



GAO Research Inc. Dual -Tone Multi-Frequency (DTMF) Software

GAO Research Inc.

#1 In Embedded Communications Software

<http://www.gaoresearch.com>

Features

- ▶ Fully compliant to EIA / TIA – 464B 6.1.4 and 6.1.5 .1 to 6.1.5.5.
- ▶ User-callable functions.
- ▶ Implemented in assembly and C.
- ▶ Low data and program memory requirements.

Product Description

GAO's DTMF software is an implementation of a Dual-Tone Multi-Frequency (DTMF) generator and decoder. DTMF is an international signaling standard for touch-tone telephones. The DTMF generator generates standard telephone digits as the sum of sinusoids corresponding to a frequency table for each digit. The DTMF decoder will take a digital signal as input and produce the decoded digit. GAO's DTMF software generates and decodes 8 kHz PCM samples. DTMF has a variety of uses in telephone systems. It is widely used in interactive control applications such as telephone banking, electronic mail systems, and many other menu-driven operations that respond to digits entered from a telephone.

GAO DTMF generator and decoder consists of four user-callable functions that perform the generating, decoding, and initialization operations.

Leadership in Embedded Communications Software

With nearly 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. GAO also adheres to stringent quality control procedures, which is reflected in our well structured code, detailed design documentation, and well-defined design and test plans. This ensures ease of integration into the customer's system, easy maintenance, and a smooth upgrade path for next-generation customer products.

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