

Overview

G.729.1 – scalable wideband speech and audio coding algorithm operating at 8-32 kbit/s scalable interoperable with G.729, G.729A and G.729B conforming the ITU-T G.729.1 recommendation. The output of the coder has a bandwidth of 50-4000 Hz at 8 and 12 kbit/s and 50-7000 Hz from 14 to 32 kbit/s. At 8 kbit/s, G.729.1 is fully interoperable with G.729, Annex A/G.729 and Annex B/G.729. It can be used in a wide range of applications such as multimedia devices, visual telephony, wireless telephony, and videoconferencing products.

Features

- coding rates 8...32kbps, frame rate 20ms
- maximum algorithmic delay 49 ms
- sampling rate 8 or 16 kHz
- discontinuous transmission (DTX)
- comfort noise generation
- ITU G.729.1 compliant
- ITU G.729, G.729A, G.729B compatible
- Very low stack usage
- Linux/Windows Kernel Mode compatible

Applications

- VoIP
- Telephony

Specifications

Algorithm	MIPS consumption		
	C64xx	ARM9e	ARM11
NB 32K Encoder + Decoder	Call	60	37.5
WB 32K Encoder + Decoder	Call	75	47

Bit exactness proved by ITE

G.729.1 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

- Texas Instruments C64/C67, DaVinci
- ARM9E, ARM11
- x86 Windows/Linux Object Library
- Porting on other platforms is upon request