



DM9013EP Product Brief

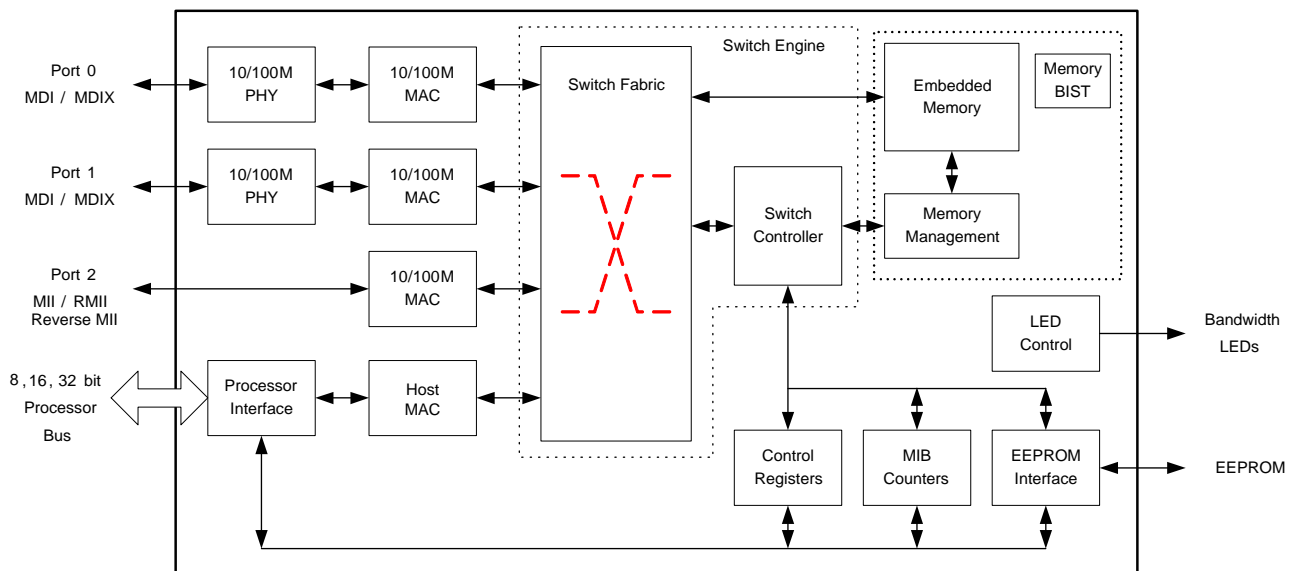
Three Port Ethernet Switch Controller with 8/16/32-bit

Processor Interface

November 2009 Rev.1.1

The DM9013 is a fully integrated and cost-effective fast Ethernet switch controller with two ports 10M/100M PHY, one port MII/RMII/Reverse MII interface, and local bus interface. The controller provides basic Layer-2 switch functions and advance IEEE 802.1Q VLAN, priority queuing scheme, The integrated two ports PHY are compliant with IEEE 802.3u standards. The MII/RMII/Reverse MII interface provides the flexibility to connect Ethernet 10/100M PHY devices. The DM9013 provides direct interface to the local bus.

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/untag 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
- uP data bus driving capability adjustable
- Port 2 TXD/TXE driving capability adjustable
- Auto. control to prevent memory read count error
- 128-pin LQFP 1.8V internal core, 3.3V I/O with 5V tolerant

Application

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

Ordering Information

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

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