

SPI EEPROM

MK-78171

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IONOTRONICS Corporation

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1 Introduction

The SPI EEPROM is useful in providing data local store for embedded systems. For a System on a Chip ASIC it can provide the bootup code as well as data. The SPI device supports two SPI sources using two connectors. With one connector the USB/SPI Bridge (Pyroraptor) can be used to program the SPI EEPROM. Through the second connector, the embedded system or ASIC can access the SPI EEPROM for data as well as write data. In some applications, the ASIC bootup code can be programmed into the SPI EEPROM.

The Digikey Part Number for the 4 Mbit SPI EEPROM is: 1265-1178-5-ND

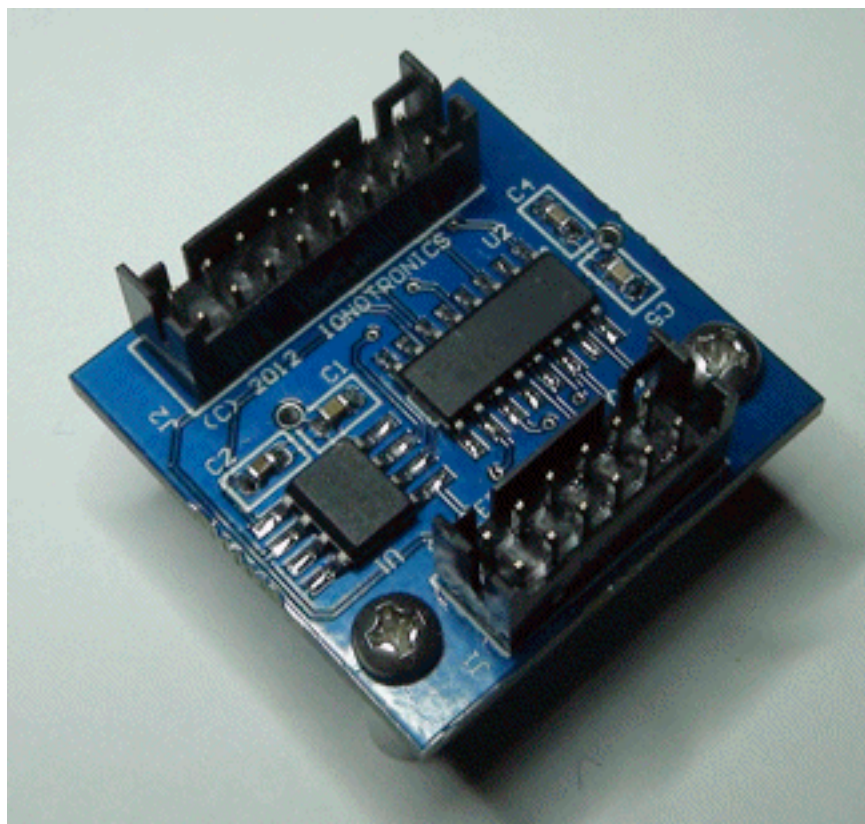


Figure 1 MK-78171 SPI EEPROM 4-MBit

2 Specifications

- SPI 4 MBit EEPROM
- MUX Selects from Two SPI Sources
- One Source can be the System on a Chip used for Bootup and Data
- Other Source can be Pyroraptor or SPI Master to Program EEPROM
- 12 pin DF11 Hirose for Source 1
- 16 Pin DF11 Hirose for Source 2 with Mux Select
- Default 12 pin Connector Selected for SPI Master
- 3.3V Supply
- Fully Supported by the Pyroraptor USB/SPI bridge as well as Java Pyroraptor Graphical Interface

3 Board Dimensions

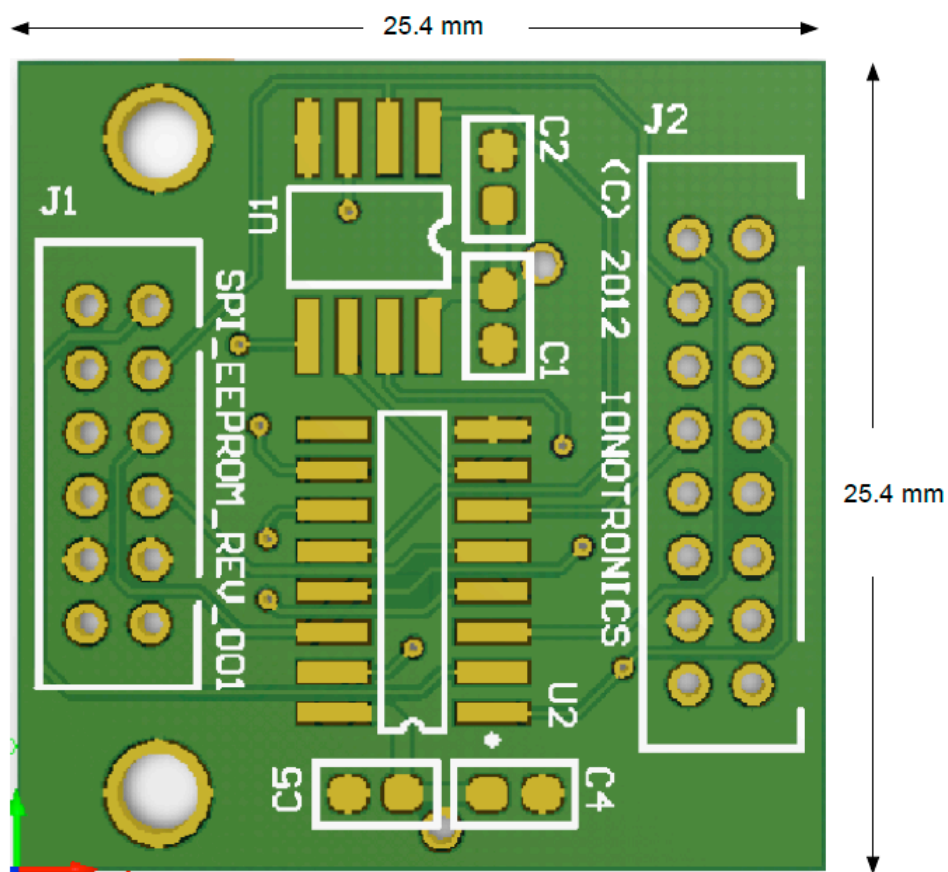


Figure 2 Board Dimensions

4 Pinouts

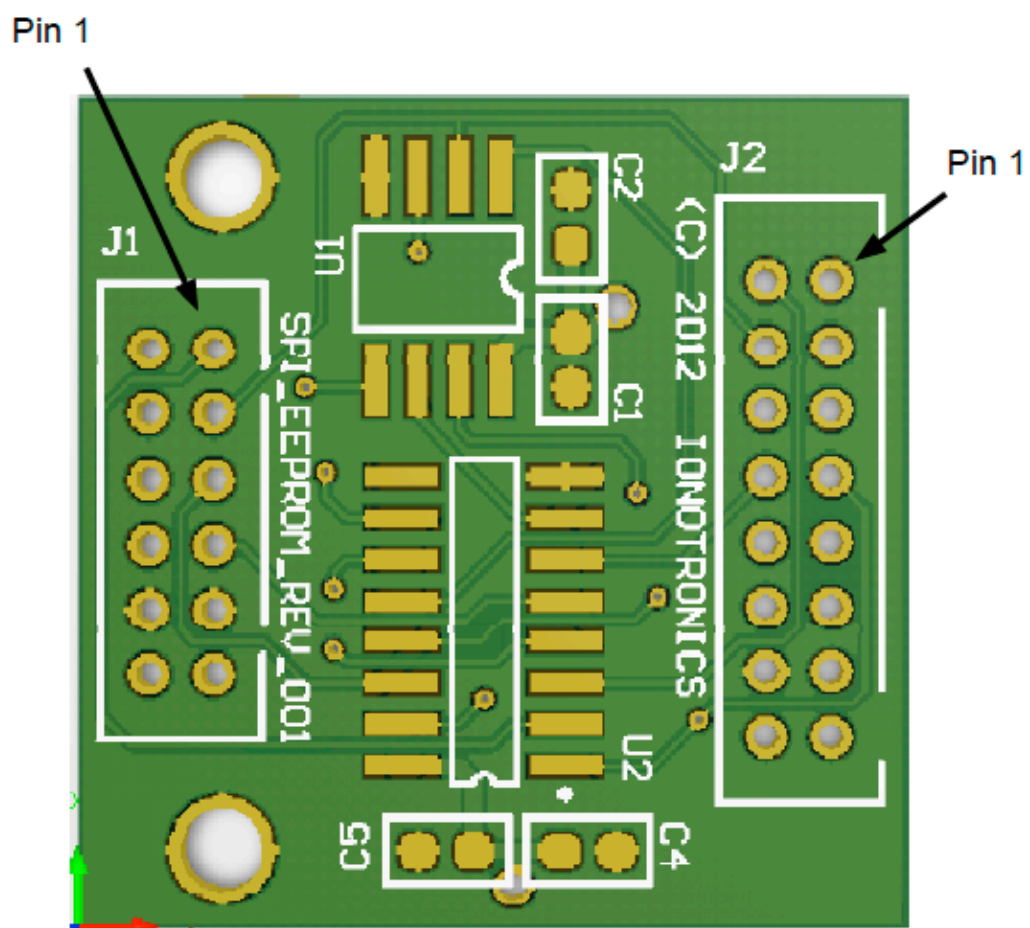


Figure 3 Pin 1 Designation

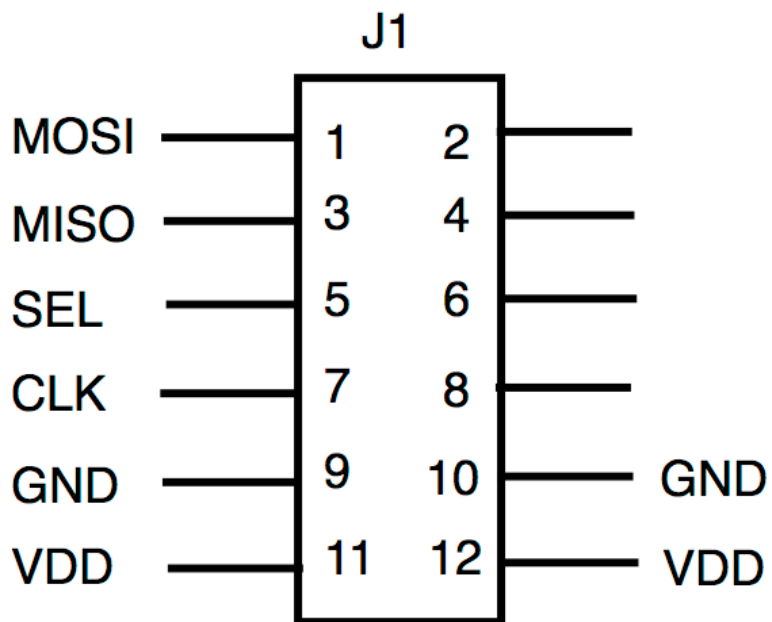


Figure 4 12 Pin Connector J1 SPI Signals

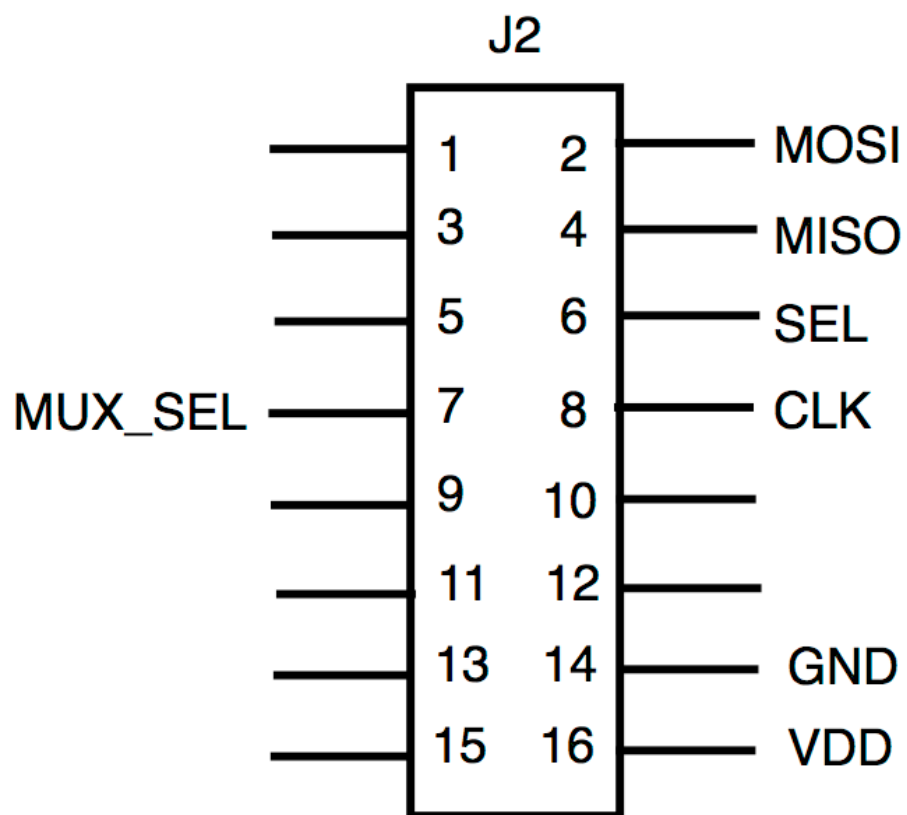


Figure 5 Pinout J2 16 Pin Connector SPI Signal and Mux Select

5 Schematic

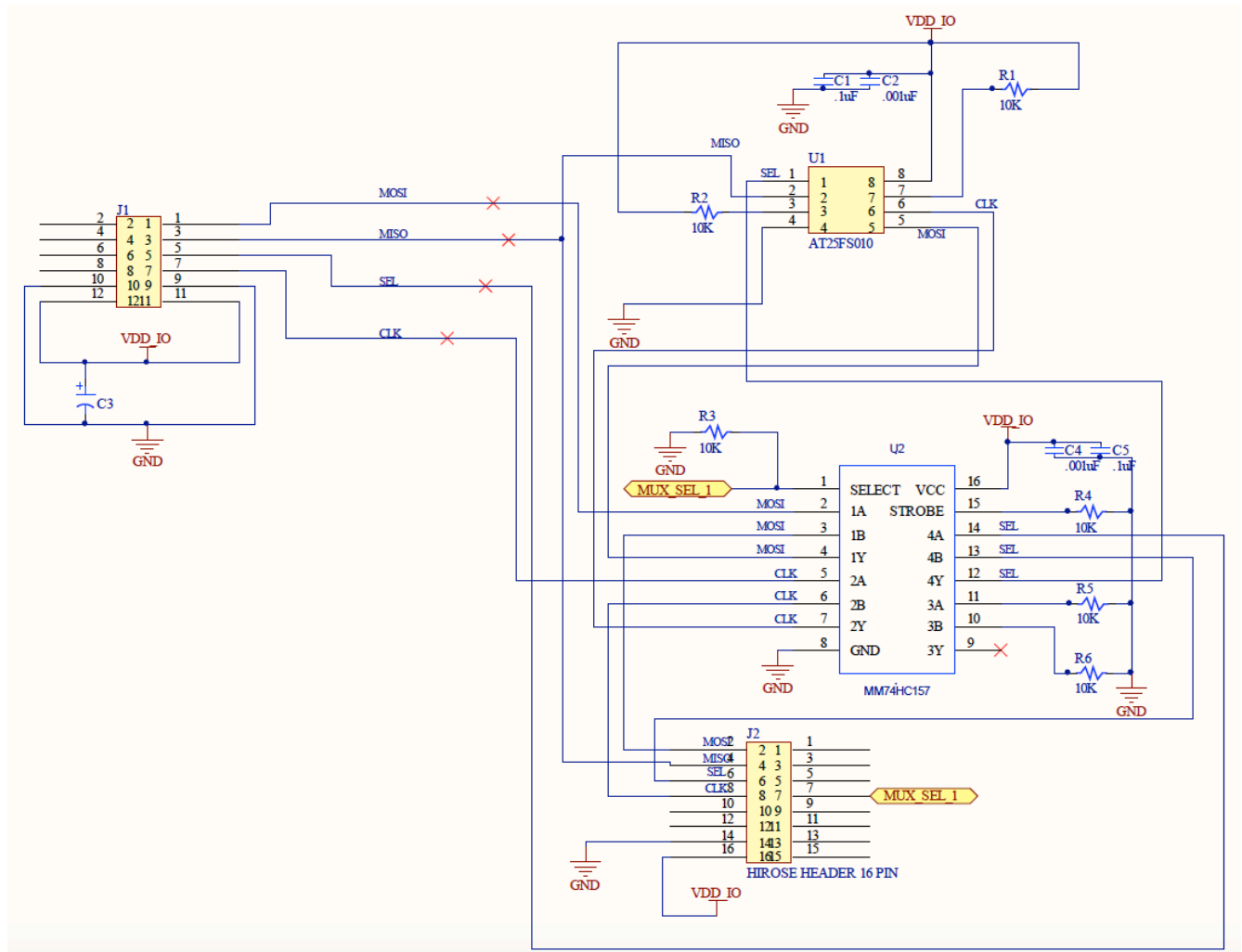


Figure 6 MK-78171 Schematic

6 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.

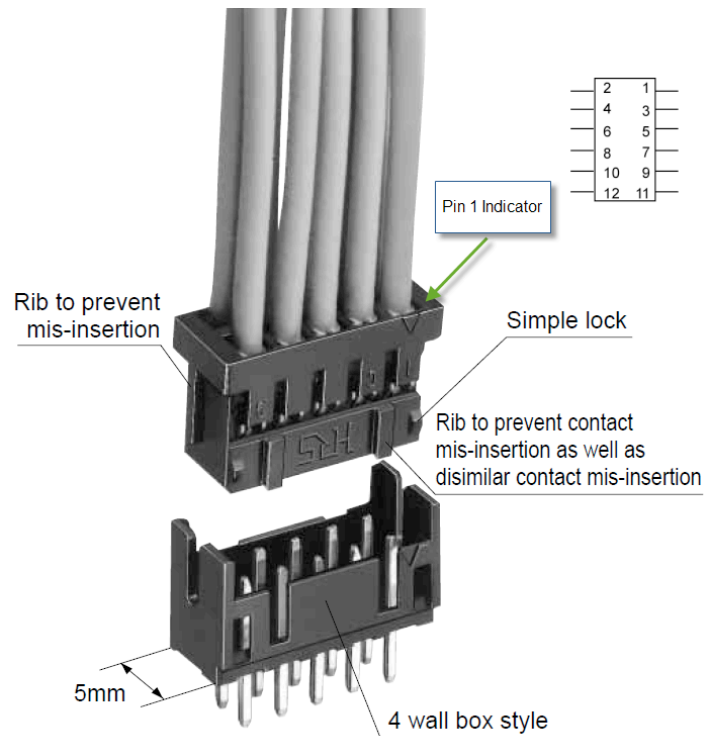


Figure 7 Guide to the Hirose DF11 series connector

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