

Overview

NatureDSP MELP – is a real-time implementation of the MELP (Mixed-Excitation Linear Predictive) Federal Standard 2400 bps speech coder, suitable for use by OEM customers for VoIP, telecom, military and government, and other low bit-rate compressed speech applications.

MELP is robust in difficult background noise environments such as those frequently encountered in commercial and military communication systems.

Features

- coding rate 2400 kbps
- automatic in-band synchronization
- sampling rate 8 kHz
- 16-bit linear signal input
- C-callable program interface
- Multi-channel capable
- **demo available** for target and PC

Applications

- Software Defined Radio
- Digital radio
- VoIP
- Military

Specifications

Function	MIPS consumption (C64xx)	Program Memory	Constants	Data Memory
Encode	12	49 kbytes	17.1 kbytes	4690 bytes
Decode	6	34 kbytes	15.5 kbytes	2850 bytes
Encode+decode	18	62 kbytes	17.6 kbytes	7540 bytes

Availability

This software package is available in binaries and in source code written on fully portable C-language for:

- Texas Instruments TMS320C64xx, DaVinci
- MS Windows
- Other platforms upon request

Evaluation version for PC and C64xx is available upon request. The product is supplied with test environment and integration example code.