



## T7121 HDLC Interface for ISDN

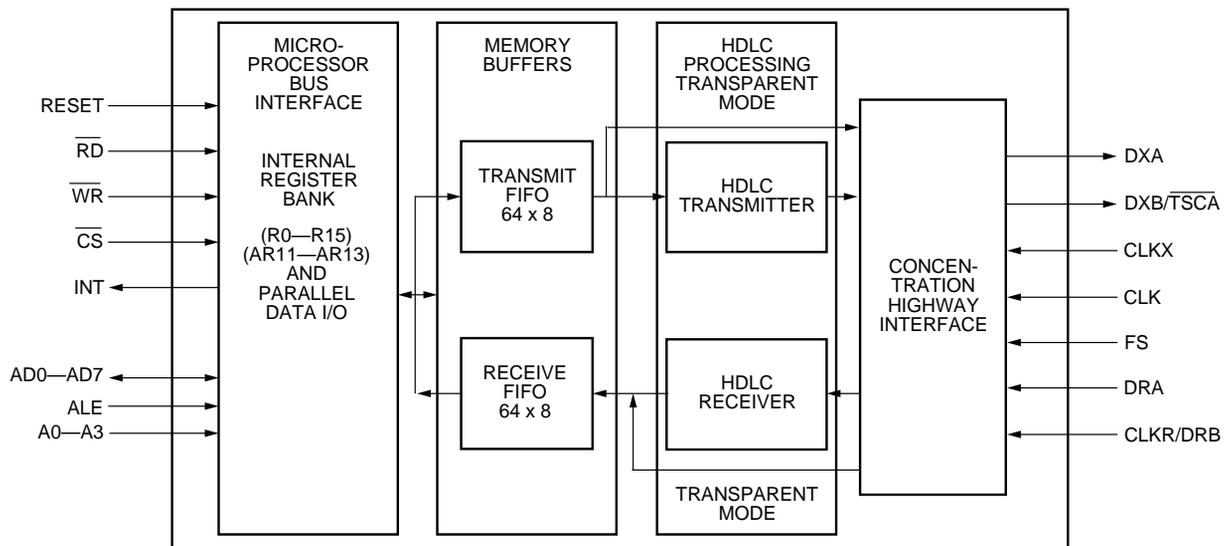
### Features

- HDLC transmitter and receiver
- 64-byte FIFO in each direction
- Serial concentration highway interface (CHI)
- 8-bit parallel control interface
- +5 V power supply

Device	Package	Temperature
T7121-PL2	28-Pin DIP	-40 °C to +85 °C
T7121-EL2	28-Pin SOJ	-40 °C to +85 °C

### Description

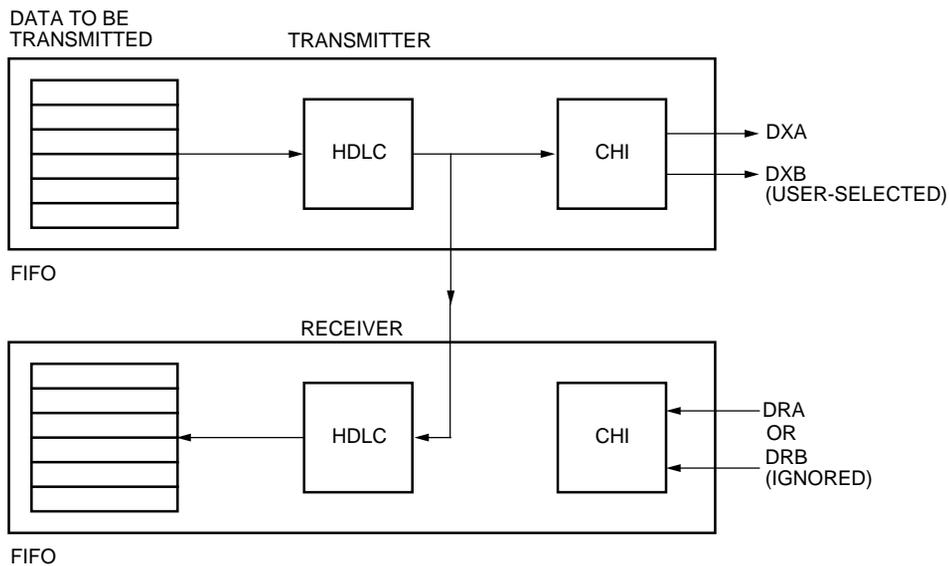
The T7121 is a dedicated HDLC controller suitable for ISDN BRI and PRI applications. The device connects serial time-division-multiplexed (TDM) communications links, carrying HDLC bit-synchronous data frames, to 8-bit microcomputer systems. The 7121's TDM link is a user-programmable, full-duplex interface called the concentration highway interface or CHI (pronounced Kī). The device communicates with the system microprocessor as a memory-mapped peripheral and is controlled by the reading and writing of internal registers. The chip can be instructed to interrupt the microprocessor when it detects certain events requiring microprocessor attention. The HDLC transmitter and receiver are each buffered with a 64-byte FIFO, therefore reducing the number of status polls or interrupts to be processed by the microprocessor, improving overall system efficiency and performance.



5-5027a (C)

Figure 1. T7121 Block Diagram

## Application Diagram



5-5036

Figure 2. T7121 Local Loopback Mode

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