

## Tech Brief 33 DS1073 and DS1075 EconOscillator Online Interactive Frequency Calculator

www.maxim-ic.com

## **EconOscillator Interactive Calculator**

The DS1073 and DS1075 are dual-output, 3V and 5V EconOscillators<sup>TM</sup> available in an 8-SO or 8-DIP package. EconOscillators are all-silicon squarewave oscillators requiring no external clock reference or timing components for operation. They provide an alternative to crystal-based oscillators in applications where size and cost are important but absolute frequency accuracy is not. Important features include 27kHz to 100MHz frequency range, 1.0% frequency tolerance over temperature and voltage, 1µA power-down mode, and single or dual synchronous outputs. The DS1073 and DS1075 are designed to be programmed prior to installation in the application and are to be used as fixed-frequency oscillators. Both devices are available with four standard master frequencies with custom master frequencies available on request. The four standard master frequencies are 60MHz, 66.666MHz, 80MHz, and 100MHz. These, in combination with a programmable 2-bit prescaler and 1-to-513 dividers, allow for thousands of possible output combinations.

Further information including datasheets and application notes can be found at

http://dbserv.maxim-ic.com/quick\_view2.cfm?qv\_pk=2619 for the DS1075 and

http://dbserv.maxim-ic.com/guick\_view2.cfm?qv\_pk=2617 for the DS1073.

## DS1073 and DS1075 EconOscillator Frequency Calculator

To ease to the selection of these devices, an online frequency calculator is provided at the following link. MS Excel<sup>TM</sup> Must be installed on your computer to use this calculator. To use the calculator, enter the frequency you desire in the query box and hit return. The calculator will calculate the closest possible frequency for each of the master frequency options and present them in the tables beneath the query box. Results are valid for both the DS1073 and the DS1075.

ftp://ftp.dalsemi.com/pub/silicon\_timed/DS1075freq.xls

When you get the "FTP Log On" prompt, click "OK" and logon on as an anonymous user.

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