

GPS Antenna

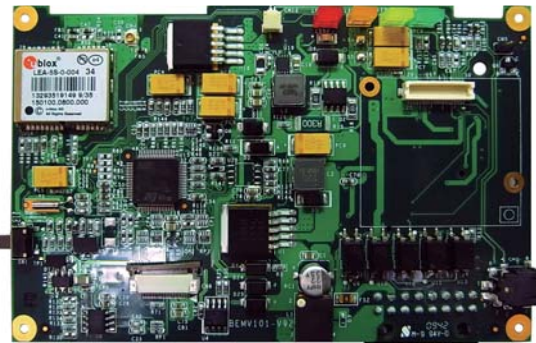
GSM Antenna



# BEMA101A

## Automatic Vehicle Locator

LED Indicator



Power switch

Micro-fit connector

### Features

- Low power ARM 32-bit Cortex-M3 CPU
- 256KB Flash and 48KB SRAM
- Onboard GSM
- GPS Module (option)
- Built-in Battery Charger circuit
- 5 x IO port / 1 x AD-in port / 2 x RS232 port
- Wide temperature operation

### Hardware Specifications

#### Processor

- ARM 32-bit Cortex-M3 CPU

#### Memory

- 256KB Flash Memory
- 48KB SRAM Memory
- 64K-bit no delay RAM

#### GSM Module with Antenna

- Tri-Band wireless module supporting 900 / 1800 / 1900MHz default (or 850 / 1800 / 1900MHz option)
- Support Voice / SMS / CS Data / GPRS mode
- Built-in TCP / IP with stack-speed design, for M2M application
- Support passive antenna
- Hand-free design (option)

#### GPS Module Antenna

- Support GPS module (with 50-channel receiver engine), and active antenna
- Support GGA / RMC / TXT / GLL / GSA / GSV / VTG message
- Sensitivity of tracking: -158~-160dBm

#### System Indicators

- Low battery / Event occurred / GSM TX / GPS active

#### External Connectors

- Support 1 x power-in, 1 x AD-in, 2 x RS232, and 5 x IO ports on Micro-fit connector

#### IO

- 5 photocoupler IO port (2 x input ports and 3 output ports, with external power support)

#### Serial Ports

- Support 1 x DMA-based operation three wired serial port, for update and system configuring

#### Battery (option)

- Support +4.2V / 1400mAh polymer battery and Auto Battery Charger circuit

#### Power Requirement

- DC +9V~+32V power requirement with short-circuit protection

#### Operating Temperature

- -20°C to +80°C



**BOLYMIN, INC.**

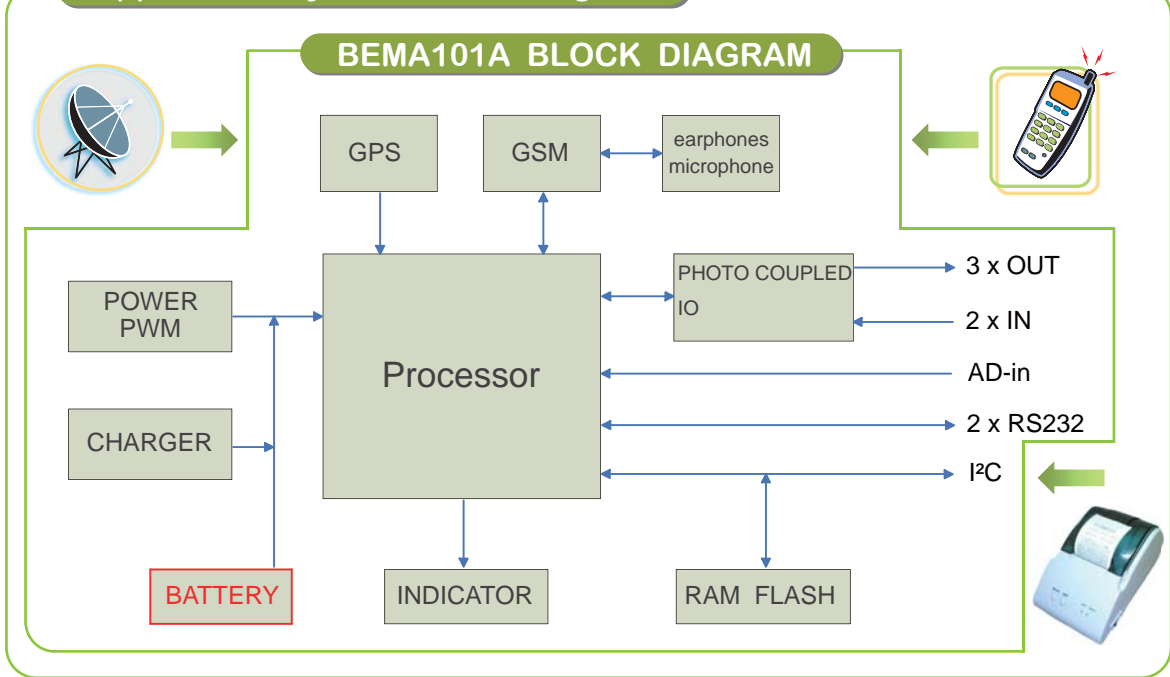
**Software Specification**

- Voice / SMS / CS Data / GPRS Mode
- 7 pre-defined SMS number setting
- Remote Output Control
- Voice Wire-tapping
- Triggered report
- Tracking report by Interval / Mileage / Intelligent Mode
- Analog input measurement
- Device ID / Password setting
- Remote configuration
- Battery-Low alarm
- Specified-Event alarm
- Time / Date setting

**Accessories**

- Micro-fit IO cable set with power-in / IO port / RS232 / AD-in
- System configuring utility program
- User manual

**Application System Block Diagram**



**Order Information**

Parts NO.	GPS	Battery	Subject application
BEMA101A	☆	☆	AVL
BEMA101A1		☆	Home Security
BEMA101A2			Data Terminal

