

M-8870 DTMF Receiver

- Low power consumption
- Adjustable acquisition and release times
- Central office quality and performance
- Power-down and inhibit modes (-02 and -03 versions)
- Inexpensive 3.58 MHz time base
- Single 5 volt power supply
- Dial tone suppression

The Teltone M-8870 is a full DTMF Receiver that integrates both bandsplit filter and decoder functions into a single 18-pin DIP or SOIC package. Manufactured using CMOS process technology, the M-8870 offers low power consumption (35 mW max) and precise data handling. Its filter section uses switched capacitor technology for both the high and low group filters and for dial tone rejection. Its decoder uses digital counting techniques to detect and decode all 16 DTMF tone pairs into a 4-bit code. External component count is minimized by provision of an on-chip differential input amplifier, clock generator, and latched tri-state interface bus. Minimal external components required include a low-cost 3.579545 MHz color burst crystal, a timing resistor, and a timing capacitor.

The M-8870-02 and M-8870-03 provide a "power-down" option which, when enabled, drops consumption to less than 0.5 mW. The -02 and -03 versions can also inhibit the decoding of fourth column digits. The -03 version features increased input sensitivity.

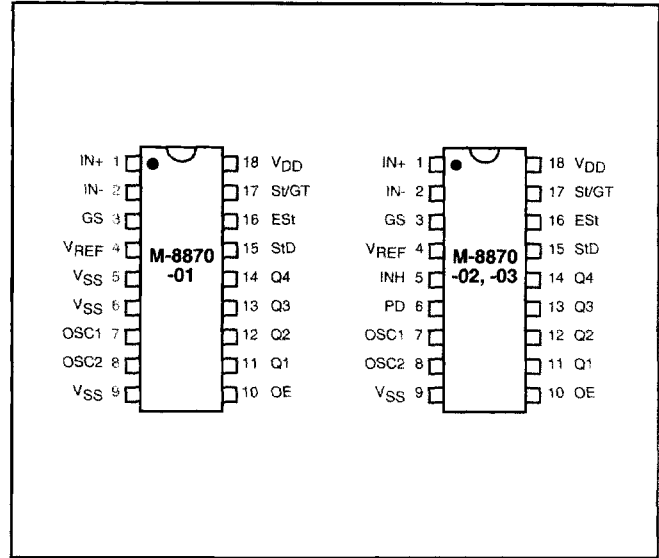


Figure 1 Pin Assignments

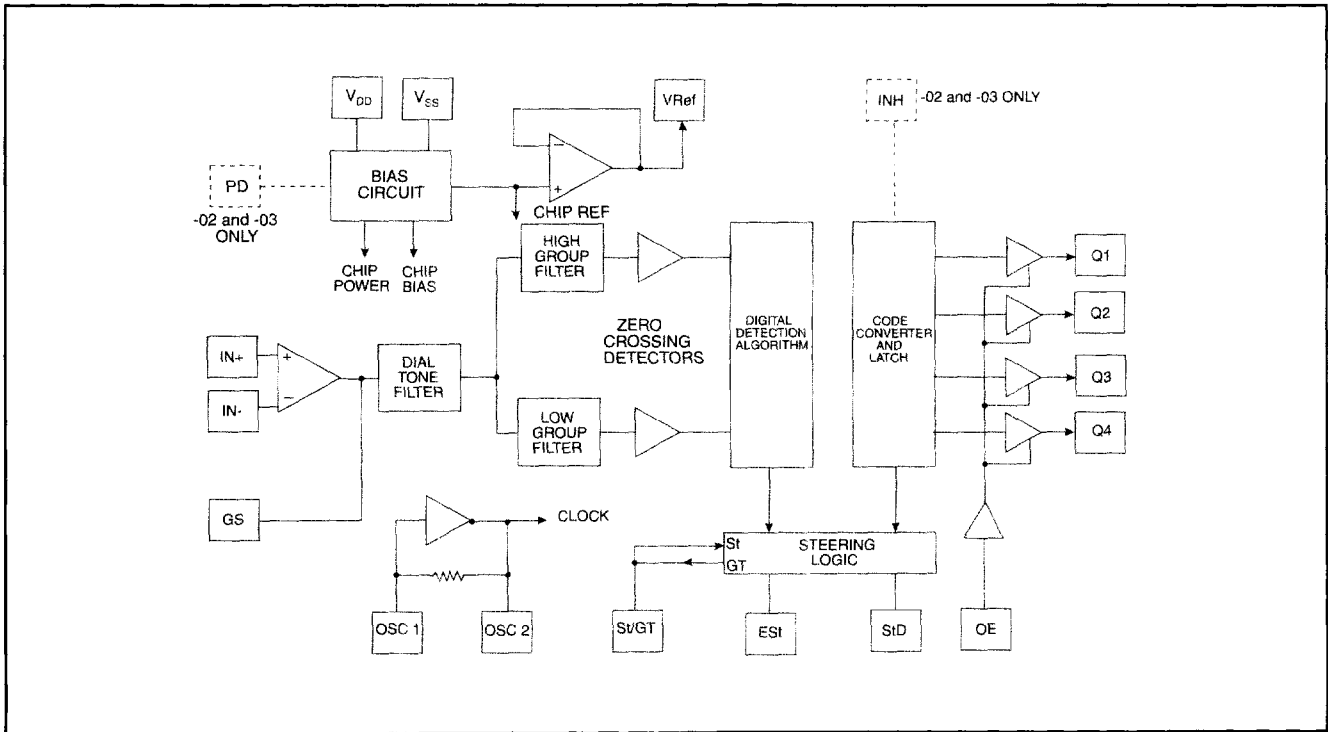


Figure 2 Block Diagram