# $\mu$ PD72873,72874

# IEEE1394 OHCI 1.1 Compliant PHY/Link 1-chip Host Controller

# **Description**

The  $\mu$ PD72873 and 72874 are NEC's single-chip solution for implementing an OHCI-Link layer and physical layer in compliance with the IEEE1394a-2000 specification. The  $\mu$ PD72873 has two and the  $\mu$ PD72874 three cable ports. The on-chip PCI/Cardbus interface, the OHCI 1.1 compliant architecture with OHCI 1.0 backward compatibility and the super low-power design makes the devices excellent choices for mobile PC applications, such as notebooks and PCMCIA cards. Package and pin configration are almost identical to NEC's OHCI 1.0 predecessor, the  $\mu$ PD72872, for easy substitution on application boards.

#### **Features**

- Link layer complies with 1394 Open Host Controller Interface Specification release 1.1
- Physical layer complies with IEEE1394a-2000 (Data rate: 100/200/400 Mbps)
  - $\bullet$   $\mu$ PD72873 : two IEEE1394 DS ports
  - μPD72874 : three IEEE1394 DS ports
- Modular 32-bit host interface complies with PCI Specification release 2.2
- PCI Bus Power Management Interface Specification release 1 1
- Modular 32-bit host interface complies with CardBus Specification

- On-chip FIFOs:
  - Isochronous transmit: 2048 bytes
  - Asynchronous transmit: 2048 bytes
  - Common receive: 3072 bytes
- Power management : D0, D1, D2, D3 hot, wake-up from D3 cold supported
- 4 isochronous transmit DMAs and 4 isochronous receive DMAs supported
- 2-wire serial EEPROM<sup>TM</sup> interface supported
- Temperature range : 0 to 70°C
- Operation voltage: 3.3 V ±10%, single power supply
- Package: 120-pin plastic TQFP (Fine pitch) (14 x 14)

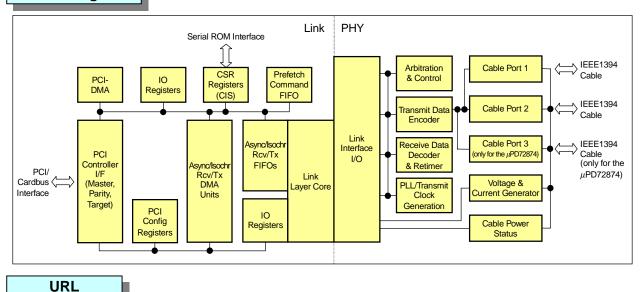
## **Evaluation Board**





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# **Block Diagram**



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