UART 1-CH 128byte FIFO 2.5V/3.3V 24-Pin TQFN EP
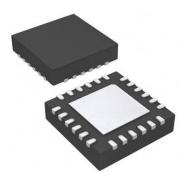
Manufacturer:	Maxim Integrated
Package/Case:	TQFN24
Product Type:	Drivers
RoHS:	RoHS Compliant/Lead free
Lifecycle:	Active

Images are for reference only

Inquiry

General Description

The MAX14830 is an advanced quad universal asynchronous receiver-transmitter (UART), each UART having 128 words of receive and transmit first-in/first-out (FIFO) and a high-speed serial peripheral interface (SPI) or I2C controller interface. A PLL and fractional baud-rate generators allow a high degree of flexibility in baud-rate programming and reference clock selection.

Each of the four UARTs is selected by in-band SPI/I2C addressing. Logic-level translation on the transceiver and controller interfaces allows ease of interfacing to microcontrollers, FPGAs, and transceivers that are powered by differing supply voltages.

Extensive features simplify transceiver control in half-duplex communication applications. The MAX14830 features the ability to synchronize the start of individual UART's transmission by SPI-based triggering. On-board timers allow programming of delays between transmitters as well as clock generation on GPIOs.

The 128-word FIFOs have advanced FIFO control reducing host processor data flow management.

The MAX14830 is available in a 48-pin TQFN (7mm × 7mm) package and is specified to operate over the extended -40°C to +85°C temperature range.

Key Features

Supply voltage range is 2.35V to 3.6V

Operating temperature range from -40°C to 85°C

Bridges an SPI/MICROWIRE or I2C microprocessor bus to an asynchronous interface

SIR and MIR compliant IrDA encoder/decoder, line noise indication ensures data link integrity

Integrated internal oscillator eliminates an external oscillator, integrated PLL and divider

Fast data rates allow maximum system flexibility across interface standards, 24Mbps (max) data rate

Fractional baud-rate generator, SPI up to 26MHz clock rate

Deep, 128 word buffer and automated control features help offload activity on microcontroller

Application

Airplane Communication Buses

Industrial Control Systems

IO-Link Master Controllers

Medical Systems

Point-of-Sales Systems

Programmable Logic Controllers (PLC)

Recommended For You

MAX232ESE+

Maxim Integrated

SOP16

MAX14830ETM+

Maxim Integrated

TQFN48

MAX483ESA+

Maxim Integrated

SOP8

MAX232ACSE+T

Maxim Integrated

SOP-16

MAX6675ISA+T

Maxim Integrated

SOP-8

MAX7300AAX+

Maxim Integrated

SSOP-36

MAX485CPA+

Maxim Integrated

DIP8

MAX232CSE+

Maxim Integrated

SOP16

MAX3100EEE+

Maxim Integrated

SSOP16

MAX31855KASA+

Maxim Integrated

SOP-8

MAX22246CAWA+

Maxim Integrated

SOP-8

MAX3140CEI+

Maxim Integrated

SSOP28

MAX9860ETG+T

Maxim Integrated

TQFN-24

MAX3344EEUE+

Maxim Integrated

TSSOP-16

MAX9180EXT

Maxim Integrated

SC70-6