**EEE4114F: DSP Project Report**

**DTMF Decoder**

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April 3, 2018



# Abstract

Dual-tone Multi-Frequency other wise known as DTMF signals are a standard in telecommunications systems. They correspond to touch tone telephones as well as various keystroke based systems. This is where keystrokes from a keypad are translated to dual tone signals.

Dual-tone Multi-frequency (DTMF) signals are used in touch-tone telephones as well as many other areas such as interactive control, telephone banking, and pager system. As analog telephone lines are converted to digital, researchers became interested in digital DTMF detectors. There are many digital DTMF detecting algorithms, but most of them do not comply with the related International Telecommunications Union (ITU) and Bellcore recommendations or are not suitable for real-time implementation. In this project, my primary aim was to implement the new DTMF algorithm proposed by M. D. Felder, J. M. Mason, and B. L. Evans

# Introduction