Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

Contact us

Micro-LTE

High Performance Multi-Protocol Embedded UHF RFID Module

The 2-port Micro-LTE delivers the size, operating efficiency, RF power, and flexibility needed to embed UHF RFID in best-in-class fixed position, portable, and hand held applications where small form factor is important. The Micro-LTE is optimized for applications with small tag populations reading up to 50 tags/second and features low power consumption needed for battery operated solutions. Micro-LTE's wide RF output range (-5 dBm to +30 dBm) is a key requirement for RFID enabled printers, tag commissioning stations, and point of sales readers. Edge connections allow the Micro-LTE to be soldered directly to a motherboard as a standard component. The on-board connectors allow the module to be mated to a motherboard.

Ordering Information

Module	M6E-MICRO
Developers Kit	M6E-MICRO-DEVKIT

Physical

Dimensions	46 mm L x 26 mm W x 4.0 mm H

Tag / Transponder Protocols

RFID Protocol Support	EPCglobal Gen 2 (ISO 18000-6C) with DRM IP-X and ISO 18000-6B optional

RF Interface

Antennas	Two 50 Ω connections (board-edge or U.FL) sup - porting two monostatic antennas
RF Power Output	Separate read and write levels, command adjust - able from -5 dBm to 30 dBm* in 0.5 dB steps, accurate to +/- 1 dBm
Regulatory	Pre-configured for the following regions: • FCC (NA, SA) 902-928 MHz • ETSI (EU, India) 865.6-867.6 MHz • TRAI (Inida) 865-867 MHz • KCC (Korea) 917-920.8 MHz • ACMA (Australia) 920-926 MHz • SRRC-MII (P.R.China) 920-925 MHz •MIC (Japan) 916.8-923.4 MHz • 'Open' (Customizable channel plan; 865-868 MHz and 902-928 MHz)

Data/Control Interface

|	
Physical	28 board-edge connections or Molex low profile connector (53748-0208) providing DC power, communication, control and GPIO signals
Control/Data Interfaces	• UART; 3.3V logic levels 9.6 to 921.6 kbps • USB 2.0 interface (12 Mbps)
GPIO Sensors and Indicators	Two 3.3V bidirectional ports configurable as input (sensor) ports or output (indicator) ports
API support	C#/.NET, Java, C

Power

DC Power Required	DC Voltage: 3.5 to 5.25 V** DC power consumption @ RF level: 5.5 W @ +30 dBm *** 3.5 W @ +27 dBm 2.5 W @ +23 dBm 2.0 W @ 0 dBm
Power Consumption when not transmit - ting	0.32 W
Idle Power Saving Options	Standby: 0.06 W Sleep: 0.008 W Shutdown: 0.0003 W

Environment

Certification	FCC 47 CFR Ch. 1 Part 15 Industrie Canada RSS-21 0 ETSI EN 302 208 v1.4.1
Operating Temp.	-20C to +60C (case temperature)
Storage Temp.	-40C to +85C
Shock and Vibra - tion	Survives 1 meter drop during handling

Performance

Max Read Rate	50 tags/second
MaxTag Read Distance	Over 30 feet (9 m) with 6 dBiL antenna (36 dBm EIRP)

RoHS Compliant

Specifications subject to change without notice
*Duty cycle restrictions, based on temperature, apply at power levels above +23 dBm
**Will operate below +3.5 V with reduced input line noise immunity
***Best case with good antenna matching

MAKING RFID EASY TO USE

ThingMagic is dedicated to driving the barriers to deploying RFID technology as low as possible. We design our products to be easy to use out-of-the box and to deliver predictable, reliable, and repeatable performance. Our development tools require little RFID expertise, enabling you to rapidly design, test, and deploy your RFID solutions.
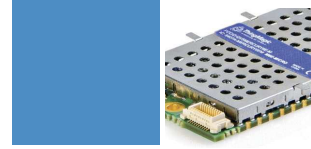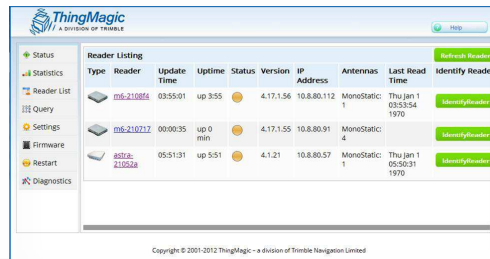
Developers Kit

Included with every ThingMagic reader Developer Kit, the MercuryAPI supports the entire line of ThingMagic finished readers and embedded RFID modules

- Test chassis
- Cables
- Antenna
- Sample Tags
- Full schematics to help you design
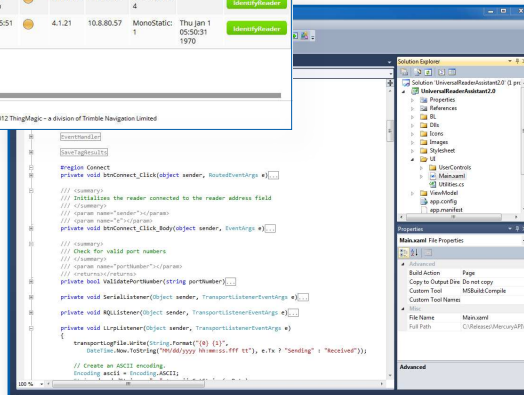 your own complimentary components

M6e Reader DevKit shown

Mercury API

A common development platform, supporting an extensive variety of hardware to connect, configure, and control ThingMagic readers.

Universal Reader Assistant

A utility for advanced demo, testing, and tuning of all ThingMagic readers. Reduces complexity for novice users while permitting low-level control for advanced developers.