NETWORK INNOVATIONS

Communicate. Anywhere.

Key Features

- Ultra compact form factor

- Single-board transceiver

- Voice and Circuit Switched Data capable

- Larger SBD message capability

- Iridium Push-to-Talk capable

- Direct PCB integration

- Pole-to-pole global coverage

- FCC, Industry Canada, and ITU approval

- SMS

- LBS

The Iridium® Core 9523 advanced voice and data satellite transceiver module is small, light and powerful. Its compact footprint and simple connections offer our partners new opportunities to integrate Iridium directly on their printed circuit boards (PCB) and develop products that meet the needs of previously unreached consumer and vertical markets like never before.

Powering New Possibilities

From single or multi channel communication platforms for maritime, aviation and land mobile markets to highly capable feature enhanced handheld smart devices and unattended sensors, Iridium Core 9523 delivers cost effective satellite voice and data communications .

Enabling New Capabilities

Small but powerful, Iridium Core 9523 supports all Iridium voice and data services. One tiny module delivers the capability needed to develop innovative communications devices, and the technology backbone for embedded applications such as GPS and location-based services (LBS), Wi-Fi and Bluetooth.

Simplifying Integration

Iridium Core 9523 features standardized connectors, making integration into innovative new devices and solutions easier than ever. With simplified PCB integration and compact form factor, designers can mount Iridium Core 9523 directly onto their application board – enabling optimization through shared components and power sources.

Core 9523 Satellite Transceiver Module

Size Matters

Incredibly compact and lightweight, the Iridium Core 9523 embedded module drives innovation and helps meet the needs of under served markets around the globe.

Capabilities

- Iridium Voice
- Iridium Push-to-Talk
- Circuit Switched Data
- SMS
- LBS
- SBD
- Mobile originated SBD message size 1960
- Mobile terminated SBD message size 1890

Mechanical

- Length: 70.44 mm
- Width: 36.04 mm
- Height

  (reservoir capacitors): 14.6 mm

  (screen can): 8.9 mm
- Weight: 32 g

Environmental

- Operating Temp: –30ºC to +70ºC
- Operating Humidity: 75% RH
- Storage Temp: –40ºC to +85ºC
- Storage Humidity: 93% RH

RF Interface

- Frequency Range: 1616 MHz to 1626.5 MHz
- Duplexing Method: TDD (Time Domain Duplex)
- Input/Output Impedance: 50Ω
- Multiplexing Method: TDMA/FDMA

VBAT Power Input Specifications

- Nominal Voltage: +3.7 V
- Voltage Limits: +3.2 V to +6 V
- Maximal Current: 500 mA

VBAT Typical Current at Nominal +3.7 V

- Standby Current: 70 mA
- Peak Current during Call: 300 mA
- Average Current during Call: 110 mA

VBOOST Power Input

- Nominal Voltage: +27 V
- Maximal Voltage: +35 V
- Maximal Recommended Voltage: +32 V
- Minimal Voltage during Call Transmit Burst: +10.5 V
- Maximal Current: 1 A

VBOOST Power Consumption

- Typical Average Power during Call: 2.3 W
- Maximal Average Power during Call: 3.1 W

Connecting to the Future

Iridium is forging ahead with its uncompromising vision for the future of global communications. Iridium NEXT, Iridium's ground-breaking next generation satellite constellation, will inspire exciting new innovations while ensuring continued high-level performance and reliability for all existing Iridium-connected solutions. With first launch scheduled for 2015, Iridium NEXT's backward compatibility will ensure Iridium 9523 applications continue to unlock new opportunities and push the limits of what's possible – for years to come.