INTELLIGENT INTERACTIVE SYNTHESIZER
SURFACE MOUNT MODEL: LFSW300600-100

FEATURES:
► Exceptionally Low Phase Noise
► Interactive Communication
► Standard Programming Interface
► Ultra Wide Tuning Range
► Lead Free - RoHS Compliant
► Patented REL-PRO® Technology
► Small Size, Surface Mount
► Buffered Output

SPECIFICATIONS (Rev. C 04/08/11)

<table>
<thead>
<tr>
<th>Frequency</th>
<th>3000 - 6000 MHz</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step Size</td>
<td>1 MHz</td>
</tr>
<tr>
<td>Reference Input Frequency</td>
<td>10 MHz</td>
</tr>
<tr>
<td>Reference Input Voltage</td>
<td>1 V p-p to 3.3 V p-p</td>
</tr>
<tr>
<td>Bias Voltage</td>
<td>Vcc (Vdc)</td>
</tr>
<tr>
<td>Digital</td>
<td>+5</td>
</tr>
<tr>
<td>VCO</td>
<td>+5</td>
</tr>
<tr>
<td>Converter</td>
<td>+5</td>
</tr>
<tr>
<td>Lock Detect Indicator</td>
<td>CMOS 3.3 V</td>
</tr>
<tr>
<td>Output Power</td>
<td>+3 dBM (Min.)</td>
</tr>
<tr>
<td>Spurious Suppression</td>
<td>70 dB (Typ.)</td>
</tr>
<tr>
<td>Harmonic Suppression</td>
<td>15 dB (Typ.)</td>
</tr>
<tr>
<td>Settling Time</td>
<td>5 mSec (Typ.)</td>
</tr>
<tr>
<td>Output Impedance</td>
<td>50 Ohms (Nom.)</td>
</tr>
<tr>
<td>Operating Temperature Range</td>
<td>-40 to +85 °C</td>
</tr>
</tbody>
</table>

Typical Phase Noise:
- @ 1 kHz: -76 dBc/Hz
- @ 10 kHz: -76 dBc/Hz
- @ 100 kHz: -95 dBc/Hz

Absolute Maximum Ratings

| Storage Temp. Range | -55 to +125 °C |
| Bias Voltage (Digital) | +5.25 V |
| Bias Voltage (VCO) | +5.5 V |
| Bias Voltage (Converter) | +8 V |
| DC Voltage Applied to RF Out | ±25 V |

Package # 197LF

**Port Configuration**
- Pin 5 - RF out
- Pin 7 - Lock Detect Out
- Pin 9 - Data In
- Pin 10 - Error Flag
- Pin 11 - Clock In
- Pin 13 - VCO (On/Off)**
- Pin 19 - Latch Enable In

**Pin 21 - Ref. In**
- Pin 23 - Vcc (Digital)
- Pin 24 - Vtune (Output)
- Pin 25 - Vcc (VCO)
- Pin 26 - Vout (Converter)***
- Pin 27 - Vcc (Tune)***
- Pin 28 - Vcc (Converter)

**NC if unused**

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This product is manufactured under one or more of the following patents. Approved: Patents 5,160,810; 5,122,621; 5,390,349; 5,416,449; 5,650,754; 5,805,431; 6,525,623; 6,850,575; 7,088,189; 7,180,381; 7,196,591; 7,262,670; 7,265,642; 7,292,113; 7,365,612; 7,495,525; 2,533,623; 2,548,311; 2,548,317; 7,545,229; 7,580,693; 7,612,296; 2,563,174; 7,636,021; 2,524,751

End of Document
INTELLIGENT INTERACTIVE SYNTHESIZER
SURFACE MOUNT MODEL: LFSW300600-100

OPTIMIZED BANDWIDTH
3000 - 6000 MHz

HARMONIC SUPPRESSION

REFERENCE SIDEBAND SUPPRESSION

Date: 16.OCT.2008  07:51:51

Reference: 5,160,810; 5,122,621; 5,390,349; 5,416,449; 5,650,754; 5,805,431; 6,525,623; 6,850,575; 7,088,189; 7,180,381; 7,196,591; 7,262,670; 7,265,642; 7,292,113; 7,365,612; 7,495,525; 2,548,311; 2,548,317; 7,540,693; 7,612,296; 7,524,751; 7,563,174; 7,586,381; 2,563,174; 7,580,693; 7,605,670; 2,563,174; 7,540,693; 7,612,296; 7,524,751; 7,563,174; 7,586,381; 7,605,670; 2,563,174; 7,540,693; 7,612,296; 7,524,751
Pending: 60/493075; 60/501371 & 60/501790; 60/527957 & 60/528670; 60/563481; 60/564173; 60/589090; 60/601823; 60/605791; EV31369834; 1 1/259766; 60/622485 & 60/710310; 10/937525/60/736901; 60/732787; 7,495,525; 2,548,311; 2,548,317; 7,540,693; 7,612,296; 2,524,751

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SURFACE MOUNT MODEL: LFSW300600-100

OPTIMIZED BANDWIDTH
3000 - 6000 MHz

REFERENCE SIDEBAND SUPPRESSION

PERFORMANCE PLOTS

Date: 16.OCT.2008 07:50:25
INTELLIGENT INTERACTIVE SYNTHESIZER
SURFACE MOUNT MODEL: LFSW300600-100

OPTIMIZED BANDWIDTH
3000 - 6000 MHz

PERFORMANCE PLOTS

HARMONIC SUPPRESSION

REFERENCE SIDEBAND SUPPRESSION

Date: 16.OCT.2008 07:52:01

Date: 16.OCT.2008 07:51:43
INTELLIGENT INTERACTIVE SYNTHESIZER
SURFACE MOUNT MODEL: LFSW300600-100

OPTIMIZED BANDWIDTH
3000 - 6000 MHz

REFERENCE SIDEBAND SUPPRESSION

PERFORMANCE PLOTS

Date: 16.OCT.2008  07:51:27