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MB86962

FUJITSU

Ethernet 10BASE-T Transceiver

FACT SHEET

APRIL 1991

FEATURES

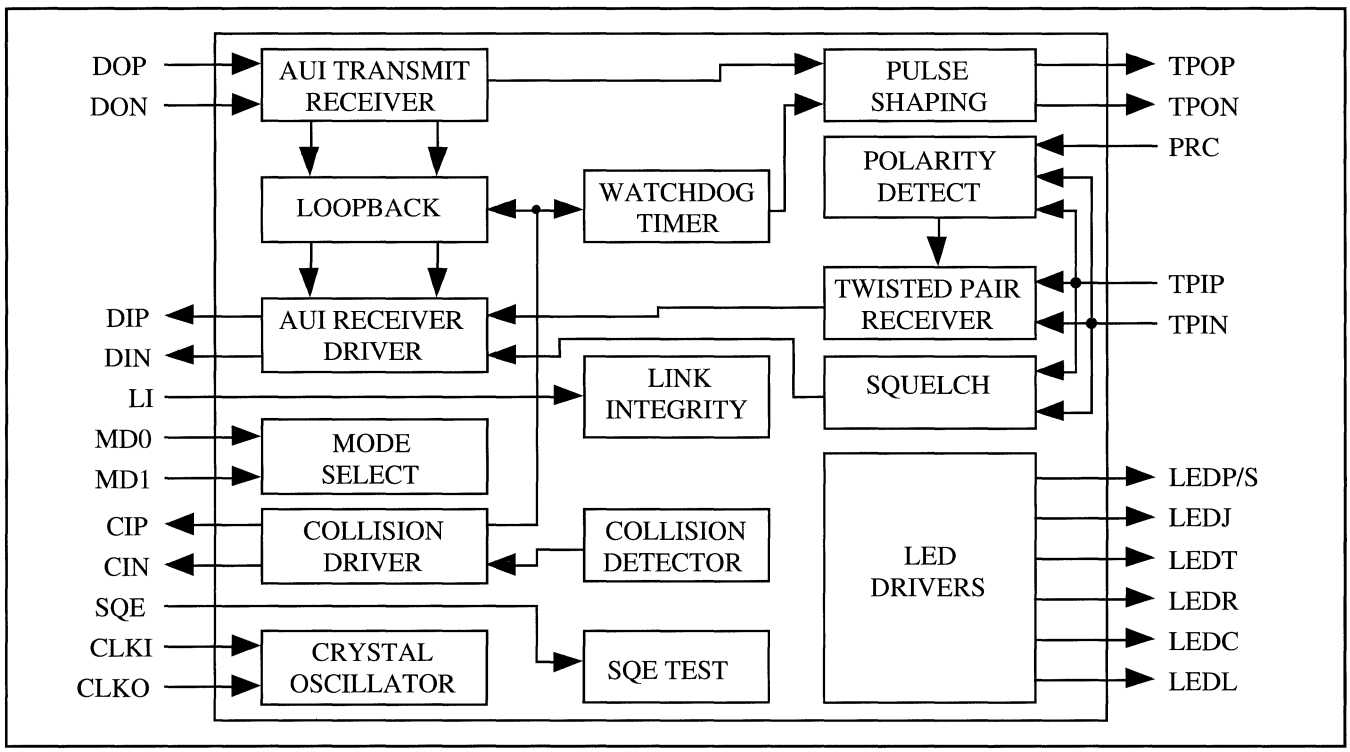
- Complete implementation of ISO/ANSI/IEEE 8802-3 10BASE-T Media Attachment Unit (MAU)
- Automatic AUI/RJ45 selection
- Internal predistortion generation
- Automatic reverse polarity detection and selectable polarity correction
- On-chip jabber logic, link test, and SQE test with enable/disable option
- Capacitive coupling to encoder/decoder eliminates transformer for internal 10BASE-T adapters
- LED drivers for transmit, receive, jabber, collision, link and reversed polarity indicators
- CMOS technology with single 5-volt power supply

DESCRIPTION

The MB86962 is a single chip transceiver for twisted pair media that meets or exceeds the ISO/ANSI/IEEE 8802-3 Ethernet standards for AUI (Attachment Unit Interface) and 10BASE-T interface. Functions provided by this transceiver include level-shifted data pass-through from one transmission medium to another, collision detection, signal quality error (SQE) testing and automatic correction of polarity reversal on the twisted pair input. The MB86962 also includes drivers for transmit, receive, jabber, collision, reversed polarity detect and link indicators, or for a flashing status indicator.

Because of its unique automatic 10BASE-T/AUI switching circuitry, the MB86962 is well suited for both 10BASE-T adapters and external Media Attachment Unit (MAU) applications.

The MB86962 is implemented in CMOS technology and requires only a single 5-volt power supply. It is available in 28-pin plastic DIP and PLCC packages.

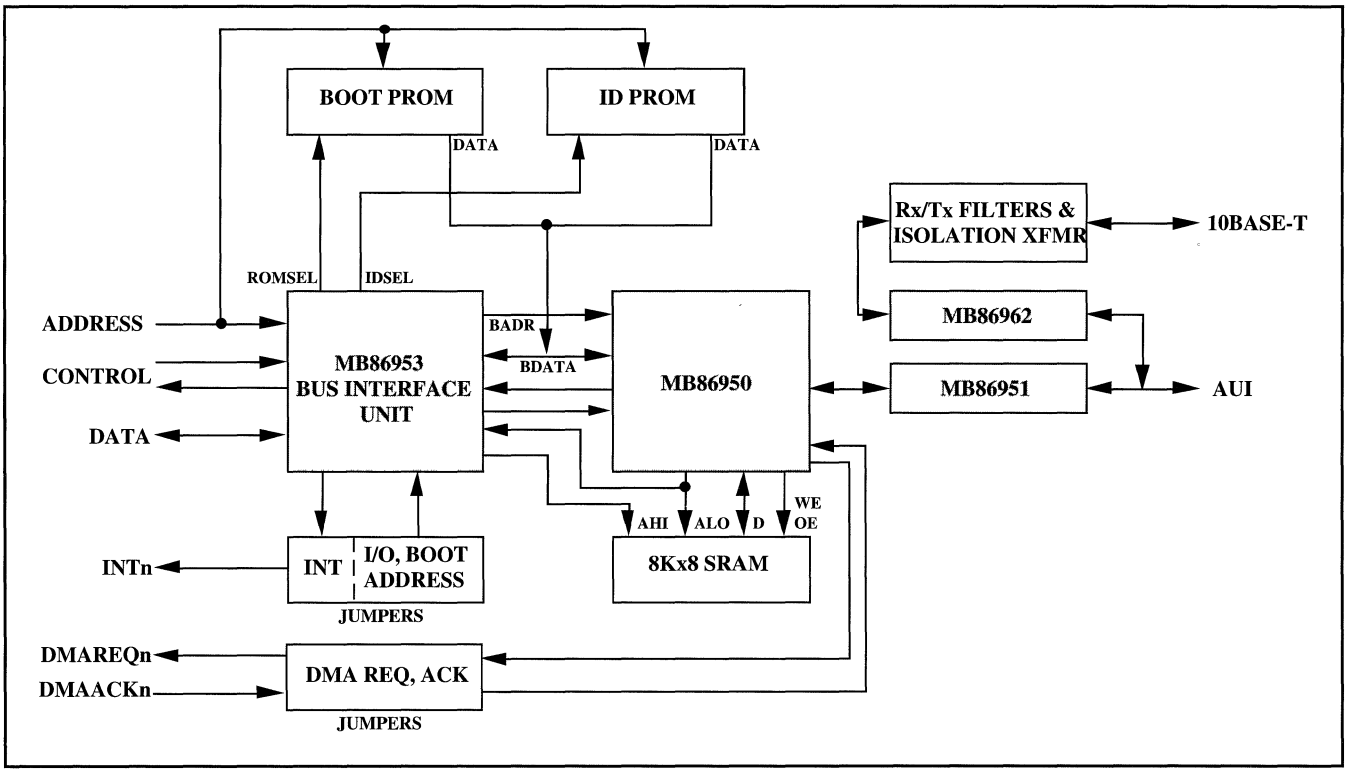


MB86962 Block Diagram

MB86962

10BASE-T TRANSCEIVER

The block diagram below illustrates the use of the MB86962 in an 8-bit Ethernet add-in card for an IBM or compatible PC, XT or AT computer. In this application, the MB86953 PC Bus Interface Unit provides the interface between Fujitsu's three-chip Ethernet set, consisting of the MB86950 Ethernet Controller, the MB86951 Manchester Encoder/Decoder and the MB86962 10BASE-T Transceiver, and the system bus of the host computer. Jumpers on the board select the base I/O address for the controller, the location of the boot PROM, and the interrupt and DMA channels. 10BASE-T and AUI selection is performed automatically by the MB86962.



Fujitsu supplies many components for your local area networking requirements, including controllers, bus interfaces, transceivers and a large variety of memories. For additional information, contact the Fujitsu Microelectronics sales office, sales representative or authorized distributor in your area, or contact:

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