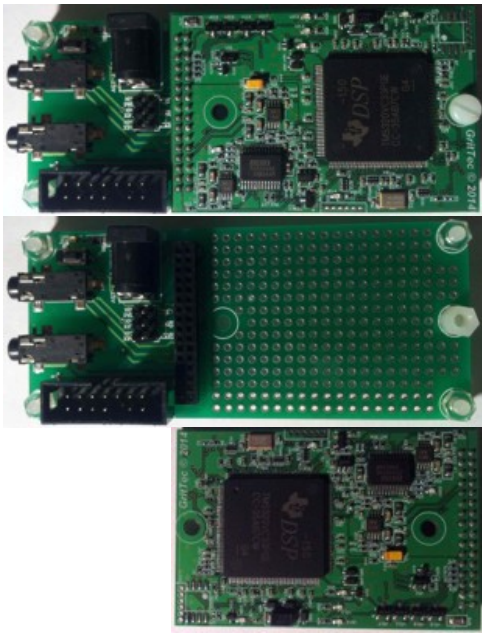
m-board-vc33 Audio DSP Board on the base of TI TMS320VC33 DSP

Overview



'm-board-vc33' Audio DSP board is intended for designing and debugging DSP algorithms. Current DSP board is useful for developers to quickly debugging of DSP algorithms and audio processes with float-point operations.
DSP board consists of two parts: general board and mother board, see fig.
General board is used to perform DSP code of developer on the base of TI TMS320VC33 processor, loaded from the boot loader. General board has completely functionality that allows to use it for integration into hardware solutions of third parties.
Mother board is used for debugging general board with JTAG emulator and connecting of audio input/output connectors with stereo 3.5 mm. jacks.
'm-board-vc33' Audio DSP board is completely compatible with all debugging tools for TI TMS320VC33 DSP processor.

Applications:

- Mobile and stationary radio systems;
- VOIP telephony;
- Real time systems for audio processing of speech signals.

Hardware Features:

- TI DSP TMS320VC33: 32-bits, 150 MFLOPS, 150 MHz (75 MIPS), float-point operations;
- Memory: 1Mb external SRAM, 256Kbit Non-Volatile FeRAM™ Boot Memory;
- Audio: PCM3003 stereo codec (16/20 bits data, 4-48 kHz Sampling rate);
- Linear audio input, audio output with stereo 3.5 mm. jacks;
- On board IEEE 1149.1 JTAG connection for optional emulator debug;
- Connector for connection the general board and mother board;
- LEDs of power and user;
- RESET button on the mother board;
- Power source: DC 5... 15 V;
- Power: 1 W;
- Size of general board (LxWxH): 60x40x9 mm.;
- Size of mother board (LxWxH): 90x40x12 mm.;
- Temperature: 0 ... +40 C;
- Weight of general board: 30 g.;
- Weight of mother board: 50 g..

What's included:

- General board with TI TMS320VC33 DSP;
- Mother board for debugging;
- Software SDK with testing projects under TI Code Composer Studio (CCS) ver.4.1;
- Firmware code with active noise cancellation (GritTec's Noise Cancellation);
- Technical Reference (includes schematics).

Do you need:

- DC power: 5... 15 V;
- TI Code Composer Studio (CCS) ver.4.1 (C3x-C4x);
- SAU510-USB (SAU510-USB ISO PLUS) JTAG Emulator.

Terms of delivery:

- Checking functionality;
- The warranty period of supporting: 3 months.

About GritTec

GritTec Laboratory (GritTec Ltd.) specializes on research and development of algorithms and technologies in the field of speech and audio processing. GritTec's research is focused on speech enhancement, speech concealment, voice biometric, speech recognition, speech synthesis and other speech and audio technologies.

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