APPLICATION NOTE

ABSTRACT
This application note shows how a SC16C752 (or SC16C752B) or a SC16C2550 (or SC16C2550B) can be connected to an ISA bus. This application note is also applicable to all Philips SC16C products.

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SC16C752/SC16C752B/ SC16C2550/SC16C2550B ISA bus hardware interface example

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This application note shows how a SC16C752 or a SC16C2550 can be connected to an ISA bus.

The two channels of the UART are hardwired to the following addresses:

CH A $\rightarrow$ 3F8 – 3F0
CH B $\rightarrow$ 2F8 – 2F0

Hardware interrupt for each channel can be selected by JP1 and JP2. The following interrupts are supported: IRQ3, IRQ4, IR5, IRQ6, and IRQ7.

In an environment where the interrupt lines must be shared by other source, $\overline{\text{OP2A}}$ or $\overline{\text{OP2B}}$ can be used to drive a 3-State driver output enable. The input of this 3-State driver is connected to the UART's interrupt output, and the output of this 3-State is connected to the system's interrupt signal. This 3-State driver can be enabled/disabled by writing to MCR register bit 3.

SC16C752/SC16C752B/SC16C2550/SC16C2550B
ISA bus hardware interface example

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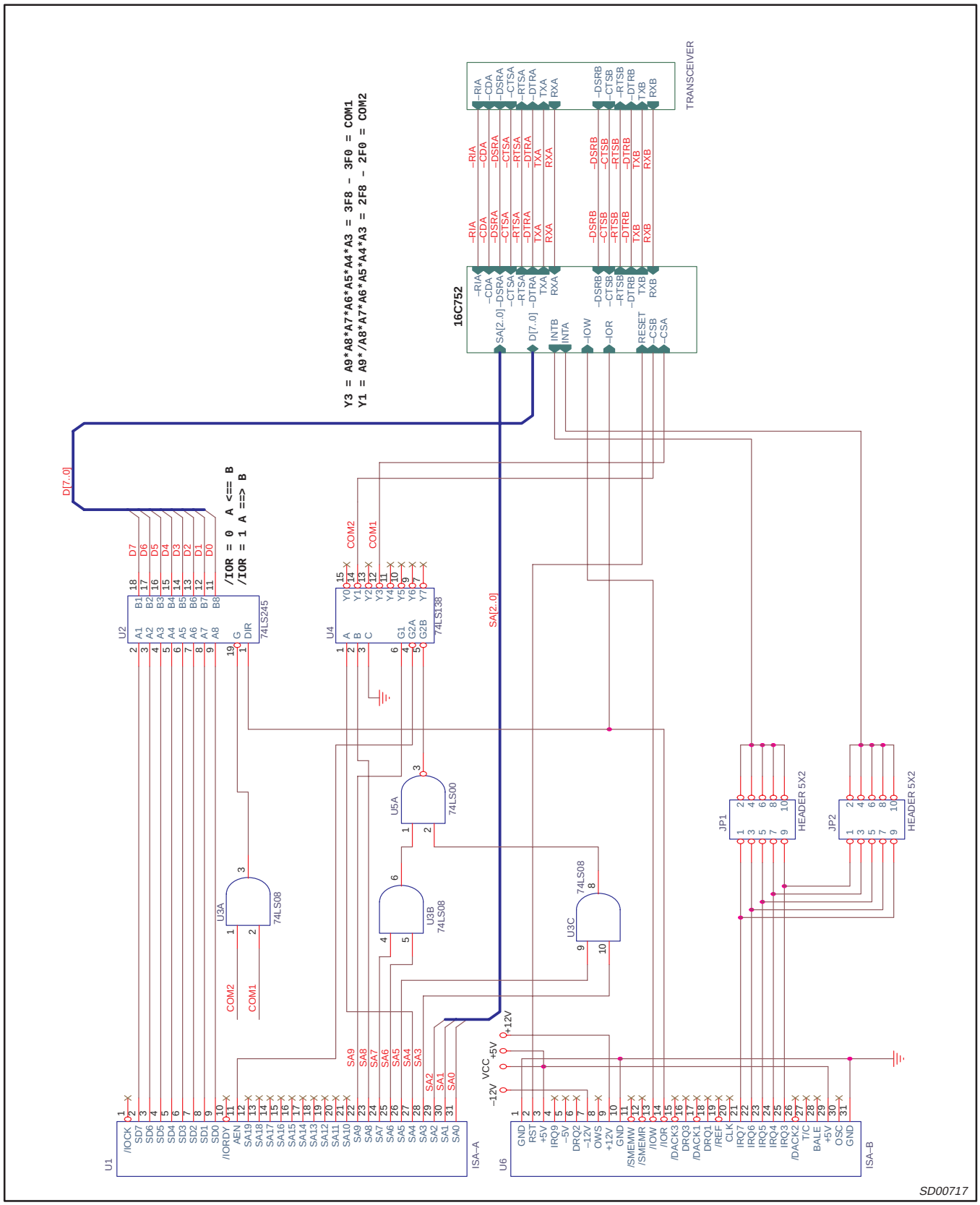

Figure 1.

SC16C752/SC16C752B/SC16C2550/SC16C2550B ISA bus hardware interface example

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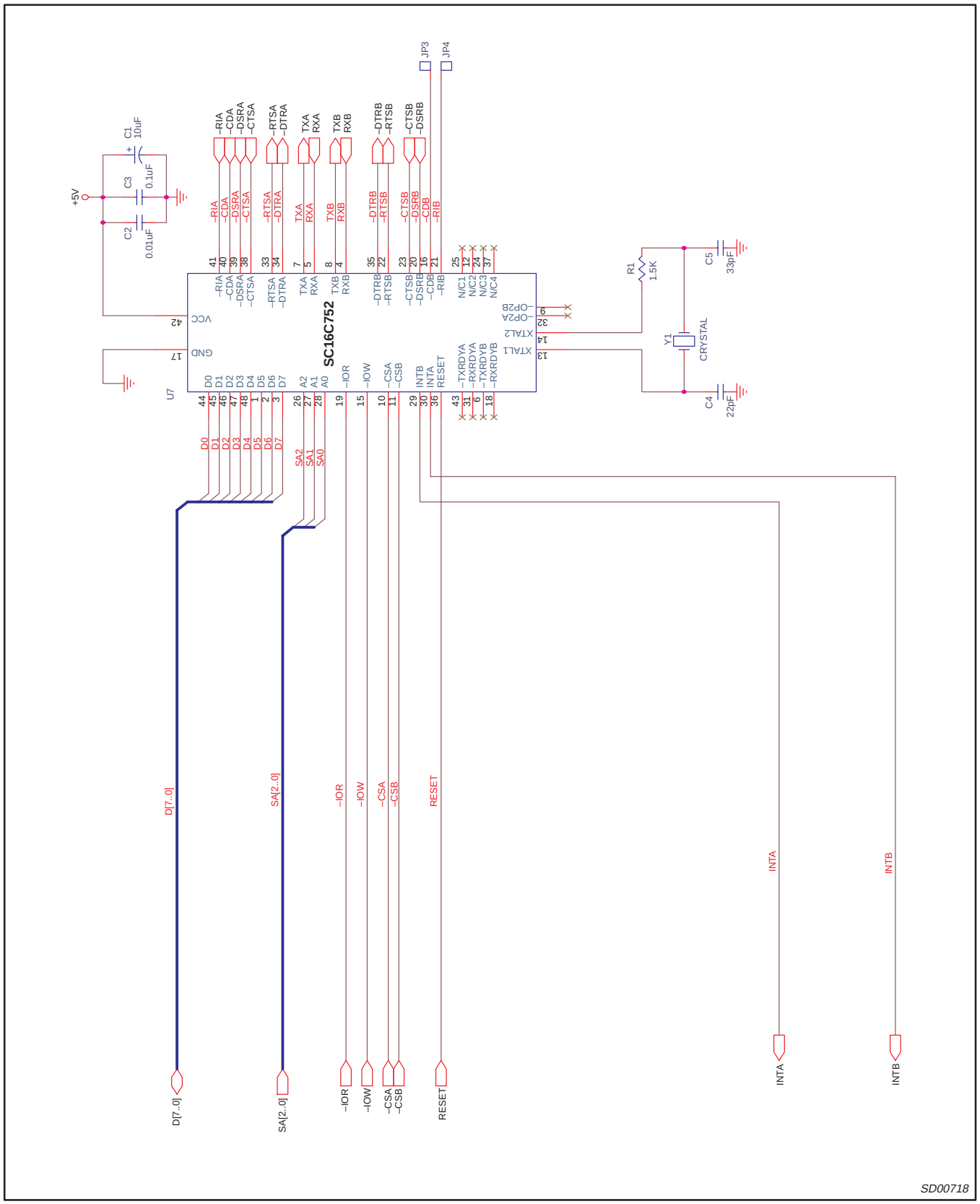

Figure 2.

SC16C752/SC16C752B/SC16C2550/SC16C2550B ISA bus hardware interface example

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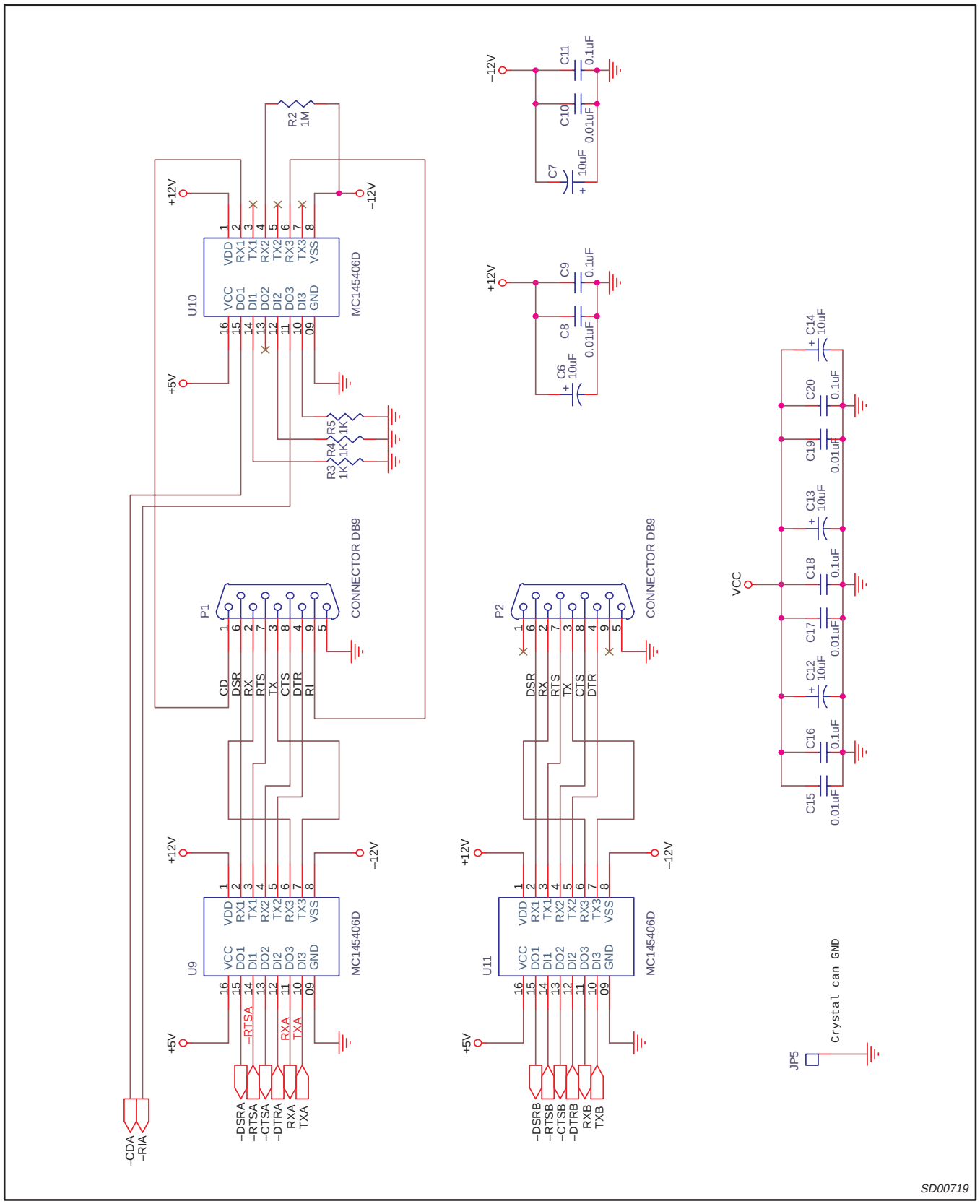

Figure 3.

SC16C752/SC16C752B/SC16C2550/SC16C2550B ISA bus hardware interface example

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REVISION HISTORY

Rev	Date	Description
_2	20040625	**Application note (9397 750 13517). Supersedes data of 04 Sep 2003 (9397 750 11996).** Modifications: ● Added part-types SC16C752B and SC16C2550B to title. ● 'Abstract' modified to include references to SC16C752B and SC16C2550B.
_1	20030904	**Application note, initial version (9397 750 11996).**

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