Product Overview

G.711 Vocoder

Product Description

GAO’s G.711 vocoder provides a compression /decompression (compounding) algorithm to deliver precision transmissions of encoded speech signals sampled at the rate of 8 kHz in conformance with the ITU G.711 standard. GAO’s G.711 implementation includes independent user-callable functions that perform all of the µ-law and A-law encoding and decoding operations. The most common application for GAO’s G.711 vocoder is in telephone networks.

The G.711 standard uses pulse code modulation (PCM) to compress, decompress, encode, and decode analog speech, which can then be transmitted and received as binary data. Two forms of compounding standards, the µ-law and the A-law, are specified. G.711 µ-law compresses frames of 14-bit linear PCM samples into frames of 8-bit logarithmic PCM code words. G.711 A-law compresses 13-bit linear PCM samples into 8-bit logarithmic PCM code words.

Key Features

- Operates at 64 kbps (standard), 56 kbps, and 48 kbps (non-standard).
- A-law and µ-law encoding and decoding.
- User selectable processing frame size.

Leadership in Embedded Communications Software

With over a decade of experience, GAO leads the embedded communications software market by providing comprehensive modem, fax, speech, and telephony technologies; broad technical expertise; and unsurpassed support to our world-class customers including electronics, communications, and semiconductor companies across the globe. GAO’s software integrates easily with MP3, MPEG, TCP/IP, and most popular real-time operating systems.
Rigorous Testing

GAO’s testing facilities are equipped with state-of-the-art test equipment. Our software is rigorously tested on TAS, Consultronics, Rochelle, Advent and Telegra equipment under various channel models according to the relevant ITU or TIA standards. All GAO’s speech software has passed the test vectors specified by the ITU. Our telephony software meets all appropriate TIA, EIA, BellCore, and Mitel standards.