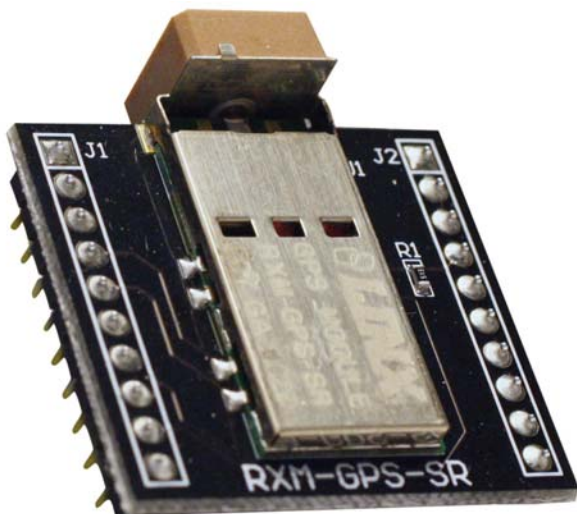


SR SERIES MASTER DEVELOPMENT SYSTEM DAUGHTER BOARD USER'S GUIDE



DESCRIPTION

The SR Series GPS receiver module is a self-contained high-performance GPS receiver with an on-board antenna, LNA and SAW filter. Based on the SiRFstar III chipset, it provides exceptional sensitivity, even in dense foliage and urban canyons. The module's very low power consumption helps maximize runtimes in battery powered applications. With over 200,000 effective correlators, the SR Series receiver can acquire and track up to 20 satellites simultaneously in just seconds, even at the lowest signal levels. These features along with the module's standard NMEA data output make it easy to integrate, even by engineers without previous RF or GPS experience. The Linx SR Series GPS modules offer a simple, efficient and cost-effective method of adding GPS capabilities to any product.

The Master Development System daughter board contains the surface mount SR Series GPS module on a single board with through-hole headers. This small board makes prototyping with the SR Series module very easy. It should be noted that the on-board patch antenna is sensitive to PCB layout, ground plane size and product construction. As a result, performance can vary with these conditions.

ORDERING INFORMATION

PART #	DESCRIPTION
ASY-MDEV-GPS-SR-DB	SR Series Master Development System Daughter Board

ELECTRICAL SPECIFICATIONS

Parameter	Designation	Min.	Typical	Max.	Units	Notes
POWER SUPPLY						
Supply Voltage	V _{CC}	3.0	–	4.3	VDC	–
Supply Current	I _{CC}					1
Peak		–	31	49	mA	–
Sleep		–	<0.1	–	mA	–
Backup Battery Voltage	V _{BAT}	1.3	–	6.0	VDC	–
Backup Battery Current	I _{BAT}	–	10	–	µA	–
ENVIRONMENTAL						
Operating Temperature Range	–	-30	–	+85	°C	–
Storage Temperature Range	–	-40	25	+85	°C	–

Table 1: SR Series Receiver Specifications

Notes:

- 1. V_{CC} = 3.3V

Please see the SR Series GPS Module Data Guide for full specifications, features and operation instructions.



CAUTION

This product incorporates numerous static-sensitive components. Always wear an ESD wrist strap and observe proper ESD handling procedures when working with this device. Failure to observe this precaution may result in module damage or failure.

PIN ASSIGNMENTS

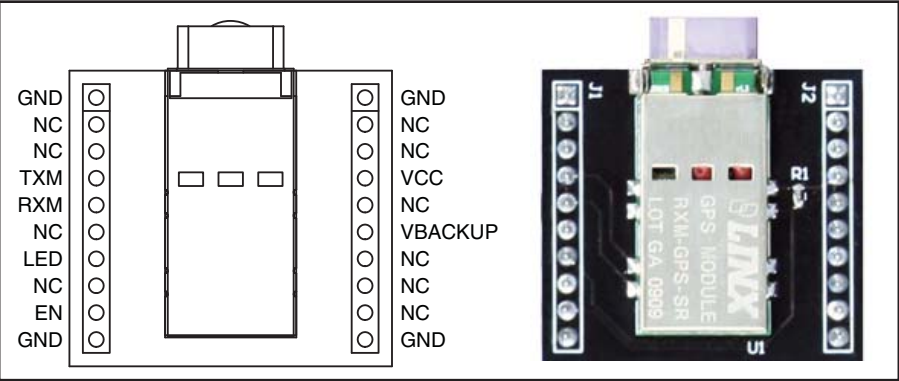


Figure 1: MDEV-GPS-SR-DB Pin Assignments

PCB LAYOUT

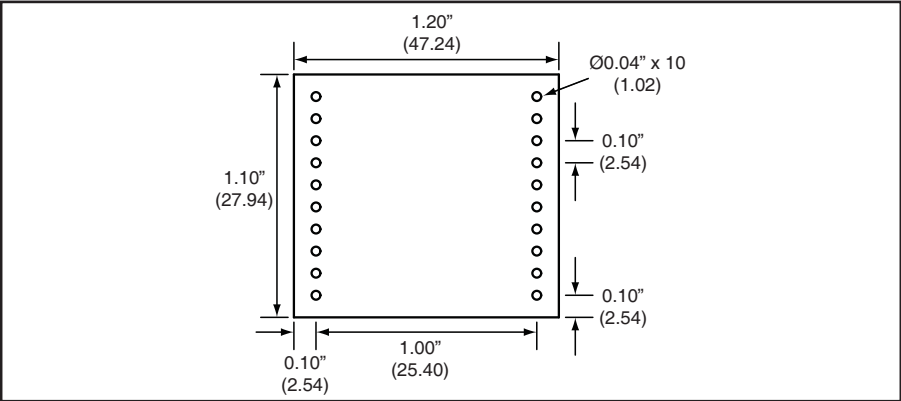


Figure 2: MDEV-GPS-SR-DB PCB Layout Dimensions

The daughter board uses 0.02" diameter round header pins on 0.1" centers. These headers can be soldered directly to the PCB or plugged into a matching socket to enable easy removal.

SCHEMATIC

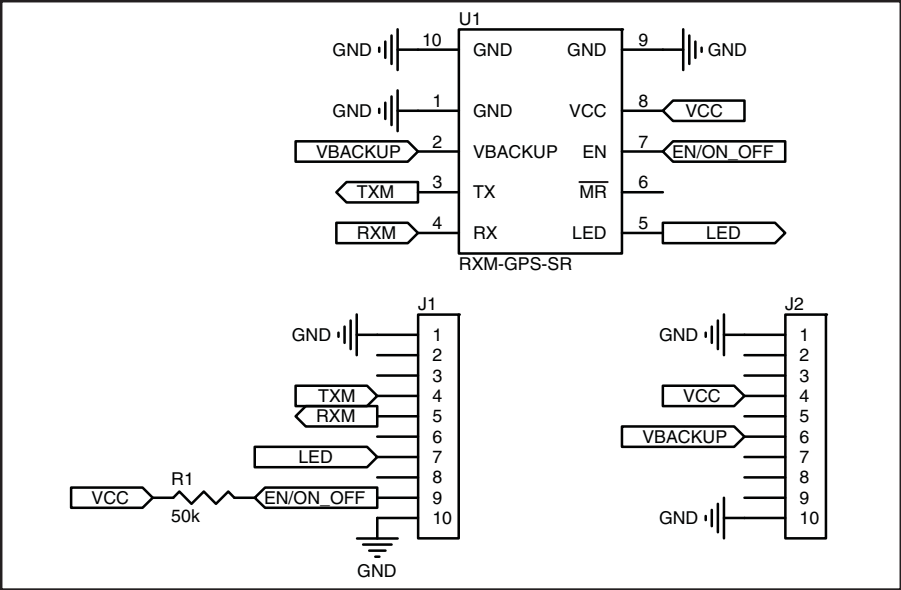


Figure 3: MDEV-GPS-SR-DB Schematic



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