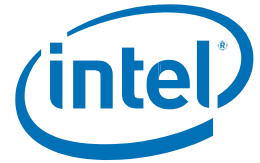




PRODUCT BRIEF  
Intel® Wireless-GNSS 2x00  
GNSS Receiver



# Intel® Wireless-GNSS 2x00



## Product Description

Intel® Wireless-GNSS 2x00 (WCS2x00) gives customers a choice of dynamic location solutions to enable continuous location awareness for social networking, tracking, mobile advertising and other location-based applications. Based on Intel's market-proven GNSS core, the products contain an on-chip navigation engine for power efficient foreground and background location applications.

## Product Features



### Worldwide Coverage

- Support for major global satellite navigation systems: GPS, GLONASS, Beidou, Galileo
- Support for regional satellite augmentation systems: QZSS, WAAS, EGNOS



### Advanced Indoor/Outdoor Location Capabilities

- Integration with Intel® Atom™ processor-based Wi-Fi location engine for continuous indoor/outdoor positioning
- Offloaded background geofencing for power efficiency
- Operator pre-certified assisted GPS capability with Intel® XMM™ 726x and XMM™ 7360 modems



### Enhanced Performance and Time to First Fix

- Enhanced search and qualification engines for complete multi satellite acquisition
- Enhanced tracking engine with 48 multi satellite tracking channels
- Motion sensors-based GNSS augmentation
- 3GPP margin of >10dB



### OEM Design Flexibility

- Available in two versions for flexible design:
  - **WCS2100** for full featured performance and location features
  - **WCS2000** for value-oriented devices

## Intel® Wireless-GNSS 2x00 Technical Specifications

### General

Dimensions (H x W x D)	3.46 x 3.46 x 0.56 mm, 48 balls, 0.5mm pitch
Interface	UART, Multi-master I2C for direct sensor connection
Power Supply	3.7V Single Supply (VBAT)
I/O Power	1.8V - 3.3V
Clock Input	TCXO, TSX and XO
Clock Sharing	Output clock sharing with Intel® Wireless-AC 8x70
Operating Systems	Android, Microsoft® Windows
Positioning Modes	Continuous, Low Power, Batched, Background, Geofencing, Position Logging
Satellite Navigation Systems	Primary: GPS, GLONASS, Beidou, Galileo Augmentation: QZSS, WAAS, EGNOS, MSAS
Hot start TTFF	1 second
Maximum Sensitivity	-165dBm (GPS tracking)

### Aiding and Certification

Time aiding	Hardware input for precise time transfer
Frequency aiding	Hardware input for precise frequency aiding
Aiding Protocols supported	RRLP, RRC, and LPP (release 10)
Control plane certification	3GPP TS 34.123, 34.171, 51.010, 37.571
3GPP pass margin	>10dB
User plane certification	OMA SUPL V1.0 and V2.0

### Compliance

Government	COCOM
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Product Name	Model Number	Version
Intel® Wireless-GNSS 2100	WCS2100	GPS, GLONASS, Beidou, and Galileo with offloaded geofencing
Intel® Wireless-GNSS 2000	WCS2000	GPS, GLONASS, and Beidou



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