PRODUCT SUMMARY

SKY65804-696LF: Mid-Band 1805 to 2170 MHz Low-Noise Amplifier

Applications
- 3G and 4G LTE radio receivers
- Smartphones
- Laptop PCs and tablets

Features
- Small signal gain: 14.5 dB typical
- Low noise figure: 1.1 dB typical
- Low current consumption
- Output impedance internally matched to 50 Ω
- DC supply: 1.5 to 3.3 V
- \( V_{\text{CTRL}} = 1.8 \text{ V} \)
- Small DFN (6-pin, 1.1 x 0.7 x 0.55 mm) package (MSL1, 260 °C per JEDEC J-STD-020)

Skyworks Green™ products are compliant with all applicable legislation and are halogen-free. For additional information, refer to Skyworks Definition of Green™, document number SQ04-0074.

Description
The SKY65804-696LF is a silicon-on-insulator (SOI) low-noise amplifier (LNA) with bypass function. The device provides excellent return loss, low-noise and high-linearity performance. It operates in the frequency range of 1805 to 2170 MHz, making it an ideal option for LTE mid-band radio receiver applications.

The SKY65804-696LF is manufactured in a compact, 1.1 x 0.7 x 0.55, 6 pin Dual Flat No Lead (DFN) package.

A functional block diagram is shown in Figure 1.
## Ordering Information

<table>
<thead>
<tr>
<th>Product Description</th>
<th>Product Part Number</th>
<th>Evaluation Board Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>SKY65804-696LF: Mid-Band Low-Noise Amplifier</td>
<td>SKY65804-696LF</td>
<td>SKY65804-696EK1 (Tuning BOM for B1 and B4)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SKY65804-696EK2 (Tuning BOM for B2)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SKY65804-696EK3 (Tuning BOM for B3)</td>
</tr>
</tbody>
</table>