



Agilent E1533A

16-Bit Digital I/O SCP

Data Sheet

- 16 non-isolated TTL inputs/outputs
- Arranged in two 8-bit ports (channels)
- Active or passive pull-up for output channels



Agilent E1533A

Description

The Agilent E1533A 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 E1533A with the following VXI modules:

Model	Description
E1415A	Algorithmic Closed Loop Controller
E1419A	Multifunction Measurement and Control Module

Refer to the Agilent Technologies Website for recent product updates, if applicable.

Product 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 K Ω 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

Description	Product No.
16-Bit Digital I/O SCP	E1533A



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Related Literature

2000 Test System and VXI Catalog CD-ROM,
Agilent Pub. No. 5980-0308E (detailed specifications for VXI products)

2000 Test System and VXI Catalog,
Agilent Pub. No. 5980-0307E (overview of VXI products)

1998 Test System and VXI Products Data Book,
Agilent Pub. No. 5966-2812E

Online

Internet access for Agilent product information, services and support
www.agilent.com/find/tmdir

VXI product information
www.agilent.com/find/vxi

Defense Electronics Applications
www.agilent.com/find/defense_ATE

Agilent Technologies VXI Channel Partners
www.agilent.com/find/vxichanpart

Agilent Technologies' HP VEE Application Website
www.agilent.com/find/vee

Agilent Technologies Data Acquisition and Control Website
www.agilent.com/find/data_acq

Agilent Technologies Instrument Driver Downloads
www.agilent.com/find/inst_drivers

Agilent Technologies Electronics Manufacturing Test Solutions
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Data Subject to Change
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Printed in the U.S.A. 04/2000
Publication No.: 5966-2402E



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