

# 3.0 GHz Pentium 4 Rack-Mount VXI Controller

**NEW**

## NI VXI-8350 1U Rack-Mount Controller

- 3.0 GHz Pentium 4 processor with hyperthreading technology
- 512 MB DDR400 RAM standard, 4 GB maximum
- Complete MXI-2 remote control kit included
- High-performance server architecture
- Dual onboard Gigabit Ethernet
- Optimized for installation in 1U of 19 in. rack
- Universal AC power supply

### Compatible Operating Systems

- Windows XP

### Recommended NI Software

- LabVIEW
- LabWindows/CVI
- Measurement Studio
- TestStand

### Other Compatible Software

- Microsoft Visual Studio
- C/C++



## Overview

The National Instruments VXI-8350 is a 1U rack-mounted VXI controller, comprised of a 19 in. rack-optimized server-class computer bundled with a complete MXI-2 VXI remote control kit. The bundle provides integrated, ready-to-run, server-class performance for VXI systems.

Processor	3.0 GHz Pentium 4 with hyperthreading
Front-side bus	800 MHz
L2 cache	1 MB
RAM type	Dual-channel DDR400, 4 DIMM slots
RAM, standard	512 MB (2 x 256 MB DIMMs)
RAM, maximum	4 GB (4 x 1 GB DIMMs)
Hard disk drive	80 GB Serial-ATA, minimum
Ethernet	2 x Gigabit Ethernet
USB ports	4 x USB 2.0
Parallel ports	1
Serial ports	1 RS232
CD-ROM	24x speed
Video	VGA port, ATI Rage XL, 8 MB RAM
PCI slots	1 PCI-X (populated with PCI MXI-2)
Rack-mount rails	Yes
Operating system	Windows XP

Table 1. VXI-8350 Features

## NI VXI-8350 Kit Components

- VXI-8350 3.0 GHz Pentium 4 1U rack-mount controller
- All peripherals in Table 1 installed
- Complete MXI-2 kit (PCI card already installed)<sup>1</sup>
- 19 in. rack-mount rails

## Applications and Acoustic Noise

The VXI-8350 is designed to maximize performance in automated and manufacturing test applications. This controller is not recommended for office or other benchtop applications where acoustic noise is a concern. The VXI-8350 is optimized purely for performance and, like other server-class machines, uses high-speed cooling fans, which are relatively noisy.

## RAM Options

The VXI-8350 has four slots for high-bandwidth dual-channel DDR400 RAM. RAM must be installed in matched pairs.

- 512 MB standard (2 x 256, 2 slots empty)
- 2.5 GB upgrade (2 x 256, 2 x 1 GB)
- 4 GB upgrade (4 x 1 GB)

<sup>1</sup>For other configuration options, including MXI-2 cable length and localized operating systems, visit [ni.com/vxi](http://ni.com/vxi).

## Ordering Information

### Step 1. Select controller

VXI-8350 with Windows XP .....779074-01

### Step 2. Select optional RAM upgrade packages

2.5 GB RAM upgrade.....779076-2048  
4 GB RAM upgrade .....779076-4096

### Step 3. Select one or more power cords

United Kingdom 240 VAC .....763064-01  
Swiss 220 VAC .....763065-01  
Australian 240 VAC .....763066-01  
Universal Euro 240 VAC.....763067-01  
North American 240 VAC .....763068-01

### Step 4. Select additional accessories

GPIB-USB-B GPIB Interface .....778416-01

## BUY ONLINE!

Visit [ni.com/info](http://ni.com/info) and enter `vxi8350`.

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## Specifications

### Electrical

#### AC Input

Input voltage range .....	100–240 VAC
Operating voltage range .....	90–264 VAC
Input frequency .....	50/60 Hz
Operating frequency range .....	47–63 Hz
Input current rating .....	6–3 A
Power disconnect .....	The AC power cable provides main power disconnect. Depressing the front panel power switch enables or inhibits the internal power supply.

#### Mainboard

Socket .....	mPGA478B
Chipset .....	Intel E7210 chipset, supports 800 MHz FSB, 4 GB dual-channel DDR333/400 memory
Memory slots .....	Four 184-pin DIMM slots, two per channel (supports ECC or non-ECC memory)
PCI .....	One PCI-X slot using riser card
SATA .....	Two SATA ports compliant with the Serial-ATA 1.0 specification. Maximum data rate of 150 MB/s
IDE .....	One primary and one secondary IDE connector. Ultra DMA 33/66/100 support
USB ports .....	Four USB 2.0 ports
Keyboard .....	PS/2 keyboard port
Mouse .....	PS/2 mouse port
Video .....	VGA port, onboard ATI Rage XL with 8 MB SDRAM
Serial .....	One RS232 serial port
Parallel .....	One parallel port
LAN .....	Two RJ45 LAN jacks
Onboard LAN controllers .....	Intel 82547 GI Gigabit LAN and Intel 82541 GI Gigabit LAN

#### CPU

CPU .....	Intel Pentium 4 with hyperthreading
Clock speed .....	3.0 GHz
Front side bus speed .....	800 MHz
L2 cache .....	1 MB
Process technology .....	90 nm
Package .....	FC-PGA4

#### Hard Disk Drive

Capacity .....	80 GB or larger
Interface .....	Serial-ATA

#### Memory

Standard memory .....	2 x 256 MB (32 M x 64 bit), DDR400 SDRAM 3–3–3, non-ECC, unbuffered, 184-pin DIMMs
2.5 GB memory upgrade .....	Standard memory plus 2 x 1 GB (128 M x 64 bit), DDR400 SDRAM 3–3–3, non-ECC, unbuffered, 184-pin DIMMs
4 GB memory upgrade .....	4 x 1 GB (128 M x 64 bit), DDR400 SDRAM 3–3–3, non-ECC, unbuffered, 184-pin DIMMs

#### Mechanical

Overall dimensions (standard chassis) .....	
Height .....	43.2 mm (1.70 in.)
Width .....	435.1 mm (17.13 in.)
Depth .....	434.4 mm (17.10 in.)
Weight .....	8.6 kg (19.0 lbs)

### Environmental

Operating temperature .....	5 to 40 °C
Storage temperature .....	–10 to 60 °C
Relative humidity .....	
Operating .....	10 to 90% noncondensing
Nonoperational (storage) .....	5 to 95% noncondensing
Operating location .....	Indoor use
Altitude .....	2,000 m
Installation Category .....	II
Pollution Degree .....	2

### Safety

This product is designed to meet the requirements of the following standards of safety for electrical equipment for measurement, control, and laboratory use:

- IEC 60950-1, EN 60950-1
- UL 60950-1
- CAN/CSA C22.2 No. 60950-1

Note: For UL and other safety certifications, refer to the product label, or visit [ni.com/hardref.nsf](http://ni.com/hardref.nsf), search by model number or product line, and click the appropriate link in the Certification column.

### Electromagnetic Compatibility

Emissions .....	EN 55011 Class A at 10 m FCC Part 15A above 1 GHz
Immunity .....	EN 61326:1997 + A2:2001, Table 1

### CE, C-Tick, and FCC Part 15 (Class A) Compliant

Note: For EMC compliance, operate this device with shielded cabling.

### CE Compliance $\text{CE}$

This product meets the essential requirements of applicable European Directives, as amended for CE marking, as follows:

Low-Voltage Directive (safety) .....	73/23/EEC
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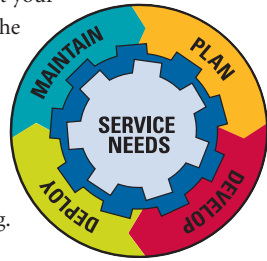
### Electromagnetic Compatibility

Directive (EMC) .....	89/336/EEC
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Note: Refer to the Declaration of Conformity (DoC) for this product for any additional regulatory compliance information. To obtain the DoC for this product, visit [ni.com/hardref.nsf](http://ni.com/hardref.nsf), search by model number or product line, and click the appropriate link in the Certification column.

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## Hardware Services

### NI Factory Installation Services

NI Factory Installation Services (FIS) is the fastest and easiest way to use your PXI or PXI/SCXI™ combination systems right out of the box. Trained NI technicians install the software and hardware and configure the system to your specifications. NI extends the standard warranty by one year on hardware components (controllers, chassis, modules) purchased with FIS. To use FIS, simply configure your system online with [ni.com/pxiadvisor](http://ni.com/pxiadvisor).

## Calibration Services

NI recognizes the need to maintain properly calibrated devices for high-accuracy measurements. We provide manual calibration procedures, services to recalibrate your products, and automated calibration software specifically designed for use by metrology laboratories. Visit [ni.com/calibration](http://ni.com/calibration).

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