



Catalog Product Number: ST16C580IQ48-F

UART with 16-Byte FIFOs and Infrared (IrDA) Encoder/Decoder

Features:

- Pin to pin and functionally compatible to the Industry Standard 16550
- 1.5 Mbps transmit/receive operation (24MHz)
- 16 byte transmit FIFO
- 16 byte receive FIFO with error flags
- Automatic hardware/software flow control
- Programmable Xon/Xoff characters
- Independent transmit and receive control
- Software selectable Baud Rate Generator pre-scaleable clock rates of 1X or 4X
- Four selectable transmit/receive FIFO interrupt trigger levels
- Standard modem interface or Infrared IrDA encode/decoder interface
- Sleep mode (200mA stand-by)
- Low operating current (1.2mA typ.)
- Pb-Free, RoHS Compliant Versions Offered

Applications:

- Battery Operated Electronics
- Internet Appliances
- Handheld Terminal
- Personal Digital Assistants
- Cellular Phones DataPort

Description:

The ST16C580¹ is a universal asynchronous receiver and transmitter (UART) and is pin compatible with the ST16C550 UART. The 580 is an enhanced UART with 16 byte FIFO's, automatic hardware/software flow control and data rates up to 1.5Mbps. Onboard status registers provide the user with error indications and operational status. Modem interface control is included and can be optionally configured to operate with the Infrared (IrDA) encoder/decoder. The system interrupts may be tailored to meet user requirements. An internal loop-back capability allows onboard diagnostics.

The 580 is available in 40 pin PDIP, 44 pin PLCC, and 48 pin TQFP packages. It is fabricated in an advanced CMOS process to achieve low drain power and high speed requirements.

