



# JetCard 2205 / 2205-w

## 5 Ports 10/100Mbps Fast Ethernet Switch Universal PCI Card



- Support 32 bit Universal PCI bus
- 5 ports RJ45 Ethernet Switch
- 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
- IEEE 802.1Q tag VLAN supported
- QoS supported
- 1.5KV Hi-pot isolation protection
- Support Windows Me/XP/NT/2000/2003/Vista, Linux 2.4/2.6
- Wide Temperature -40-80°C (JetCard 2205-w)



### Embedded Switch Card

The JetCard 2205 is a flexible and high performance five-port Ethernet switch card in Universal PCI format. The universal PCI bus of JetCard 2205 supports both +3.3V and +5V slot. The easy-to-install drivers that come with JetCard make it easier for you to set up your complex system. And with its 1.5KV Hi-pot isolation protection, and overload current/voltage protection, JetCard 2205 is ideal for industrial applications in severe environments and is your best choice for embedded networking solution.

The JetCard 2205 uses Marvell 88E6065 chip to provide 5 Ethernet ports. Each Ethernet port in the JetCard 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 determine whether or not it needs to interchange cable sense between pairs so that an external crossover cable is not required. If the JetCard interoperate 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.

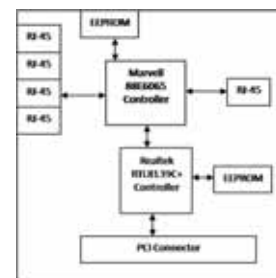
**QoS (Quality of Service):** QoS for networks is an industry-wide set of standards and mechanisms for ensuring high-quality performance for critical applications. JetCard provides the shared memory-based QoS switch architecture. Packets are directed into one of four traffic class queues based upon Port,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

**VLAN:** The JetCard supports IEEE802.1Q tag VLAN and also can be enabled on a per-port basis VLAN.

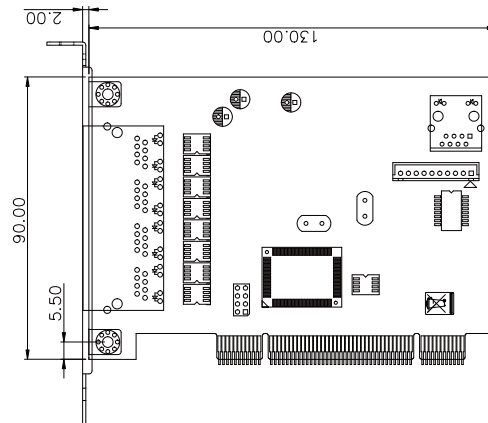
**Ethernet Statistics monitoring:** The JetCard has a set of thirty, 32-bit counters to provide a set of Ethernet statistics for frames received on ingress and transmitted on egress. A register interface allows the JetCard to capture, read, or clear the counter values.

**Customerized Configurations:** The JetCard supports an add-on EEPROM for programming its internal registers.

The EEPROM data will be read in once after JetCard is reset.



## Dimensions (Unit –mm)



## Specification

### Technology

#### Standard:

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

**Processing:** Store and Forward architecture

**Packet filter:** Broadcast packet filtering

### Interface

**Bus interface:** 32-bit Universal PCI bus

**Number of ports:** 4+1 Ethernet ports  
 10 Base-T/ 100 Base-Tx with auto MDI/MDI-X  
 Auto-negotiation

**Surge protection:** built-in 15KV ESD surge protection

**Maximum stacked boards:** 4 boards  
 IRQ: assigned by Universal PCI plug and play

### OS supported:

Windows Me/NT/2000/2003/XP/Vista  
 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 130 mm

### Performance

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

**Transfer packet size:** 64 to 1522bytes

**MAC address:** 1K MAC

### Power requirement

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

### Environment

#### Operating Temp:

-25 ~ 70°C (-13 ~ 158°F), 5 ~ 95% RH  
 -40 ~ 80°C (-40 ~ 176°F), 5 ~ 95% RH (Wide temp version)

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

**Regulation:** CE, FCC

**Warranty:** 5 years

Industrial PoE Switch	
IP67/68 Ethernet Switch	
Rackmount Managed Switch	
Gigabit Switch	
Redundant Switch	
Entry-Level Switch	
Networking Computer	
Communication Computer	
Ethernet I/O Server	
Serial Device Server	
Media Converter	
<b>Multiport Serial Card</b>	
SFP Module	
Din Rail Power Supply	

## Ordering Information

**JetCard 2205** 5-port 10/100Mbps Fast Ethernet Switch Universal PCI Card

**JetCard 2205-w** 5-port 10/100Mbps Fast Ethernet Switch Universal PCI Card, -40~80°C

Includes:

- JetCard 2205 / 2205-w
- Quick installation guide
- Documentation and software CD-ROM