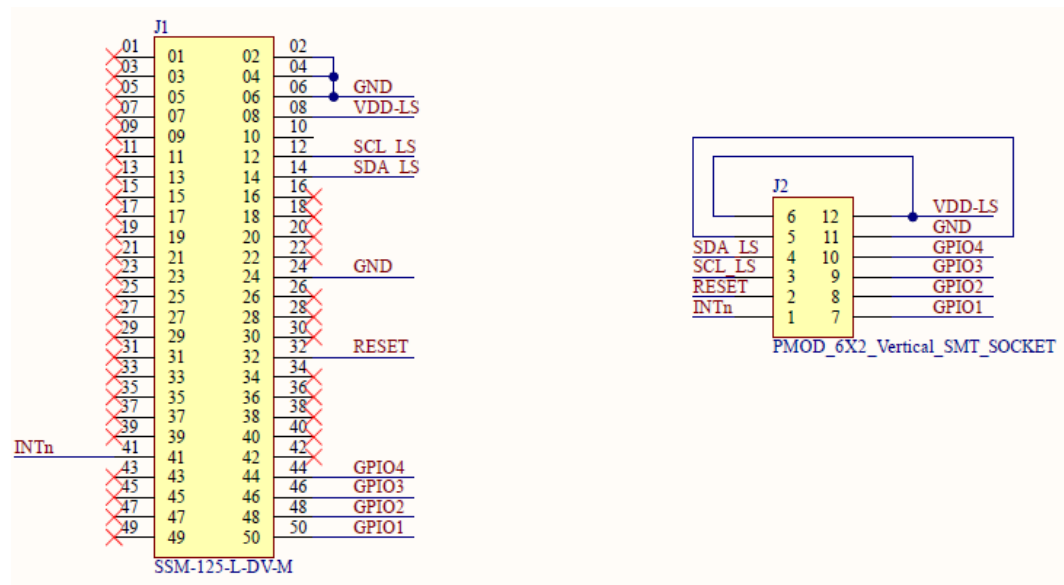


Figure 3. US082-SSCALINTRPEVZ Schematic

2.2 Bill of Materials

Qty	Reference	Description	Part Number
1	J1	CONN Socket 50POS 2ROW Vertical SMT	SSM-125-L-DV-M
1	J2	CONN Socket 12POS 2ROW Vertical SMT	NPPC062KFMS-RC

2.3 Board Layout

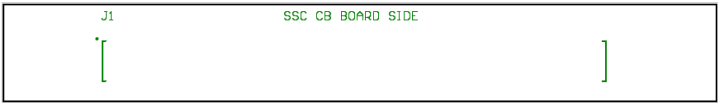


Figure 4. Silkscreen Top

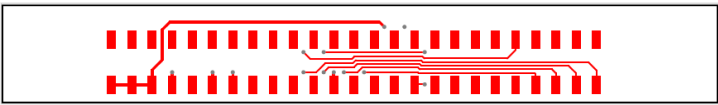


Figure 5. Copper Top

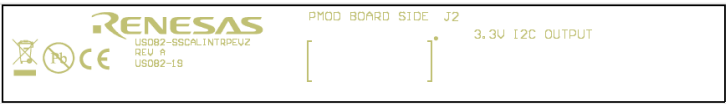


Figure 6. Silkscreen Bottom

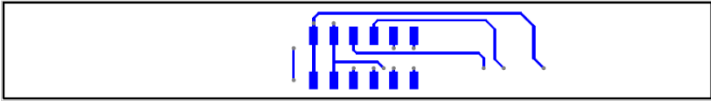


Figure 7. Copper Bottom

3. Ordering Information

Part Number	Description
US082-SSCALINTRPEVZ	Interposer Board

4. Revision History

Revision	Date	Description
1.00	Jun 6, 2025	Initial release.

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