

SCI Datasheet

Serial Communications Interface

Overview

- This IP is nine independent serial communications interface (SCI) channels. The SCI consists of the SCIlg module (SCI0 to SCI7) and the SCIlh module (SCI12).

Key Features

- Serial communication modes
 - Asynchronous
 - Clock synchronous
 - Smart card interface
 - Simple I2C-bus
 - Simple SPI bus
- Transfer speed : Bit rate specifiable with the on-chip baud rate generator.
- Full-duplex communications
 - Transmitter: Continuous transmission possible using double-buffer structure.
 - Receiver: Continuous reception possible using double-buffer structure.
- Data transfer : Selectable as LSB first or MSB first transfer.
- Interrupt sources
 - Transmit end, transmit data empty, receive data full, and receive error
 - Completion of generation of a start condition, restart condition, or stop condition (for simple I2C mode)

Block diagram

