

Reset Example for the NS32GX32

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Reset Example for the NS32GX32

The NS32GX32 provides support for applications spanning a wide range. From real-time controllers to highly sophisticated multi-processor systems. This Application Brief describes two different basic reset circuits for resetting the NS32GX32. The same circuits can be used for the NS32532.

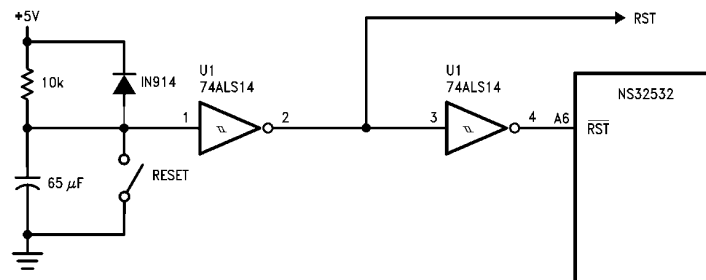
Figure 1 shows an asynchronous reset circuit for use in an application with a single processor. Figure 2 shows a synchronous reset circuit for use in an application with multiple processors.

A pair of Schmitt triggered inverters can be used with a 650 ms RC time constant.

Note: For system power sources with slower rise times, a longer RC time constant may be required. Refer to the NS32532 or NS32GX32 data-sheet for the RST input signal requirements.

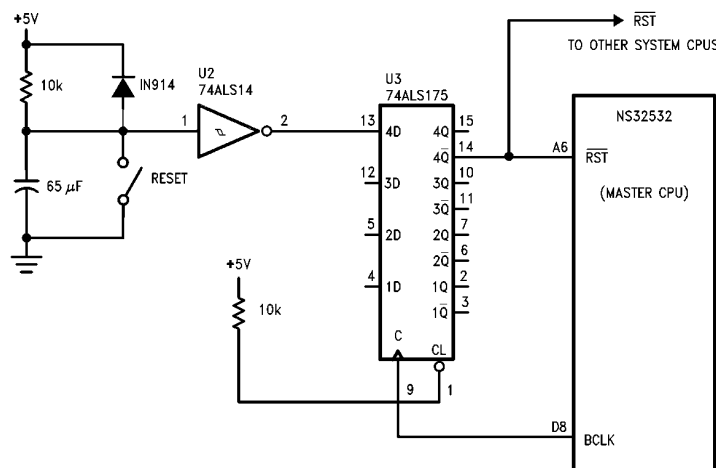
It is necessary to synchronize reset with the rising edge of the master processor BCLK signal.

Figure 3 shows the worst case timing when using the NS32GX32 at 30 MHz.



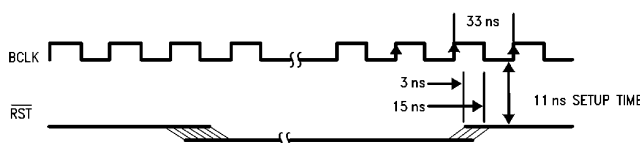
TL/EE/10352-1

FIGURE 1. Reset for a Single NS32GX32



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FIGURE 2. Reset for a Lock-Step NS32GX32 Multiprocessor Application



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FIGURE 3. Worst Case Timing at 30 MHz

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