

Ultra-Low Power GPS Reference Design

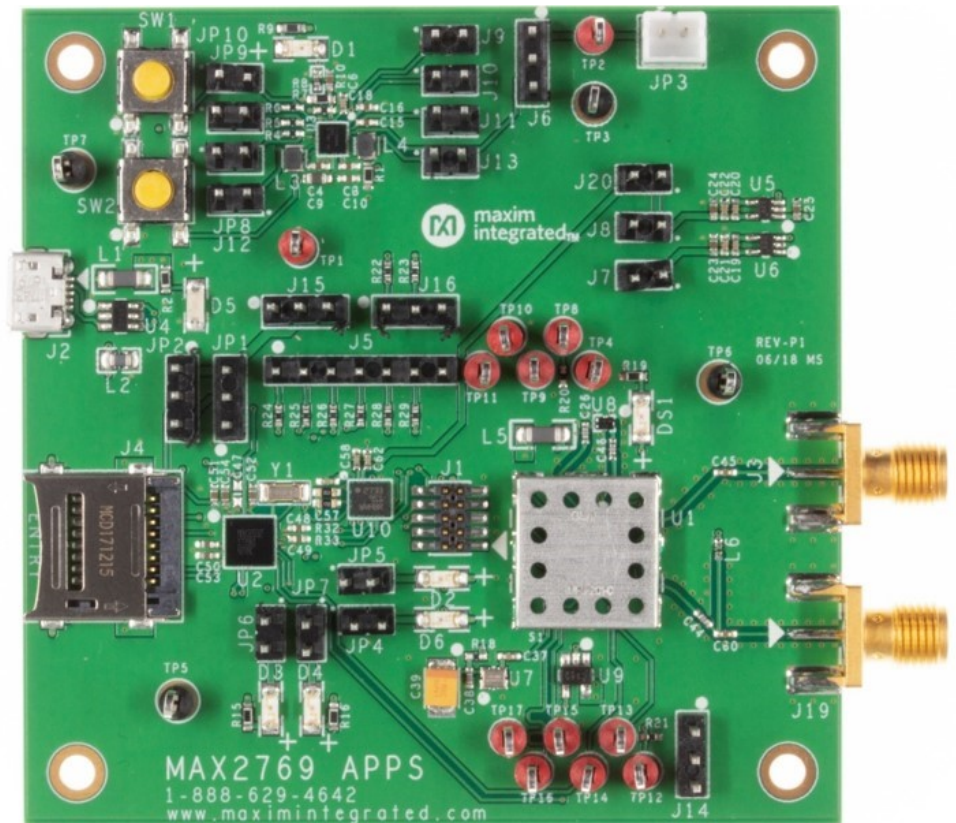
FEATURES

- Ultra fast
- Ultra low power consumption
- Ultra flexible operating modes
- Native ARM Cortex M4 design

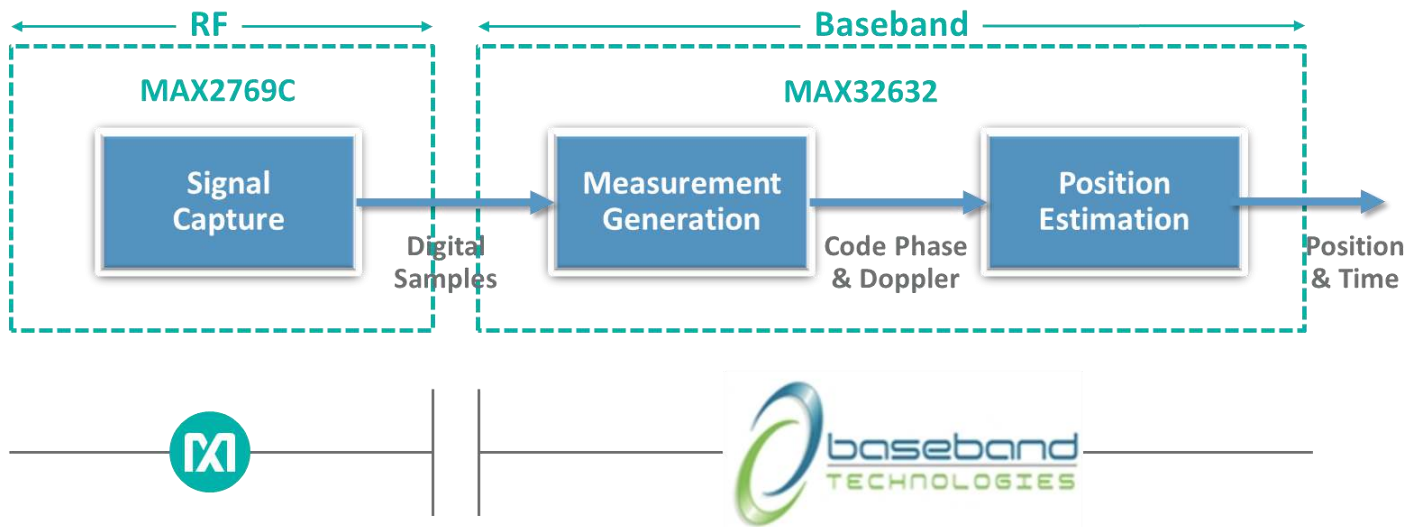
The Maxim MGPS Reference Design is a complete ultra-low power L1-band GPS receiver reference design. It contains the MAX2769C GNSS L1-Band receiver and the MAX32632 ARM Cortex® M4 microcontroller executing Baseband Technologies' Snapshot Receiver. The reference design allows evaluation of the accuracy of the GPS position solutions and measurement of the power consumption of the complete navigation solution. Furthermore, it provides a reference guide for integration of the GPS receiver into products that require a low-power GPS navigation solution such as battery-powered asset trackers.

Applications

- Wearables
- Internet of Things (IoT)
- Activities Tracker
- Asset Tracking
- Cattle Tracking
- Wildlife Tracker



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Primary Reference Design Components

Receiver: MAX2769C GNSS L1-Band Receiver

Microcontroller: MAX32632 ARM Cortex® M4

Firmware: Baseband Technologies' Snapshot Receiver

Ordering Information

MAXREFDES_GPS_A

Technical Specifications

- GPS L1 Snapshot Receiver
- Sensitivity (Cold Start): -144dBm
- TTTF:
 - Mode 1: ~100ms (Server Dependent)
 - Mode 2: ~2ms (Server Dependent)
 - Mode 3: 2s
- User Selectable Signal Capture: 2ms min
- Operating Modes: Real-Time, Post Process
- Position Accuracy: 5m CEP
- Power Consumption:
 - 2.82mW to 6.47mW (@15s Update Rate)
- Temperature Range: -40C to +85C

Contact Us

For more information, contact us at analog@maximintegrated.com

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