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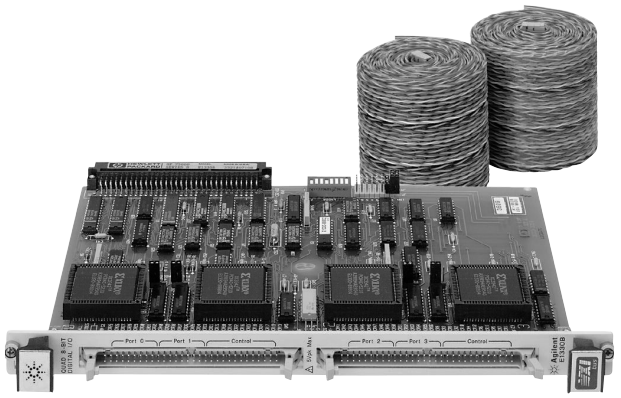
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Find the *Keysight / Agilent E1330B* at our website: ***Click HERE***

Agilent E1330B
Quad 8-Bit Digital Input/Output

Data Sheet

- **1-Slot, B-size, register based**
- **Quad 8-bit input or output data ports**
- **Interface to industry standard opto-isolator racks**
- **Standard GPIO handshake modes**
- **Wide variety of output data types**
- **Four-port digital input/output module**



Agilent E1330B

Description

The Agilent E1330B Quad 8-bit Digital Input/Output module is a **B-size, 1-slot, register-based VXI device.** It is a four-port digital input/output module intended for data communication and digital control.

Each 8-bit port is identical consisting of data and handshake/control lines. Each 8-bit port can be configured for output or input and positive or negative true logic. Ports can be combined allowing data transmission using bytes, words (16-bit), and long words (32-bit). Bit data transmissions are also allowed. Three handshake and control lines are provided for each port when using SCPI programming. The flag line from each of the individual ports can be used independently, or they can be combined when using word or long-word data transmission.

Refer to the Agilent Technologies Website for instrument driver availability and downloading instructions, as well as for recent product updates, if applicable.

Handshake and Control Lines

Three handshake and control lines are provided for each port when using SCPI programming. These lines provide the following functions:

FLG Flag line. Data handshaking line input to the digital I/O module.

CTL Control line. Data handshaking line output by the digital I/O module.

I/O Input/output status line. Output line on the module describing the current status of the port.

The flag line from each of the individual ports can be used independently, or they can be combined when using word or long-word data transmission.

Each port has three additional control lines available for custom handshaking and interrupt functions: **PIR** (peripheral

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interrupt), /**RES** (peripheral reset), and **STS** (status). Control of these three lines is accomplished using register-based programming.

C-size Adapter

For adapting this product to a C-size mainframe, refer to the section on Accessories in this catalog for a description of the E1403C Adapter.

Product Specifications

General

Number of channels:	32
Channel type:	Input or Output
Output or input type:	TTL
Memory:	none
Max. pattern rate:	n/a
Max. pattern rate:	325 Kb/s
Test synchronization:	Software triggers, hardware handshaking
Logic levels:	TTL compatible, 5 V max

Data Lines

Output characteristics:	
I_{out} (High):	–5.2 mA @ V_{out} = 2.5 V (Pullup Enabled)
I_{out} (Low):	48 mA @ V_{out} = 0.5 V
Input characteristics:	
I_{in} (High):	<2.5 mA @ Vin = 2.5 V
I_{in} (Low):	<–3.2 mA @ Vin = 0.4 V
V_{in} (High):	>2.0 V (5.0 V max)
V_{in} (Low):	<0.8 V

Handshake Lines

Output characteristics:	
I_{out} (High):	250 µA @ V_{out} (High) = 5 V
I_{out} (Low):	40 mA @ V_{out} (Low) = 0.7 V
I_{out} (Low):	16 mA @ V_{out} (Low) = 0.4 V
Input characteristics:	
V_{in} (High):	>2.0 V
V_{in} (Low):	<0.8 V
I_{in} (Low):	<1.75 mA

Block Mode Transfers

8-bit wide:	@ 90 KB/s
32-bit wide:	@ 325 KB/s

General Specifications

VXI Characteristics

VXI device type:	Register based
Data transfer bus:	A16/D16 slave
Size:	B
Slots:	1
Connectors:	P1
Shared memory:	No
VXI busses:	No
C-size compatibility:	Yes, with E1403C Adapter

Instrument Drivers

See the Agilent Technologies Website (http://www.agilent.com/find/inst_drivers) for driver availability and downloading

Command module firmware:	Downloadable
Command module firmware rev:	A.03
I-SCPI Win 3.1:	Yes
I-SCPI Series 700:	Yes
C-SCPI LynxOS:	Yes
C-SCPI Series 700:	Yes
Panel Drivers:	Yes
VXI*plug&play* Win Framework:	Yes
VXI*plug&play* Win 95/NT Framework:	Yes
VXI*plug&play* HP-UX Framework:	No

Module Current

	I_{PM}	I_{DM}
+5 V:	0.5	0.01
+12 V:	0	0
–12 V:	0	0
+24 V:	0	0
–24 V:	0	0
–5.2 V	0	0
–2 V:	0	0

Cooling/Slot

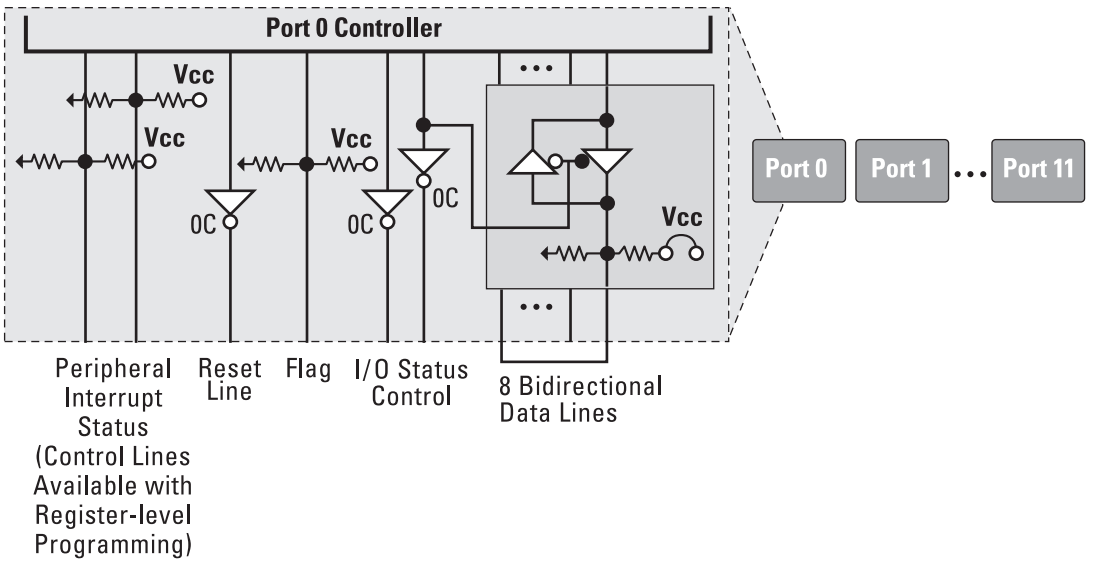
Watts/slot:	2.50
ΔP mm H_2O:	0.04
Air Flow liter/s:	0.21

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Ordering Information

Description	Product No.
Quad 8-bit Digital Input/Output	E1330B
Service Manual	E1330B 0B3
Japan - Japanese Localization	E1330B ABJ
3 Yr. Retn. to Agilent to 1 Yr. OnSite Warr.	E1330B W01
Cable Assy Ribbon 60P	E1330-61601



Agilent E1330B Block Diagram

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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
www.agilent.com/go/manufacturing

Get assistance with all your test and measurement needs at
www.agilent.com/find/assist
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