

## VS1010 - MP3 and DSP Microcontroller System-on-a-Chip

Tampere, Finland, 25th November 2016 - VLSI Solution, an expert in digital audio, announces the VS1010 MP3 Audio DSP Microcontroller, a versatile and highly integrated all-in-one system-on-a-chip.

VS1010 is a highly integrated and costefficient MP3 player System-on-a-Chip, expected to cost less than 2 US\$ in volumes (including the MP3 license).

VS1010's firmware is based on the same VSOS operating system powering the VS1005, allowing the same ease of modifying and programming.

Expected applications for VS1010 are SD Card or USB host MP3 players, UART or SPI controlled MP3 coprocessors, USB DACs, audio guides, players with pre-loaded content, and toys. VS1010's streamlined interfaces makes



it an ideal, MP3-capable upgrade for e.g. VLSI's VS1000 System-on-a-Chip. It can also replace systems containing a microcontroller and VS1011 or VS1003.

VS1010's I/O system includes support for Hi-speed USB (both host and device operations are supported), SD/SDHC cards, 2xSPI, MEMS microphones, S/PDIF, I2S, 2xUART, RTC clock, SAR inputs, a PWM output, GPIOs. It also contains a 24-bit stereo DAC and an integrated earphone amplifier with a dynamic range of 100 dB(A).

VS1010 runs VLSI Solution's VSOS operating system that provides a command line interface that makes testing and combining applications and drivers a quick task. For those who want to program the VS1010, VLSI Solution's Integrated Development Environment VSIDE is available for free. Most of VS1010's apps and drivers will be available in both binary and source code formats as VSIDE Solutions.

Evaluation boards for selected projects will be available in Q1/2017, samples in Q2/2017, preproduction quantities in Q3/2017, and mass production quantities in Q4/2017.

VS1010 is available in LFGA-88 8x8x0.9 mm RoHS compatible package. A stripped down version is available in LQFP-48 7x7x1.4 mm RoHS compatible package.

More information is available at

http://www.vlsi.fi/en/products/vs1010.html http://www.vlsi.fi/en/products/vs1010mcu.html

## **About VLSI Solution**

VLSI Solution, a pioneer in audio decoding, designs and manufactures versatile, customizable DSP-based mixed-signal ICs for audio applications including audio encoding and decoding. Within its quarter of a century of existence VLSI has built an extensive inhouse IP library and has the capability to pull through complicated mixed-signal IC projects, ranging from digital audio to RF applications. <a href="http://www.vlsi.fi/">http://www.vlsi.fi/</a>



## VS1010 Block Diagram

