

Parallel Port to I²C Interface Cables

CABLE-SMBUS-3PINZ, CABLE-SMBUS-5PINZ

GENERAL DESCRIPTION

This data sheet provides details of the parallel port to the I^2C° interface cables. The CABLE-SMBUS-3PINZ is for use with the ADM106x series of programmable power supply sequencers from Analog Devices, Inc. The CABLE-SMBUS-5PINZ is for use with the ADM1175/ADM1176/ADM1177/ADM1178 family of hot swap controllers and ADM119x power monitoring devices.

The dongles are designed to connect a standard PC or notebook parallel port to a 3-pin or 5-pin header on an evaluation board, system board, or preprogramming module. The dongle can then be used to access and program a supported I²C device using the appropriate PC software. Note that a suitable power supply must also be provided to the device.

Both cables provide clock (SCL), data (SDA), and GND signals. The CABLE-SMBUS-5PINZ also provides a CONV and an ALERT signal. The signals are labeled on the crimp housing of the cable. It is advisable to mark Pin 1 of the header on the board to ensure correct orientation upon connection, as shown in Figure 1. Figure 2 shows a schematic for the PCB contained in the parallel port connector for the CABLE-SMBUS-3PINZ. Figure 3 shows a schematic for the PCB contained in the parallel port connector for the CABLE-SMBUS-5PINZ.

For more information on these devices and to download the evaluation software, visit www.analog.com.

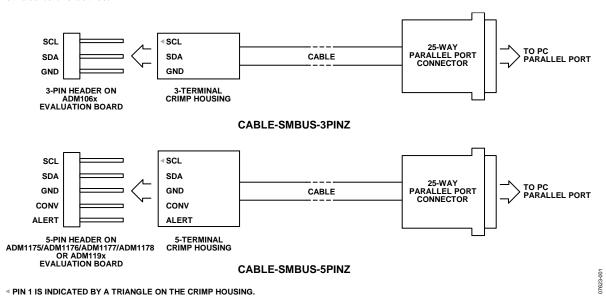


Figure 1. Parallel Port to I²C Interface Cable Connections

Rev. 0

Evaluation boards are only intended for device evaluation and not for production purposes. Evaluation boards are supplied "as is" and without warranties of any kind, express, implied, or statutory including, but not limited to, any implied warranty of merchantability or fitness for a particular purpose. No license is granted by implication or otherwise under any patents or other intellectual property by application or use of evaluation boards. Information furnished by Analog Devices is believed to be accurate and reliable. However, no responsibility is assumed by Analog Devices for its use, nor for any infringements of patents or other rights of third parties that may result from its use. Analog Devices reserves the right to change devices or specifications at any time without notice. Trademarks and registered trademarks are the property of their respective owners. Evaluation boards are not authorized to be used in life support devices or systems.

CABLE-SMBUS-3PINZ, CABLE-SMBUS-5PINZ

EVALUATION BOARD SCHEMATICS

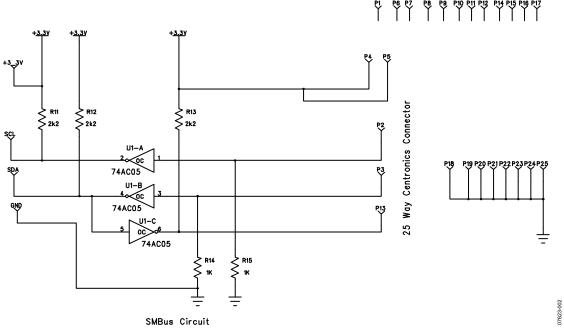


Figure 2. CABLE-SMBUS-3PINZ Schematic

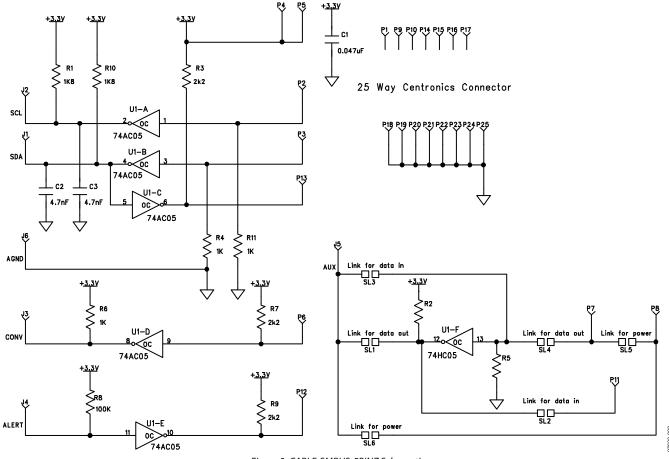


Figure 3. CABLE-SMBUS-5PINZ Schematic

CABLE-SMBUS-3PINZ, CABLE-SMBUS-5PINZ

ORDERING INFORMATION

BILL OF MATERIALS

Table 1. CABLE-SMBUS-3PINZ

| Qty. | Reference Designator | Description | Supplier/Part No. |
|------|----------------------|------------------------|--------------------------|
| 3 | R11, R12, R13 | 2.2 kΩ resistor, R0603 | FEC ¹ 9330810 |
| 2 | R14, R15 | 1 kΩ resistor, R0603 | FEC 9330380 |
| 1 | U1 | 74AC05 IC, SO14NB | FEC 1103063 |

¹ FEC = Farnell Electronics.

Table 2. CABLE-SMBUS-5PINZ

| Qty. | Reference Designator | Description | Supplier/Part No. |
|------|----------------------|-------------------------------|-------------------|
| 1 | C1 | 47 nF capacitor, 0603 | FEC1 431965 |
| 2 | C2, C3 | 4.7 nF capacitor, 0603 | FEC 722212 |
| 6 | J1 to J6 | Test pad, testpoint | Not inserted |
| 2 | R1, R10 | 1.8 k Ω resistor, 0603 | FEC 9330712 |
| 2 | R2, R5 | Resistor, 0603 | Not inserted |
| 3 | R3, R7, R9 | 2.2 k Ω resistor, 0603 | FEC 9330810 |
| 3 | R4, R6, R11 | 1 kΩ resistor, 0603 | FEC 9330380 |
| 1 | R8 | 100 kΩ resistor, 0603 | FEC 9330402 |
| 6 | SL1 to SL6 | Solder pad, SOLDER_LINK | Not inserted |
| 1 | U1 | 74AC05 IC, SO14NB | FEC 1103063 |

¹ FEC = Farnell Electronics.

ORDERING GUIDE

| | Description |
|--------------------------------|---------------------------------------------------------|
| | Parallel Port to 3-Pin I ² C Interface Cable |
| CABLE-SMBUS-5PINZ ¹ | Parallel Port to 5-Pin I ² C Interface Cable |

 $^{^{1}}$ Z = RoHS Compliant Part.

ESD CAUTION



ESD (electrostatic discharge) sensitive device. Charged devices and circuit boards can discharge without detection. Although this product features patented or proprietary protection circuitry, damage may occur on devices subjected to high energy ESD. Therefore, proper ESD precautions should be taken to avoid performance degradation or loss of functionality.

| CABLE-SMBUS-3PINZ, CABLE-SMBUS-5PINZ |
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