

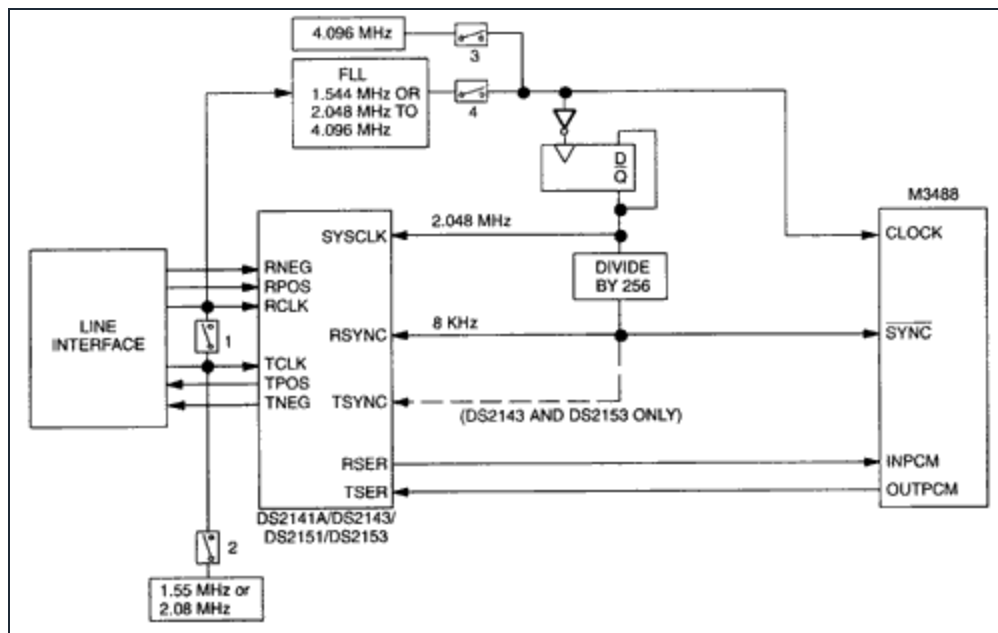
Keywords: DS2141A, DS2143, DS2151, DS2153, interface, SGS-Thomson, M3488, loop, loop-time

## APPLICATION NOTE 308

# DS2141A, DS2143, DS2151 and DS2153 Interfacing to the SGS-Thomson M3488

May 04, 2001

*Abstract: This application note describes how the DS2141A, DS2143, DS2151, and DS2153 interface to the SGS-Thomson M3488. Also shown are waveforms and timing diagrams of the different pins that are used for interfacing with M3488.*



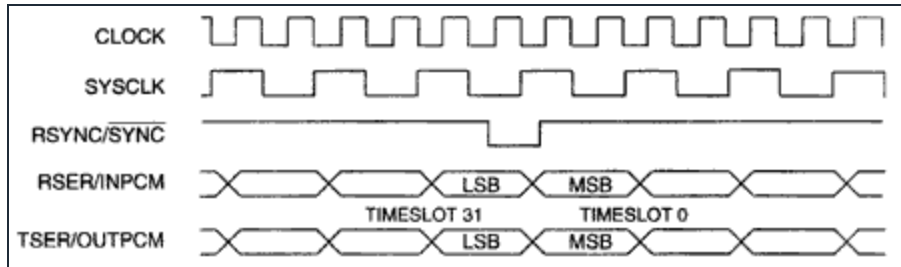
## Notes:

1. The DS2141A and DS2151 are set up with both the receive and transmit elastic stores enabled; the DS2143 and DS2153 only need the receive side elastic store enabled.
2. The RSYNC pin is programmed to be an input; the TSYNC pin is programmed to be an output on the DS2141, DS2151 and an input on the DS2143, DS2153.
3. The SYSCLK is set for 2.048 MHz operation.
4. The elastic stores provide controlled slip operation.
5. In "looped-timed" applications, close switch 1 and open switch 2.
6. In applications that cannot handle controlled slips, close switches 1 and 4 and open switches 2 and

3.

7. In DS2151 and DS2153 applications, the line interface function is included onboard the device.

8. Timing between the devices is shown below:



#### Related Parts

<a href="#">DS2141A</a>	T1 Controller
<a href="#">DS2143</a>	E1 Controller

#### More Information

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