

# I<sup>2</sup>C and SPI EERAM PICtail™ Plus Daughter Boards with mikroBUS™ Connector – Information Sheet

## Overview

The Microchip Technology Inc. 47XXX/48XXX series of EERAM devices are Serial SRAM with a matching EEPROM backup array. The 47XXX/48XXX provide infinite read and write cycles to the SRAM while the EEPROM cells provide high-endurance, nonvolatile storage of data. The I<sup>2</sup>C PICtail™ Plus and the SPI PICtail™ Plus Daughter Boards are evaluation boards based on the 47L64 I<sup>2</sup>C EERAM device and the 48LM01 SPI EERAM device, respectively. The boards are designed to interface with the Explorer or Curiosity series of development boards, which have a mikroBUS™ compatible connector, or with any mikroBUS compatible boards.

## Key Features of the I<sup>2</sup>C Board

- 64 Kbit I<sup>2</sup>C Serial EERAM
- Test points with probe loops for SCL, SDA, WP, VCAP, VCC and GND
- On-board pull-ups for I<sup>2</sup>C bus operation
- SMD jumper options for address pins level selection
- Voltage level shifter for WP for 3.3V and 5V operation
- Through-hole capacitor option
- On-board RC filter ensures VCC ramp rate adheres to data sheet requirements

## Key Features of the SPI Board

- 1 Mbit SPI Serial EERAM
- Test points with probe loops for SCK, SI, SO, CS, VCAP, VCC and GND
- Voltage level shifter for HOLD, CS, SCK and SI for 3.3V and 5V operation
- Through-hole capacitor option
- On-board RC filter ensures VCC ramp rate adheres to data sheet requirements
- 100 ohm SO series terminator resistor

Both boards in the kit have PICtail™ Plus and mikroBUS™ connectors, 0.1" two-way jumpers for VCAP/VCC operation, and are populated with the published recommended capacitor selection for their respective EERAM device.

## Getting Started

The I<sup>2</sup>C and SPI EERAM PICtail Plus with mikroBUS™ connectors allow you to get started right out of the box. System firmware can be developed quickly by using the daughter boards and one of the microcontroller development boards that support the PICtail™ Plus or the mikroBUS™ series of connectors. Most of the application notes written for the EERAM family are designed around the EERAM PICtail™ Plus with mikroBUS™ connector. The installed capacitor provides the rated necessary charge for correct AutoStore operation. Code examples and driver firmware for compatible PIC® microcontrollers can be created through the MPLAB® Code Configurator IDE (MCC) extension.

## Information

For more information on the adapter boards or any of the other products previously listed, visit the Microchip website: <https://www.microchip.com/design-centers/memory/serial-eeram>.

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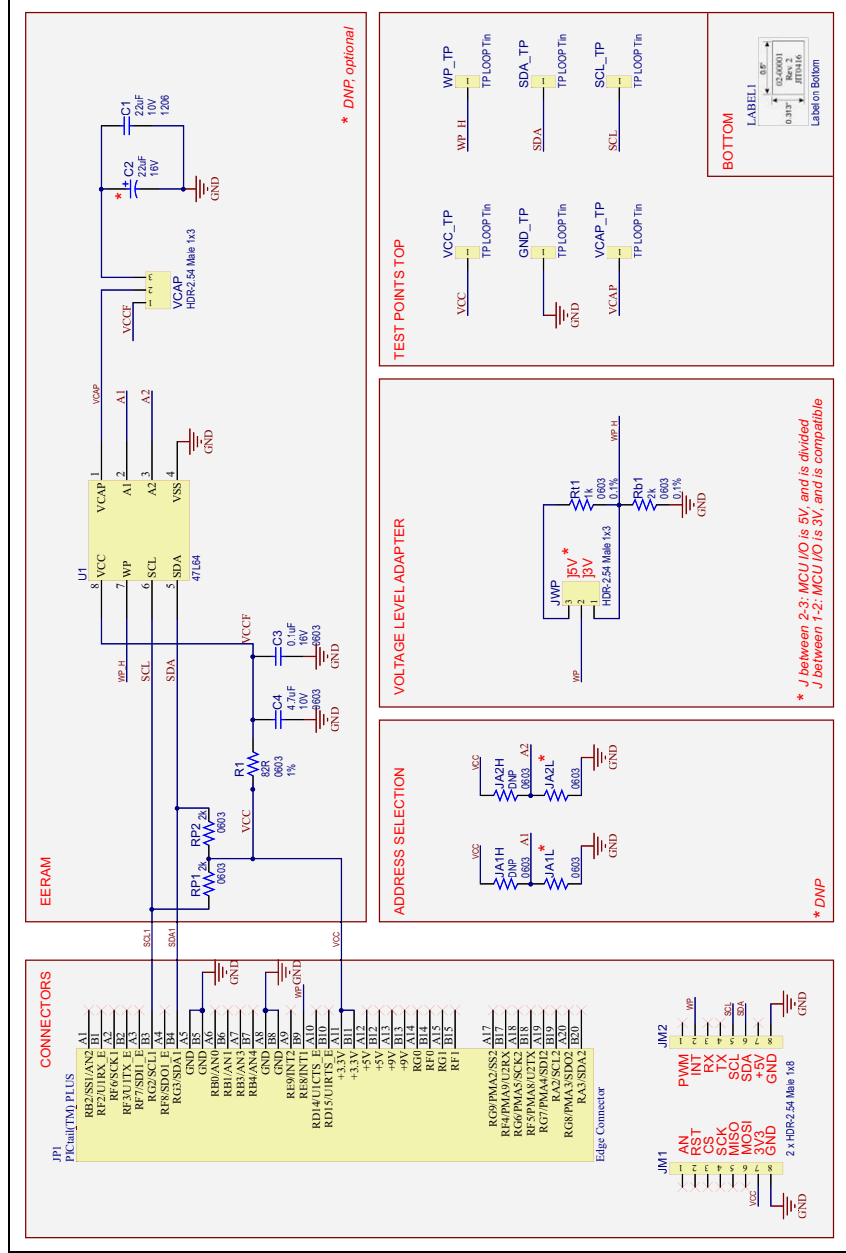
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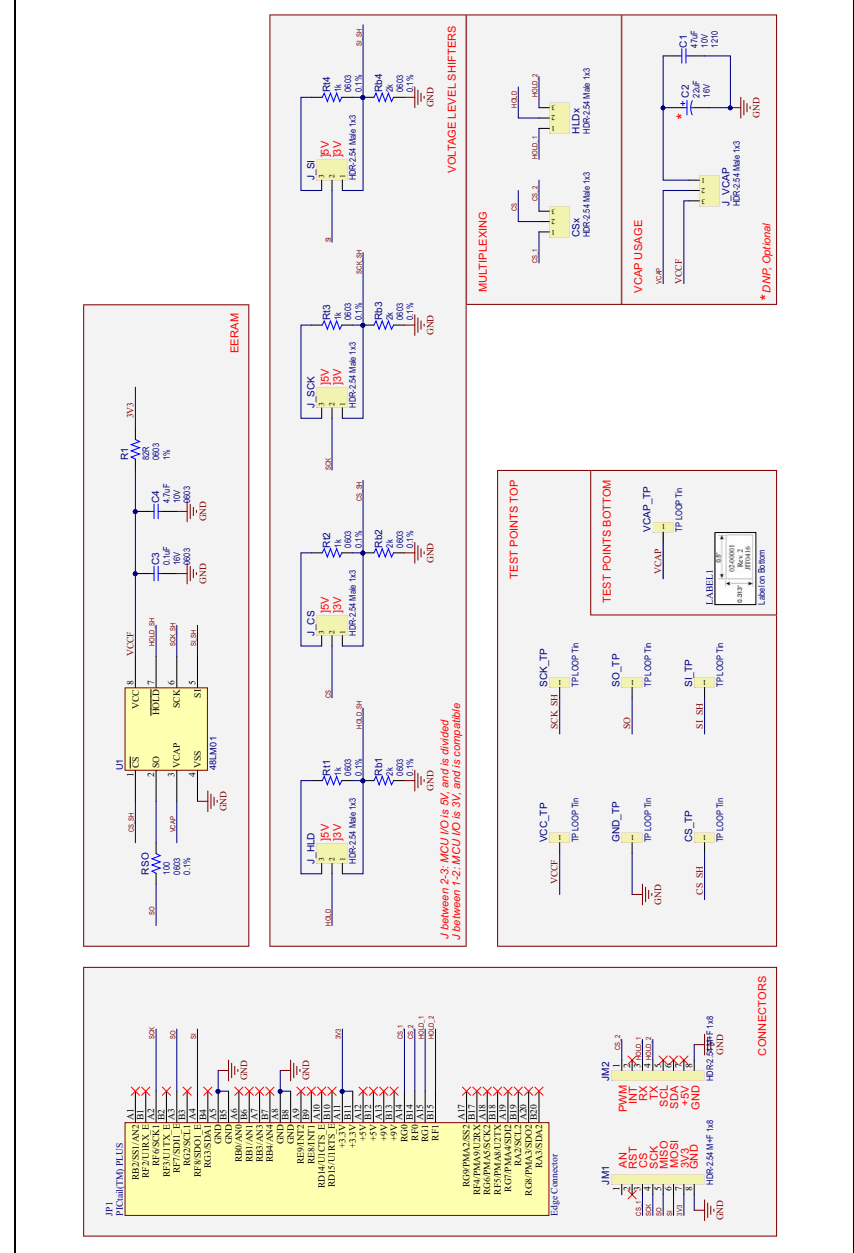
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# I<sup>2</sup>C and SPI EERAM PICtail™ Plus Daughter Boards with mikroBUS™ Connector – Information Sheet

## I<sup>2</sup>C EERAM PICtail™ Plus Schematic



## SPI EERAM PICtail™ Plus Schematic



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