



# DM9106EP Product Brief

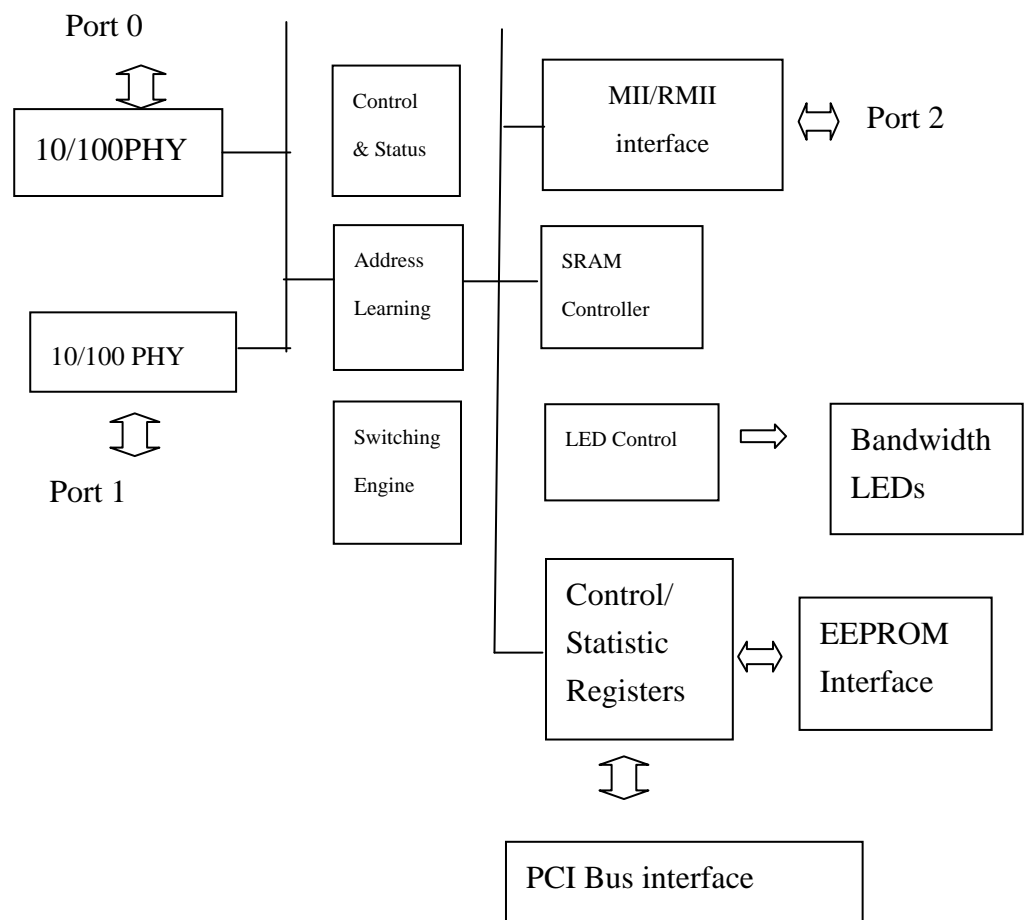
## Three Port Ethernet Switch Controller with 32-bit

### PCI Interface

March 2009 Rev.1.0

The DM9106 is a fully integrated and cost-effective fast Ethernet switch controller with two ports 10M/100M PHY, one port MII/RMII/RGMII interface, and PCI 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/RGMII interface provides the flexibility to connect Ethernet 10/100/1000M PHY devices. The DM9106 provides direct interface to the PCI bus. The PCI bus mode is fully complies with PCI 2.2 spec. and supports bus master mode to achieve the high performance.

### Block Diagram



## Specifications

- Ethernet Switch with two 10/100Mb PHY with 32-bit PCI 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
- Support multicast filter function
- TCP/IP 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
DM9106EP	128	LQFP (Pb-Free)

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