

## Product Bulletin

# The High-Performance UART Product Family

As an industry-leading supplier of universal asynchronous receiver/transmitters (UARTs), Texas Instruments provides products designed to improve a system's performance and meet the needs of next-generation applications. TI's portfolio features highly-integrated

parallel-to-serial and serial-to-parallel UARTs that are able to perform under even the toughest conditions. These conditions include meeting the increased demands placed on a system while reducing its space and power requirements. Space-saving configurations allow improved system

### Key Features

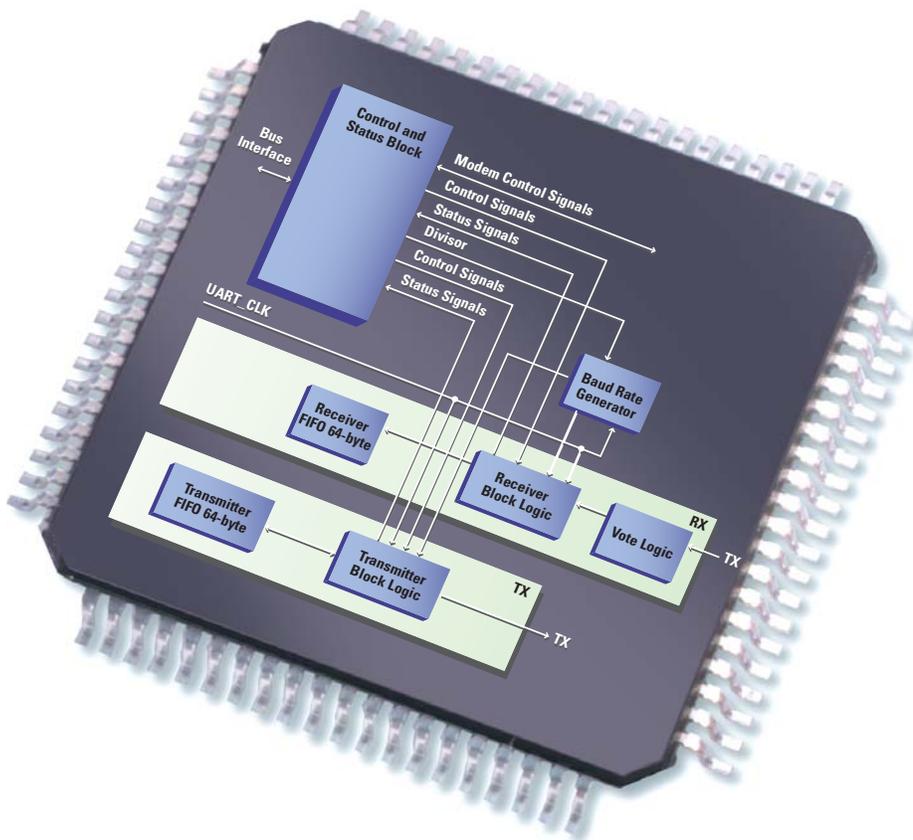
- Single-, dual- and quad-channel devices available
- Hardware and software auto-flow control
- Programmable sleep mode and low-power mode
- Industrial temperature characterization available
- Choice of 5-V, 3.3-V, 2.5-V or 1.8-V supply

performance while conserving valuable board space. By supporting operating voltages down to 1.8 V, TI's UART product family is capable of taking care of even the most power-demanding applications.

TI's high-performance UARTs are ideal for many applications including telecommunications, gaming, point-of-sale (POS) terminals, mobile computing, industrial automation, base stations and mobile telephones.

As one of the world's leading high-volume semiconductor manufacturers, TI delivers the resources and industry expertise required to meet your needs. These resources include dedicated marketing and technical support teams around the globe.

TI's vast UART portfolio provides cost-effective solutions for numerous customer applications. They include 16- and 64-byte FIFOs along with single-, dual- and quad-channel devices.



The TL16C754B: TI's high-performance, four-channel UART device.



## UART Selection Guide

Device Name	Description	FIFOs	Package Options	Operating Voltage (V)	Characterized Temperature
TL16C2550	Dual UART with Programmable Auto-RTS and Auto-CTS	16-Byte	32 QFN, 44 PLCC, 48 TQFP	1.8/2.5/3.3/5	-40°C to 85°
TL16C2552	Dual UART with Programmable Auto-RTS and Auto-CTS	16-Byte	32 QFN, 44 PLCC	1.8/2.5/3.3/5	-40°C to 85°C
TL16C2752	Dual UART with Customizable Trigger Levels	64-Byte	44 PLCC	1.8/2.5/3.3/5	-40°C to 85°C
TL16C450	Single UART	None	40 DIP, 44 PLCC	5	0°C to 70°C
TL16C451	Single UART with Parallel Port	None	68 PLCC	5	0°C to 70°C
L16C452	Dual UART with Parallel Port	None	68 PLCC	5	0°C to 70°C
TL16C550C	Single UART with Hardware Autoflow Control	16-Byte	40 DIP, 44 PLCC 48 LQFP, 48 TQFP	3.3/5	-40°C to 85°C
TL16C550D	Single UART with Hardware Autoflow Control	16-Byte	32 QFN 48 LQFP, 48 TQFP	2.5/3.3/5	-40°C to 85°C
L16C552A	Dual UART with Parallel Port	16-Byte	68 PLCC, 80 TQFP	5	-40°C to 85°C
TL16C554A	Quad UART with Hardware Autoflow Control	16-Byte	68 PLCC, 80 LQFP	5	-40°C to 85°C
TL16C750	Single UART with Hardware Autoflow Control, Low-Power Modes	16/64-Byte	44 PLCC, 64 LQFP	5	-40°C to 85°C
TL16C752B	Dual UART with Hardware Autoflow Control, Low-Power Modes	64-Byte	48 LQFP, 48 TQFP	3.3	-40°C to 85°C
TL16C754B	Dual UART with Hardware Autoflow Control, Low-Power Modes	64-Byte	68 PLCC, 80 LQFP	3.3/5	40°C to 85°C
TL16PC564B/BLV	Single UART with PCMCIA Interface	16/64-Byte	100 BGA, 100 LQFP	3.3/5	0°C to 70°C
TL16PIR552	Dual UART with Selectable IR and 1284 Modes	16-Byte	80 QFP	5	0°C to 70°C

## IrDA Selection Guide

Device Name	Description	Data Rate Max (Kbps)	IrDA Standard
TIR1000	Stand-alone IrDA Encoder and Decoder	115	1.0

# TI Worldwide Technical Support

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