WiLink™ 8Q Solutions – Scalable Wi-Fi®, Bluetooth® and GNSS

The Texas Instruments WiLink™ 8Q product family brings high performance Wi-Fi, Bluetooth® and GNSS positioning solutions to Infotainment systems. The solutions enable close integration with mobile handsets and high-speed data traffic to multiple devices in parallel. The WiLink 8Q family has a scalable and flexible combo chip architecture where the pin-to-pin compatible devices enable hardware and software reuse across platforms. It offers the lowest power and best-in-class RF performance and co-existence.

Key Features
- Integrated solution for Wi-Fi, Bluetooth® and GNSS
- Qualified following AEC-Q100 guidelines for automotive
  - Bluetooth
  - Bluetooth 4.1, including Bluetooth low energy
- Best-in-class sensitivity
- On-chip mSBC codec
- Shared UART for Bluetooth, GNSS control
- PCM for audio
- Wi-Fi
  - IEEE 802.11a/b/g/n
  - Station / Access Point / Wi-Fi Direct
  - Multi-channel / Multi-role
  - Wi-Fi Protected Access 2 (WPA2) and Setup (WPS)
  - 100Mbps throughput
  - Wi-Fi Miracast™ ready
  - SDIO interface
- Location
  - Autonomous and Assisted GNSS
  - Supporting four satellite systems in parallel: GPS, Glonass, QZSS and SBAS
  - Short TTFF, fast cold start
  - High tracking sensitivity
  - Sensors blending
  - Integrated LNA, support for external LNA / Active antenna
  - On-chip Position Engine
- Leading co-ex performance through advanced techniques
- Operating temp. -40 to +85°C

WiLink™ 8Q Solutions

<table>
<thead>
<tr>
<th>Available technology options</th>
<th>WL187xQ</th>
<th>WL183xQ</th>
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<tbody>
<tr>
<td>Dual-band 2x2 MIMO mobile</td>
<td>WL1877Q</td>
<td>WL1837Q</td>
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<tr>
<td>Wi-Fi 802.11 a/b/g/n</td>
<td>WL1873Q</td>
<td>WL1833Q</td>
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<tr>
<td>Wi-Fi 802.11 b/g/n</td>
<td>WL1871Q</td>
<td>WL1831Q</td>
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<tr>
<td>Wi-Fi SS 40MHz (HT40)</td>
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<tr>
<td>GNSS</td>
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<tr>
<td>Bluetooth® 4.1 (including BLE)</td>
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For further inquiries on automotive connectivity, please contact a TI global sales office or submit an email inquiry to wilink8q@ti.com.

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