

Description

The ZL38015 is a four channel Voice-Processor hardware platform designed to support advanced voice and digital signal processing applications available from Zarlink Semiconductor. The ZL38015 platform integrates Zarlink's Voice Processor (ZVP) DSP Core with a number of internal peripherals including: 2 PCM ports, a 2048 tap Filter Co-processor, 2 Auxiliary Timers and a Watchdog Timer, 9 GPIO pins, UART, Slave SPI and Master SPI ports and a master/slave timing block.

The firmware products and manuals available at the release of this data sheet is the ZLS38233: 4 Channel Voice Echo Canceller (VEC) with integrated DTMF Transceiver (Tx/Rx). If these applications do not meet your requirements, please contact your local Zarlink Sales Office for the latest firmware releases.

1.0 Functional Description

The ZL38015 is a hardware platform designed to support advanced voice processing applications available from Zarlink Semiconductor. These applications are resident in external memory and are down-loaded by the ZL38015 resident boot code during initialization.

The firmware products and manuals available at the release of this data sheet is the ZLS38233: 4 Channel Voice Echo Canceller with DTMF Transceiver.

The ZL38015 platform integrates Zarlink's Voice Processor (ZVP) DSP Core with a number of internal peripherals. These peripherals include the following:

- Two PCM ports - ST BUS, GCI, McBSP or SSI operation
- A 2048 tap Filter Co-processor (LMS, FIR and FAP realizations)
- Two Auxiliary Timers and a Watchdog Timer
- 11 GPIO pins
- A UART interface
- A Slave SPI port and a Master SPI port
- A timing block that supports master and slave operation
- An IEEE - 1149.1 compatible JTAG port

The DSP Core can process up to four 8-bit voice channels, two 16-bit voice channels or two 8-bit and one 16-bit voice channel.



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