

NatureDSP G.726 ADPCM Voice Codec

Overview

G.726 – 16/24/32/40 kbit/sec ADPCM voice codec ITU-T G.726 recommendation. It can be used in a wide range of applications such as multimedia devices, visual telephony, wireless telephony and videoconferencing products.

Features

- coding rates 16, 24, 32 and 40 kbps
- A-law, μ-law and 14-bit PCM interfaces
- Sampling rate 8 kHz
- C-callable program interface
- Linux kernel mode compatible
- The encoder and decoder meet all ITU G.726 compliance and interoperability requirements.

Applications

- VoIP
- Telephony

Specifications

PLATFORM	MIPS consumption
Texas Instruments C64, DSP/BIOS	
Encoder	2.5
Decoder	3.0
Texas Instruments C64+, DSP/BIOS	
Encoder	2.4
Decoder	3.0
ARM9E, GCC, Linux	
Encoder 16 / 24 / 32 / 40	8.4 / 8.3 / 8.4 / 8.7
Decoder 16 / 24 / 32 / 40	7.8 / 7.9 / 8.1 / 8.4
ARM11, GCC, Linux	
Encoder 16 / 24 / 32 / 40	6.9 / 6.9 / 7.0 / 7.1
Decoder 16 / 24 / 32 / 40	6.1 / 5.8 / 5.8 / 6.2

Bit exactness proved by ITE

G.726 is delivered with fully automated IntegrIT Testing Environment (ITE) for target platform based on reference ITU-T vectors set along with extended IntegrIT proprietary vectors and methods.

Availability

This software component is available in binary/source code written on fully portable C-language for:

- Texas Instruments C55, C64+, C67, DaVinci
- Marvell Sheeva, Marvell Kirkwood, Marvell Armada
- ARM9E, ARM11
- x86
- Windows/Linux Object Library

Porting on other platforms is upon request