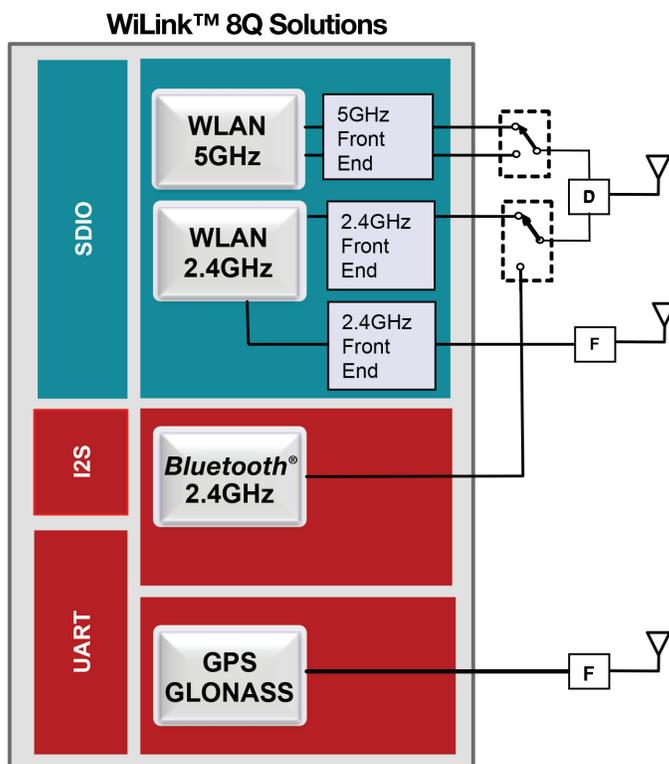


# Automotive Wireless Connectivity Solutions



## 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

| Available technology options   | WL187xQ | WL183xQ |
|--------------------------------|---------|---------|
| Dual-band 2x2 MIMO mobile      | WL1877Q | WL1837Q |
| Wi-Fi 802.11 a/b/g/n           | WL1873Q | WL1833Q |
| Wi-Fi 802.11 b/g/n             | WL1871Q | WL1831Q |
| Wi-Fi SS 40MHz (HT40)          | •       | •       |
| GNSS                           | •       | •       |
| Bluetooth® 4.1 (including BLE) | •       | •       |



## TI Worldwide Technical Support

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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](mailto:wilink8q@ti.com).

### Product Information Centers

**Americas** Phone +1(512) 434-1560

**Brazil** Phone 0800-891-2616

**Mexico** Phone 0800-670-7544

Fax +1(972) 927-6377  
Internet/Email [support.ti.com/sc/pic/americas.htm](http://support.ti.com/sc/pic/americas.htm)

### Europe, Middle East, and Africa

Phone

European Free Call 00800-ASK-TEXAS  
(00800 275 83927)  
International +49 (0) 8161 80 2121  
Russian Support +7 (4) 95 98 10 701

**Note:** The European Free Call (Toll Free) number is not active in all countries. If you have technical difficulty calling the free call number, please use the international number above.

Fax +(49) (0) 8161 80 2045  
Internet [www.ti.com/asktexas](http://www.ti.com/asktexas)  
Direct Email [asktexas@ti.com](mailto:asktexas@ti.com)

### Japan

Phone Domestic 0120-92-3326  
Fax International +81-3-3344-5317  
Domestic 0120-81-0036  
Internet/Email International [support.ti.com/sc/pic/japan.htm](http://support.ti.com/sc/pic/japan.htm)  
Domestic [www.tij.co.jp/pic](http://www.tij.co.jp/pic)

### Asia

Phone

International +91-80-41381665  
Domestic Toll-Free Number

**Note:** Toll-free numbers do not support mobile and IP phones.

Australia 1-800-999-084  
China 800-820-8682  
Hong Kong 800-96-5941  
India 1-800-425-7888  
Indonesia 001-803-8861-1006  
Korea 080-551-2804  
Malaysia 1-800-80-3973  
New Zealand 0800-446-934  
Philippines 1-800-765-7404  
Singapore 800-886-1028  
Taiwan 0800-006800  
Thailand 001-800-886-0010

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| Clocks and Timers            | <a href="http://www.ti.com/clocks">www.ti.com/clocks</a>                             |
| Interface                    | <a href="http://interface.ti.com">interface.ti.com</a>                               |
| Logic                        | <a href="http://logic.ti.com">logic.ti.com</a>                                       |
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| RFID                         | <a href="http://www.ti-rfid.com">www.ti-rfid.com</a>                                 |
| OMAP Applications Processors | <a href="http://www.ti.com/omap">www.ti.com/omap</a>                                 |
| Wireless Connectivity        | <a href="http://www.ti.com/wirelessconnectivity">www.ti.com/wirelessconnectivity</a> |

### Applications

|                               |  |
|-------------------------------|--|
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| Communications and Telecom    | <a href="http://www.ti.com/communications">www.ti.com/communications</a>                 |
| Computers and Peripherals     | <a href="http://www.ti.com/computers">www.ti.com/computers</a>                           |
| Consumer Electronics          | <a href="http://www.ti.com/consumer-apps">www.ti.com/consumer-apps</a>                   |
| Energy and Lighting           | <a href="http://www.ti.com/energy">www.ti.com/energy</a>                                 |
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| Medical                       | <a href="http://www.ti.com/medical">www.ti.com/medical</a>                               |
| Security                      | <a href="http://www.ti.com/security">www.ti.com/security</a>                             |
| Space, Avionics and Defense   | <a href="http://www.ti.com/space-avionics-defense">www.ti.com/space-avionics-defense</a> |
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