KEYFOB BASE BOARD

The Genesys Keyfob Base Board is a general purpose M2M/IoT actuator that offers a variety of I/O interfaces. The Base Board comes with a set of three pushbuttons paired with RGB LEDs, and can be configured to transmit various commands and receive and display acknowledgement signals from a remote receiver using the 6LoWPAN protocol. This provides the designer maximum flexibility of options to configure their commands and designs while also having access to the benefits of IoT technology.

EASY BATTERY REPLACEMENT
To ensure its low cost, the device does not come with battery charging capabilities but utilises a standard A23 non-rechargeable alkaline battery; a common battery that is widely available, compact and long-lasting.

HARDENED INTERFACE OPTIONS
The baseboard was designed for harsher environment applications and breaks out a set of I/O terminals to allow for interfacing with various “dumb” actuators and sensors. This allow for quick and easy wired integration with M2M/IoT technology if the user so desires. In addition wiring points are present at the pushbuttons allows for designers to add their own choice of interfaces, maximising flexibility.

CHARACTERISTICS SUMMARY
1°C Accuracy Temperature Sensor
0.4% RH Accuracy Humidity Sensor
ON-BOARD
Real-time clock
Buzzer and vibration motor
Dual serial EEPROMs, with unique ID
DIMENSIONS
42mm x 32mm
CONNECTIVITY
Genesys Modular Stack dual 40-pin connector

Genesys Modular Stack allows for easy interconnection of expansion modules. Genesys Modular Stack compliant modules feature a characteristic pair of board-to-board feedthrough connectors ensuring that they are infinitely stackable with each module adding new functionality. The Keyfob Base Board is fully compatible with Genesys Modular Stack.
**CHARACTERISTICS**

**PERIPHERAL SPECIFICATIONS**
- Battery-backed realtime clock
- Dual on-board data backup EEPROMs
- EUI-48 48-bit Extended Unique Identifier

**CLIMATE SENSORS SPECIFICATIONS**
- Temperature:
  - ±1°C Accuracy Temperature Sensor
- Humidity:
  - 0.4% RH Accuracy Humidity Sensor

**I/O**
- Internal I/O breakout header options:
  - 4 GPIO
  - 2 open-drain outputs
  - 4 un-buffered ADC inputs with protection

**USER INTERFACE**
- 1 Reset button
- 1 System pushbutton with RGB LED
- 3 optional pushbuttons with RGB LEDs
- Buzzer and vibration motor

**BATTERY POWERING**
- Type & chemistry: A23 Alkaline
- Current consumption:
  - 30mA (Typical)
  - <14.6 µA (Sleep Mode)
  - < 1µA (Hibernate)
- With typical use as a remote control device, the battery will typically last at least one year, and likely two years depending on usage patterns

**ENVIRONMENTAL**
- Temperature (operating): -15°C to +55°C
- Temperature (survival): -55°C to +85°C
- Humidity (operating): 95% RH at 50°C

**MOUNTING DIMENSION DRAWING**