DATA SHEET

SKY66101-11: 902 to 928 MHz High-Power RF Front-End Module

Applications
- Range extender
- Smart meters
- In-home appliances
- Smart thermostats

Features
- Integrated PA with +30 dBm output power
- Integrated LNA with programmable bypass
- Low noise figure: 2.5 dB, typical
- Single-ended 50 Ω transmit RF interface
- Differential 100 Ω receive RF interface
- Fast turn-on/turn-off time: <1 μs
- Supply voltage: 2.0 V to 4.8 V
- Sleep mode current: < 1 μA
- Small MCM (36-pin, 6 x 6 x 0.9 mm) package (MSL3, 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 SKY66101-11 is a high-performance, highly integrated RF front-end module (FEM) designed for high-power Industrial, Scientific, Medical (ISM) band applications operating in the 902 to 928 MHz frequency range.

The SKY66101-11 is designed for ease of use and maximum flexibility with fully matched, 50 Ω power amplifier (PA) input and output, and digital controls compatible with 1.6 to 3.6 V CMOS levels.

The RF blocks operate over a wide supply voltage range from 2.0 to 4.8 V that allows the SKY66101-11 to be used in battery powered applications over a wide spectrum of the battery discharge curve.

The SKY66101-11 is packaged in a 36-pin, 6 x 6 x 0.9 mm Multi-Chip Module (MCM), which allows for a highly manufacturable low-cost solution.

A functional block diagram of the SKY66101-11 is shown in Figure 1. The 36-pin MCM package and pinout are shown in Figure 2. Signal pin assignments and functional pin descriptions are provided in Table 1.
Table 1. SKY66101-11 Signal Descriptions

<table>
<thead>
<tr>
<th>Pin</th>
<th>Name</th>
<th>Description</th>
<th>Pin</th>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>CSD</td>
<td>Standby control (see Table 9)</td>
<td>19</td>
<td>GND</td>
<td>Ground</td>
</tr>
<tr>
<td>2</td>
<td>GND</td>
<td>Ground</td>
<td>20</td>
<td>ANT1</td>
<td>Antenna 1 (integrated harmonic filtering)</td>
</tr>
<tr>
<td>3</td>
<td>RX_N</td>
<td>Receive RF output, negative polarity (100 Ω differential)</td>
<td>21</td>
<td>GND</td>
<td>Ground</td>
</tr>
<tr>
<td>4</td>
<td>RX_P</td>
<td>Receive RF output, positive polarity (100 Ω differential)</td>
<td>22</td>
<td>GND</td>
<td>Ground</td>
</tr>
<tr>
<td>5</td>
<td>GND</td>
<td>Ground</td>
<td>23</td>
<td>GND</td>
<td>Ground</td>
</tr>
<tr>
<td>6</td>
<td>N/C</td>
<td>No connection</td>
<td>24</td>
<td>GND</td>
<td>Ground</td>
</tr>
<tr>
<td>7</td>
<td>PA_IN</td>
<td>PA input</td>
<td>25</td>
<td>GND</td>
<td>Ground</td>
</tr>
<tr>
<td>8</td>
<td>CPS</td>
<td>LNA gain control (see Table 9)</td>
<td>26</td>
<td>GND</td>
<td>Ground</td>
</tr>
<tr>
<td>9</td>
<td>CTX</td>
<td>Transmit/receive control (see Table 9)</td>
<td>27</td>
<td>GND</td>
<td>Ground</td>
</tr>
<tr>
<td>10</td>
<td>ANT_SEL</td>
<td>Antenna select control (see Table 9)</td>
<td>28</td>
<td>GND</td>
<td>Ground</td>
</tr>
<tr>
<td>11</td>
<td>GND</td>
<td>Ground</td>
<td>29</td>
<td>VCC2</td>
<td>PA voltage supply</td>
</tr>
<tr>
<td>12</td>
<td>GND</td>
<td>Ground</td>
<td>30</td>
<td>GND</td>
<td>Ground</td>
</tr>
<tr>
<td>13</td>
<td>GND</td>
<td>Ground</td>
<td>31</td>
<td>VCC0</td>
<td>Decoupling capacitor</td>
</tr>
<tr>
<td>14</td>
<td>LNA_IN</td>
<td>LNA input</td>
<td>32</td>
<td>GND</td>
<td>Ground</td>
</tr>
<tr>
<td>15</td>
<td>GND</td>
<td>Ground</td>
<td>33</td>
<td>VCC1</td>
<td>PA voltage supply</td>
</tr>
<tr>
<td>16</td>
<td>RX_FLT</td>
<td>Receive signal from antennas</td>
<td>34</td>
<td>GND</td>
<td>Ground</td>
</tr>
<tr>
<td>17</td>
<td>GND</td>
<td>Ground</td>
<td>35</td>
<td>VSUP1</td>
<td>PA voltage supply</td>
</tr>
<tr>
<td>18</td>
<td>ANT2</td>
<td>Antenna 2 (no integrated harmonic filtering)</td>
<td>36</td>
<td>GND</td>
<td>Ground</td>
</tr>
</tbody>
</table>
Technical Description

The SKY66101-11 consists of a complete T/R chain with T/R switches contained in the module. An SP3T switch selects between receive, transmit, and transmit bypass paths. The module has a shutdown mode to minimize power consumption.

Three digital input control pins (CSD, CPS, and CTX) are used to select between shutdown, T/R, or transmit bypass mode, respectively. A fourth digital control pin (ANT_SEL) is used to select between antenna ports 1 and 2.

The bypass mode can also be configured to power-down the PA and remove it from the RF path using an internal single-pole, single-throw (SPST) switch.

The transmit path contains a PA optimized for saturated performance. The PA can be passed through an external impedance matching network and harmonic filter before being fed through the SP3T switch. External inductors for each of the two PA stages provide maximum application flexibility.

Electrical and Mechanical Specifications

The absolute maximum ratings of the SKY66101-11 are provided in Table 2. The recommended operating conditions are specified in Table 3 and electrical specifications are provided in Tables 4 through 8.

The state of the SKY66101-11 is determined by the logic provided in Table 9.

Table 2. SKY66101-11 Absolute Maximum Ratings

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Symbol</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply voltage (no RF)</td>
<td>VCC</td>
<td>-0.3</td>
<td>+5.5</td>
<td>V</td>
</tr>
<tr>
<td>Control pin (CSD, CPS, CTX, and ANT_SEL) voltages</td>
<td></td>
<td>-0.3</td>
<td>+3.6</td>
<td>V</td>
</tr>
<tr>
<td>Operating temperature</td>
<td>TA</td>
<td>-40</td>
<td>+85</td>
<td>°C</td>
</tr>
<tr>
<td>Storage temperature</td>
<td>TSTG</td>
<td>-40</td>
<td>+125</td>
<td>°C</td>
</tr>
<tr>
<td>Transmit RF input power</td>
<td>PIN_TX_MAX</td>
<td></td>
<td>+10</td>
<td>dBm</td>
</tr>
<tr>
<td>Receive RF input power @ ANT1 or ANT2 ports</td>
<td>PIN_RX_MAX</td>
<td></td>
<td>+15</td>
<td>dBm</td>
</tr>
<tr>
<td>Voltage Standing Wave Ratio @ ANT1 or ANT2 ports</td>
<td>VSWR</td>
<td>10:1</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Electrostatic discharge</td>
<td>ESD</td>
<td>250</td>
<td>1000</td>
<td>V</td>
</tr>
<tr>
<td>Charged Device Model (CDM), Class 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Human Body Model (HBM), Class 1C</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Machine Model (MM), Class A</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1 Exposure to maximum rating conditions for extended periods may reduce device reliability. There is no damage to device with only one parameter set at the limit and all other parameters set at or below their nominal value. Exceeding any of the limits listed here may result in permanent damage to the device.

ESD HANDLING: Although this device is designed to be as robust as possible, electrostatic discharge (ESD) can damage this device. This device must be protected at all times from ESD when handling or transporting. Static charges may easily produce potentials of several kilovolts on the human body or equipment, which can discharge without detection. Industry-standard ESD handling precautions should be used at all times.

Table 3. SKY66101-11 Recommended Operating Conditions

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Symbol</th>
<th>Min</th>
<th>Typ</th>
<th>Max</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply voltage</td>
<td>VCC</td>
<td>2.0</td>
<td>3.6</td>
<td>4.8</td>
<td>V</td>
</tr>
<tr>
<td>Operating temperature</td>
<td>TA</td>
<td>-40</td>
<td>+25</td>
<td>+85</td>
<td>°C</td>
</tr>
<tr>
<td>Transmit duty cycle</td>
<td></td>
<td></td>
<td></td>
<td>50</td>
<td>%</td>
</tr>
</tbody>
</table>
### Table 4. SKY66101-11 DC Electrical Specifications

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Symbol</th>
<th>Test Condition</th>
<th>Min</th>
<th>Typ</th>
<th>Max</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total supply current, transmit mode</td>
<td>ICC_TX30</td>
<td>POUT = +30 dBm</td>
<td>670</td>
<td></td>
<td></td>
<td>mA</td>
</tr>
<tr>
<td>2</td>
<td>ICC_TX27</td>
<td>POUT = +27 dBm</td>
<td>475</td>
<td></td>
<td></td>
<td>mA</td>
</tr>
<tr>
<td>2</td>
<td>ICC_TX24</td>
<td>POUT = +24 dBm</td>
<td>340</td>
<td></td>
<td></td>
<td>mA</td>
</tr>
<tr>
<td>Total supply current, receive mode</td>
<td>ICC_RX</td>
<td></td>
<td>6</td>
<td></td>
<td></td>
<td>mA</td>
</tr>
<tr>
<td>Total supply current, receive bypass mode</td>
<td>ICC_RXB</td>
<td></td>
<td></td>
<td></td>
<td>250</td>
<td>μA</td>
</tr>
<tr>
<td>Quiescent current</td>
<td>ICC_TX</td>
<td>No RF</td>
<td>50</td>
<td></td>
<td></td>
<td>mA</td>
</tr>
<tr>
<td>Sleep supply current</td>
<td>ICC_OFF</td>
<td>No RF</td>
<td>0.05</td>
<td>1.00</td>
<td></td>
<td>μA</td>
</tr>
</tbody>
</table>

1 Performance is guaranteed only under the conditions listed in this table.
2 ICC_TX27 and ICC_TX24 are not production tested.

### Table 5. SKY66101-11 Receive Mode Electrical Specifications

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Symbol</th>
<th>Test Condition</th>
<th>Min</th>
<th>Typ</th>
<th>Max</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency range</td>
<td>f</td>
<td>900 to 930 MHz</td>
<td>902</td>
<td></td>
<td>928</td>
<td>MHz</td>
</tr>
<tr>
<td>Gain</td>
<td>RX_GAIN</td>
<td></td>
<td></td>
<td>16</td>
<td></td>
<td>dB</td>
</tr>
<tr>
<td>Noise Figure2</td>
<td>NF</td>
<td>900 to 930 MHz</td>
<td>2.5</td>
<td></td>
<td></td>
<td>dB</td>
</tr>
<tr>
<td>Third order input intercept point</td>
<td>IIP3</td>
<td>-5</td>
<td>-2</td>
<td></td>
<td></td>
<td>dBm</td>
</tr>
<tr>
<td>1 dB input compression point</td>
<td>IP1dB</td>
<td>-12</td>
<td>-9</td>
<td></td>
<td></td>
<td>dBm</td>
</tr>
<tr>
<td>Gain in receive bypass mode</td>
<td>G_RXB</td>
<td>-4.5</td>
<td>-3</td>
<td></td>
<td></td>
<td>dB</td>
</tr>
<tr>
<td>1 dB input compression point in receive bypass mode</td>
<td>IP1dB_RXB</td>
<td>+9</td>
<td></td>
<td></td>
<td></td>
<td>dBm</td>
</tr>
<tr>
<td>Antenna port return loss</td>
<td>S11</td>
<td>900 to 930 MHz, into 50 Ω, ANT1 and ANT2 ports</td>
<td>-12</td>
<td>-8</td>
<td></td>
<td>dB</td>
</tr>
<tr>
<td>Turn-on time2</td>
<td>tON</td>
<td>From 50% of CTX edge to 90% of final RF output power</td>
<td>1</td>
<td></td>
<td></td>
<td>μs</td>
</tr>
<tr>
<td>Turn-off time2</td>
<td>tOFF</td>
<td>From 50% of CTX edge to 10% of final RF output power</td>
<td>1</td>
<td></td>
<td></td>
<td>μs</td>
</tr>
</tbody>
</table>

1 Performance is guaranteed only under the conditions listed in this table.
2 Not production tested.
Table 6. SKY66101-11 Transmit Mode Electrical Specifications
(Vcc = +3.6 V, Ta = +25 °C, Pout = +30 dBm, as Measured on the Evaluation Board [De-Embedded to Device], All Unused Ports Terminated with 50 Ω, Unless Otherwise Noted. Input Port: PA_IN, Outport Ports: ANT1 and ANT2)

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Symbol</th>
<th>Test Condition</th>
<th>Min</th>
<th>Typ</th>
<th>Max</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency range f</td>
<td>f</td>
<td>VCC = 4.0 V</td>
<td>902</td>
<td></td>
<td>928</td>
<td>MHz</td>
</tr>
<tr>
<td></td>
<td></td>
<td>VCC = 3.6 V</td>
<td></td>
<td></td>
<td></td>
<td>dBm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>VCC = 3.6 V</td>
<td></td>
<td></td>
<td></td>
<td>dBm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>POUT = +30 dBm, CW into 50 Ω,</td>
<td>-31</td>
<td>-30</td>
<td>-28</td>
<td>dBm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ANT1 and ANT2 ports</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small signal gain S21</td>
<td>S21</td>
<td>@ 902 to 928 MHz</td>
<td>33</td>
<td></td>
<td></td>
<td>dB</td>
</tr>
<tr>
<td>Output return loss S22</td>
<td>S22</td>
<td>50 Ω, ANT1 and ANT2 ports</td>
<td>-10</td>
<td>-7</td>
<td></td>
<td>dB</td>
</tr>
<tr>
<td>2nd harmonic POUT</td>
<td>2fo</td>
<td>POUT = +30 dBm, CW into 50 Ω,</td>
<td>-22</td>
<td></td>
<td></td>
<td>dBc</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ANT1 and ANT2 ports</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3rd to 10th harmonic</td>
<td>3fo to 10fo</td>
<td>POUT = +30 dBm, CW:</td>
<td>-72</td>
<td>-45</td>
<td></td>
<td>dBc</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ANT1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>ANT2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Turn-on time t&lt;sub&gt;on&lt;/sub&gt;</td>
<td>t&lt;sub&gt;on&lt;/sub&gt;</td>
<td>From 50% of CTX edge to 90%</td>
<td>1</td>
<td></td>
<td></td>
<td>μs</td>
</tr>
<tr>
<td></td>
<td></td>
<td>of final RF output power</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Turn-off time t&lt;sub&gt;off&lt;/sub&gt;</td>
<td>t&lt;sub&gt;off&lt;/sub&gt;</td>
<td>From 50% of CTX edge to 10%</td>
<td>1</td>
<td></td>
<td></td>
<td>μs</td>
</tr>
<tr>
<td></td>
<td></td>
<td>of final RF output power</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stability Stab</td>
<td>Stab</td>
<td>@ 0.1 to 20 GHz, CW,</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>POUT = +30 dBm, load VSWR = 6:1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>All non-harmonically related outputs &lt;</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>-43 dBm</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ruggedness RU</td>
<td>RU</td>
<td>CW, POUT = +30 dBm into 50 Ω, load VSWR = 10:1</td>
<td></td>
<td></td>
<td></td>
<td>No permanent damage</td>
</tr>
</tbody>
</table>

1 Performance is guaranteed only under the conditions listed in this table.
2 Production tested at VCC = 3.6 V only.
3 Only the 2nd to 5th harmonics at ANT1 are production tested. The 6th to 10th harmonics are characterized only.
4 Not production tested.

Table 7. SKY66101-11 Diversity Antenna Electrical Specifications
(Vcc = +3.6 V, Ta = +25 °C, f = 900 MHz to 930 MHz, as Measured on the Evaluation Board [De-Embedded to Device], All Unused Ports Terminated with 50 Ω, Unless Otherwise Noted)

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Symbol</th>
<th>Test Condition</th>
<th>Min</th>
<th>Typical</th>
<th>Max</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isolation between ANT1 and ANT2 ports</td>
<td>ISO_ANTSW</td>
<td></td>
<td>28</td>
<td></td>
<td>dB</td>
<td></td>
</tr>
<tr>
<td>Insertion loss from ANT1 to RX_FLT port (Note 2)</td>
<td>RX_ANT1</td>
<td></td>
<td>1.0</td>
<td></td>
<td>dB</td>
<td></td>
</tr>
<tr>
<td>Insertion loss from ANT2 to RX_FLT port (Note 2)</td>
<td>RX_ANT2</td>
<td></td>
<td>1.0</td>
<td></td>
<td>dB</td>
<td></td>
</tr>
<tr>
<td>ANT1 to ANT2 switching time, transmit mode (Note 2)</td>
<td>TANT1-ANT2_TX</td>
<td></td>
<td>800</td>
<td></td>
<td>ns</td>
<td></td>
</tr>
<tr>
<td>ANT1 to ANT2 switching time, receive mode (Note 2)</td>
<td>TANT1-ANT2_RX</td>
<td></td>
<td>400</td>
<td></td>
<td>ns</td>
<td></td>
</tr>
</tbody>
</table>

1 Performance is guaranteed only under the conditions listed in this table.
2 Not production tested.
Table 8. SKY66101-11 Electrical Specifications: Control Logic Characteristics¹
(Ta = +25 °C, as Measured on the SKY66101-11 Evaluation Board [De-Embedded to Device], Unless Otherwise Noted)

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Symbol</th>
<th>Test Condition</th>
<th>Min</th>
<th>Typical</th>
<th>Max</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control voltage:²</td>
<td>( V_{IH} )</td>
<td>1.6</td>
<td>3.6</td>
<td>( V )</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>( V_{IL} )</td>
<td>0</td>
<td>0.3</td>
<td>( V )</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Input current:²</td>
<td>( I_{IH} )</td>
<td>1</td>
<td>1</td>
<td>( \mu A )</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>( I_{IL} )</td>
<td>1</td>
<td>1</td>
<td>( \mu A )</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

¹ Performance is guaranteed only under the conditions listed in this table.
² Not production tested.

Table 9. SKY66101-11 Mode Control Logic¹

<table>
<thead>
<tr>
<th>Mode</th>
<th>CPS (Pin 8)</th>
<th>CSD (Pin 1)</th>
<th>CTX (Pin 9)</th>
<th>ANT_SEL (Pin 10)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sleep (all off)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>X</td>
</tr>
<tr>
<td>Receive bypass</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>X</td>
</tr>
<tr>
<td>Receive LNA mode</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>X</td>
</tr>
<tr>
<td>Transmit</td>
<td>X</td>
<td>1</td>
<td>1</td>
<td>X</td>
</tr>
<tr>
<td>ANT1 port enabled</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>0</td>
</tr>
<tr>
<td>ANT2 port enabled</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>1</td>
</tr>
</tbody>
</table>

¹ "1" = 1.6 to 3.6 V, "0" = 0 to 0.3 V, "X" = don’t care.
**Evaluation Board Description**

The SKY66101-11 Evaluation Board is used to test the performance of the SKY66101-11 front-end module. An Evaluation Board schematic diagram is provided in Figure 3.

An assembly drawing for the Evaluation Board is shown in Figure 4, and the layer detail information is provided in Figure 5.

---

**PCB Recommendations:**

- **Metal Layer 1** = RF traces + control lines. Core thickness between top RF layer and ground plane is critical.
- **Metal Layer 2** = Solid ground plane. No traces routing.
- **Metal Layer 3 and 4** = Control lines + VCC traces (no VCC plane).
- Pour copper on each layer connected to the ground plane. Use VCC traces in a star distribution pattern.
- Always use 4 layers.

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**Figure 3. SKY66101-11 Evaluation Board Schematic**
Figure 4. SKY66101-11 Evaluation Board Assembly Drawing
Figure 5. SKY66101-11 Evaluation Board Layer Details
Package Dimensions
The PCB layout footprint is shown in Figure 6. Figure 7 shows the package dimensions, and Figure 8 provides the tape and reel dimensions.

Package and Handling Information
Since the device package is sensitive to moisture absorption, it is baked and vacuum packed before shipping. Instructions on the shipping container label regarding exposure to moisture after the container seal is broken must be followed. Otherwise, problems related to moisture absorption may occur when the part is subjected to high temperature during solder assembly.

The SKY66101-11 is rated to Moisture Sensitivity Level 3 (MSL3) at 260 °C. It can be used for lead or lead-free soldering. For additional information, refer to the Skyworks Application Note, PCB Design and SMT Assembly/Rework Guidelines for MCM-L Packages, document number 101752.

Care must be taken when attaching this product, whether it is done manually or in a production solder reflow environment. Production quantities of this product are shipped in a standard tape and reel format.

Figure 6. SKY66101-11 PCB Layout Footprint
Figure 7. SKY66101-11 Package Dimensions

Figure 8. SKY66101-11 Tape and Reel Dimensions

Notes:
1. Carrier tape material: Black conductive polycarbonate.
2. Cover tape material: Transparent conductive.
3. Po/Pi 0° pitch cumulative tolerance ± 0.20 mm.
4. Aa and Bb measured on plane 0.30 mm from bottom pocket.
5. All dimensions are in millimeters.
Ordering Information

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Product Description</th>
<th>Evaluation Board Part Number</th>
</tr>
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<tbody>
<tr>
<td>SKY66101-11</td>
<td>High-Power RF Front-End Module</td>
<td>SKY66101-11-EK1</td>
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