



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

SC16IS740_750_760

Last Updated: Oct 13, 2023

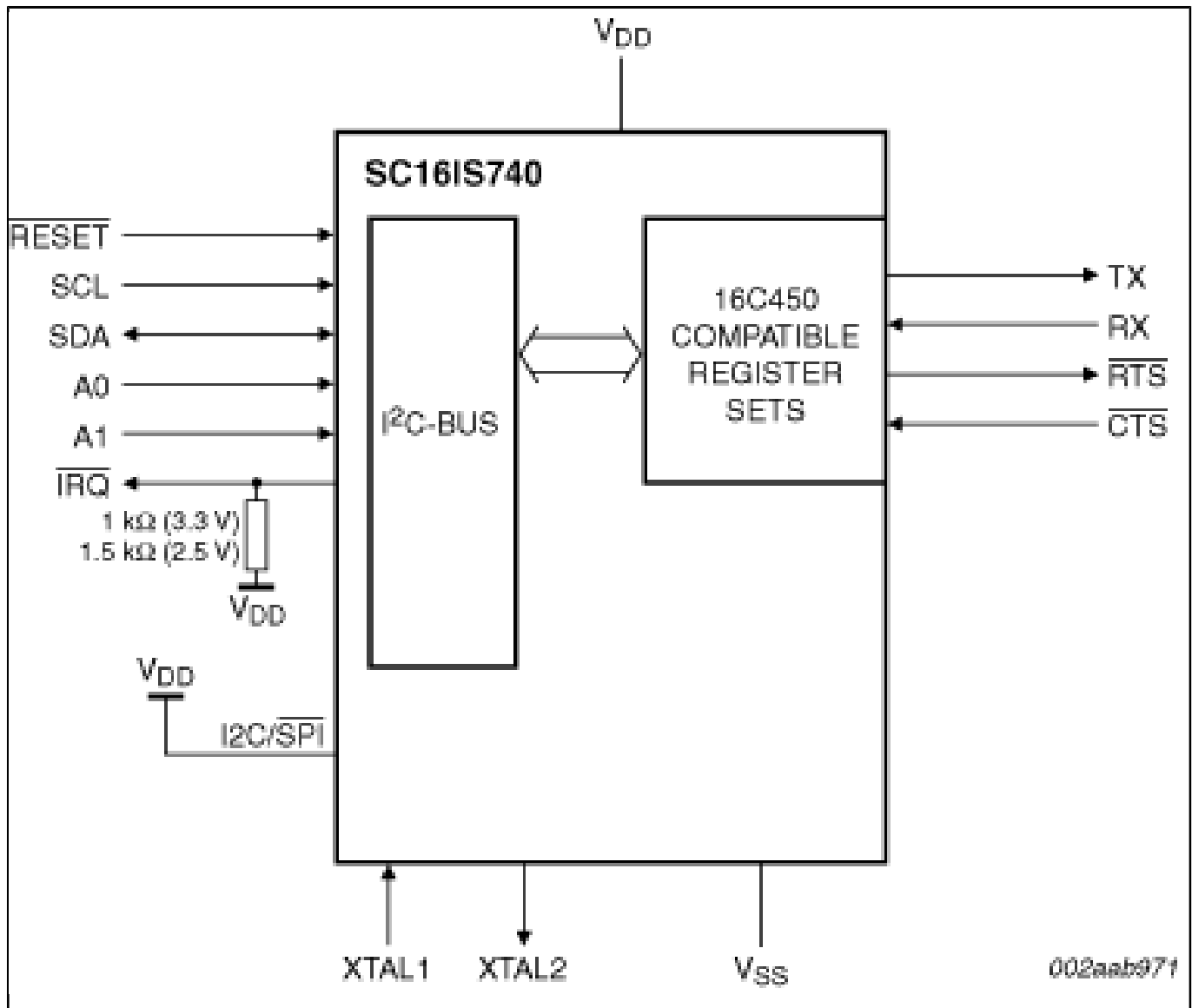
The SC16IS740/750/760 is a follower I²C-bus/SPI interface to a single-channel high performance UART. It offers data rates up to 5 Mbit/s and guarantees low operating and sleeping current. The SC16IS750 and SC16IS760 also provide the application with 8 additional programmable I/O pins. The device comes in very small HVQFN24, TSSOP24 (SC16IS750/760) and TSSOP16 (SC16IS740) packages, which makes it ideally suitable for handheld, battery operated applications. This family of products enables seamless protocol conversion from I²C-bus or SPI to and RS-232/RS-485 and are fully bidirectional.

The SC16IS760 differs from the SC16IS750 in that it supports SPI clock speeds up to 15 Mbit/s instead of the 4 Mbit/s supported by the SC16IS750, and in that it supports IrDA SIR up to 1.152 Mbit/s. In all other aspects, the SC16IS760 is functionally and electrically the same as the SC16IS750. The SC16IS740 is functionally and electrically identical to the SC16IS750, with the exception of the programmable I/O pins which are only present on the SC16IS750.

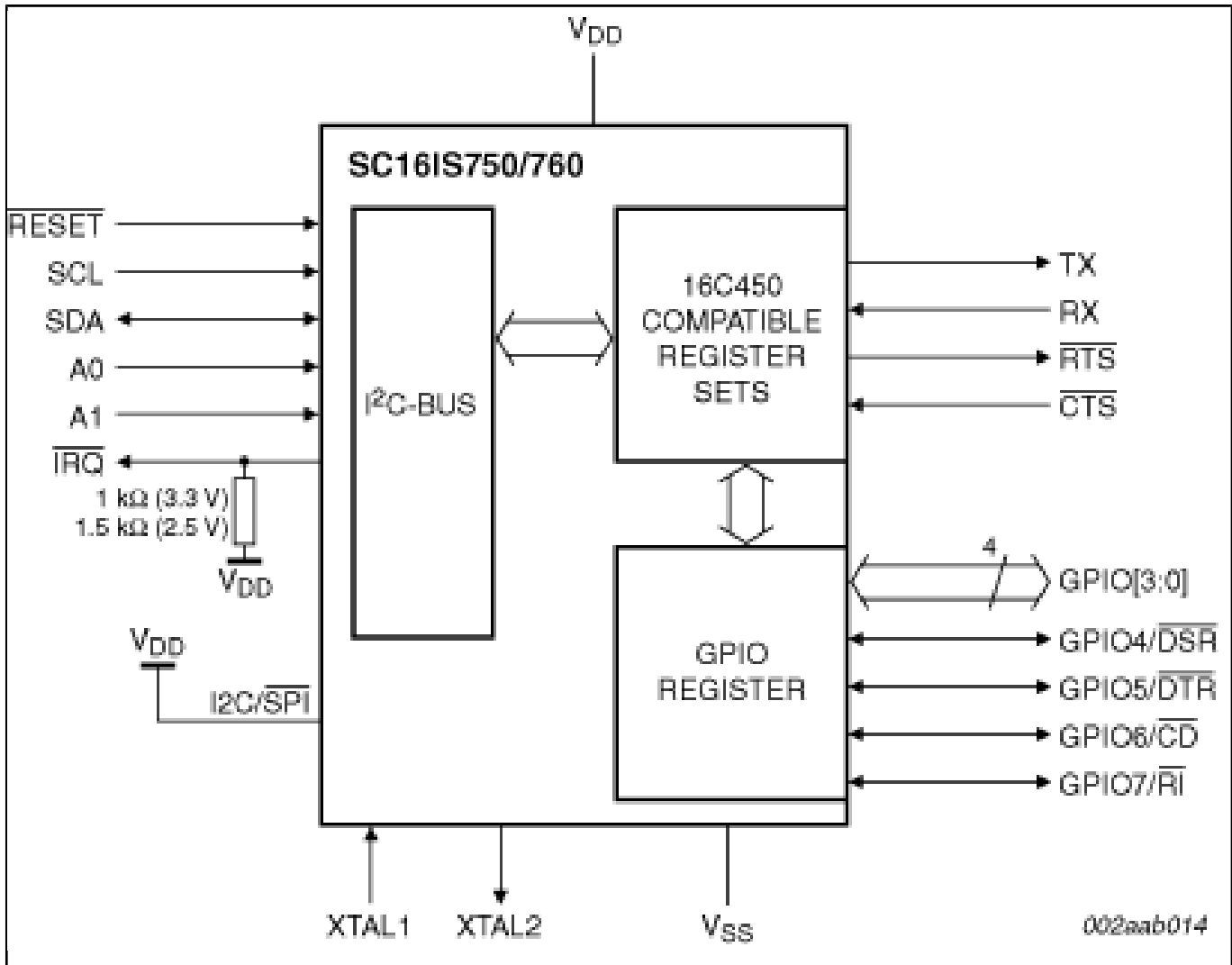
The SC16IS740/750/760's internal register set is backward-compatible with the widely used and widely popular 16C450. This allows the software to be easily written or ported from another platform.

The SC16IS740/750/760 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.

Block diagram: SC16IS740IPW, SC16IS750IBS, SC16IS750IPW, SC16IS760IBS, SC16IS760IPW Block Diagram



Block diagram: SC16IS740IPW, SC16IS750IBS, SC16IS750IPW, SC16IS760IBS, SC16IS760IPW Block Diagram



View additional information for [Single UART with I²C-Bus/SPI Interface, 64 Bs of Transmit and Receive FIFOs, IrDA SIR Built-In Support](#).

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