

Modular Prototyping Module (SMIP™)

Overview

VXI Technology's SMIP platform has achieved enormous popularity in ATE systems, and is at the heart of switching designs that demand reduced footprints and superior signal integrity. Up to six SMIP plug-in modules can be installed in a dual slot VXIbus carrier, with the ability to mix and match relay functions for unmatched flexibility and density. The form factor for the SMIP also provides the necessary real estate for developing high-performance instrument designs, such as the SMP7600A 5 Watt precision load.

The SMP7000 is a general purpose prototyping module that leverages the SMIP's modularity and interface architecture to the VXIbus to provide over 24 square inches of real estate that is available for user-defined designs. System engineers can incorporate their own designs within a standard SMIP carrier and combine it with products, such as 1.8 GHz RF switching or 16 A relays that are already available on the platform. Custom DAC modules, or digital I/O cards with custom logic levels can easily be accommodated within the available breadboard space.

Flexible Interface and Programming Options

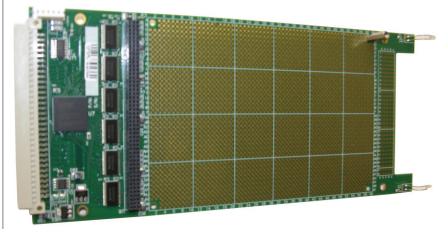
The SMP7000 provides access to 96 digital I/O lines and five fused power rails for interfacing to user-defined logic. Custom designs can be laid out on the thru-hole pattern available on the breadboard space. A connector header is provided to facilitate migration of the custom design to a printed circuit board layout. This enables the use of multiple front panel I/O possibilities, ranging from 15p Dsub to 160p high-density DIN connectors. All 96 digital lines are mapped to VXI extended memory space for direct register access. API support is also provided through the standard SMIP VXIplug&play driver, reducing the time required for software development.

Specifications

- Breadboard Space:** 6" x 4"
- Data Access:** Register-based (A24/A32)
- Front Panel Connectors:** 15p, 25p, 44p, 62p DSubs (solder cup)
160p DIN
- I/O Channels:** 96 Bi-directional TTL

Power Rails:

Voltage	Current
+ 5 V	2.0 A
+ 12 V	0.2 A
- 12 V	0.2 A
+ 24 V	0.05 A
- 24 V	0.05 A



SMP7000 Modular Prototyping Module

Features

96 digital lines configurable as either input or output

Five available power supply rails for custom designs

Mix and match with standard SMIP switching and digital I/O modules to create high density configurations

VXIplug&play driver simplifies software development

On-board connector header for simplified migration to PCB implementation

Access to 16 MHz clock for use in complex designs

Multiple front panel connector options