



DM9010BEP Product Brief

Ethernet Controller with General Processor Interface

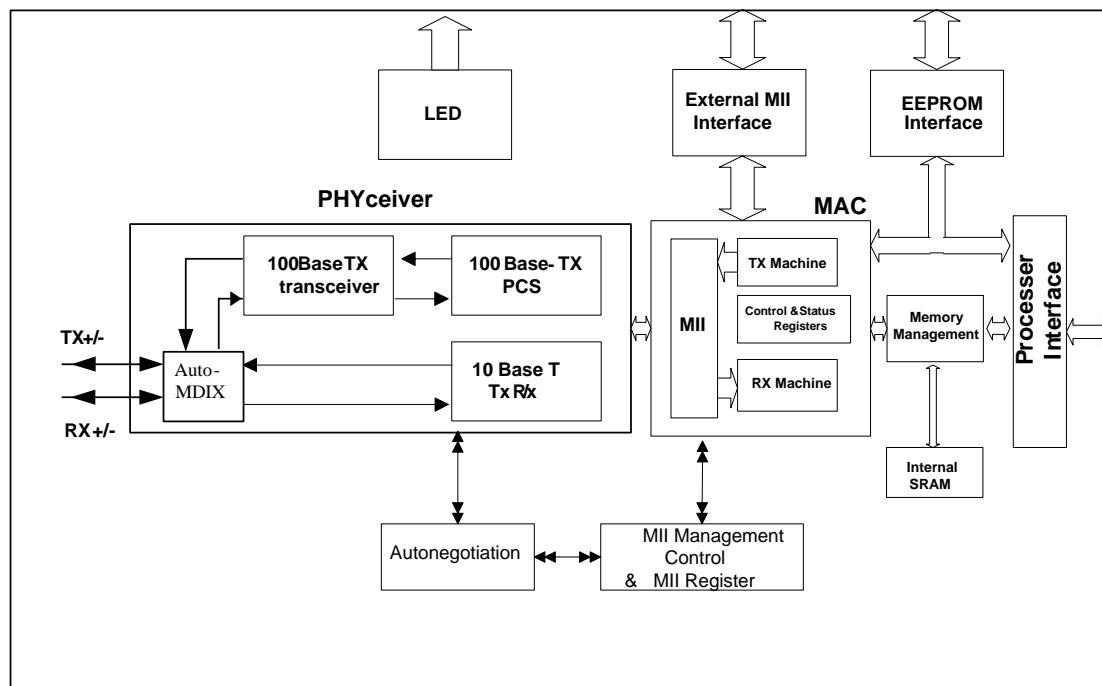
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The DM9010B is a fully integrated and cost-effective single chip Fast Ethernet MAC controller with a general processor interface, a 10/100M PHY and 16K Byte SRAM. It is designed with low power and high performance process that support 3.3V with 5V tolerance.

The DM9010B also provides a MII interface to connect HPNA device or other transceivers that support MII interface.

The DM9010B supports 8-bit, 16-bit and 32-bit uP interfaces to internal memory accesses for different processors. The PHY of the DM9010B 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 DM9010B to take the maximum advantage of its abilities. The DM9010B also supports IEEE 802.3x full- duplex flow control. This programming of the DM9010B is very simple, so user can port the software drivers to any system easily.

Block Diagram



Specifications

- 100-pin LQFP.
- Supports processor interface: Byte/word/Dword of I/O command to internal memory data operation
- Integrated 10/100M transceiver with HP Auto-MDIX
- 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 16K Byte SRAM
- Build in 3.3V to 1.8V regulator
- Supports early Transmit
- Supports IP/TCP/UDP checksum generation and checking
- Supports automatically load vendor ID and product ID from EEPROM
- Supports 7 or 23 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.
 - 1: 1 transformers only when HP Auto-MDIX Enable.
- Compatible with 3.3V and 5.0V tolerant I/O

Application

VoIP CPE (ATA, IP Phone, Video Phone)

IP STB, IPC, Internet Radio

Ordering Information

Part Number	Pin Count	Package
DM9010BE	100	LQFP
DM9010BEP	100	LQFP(Pb-Free)

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