

# EGIGATEK eGM-A35 Brief

(nRF24LU1+ RF2.4G based Module)

## 1. Description

eGM-A35 use nRF24LU1+ solution, is a unique single chip solution for compact USB dongles. The internal nRF24LU1+ 2.4 GHz RF transceiver supports a wide range of applications including PC peripherals, sports accessories and game peripherals. With an air data rate of 2 Mbps combined with full speed USB, supporting up to 12 Mbps, the nRF24LU1+ meets the stringent performance requirements of applications.

## 2. Features

- nRF24LU1+ compatible RF transceiver
  - Worldwide 2.4 GHz ISM band operation
  - Up to 2 Mbps on air data rate
  - Enhanced ShockBurst™ hardware link layer
  - Low cost external  $\pm 60$  ppm 16 MHz crystal
  - Full speed USB 2.0 compliant device controller
  - Up to 12 Mbps USB transfer rate
  - 2 control, 10 bulk/interrupt and 2 ISO endpoints
  - Dedicated 512 bytes endpoint buffer RAM
  - Software controlled pull-up resistor for D+
  - PLL for full-speed USB operation
  - Voltage regulator, 4.0 to 5.25V supply range
  - Enhanced 8-bit compatible microcontroller
  - Drop-in compatibility with nRF24LU1
  - Reduced instruction cycle time
  - 32-bit multiplication-division unit
  - 16k or 32k bytes of on-chip flash memory
  - 2k bytes of on-chip SRAM
  - 6 general purpose digital input/output pins
  - Hardware SPI slave and master, UART
  - 3 16-bit timers/counters
  - AES encryption/decryption co-processor
  - Supports firmware upgrade over USB
  - Supports FS2 hardware debugger
- Dimensions: L10 mm x W16 mm x 2.2 mm(with printed antenna)

- Working distance : up to 60 meters in open space
- Operating temperature range: -30°C ~ +85°C

### 3. Applications

- Compact USB dongles for wireless peripherals
- USB dongles for mouse, keyboards and remotes
- USB dongle 3-in-1 desktop bundles
- USB dongle for advanced media center remote controls
- USB dongle for game controllers

### 4. Pin Placement and Dimensions (in mm)

