



DM9013EP Product Brief

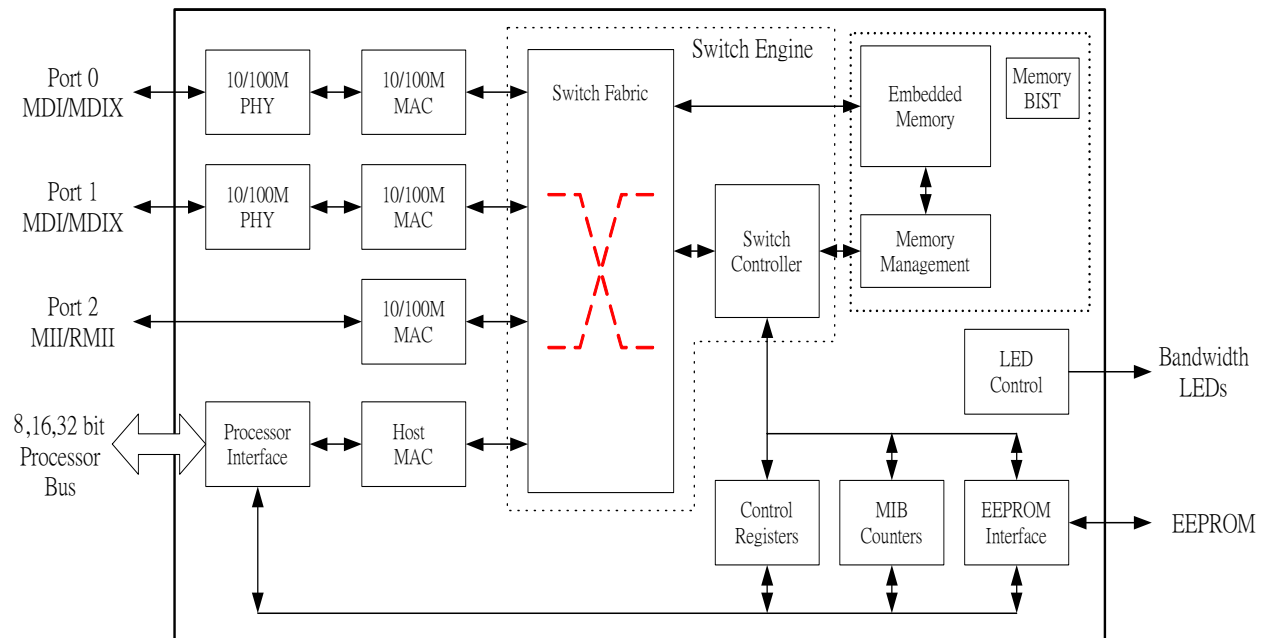
Three Port Ethernet Switch Controller with 32-bit Processor

Interface

Dec. 2006 Rev.1.0

The DM9013EP is a fully integrated and cost-effective fast Ethernet switch controller with two ports 10/100M PHY, one port MII or RMIi interface, and general processor bus interface. The controller provides basic Layer-2 switch functions and advanced IEEE 802.1Q VLAN and priority queuing scheme. The integrated two ports PHY are compliant with IEEE 802.3u standards. The MII interface provides the flexibility to connect Ethernet PHY or SoC with MII/RMIi interface. The DM9013EP provides direct interface to the general processor bus with 8-, 16-, or 32-bit data to access internal memory.

Block Diagram



Specifications

- ❑ Ethernet Switch with two 10/100Mb PHY, one MII/RMII, and general processor bus interface
- ❑ Support Reverse-MII
- ❑ Processor bus slave architecture
- ❑ EEPROM interface for power up configurations
- ❑ Support TCP/UDP/IPv4 checksum offload
- ❑ Support HP Auto-MDIX
- ❑ Support IEEE 802.3x Flow Control in Full-duplex mode
- ❑ Support Back Pressure Flow Control in Half-duplex mode
- ❑ Per port support 4 priority queues by Port-based, 802.1P VLAN, and IP TOS priority
- ❑ Support 802.1Q VLAN up-to 16 VLAN group
- ❑ Support VLAN ID tag/un-tag options
- ❑ Per port support bandwidth, ingress and egress rate control
- ❑ Support Broadcast Storming filter function
- ❑ Support Store and Forward switching approach
- ❑ Support up-to 1K Uni-cast MAC addresses
- ❑ Automatic aging scheme
- ❑ Support MIB counters for diagnostic
- ❑ 128-pin LQFP 1.8V internal core, 3.3V I/O with 5V tolerant

Application

- ❑ VoIP CPE (ATA, IP Phone)
- ❑ IP STB
- ❑ Industrial Control

Ordering Information

Part Number	Pin Count	Package
DM9013EP	128	LQFP (Pb-free)

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