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April 1st, 2010 Renesas Electronics Corporation

Issued by: Renesas Electronics Corporation (http://www.renesas.com)
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PRELIMINARY PRODUCT BRIEF

μ PD720102

USB 2.0 HOST CONTROLLER

The μ PD720102 complies with the universal serial bus specification revision 2.0 and open host controller interface specification for full-/low-speed signaling and Intel's enhanced host controller interface specification for high-speed signaling and works up to 480 Mbps. The μ PD720102 is integrated 2 host controller cores with PCI interface and USB 2.0 transceivers into a single chip.

FEATURES

- Compliant with universal serial bus specification revision 2.0 (data rate: 1.5/12/480 Mbps)
- Compliant with open host controller interface specification for USB rev 1.0a
- Compliant with enhanced host controller interface specification for USB revision 1.0
- PCI multi-function device consists of one OHCI host controller core for full-/low-speed signaling and one EHCI host controller core for high-speed signaling
- Root hub with 3 (Max.) downstream facing ports which are shared by OHCl and EHCl host controller cores
- All downstream facing ports can handle high-speed (480 Mbps), full-speed (12 Mbps), and low-speed (1.5 Mbps) transaction
- Supports hyper-speed transfer mode using HSMODE signal. Transfer rate is 1.5 times higher than existing host controllers

- 32-bit 33 MHz host interface compliant with PCI specification release 2.2
- · Supports PCI mobile design guide revision 1.1
- Supports PCI-bus power management interface specification release 1.1
- PCI bus bus-master access
- Supports 3.3 V PCI
- System clock is generated by 30 MHz crystal or 48 MHz clock input.
- Operational registers direct-mapped to PCI memory space
- Native driver support in various operating sysytem.
- 3.3 V single power supply, 1.5 V internal operating voltage from on chip regulator
- On chip Rs and Rpd resistors for USB signals

APPLICATION

- · CardBus card and PCI board for PC
- Digital TV, DVD recorder, and STB
- Digital audio system
- · Printer, copy and fax machine
- Router, NAS (Network Attached Storage)



PACKAGE

• 120-pin plastic TQFP (fine pitch) (14 x 14)

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