

# ADIS16IMU1/PCBZ Breakout Board Wiki-Guide

## OVERVIEW

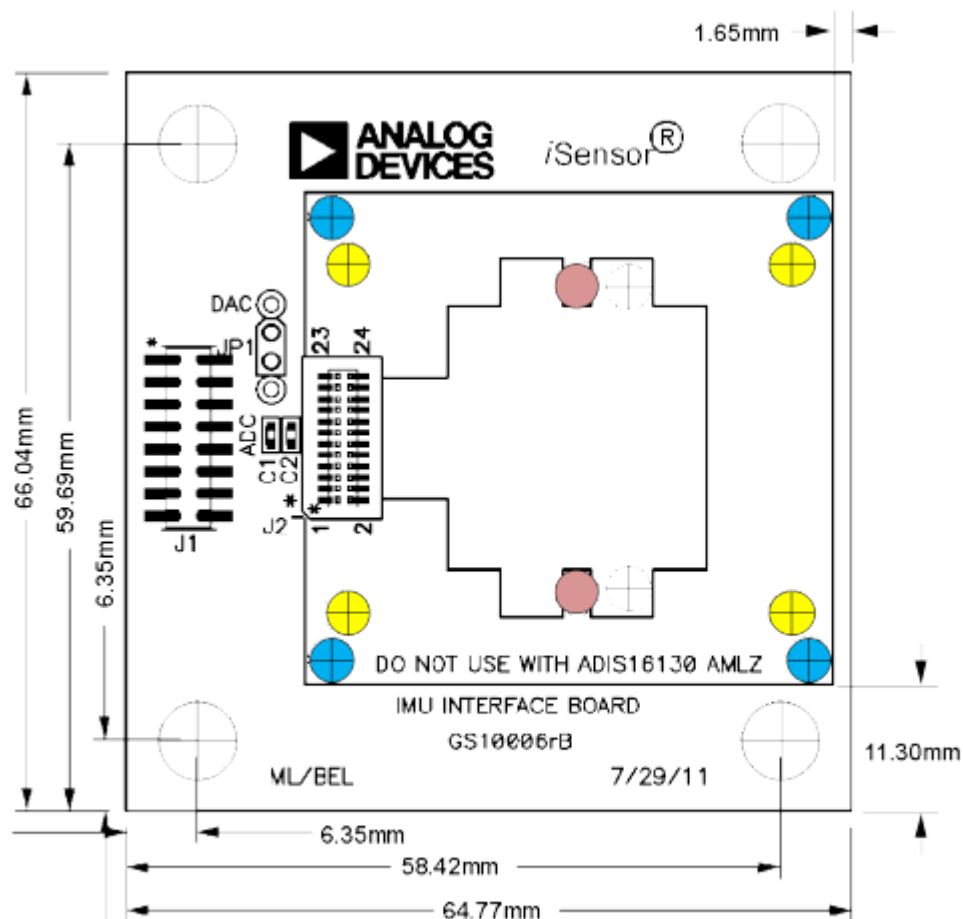
The ADIS1613x, ADIS1636x, ADIS16375, ADIS16407 and ADIS1648x IMU products all use a 24-pin, dual-row, 1mm connector for their electrical interface. This mating connector for their interface supports surface-mount solder attachment but does not support direct attachment with ribbon cables. For those who would like to connect to these IMU/gyroscope products to an existing processor board, using a ribbon cable, the ADIS16IMU1/PCBZ provides a simple connector translation for this purpose.

Here is a picture of the contents that come with the ADIS16IMU1/PCBZ.



## IMU/GYROSCOPE MOUNTING HOLES

The ADIS16IMU1/PCBZ provides several sets of mounting holes that line up with mounting holes and tabs on the following products: ADIS1613x, ADIS1636x, ADIS16375, ADIS1640x and ADIS1648x products. Please see the following picture for device mounting hole locations.



## ADIS16133, ADIS16135, ADIS1636 Mounting

Use the M2x0.4x16mm machine screws (provided in pink bag) for mounting these products to the ADIS16IMU1/PCBZ and set their torque for 20 inch-ounces. The yellow-highlights in the top-view picture illustrate the location of the mounting holes for these products.



## ADIS16360, ADIS16362, ADIS16364, ADIS16365, ADIS16367, ADIS16400, ADIS16405, ADIS16407 Mounting

Use the M2x0.4x4mm machine screws (provided in pink bag) for mounting these products to the ADIS16IMU1/PCBZ and set their torque for 20 inch-ounces. The pink-highlights in the top-view picture illustrate the location of the mounting holes for these products. For high-vibration environments, consider using more than 2 screws, per [AN-1045](#)



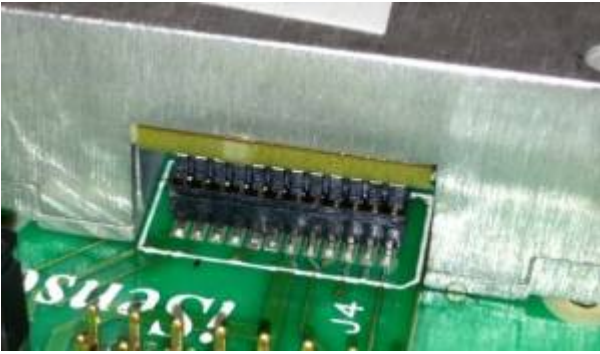
## ADIS16375, ADIS16480, ADIS16485, ADIS16488 Mounting

Use the M2x0.4x16mm machine screws (provided in pink bag) for mounting these products to the ADIS16IMU1/PCBZ and set their torque for 20 inch-ounces. The blue-highlights in the top-view picture illustrate the location of the mounting holes for these products. Here is an example of the ADIS16IMU1/PCBZ, with an ADIS16485 AMLZ mounted to it.



Make sure that the connector pins are in alignment with J2 on the ADIS16IMU1/PCBZ, before pressing it into place.

Here is a close-up view, which shows the **correct connector alignment**.



This picture provides an example of the an **incorrect connector alignment**. Note that this view is on the EVAL-ADISZ board, not the ADIS16IMU1/PCBZ.



## INTERFACE CONNECTOR

J1 is the electrical connector that provides direct access to power, ground and critical digital I/O pins on the devices. It is a 16-pin, dual-row, 2-mm pitch connector that support 1mm ribbon cable systems.

## Pin Assignments

Here is the pin assignments for J1, which is the connector that will interface with an embedded processor board.

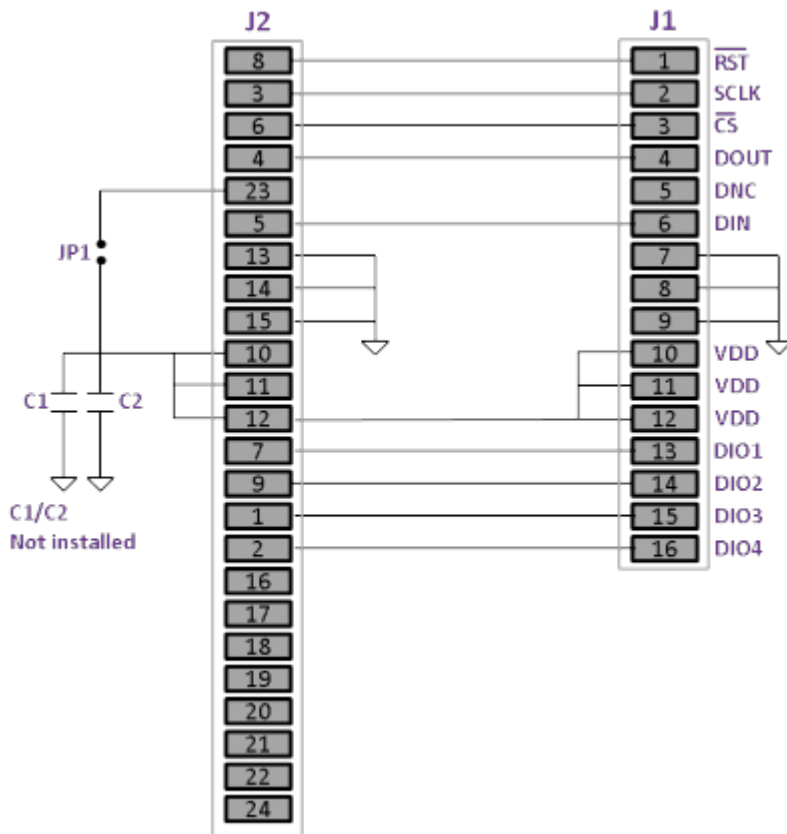


## Ribbon Cable Options

Check out the following link for ideas on how to make or purchase 16-pin, 1mm ribbon cables that can mate to J1 on the ADIS16IMU1/PCBZ.

[Acquiring 1mm ribbon cables](#)

## ELECTRICAL SCHEMATIC





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