GPS RADIONOVA® M10214-K1 Evaluation Kit

Antenova's GPS RADIONOVA® M10214-K1 Evaluation Kit is a complete GPS solution in a box for the development of GPS enabled devices. The M10214-K1 provides the necessary hardware and procedures for the proper evaluation of Antenova's GPS RADIONOVA® M10214-A1 RF Antenna Module's - the world's smallest RF antenna module incorporating a SiRFstarIII GPS chipset and optimized with Antenova's high efficiency complementary GPS antenna. The Evaluation Kit enables users to develop a complete working GPS solution and become experienced with the benefits of the RF antenna modules earlier in the design cycle.

The M10214-K1 Evaluation Kit, in conjunction with SiRFDemo software, allows users to configure the M10214-A1 GPS receiver for a specific mode and real-time monitoring of performance such as the number of satellites being tracked, signal strength and position.

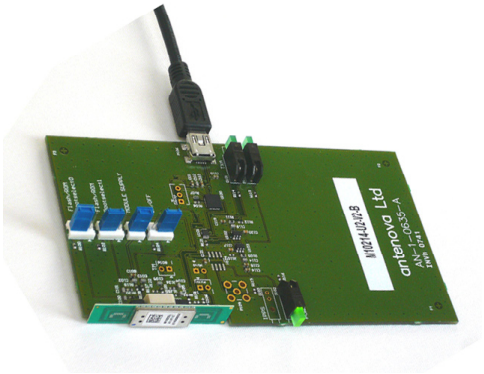
Evaluation Kit consist of:

- Two GPS RADIONOVA M10214-A1 RF Antenna Modules
- One M10214-U1 Test Board
- One USB Cable
- Printed User Guide
- CD-ROM with documentation

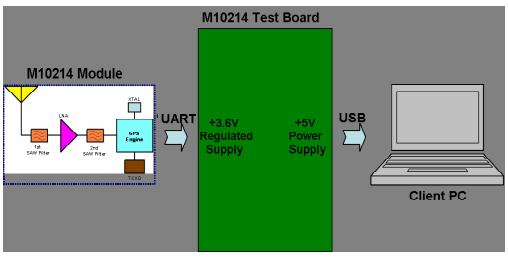
Applications:

- Personal Navigation Devices (PNDs)
- Portable Media Players (PMPs)
- Personal Digital Assistants (PDAs)
- Trackers/Tracking Devices
- Personal Safety Devices
- Other GPS enabled devices
- Feature phones and Smart Phones

M10214-K1 Evaluation Kit



GPS Receiver
(M10214-U1 Test Board + M10214-A1 RF Antenna Module)



Block Diagram

Antenova is a certified SiRF Value Added Manufacturer (VAM)

SiRF

Part No. M10214-K1

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Integrated Antenna and RF Solutions

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M10214-A1 RF Antenna Module Electrical and Mechanical Information

electrical

Frequency:	1575 MHz
Supply Voltage	3.6V
Suppy Current:	30mA
Hibernate Current:	30 uA
Com Interface:	UART
Output Protocol:	SiRF Binary / NMEA 0183
Temperature:	-25°C to +70°C

mechanical

Dimensions :	43 x 9 x 4mm (w/shield can)
Mounting:	Vertical mount / low profile connector
Groundplane:	20 x 40mm min

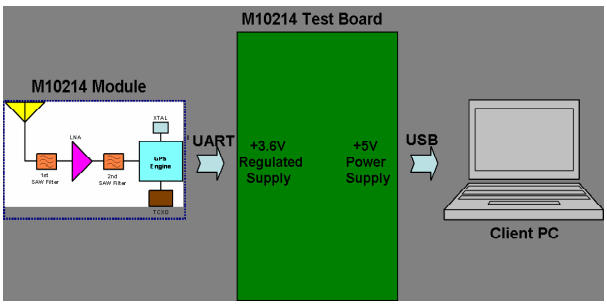
Typical M10214-K1 Evaluation Kit System Performance

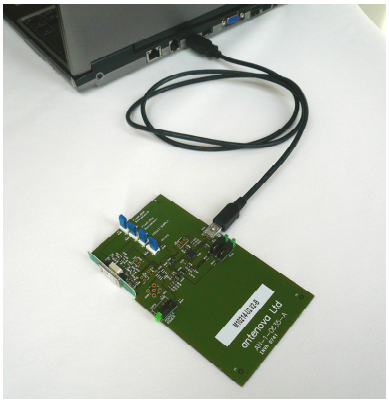
Conditions: Vbat = 3.6V, Ta = 25 °C, Outdoor clear view of the open sky

Symbol	Parameter	Typ	Unit
Icc_{ACQ}	Total Supply Current (Acquisition Mode)	50	mA
Icc_{TRK}	Track Mode	33	mA
$Icc_{(HIBERNATE)}$	Hibernate Mode	30	µA

TTFF	
Hot Start	<1s
Warm Start	<35s
Cold Start	25s to 50s

Note: M10214-K1 Evaluation Kits use a PC based software provided by SiRF Technology, Inc. for evaluation and characterization of the M10214-A1 RF Antenna Module. For SiRFDemo software availability, please contact Antenova by email on info@antenova.com.





Recommended M10214-K1 Evaluation Kit System Configuration

antenova®

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