

## ICC-IN-MODULE-JL

### LTE CAT4 for Japan with Internal Antenna

|                  |  |
|------------------|--|
| Specification    | <ul style="list-style-type: none"> <li>✦ LTE FDD: B1/B3/B8/B18/B19/B26</li> <li>✦ LTE TDD: B41</li> <li>✦ WCDMA: B1/B6/B8/B19</li> <li>✦ Carrier: NTT DOCOMO/ SoftBank/ KDD</li> </ul>   |
| Antenna          | <ul style="list-style-type: none"> <li>✦ Built-in Antenna</li> <li>✦ 1.1 dBi (895 MHz), 2.4 dBi (1950 MHz)</li> </ul>  |
| Data             | <ul style="list-style-type: none"> <li>✦ LTE FDD: Max 150Mbps (DL)/Max 50Mbps (UL)</li> <li>✦ LTE TDD: Max 130Mbps (DL)/Max 30Mbps (UL)</li> <li>✦ WCDMA: Max 384Kbps (DL)/Max 384Kbps (UL)</li> </ul>   |
| Output Power     | <ul style="list-style-type: none"> <li>✦ Class 4 (33dBm±2dB) for GSM850</li> <li>✦ Class 4 (33dBm±2dB) for EGSM900</li> <li>✦ Class 1 (30dBm±2dB) for DCS1800</li> <li>✦ Class 1 (30dBm±2dB) for PCS1900</li> <li>✦ Class E2 (27dBm±3dB) for GSM850 8-PSK</li> <li>✦ Class E2 (27dBm±3dB) for EGSM900 8-PSK</li> <li>✦ Class E2 (26dBm±3dB) for DCS1800 8-PSK</li> <li>✦ Class E2 (26dBm±3dB) for PCS1900 8-PSK</li> <li>✦ Class 3 (24dBm+1/-3dB) for WCDMA bands</li> <li>✦ Class 3 (23dBm±2dB) for LTE-FDD bands</li> <li>✦ Class 3 (23dBm±2dB) for LTE-TDD bands</li> </ul>   |
| Consumption      | <ul style="list-style-type: none"> <li>✦ 3.6mA @Sleep, Typ.</li> <li>✦ 35mA @Idle</li> </ul>   |
| General Features | <ul style="list-style-type: none"> <li>✦ Temperature Range: -30°C to 55°C (-22°F to 131°F)</li> <li>✦ Mini PCIe Package (LTE module)</li> <li>✦ Bandwidth: 1.4/3/5/10/15/20MHz</li> </ul>  |
| Sensitivity      | <ul style="list-style-type: none"> <li>✦ LTE B1: -101.5dBm (10M)</li> <li>✦ LTE B2: -101dBm (10M)</li> <li>✦ LTE B3: -101.5dBm (10M)</li> <li>✦ LTE B4: -101dBm (10M)</li> <li>✦ LTE B5: -101dBm (10M)</li> <li>✦ LTE B7: -99.5dBm (10M)</li> <li>✦ LTE B8: -101dBm (10M)</li> <li>✦ LTE B12: -101dBm (10M)</li> <li>✦ LTE B13: -100dBm (10M)</li> <li>✦ LTE B14: -99dBm (10M)</li> <li>✦ LTE B18: -101.7dBm (10M)</li> <li>✦ LTE B19: -101.4dBm (10M)</li> <li>✦ LTE B20: -102.5dB (10M)</li> <li>✦ LTE B26: -101.5dBm (10M)</li> <li>✦ LTE B28: -102dBm (10M)</li> <li>✦ LTE B38: -100dBm (10M)</li> <li>✦ LTE B40: -100dBm (10M)</li> <li>✦ LTE B41: -99dBm (10M)</li> <li>✦ LTE B66: -99dBm (10M)</li> <li>✦ LTE B71: -100dBm (10M)</li> <li>✦ WCDMA B1: -110dBm</li> <li>✦ WCDMA B2: -110dBm</li> <li>✦ WCDMA B4: -110dBm</li> <li>✦ WCDMA B5: -110.5dBm</li> <li>✦ WCDMA B6: -110.5dBm</li> <li>✦ WCDMA B8: -110.5dBm</li> <li>✦ WCDMA B19: -110.5dBm</li> </ul> |

# ICC-EX-MODULE-JL

## LTE CAT4 for Japan with External Antenna

|                  |  |
|------------------|--|
| Specification    | <ul style="list-style-type: none"> <li>✦ LTE FDD: B1/B3/B8/B18/B19/B26</li> <li>✦ LTE TDD: B41</li> <li>✦ WCDMA: B1/B6/B8/B19</li> <li>✦ Carrier: NTT DOCOMO/ SoftBank/ KDDI</li> </ul>  |
| Antenna          | <ul style="list-style-type: none"> <li>✦ SMA Omni-directional</li> <li>✦ 3.05 dBi</li> </ul>   |
| Data             | <ul style="list-style-type: none"> <li>✦ LTE FDD: Max 150Mbps (DL)/Max 50Mbps (UL)</li> <li>✦ LTE TDD: Max 130Mbps (DL)/Max 30Mbps (UL)</li> <li>✦ WCDMA: Max 384Kbps (DL)/Max 384Kbps (UL)</li> </ul>   |
| Output Power     | <ul style="list-style-type: none"> <li>✦ Class 4 (33dBm±2dB) for GSM850</li> <li>✦ Class 4 (33dBm±2dB) for EGSM900</li> <li>✦ Class 1 (30dBm±2dB) for DCS1800</li> <li>✦ Class 1 (30dBm±2dB) for PCS1900</li> <li>✦ Class E2 (27dBm±3dB) for GSM850 8-PSK</li> <li>✦ Class E2 (27dBm±3dB) for EGSM900 8-PSK</li> <li>✦ Class E2 (26dBm±3dB) for DCS1800 8-PSK</li> <li>✦ Class E2 (26dBm±3dB) for PCS1900 8-PSK</li> <li>✦ Class 3 (24dBm+1/-3dB) for WCDMA bands</li> <li>✦ Class 3 (23dBm±2dB) for LTE-FDD bands</li> <li>✦ Class 3 (23dBm±2dB) for LTE-TDD bands</li> </ul>   |
| Consumption      | <ul style="list-style-type: none"> <li>✦ 3.6mA @Sleep, Typ.</li> <li>✦ 35mA @Idle</li> </ul>   |
| General Features | <ul style="list-style-type: none"> <li>✦ Temperature Range: -30°C to 55°C (-22°F to 131°F)</li> <li>✦ Mini PCIe Package (LTE module)</li> <li>✦ Bandwidth: 1.4/3/5/10/15/20MHz</li> </ul>  |
| Sensitivity      | <ul style="list-style-type: none"> <li>✦ LTE B1: -101.5dBm (10M)</li> <li>✦ LTE B2: -101dBm (10M)</li> <li>✦ LTE B3: -101.5dBm (10M)</li> <li>✦ LTE B4: -101dBm (10M)</li> <li>✦ LTE B5: -101dBm (10M)</li> <li>✦ LTE B7: -99.5dBm (10M)</li> <li>✦ LTE B8: -101dBm (10M)</li> <li>✦ LTE B12: -101dBm (10M)</li> <li>✦ LTE B13: -100dBm (10M)</li> <li>✦ LTE B14: -99dBm (10M)</li> <li>✦ LTE B18: -101.7dBm (10M)</li> <li>✦ LTE B19: -101.4dBm (10M)</li> <li>✦ LTE B20: -102.5dB (10M)</li> <li>✦ LTE B26: -101.5dBm (10M)</li> <li>✦ LTE B28: -102dBm (10M)</li> <li>✦ LTE B38: -100dBm (10M)</li> <li>✦ LTE B40: -100dBm (10M)</li> <li>✦ LTE B41: -99dBm (10M)</li> <li>✦ LTE B66: -99dBm (10M)</li> <li>✦ LTE B71: -100dBm (10M)</li> <li>✦ WCDMA B1: -110dBm</li> <li>✦ WCDMA B2: -110dBm</li> <li>✦ WCDMA B4: -110dBm</li> <li>✦ WCDMA B5: -110.5dBm</li> <li>✦ WCDMA B6: -110.5dBm</li> <li>✦ WCDMA B8: -110.5dBm</li> <li>✦ WCDMA B19: -110.5dBm</li> </ul> |

# ICC-EX-MODULE-GL

## LTE CAT4 for Global with External Antenna

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|------------------|--|
| Specification    | <ul style="list-style-type: none"> <li>♦ LTE FDD: B1/B2/B3/B4/B5/B7/B8/B12/B13/B18/B19/B20/B25/B26/B28</li> <li>♦ LTE TDD: B38/B39/B40/B41</li> <li>♦ WCDMA: B1/B2/B4/B5/B6/B8/B19</li> <li>♦ Carrier: Deutsche Telekom/ Verizon/ AT&amp;T/ Sprint/U.S. Cellular/ T-Mobile*/ Rogers*/ Telus*</li> </ul> <p style="text-align: right;">*Under development</p>   |
| Antenna          | <ul style="list-style-type: none"> <li>♦ SMA Omni-directional</li> <li>♦ 4.0 dBi</li> </ul>  |
| Data             | <ul style="list-style-type: none"> <li>♦ LTE FDD: Max 150Mbps (DL)/Max 50Mbps (UL)</li> <li>♦ LTE TDD: Max 130Mbps (DL)/Max 30Mbps (UL)</li> <li>♦ WCDMA: Max 384Kbps (DL)/Max 384Kbps (UL)</li> </ul>   |
| Output Power     | <ul style="list-style-type: none"> <li>♦ Class 3 (23dBm±2dB) for LTE FDD bands</li> <li>♦ Class 3 (23dBm±2dB) for LTE TDD bands</li> <li>♦ Class 3 (24dBm+1/-3dB) for WCDMA bands</li> <li>♦ Class E2 (27dBm±3dB) for GSM850 8-PSK</li> <li>♦ Class E2 (27dBm±3dB) for EGSM900 8-PSK</li> <li>♦ Class E2 (26dBm±3dB) for DCS1800 8-PSK</li> <li>♦ Class E2 (26dBm±3dB) for PCS1900 8-PSK</li> <li>♦ Class 4 (33dBm±2dB) for GSM850</li> <li>♦ Class 4 (33dBm±2dB) for EGSM900</li> <li>♦ Class 1 (30dBm±2dB) for DCS1800</li> <li>♦ Class 1 (30dBm±2dB) for PCS1900</li> </ul>                                     |
| Consumption      | <ul style="list-style-type: none"> <li>♦ 3.6mA @Sleep, Typ.</li> <li>♦ 35mA @Idle</li> </ul>   |
| General Features | <ul style="list-style-type: none"> <li>♦ Temperature Range: -30°C to 55°C (-22°F to 131°F)</li> <li>♦ Mini PCIe Package (LTE module)</li> <li>♦ Bandwidth: 1.4/3/5/10/15/20MHz</li> </ul>  |
| Sensitivity      | <ul style="list-style-type: none"> <li>♦ LTE B1: -101.5dBm (10M)</li> <li>♦ LTE B2: -101dBm (10M)</li> <li>♦ LTE B3: -101.5dBm (10M)</li> <li>♦ LTE B4: -101dBm (10M)</li> <li>♦ LTE B5: -101dBm (10M)</li> <li>♦ LTE B7: -99.5dBm (10M)</li> <li>♦ LTE B8: -101dBm (10M)</li> <li>♦ LTE B12: -101dBm (10M)</li> <li>♦ LTE B13: -100dBm (10M)</li> <li>♦ LTE B20: -102.5dB (10M)</li> <li>♦ LTE B25: -99dBm(10M)</li> <li>♦ LTE B28: -102dBm (10M)</li> <li>♦ WCDMA B1: -110dBm</li> <li>♦ WCDMA B2: -110dBm</li> <li>♦ WCDMA B4: -110dBm</li> <li>♦ WCDMA B5: -110.5dBm</li> <li>♦ WCDMA B8: -110.5dBm</li> </ul> |

## ORDERING INFORMATION

| Part Number      | Description                             | Included parts  |
|------------------|---|---|
| ICC-IN-MODULE-JL | LTE CAT4 for Japan w/ internal antenna  | 12V/2A Power adapter*1 / USB cable*1                      |
| ICC-EX-MODULE-JL | LTE CAT4 for Japan w/ external antenna  | 12V/2A Power adapter*1 / USB cable*1 / External Antenna*2 |
| ICC-EX-MODULE-GL | LTE CAT4 for Global w/ external antenna | 12V/2A Power adapter*1 / USB cable*1 / External Antenna*2 |