## IP113A / IP113C 10/100Base-TX / FX Media Converter

**General Description :**

IP113A can be a 10/100BASE-TX to 100BASE-FX converter or a 100BASE-FX to 100BASE-FX repeater with an SMI port for management. It consists of a 2-port switch controller, a fast Ethernet transceiver and a PHY for 100BASE-FX. The transceivers in IP113A are designed in DSP approach with advance 0.25um technology; this results in high noise immunity and robust performance.

IP113A not only supports store and forward mode, IP113A also supports modified cut through mode and pure converter mode for low latency data forwarding. IP113A can transmit packet(s) up to 1600 bytes to meet requirement of extra long packets.

IP113A supports IEEE802.3x, collision base backpressure, and various LED functions, etc. These functions can be configured to fit the different requirements by feeding operation parameters via EEPROM interface or pull up/down resistors on specified pins.

**Feature :**

- A 10/100BASE-TX/100BASE-FX converter
- Built in a 10/100BASE-TX transceiver
- Built in a PHY for 100BASE-FX
- Built in a 2-port switch

  - Pass all packets without address and CRC check (optional)
  - Supports modified cut-through frame forwarding for low latency
  - Supports pure converter mode data forwarding for extreme low latency
  - Supports flow control for full and half duplex operation
  - Bandwidth control
  - Forward 1600 bytes packet for management
  - Optional forward fragments

- Built in 128Kb RAM for data buffer
- Supports auto MDI-MDIX function
- Supports link fault pass through function
- Supports far end fault function
- LED display for link/activity, full/half, 10/100

- Built in a watchdog timer to monitor internal switch error
- Supports EEPROM Configuration
- 0.25um CMOS technology
- Single 2.5v power supply 48-pin LQFP package
- 48-pin LQFP package