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**November 24, 2011**

## **Main Specifications of the $\mu$ PD60610 and $\mu$ PD60611 PHY Devices**

### **Ethernet Interface**

- Fully-compliant with IEEE 802.3/802.3u for 100BASE-TX, 100BASE-FX and 10BASE-T
- IEEE 802.3u auto-negotiation and parallel detection
- Full and half duplex operation
- Support automatic polarity detection and correction
- Support automatic MDI/MDI-X crossover

### **MAC Interface**

- MAC interface: MII and RMII
- Serial management port (MDC/MDIO)

### **Power Management:**

- Software power-up/down and automatic power-up/down by energy detection

### **Special Features**

- Low latency and low jitter for industrial networking
- Fast link-down detection
- Permanent cable quality tracking
- Fast link-up option
- Industrial networking special auto-negotiation function
- Fast error detection
- Enhanced system testability (such as bypass, loopback and cable length measurement by TDR)
- Cable monitoring and error detection

### **Power Supply:**

- Single 3.3 V power supply

**Operating Temperature:**

- Tambient = -40 to +85°C (Tjunction from -40 to +125°C)

**Package**

- 48-pin 0.5 mm pitch 7 × 7 mm, LQFP (low-profile quad flat package)