MOTOROLA
SEMICONDUCTOR MOTOROLA SC (TELECOM)
TECHNICAL DATA

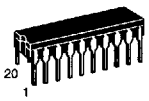
**MC145428**

# Data Set Interface

## Asynchronous-to-Synchronous and Synchronous-to-Asynchronous Converter

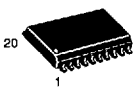
The MC145428 Data Set Interface provides asynchronous-to-synchronous and synchronous-to-asynchronous data conversion. It is ideally suited for voice/data digital telsets supplying an EIA-232 compatible data port into a synchronous transmission link. Other applications include: data multiplexers, concentrators, data-only switching, and PBX-based local area networks. This low-power CMOS device directly interfaces with either the 64 kbps or 8 kbps channel of Motorola's MC145422 and MC145426 Universal Digital Loop Transceivers (UDLTs), as well as the MC145421 and MC145425 Second Generation Universal Digital Loop Transceivers (UDLT II).

- Provides the Interface Between Asynchronous Data Ports and Synchronous Transmission Links
- Up to 128 kbps Asynchronous Data Rate Operation
- Up to 2.1 Mbps Synchronous Data Rate Operation
- On-Board Bit Rate Clock Generator with Pin Selectable Bit Rates of 300, 1200, 2400, 4800, 9600, 19200, and 38400 bps or an Externally Supplied 16 Times Bit Rate Clock
- Accepts Asynchronous Data Words of 8 or 9 Bits in Length
- False Start Detection Provided
- Automatic Sync Insertion and Checking
- Single 5 V Power Supply
- Low Power Consumption of 5 mW Typical
- Application Notes AN943 and AN946



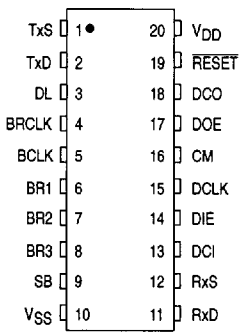

**L SUFFIX**
CERAMIC
CASE 732


**P SUFFIX**
PLASTIC
CASE 738




**DW SUFFIX**
SOG
CASE 751D

**PIN ASSIGNMENT**




NOT RECOMMENDED FOR NEW DESIGN

**BLOCK DIAGRAM**