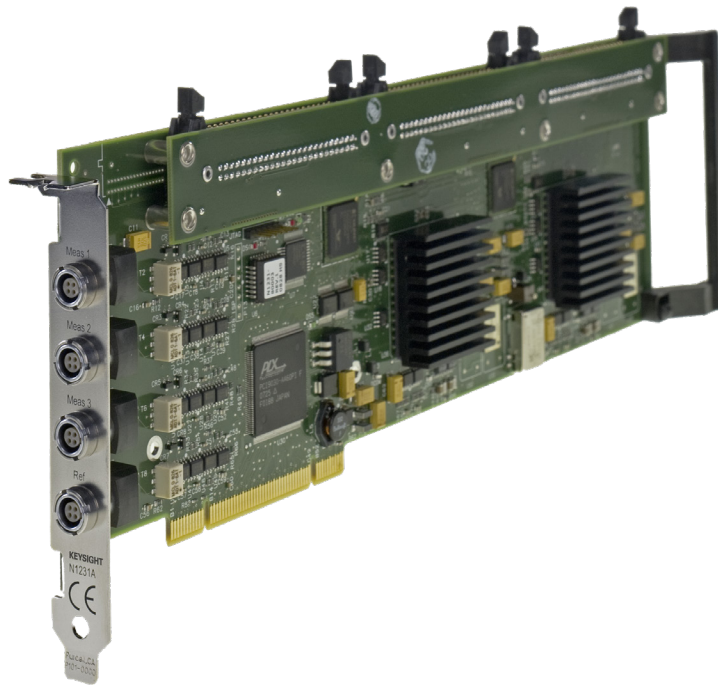


Keysight N1231A PCI Three-Axis Laser Board

Data Sheet



Overview

The Keysight Technologies, Inc. N1231A PCI Three-Axis Laser Board is a register-based PCI bus board that implements three axes of laser measurement for position monitoring and closed-loop servo control. The hardware outputs, optimized for connection to a DeltaTau PMAC servo control system, provide parallel digital position data at rates up to 4 MHz. The same position data along with velocity data is available over the PCI bus at rates up to 100 kHz (3 axes of position and velocity) or 200 kHz (position or velocity only).

Features and Benefits

- Three axes of laser measurement on one board
- 20 MHz hardware update rate
- Adjustable hardware output rate (4 MHz max)
- Simple programming API (Windows NT4/2000/XP)
- Software sample rates up to 200 kHz (3 axes of data)
- Measurement resolution
 - 0.6 nm ($\lambda/1024$) using linear or single beam interferometers
 - 0.3 nm ($\lambda/2048$) using plane mirror type interferometers
 - 0.15 nm ($\lambda/4096$) using high resolution interferometers
- Power Requirements (typical)
 - +5 VDC ± 0.25 V / -0.125 V at approximately 2.8 Amps
 - +12 VDC ± 0.5 V at approximately 50 milliamps
 - -12 VDC ± 0.5 V at approximately 50 milliamps
- PCI Compliant
- Bus Interface: 33 MHz @ 3.3 or 5 Volt signal levels
- Data Transfers: 16 or 32 bit transfers
- IRQ: can generate IRQ on error conditions
- Board Size: 98 x 312 mm

Evolving Since 1939

Our unique combination of hardware, software, services, and people can help you reach your next breakthrough. We are unlocking the future of technology.

From Hewlett-Packard to Agilent to Keysight.



For more information on Keysight Technologies' products, applications or services, please contact your local Keysight office. The complete list is available at: www.keysight.com/find/contactus

Americas

Canada	(877) 894 4414
Brazil	55 11 3351 7010
Mexico	001 800 254 2440
United States	(800) 829 4444

Asia Pacific

Australia	1 800 629 485
China	800 810 0189
Hong Kong	800 938 693
India	1 800 11 2626
Japan	0120 (421) 345
Korea	080 769 0800
Malaysia	1 800 888 848
Singapore	1 800 375 8100
Taiwan	0800 047 866
Other AP Countries	(65) 6375 8100

Europe & Middle East

Austria	0800 001122
Belgium	0800 58580
Finland	0800 523252
France	0805 980333
Germany	0800 6270999
Ireland	1800 832700
Israel	1 809 343051
Italy	800 599100
Luxembourg	+32 800 58580
Netherlands	0800 0233200
Russia	8800 5009286
Spain	800 000154
Sweden	0200 882255
Switzerland	0800 805353
	Opt. 1 (DE)
	Opt. 2 (FR)
	Opt. 3 (IT)
United Kingdom	0800 0260637

For other unlisted countries: www.keysight.com/find/contactus (BP-9-7-17)

DEKRA Certified
ISO 9001 Quality Management System

www.keysight.com/go/quality
Keysight Technologies, Inc.
DEKRA Certified ISO 9001:2015
Quality Management System

myKeysight

myKeysight

www.keysight.com/find/mykeysight

A personalized view into the information most relevant to you.

www.keysight.com/find/emt_product_registration

Register your products to get up-to-date product information and find warranty information.

KEYSIGHT SERVICES

Accelerate Technology Adoption.
Lower costs.

Keysight Services

www.keysight.com/find/service

Keysight Services can help from acquisition to renewal across your instrument's lifecycle. Our comprehensive service offerings—one-stop calibration, repair, asset management, technology refresh, consulting, training and more—helps you improve product quality and lower costs.



Keysight Assurance Plans

www.keysight.com/find/AssurancePlans

Up to ten years of protection and no budgetary surprises to ensure your instruments are operating to specification, so you can rely on accurate measurements.

Keysight Channel Partners

www.keysight.com/find/channelpartners

Get the best of both worlds: Keysight's measurement expertise and product breadth, combined with channel partner convenience.

www.keysight.com/find/connectivity



This information is subject to change without notice.
© Keysight Technologies, 2017
Published in USA, December 1, 2017
5989-1787EN
www.keysight.com