

PM3371 OCTAL 10/100 SWITCH PORT CONTROLLER

FEATURES

- Monolithic intelligent low cost octal 10/100 Ethernet Switch Port Controller.
- Integrates eight 10/100 MACs which connect to physical layer devices over standard IEEE 802.3u MII's.
- Supports the Gigabit EXACT Bus Protocol for device interconnect.
- May be used alone or in combination with other devices to build high density 10/100 switches.
- Supports non-blocking system configurations up to 128 x 10/100 ports.
- Layer 2 line rate address lookup capability for all Ethernet port configurations supported.
- Store and forward switching using Output Associated Input Buffering for efficient memory usage without HOL blocking.
- Embedded Smartpath™ Processor supports value-added datapath operations.

- Supports up to 16K MAC addresses.
- Support for IEEE 802.1D bridging and spanning tree algorithm in an external processor when used with the PM3380, PM3390 or PM3391.
- Two 32 bit memory interfaces for flexible combinations of SSRAM, SDRAM, SGRAM, and EPROM allows cost optimization of different applications.

COMPATIBILITY

- Interworks with the following EXACT Chip-set devices:
 PM3370 Octal 10/100 Switch Port Controller.
 PM3380 Gigabit Switch Port Controller.
 PM3390 8-Port EXACT Bus Switching Matrix.
 PM3391 6-Port EXACT Bus Switching Matrix.

VALUE ADD

- EXACT Bridge appnote for direct high-speed external CPU access to the EXACT Bus.

MANAGEMENT

- Statistics collection to support RMON-I, Ethernet MIB, and SNMP agent functions in an external processor when used with the PM3380, PM3390 or PM3391.

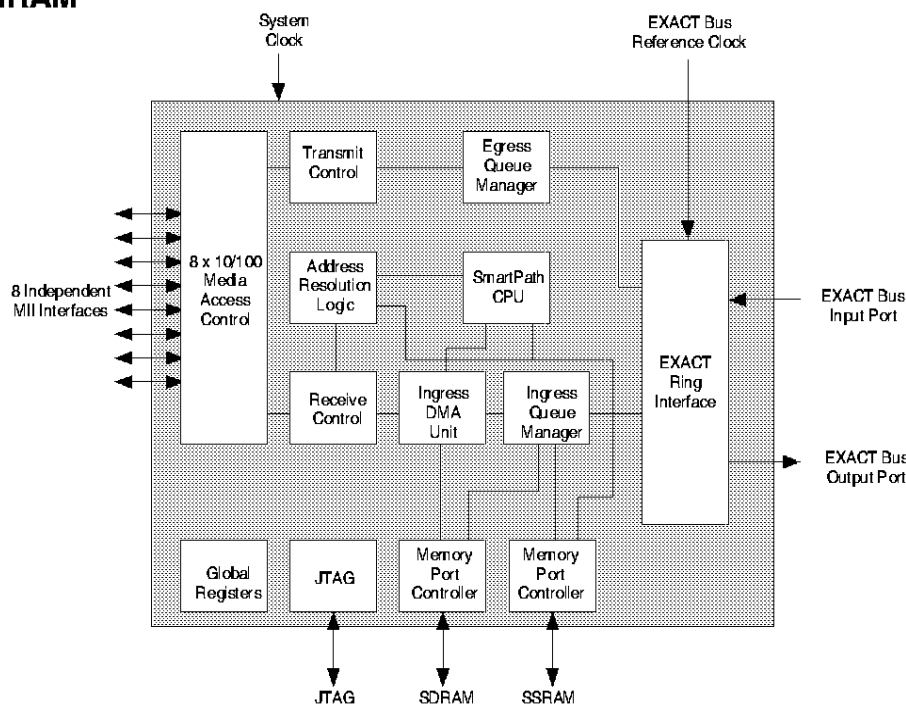
PACKAGING

- Provides a standard 5 signal P1149.1 JTAG test port for boundary scan board test purposes.
- Implemented in low power 3.3 Volt CMOS technology with 5 Volt tolerant MII interface.

APPLICATIONS

- Low cost layer 2 Ethernet Switching systems requiring high density 10/100 ports.
- Low cost Ethernet Switching systems capable of 10/100, and 1000 Mbit/s operation when used with the Gigabit Ethernet Switch Port Controller.

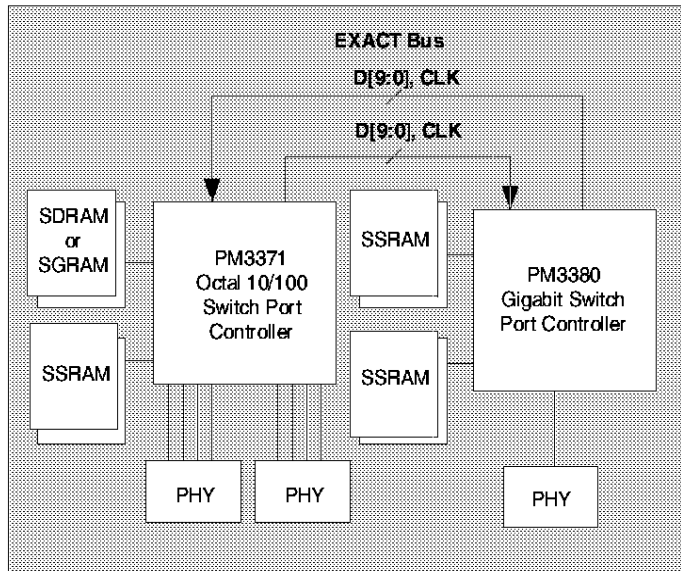
BLOCK DIAGRAM



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TYPICAL APPLICATIONS

8 X 10/100 + 1 X 1000 USING THE PM3371 AND PM3380



24 X 10/100 + 2 X 1000 SWITCH

