



DM9000BIEP Product Brief

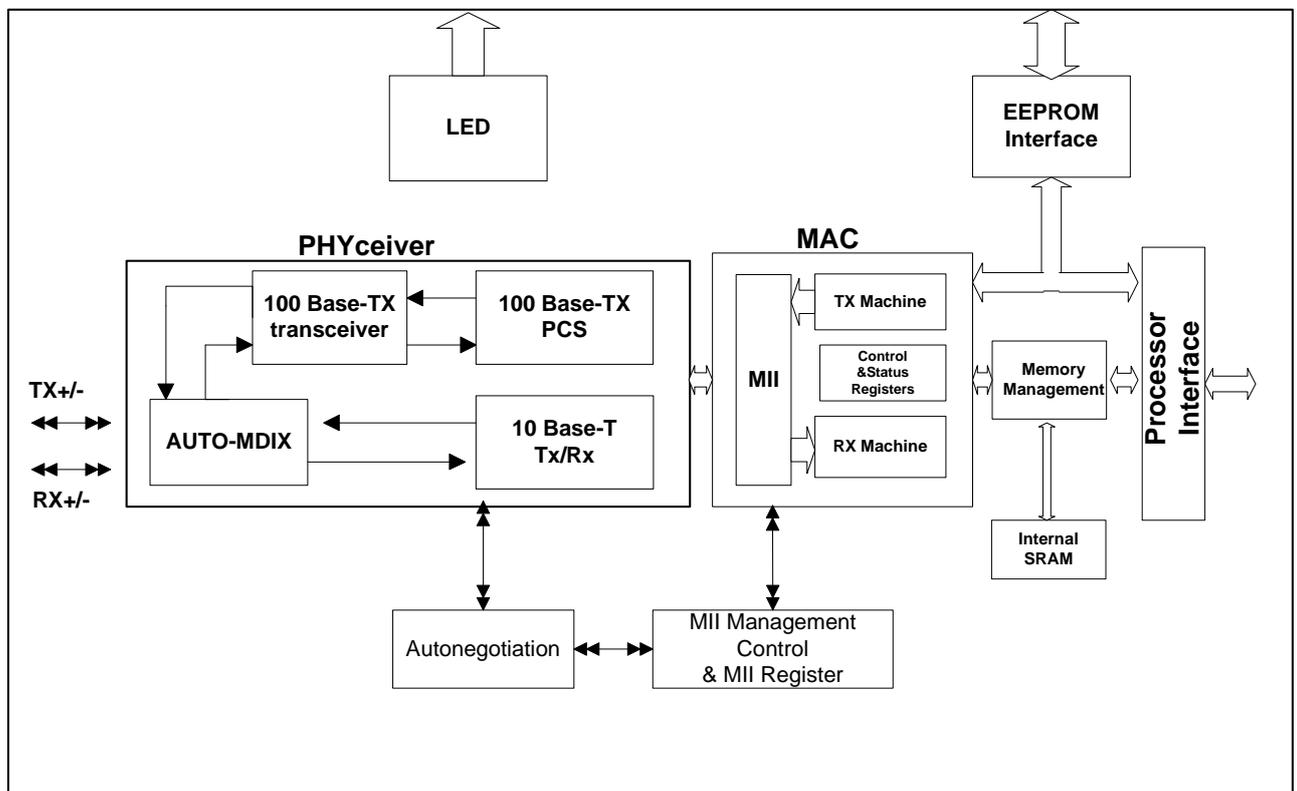
Ethernet Controller with General Processor Interface

November 2008 Rev.1.0

The DM9000BI is a fully integrated and cost-effective low pin count single chip Fast Ethernet controller with a general processor interface, Supports Industrial-grade: $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$, 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 DM9000BI supports 8-bit and 16-bit data interfaces to internal memory accesses for various processors. The PHY of the DM9000BI 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 DM9000BI to take the maximum advantage of its abilities. The DM9000BI 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.
- Supports Industrial-grade: -40°C.~ +85°C
- 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
DM9000BIEP	48	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