SPIRIT DSP
Voice & Video Engine Experts

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.

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

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.

CONTACTS

www.spiritdsp.com
sales@spiritdsp.com

RU & EU:	+7-499-995-23-85	India:	+91-9833-894005	Korea:	+82-17-232-3878
USA:	+1-916-955-4507	China:	+86-136-0192-2495	Singapore:	+65-9380-4061
Japan:	+81-3-6361-8086	Taiwan:	+886-2-2888-1010 ext. 100	Vietnam:	+84-24-3772-7766