

rfid enabled



KIT CONTENTS

- 1 M1 Module
- 3 M1-Mini Modules
- 1 EA1 External Antenna
- 1 DB9 Connector
- 1 5V Power Supply
- 1 RS232 Cable
- 30 Elpacko Pins
- 25 Sample Tags (5 tag types)
- Demo Software, Drivers, Software Libraries
- Demo Software
- Drivers and Software Libraries
- Demo Source Code in VB, C++ and Java
- Tech Support

features:

- Plug and Play Pre-Assembled M1/EA1/DB9
- Demo Source Code in Multiple Languages
- Protocol Command Builder
- Software Libraries

benefits:

- Easy Setup of Your RFID Demonstration
- Straightforward Customization
- Build Your Specialized Application
- Able to Read/Write Industry Standard Tags

Developer Kit SkyeModule DKM1-Mini



13.56MHz Developer's Kit

Product Overview

Developer Kit

The SkyeModule™ DKM1-Mini provides a complete solution for RFID enablement using the world's smallest, self-contained multi-protocol 13.56 MHz OEM Module. The DKM1-Mini supports most 13.56 MHz tag types including ISO-15693 and ISO-14443A air interface protocols. The DKM1-Mini features a SkyeModule M1 assembled to an EA1 external antenna with DB9 for RS232 communication. Start with the plug and play M1 assembly and demo software, then migrate to the M1-Mini for your application proof of concept, as all code developed for the M1 is applicable to the M1-Mini.

About SkyeModule M1-Mini

The M1-Mini is a high performance, low power, cost effective platform designed to enable any device with RFID technology. M1-Mini Features:

- Tagnostic™
- UART (TTL), I2C, SPI,
- Configurable Power Schema
- Simple and Intuitive API
- Efficient HW/ SW Design - Applications Reside "On Reader"
- Low Cost and Small Size
- Fast Integration /Time to Market

Detailed specification and product information on the SkyeModule M1 and the SkyeModule M1-Mini is located on the SkyeModule M1 and M1-Mini Data Sheets.

Applications

The DKM1-Mini has been created to allow efficient development of RFID-enabled applications providing the means for PC-based code development and debugging with a clear migration to embedded operation.. Some areas in which the M1-Mini has been successfully integrated include:

- Medical equipment for the healthcare and pharmaceutical industries
- Industrial equipment requiring embedded RFID technology
- Kiosks and vending machines
- Mobile devices including printers, hand-helds, and sensor networks

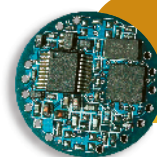
With the variety of host interfaces, supply voltages, and configurable parameters, customers found the M1-Mini was easy to embed in these devices.

About Skyetek:

SkyeTek, Inc., maker of ReaderWare™ is the leading supplier of RFID reader software and reference designs that enable the pervasive adoption of RFID technology. SkyeTek's Tagnostic™ reader technology works with most industry standard tags and smart labels, its low power requirements and a small form factor make it the optimal choice for embedding into new or existing products. SkyeTek's RFID reader technology is available in several formats including reader modules, hardware reference designs, and the ReaderWare™ software suite. SkyeTek markets to OEM customers in targeted vertical markets with several high-volume licensing options available. For more information about SkyeTek, visit www.skyetek.com or call 720-565-0441.

SkyeTek is based in Colorado.

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Developer Kit SkyeModule DKM1-Mini

Transponder Support¹

Product Name	Memory (bits)	Manufacturer	Protocol
Tag-It HF-I	2K	Texas Instruments	ISO15693
I-Code SL2	1K	Philips	ISO15693
My-d	2.5k,10K	Infineon	ISO15693
LRI512	0.5K	ST Microelectronics	ISO15693
EM 4135	2.2K	EM Microelectronics	ISO15693
PicoTag ³	2K, 16K	Inside Contactless	Proprietary
Mifare ²	1K, 4K (byte)	Philips, Infineon	ISO14443A
Mifare Ultralight ³	0.5K	Philips	ISO14443A
GemWave	id only	TagSys	Proprietary
Tag-It HF	0.25K	Texas Instruments	Proprietary
I-Code SL1	0.5K	Philips	Proprietary
AT88RF319	32K	Atmel	ECMA-319

¹Firmware version dependent

²ID only

³No Anti-Collision

Frequency

13.56 MHz +/- 7 kHz

Physical

Diameter: 25.4mm
Height: 2.8 mm

Current Consumption

Sleep Mode- 50 µA
Idle Mode- 15mA
Scan Mode- 60mA

Supply Voltage

3.2-6.0V

Antenna

Internal or external
50 ohm port

**Host Communication
Interfaces/ Data Rates**

UART (TTL): 4800-57600 bps
I2C up to 400 kHz
SPI up to 3MHz

Transponder**Communication Rate**

26 kbps ISO 15693
106 kbps ISO 14443A

Accessories

EA1 external antenna
(94mmx94mm)

Effective Range

Internal Antenna, 48 mm x
76 mm ISO 15693
transponder: 5.0 cm
Internal Antenna, 38 mm x
22.5 mm ISO 15693
transponder: 3.5 cm
*(Individual results may
vary with environment)*

Other Offerings from Skyetek

SkyeTek provides a variety of reader technology at both 13.56 MHz (HF) and ~900 MHz (UHF). The M1, also part of the SkyeModule HF line, is slightly larger than the M1-Mini and adds 8 GPIO pins and native support for RS232 host interface. ReaderDNA, a comprehensive reference design, is available for component level integration of the technology including complete design files, BOM, and test fixture. ReaderWare, an open-architected software suite residing on all SkyeTek's modules, provides intelligence for the RFID reader. The SkyeModule M8 is a low power, compact, UHF reader compatible with EPC and ISO transponders. All SkyeModules are controlled via the SkyeTek Protocol, a powerful but simple communication protocol that grants the user access to all features of an RFID transponder. Further, they have been designed with flexible and modular embedded software that allows one to select only the desired features.



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