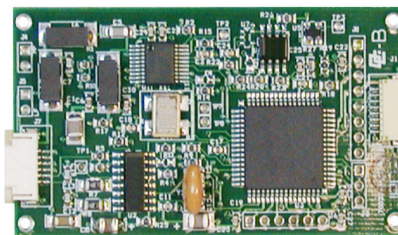


Product Preview

MF Reader System Series 4000

S4100 Multi-Function Reader Module



Description:

Texas Instruments' RFid S4100 Multi-Function Reader (multi frequency and protocol) module (MFR) is a low-cost high performance module offering compatibility across multiple platforms and ease of integration.

This multi-protocol reader allows quick and easy integration into new equipment designs and retro-fit into existing products.

With support for 134.2 KHz and 13.56 MHz contactless

technologies, the MFR module is ideal for any contactless application, and makes transitioning from Low-Frequency to High-Frequency products painless and transparent.

Modular firmware architecture provides for system scalability.

Specifications:

Part number	RF-MGR-MNMN
Operating Frequency (HF)	13.56 MHz
Operating Frequency (LF)	134.2 kHz
Supported Transponders (HF)	TI Tag-it™ inlays and transponders ISO 15693 compliant inlays and transponders ISO 14443 Type A/B compliant inlays and transponders
Supported Transponders (LF)	TI LF transponders (DST, R/W & R/O)
Supported ISO Standards	ISO 15693 ISO 14443 Type A & B
Supply Voltage	Module: 5 VDC +/- 5% (Regulated)
Current Consumption (Typ-mA)	Receive 60 mA, Transmit 160 mA
Transmitter Power (HF)	200 mW
Transmitter Peak-Current (LF)	1.1 Amps Peak
Antenna Impedance (HF)	50 Ohms @ 13.56 MHz
Antenna Impedance (LF)	440 μ H (Approximately)
Antenna Connection	Independent on-board LF & HF Connections
User Interface response	Three TTL outputs:
Communication Interface	Module: USART TTL output
Synchronization	Protocol synchronization via host
Approximate Dimensions:	PWB: 2.75" x 1.5" x 0.4" (69 mm x 38 mm x 1 mm)
Approximate Weight	Module: 1.2 Oz (34 g)

Key Features:

- TTL Serial I/O
- 3 TTL User Feedback Outputs
- Dual Frequency
 - 134.4KHz
 - 13.56 MHz
- Multi-Protocol
 - TI RFid LF Products
 - TI RFid HF Tag-It
 - ISO 15693
 - ISO 14443 A/B
- Custom Firmware Downloadable
- Scalability/Modular Architecture

Applications:

- Access Control
- Vending Machines
- Point of Sale Terminals
- Printers
- Wireless Payments
- Handheld Devices

Figure 1. Typical Application:

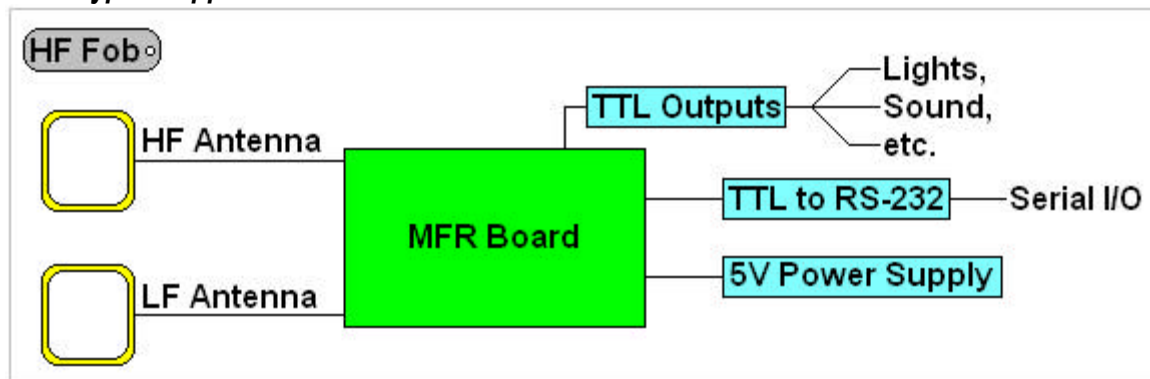


Figure 2. Connector Pin-outs:

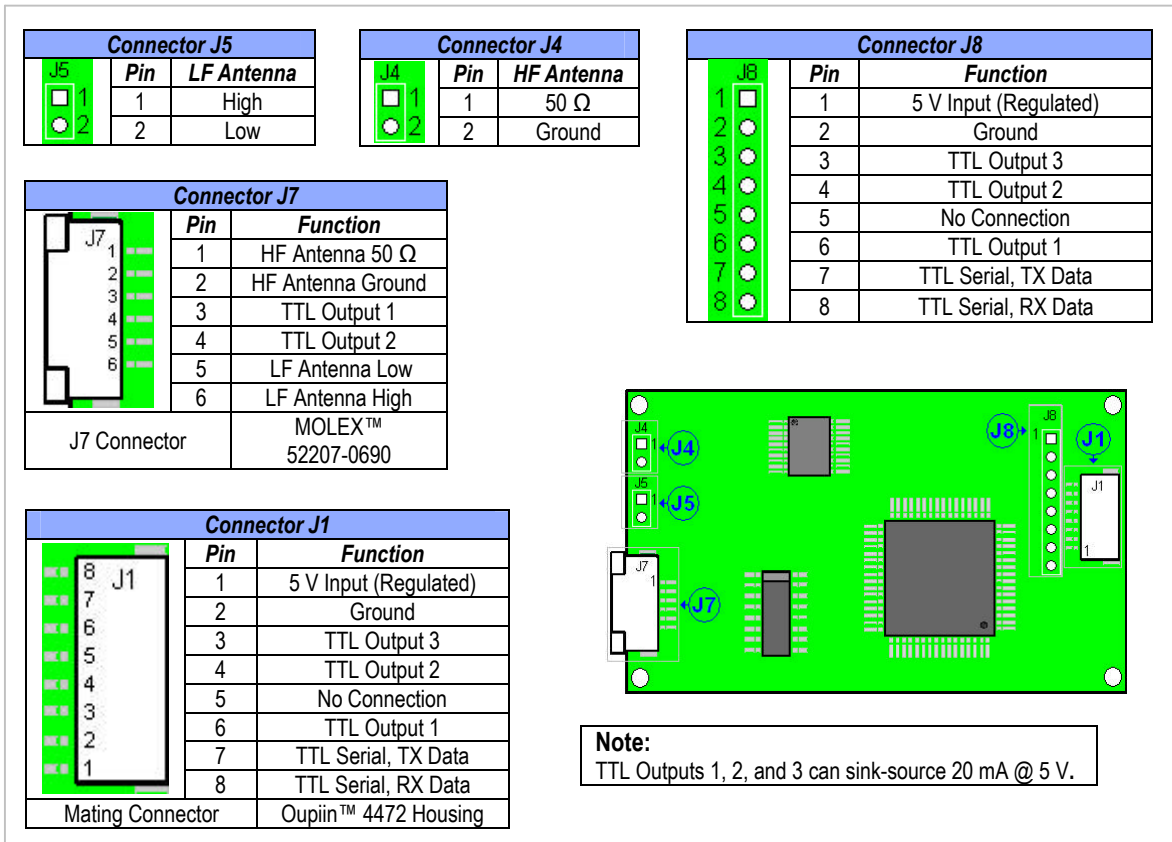


Figure 3. Block Diagram:

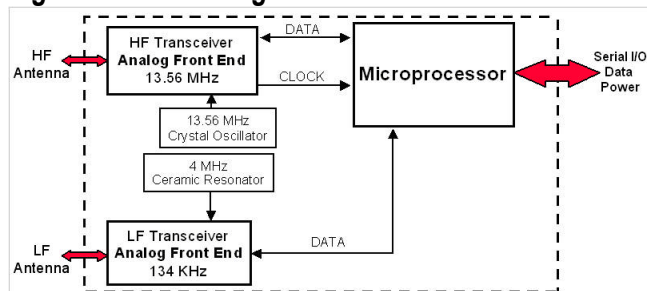
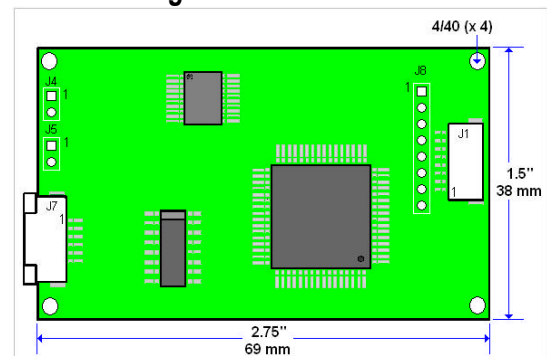


Figure 4. Dimensions and Mounting Holes:



For more information, contact the sales office or distributor nearest you. This contact information, and the most up-to-date specifications for this data sheet can be found on our web site at: <http://www.ti-rfid.com>

Texas Instruments reserves the right to change its products and services at any time without notice. TI provides customer assistance in various technical areas, but does not have full access to data concerning the uses and applications of customers' products. Therefore, TI assumes no responsibility for customer product design or for infringement of patents and/or the rights of third parties, which may result from assistance provided by TI.

