

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 <sup>®</sup> 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	$f_{\text{OSC}} = 133\text{MHz}$ , $66.7\text{MHz}$ and $33.5\text{MHz}$ , $\pm 1.0\%$ 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	$f_{\text{OSC}} = 100\text{MHz}$ , $50\text{MHz}$ and $25\text{MHz}$ , $\pm 1.0\%$ 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	$f_{\text{OSC}} = 96\text{MHz}$ , $48\text{MHz}$ and $24\text{MHz}$ , $\pm 1.0\%$ 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	$f_{\text{OSC}} = 80\text{MHz}$ , $40\text{MHz}$ and $20\text{MHz}$ , $\pm 1.0\%$ 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 $3.6\text{V}$ 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 $3.6\text{V}$
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 $V^+ = 5\text{V}$

## QUICK START PROCEDURE

### Test Equipment:

1. A single 3V power supply.
2. An oscilloscope with a bandwidth of at least  $5 \times f_{OSC}$ . (For example, if  $f_{OSC} = 100\text{MHz}$  then use a 500MHz oscilloscope).
3. A screwdriver to adjust the potentiometer.

### Basic Test Procedure:

1. Connect power supply to  $V^+$  and GND, turrets E4 and E5.
2. Connect oscilloscope probe to OUT1 and GND.

Note: The ground lead of an oscilloscope probe has a series inductance that can generate a resonant circuit with the probe's capacitance. Probe resonance adds transient peaks and ringing on a high speed waveform. Reliable probing of the high frequency LTC6905 and LTC6905-XXX (with corresponding demo boards DC2073A-A, -D, -E, -F or -G), must use a very short connection of the oscilloscope probe ground to the board GND (see probe tip picture in Figure 1 Test Setup).

3. Set the JP1 jumper to the N divider position for the desired frequency shown on Table 2.
4. Turn on supply.
5. The oscilloscope display shows a 3V squarewave (0V to 3V).
6. For the resistor-set ICs (DC2073A-A, -B, -C, -H, -I, -J or -K) turn the RPOT potentiometer for the desired frequency. (The frequency adjustment is very coarse when the potentiometer is turned near the fully clockwise or counter-clockwise position).

### Verify Oscillator Accuracy

The  $f_{OSC}$  accuracy of the resistor-set ICs (DC2073A-A, -B, -C, -H, -I, -J or -K), can be verified by setting RSET to the exact value from the  $f_{OSC}$  equation shown in Table 2. For the DC2073A-A, -B, -C, -J, -K,  $RSET = RPOT + RSET2$ . RSET1 and RSET2 are never installed on the same board. Connecting an ohmmeter across RPOT and RSET1 or RSET2 forces current into the IC set pin (Pin 3 or 4) and causes an error in the ohmmeter reading. The RS resistor is in series with RPOT and equal to RSET1 or RSET2 and the equivalent  $RSET = RPOT + RS$ .

### Procedure to Verify Oscillator Accuracy

- a. Calculate RSET for the desired frequency (RSET in Table 2).
- b. Remove the power supply leads from DC2073A and connect an ohmmeter from POT (E6) to  $V^+$  (DC2073A-A, -B, -C, -J or -K) or GND (DC2073A-H or -I).
- c. Adjust RPOT for the exact value of RSET needed.

Note: If the potentiometer is turned near the fully clockwise or counter-clockwise position the RPOT adjustment may be too coarse for setting an exact RSET value. In addition, for a frequency adjustment near the upper or lower  $f_{OSC}$  range, RSET may be greater or less than the default DC2073A  $RPOT + RSET1$  or  $RSET2$  value, in this case the RSET1 or RSET2 resistor must be removed and replaced with a lower or higher value.

**QUICK START PROCEDURE**

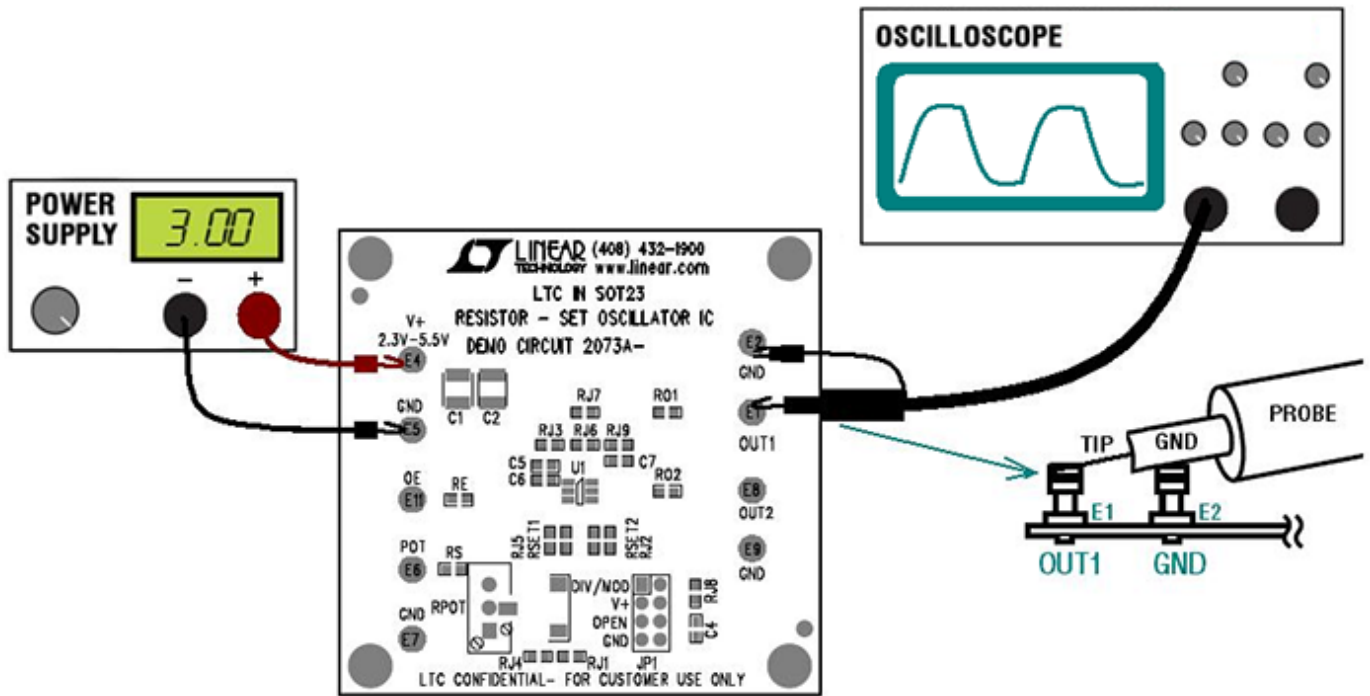


Figure 1. Test Setup

## QUICK START PROCEDURE

**Table 2.  $f_{OSC}$  Frequency and N Divider Setting**

<p><b>LTC6905, DC2073A-A</b></p> $f_{OSC} = \left( \frac{168.5\text{MHz} \cdot 10\text{k}\Omega}{R_{SET}} + 1.5\text{MHz} \right) \cdot \frac{1}{N}, R_{SET} = \frac{168.5\text{MHz} \cdot 10\text{k}\Omega}{N \cdot f_{OSC} - 1.5\text{MHz}}$ <p>N = 1 (JP1 to V<sup>+</sup>), 68.9MHz ≤ <math>f_{OSC}</math> ≤ 170MHz                      N = 2 (JP1 to OPEN), 34.45MHz ≤ <math>f_{OSC}</math> ≤ 85MHz                      N = 4 (JP1 to GND), 7.225MHz ≤ <math>f_{OSC}</math> ≤ 42.5MHz</p>	<p><b>LTC1799, DC2073A-B</b></p> $f_{OSC} = \frac{10\text{MHz} \cdot 10\text{k}\Omega}{N \cdot R_{SET}}, R_{SET} = \frac{10\text{MHz} \cdot 10\text{k}\Omega}{f_{OSC} \cdot N}$ <p>N = 1 (JP1 to GND), 500kHz ≤ <math>f_{OSC}</math> ≤ 20MHz                      N = 10 (JP1 to OPEN), 50kHz ≤ <math>f_{OSC}</math> ≤ 2MHz                      N = 100 (JP1 to V<sup>+</sup>), 5kHz ≤ <math>f_{OSC}</math> ≤ 200kHz</p>
<p><b>LTC6900, DC1073A-C</b></p> $f_{OSC} = \frac{10\text{MHz} \cdot 20\text{k}\Omega}{N \cdot R_{SET}}, R_{SET} = \frac{10\text{MHz} \cdot 20\text{k}\Omega}{f_{OSC} \cdot N}$ <p>N = 1 (JP1 to GND), 500kHz ≤ <math>f_{OSC}</math> ≤ 20MHz                      N = 10 (JP1 to OPEN), 50kHz ≤ <math>f_{OSC}</math> ≤ 2MHz                      N = 100 (JP1 to V<sup>+</sup>), 5kHz ≤ <math>f_{OSC}</math> ≤ 200kHz</p>	<p><b>LTC6905-133, DC2073A-D</b></p> $f_{OSC} = \frac{133\text{MHz}}{N}$ <p>N = 1 (JP1 to V<sup>+</sup>), <math>f_{OSC} = 133\text{MHz}</math>                      N = 2 (JP1 to OPEN), <math>f_{OSC} = 66.7\text{MHz}</math>                      N = 4 (JP1 to GND), <math>f_{OSC} = 33.5\text{MHz}</math></p>
<p><b>LTC6905-10, DC2073A-E</b></p> $f_{OSC} = \frac{100\text{MHz}}{N}$ <p>N = 1 (JP1 to V<sup>+</sup>), <math>f_{OSC} = 100\text{MHz}</math>                      N = 2 (JP1 to OPEN), <math>f_{OSC} = 50\text{MHz}</math>                      N = 4 (JP1 to GND), <math>f_{OSC} = 25\text{MHz}</math></p>	<p><b>LTC6905-96, DC2073A-F</b></p> $f_{OSC} = \frac{96\text{MHz}}{N}$ <p>N = 1 (JP1 to V<sup>+</sup>), <math>f_{OSC} = 96\text{MHz}</math>                      N = 2 (JP1 to OPEN), <math>f_{OSC} = 48\text{MHz}</math>                      N = 4 (JP1 to GND), <math>f_{OSC} = 24\text{MHz}</math></p>
<p><b>LTC6905-80, DC2073A-G</b></p> $f_{OSC} = \frac{80\text{MHz}}{N}$ <p>N = 1 (JP1 to V<sup>+</sup>), <math>f_{OSC} = 80\text{MHz}</math>                      N = 2 (JP1 to OPEN), <math>f_{OSC} = 40\text{MHz}</math>                      N = 4 (JP1 to GND), <math>f_{OSC} = 20\text{MHz}</math></p>	<p><b>LTC6906, DC2073A-H</b></p> $f_{OSC} = \frac{1\text{MHz} \cdot 100\text{k}\Omega}{N \cdot R_{SET}}, R_{SET} = \frac{1\text{MHz} \cdot 100\text{k}\Omega}{f_{OSC} \cdot N}$ <p>N = 1 (JP1 to GND), 0.1MHz ≤ <math>f_{OSC}</math> ≤ 1MHz                      N = 3 (JP1 to OPEN), 33kHz ≤ <math>f_{OSC}</math> ≤ 333kHz                      N = 10 (JP1 to V<sup>+</sup>), 10kHz ≤ <math>f_{OSC}</math> ≤ 100kHz</p>
<p><b>LTC6907, DC2073A-I</b></p> $f_{OSC} = \frac{4\text{MHz} \cdot 50\text{k}\Omega}{N \cdot R_{SET}}, R_{SET} = \frac{4\text{MHz} \cdot 50\text{k}\Omega}{f_{OSC} \cdot N}$ <p>N = 1 (JP1 to GND), 0.4MHz ≤ <math>f_{OSC}</math> ≤ 4MHz                      N = 3 (JP1 to OPEN), 133kHz ≤ <math>f_{OSC}</math> ≤ 1.33MHz                      N = 10 (JP1 to V<sup>+</sup>), 40kHz ≤ <math>f_{OSC}</math> ≤ 400kHz</p>	<p><b>LTC6908-1, DC2073A-J</b></p> <p>Complementary Outputs (0°/180°) without Modulation:                      250kHz ≤ <math>f_{OSC}</math> ≤ 5MHz, (JP1 to DIV/MOD)</p> $f_{OSC} = \frac{10\text{MHz} \cdot 10\text{k}\Omega}{N \cdot R_{SET}}, R_{SET} = \frac{10\text{MHz} \cdot 10\text{k}\Omega}{f_{OSC} \cdot N}$ <p>Spread Spectrum Modulation Rate:                      (JP1 to GND), <math>f_{OSC}/16</math>                      (JP1 to OPEN), <math>f_{OSC}/32</math>                      (JP1 to V<sup>+</sup>), <math>f_{OSC}/64</math></p>
<p><b>LTC6908-1, DC2073A-K</b></p> <p>Quadrature Outputs (0°/90°) without Modulation:                      250kHz ≤ <math>f_{OSC}</math> ≤ 5MHz, (JP1 to DIV/MOD)</p> $f_{OSC} = \frac{10\text{MHz} \cdot 10\text{k}\Omega}{N \cdot R_{SET}}, R_{SET} = \frac{10\text{MHz} \cdot 10\text{k}\Omega}{f_{OSC} \cdot N}$ <p>Spread Spectrum Modulation Rate:                      (JP1 to GND), <math>f_{OSC}/16</math>                      (JP1 to OPEN), <math>f_{OSC}/32</math>                      (JP1 to V<sup>+</sup>), <math>f_{OSC}/64</math></p>	

## PARTS LIST

ITEM	QTY	REFERENCE	PART DESCRIPTION	MANUFACTURER/PART NUMBER
<b>General</b>				
1	2	C1,C2	Cap., Chip, X7R, 10µF, 10%, 16V, 1210	Murata, GRM32DR71C106KA01
2	1	C4	Cap., Chip, X7R, 1000pF, 10%, 16V, 0603	AVX, 0603YC102KAT
3	0	C7 OPT	Cap., 0603, OPT	
4	9	E1-E9	Testpoint, Turret, 0.064"	Mill-Max, 2308-2-00-80-00-00-07-0
5	1	R01	Res., Chip, 49.9Ω, 1%, 0603	Vishay, CRCW060349R9FKEA
6	1	JP1	Headers, Dbl. Row 2 x 4 2mm Ctrs	Samtec TMM-104-02-L-D
7	1	XJP1	Shunt	
8	4	(STAND-OFF)	Stand-Off, Nylon 0.5"	Keystone, 8833 (Snap On)
<b>DC2073A-A</b>				
1	1	RPOT	3/8" Square Multiturn Cermet Trimmer, 20k	Vishay, T93YA203KT20
2	2	RSET1, RS	Res., Chip, 10k, 1% 0603	Vishay, CRCW060310K0FKEA
3	5	RJ1, RJ2, RJ3, RJ8, RJ9	Res., Chip, 0Ω, 0603	Vishay, CRCW06030000Z0EA
4	1	C5	Cap., Chip, X7R, 0.1µF, 10%, 16V, 0603	AVX, 0603YC104KAT2A
5	1	C6	Cap., Chip, X7R, 0.01µF, 10%, 16V, 0603	AVX, 0603YC103KAT2A
6	1	U1	Resistor Set SOT-23 Oscillator, SOT23, 5-Lead	Linear Tech., LTC6905CS5
<b>DC2073A-B</b>				
1	1	RPOT	3/8" Square Multiturn Cermet Trimmer, 500k	Vishay, T93YA504KT20
2	2	RSET1, RS	Res., Chip, 4.99k, 1% 0603	Vishay, CRCW06034K99FKEA
3	5	RJ1, RJ2, RJ3, RJ8, RJ9	Res., Chip, 0Ω, 0603	Vishay, CRCW06030000Z0EA
4	1	C5	Cap., Chip, X7R, 0.1µF, 10%, 16V, 0603	AVX, 0603YC104KAT2A
5	1	C6	Cap., Chip, X7R, 0.01µF, 10%, 16V, 0603	AVX, 0603YC103KAT2A
6	1	U1	Resistor Set SOT-23 Oscillator, SOT23, 5-Lead	Linear Tech., LTC1799CS5
<b>DC2073A-C</b>				
1	1	RPOT	3/8" Square Multiturn Cermet Trimmer, 500k	Vishay, T93YA504KT20
2	2	RSET1, RS	Res., Chip, 20K, 1% 0603	Vishay, CRCW060320K0FKEA
3	5	RJ1, RJ2, RJ3, RJ8, RJ9	Res., Chip, 0Ω, 0603	Vishay, CRCW06030000Z0EA
4	1	C5	Cap., Chip, X7R, 0.1µF, 10%, 16V, 0603	AVX, 0603YC104KAT2A
5	1	C6	Cap., Chip, X7R, 0.01µF, 10%, 16V, 0603	AVX, 0603YC103KAT2A
6	1	U1	Resistor set SOT-23 Oscillator, SOT23, 5-Lead	Linear Tech., LTC6900CS5
<b>DC2073A-D</b>				
1	4	RJ2, RJ3, RJ8, RJ9	Res., Chip, 0Ω, 0603	VISHAY, CRCW06030000Z0EA
2	1	RE	Res., Chip, 1k, 1% 0603	VISHAY, CRCW06031K0FKEA
3	1	C5	Cap., Chip, X7R, 0.1µF, 10%, 16V, 0603	AVX, 0603YC104KAT2A
4	1	C6	Cap., Chip, X7R, 0.01µF, 10%, 16V, 0603	AVX, 0603YC103KAT2A
5	1	U1	Resistor set SOT-23 Oscillator, SOT23, 5-Lead	Linear Tech., LTC6905CS5-133
<b>DC2073A-E</b>				
1	4	RJ2, RJ3, RJ8, RJ9	Res., Chip, 0Ω, 0603	Vishay, CRCW06030000Z0EA
2	1	RE	Res., Chip, 1k, 1% 0603	Vishay, CRCW06031K0FKEA
3	1	C5	Cap., Chip, X7R, 0.1µF, 10%, 16V, 0603	AVX, 0603YC104KAT2A
4	1	C6	Cap., Chip, X7R, 0.01µF, 10%, 16V, 0603	AVX, 0603YC103KAT2A
5	1	U1	Resistor Set SOT-23 Oscillator, SOT23, 5-Lead	Linear Tech., LTC6905CS5-100

# DEMO MANUAL DC2073A

## PARTS LIST

ITEM	QTY	REFERENCE	PART DESCRIPTION	MANUFACTURER/PART NUMBER
<b>DC2073A-F</b>				
1	4	RJ2, RJ3, RJ8, RJ9	Res., Chip, 0 $\Omega$ , 0603	Vishay, CRCW06030000Z0EA
2	1	RE	Res., Chip, 1k, 1% 0603	Vishay, CRCW06031K0FKEA
3	1	C5	Cap., Chip, X7R, 0.1 $\mu$ F, 10%, 16V, 0603	AVX, 0603YC104KAT2A
4	1	C6	Cap., Chip, X7R, 0.01 $\mu$ F, 10%, 16V, 0603	AVX, 0603YC103KAT2A
5	1	U1	Resistor Set SOT-23 Oscillator, SOT23, 5-Lead	Linear Tech., LTC6905CS5-96
<b>DC2073A-G</b>				
1	4	RJ2, RJ3, RJ8, RJ9	Res., Chip, 0 $\Omega$ , 0603	Vishay, CRCW06030000Z0EA
2	1	RE	Res., Chip, 1k, 1% 0603	Vishay, CRCW06031K0FKEA
3	1	C5	Cap., Chip, X7R, 0.1 $\mu$ F, 10%, 16V, 0603	AVX, 0603YC104KAT2A
4	1	C6	Cap., Chip, X7R, 0.01 $\mu$ F, 10%, 16V, 0603	AVX, 0603YC103KAT2A
5	1	U1	Resistor Set SOT-23 Oscillator, SOT23, 5-Lead	Linear Tech., LTC6905CS5-80
<b>DC2073A-H</b>				
1	1	RPOT	3/8" Square Multiturn Cermet Trimmer, 500k	Vishay, T93YA504KT20
2	2	RSET2, RS	Res., Chip, 100k, 1% 0603	Vishay, CRCW0603100KFKEA
3	4	RJ4, RJ5, RJ6, RJ7	Res., Chip, 0 $\Omega$ , 0603	Vishay, CRCW06030000Z0EA
4	1	U1	Resistor Set SOT-23 Oscillator, SOT23, 6-Lead	Linear Tech., LTC6906CS6
<b>DC2073A-I</b>				
2	1	RPOT	3/8" Square Multiturn Cermet Trimmer, 500k	Vishay, T93YA504KT20
3	2	RSET2, RS	Res., Chip, 49.9k, 1% 0603	Vishay, CRCW060349K9FKEA
4	4	RJ4, RJ5, RJ6, RJ7	Res., Chip, 0 $\Omega$ , 0603	Vishay, CRCW06030000Z0EA
5	1	U1	Resistor Set SOT-23 Oscillator, SOT23, 6-Lead	Linear Tech., LTC6907CS6
<b>DC2073A-J</b>				
1	1	RPOT	3/8" Square Multiturn Cermet Trimmer, 500k	Vishay, T93YA504KT20
2	2	RSET1, RS	Res., Chip, 10k, 1% 0603	Vishay, CRCW060310K0FKEA
3	4	RJ1, RJ2, RJ3, RJ9	Res., Chip, 0 $\Omega$ , 0603	Vishay, CRCW06030000Z0EA
4	1	R02	Res., Chip, 49.9k, 1%, 0603	Vishay, CRCW060349R9FKEA
5	1	C5	Cap., Chip, X7R, 0.1 $\mu$ F, 10%, 16V, 0603	AVX, 0603YC104JAT2A
6	1	C6	Cap., Chip, X7R, 0.01 $\mu$ F, 10%, 16V, 0603	AVX, 0603YC103KAT2A
7	1	U1	Resistor Set SOT-23 Oscillator, SOT23, 6-Lead	Linear Tech., LTC6908CS6-1
<b>DC2073A-K</b>				
1	1	RPOT	3/8" Square Multiturn Cermet Trimmer, 500k	Vishay, T93YA504KT20
2	2	RSET1, RS	Res., Chip, 10K, 1% 0603	Vishay, CRCW060310K00FKEA
3	4	RJ1, RJ2, RJ3, RJ9	Res., Chip, 0 $\Omega$ , 0603	Vishay, CRCW06030000Z0EA
4	1	R02	Res., Chip, 49.9k, 1%, 0603	Vishay, CRCW060349R9FKEA
5	1	C5	Cap., Chip, X7R, 0.1 $\mu$ F, 10%, 16V, 0603	AVX, 0603YC104KAT2A
6	1	C6	Cap., Chip, X7R, 0.01 $\mu$ F, 10%, 16V, 0603	AVX, 0603YC103KAT2A
7	1	U1	Resistor Set SOT-23 Oscillator, SOT23, 6-Lead	Linear Tech., LTC6908CS6-2

**SCHEMATIC DIAGRAM**

REVISION HISTORY			
ECO	REV	DESCRIPTION	APPROVED
—	2	PRODUCTION	PHILIP K.
			DATE
			06-27-13

**\*\* IC NO. :LTC6905, LTC1799,  
LTC6900, LTC6905-80,  
LTC6905-96, LTC6905-100,  
LTC6905-133 -5 LEAD SOT-23  
LTC6906, LTC6907, LTC6908-1,  
LTC6908-2 - 6 LEAD SOT23**

ASSY TYPE	LTC Part#	RSET1	RSET2	RJ1	RJ2	RJ3	RJ4	RJ5	RJ6	RJ7	RJ8	RJ9	RS	C5	C6	RE
A	LTC6905CS5	20K	10K	0 OHM	0 OHM	0 OHM	0 OHM	0 OHM	0 OHM	0 OHM	0 OHM	0 OHM	10K	0.1uF	0.01uF	
B	LTC1799CS5	500K	4.99K	0 OHM	0 OHM	0 OHM	0 OHM	0 OHM	0 OHM	0 OHM	0 OHM	0 OHM	4.99K	0.1uF	0.01uF	
C	LTC6900CS5	500K	20K	0 OHM	0 OHM	0 OHM	0 OHM	0 OHM	0 OHM	0 OHM	0 OHM	0 OHM	20K	0.1uF	0.01uF	
D	LTC6905CS5-133	OPEN	OPEN	0 OHM	0 OHM	0 OHM	0 OHM	0 OHM	0 OHM	0 OHM	0 OHM	0 OHM	0.1uF	0.01uF	1K	
E	LTC6905CS5-100	OPEN	OPEN	0 OHM	0 OHM	0 OHM	0 OHM	0 OHM	0 OHM	0 OHM	0 OHM	0 OHM	0.1uF	0.01uF	1K	
F	LTC6905CS5-96	OPEN	OPEN	0 OHM	0 OHM	0 OHM	0 OHM	0 OHM	0 OHM	0 OHM	0 OHM	0 OHM	0.1uF	0.01uF	1K	
G	LTC6905CS5-80	OPEN	OPEN	0 OHM	0 OHM	0 OHM	0 OHM	0 OHM	0 OHM	0 OHM	0 OHM	0 OHM	0.1uF	0.01uF	1K	
H	LTC6906CS6	500K	100K	0 OHM	0 OHM	0 OHM	0 OHM	0 OHM	0 OHM	0 OHM	0 OHM	0 OHM	100K			
I	LTC6907CS6	500K	49.9K	0 OHM	0 OHM	0 OHM	0 OHM	0 OHM	0 OHM	0 OHM	0 OHM	0 OHM	49.9K			
J	LTC6908CS6-1	500K	10K	0 OHM	0 OHM	0 OHM	0 OHM	0 OHM	0 OHM	0 OHM	0 OHM	0 OHM	10K	0.1uF	0.01uF	49.9
K	LTC6908CS6-2	500K	10K	0 OHM	0 OHM	0 OHM	0 OHM	0 OHM	0 OHM	0 OHM	0 OHM	0 OHM	10K	0.1uF	0.01uF	49.9

**\* ASSEMBLY TYPE**

**CUSTOMER NOTICE**  
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**APPROVALS**  
PCB DES. / AK  
APP. ENG. / PHILIP K.

**TITLE: SCHEMATIC**  
**RESISTOR - SET OSCILLATOR IC**

SIZE / IC NO. \*\* / LTC IN SOT23 / REV.  
N/A / N/A / DEMO CIRCUIT 2073A / 2

DATE: Thursday, June 27, 2013 / SHEET 1 OF 1

**NOTE: UNLESS OTHERWISE SPECIFIED  
ALL RESISTORS ARE IN OHMS, 0603  
ALL CAPACITORS ARE 0603, 16V**

# DEMO MANUAL DC2073A

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## DEMONSTRATION BOARD IMPORTANT NOTICE

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