



DEMO MANUAL DC2073A

LTC1799, LTC6900, LTC6905,
LTC6905-XXX, LTC6906, LTC6907
LTC6908 SOT23 Silicon Oscillators

DESCRIPTION

DC2073A demo board features Linear Technology's SOT23 packaged silicon oscillators. The DC2073A demo board is available in eleven different options; DC2073A-A through DC2073A-K. These eleven options provide for the evaluation of resistor-set oscillator ICs and fixed frequency ICs (Table1).

Design files for this circuit board are available at <http://www.linear.com/demo>

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Table 1. Resistor-Set Oscillator ICs and Maximum Frequency Error at $T_A = 25^\circ\text{C}$

PART NUMBER, BOARD ASSEMBLY	FREQUENCY PROGRAM METHOD	DESCRIPTION
LTC®6905, DC2073A-A	Resistor Programmable	$17.225\text{MHz} \leq f_{\text{OSC}} \leq 170\text{MHz}$, $\pm 1.4\%$ at $V^+ = 2.7\text{V}$ and $\pm 2.2\%$ at $V^+ = 5\text{V}$
LTC1799, DC2073A-B	Resistor Programmable	$5\text{kHz} \leq f_{\text{OSC}} \leq 10\text{MHz}$, $\pm 1.5\%$ at $V^+ = 3\text{V}$ and $\pm 1.5\%$ at $V^+ = 5\text{V}$ (Up to 20MHz)
LTC6900, DC2073A-C	Resistor Programmable	$5\text{kHz} \leq f_{\text{OSC}} \leq 10\text{MHz}$, $\pm 1.5\%$ at $V^+ = 3\text{V}$ and $\pm 1.5\%$ at $V^+ = 5\text{V}$ (Up to 20MHz)
LTC6905-133, DC2073A-D	Three Fixed Frequencies Set by Three-State Input	$f_{\text{OSC}} = 133\text{MHz}$, 66.7MHz and 33.5MHz , $\pm 1.0\%$ at $V^+ = 3\text{V}$ and $\pm 1.5\%$ Typical at $V^+ = 5\text{V}$
LTC6905-100, DC2073A-E	Three Fixed Frequencies Set by Three-State Input	$f_{\text{OSC}} = 100\text{MHz}$, 50MHz and 25MHz , $\pm 1.0\%$ at $V^+ = 3\text{V}$ and $\pm 1.5\%$ Typical at $V^+ = 5\text{V}$
LTC6905-96, DC2073A-F	Three Fixed Frequencies Set by Three-State Input	$f_{\text{OSC}} = 96\text{MHz}$, 48MHz and 24MHz , $\pm 1.0\%$ at $V^+ = 3\text{V}$ and $\pm 1.5\%$ Typical at $V^+ = 5\text{V}$
LTC6905-80, DC2073A-G	Three Fixed Frequencies Set by Three-State Input	$f_{\text{OSC}} = 80\text{MHz}$, 40MHz and 20MHz , $\pm 1.0\%$ at $V^+ = 3\text{V}$ and $\pm 1.5\%$ typical at $V^+ = 5\text{V}$
LTC6906, DC2073A-H	Resistor Programmable	$10\text{kHz} \leq f_{\text{OSC}} \leq 1\text{MHz}$, $\pm 0.5\%$ at $V^+ = 2.7\text{V}$ to 3.6V and $\pm 0.7\%$ at $V^+ = 2.25\text{V}$
LTC6907, DC2073A-I	Resistor Programmable	$400\text{kHz} \leq f_{\text{OSC}} \leq 4\text{MHz}$, $\pm 0.65\%$ at $V^+ = 3\text{V}$ to 3.6V
LTC6908-1, DC2073A-J	Spread Spectrum Modulation, Complementary Outputs ($0^\circ/180^\circ$) Resistor Programmable	$250\text{kHz} \leq f_{\text{OSC}} \leq 5\text{MHz}$, $\pm 1.5\%$ at $V^+ = 2.7\text{V}$ and $\pm 2.0\%$ at $V^+ = 5\text{V}$
LTC6908-2, DC2073A-K	Spread Spectrum Modulation, Quadrature Outputs ($0^\circ/90^\circ$) Resistor Programmable	$250\text{kHz} \leq f_{\text{OSC}} \leq 5\text{MHz}$, $\pm 1.5\%$ at $V^+ = 2.7\text{V}$ and $\pm 2.0\%$ at $V^+ = 5\text{V}$