

Ethernet Controller with General Processor Interface

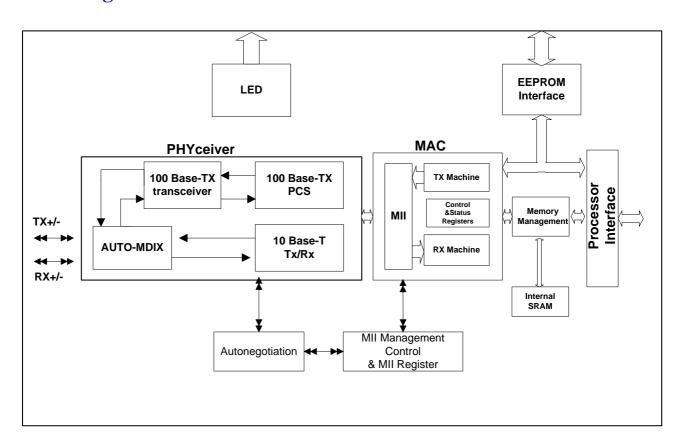
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The DM9000B is a fully integrated and cost-effective low pin count single chip Fast Ethernet controller with a general processor interface, a 10/100M PHY and 4K Dword SRAM. It is designed with low power and high performance process interface that support 3.3V with 5V IO tolerance.

The DM9000B supports 8-bit and 16-bit data interfaces to internal memory accesses for various processors. The PHY of the DM9000B can interface to the UTP3, 4, 5 in 10Base-T and UTP5 in 100Base-TX with

HP Auto-MDIX. It is fully compliant with the IEEE 802.3u Spec. Its auto-negotiation function will automatically configure the DM9000B to take the maximum advantage of its abilities. The DM9000B also supports IEEE 802.3x full-duplex flow control.

Block Diagram



Specifications

- Supports processor interface: byte/word of I/O command to internal memory data operation
- Integrated 10/100M transceiver With HP Auto-MDIX
- Supports back pressure mode for half-duplex
- IEEE802.3x flow control for full-duplex mode
- Supports wakeup frame, link status change and magic packet events for remote wake up
- Support 100M Fiber interface.
- 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
- 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
- DSP architecture PHY Transceiver.
- 48-pin LQFP, 0.18 um process

Application

VoIP CPE (ATA, IP Phone, Video Phone)

IP STB, IPC, Internet Radio

Ordering Information

Part Number	Pin Count	Package
DM9000BE	48	LQFP
DM9000BEP	48	LQFP
		(Pb-Free)

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