Fully Bit Exact With ITU-T G.726
Sample-by-Sample or Block-Based Analog Input
16, 24, 32, or 40 Kbps Bit Stream Rate
A-law, μ-law, and 14-bit Uniform 8-kHz PCM Input/Output
Direct Interface With PCM 8-kHz Sampled Data. Both Sample-by-Sample and Block-Based Processing Supported

Can Process Blocks of Different Lengths
Very Simple Application Interface
Compliant With Texas Instruments (TI) eXpressDSP Standard. Code is Reentrant, Supports Multithreading and Dynamic Memory Allocation
Can be Easily Ported to any Platform

description

The SPIRIT G.726 conforms to ITU-T G.726 recommendation that specifies speech compression and decompression at rates of 16, 24, 32, and 40 Kbps based on Adaptive Differential Pulse Code Modulation (ADPCM). It can be effectively used for speech compression in such applications as speech storing, digital circuit multiplication and telephony applications.

resource requirements (G.726 and G.711)

<table>
<thead>
<tr>
<th>ALGORITHM</th>
<th>MIPS PEAK / AVERAGE</th>
<th>PROGRAM MEMORY (KWORDS)</th>
<th>CONSTANT MEMORY (KWORDS)</th>
<th>DATA MEMORY (KWORDS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Encoder + Decoder</td>
<td>10.8 / 10.4</td>
<td>13.3 / 13</td>
<td>2.2</td>
<td>0.5</td>
</tr>
</tbody>
</table>

availability

The SPIRIT G.726 is available in four forms:
- eXpressDSP compliant object code for TMS320C54x
- Fully functional eXpressDSP evaluation object at extremely low price
- Portable C code
- Assembly code

The algorithm 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 and DSP-based (TI TMS320VC5406 EVM and TMS320VC5402 DSK) demos are available for evaluation upon request. To get additional information on CST software, go to www.spiritDSP.com/CST.

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