

# UNI/O® Bus Parasitic Power Demo Board

## Overview

The UNI/O® Bus Parasitic Power Demo Board is designed to illustrate how a standard half-wave rectifier and capacitor circuit can be used to parasitically extract power for a UNI/O device from the SCIO signal as described in application note, AN1213 "Powering a UNI/O® Bus Device Through SCIO." This reduces the number of connections necessary for adding a UNI/O device to your application down to two: SCIO and Vss.

The board is designed to interface with the MPLAB® Serial Memory Starter Kit, but the included test points allow you to interface the board with any application through the use of test leads (not included).

## Key Features of the Board

- 11AA160, 16 Kbit UNI/O Serial EEPROM, featuring 1.8V to 5.5V operation
- Schottky diode and 4.7 µF capacitor for extracting power parasitically
- Test points for application or oscilloscope connections
- Headers for interfacing with standard .300"-wide DIP sockets

## Getting Started

By using the MPLAB Serial Memory Starter Kit, you can read and write the Serial EEPROM directly. The figures below show how to insert the UNI/O Bus Parasitic Power Demo Board into the MPLAB Serial Memory Starter Kit.

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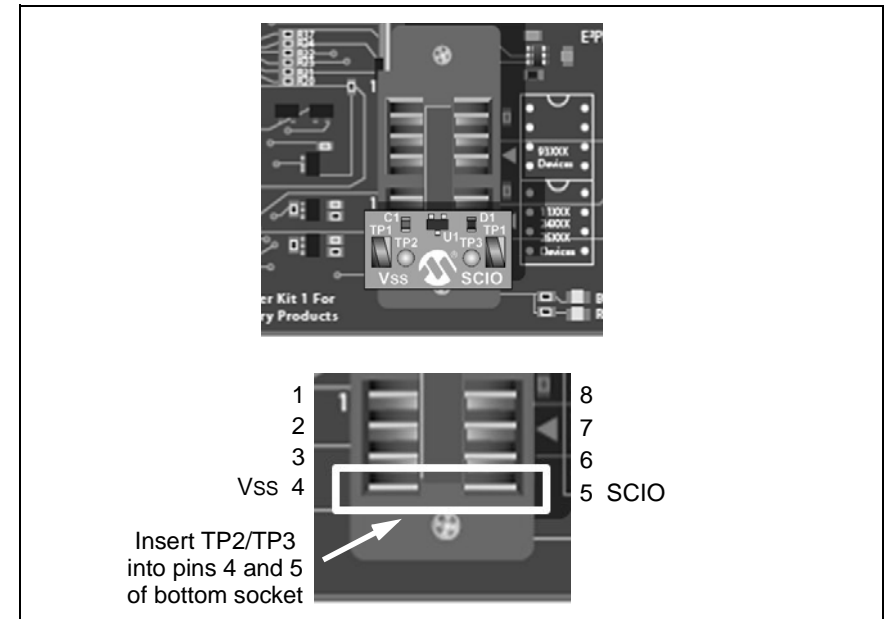
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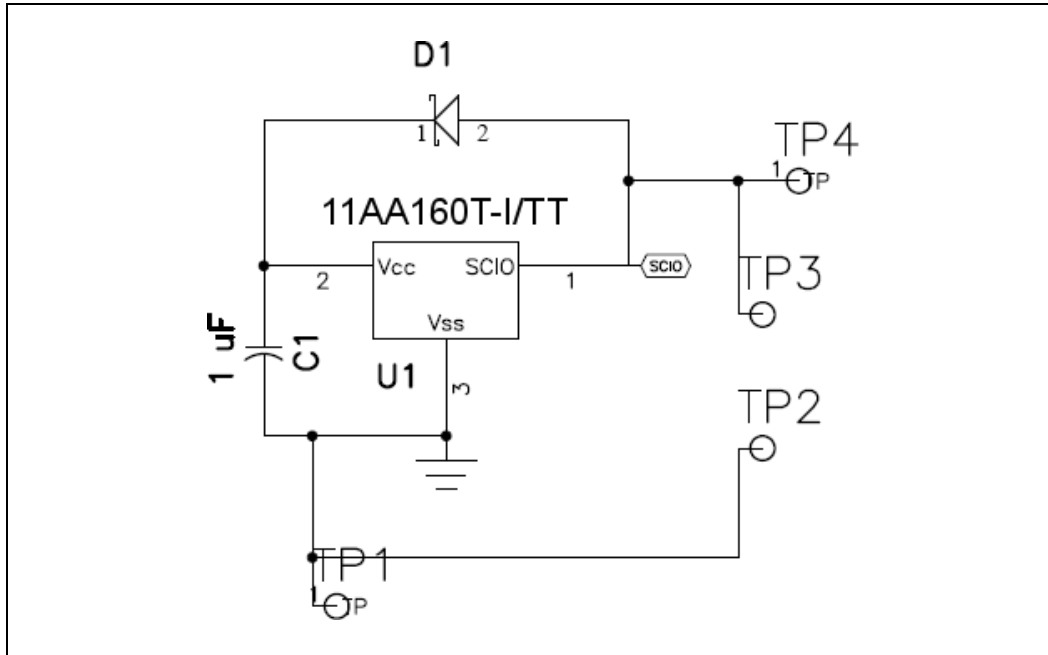
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# UNI/O® Bus Parasitic Power Demo Board

## Board Schematic

The schematic for the UNI/O® Bus Parasitic Power Demo board is shown below:



## Bill of Materials

The table below lists the components used for the board:

Designator	Description
U1	Microchip 11AA160 – 1.8V, 16 Kbit UNI/O® Serial EEPROM
C1	4.7 $\mu$ F Ceramic Capacitor
D1	Fairchild Semiconductor RB751S40 – 40V, 30 mA Schottky Diode
TP1, TP4	Keystone Electronics 5016 – Surface Mount Test Point
TP2, TP3	0.100" Pitch, 0.025" Square, 1x1 Breakaway Header

## Other

More information can be found by visiting the Microchip web site at <http://www.microchip.com/uniio>.

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