

**Product:** PCI Express-to-PCI /PCIX Reversible Bridge  
**Part Number:** PI7C9X130

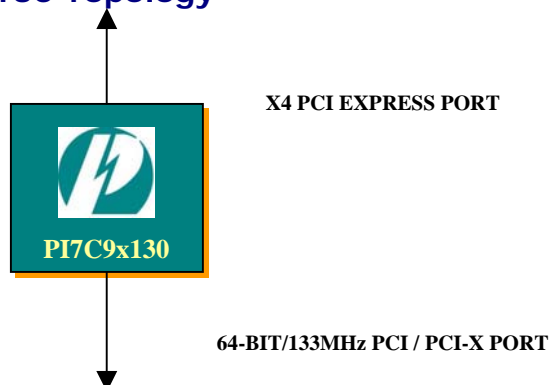
## Product Description

As one of the leading PCI Express Solution Providers, Pericom is committed to introducing a line of performance tuned PCI Express Bridge Products. The PI7C9X130 is composed of one x4 PCI Express port and one standard 64-bit /133 MHz PCIX port. The versatile PI7C9X130 is capable of both “forward” and “reverse” bridging. In “forward” mode, the PI7C9X130 is configured with the PCI Express port on the primary and the PCI/PCIX port on the downstream side. The typical usage in this configuration is to “bridge” legacy PCI/PCIX product to PCI Express systems. In “reverse” mode, the PI7C9X130 is configured with the PCIX port on the primary and the PCI Express port on the downstream side. The “reverse” configuration will be mainly used to “bridge” new PCI Express products to legacy PCI/PCIX systems.

## Industry Specifications Compliance

- ❑ PCI Express Base Specification, Revision 1.1
- ❑ PCI Express CEM Specification, Revision 1.1
- ❑ PCIe to PCI/PCI-X Bridge Specification, Rev 1.0
- ❑ PCI-X Protocol Addendum to the PCI Local Bus Specification, Revision 2.0a
- ❑ PCI-to-PCI Bridge Architecture Specification, Rev 1.2
- ❑ PCI Local Bus Specification, Revision 3.0
- ❑ PCI Hot-Plug Specification, Revision 1.1
- ❑ PCI SHPC and Subsystem Specification, Revision 1.0
- ❑ PCI Mobile Design Guide, Version 1.1
- ❑ System Management (SM) Bus, Version 2.0
- ❑ PCI Bus PM Interface Specification, Revision 1.1
- ❑ Advanced Configuration and Power Interface Specification, Revision 2.0b

## PI7C9X130 Topology



## General Features

- ❑ **Fully Reversible**
  - Forward – PCIe primary, PCIX secondary
  - Reverse – PCIX primary, PCIe secondary
- ❑ **Maximum Payload Size – Up to 512 bytes**
- ❑ **Industrial Temp Compliant (-40C ~ +85C)**
- ❑ **Transparent and Non-transparent mode**
- ❑ **GPIO Support**
  - 7 dedicated bi-directional
  - When external arbiter is used:
    - 4 additional outputs
    - 4 additional inputs
- ❑ **Masquerade support**
  - User defined vendor, device, revision, subsystem device, and subsystem vendor ID
- ❑ **Large 10KB Buffer**
  - 4KB for upstream reads & 2KB for upstream writes
  - 2KB for downstream reads & 2KB for downstream writes
- ❑ **17 x 17mm, 256-pin PBGA, 1mm Ball Pitch**

## PCI Express Features

- ❑ Virtual Isochronous Support
  - Upstream TC 1 – 7 generation
  - Downstream TC 1 – 7 mapping
- ❑ 16-bit CRC, LCRC (32-bit)
- ❑ ECRC and Advanced Error Reporting
- ❑ Error Forwarding (Data Poisoning)
- ❑ Polarity Toggle
- ❑ VDDAUX Support (1.8V)
- ❑ Hot Plug Support

## PCI/PCIX Features

- ❑ Two Level Internal Arbitration
  - Support for up to 6 PCI and 2 PCIX bus masters
- ❑ 3.3V Signaling with 5V I/O Tolerance
- ❑ PME# Support
- ❑ 16-bit Address Decode for VGA
- ❑ CLKRUN# Support
- ❑ VAUX Support (3.3V)
- ❑ Hot Plug Support
- ❑ Subsystem Device and Subsystem Vendor ID
- ❑ MSI and INT Support
- ❑ SM Bus
  - PHY, data link, network layer, PEC, ARP, etc.
- ❑ I2C Serial EEPROM Support

# AMEYA360

Components Supply Platform

Authorized Distribution Brand :



Website :

Welcome to visit [www.ameya360.com](http://www.ameya360.com)

Contact Us :

➤ Address :

401 Building No.5, JiuGe Business Center, Lane 2301, Yishan Rd  
Minhang District, Shanghai , China

➤ Sales :

Direct    +86 (21) 6401-6692  
Email     amall@ameya360.com  
QQ        800077892  
Skype     ameyasales1 ameyasales2

➤ Customer Service :

Email     service@ameya360.com

➤ Partnership :

Tel        +86 (21) 64016692-8333  
Email     mkt@ameya360.com