

iSensorTM Inclinometer/Accelerometer Evaluation Board

Preliminary Technical Data

ADIS1620x/PCB

GENERAL DESCRIPTION

The ADIS1620x/PCBs are simple evaluation boards that provide convenient access to the ADIS1620x family of products, 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 ADIS1620x/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 ADIS1620x/PCB can be found in

Figure 1,

Figure 2, and Table 1.

The ADIS1620x'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 ADIS1620x SPI interface, refer to the ADIS16201 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.

Table 1. Parts List

Reference Designator	Part Description
U1	ADIS1620xyCCZ ¹
J1, J2	12-pin, dual row, 2 mm connector
C1	Power supply filtering, not installed

 $^{^{1}}$ x = 0, 1, 2, 3, 4 or 9, y = B or C

SPECIAL NOTES ON HANDLING

Note that the ADIS1620x/PCB is not reverse-polarity protected. Reversing the power supply or applying inappropriate voltages (that is, voltages outside the Absolute Maximum Ratings in the ADIS1620x data sheets) to any pin may damage the ADIS1620x/PCB.

Table 2. Power Supply Levels

Parameter	Range
V _{CC}	3.0 V to 3.6 V

Rev. PrA

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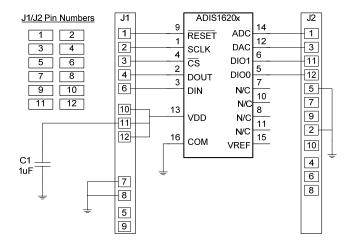


Figure 1. ADIS1620x/PCB Schematic

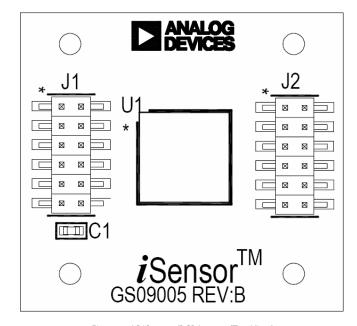


Figure 2. ADIS1620x/PCB Layout (Top View)

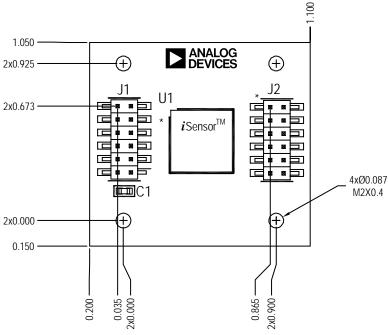


Figure 3. ADIS1620x/PCB Mechanical Drawing

ORDERING GUIDE

Model	Description	
ADIS16201/PCBZ	Evaluation Board	
ADIS16202/PCBZ	Evaluation Board	
ADIS16203/PCBZ	Evaluation Board	
ADIS16204/PCBZ	Evaluation Board	
ADIS16209/PCBZ	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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ADIS16209/PCBZ