TEXAS INSTRUMENTS

CC4000 GPS Module Kit Status: ACTIVE

CC4000GPSEM

Description

Know where you are when the need arises with TI's SimpleLink™ CC4000 GPS solution. TI's CC4000 GPS solution provides a quick, accurate, low cost path to add GPS positioning technology to your product. With unmatched performance, TI's CC4000 can deliver accuracy better than 3 meters with autonomous time to fix of 35 seconds. CC4000s' "Watchful Eye" technology automatically maintains satellite positioning information allowing your solution to stay in low power modes longer.

A slim driver coupled with modules from the world's leading manufacturers reduces development time, complexity and cost by allowing you to get to market quicker with known system performance.

Fully integrated GPS solution

- Embedded GPS driver
- NMEA protocol communication
- Reduced system complexity
- Minimal loading on host CPU
- Enables GPS functionality with all MCUs and MPUs
- Based on 6th generation GPS solution shipping for several years (millions of units shipped)

Features

- Protocol Communication - NMEA (provides time, position, speed, satellite status, and course)
- Performance - Autonomous cold start TTFF of 35 seconds in open sky signal conditions
- Autonomous hot start TTFF of ~1 second in open sky signal conditions
- Tracking Accuracy better than 3 meters
- GPS tracking sensitivity -- -162 dBm
- Embedded software - Fully integrated GPS driver
- Push-to-fix - Single GPIO activates power management for active and deep sleep
- Ephemeris data - Automatically maintains satellite positioning information, valid for up to 4 hours
- Pulse-per-second (PPS) generator - Independent output for high precision timing applications with accuracy <100ns (nominal)
- Host interface - UART

What's Included
- GNS TC6000GN module and EM board

- Jumpers required to run software on MSP-EXP430F5529