SiRFstarIII Evaluation Kit

For Complete Performance Evaluation of SiRFstarIII

SiRF Development Tools

INTRODUCTION

SiRFstarIII - a GPS architecture based on three generations of experience and SiRF's latest GPS solution offering. With over 200,000+ effective correlators, SiRFstarIII is one of the most powerful GPS solutions in the market today. The SiRFstarIII Evaluation Kit (EVK) provides all the tools and equipment necessary to easily and efficiently evaluate the suitability, performance and capability of the SiRFstarIII GPS solution.

DATA COLLECTION CONVENIENCE

Flexibility and ease of use are assured with the SiRFstarIII Evaluation Receiver. Equally suited to a road, on foot, or workbench testing environment, the Evaluation Receiver is based on SiRF's LGA GPS reference design and is housed in a durable aluminum casing. Highly visible LEDs provide immediate indication of the receiver operation, while two configurable serial ports allow operation in either SiRF Binary or NMEA protocols. For added compatibility, the Evaluation Receiver also includes a USB port when USB is the preferred communication method.

To provide even more evaluation flexibility and convenience, the Evaluation Receiver includes internal rechargeable batteries, providing up to 14 hours of continuous, full power operation. This allows for a totally mobile receiver, eliminating the need to be tethered to an external power source.

SOFTWARE TOOLS SUITE

An important part of the evaluation process is understanding what the receiver is doing and why. Therefore an extensive suite of software tools is provided with the SiRFstarIII Evaluation Kit. The software tools provided with the kit include:

- **SiRFDemo** - a PC tool that can monitor the Evaluation Receiver in real time, log data for later analysis, and configure the operating parameters of the receiver.

- **SiRFDemoPPC** - similar in function as SiRFDemo, but is designed to run on a Pocket PC for maximum mobility.

- **SiRFView** - With data already collected in the field, SiRFView quickly provides various graphical displays and map overlays for closer analysis.

- **SiRFFlash** - a flash programming utility that can be used to upgrade the software running on the Evaluation Receiver.

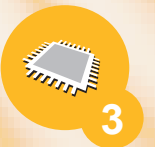## THE EVK COMES COMPLETE WITH:

- Evaluation Receiver based on the SiRFstarIII GSC single-chip GPS solution

- Extensive software tools suite including SiRFDemo, SiRFDemoPPC, SiRFView, and SiRFFlash

- Detailed documentation including data sheets, software tool user guides, and protocol reference manuals

- A Quick Start Guide to help you get everything up and running in the shortest time possible

- Active 3V GPS patch antenna with a 5 meter cable

- 110 to 220V power supply including international plug adaptors

- Cigarette lighter adapter for road testing

- Two serial cables

- A USB cable

- A mini USB optical mouse

1 Evaluate

2 Develop

3 Build

TECHNICAL SPECIFICATIONS

Position Accuracy
Autonomous [1]	<10m
SBAS	<5m

Receiver
Tracking	L1, CA code
Channels	12
Max. Update Rate	10Hz
Max. Altitude	<60,000ft
Max. Velocity	<1,000 knots
Protocol Support	NMEA, SiRF Binary

Acquisition
Hot Start (Open Sky) [2]	<1sec
Hot Start (Indoor) [3]	<15sec
Cold Start [4] (Open Sky)	<35sec
Tracking Sensitivity	-159dBm

Power
Draw @ 9V (Full Power)	<100mA
Draw @ 9V (TricklePower) [5]	<70mA
Input Voltage	9-24VDC

Dimensions
Width	105mm
Length	80mm
Height	35mm

1: A typical value based on 24 hour open sky static test. Note that the US Government guarantees performance no better than 10m.

2: Open sky: All SVs at -144dBm or higher

3: Indoor: 7 SVs at -153dBm with one at -145dBm to approximate real world environment

4: SiRFstarIII is capable of cold starts down to -144dBm

5: Trickle Power mode operating with a 1Hz update rate and 300msec on-time.

HIGHLIGHTED ADVANTAGES

SiRF understands that time is always an issue and that it is important to move quickly through each stage of development. That is why the SiRFstarIII Evaluation Kit gives you the tools to quickly and easily complete your GPS performance evaluation.

All hardware and accessories are provided so you can collect data and monitor the performance in the environment you choose.

Intuitive PC and Pocket PC software tools allows you to graphically see the results of your testing; giving you the confidence needed in the SiRFstarIII architecture.

If you do need additional assistance, you have access to a dedicated team of engineers, as well as access to the latest software, tools, and documentation through a dedicated developers download site.

PRODUCT ORDERING INFORMATION

For more information, contact your SiRF representative, or call our sales force on +1 (408) 467-0410, or visit us at www.sirf.com.

SiRFstarIII Evaluation Kit   PN: 9900-0224   US$995.00

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