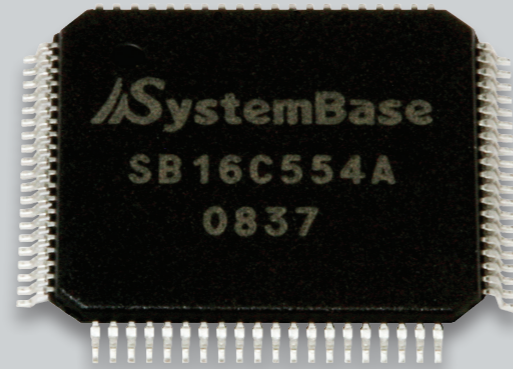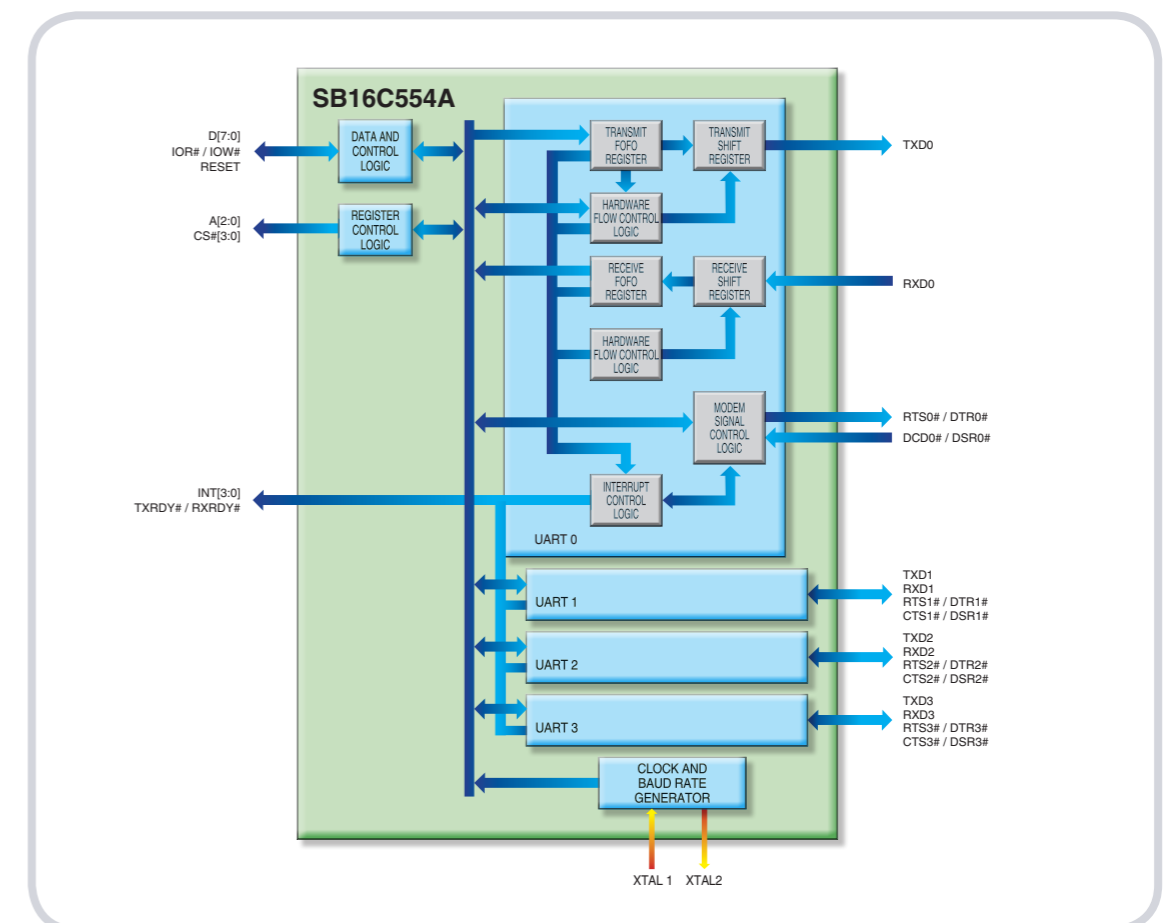# SB16C554A

Quad UART with 16-Byte TX/RX FIFOs

» Main Features

- 16-Byte Tx/Rx FIFOs
- Data Rate up to 5.3Mbps
- H/W flow control (Auto-RTS and Auto-CTS)
- pin-to-pin compatibility with TI's TL16C554A

Features

- Integrated Four Improved SB16C550A UART
- In the FIFO mode, Each channel's transmitter and receiver is buffered with 16-byte FIFO to reduce the number of interrupts to CPU.
- Adds or deletes standard asynchronous communication bits(start, stop, parity) to or from the serial data.
- Holding Register and Shift Register eliminate needs for the precise synchronization between the CPU and serial data.
- Independently controlled transmit, receive, line status and data interrupts.
- Programmable Baud Rate Generators which allow division of any input reference clock by 1 to $2^{16}-1$ and generated an internal 16x clock.
- Modem control functions (RTS#, CTS#, DTR#, DSR#, DCD# and RI#)
- Independent receiver clock input.
- Fully programmable serial interface characteristics.
  - 5, 6, 7 or 8 bit characters.
  - Even, Odd, No parity bit
  - 1, 1.5, 2 Stop bit generation.
  - Like other general UARTs, SB16C554A checks one stop bit, no matter how many they are.
- False start bit detection and Generates or Detects Line Break.
- Internal diagnostic capabilities : Loopback controls for communication link Fault isolation.
- Fully prioritized interrupt system controls.
- Programmable Auto-RTS# and Auto-CTS#
- CTS# Controls Transmitter in Auto-CTS# Mode
- RCV FIFO Contents and Threshold Control RTS# in Auto-RTS# Mode
- 3.3V Operation
- 80-pin TQFP, 68-pin PLCC, 64-pin TQFP Packages

Block Diagram

Application

- Multi-port RS-232/RS-422/RS-485 Cards
- Remote Access Servers
- Factory Automation and Process Control
- Ethernet Network to Serial Ports
- Network Management
- Point-of-Sale Systems

Ordering Information

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Part Number	SB16C554A-TQ	SB16C554A-LQ	SB16C554A-PL
Package	80-pin TQFP	64-pin LQFP	68-pin PLCC
Operating Temperature Range	-20˚C to +85˚C	-20˚C to +85˚C	-20˚C to +85˚C
Device Status	Active	Active	Active

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