

DATA SHEET

Communications

XR88C192

AP NOTE GEN UART

Dual UART with 16 Bytes Transmit and Receive FIFO

Features

- Pin to pin and functional compatible to SC26C92
- Enhanced Multidrop mode operation with separate storage for address and data tags (9th bit)
- 16 Bytes transmit/receive FIFO (XR88C192)
- Standard baud rates from 50bps to 230.4kbps
- Non-standard baud rate of up to 1Mbps
- Transmit and Receive trigger levels
- Watch dog timer
- Programmable clock source for receiver and transmitter of each channel
- Single interrupt output
- 7 Multipurpose inputs
- 8 Multipurpose outputs
- 3.3 or 5 volts operation
- Various Loopback modes
- Programmable character lengths (5, 6, 7, 8)
- Parity, framing, and over run error detection
- Programmable 16-bit timer/counter
- On-chip crystal oscillator
- TTL compatible inputs, outputs
- Power down mode

The XR88C192 is a Dual Universal Asynchronous Receiver and Transmitter with 16 bytes transmit and receive FIFO. The XR88C192 is a pin and functional replacement for the SC26C92 and an improved version of the Philips SCC2692 UART with additional features. The operating speed of the receiver and transmitter can be selected independently from a table of twenty four fixed baud rates, a 16X clock derived from a programmable counter/timer, or an external 1X or 16X clock.

The baud rate generator and counter/timer can operate directly from a crystal or from external clock input. The XR88C192 provides a power-down mode in which the oscillator is stopped but the register contents are retained. The XR88C192 is fabricated in an advanced CMOS process to achieve low power and high speed requirements.