



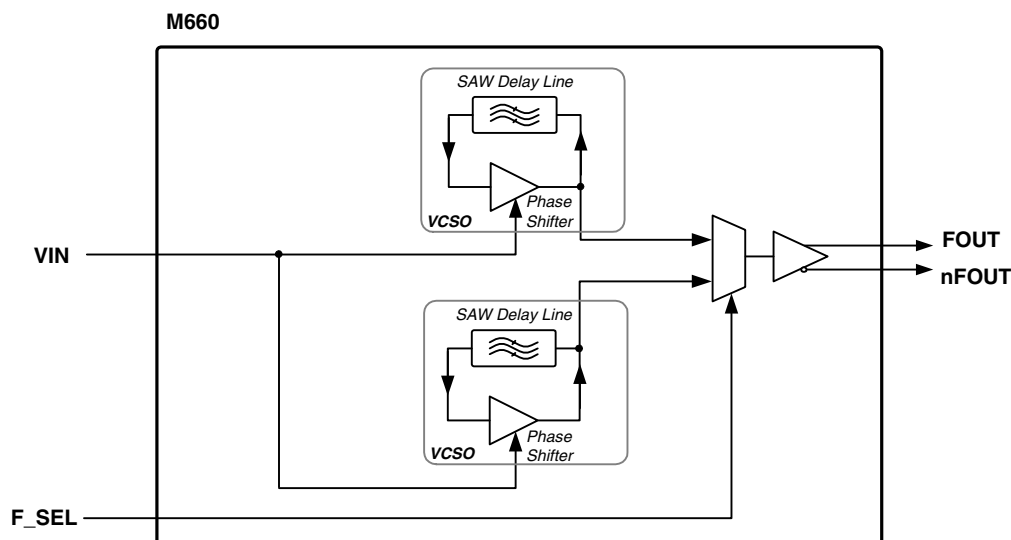
## GENERAL DESCRIPTION

The M660-01 is a dual SAW, selectable frequency VCSO for low-jitter clock generation. An integrated SAW (surface acoustic wave) delay line implements the high-Q VCO (voltage controlled oscillator) function, which results in low output phase noise and very low jitter. The M660-01 is available in a range of center frequencies from 125 to 175MHz. The M660-02 is available in a range of center frequencies from 500 to 700MHz. Minimum pull-range is  $\pm 50$  ppm (wider pull-range is available). The M660 is well suited for phase-locked loop implementations, clock and data recovery circuits, and other timing applications in telecom and optical fiber networking systems (e.g., OC-48, OC-192).

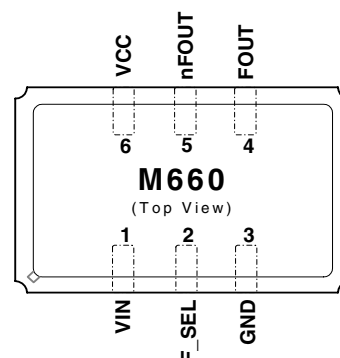
## FEATURES

- M660-01 output frequencies from 125 to 175 MHz  
M660-02 output frequencies from 500 to 700 MHz (Specify center frequency at time of order)
- Two integrated SAW devices
- Selectable output frequency
- Supports multi-rate optical interface requirements
- Low phase jitter 0.37ps rms typical (12kHz to 20MHz)
- Low phase noise -70dBc/Hz @ 1kHz offset
- Differential 3.3V LVPECL output
- Single 3.3V power supply
- Small 9 x 14 mm SMT (surface mount) package

## BLOCK DIAGRAM



## PIN ASSIGNMENT (9 x 14 mm SMT)



## Sample of Available Output Frequencies

VCSO Center Frequency <sup>1</sup> (MHz)	Applications
622.0800	SONET/SDH
625.0000	Gigabit Ethernet
644.5313	Gigabit Ethernet FEC
669.3266	SONET/SDH FEC

1. Specify VCSO center frequency at time of order