

UART 1-CH 5V 44-Pin PLCC Tube**Manufacturer:** [Texas Instruments, Inc](#)**Package/Case:** PLCC44**Product Type:** Drivers**RoHS:** RoHS Compliant/Lead free **Lifecycle:** Active

Images are for reference only

[Inquiry](#)**General Description**

The TL16C450 is a CMOS version of an asynchronous communications element (ACE). It typically functions in a microcomputer system as a serial input/output interface.

The TL16C450 performs serial-to-parallel conversion on data received from a peripheral device or modem and parallel-to-serial conversion on data received from its CPU. The CPU can read and report on the status of the ACE at any point in the ACE's operation. Reported status information includes the type of transfer operation in progress, the status of the operation, and any error conditions encountered.

The TL16C450 ACE includes a programmable, on-board, baud rate generator. This generator is capable of dividing a reference clock input by divisors from 1 to (216 - 1) and producing a 16× clock for driving the internal transmitter logic. Provisions are included to use this 16× clock to drive the receiver logic. Also included in the ACE is a complete modem control capability and a processor interrupt system that may be software tailored to the user's requirements to minimize the computing required to handle the communications link.

Key Features

Programmable Baud Rate Generator Allows Division of Any Input Reference Clock by 1 to (216 -1) and Generates an Internal 16× Clock

Full Double Buffering Eliminates the Need for Precise Synchronization

Standard Asynchronous Communication Bits (Start, Stop, and Parity) Added or Deleted to or From the Serial Data Stream

Independent Receiver Clock Input

Transmit, Receive, Line Status, and Data Set Interrupts Independently Controlled

Fully Programmable Serial Interface Characteristics:

5-, 6-, 7-, or 8-Bit Characters

Even-, Odd-, or No-Parity Bit Generation and Detection

1-, 1 1/2-, or 2-Stop Bit Generation

Baud Generation (dc to 256 Kbit/s)

False Start Bit Detection

Complete Status Reporting Capabilities

3-State TTL Drive Capabilities for Bidirectional Data Bus and Control Bus

Line Break Generation and Detection

Internal Diagnostic Capabilities:

Loopback Controls for Communications Link Fault Isolation

Break, Parity, Overrun, Framing Error Simulation

Fully Prioritized Interrupt System Controls

Modem Control Functions (CTS\, RTS\, DSR\, DTR\, RI\, and DCD\)

Easily Interfaces to Most Popular Microprocessors

Faster Plug-In Replacement for National Semiconductor NS16C450



Recommended For You

TLV320AIC23BIPWR

Texas Instruments, Inc
TSSOP28

TLV320AIC3104IRHBR

Texas Instruments, Inc
QFN32

TL16C554AIPN

Texas Instruments, Inc
LQFP80

TLV320AIC3101IRHBR

Texas Instruments, Inc
QFN32

TL16C554APN

Texas Instruments, Inc
LQFP80

TLV320AIC24KIPFBR

Texas Instruments, Inc
TQFP-48

TL16C554PN

Texas Instruments, Inc
QFP

TLV320AIC24KIPFB

Texas Instruments, Inc
TQFP-48

TL16C752BLPIREP

Texas Instruments, Inc
LQFP-48

TL16C550DIPFBR

Texas Instruments, Inc
48-TQFP

TLC320AC01CFN

Texas Instruments, Inc
PLCC28

TL16C552AFN

Texas Instruments, Inc
PLCC

TL16C554FN

Texas Instruments, Inc
PLCC

TLV320AIC311RHBR

Texas Instruments, Inc
VQFN32

TLV320AIC3100IRHBR

Texas Instruments, Inc
QFN32