



*Advance Information*

# Data Set Interface

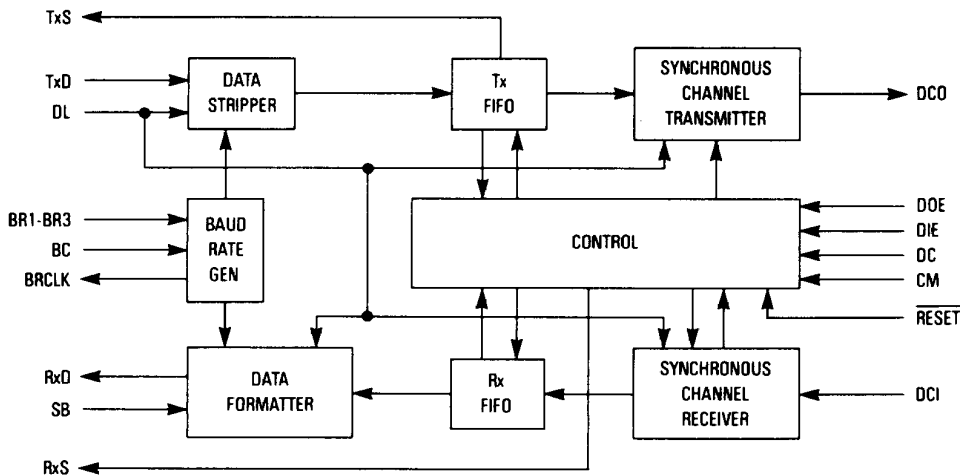
## Asynchronous-To-Synchronous

## Synchronous-To-Asynchronous Converter

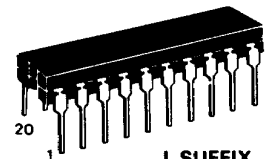
The MC145428 Data Set Interface provides asynchronous to synchronous and synchronous to asynchronous data conversion. It is ideally suited for voice/data digital telsets supplying an RS-232 compatible data port into a synchronous transmission link. Other applications include, data multiplexers, concentrators, 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 MC145418 and MC145419 Digital Loop Transceivers (DLTs).

- 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 Eight or Nine Bits in Length
- False Start Detection Provided
- Automatic Sync Insertion and Checking
- Single 5 Volt Power Supply
- Low Power Consumption of 5 mW Typical
- Applications Notes AN943 and AN946

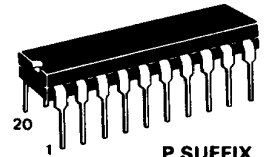
**BLOCK DIAGRAM**



# MC145428



**L SUFFIX  
CERAMIC  
CASE 732**



**P SUFFIX  
PLASTIC  
CASE 738**

### PIN ASSIGNMENT

|       |    |    |       |
|-------|----|----|-------|
| TxS   | 1  | 20 | VDD   |
| TxD   | 2  | 19 | RESET |
| DL    | 3  | 18 | DCO   |
| BRCLK | 4  | 17 | DOE   |
| BC    | 5  | 16 | CM    |
| BR1   | 6  | 15 | DC    |
| BR2   | 7  | 14 | DIE   |
| BR3   | 8  | 13 | DCI   |
| SB    | 9  | 12 | RxS   |
| VSS   | 10 | 11 | RxD   |