

Am7960

Coded Data Transceiver

PRELIMINARY

Am7960

DISTINCTIVE CHARACTERISTICS

- Universal Networking Transceiver
- High impedance interface to coupling transformer
 - User transparent Manchester encoding/decoding
 - Glitch-free power up/down
- "Modem-like" controller interface
- 32 dB dynamic range (transmit to receive)
- Transmit edge rate control
- Up to 3 Mbps data rate

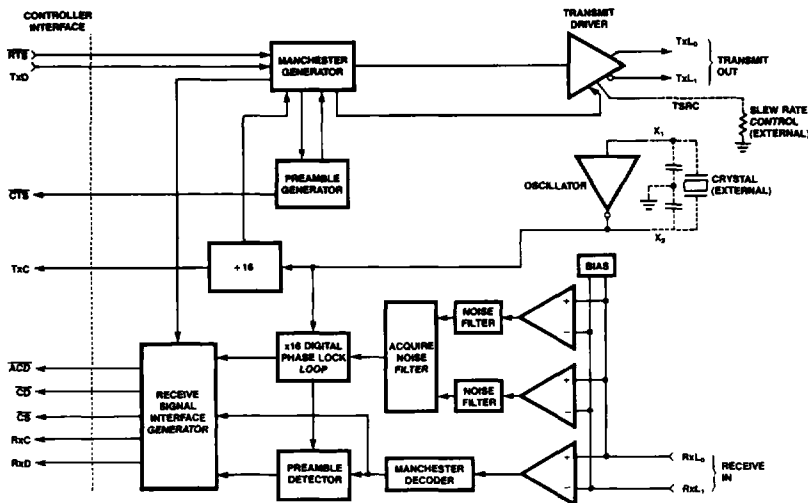
GENERAL DESCRIPTION

The Am7960 is a combined Manchester encoder/decoder and transceiver. It is designed for use in synchronous communications systems which require common mode isolation in point-to-point or common bus architecture, supporting data rates of up to 3 Mbps. This 5 V device provides 32 dB of dynamic range, and guarantees 2 V output into 37.5Ω . A single external component controls the slew rate of the transmitter, and a signal qualifier in the receiver minimizes false starts improving reliability.

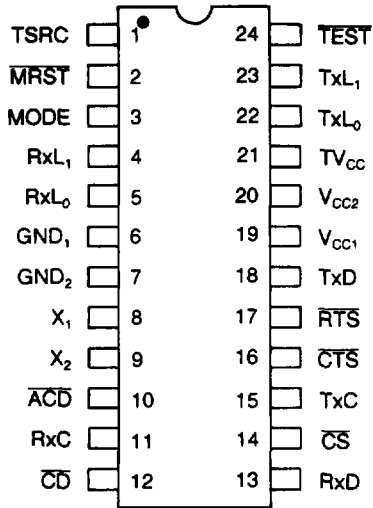
The Am7960 has a modem-like controller interface which makes it compatible with nearly every existing synchronous communications controller (USARTs, SCCs, etc).

The use of ECL circuitry to process signals internal to the Am7960 chip enhances device speed. I/O pins operate at TTL/MOS logic levels to allow convenient interfacing with other devices such as the Am28530* Serial Communications Controller.

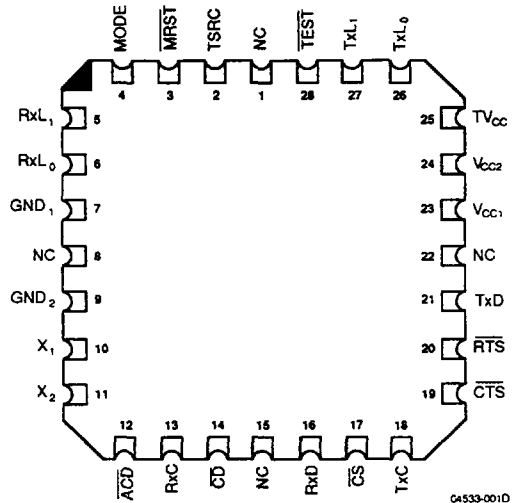
BLOCK DIAGRAM



CONNECTION DIAGRAM Top View



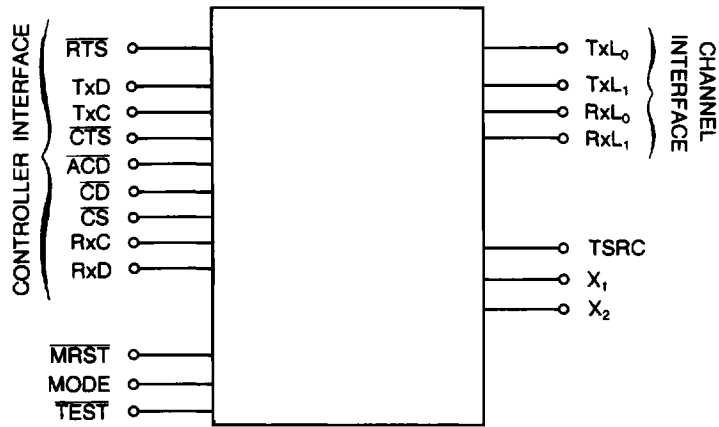
CD007050



CA533-001D

CD011960

LOGIC SYMBOL



LS001950

ORDERING INFORMATION

Standard Products

AMD standard products are available in several packages and operating ranges. The order number (Valid Combination) is formed by a combination of:

- a. **Device Number**
- b. **Speed Option** (if applicable)
- c. **Package Type**
- d. **Temperature Range**
- e. **Optional Processing**

AM7960

D

C

B

e. OPTIONAL PROCESSING

Blank = Standard processing
B = Burn-in

d. TEMPERATURE RANGE

C = Commercial (0 to +70°C)
M = Military* (-55 to +125°C)

c. PACKAGE TYPE

D = 24-Pin Slim Ceramic DIP (CD3024)
L = 28-Pin Ceramic Leadless Chip Carrier (CL 028)

b. SPEED OPTION

Not Applicable

a. DEVICE NUMBER/DESCRIPTION
Am7960 Coded Data Transceiver

Valid Combinations

Valid Combinations	
AM7960	DC, DCB, LC, DMB, LMB

Valid Combinations

Valid Combinations list configurations planned to be supported in volume for this device. Consult the local AMD sales office to confirm availability of specific valid combinations, to check on newly released combinations, and to obtain additional data on AMD's standard military grade products.

*Military range products are "NPL" (Non-Compliant Products List) or Non-MIL-STD-883C Compliant products only.