



DM8606C Product Brief

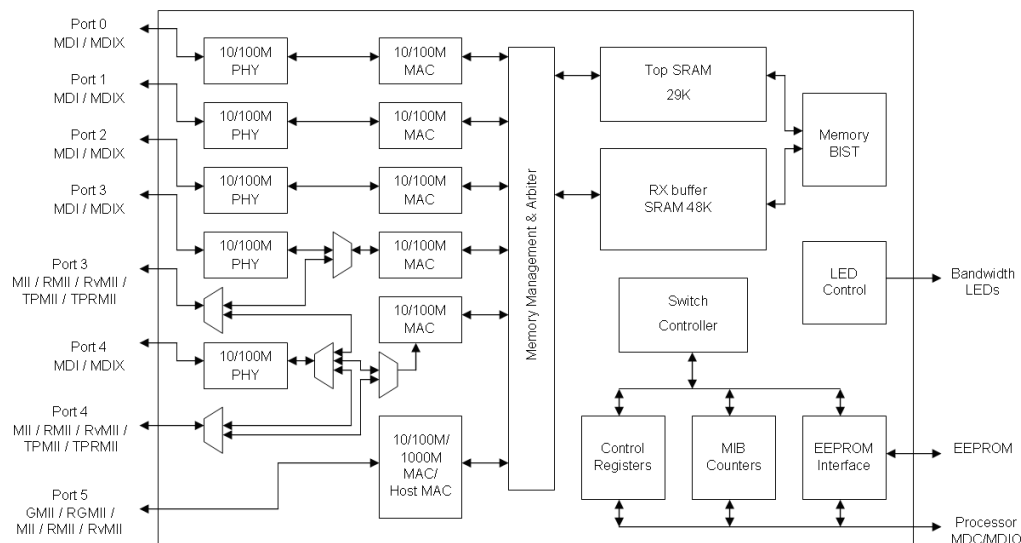
6-Port Fast Ethernet Single Chip Switch Controller with GMII/RGMII/MII/RMII Interface

Feb. 2010 Rev.1.0

The DM8606C is a fully integrated and cost-effective fast Ethernet switch controller with five 10/100Mb PHY, five 10/100Mb MAC plus one 10/100/1000Mb MAC, and one MII/RevMII/RMII for 6th MAC

The controller provides basic Layer-2 switch functions and advance IEEE 802.1Q VLAN, priority queuing scheme, IGMP snooping protocol. Spanning Tree protocol, The integrated 5 ports PHY are compliant with IEEE 802.3u standards. The GMII/RGMII/MII/RMII/Reverse MII interface provides the flexibility to connect Ethernet 10/100/1000M PHY devices.

Block Diagram



Specifications

- Ethernet Switch with five 10/100Mb PHY, five 10/100Mb MAC plus one 10/100/1000Mb MAC, and one GMII/RGMII/MII/RevMII/RMII for 6th MAC

- Per port supports 4 priority queues , Port-based, 802.1P VLAN, MAC based, IPv4 TOS, IPv6 DSCP.
- Support 802.1Q/port-based VLAN up-to 16 VLAN group with full 12-bit VID: tag/untag, priority remarking.
- 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 2K Uni/Multi-cast MAC addresses
- Support hardware IGMP v1,v2/MLD v1snooping
- Automatic aging scheme
- EEPROM interface for power up configurations
- Support MIB counter
- Support multicast filter function
- Support STP
- Support serial LED in 3-MII mode
- Register access by MDC/MDIO format
- Support trunk ports
- DSP PHY with Auto-MDIX
- Built in linear regulator control register
- 128-pin QFP

Application

- SOHO 5-port switch.
- 5-port switch + Router with GMII/MII CPU interface.

Ordering Information

Part Number	Pin Count	Package
DM8606CFP	128	LQFP (Pb-Free and Halogen-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