


UART 4-CH 65byte FIFO 1.8V/2.5V/3.3V/5V 64-Pin LQFP

Tray

Manufacturer:	Texas Instruments, Inc
Package/Case:	LQFP-64
Product Type:	Drivers
RoHS:	RoHS Compliant/Lead free 
Lifecycle:	Active



Images are for reference only

[Inquiry](#)

General Description

The '754C is a quad universal asynchronous receiver transmitter (UART) with 64-byte FIFOs, automatic hardware and software flow control, and data rates up to 3 Mbps. It incorporates the functionality of four UARTs, each UART having its own register set and FIFOs. The four UARTs share only the data bus interface and clock source, otherwise they operate independently. Another name for the UART function is Asynchronous Communications Element (ACE), and these terms are used interchangeably. The bulk of this document describes the behavior of each ACE, with the understanding that four such devices are incorporated into the '754C. The '754C offers enhanced features. It has a transmission control register (TCR) that stores received FIFO threshold level to start or stop transmission during hardware and software flow control. With the FIFO RDY register, the software gets the status of TXRDY/RXRDY for all four ports in one access. On-chip status registers provide the user with error indications, operational status, and modem interface control. System interrupts may be tailored to meet user requirements. An internal loopback capability allows onboard diagnostics.

Each UART transmits data sent to it from the peripheral 8-bit bus on the TX signal and receives characters on the RX signal. Characters can be programmed to be 5, 6, 7, or 8 bits. The UART has a 64-byte receive FIFO and transmit FIFO and can be programmed to interrupt at different trigger levels. The UART generates its own desired baud rate based upon a programmable divisor and its input clock. It can transmit even, odd, or no parity and 1-, 1.5-, or 2-stop bits. The receiver can detect break, idle or framing errors, FIFO overflow, and parity errors. The transmitter can detect FIFO underflow. The UART also contains a software interface for modem control operations, and software flow control and hardware flow control capabilities.

The '754C is available in a 64-pin TQFP PM package. RXRDY and TXRDY functionality is not supported in the TL16C754CPM device.

Key Features

ST16C654/654D Pin Compatible With Additional Enhancements

Support up to:

48-MHz Oscillator Input Clock (3Mbps) for 5-V Operation

32-MHz Oscillator Input Clock (2Mbps) for 3.3-V Operation

24-MHz Input Clock (1.5Mbps) for 2.5-V Operation

16-MHz Input Clock (1Mbps) for 1.8-V Operation

64-Byte Transmit FIFO

64-Byte Receive FIFO With Error Flags

Programmable and Selectable Transmit and Receive FIFO Trigger Levels for DMA and Interrupt Generation

Programmable Receive FIFO Trigger Levels for Software/Hardware Flow Control

Software/Hardware Flow Control

Programmable Xon/Xoff Characters

Programmable Auto-CD)

Infrared Data Association (IrDA) Capability

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

TL16C752BLPTREP

Texas Instruments, Inc

LQFP-48

TL16C550DIPFBR

Texas Instruments, Inc

48-TQFP

TLC320AC01CFN

Texas Instruments, Inc

PLCC28

TL16C552AFN

Texas Instruments, Inc

PLCC

TL16C450FN

Texas Instruments, Inc

PLCC44

TL16C554FN

Texas Instruments, Inc

PLCC

TLV320AIC311RHBR

Texas Instruments, Inc

VQFN32