



## 16-bit Digital I/O SCP

### Overview

The VXI Technology VT1533A 16-bit Digital I/O SCP provides 16 TTL compatible input/output lines. The 16 TTL bits are grouped as two, 8-bit "channels". Each channel can be configured as an 8-bit input port or an 8-bit output port. When configured for output, each channel can be either passive (resistor) pull-up or active (transistor) pull-up.

Each output terminal is provided with over-voltage protection to prevent damage to the SCP or A/D module. Voltages greater than 6 V on any terminal will generate an error.

Use the VT1533A with the following VXI modules:

Model	Description
VT1415A	Algorithmic Closed Loop Controller
VT1419A	Multifunction Measurement and Control Module
VT1422A	Remote Channel Multifunction DAC

Refer to the VXI Technology Website for recent product updates, if applicable.

## Features

Use with VT1415A/VT1419A/VT1422A

16 Non-isolated TTL Inputs/Outputs

Arranged in Two 8-bit Ports (channels)

Active or Passive Pull-up for Output Channels

### Specifications

#### Output Characteristics

##### Current source (logic 1):

Active pull-up: 5 mA  
Passive pull-up: 0 mA

##### Current sink (logic 0):

Active pull-up: 48 mA  
Passive pull-up: 48 mA

##### Voltage (logic 1):

Active pull-up: 2.5 V min. @ 5 mA load  
Passive pull-up: n/a

##### Voltage (logic 0):

Active pull-up: 0.5 V max. @ 48 mA load  
Passive pull-up: 0.5 V max. @ 48 mA load

#### Input Characteristics

**Equivalent circuit:** 1.2 kΩ connected to 3 V

**Maximum input low:** 0.8 V

**Minimum input low:** 2 V

**Maximum voltage:** + 5.5 V and - 0.5 V  
(inputs clamped, user must limit current to 15 mA)

#### Current Requirements (Amps)

5 V max	24 V max	-24 V max
0.08	0.015	0.006

### Ordering Information

VT1533A 16-bit Digital I/O SCP

VT1533A