

PRODUCT BRIEF

PI7C9X794

8BIT Bus® Quad UART I/O Bridge

The PI7C9X794 is a 1.62V to 3.6V quad Universal Asynchronous Receiver and Transmitter(UART) with 5V tolerant serial (modem) inputs. The highly integrated device is designed for high bandwidth requirement in communication systems. The global interrupt source register provides a complete interrupt status indication for all 4 channels to speed up interrupt parsing. Each UART has its own 16C550 compatible set of configuration registers, TX and RX FIFOs of 64 bytes, fully programmable transmit and receive FIFO trigger levels, TX and RX FIFO level counters, automatic RTS/CTS or DTR/DSR hardware flow control with programmable hysteresis, automatic software(Xon/Xoff) flow control, RS-485 half-duplex direction control, and auto address detection, Intel or Motorola bus interface and sleep mode with a wake-up indicator.

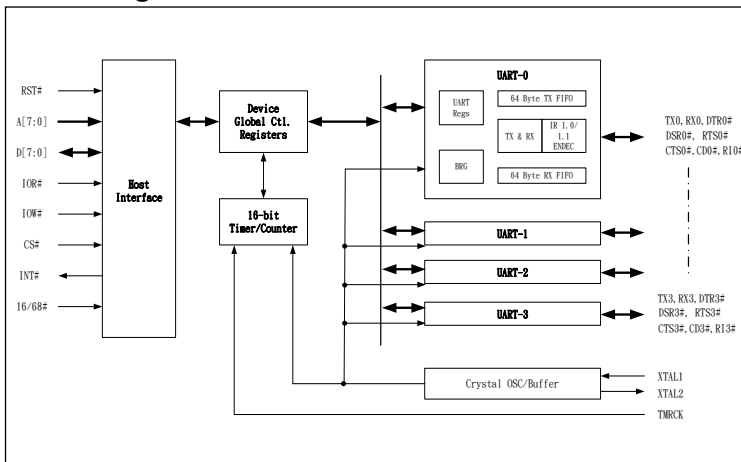
Applications

- ➔ Remote Access Servers
- ➔ Ethernet Network to Serial Ports
- ➔ Factory Automation and Process Control
- ➔ Instrumentation
- ➔ Multi-port RS-232/ RS-422/ RS-485 Cards
- ➔ Point-of-Sale Systems (PoS)
- ➔ Industrial Control (IPC)
- ➔ Gaming Machines
- ➔ Building Automation
- ➔ Embedded Systems
- ➔ Network Management

Software support

- ➔ PI7C9X794 Programming guide
- ➔ PI7C9X794 Sample code
- ➔ PI7C9X794 implementation guide

Block Diagram



Features

- ➔ 1.62V to 3.6V with 5V tolerant serial inputs
- ➔ Single Interrupt output for all 4 UARTs
- ➔ A Global Interrupt Source Register for all 4 UARTs
- ➔ Simultaneous Initialization of all UART channels
- ➔ A General Purpose Command-drive 16-bit Timer/counter
- ➔ Sleep Mode with Wake-up indication
- ➔ Highly integrated device for space saving
- ➔ Each UART is independently controlled with:
 - 16C550 Compatible 5G register set
 - 64-byte transmit and receive FIFOs
 - Transmit and Receive FIFO level counters
 - Programmable TX and RX FIFO trigger level
 - Automatic RTS/CTS or DTR/DSR flow control
 - Automatic Xon/Xoff software flow control
 - RS485 HDX Control output
 - RS485 auto address detection
 - Infrared (IrDA 1.0/1.1) Data encoder/decoder
 - Programmable data rate with prescaler
- ➔ Up to 8Mbps serial data rate with 64MHz external clock input
- ➔ Crystal oscillator(up to 24MHz) or external clock(up to 80MHz) input
- ➔ Built in Power-On-Reset circuit

Order Information

Part Number	Package	PB-Free& Green	Temperature
PI7C9X794FCEX	LQFP-64	YES	-40°C TO 85°C
PI7C9X794FC_P17C9X752FAEVB	Board	Evaluation Board for PI7C9X794FC	

*Note:

- Thermal characteristics can be found on the company web site at www.pericom.com/packaging
- E= Pb-free and Green
- X suffix =Tape/Ree