

I2C 3-Axis Gyro and Accelerometer

MK-95157

December 24, 2015

IONOTRONICS Corporation

<http://www.ionotronics.com>

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1 Introduction

The MK-95157 supports I2C bus interface to a 3-Axis Gyro and a 3-Axis Accelerometer. The device is shown in Figures 1 and 2. The Board dimensions are shown in Figure 3.

The I2C 3-Axis Accelerometer is based on the Analog Devices ADXL343. The Digikey part number is: ADXL343BCCZ-ND.

The I2C 3-Axis Gyro is based on the ST Micro L3G4200DTR with Digikey part number: 497-11071-1-ND.

The two I2C slaves are accessed through a 4 pin DF11 Series Hirose Connector. Two connectors are provided so that the device can be bussed to other I2C devices. Two 6 pin DF11 Series Hirose connectors are also provided for each device that also provide the interrupt signals.

Visit the IONOTRONICS Web Site for videos showing the operation of the MK-95157. We also provide C code for both the PIC32MX360F512 and the PIC16F1947 for interfacing and reading measurements from the MK-95157.

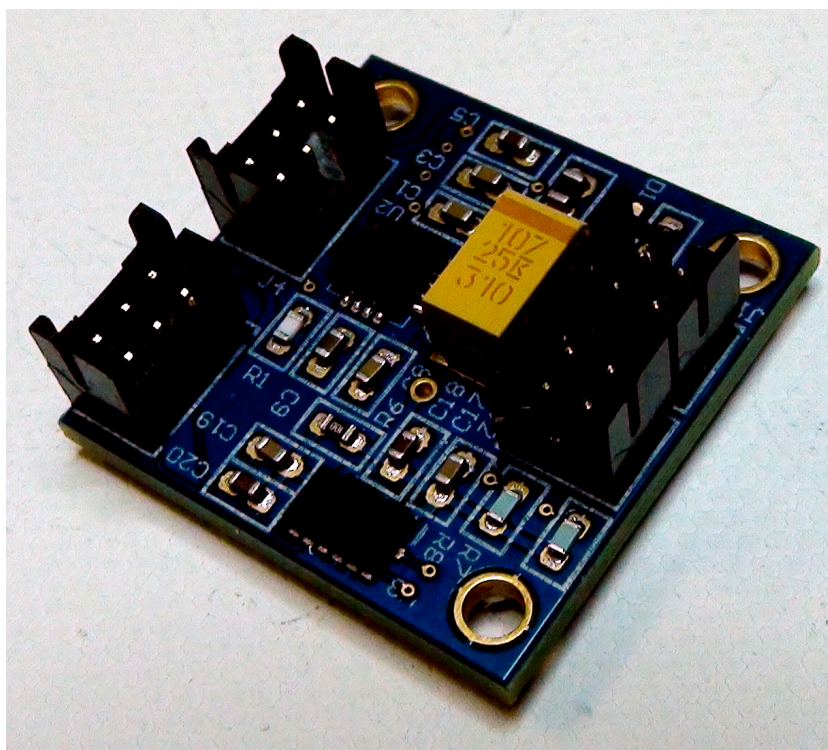


Figure 1 MK-95157 I2C 3-Axis Gyro and 3-Axis Accelerometer

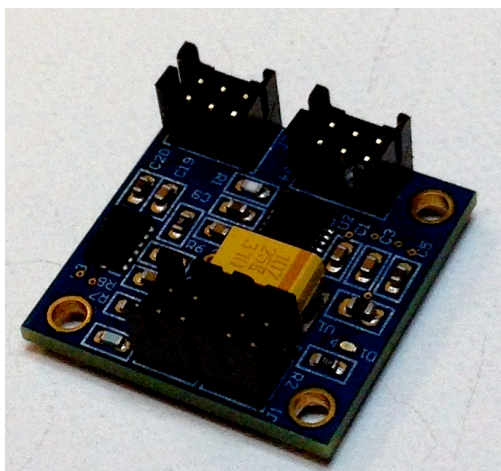


Figure 2 MK-95157 I2C 3-Axis Gyro and 3-Axis Accelerometer Another View

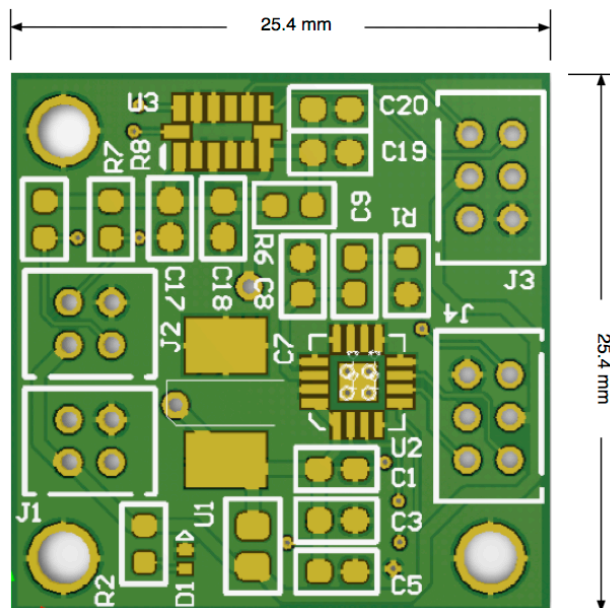


Figure 3 MK-95157 Board Dimensions

2 Connections

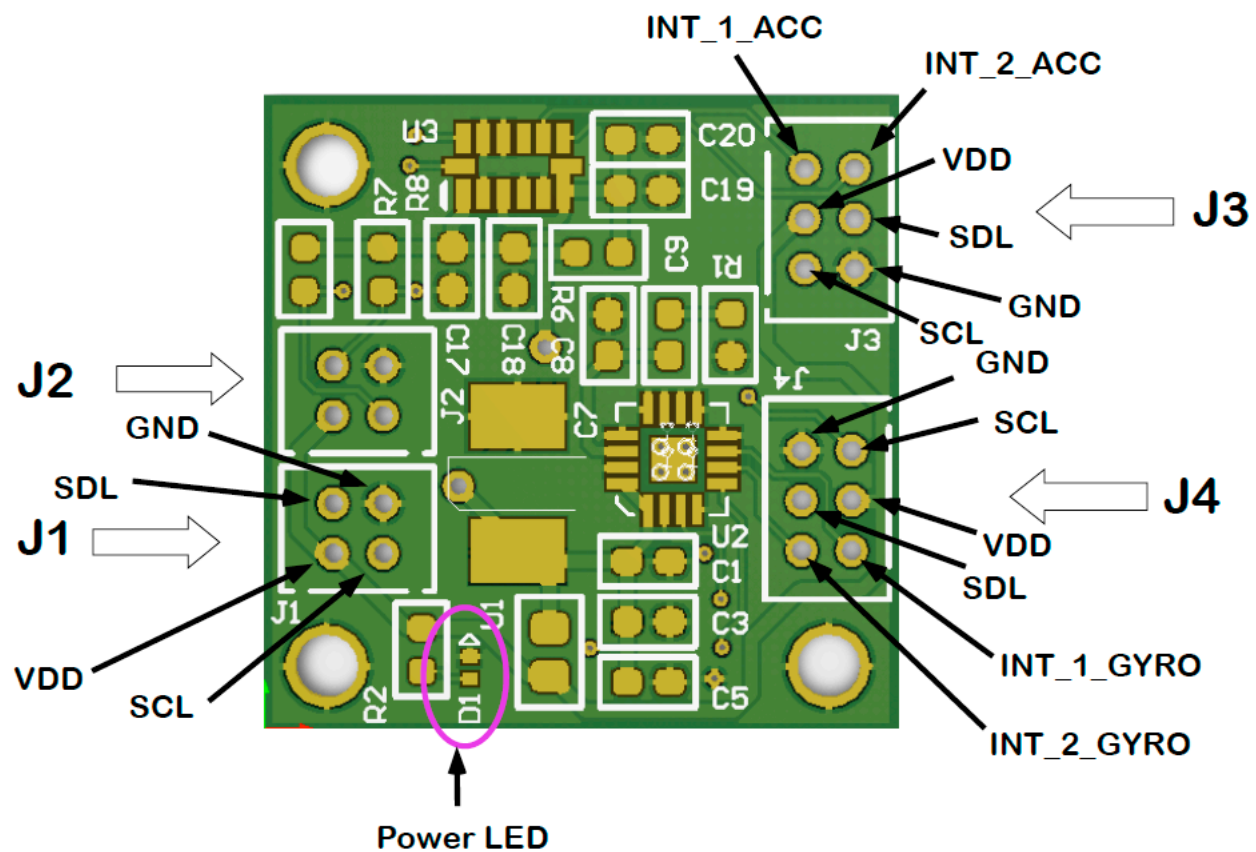


Figure 4 MK-95157 Connections

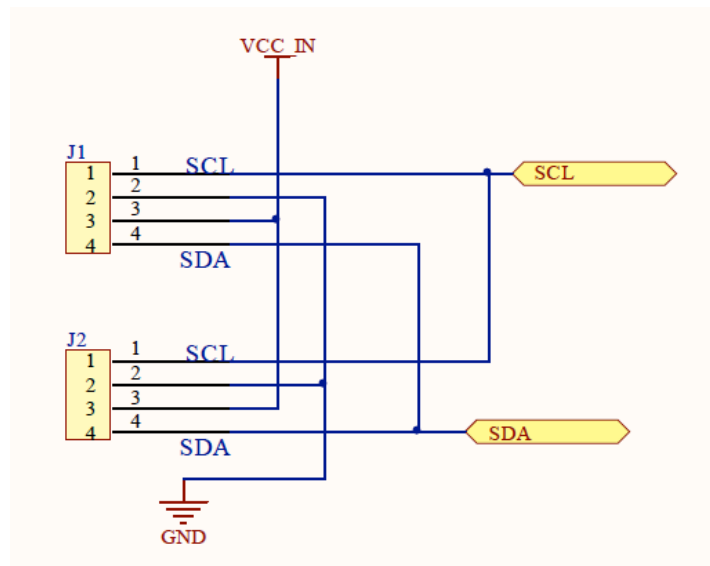


Figure 5 I2C Bus 4 Pin DF11 Hirose Connections

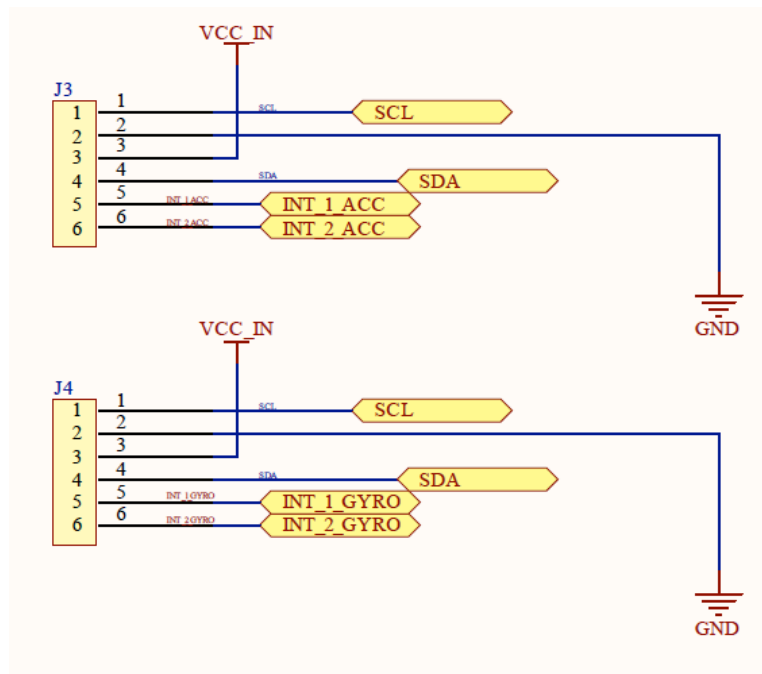


Figure 6 I2C Connections with Interrupts

3 Hirose DF11 Series Connectors

Figure 11 shows a 12 pin Hirose DF11 Series connector. This is useful when building cabling systems. Note pin 1 marker and numbering scheme.

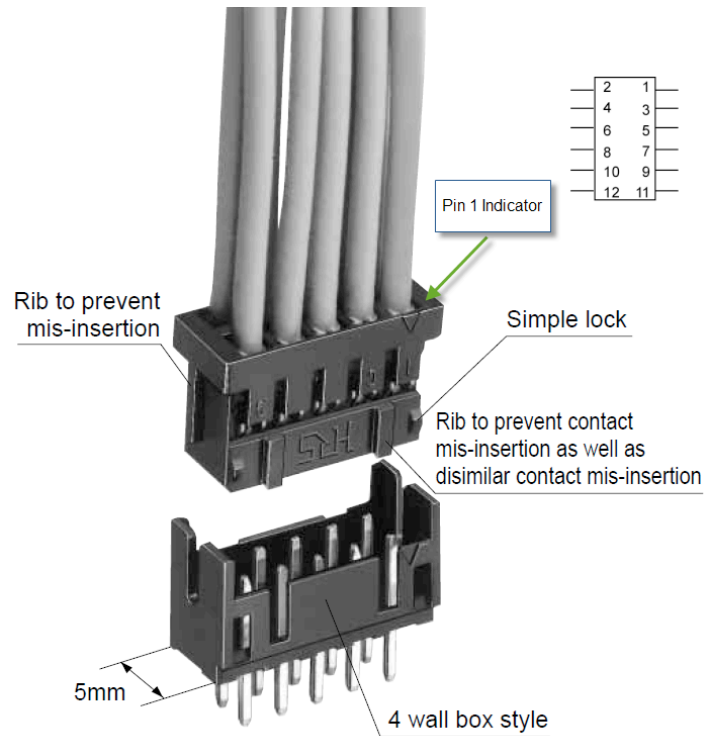


Figure 7 Guide to the Hirose DF11 series connector

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