

## Cardinal Components Programmable Dual Frequency Oscillator vs Two Separate Oscillators using Multiplexers

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Cardinal Components

Cardinal Components' new programmable dual frequency oscillator is designed for any application where two frequencies are required. This new oscillator, with its ultra low jitter (<70 ps p-p @ 1 million samples) and fast switching time, is perfect for any application where board space, cost, and minimum amount of component use is critical. The other option is to use two separate oscillators and added circuitry, including some type of switching network and multiplexing of the two separate frequencies (see Figure 1).

Cardinal Components' programmable solves all of these problems. Not only are fewer components (see Figure 2) needed, but also the overall cost of design and manufacturing is brought down to a minimum. This new programmable can be programmed in seconds using the new PG3000 programmer, or any PC running Windows--or Cardinal itself can program them for you.

Cardinal's programmable offers a wide variety of options, including operating voltages of 2.7, 3.3 or 5 volts, frequencies of 1 Mhz to 133 MHz, and package types including 5x7 ceramic smt, half size dip, and plastic. No more waiting weeks for a custom oscillator! These oscillators can be programmed and shipped the same day from Cardinal's facility in Wayne, N.J. For more information on the dual frequency programmable oscillator or any of their other products, log onto Cardinal Components' website at [www.cardinalxtal.com](http://www.cardinalxtal.com).

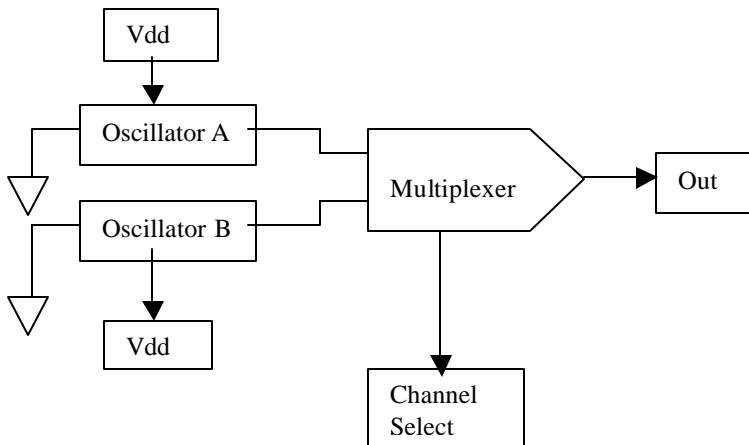


Figure 1  
Typical Multi-Frequency Design

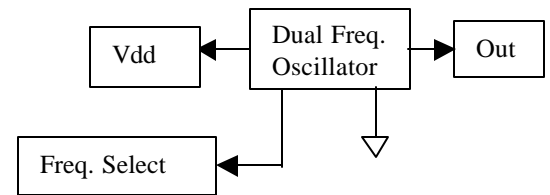


Figure 2  
CPPD Multi-Frequency Design