G.722.1 on TMS320C64X+ Version 2.00.00.000

Release Notes

January 2012

The ITU G.722.1 is the codec for wideband and super wideband speech. It is a low complexity encoder and decoder that may be used for 7KHz or 14KHz bandwidth audio signals. Encoder takes linear PCM input signals (14, 15, or 16 bit 2's compliment) sampled at 16/32KHz sampling rate and encodes using Modulated Lapped Transform (MLT) technology to give 24kbps or 32kbps bit rates for wideband speech and 24kbps or 32kbps or 48kbps for super wideband speech. Decoder expands encoded bit stream into linear PCM samples.

Salient features of this product are described below.

- Bit Compliant with ITU-T G.722.1 specifications
- Optimized for TI C64X+ DSP
- C callable interface for encoder and decoder
- Re-entrant multi channel implementation
- eXpressDSP™ compliant
- Codec operates at 20ms frames
- Fully interruptible Code
- Supports ITU-T G.722.1 Appendix IV Packet Loss Concealment (PLC)
- Relocatable tables
- The implementation support run time data buffers relocation
- Fully validated on TMS320C6455 DSK, using CCS version 4.2 with the code generation tools version 7.2.0A10197
- This release supports Little Endian and Big Endian Mode of operation
- This release supports both ELF and COFF formats
- This codec can be used on any of the C6x based platforms such as DM644x, DM646x, OMAP3530, DM648, C6455, C674x, C64x+ and C66x.

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1 New In This Release

- This release supports ELF format.
- Both ELF and COFF Libraries are validated on TMS320C6455 DSK using Code Composer Studio 4.2 and Code Generations Tools version 7.2.0A10197

2 System Requirements

Refer to section 1.1.2 of G7221_XDAIS_UserManual_C64xplus.doc

3 Building G.722.1 on TMS320C64X+

Refer to chapter 2.5 of G7221_XDAIS_UserManual_C64Xplus.doc

4 Release Contents

Refer to chapter 2.3 of G7221_XDAIS_UserManual_C64Xplus.doc

5 Fixed In This Release

None

6 Known Issues

None