



DM9016EP Product Brief

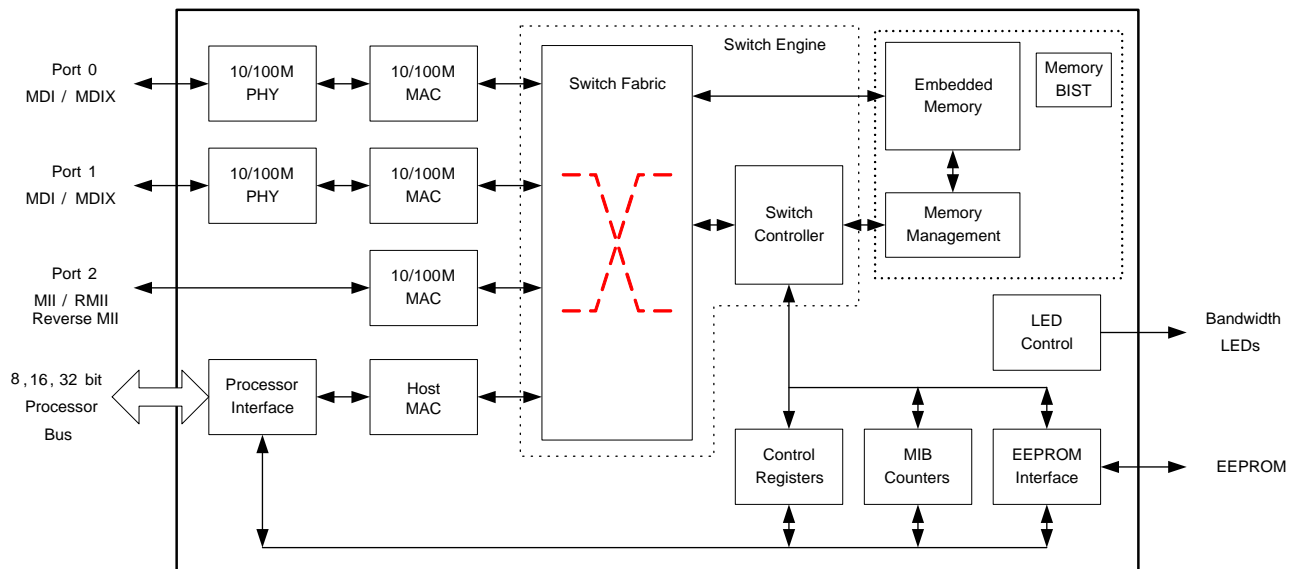
Three Port Ethernet Switch Controller with 8/16/32-bit

Processor Interface

March 2009 Rev.1.0

The DM9016 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, IGMP snooping protocol. 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 DM9016 provides direct interface to the local bus.

Block Diagram



Specifications

- Ethernet Switch with two 10/100Mb PHY with 32-bit Processor Interface
- Per port supports 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 IEEE 802.3x Flow Control in Full-duplex mode.
- Support Back Pressure Flow Control in Half-duplex mode.
- Recode up-to 1K Uni-cast MAC addresses
- Automatic aging scheme
- EEPROM interface for power up configurations
- Support MIB-II counters
- Local bus slave architecture, Support multicast filter function
- TCP/IP/UDP/IPv4 checksum offload
- Support IGMP Snooping v1, v2
- Support port security
- Support MII/RMII/Reverse-MII
- WoL (Wake-on-LAN)
- Compatible with 3.3V and 5.0V tolerant I/O
- DSP PHY with HP Auto-MDIX, DSP architecture PHY Transceiver.
- 128-pin LQFP, 0.18 um process

Application

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

Ordering Information

Part Number	Pin Count	Package
DM9016EP	128	LQFP (Pb-Free)

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