

Agilent E1406A VXI GPIB Command Module, C-Size

Data Sheet

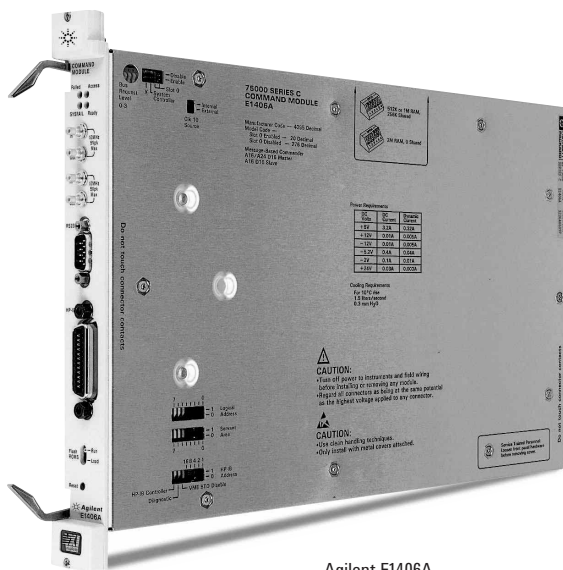
- 1-Slot, C-size, message-based commander
- GPIB, RS-232, Slot 0, and Resource Manager
- 2 MB RAM
- MXIbus protocol support for high throughput
- Easy to program as message-based instruments

Description

The Agilent Technologies E1406A Command Module is a **C-size, 1-slot VXI message-based commander** that provides **Slot 0** and **Resource Manager functions**. It can act as a VMEbus system controller and GPIB (IEEE-488)-to-VXIbus interface device for transparently communicating with any manufacturer's message-based VXI modules. The E1406A Command Module has FLASH memory for downloadable drivers, so you can program Agilent register-based devices using the high-level SCPI programming language. It also translates SCPI commands for register-based instruments and therefore, makes these VXI devices as easy to program as message-based instruments.

This command module also includes a MXIbus Resource Manager for VXIbus extensions. This allows you to maintain high-throughput performance in multiple mainframe systems. With its flexible triggering and clock interfacing, you can synchronize the VXI backplane 10 MHz clock to an external TTL signal.

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



Agilent E1406A



Product Specifications

General Characteristics

Processor:	16 MHz 68000
Interface:	IEEE-488
Clock accuracy:	0.005% elapsed time
Memory:	1.75 MB FLASH max. 2 MB RAM max.
Shared memory:	512 KB max.
Agilent IBASIC:	Yes
Slot 0 functions:	Yes
Resource manager:	Yes
MXIbus resource manager:	Yes
CLK10:	Yes
Temperature coefficient:	0.001%, to 0.012% of time since last set (<i>per °C change in temperature</i>)
Resolution:	1.0 s

CLK10

Input:	TTL or low-level ac
Minimum input level:	40 mV p-p
Maximum input level:	42.5 V p-p
Output:	TTL
Jitter:	0.03% (–55 dB)
Initial accuracy:	50 ppm
Maximum stability:	± 20 ppm/year (0-55° C)
Typical stability:	± 3 ppm/year at 25° C

Trigger Input

Levels:	TTL
Input load:	55 kΩ, 50 pF
Maximum rate:	12.5 MHz (TTL), 40 MHz (ECL)
Minimum pulse width:	30 ns (TTL), 12.5 ns (ECL)
Maximum trigger delay:	30 ns

RS-232 Interface (for terminal only)

Baud rate:	300, 1200, 2400, 4800, 9600, 19200
Parity:	Even, Odd, One, Zero, None
Character size:	7, 8
Pace:	Xon/Xoff, None
Hardware handshake:	DTR, RTS
Buffer size:	16 characters
RS-232 terminals supported:	HP 700/92, HP 700/94, HP 700/22, HP 700/43; WYSE WY-30, DEC VT100, DEC VT220
VXI compliance:	Revision 1.4 compliance

General Specifications

VXI Characteristics

VXI device type:	Message-based commander
Size:	C
Slots:	1
Connectors:	P1/2
Shared memory:	Yes
VXI buses:	Local Bus A TTL Trigger Bus ECL Trigger Bus

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

Command module firmware:	n/a
Command module firmware rev:	n/a
I-SCPI Win 3.1:	n/a
I-SCPI Series 700:	n/a
C-SCPI LynxOS:	n/a
C-SCPI Series 700:	n/a
Panel Drivers:	Yes
VXI plug&play Win Framework:	Yes
VXI plug&play Win95/NT Framework:	Yes
VXI plug&play HP-UX Framework:	No

Module Current

	I _{PM}	I _{DM}
+5 V:	0.1	0.1
+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:	19.00
ΔP mm H₂O:	0.30
Air Flow liter/s:	1.50

Ordering Information

Description	Product No.
VXI GPIB Command Module, C-Size	E1406A
Service manual	E1406A 0B3
Taiwan - Chinese localization	E1406A AB0
Korea - Korean localization	E1406A AB1
China - Chinese localization	E1406A AB2
Germany - German localization	E1406A ABD
Spain - Spanish localization	E1406A ABE
France - French localization	E1406A ABF
Japan - Japanese localization	E1406A ABJ
Italy - Italian localization	E1406A ABZ

**Agilent Technologies'
Test and Measurement Support,
Services, and Assistance**

Agilent Technologies aims to maximize the value you receive, while minimizing your risk and problems. We strive to ensure that you get the test and measurement capabilities you paid for and obtain the support you need. Our extensive support resources and services can help you choose the right Agilent products for your applications and apply them successfully. Every instrument and system we sell has a global warranty. Support is available for at least five years beyond the production life of the product. Two concepts underlie Agilent's overall support policy: "Our Promise" and "Your Advantage."

Our Promise

Our Promise means your Agilent test and measurement equipment will meet its advertised performance and functionality. When you are choosing new equipment, we will help you with product information, including realistic performance specifications and practical recommendations from experienced test engineers. When you use Agilent equipment, we can verify that it works properly, help with product operation, and provide basic measurement assistance for the use of specified capabilities, at no extra cost upon request. Many self-help tools are available.

Your Advantage

Your Advantage means that Agilent offers a wide range of additional expert test and measurement services, which you can purchase according to your unique technical and business needs. Solve problems efficiently and gain a competitive edge by contracting with us for calibration, extra-cost upgrades, out-of-warranty repairs, and on-site education and training, as well as design, system integration, project management, and other professional engineering services. Experienced Agilent engineers and technicians worldwide can help you maximize your productivity, optimize the return on investment of your Agilent instruments and systems, and obtain dependable measurement accuracy for the life of those products.

By internet, phone, or fax, get assistance with all your test & measurement needs.

Online assistance:

www.agilent.com/find/assist

Phone or Fax

United States:

(tel) 1 800 829 4444

Canada:

(tel) 1 877 894 4414

(fax) (905) 282 6495

China:

(tel) 800 810 0189

(fax) 800 820 2816

Europe:

(tel) (31 20) 547 2323

(fax) (31 20) 547 2390

Japan:

(tel) (81) 426 56 7832

(fax) (81) 426 56 7840

Korea:

(tel) (82 2) 2004 5004

(fax) (82 2) 2004 5115

Latin America:

(tel) (305) 269 7500

(fax) (305) 269 7599

Taiwan:

(tel) 0800 047 866

(fax) 0800 286 331

Other Asia Pacific Countries:

(tel) (65) 6375 8100

(fax) (65) 6836 0252

(e-mail) tm_asia@agilent.com

Data Subject to Change

© Agilent Technologies, Inc. 2001

Printed in the U.S.A. May 1, 2004

5965-5545E



Agilent Technologies