

Preliminary Information

UART WITH 128 BYTES OF FIFO AND INFRARED ENCODER/DECODER

DESCRIPTION

The XR16C850 is a universal asynchronous receiver and transmitter with 128 bytes of transmit and receive FIFO. It include transmit/receive FIFO counters to increase data loading and unloading from controling CPU. A programmable baud rate generator is provided to select transmit and receive clock rates from 50 Bps to 1.5 Mbps.

The XR16C850 is an improved version of the ST16C650 UART with deeper FIFO, user programmable transmit and receive trigger levels, FIFO count buffer, and support for RS485 half duplex operation. Included is complete MODEM control capability, and a processor interrupt system that may be software tailored to the user's requirements. The XR16C850 provides internal loop-back capability for on board diagnostic testing. The XR16C850 is fabricated in an advanced CMOS process to achieve low drain power and high speed requirements.

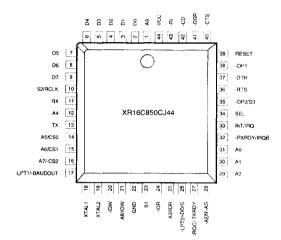
FEATURES

- Pin to pin and functional compatible to ST16C550, ST16C650
- Transmit/receive FIFO counters
- 128 bytes of Transmit/Receive FIFO
- Software/Hardware flow control
- Programmable Xon/Xoff characters
- Sleep mode (200µA stand-by)
- Programmable, selectable Transmit/Receive trigger levels
- RS485 half duplex direction support
- · Infrared receive and transmit encoder/decoder
- Standard and PC mode interface with address decoder

ORDERING INFORMATION

Part number	Pin	Package	Operating temperature
XR16C850CJ44	44	PLCC	0° C to + 70° C
XR16C850CP40	40	PDIP	0° C to + 70° C
XR16C850CQ48	48	TQFP	0° C to + 70° C
XR16C850IJ44	44	PLCC	-40° C to + 85° C
XR16C850IP40	40	PDIP	-40° C to + 85° C
XR16C850IQ48	48	TQFP	-40° C to + 85° C

PLCC Package



Plastic-Dip Package

D0			40 VCC
D1	2		39 -RI
D2	3		38 -CD
D3	4		37 -DSR
D4	5		36 -CTS
D5	6		35 RESET
D6	7		34 -OP1
D7	В	240	33 -DTR
RCLK	9	900	32 -RTS
RX	10	XR16C850CP40	31 -OP2
TX	11	416(30 INT
CS0	12	×	29 -RXRDY
CS1	. 13		28 A0
-CS2	14		27 A1
BAUDOUT	15		26 A2
XTAL1	16		25 -AS
XTAL2	17		24 -TXRDY
-IOW	[18]		23 -DDI*
łOW	19		22 IOR
GND	20		21 JOR