

Programmable Low Power Gyroscope Evaluation Board

Preliminary Technical Data

ADIS1625x/PCB

GENERAL DESCRIPTION

The ADIS16250/PCB, ADIS16251/PCB, and ADIS16255/PCB are simple evaluation boards that provide convenient access to the ADIS16250, ADIS16251, ADIS16255 using a standard 2 mm, 2×6 , connector interface. These connectors can be accessed using a variety of cable options, including standard 1 mm ribbon cables. The ADIS1625x/PCB is designed to be evaluated in an existing digital platform (such as MCU, DSP, FPGA, PLD) or as part of the ADISEVAL system. Four mounting holes (sized for 2-56 or 2 mm screws) have been provided to secure the board during evaluation.

CIRCUIT DESCRIPTION

The schematic, layout, and parts list for the ADIS1625x/PCB can be found in Figure 1, Figure 2, and Table 1.

The ADIS1625x's digitized outputs can be accessed using the 4-wire serial port interface (SPI) signals on J1: SCLK, CS, DOUT, and DIN. For specific information on using the ADIS1625x SPI interface, refer to the ADIS16250 data sheet. Auxiliary functions, such as the 12-bit ADC input, can be accessed using J2. C1 provides additional power supply filtering but is generally not required. C2 provides pads for installing a capacitor to reduce the ADIS1625x's bandwidth.

Table 1. ADIS1625x/PCB Parts List

U1ADIS1625xACCZ1J1, J212-pin, dual row, 2 mm connectorC1Power supply filtering, not installed	Reference Designator	Part Description
J1, J212-pin, dual row, 2 mm connectorC1Power supply filtering, not installed	U1	ADIS1625xACCZ ¹
C1 Power supply filtering, not installed	J1, J2	12-pin, dual row, 2 mm connector
	C1	Power supply filtering, not installed
C2 Bandwidth adjust, not installed	C2	Bandwidth adjust, not installed

¹ x = 0, 1, or 5.

SPECIAL NOTES ON HANDLING

Note that the ADIS1625x/PCB is not reverse-polarity protected. Reversing the power supply or applying inappropriate voltages (that is, voltages outside the Absolute Maximum Ratings in the ADIS16250 data sheet) to any pin may damage the ADIS1625x/PCB.

Parameter	Range
V _{cc}	4.75 V to 5.25 V

Rev. PrE

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Figure 1. ADIS1625x/PCB Schematic



Figure 2. ADIS1625x/PCB Layout (Top View)

ADIS1625x/PCB



ORDERING GUIDE

Model	Description
ADIS16250/PCBZ ¹	Evaluation Board
ADIS16251/PCBZ ¹	Evaluation Board
ADIS16255/PCBZ ¹	Evaluation Board

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.

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