

JetCard 2105

5-port 10/100Mbps Fast Ethernet Switch PCI-104 Card



CE FC  RoHS

PCI-104

QoS

Win 7

0~60°C

- Supports 32 bit PCI-104 bus
- 5 10/100TX ports with Auto MDI/MDI-X
- IEEE 802.3 10 Base-T and 100 Base-Tx compatible
- Full or half duplex at 10/100 Mbps
- IEEE 802.3u Auto-Negotiation supported
- QoS supported for packet forwarding precedence
- Supports Windows 7/Vista/NT/2000/2003/XP, Linux 2.4/2.6
- 0~60°C operating temperature for hazardous environment application



- Industrial Intelligent NMS
- Rackmount PoE Plus Switch
- Industrial PoE Plus Switch
- Industrial 12-24V PoE Switch
- Industrial PoE Switch
- Rackmount L3/L2 Switch
- Gigabit Managed Ethernet Switch
- Managed Ethernet Switch
- Entry-level Switch
- Wireless Outdoor AP
- Embedded PoE/Router Computer (LINUX)
- Industrial Communication Computer (WIN/LINUX)
- Ethernet/PoE/ Serial Board**
- Ethernet I/O Server
- Media Converter
- Serial Device Server
- SFP Module
- Din Rail Power Supply

Embedded Switch Card

The JetCard 2105 is a flexible and high performance five-port Ethernet switch card in PCI-104 format. The PCI-104 bus of JetCard 2105 supports both +3.3V and +5V slot. With the 0~60°C operating temperature range, JetCard 2105 becomes an ideal embedded networking solution for industrial applications in severe environments.

Unmanaged Ethernet Switch: The JetCard 2105 uses Marvell 88E6065 chip to provide 5 Ethernet ports and each port offers IEEE 802.3 10 Base-T and 100 Base-Tx compliant Ethernet data transmission with auto MDI/MDI-X and auto-negotiation.

Auto MDI/MDI-X: The JetCard automatically determines whether or not it needs to interchange cable sense between pairs so that an external crossover cable is not required. If the JetCard interoperates with a device that cannot automatically correct for crossover, the JetCard makes the necessary adjustment prior to commencing Auto-Negotiation.

Flow control: The JetCard supports back-pressure and pause frame-based flow control schemes to ensure zero packet loss under temporary traffic congestion.

QoS (Quality of Service): QoS for networks is an industry-wide set of standards and mechanisms for ensuring high-quality performance for critical applications. JetCard provides the shared memory-based QoS switch architecture. Packets are directed into one of four traffic class queues based upon Port, IEEE 802.1p, IPv4's TOS or Diff-Serv, or IPv6's Traffic Class.

Ethernet Statistics monitoring: The JetCard has a set of thirty, 32-bit counters to provide a set of Ethernet statistics for frames received on ingress and transmitted on egress. A register interface allows the JetCard to capture, read, or clear the counter values.

Customized Configurations: The JetCard supports an add-on EEPROM for programming its internal registers. The EEPROM data will be read in once the JetCard is reset.

Specifications

Technology

Standard:

IEEE802.3 10 Base-T
 IEEE802.3u 100 Base-Tx
 IEEE802.3x flow control and Back Pressure
 IEEE802.1p Class of Service

Processing: Store and Forward architecture

Interface

Bus interface: 32-bit PCI-104 bus

Number of ports: 5 Ethernet ports
 10 Base-T/ 100 Base-Tx with auto MDI/MDI-X
 Auto-negotiation

Maximum stacked boards: 4 boards plus the host board

IRQ: assigned by PCI-104 plug and play

OS supported:

Windows 7/Vista/NT/2000/2003/XP
 Linux 2.4.x/2.6.x

Hardware

Communication controller:

Realtek RTL 8139C+
 Marvell 88E6065

Board connector: RJ45

Cable connection:

10 Base-T: 2-pair UTP/STP Cat. 3,4,5 cable (100m)
 100 Base-Tx: 2/4-pair UTP/STP Cat. 5 cable (100m)

Dimension: 90 x 96 mm

Performance

Transfer performance: 14,880pps for Ethernet and 148,800pps for Fast Ethernet

Transfer packet size: 64 to 1522bytes

Memory buffer: 512 Kbits

MAC address: 1K MAC

Power requirement

Power consumption: 0.95A (+3.3V and +5V)

Environment

Operating Temp:

0 ~ 60°C (32 ~ 140°F), 5 ~ 95% RH

Storage Temp: -40 ~ 80°C (-40 ~ 176°F), 5 ~ 95% RH

Regulation: CE, FCC

Warranty: 5 years

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**Ethernet/PoE/
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Ethernet
I/O Server

Media
Converter

Serial Device
Server

SFP Module

Din Rail
Power Supply

Ordering Information

JetCard 2105 5-port 10/100Mbps Fast Ethernet Switch PCI-104 Card

Includes:

- JetCard 2105
- Quick installation guide
- Documentation and software CD-ROM
- Screw Pack