

# Ultralow Noise Fractional-N Synthesizer



## $\Delta\Sigma$ -Based Synthesizer Achieves Integer-N Spurious Performance

Our new ultralow noise fractional-N PLL synthesizers deliver best-in-class phase noise performance, and also provide exceptionally low spurious levels due to an advanced  $\Delta\Sigma$  modulator. With modulator spurious levels in the noise, designers can confidently architect a frequency plan without unexpected spurious frequencies in the output spectrum. Predictable spurious performance ensures peace of mind when designing with our fractional-N PLLs.

#### 🗸 Features

- Low –226dBc/Hz Normalized In-Band Phase Noise Floor
- –274dBc/Hz Normalized In-Band 1/f Noise
- –157dBc/Hz Wideband Output Phase Noise Floor
- Programmable 1 to 6 Output Divider
- 28-Lead (4mm x 5mm) QFN Package

#### PLL Family

Part No.	Features	Freq. Range (GHz)
LT C°6945	Integer-N, PLL	0.350 to 6.0
LTC6946	Integer-N, PLL + VCO	0.373 to 6.39
LTC6947	Frac-N, PLL	0.350 to 6.0
LTC6948	Frac-N, PLL + VCO	0.373 to 6.39

### 🗸 Info & Free Samples

www.linear.com/product/LTC6948 1-800-4-LINEAR



LT, LTC, LTM, Linear Technology and the Linear logo are registered trademarks and FracNWizard is a trademark of Linear Technology Corporation. All other trademarks are the property of their respective owners.

