Dual UART with I²C-Bus/SPI Interface, 64 Bs of Transmit and Receive FIFOs, IrDA SIR Built-In Support

SC16IS752_SC16IS762

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The SC16IS752/SC16IS762 is an I²C-bus/SPI bus interface to a dual-channel high performance UART offering data rates up to 5 Mbit/s, low operating and sleeping current; it also provides the application with 8 additional programmable I/O pins. The device comes in very small HVQFN32 and TSSOP28 packages, which makes it ideally suitable for hand-held, battery-operated applications. This chip enables seamless protocol conversion from I²C-bus/SPI to RS-232/RS-485 and is fully bidirectional.

The SC16IS762 differs from the SC16IS752 in that it supports SPI clock speeds up to 15 Mbit/s instead of the 4 Mbit/s supported by the SC16IS752, and in that it supports IrDA SIR up to 1.152 Mbit/s. In all other aspects, the SC16IS762 is functionally and electrically the same as the SC16IS752.

The SC16IS752/SC16IS762's internal register set is backward compatible with the widely used and widely popular 16C450. This allows the software to be easily written or ported from another platform.

The SC16IS752/SC16IS762 also provides additional advanced features such as auto hardware and software flow control, automatic RS-485 support and software reset. This allows the software to reset the UART at any moment, independent of the hardware reset signal.

SC16IS752IBS, SC16IS752IPW, SC16IS762IBS, SC16IS762IPW Block Diagram Block Diagram
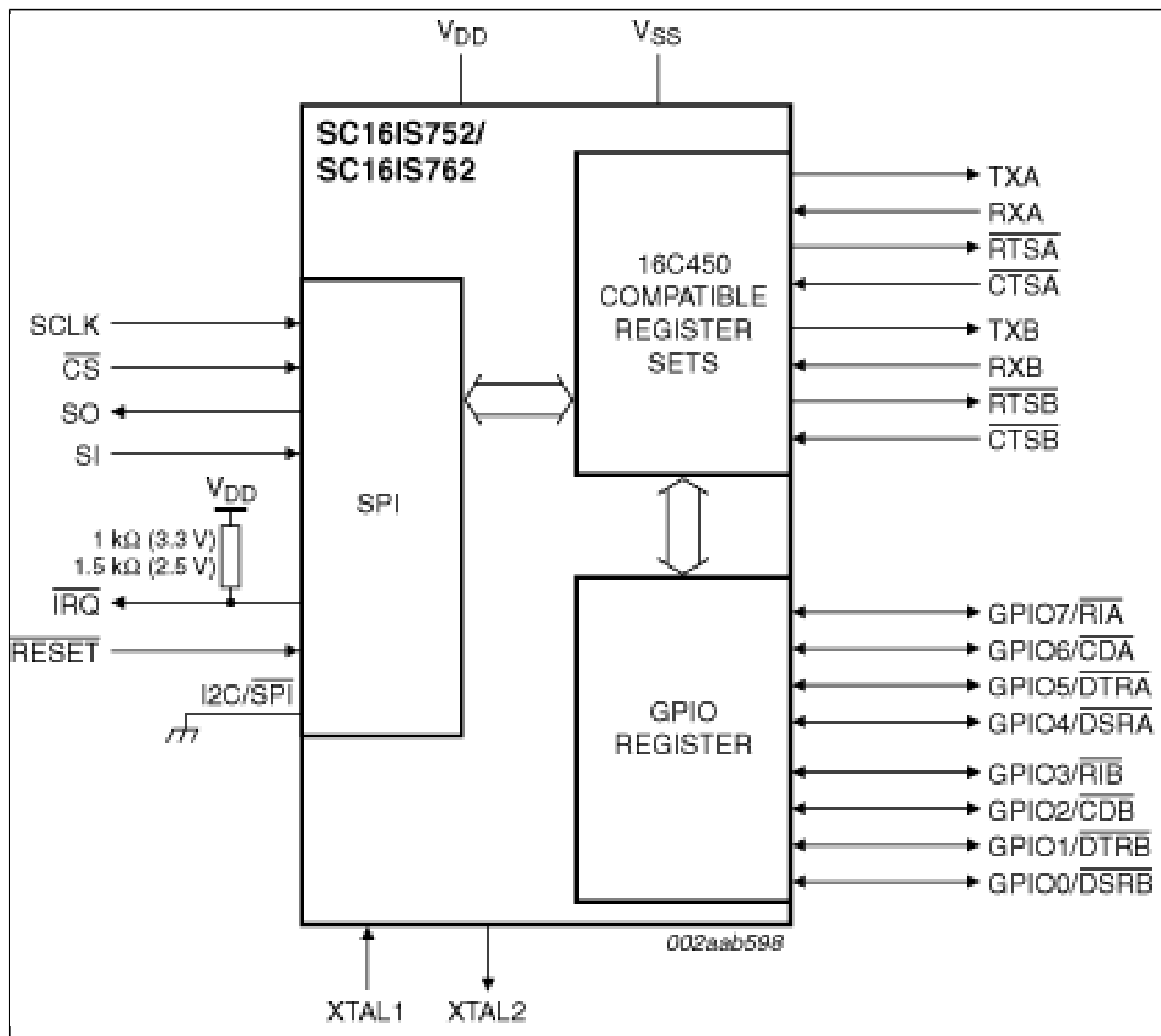
Block diagram: SC16IS752IBS, SC16IS752IPW, SC16IS762IBS, SC16IS762IPW Block Diagram
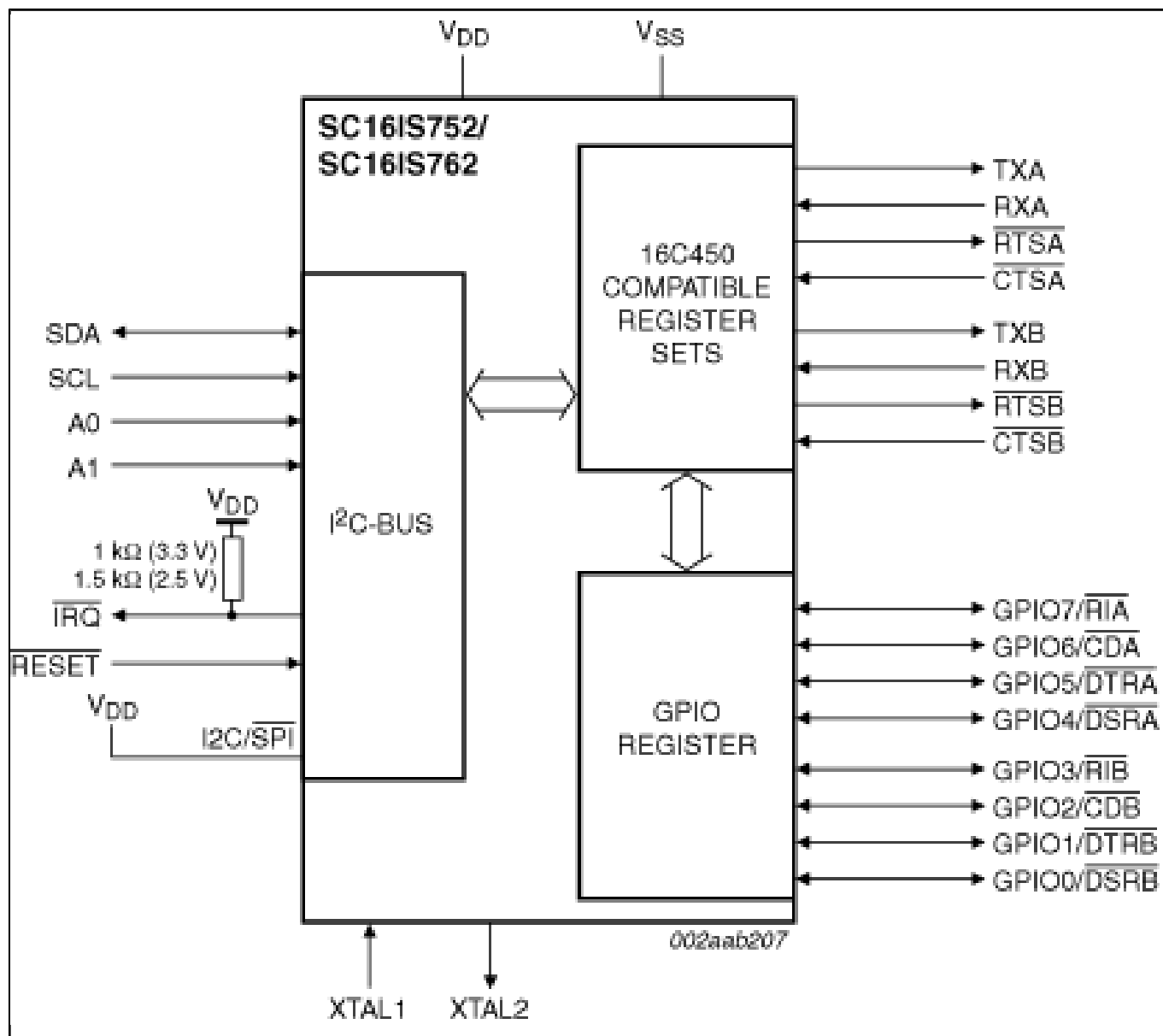
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Note: The information on this document is subject to change without notice.