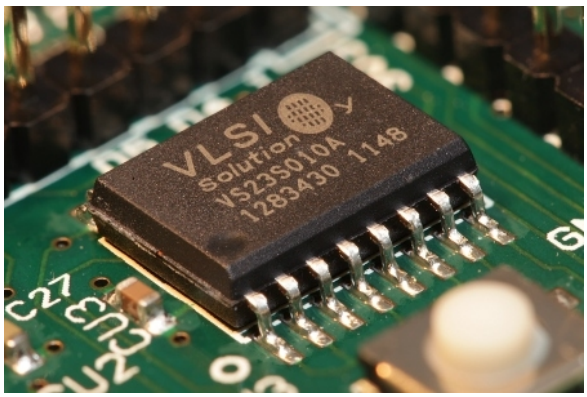
VS23S010 – 1 Mbit Versatile SPI / 8-Bit Parallel Bus SRAM

Tampere, Finland, 21th June 2012 - VLSI Solution announces availability of VS23S010, a versatile SPI SRAM device with the largest capacity on the market.



The VLSI Solution VS23S010 is an easy to use one megabit static RAM device. The memory can be accessed via a standard SPI compatible serial bus (1, 2 and 4-bit modes), or via an 8080-type 8-bit parallel bus similar to nand flash devices.

One of the main applications for the VS23S010 is microcontroller RAM extension. Internet streaming applications, which are becoming increasingly popular, will benefit from the large buffer memory provided by VS23S010. For an example of usage, please see VLSI's internet streaming presentation at http://www.vlsi.fi/fileadmin/presentations/vlsi/Internet_streaming.pdf .

In addition to being used purely as a memory storage device the VS23S010 also contains a pattern generation logic. When VS23S010's RAM is accessed through the SPI bus, it can simultaneously output a repeating memory data pattern through four of its parallel bus pins. This feature significantly reduces the computing requirement of a microcontroller for applications that require periodic output from the memory, such as a video frame buffer.

The VS23S010 is operated from a single voltage with an unforeseen flexible voltage range from 1.5V up to 3.6V. This feature together with the standard 4-wire SPI interface and an industrial temperature range (-40 ... +85°C) makes the device both reliable and easy to use for any application requiring additional RAM.

The SPI interface supports single, dual and quad I/O. All of these I/O modes can further support byte-based or sequential byte transfer modes. SPI operation is fast: in quad mode the whole 131,072 x 8-bit memory can be written in 262,176 clock cycles. Using the maximum 36MHz SPI clock the write time of the entire memory is less than 7.3ms.

The VS23S010 is offered in SOIC-16 (300mil) RoHS compatible package.

More information is available at http://www.vlsi.fi/en/products/vs23s010.html .

The datasheet is available at http://www.vlsi.fi/fileadmin/datasheets/vlsi/vs23s010.pdf .

The budgetary volume price of VS23S010 is $0.99. A request for engineering samples can be placed at http://www.vlsi.fi/samples/vs23s010 .

About VLSI Solution

VLSI Solution is an innovative new technology creator that designs and manufactures integrated circuits. Within its over 20 years of existence VLSI has built an extensive in-house IP library and has the capability to pull through complicated mixed-signal IC projects, ranging from digital audio to RF applications.

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