

SPiRiT G.722 Codec

SPiRiT G.722 conforms to ITU-T G.722 recommendation that specifies speech compression and decompression at rates of 48, 56, or 64 Kbps based on Sub-Band Adaptive Differential Pulse Code Modulation (SB-ADPCM). G.722 SB-ADPCM encoder reduces a bit rate of a uniform digital signal, which is coded using 14-bit with 16 kHz sampling, to 64 kbps (or 56 or 48 kbps). G.722 decoder performs the reverse operation to the encoder. It can be effectively used for audio and speech compression in speech storing, digital circuit multiplication and telephony applications.

Features

- Fully bit exact with ITU-T G.722
- Based on Sub-Band Adaptive Differential Pulse Code Modulation (SB-ADPCM) algorithm
- 3 bitrates supported: 48, 56, or 64 kbps
- Input/output samples format: Linear PCM, 16 kHz, 14 bits.
- 50...7000Hz coding bandwidth
- Sample-by-sample or block based analog input
- Simple application interface
- eXpressDSP compliant. Code is reentrant, supports multithreading and dynamic memory allocation.

Resource Requirements

PLATFORM	TI C64xx		
	Encoder	Decoder	Encoder + Decoder
Peak MIPS	3.1	2.6	5.7
Program Memory, KB	-	-	4.8
Constant Memory, KB	-	-	1.95
Dynamic Memory, KB	-	-	0.4
Stack Memory, KB	-	-	0.4

PLATFORM	ARM 9E
	Encoder + Decoder
Peak MIPS	19.2
Program + Constant Memory, KB	7.62
Dynamic Memory, KB	0.43

The product is supplied with test environment and integration example code.

Detailed Product Annotation and User Guide documents describing testing procedures, interface and integration of this product, as well as PC-based demo are available for evaluation upon request.

Benefits

- Highly optimized code ideal for resource constrained applications
- Easy integration and fast time-to-market

Applications

- VoIP gateways
- Communication devices
- IP-PBX
- VoIP clients

Availability

- ARM9E Now
- TI C64xx Now
- TI OMAP3 Call
- TI C54xx Call
- TI C55xx Call
- DLL for MS Windows

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