**APPROVAL SHEET**

<table>
<thead>
<tr>
<th>PRODUCT NAME</th>
<th>CUSTOMER APPROVED BY</th>
</tr>
</thead>
<tbody>
<tr>
<td>JCA216</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CUSTOMER NAME OR MODEL</th>
<th>APPROVED DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SPECIFICATION /规格书**

**Part Number: JCA216**

**Product Name:** BEIDOU I Antenna

**VERSION INFORMATION**

<table>
<thead>
<tr>
<th>VERSION</th>
<th>DATE</th>
<th>REVISION DESCRIPTION</th>
<th>PREPARED</th>
<th>CHECKED</th>
<th>APPROVED</th>
</tr>
</thead>
<tbody>
<tr>
<td>V1.0</td>
<td>2014-9-30</td>
<td>New Issued</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**PREPARED BY**

<table>
<thead>
<tr>
<th>PREPARED BY</th>
<th>CHECKED BY</th>
<th>APPROVED BY</th>
</tr>
</thead>
<tbody>
<tr>
<td>ston</td>
<td>傅胜明</td>
<td>陈小忠</td>
</tr>
</tbody>
</table>
### 1. Electrical Characteristics / 电气参数

<table>
<thead>
<tr>
<th>Item</th>
<th>Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antenna</td>
<td></td>
</tr>
</tbody>
</table>
| Frequency Range/频率范围 | L: 1615.68 ± 4.08MHz  
S: 2491.75 ± 4.08MHz |
| Band Width/带宽     | L > 10MHz                                   
S > 80MHz                                        |
| Polarization/极化   | L: LHCP                                   
S: RHCP                                        |
| Gain/增益          | L ≥ -6 dBic（仰角 20° ~ 90°）          
S ≥ -4 dBic（仰角 20° ~ 90°）             |
| V.S.W.R/电压驻波比 | ≤ 1.5:1                                    |
| Impedance/阻抗     | 50 Ω                                       |
| Axis Ratio/法向轴比 | ≤ 4 dB                                     |
| Isolation/隔离度   | ≥ 15 dB                                    |

### 2. Material / 材质

<table>
<thead>
<tr>
<th>Item</th>
<th>Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>RF Connector/射频连接器</td>
<td>MCX</td>
</tr>
<tr>
<td>PCB Material/线路板材料</td>
<td>FR4</td>
</tr>
<tr>
<td>Antenna/天线</td>
<td>Dielectric Ceramics/介质陶瓷</td>
</tr>
</tbody>
</table>

### 3. Environmental Conditions / 环境条件

<table>
<thead>
<tr>
<th>Item</th>
<th>Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental</td>
<td></td>
</tr>
<tr>
<td>Operating Temperature/工作温度</td>
<td>-40℃~+80℃</td>
</tr>
<tr>
<td>Storage Temperature/储存温度</td>
<td>-40℃~+85℃</td>
</tr>
<tr>
<td>Vibration</td>
<td>10 to 55Hz with 1.5mm amplitude 1 hour</td>
</tr>
<tr>
<td>Relative Humidity/相对湿度</td>
<td>Up to 95%</td>
</tr>
</tbody>
</table>
4. Structure/成品结构图
5. Test/测试

L band Smith & Return loss:

<table>
<thead>
<tr>
<th>CH1</th>
<th>S22</th>
<th>LOG MAG</th>
<th>REF 0.000 dB</th>
<th>5.000 dB/</th>
</tr>
</thead>
<tbody>
<tr>
<td>CH3</td>
<td>S22</td>
<td>SMITH(R+jX)</td>
<td>FS 1.000</td>
<td></td>
</tr>
</tbody>
</table>

![Graph showing Smith & Return loss](image)

**Central Frequency (CF):** 1.616 GHz
**Lower Frequency (LF):** 1.606 GHz
**Return Loss (RL):** 33.948 dB

**Contact Information:**
- Add: 398#, Zhenye Road, South Street, Jiaxing, Zhejiang, China
- Http://www.jinchanggps.com
- E-mail: jcgps@vip.163.com
- Tel: 86-0573-83692157/83692605/83958637
- Fax: 86-0573-83958635
S band Smith & Return loss:

<table>
<thead>
<tr>
<th>CH1</th>
<th>S22</th>
<th>LOG MAG</th>
<th>REF 0.000 dB</th>
<th>5.000 dB/FS 1.000</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>SMITH(R+jX)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

CENTER 2.492GHz [8.00 dBm] SPAN 300MHz