



DM9000EP Product Brief

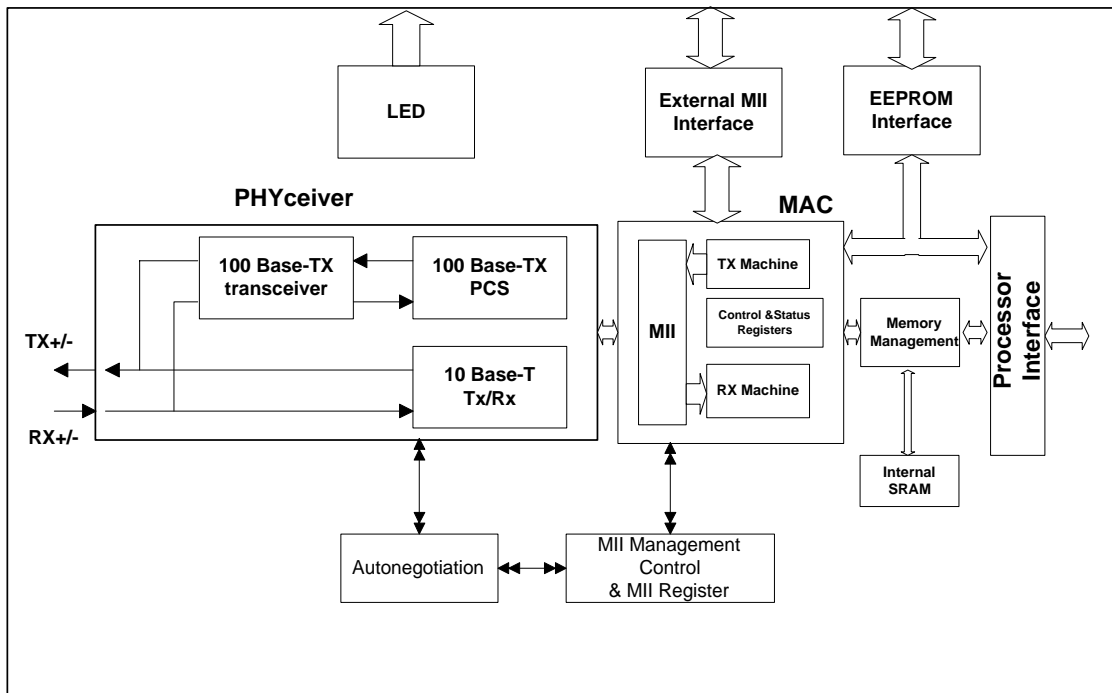
Ethernet Controller with General Processor Interface

May 2008 Rev.1.0

The DM9000 is a fully integrated and cost-effective single chip Fast Ethernet MAC controller with a general processor interface, a 10/100M PHY and 4K Dword SRAM. It is designed with low power and high performance process that support 3.3V with 5V tolerance.

The DM9000 also provides a MII interface to connect HPNA device or other transceivers that support MII interface. The DM9000 supports 8-bit, 16-bit and 32-bit uP interfaces to internal memory accesses for different processors. The PHY of the DM9000 can interface to the UTP3, 4, 5 in 10Base-T and UTP5 in 100Base-TX. It is fully compliant with the IEEE 802.3u Spec. Its auto-negotiation function will automatically configure the DM9000 to take the maximum advantage of its abilities. The DM9000 also supports IEEE 802.3x full- duplex flow control. This programming of the DM9000 is very simple, so user can port the software drivers to any system easily.

Block Diagram



Specifications

- Supports processor interface: byte/word/dword of I/O command to internal memory data operation
 - Integrated 10/100M transceiver
 - Supports MII and reverses MII interface
 - Supports back pressure mode for half-duplex mode flow control
 - IEEE802.3x flow control for full-duplex mode
 - Supports wakeup frame, link status change and magic packet events for remote wake up
 - Integrated 4K dword SRAM
-
- Supports automatically load vendor ID and product ID from EEPROM
 - Supports 4 GPIO pins
 - Optional EEPROM configuration
 - Very low power consumption mode:
 - Power reduced mode (cable detection)
 - Power down mode
 - Selectable TX drivers for 1:1 or 1.25:1 transformers for additional power reduction.
 - Compatible with 3.3V and 5.0V tolerant I/O
 - 100-pin LQFP with CMOS process

Application

VoIP CPE (ATA, IP Phone, Video Phone)
IP STB, IPC, Internet Radio

Ordering Information

Part Number	Pin Count	Package
DM9000E	100	LQFP
DM9000EP	100	LQFP (Pb-Free)

DAVICOM Semiconductor, Inc.

No.6, Li-Hsin Rd.VI, Science Park, Hsin-Chu, Taiwan, R.O.C.

TEL: 886-3-5798797

FAX: 886-3-5646929

E-mail: sales@davicom.com.tw