

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 I²C^{*} 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

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

EVALUATION BOARD SCHEMATICS



07623-003

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	FEC ¹ 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 kΩ resistor, 0603	FEC 9330712
2	R2, R5	Resistor, 0603	Not inserted
3	R3, R7, R9	2.2 kΩ 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

Model	Description
CABLE-SMBUS-3PINZ ¹	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

NOTES

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