

# **Wireless Module**

## ***Bluetooth® low energy* Module**

### **Overview**

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May 30, 2018 Version 1.8

# TAIYO YUDEN Bluetooth® low energy Module Line-Up

## Taiyo Yuden Bluetooth® low energy Module

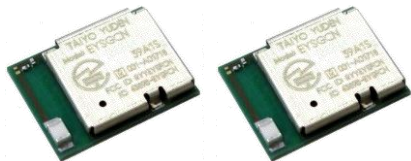
nRF52832 Module  
nRF52810 Module

nRF51422 Module  
nRF51822 Module

EYSHCN Series  
EYSLCN Series

Big

Embedded antenna  
Int. 32kHz X'tal  
Int. LC for DC/DC  
9.6 x 12.9 x 2.0 mm



EYSHCN  
ZWZ

EYSLCN  
ZWW

RAM 64kB  
SoftDevice  
S132

RAM 24kB  
SoftDevice  
S112

EYSHJN Series

Small

Embedded antenna  
Ext. 32kHz X'tal  
Ext. LC for DC/DC  
5.1 x 11.3 x 1.3 mm



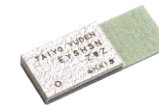
EYSHJN  
ZWZ

RAM 64kB  
SoftDevice  
S132

EYSHSN Series

Ultra-small

Embedded antenna  
Ext. 32kHz X'tal  
Ext. LC for DC/DC  
3.25 x 8.55 x 0.85 mm

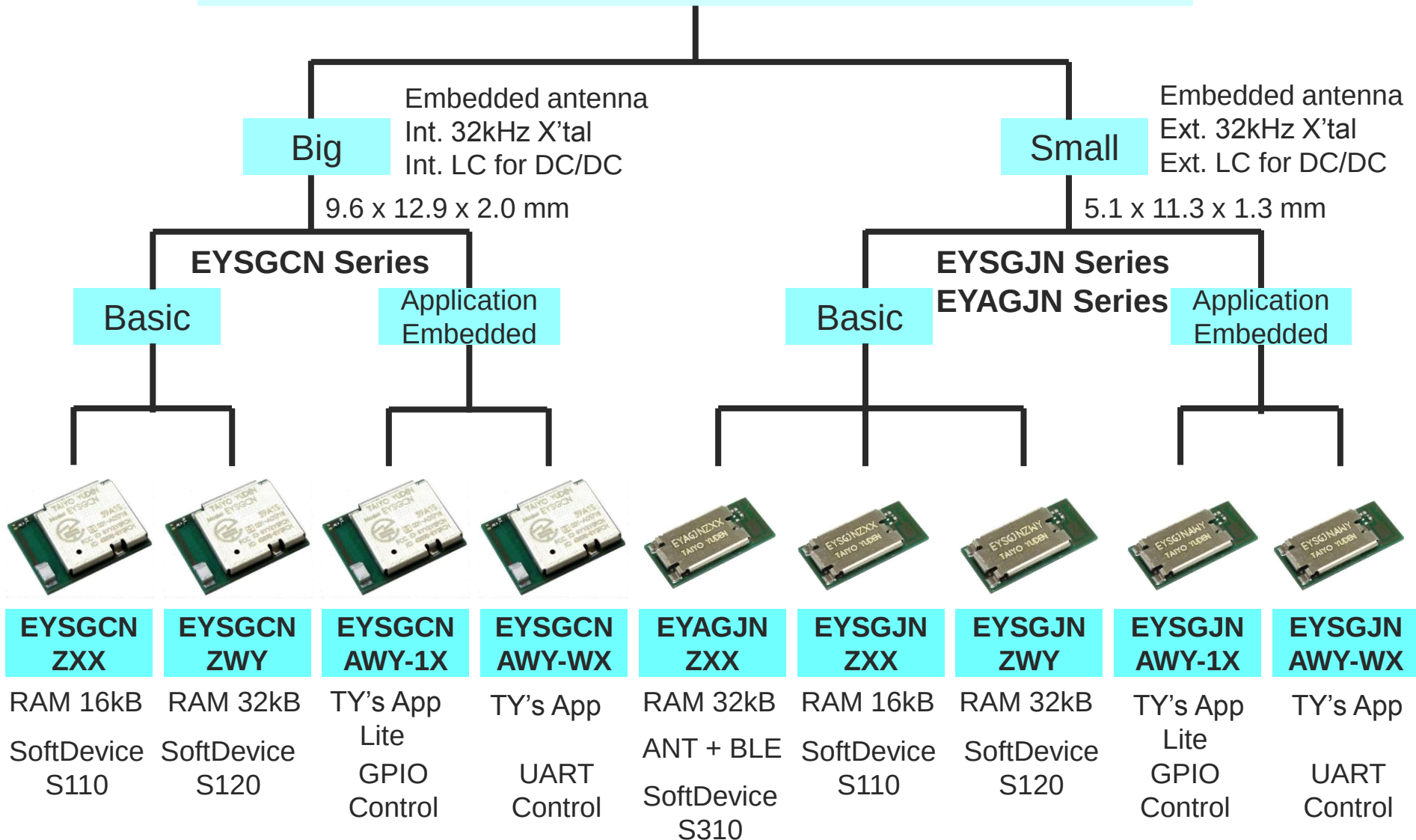


EYSHSN  
ZWZ

RAM 64kB  
SoftDevice  
S132

# TAIYO YUDEN Bluetooth® low energy Module Line-Up

## nRF51x22 Bluetooth® low energy Module



# Latest Documents for Bluetooth® low energy Module

|              |                                                                                                                                                       |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| EYSHSNZWZ    | <a href="http://www.yuden.co.jp/or/product/category/module/EYSHSNZWZ.html">http://www.yuden.co.jp/or/product/category/module/EYSHSNZWZ.html</a>       |
| EYSHCNZWZ    | <a href="http://www.yuden.co.jp/or/product/category/module/EYSHCNZWZ.html">http://www.yuden.co.jp/or/product/category/module/EYSHCNZWZ.html</a>       |
| EYSHJNZWZ    | <a href="http://www.yuden.co.jp/or/product/category/module/EYSHJNZWZ.html">http://www.yuden.co.jp/or/product/category/module/EYSHJNZWZ.html</a>       |
| EYSLCNZWZ    | <a href="http://www.yuden.co.jp/or/product/category/module/EYSLCNZWZ.html">http://www.yuden.co.jp/or/product/category/module/EYSLCNZWZ.html</a>       |
|              |                                                                                                                                                       |
| EYSGCNZXX    | <a href="http://www.yuden.co.jp/or/product/category/module/EYSGCNZXX.html">http://www.yuden.co.jp/or/product/category/module/EYSGCNZXX.html</a>       |
| EYSGCNZWY    | <a href="http://www.yuden.co.jp/or/product/category/module/EYSGCNZWY.html">http://www.yuden.co.jp/or/product/category/module/EYSGCNZWY.html</a>       |
| EYSGJNZXX    | <a href="http://www.yuden.co.jp/or/product/category/module/EYSGJNZXX.html">http://www.yuden.co.jp/or/product/category/module/EYSGJNZXX.html</a>       |
| EYSGJNZWY    | <a href="http://www.yuden.co.jp/or/product/category/module/EYSGJNZWY.html">http://www.yuden.co.jp/or/product/category/module/EYSGJNZWY.html</a>       |
| EYAGJNZXX    | <a href="http://www.yuden.co.jp/or/product/category/module/EYAGJNZXX.html">http://www.yuden.co.jp/or/product/category/module/EYAGJNZXX.html</a>       |
|              |                                                                                                                                                       |
| EYSGCNAWY-1X | <a href="http://www.yuden.co.jp/or/product/category/module/EYSGCNAWY-1X.html">http://www.yuden.co.jp/or/product/category/module/EYSGCNAWY-1X.html</a> |
| EYSGJNAWY-1X | <a href="http://www.yuden.co.jp/or/product/category/module/EYSGJNAWY-1X.html">http://www.yuden.co.jp/or/product/category/module/EYSGJNAWY-1X.html</a> |
| EYSGCNAWY-WX | <a href="http://www.yuden.co.jp/or/product/category/module/EYSGCNAWY-WX.html">http://www.yuden.co.jp/or/product/category/module/EYSGCNAWY-WX.html</a> |
| EYSGJNAWY-WX | <a href="http://www.yuden.co.jp/or/product/category/module/EYSGJNAWY-WX.html">http://www.yuden.co.jp/or/product/category/module/EYSGJNAWY-WX.html</a> |
|              |                                                                                                                                                       |
| EYSHCNZXZ    | <a href="http://www.yuden.co.jp/or/product/category/module/EYSHCNZXZ.html">http://www.yuden.co.jp/or/product/category/module/EYSHCNZXZ.html</a>       |
| EYSHJNZXZ    | <a href="http://www.yuden.co.jp/or/product/category/module/EYSHJNZXZ.html">http://www.yuden.co.jp/or/product/category/module/EYSHJNZXZ.html</a>       |
| EYSFCNZXX    | <a href="http://www.yuden.co.jp/or/product/category/module/EYSFCNZXX.html">http://www.yuden.co.jp/or/product/category/module/EYSFCNZXX.html</a>       |

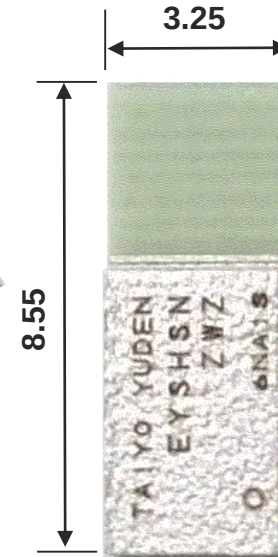
- The documents for the evaluation board and evaluation kit are also available on the above page.
- The Japanese documents are available on the following page.  
<http://www.yuden.co.jp/jp/product/category/module/lineup.html#Bluetooth>

# 2Mbps Bluetooth® 5.0 low energy Module: EYSHSNZWZ

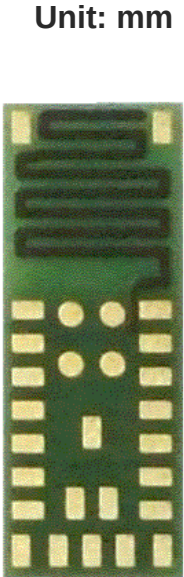
## Features

- Frequency: 2402 to 2480 MHz with +4dBm Output power
- Single power supply: 1.7– 3.6V
- Single Mode Bluetooth low energy (ANT™ Available)
- Chip: **nRF52832** (Nordic) with Bluetooth low energy **2Mbps** mode
- Integrated System Clock
- ARM Cortex M4F** 32bit processor
- 512kB Flash and 64kB RAM**
- Interface: SPI, UART, I2C, I2S, PDM and 12bit ADC
- Support **NFC-A Type-2** for Touch-to-Pair
- Integrated high performance PCB antenna
- Outline: **3.25 x 8.55 x 0.85**mm MAX
- Operating Temperature range: -40 to 85 deg-C
- Bluetooth and Japan, FCC, IC qualified
- ETSI EN 300 328 v2.1.1 Conducted Test Report Available
- RoHS compliant / Complete Lead Free

## Outline



Top View



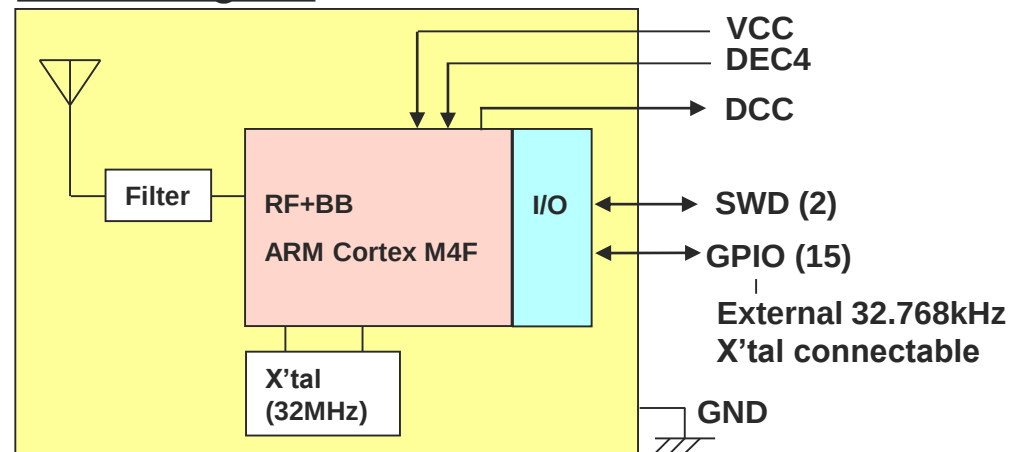
Bottom View

Unit: mm

## Applications

- Smart wristband
- Smart glasses
- Remote control ring
- Smart pen
- Heart rate monitor
- pressure monitor
- Blood glucose meter
- Thermometer
- Mobile accessories

## Block Diagram



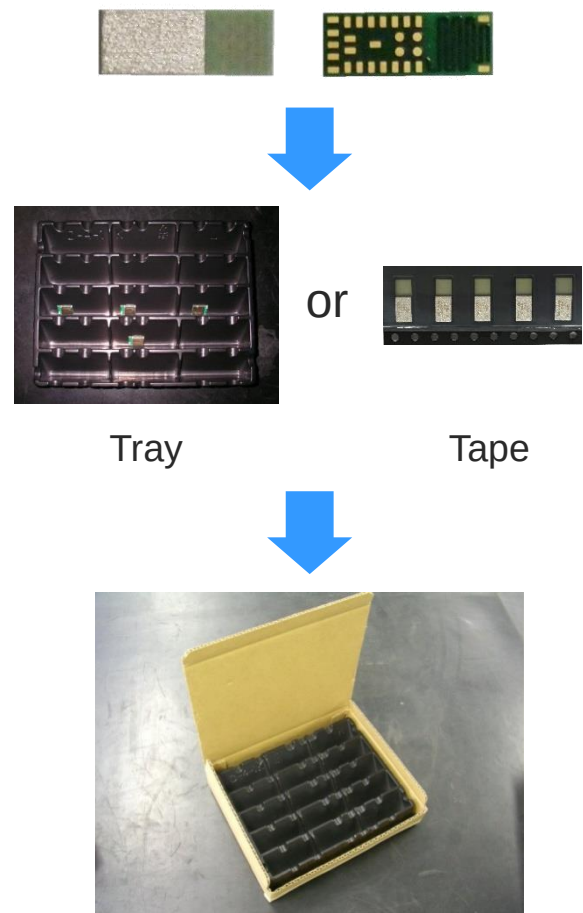
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# Bluetooth® low energy Module Sample, Evaluation Board / Kit

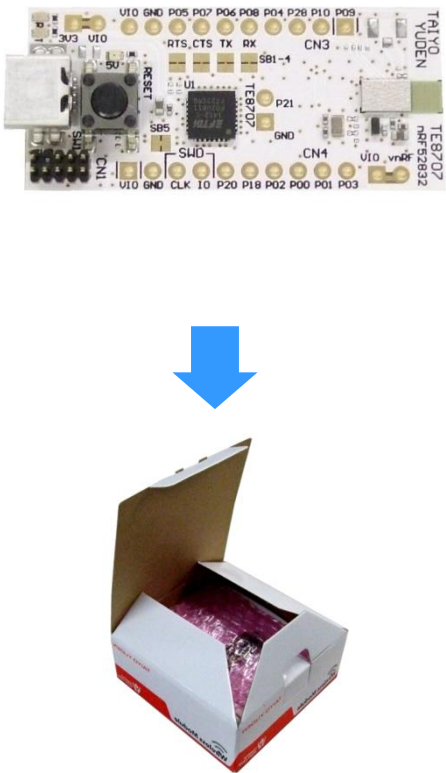
## EYSHSNZWZ (Module)

### Module samples



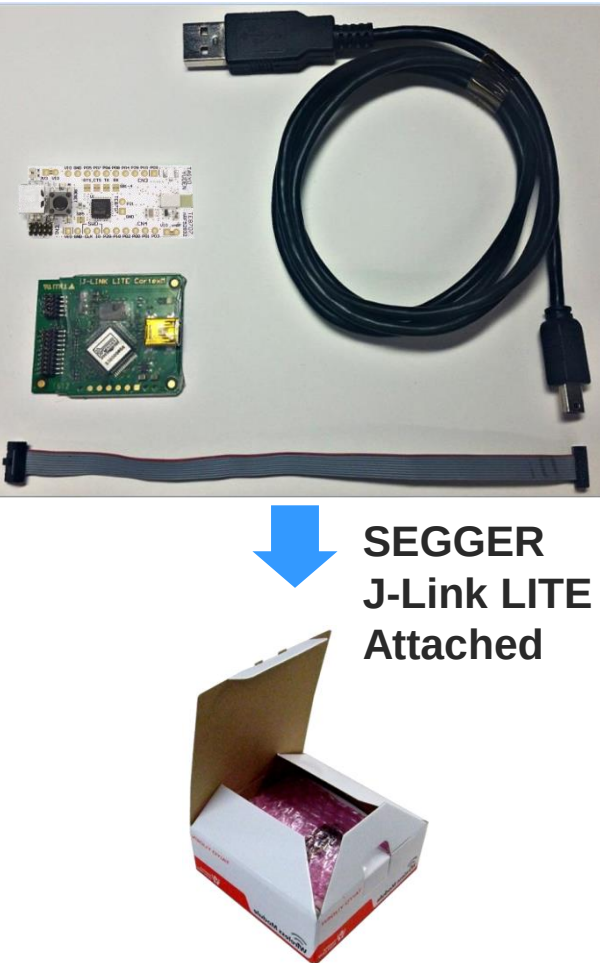
## EBSHSNZWZ (EV-B)

### Evaluation board



## EKSHSNZWZ (EV-K)

### Evaluation kit



# 2Mbps Bluetooth® 5.0 low energy Module: EYSHCNZWZ

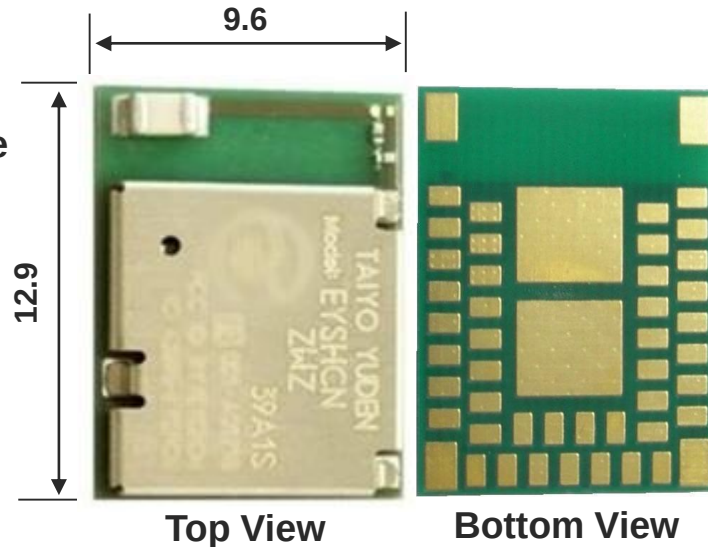
## Features

- Frequency: 2402 to 2480 MHz with +4dBm Output power
- Single power supply: 1.7 – 3.6V
- Single Mode Bluetooth low energy Slave/Master (ANT™ Available)
- Chip: **nRF52832** (Nordic) with Bluetooth low energy **2Mbps** mode
- Integrated System/**Sleep Clock, LC for DC/DC**
- Integrated high performance ceramic chip antenna
- ARM Cortex M4F** 32bit processor
- 512kB Flash** and **64kB RAM**
- Interface: SPI, UART, I2C, I2S, PDM and 12bit ADC
- Support **NFC-A Type-2** for Touch-to-Pair
- Outline: **9.6 x 12.9 x 2.0** mm with **1mm** pad pitch
- Operating Temperature range: -40 to 85 deg-C
- Bluetooth and Japan, FCC, IC qualified
- ETSI EN 300 328 v2.1.1 Conducted Test Report Available
- RoHS compliant / Complete Lead Free

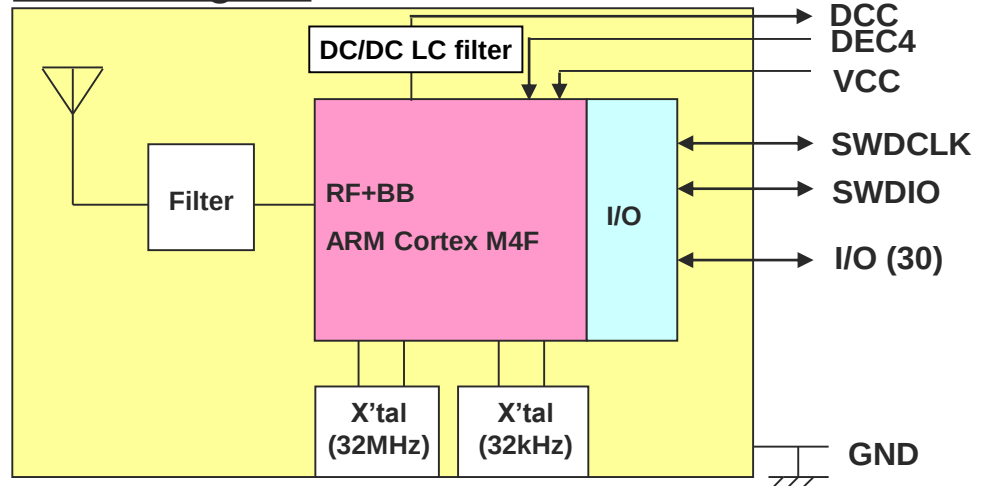
## Applications

- Cycle computer
- Heart rate monitor
- Blood pressure monitor
- Blood glucose meter
- Weighing machine
- Thermometer
- Mobile accessories
- Sports and fitness sensors
- Remote controllers / Toys

## Outline



## Block Diagram



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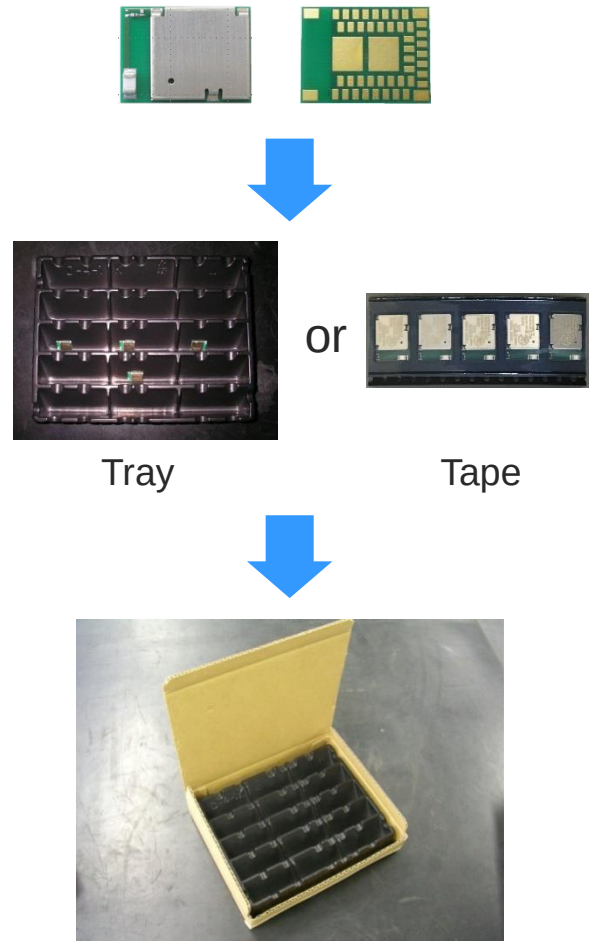
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# Bluetooth® low energy Module Sample, Evaluation Board / Kit

## EYSHCNZWZ (Module)

### Module samples



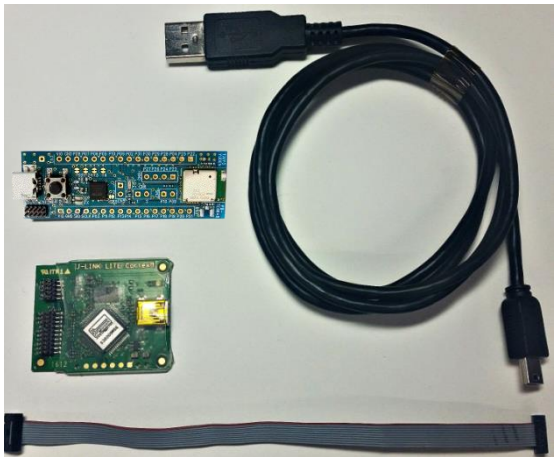
## EBSHCNZWZ (EV-B)

### Evaluation board



## EKSHCNZWZ (EV-K)

### Evaluation kit





# 2Mbps Bluetooth® 5.0 low energy Module: EYSHJNZWZ

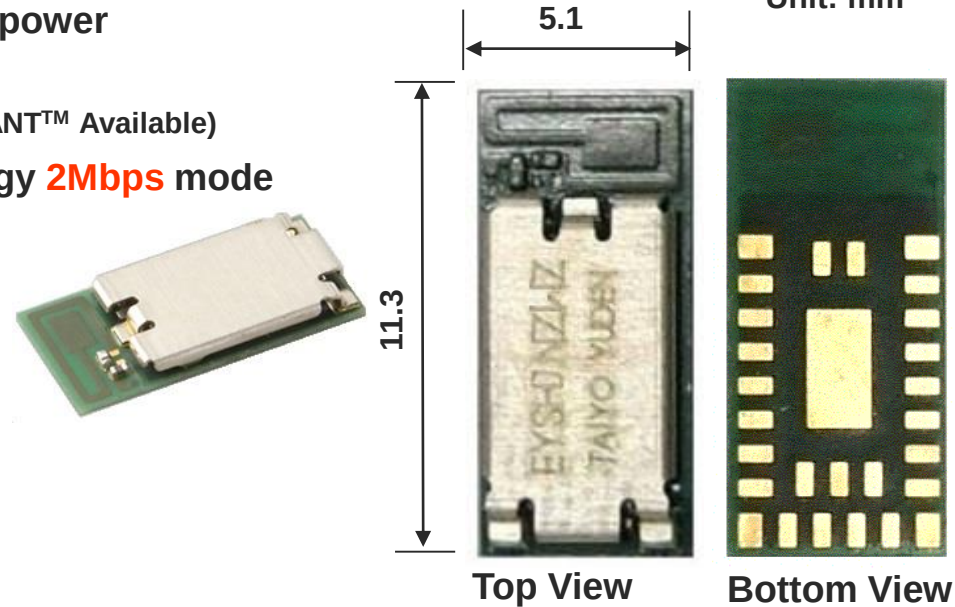
## Features

- Frequency: 2402 to 2480 MHz with +4dBm Output power
- Single power supply: 1.7– 3.6V
- Single Mode Bluetooth low energy Slave/Master (ANT™ Available)
- Chip: **nRF52832** (Nordic) with Bluetooth low energy **2Mbps** mode
- Integrated System Clock
- ARM Cortex M4F** 32bit processor
- 512kB Flash and 64kB RAM**
- Interface: SPI, UART, I2C, I2S, PDM and 12bit ADC
- Support **NFC-A Type-2** for Touch-to-Pair
- Integrated high performance pattern antenna
- Outline: **5.1 x 11.3 x 1.3**mm MAX
- Operating Temperature range: -40 to 85 deg-C
- Bluetooth and Japan, FCC, IC qualified
- ETSI EN 300 328 v2.1.1 Conducted Test Report Available
- RoHS compliant / Complete Lead Free

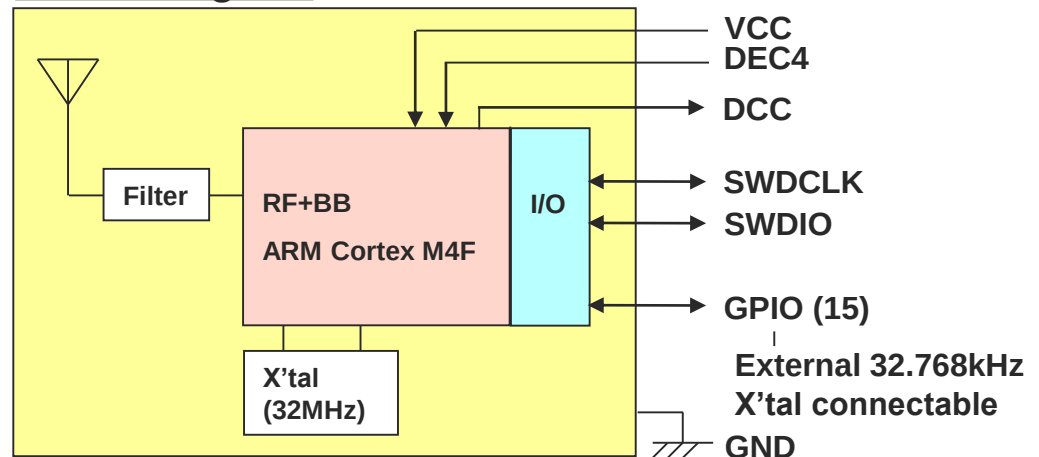
## Applications

- Cycle computer
- Heart rate monitor
- Blood pressure monitor
- Blood glucose meter
- Weighing machine
- Thermometer
- Mobile accessories
- Sports and fitness sensors
- Remote controllers / Toys

## Outline



## Block Diagram



All specifications are subject to change without notice.

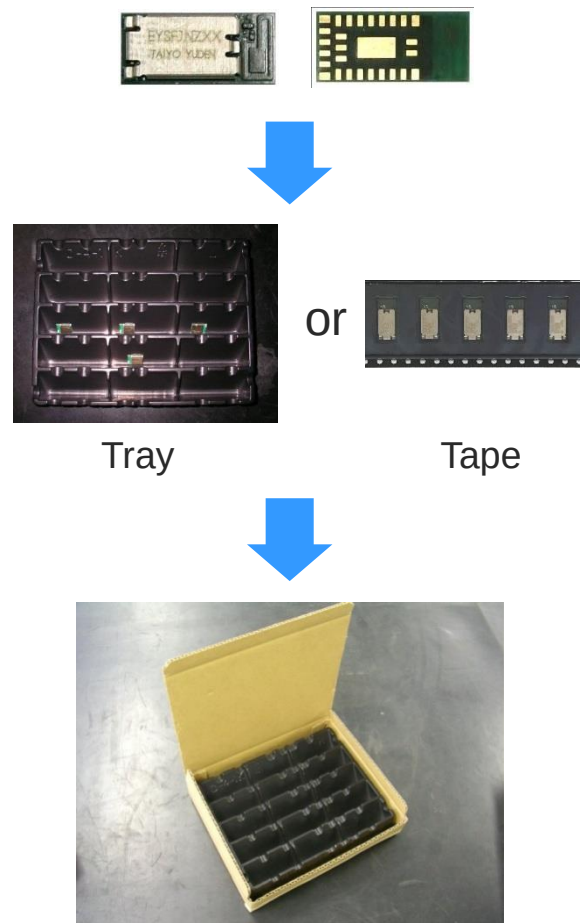
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# Bluetooth® low energy Module Sample, Evaluation Board / Kit

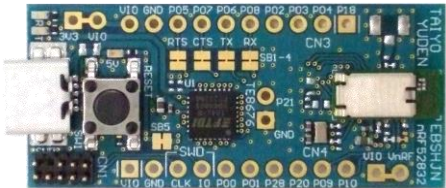
## EYSHJNZWZ (Module)

### Module samples



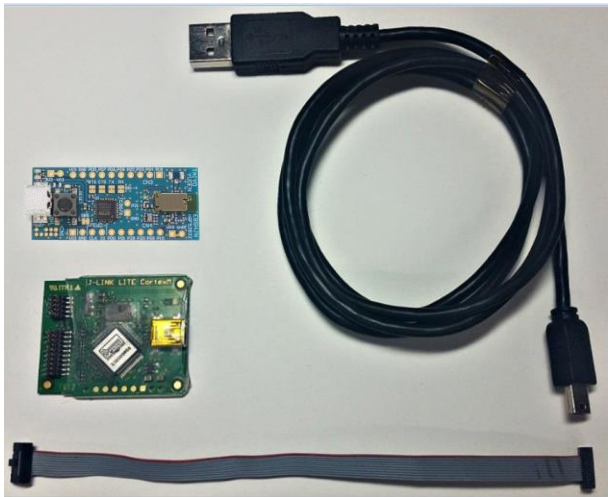
## EBSHJNZWZ (EV-B)

### Evaluation board



## EKSHJNZWZ (EV-K)

### Evaluation kit



# 2Mbps Bluetooth® 5.0 low energy Module: EYSLCNZWW

## Features

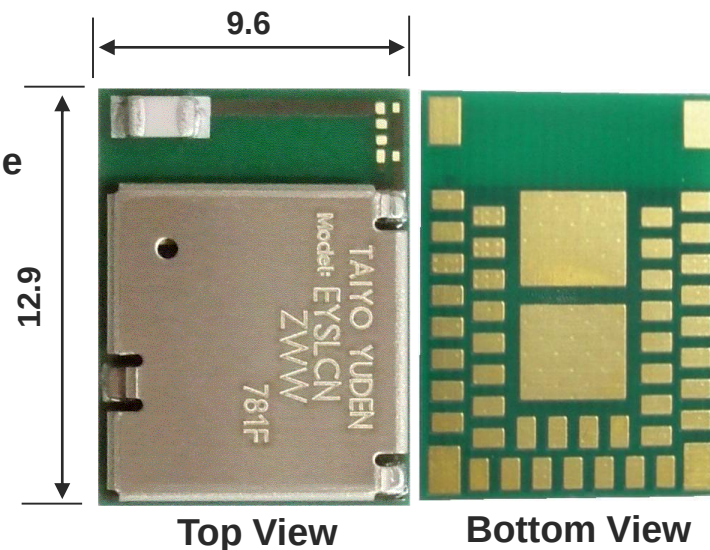
- Frequency: 2402 to 2480 MHz with +4dBm Output power
- Single power supply: 1.7 – 3.6V
- Single Mode Bluetooth low energy Slave/Master (ANT™ Available)
- Chip: **nRF52810** (Nordic) with Bluetooth low energy **2Mbps** mode
- Integrated System/**Sleep Clock, LC for DC/DC**
- Integrated high performance ceramic chip antenna
- ARM Cortex M4** 32bit processor
- 192kB Flash** and **24kB RAM**
- Interface: SPI, UART, I2C, PDM and 12bit ADC
- Outline: **9.6 x 12.9 x 2.0** mm with **1mm** pad pitch
- Operating Temperature range: -40 to 85 deg-C
- Bluetooth and Japan, FCC, IC qualified
- ETSI EN 300 328 v2.1.1 Conducted Test Report Available
- RoHS compliant / Complete Lead Free

## Applications

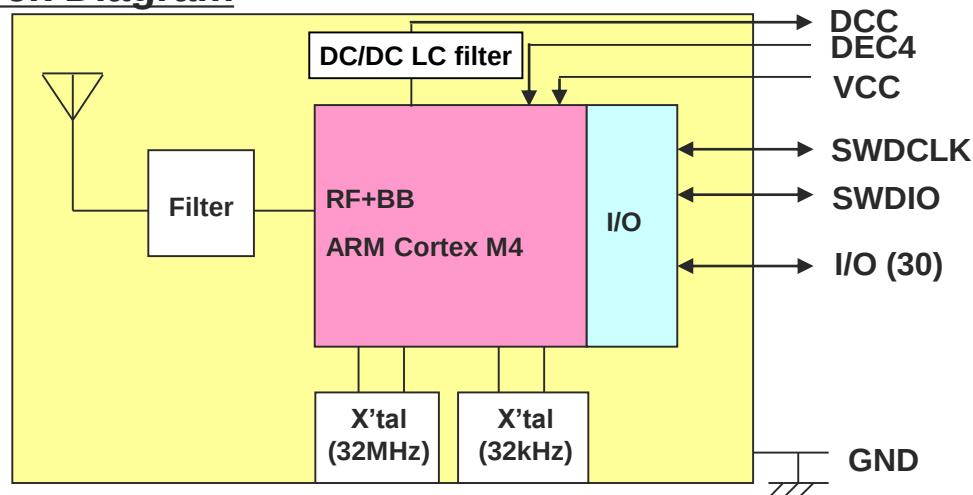
- Beacon
- Heart rate monitor
- Blood pressure monitor
- Blood glucose meter
- Weighing machine
- Thermometer
- Mobile accessories
- Sports and fitness sensors
- Remote controllers / Toys

## Outline

Unit: mm



## Block Diagram



All specifications are subject to change without notice.

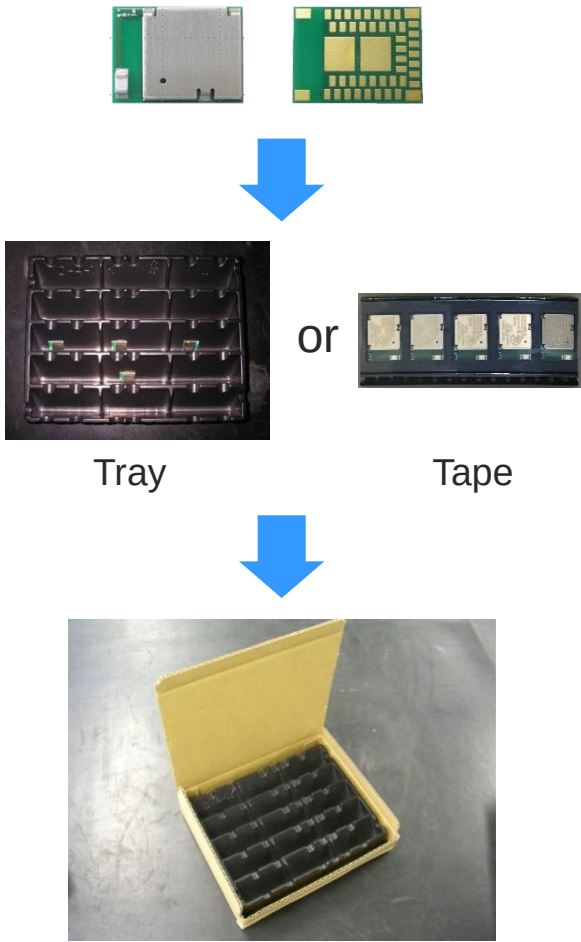
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# Bluetooth® low energy Module Sample, Evaluation Board / Kit

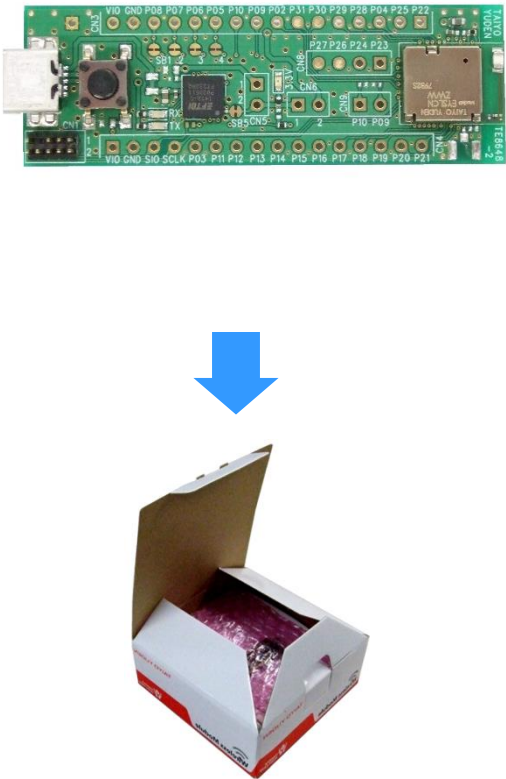
## EYSLCNZWW (Module)

### Module samples



## EBSLCNZWW (EV-B)

### Evaluation board



## EKSLCNZWW (EV-K)

### Evaluation kit





# Bluetooth® low energy Module: **EYSGCNZXX**

## Features

- Frequency: 2402 to 2480 MHz
- Output power: +4dBm typ.
- Single power supply: 1.8 – 3.6V
- Single Mode Bluetooth low energy Slave
- Chip: nRF51822 **Rev.3** (Nordic)
- Integrated System/Sleep Clock
- Integrated high performance ceramic chip antenna
- ARM Cortex M0** 32bit processor
- 256kB Flash** and **16kB RAM**
- Interface: SPI, UART, I2C and 8/9/10bit ADC
- Outline: **9.6 x 12.9 x 2.0** mm with **1mm** pad pitch
- Operating Temperature range: -40 to 85 deg-C**
- Bluetooth and Japan, FCC, IC qualified
- ETSI EN 300 328 v2.1.1 Conducted Test Report Available
- RoHS compliant / Complete Lead Free

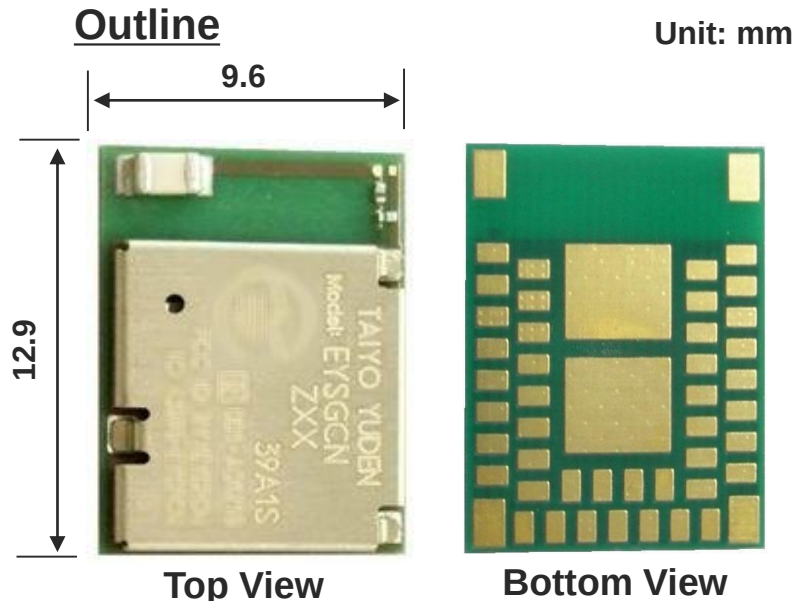
## Applications

- Cycle computer
- Heart rate monitor
- Blood pressure monitor
- Blood glucose meter
- Weighing machine
- Thermometer
- Mobile accessories
- Sports and fitness sensors
- Remote controllers / Toys

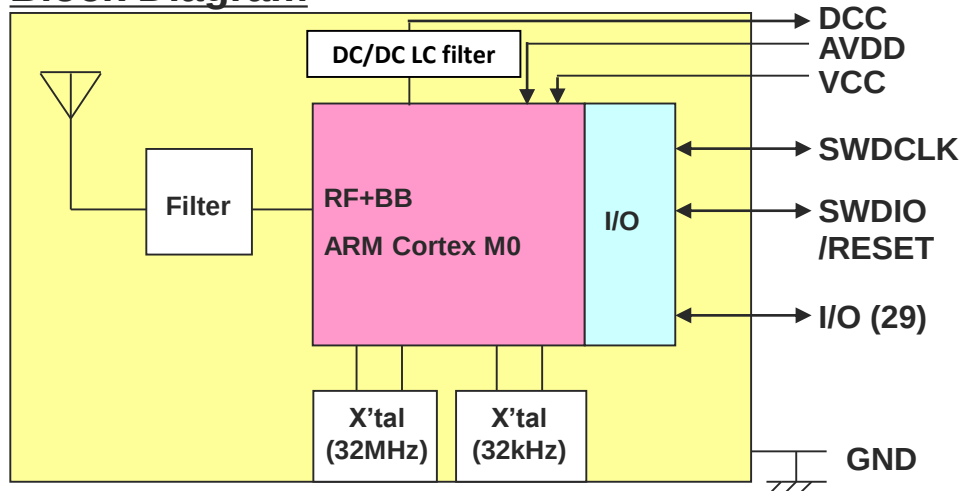
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**TAIYO YUDEN**



## Block Diagram



# Bluetooth® low energy Module: **EYSGCNZWY**

## Features

- Frequency: 2402 to 2480 MHz
- Output power: +4dBm typ.
- Single power supply: 1.8 – 3.6V
- Single Mode Bluetooth low energy **Slave / Master**
- Chip: nRF51822 **Rev.3** (Nordic)
- Integrated System/**Sleep Clock**
- Integrated high performance ceramic chip antenna
- ARM Cortex M0** 32bit processor
- 256kB Flash** and **32kB RAM**
- Interface: SPI, UART, I2C and 8/9/10bit ADC
- Outline: **9.6 x 12.9 x 2.0** mm with **1mm** pad pitch
- Operating Temperature range: -25 to 85 deg-C**
- Bluetooth and Japan, FCC, IC qualified
- ETSI EN 300 328 v2.1.1 Conducted Test Report Available
- RoHS compliant / Complete Lead Free

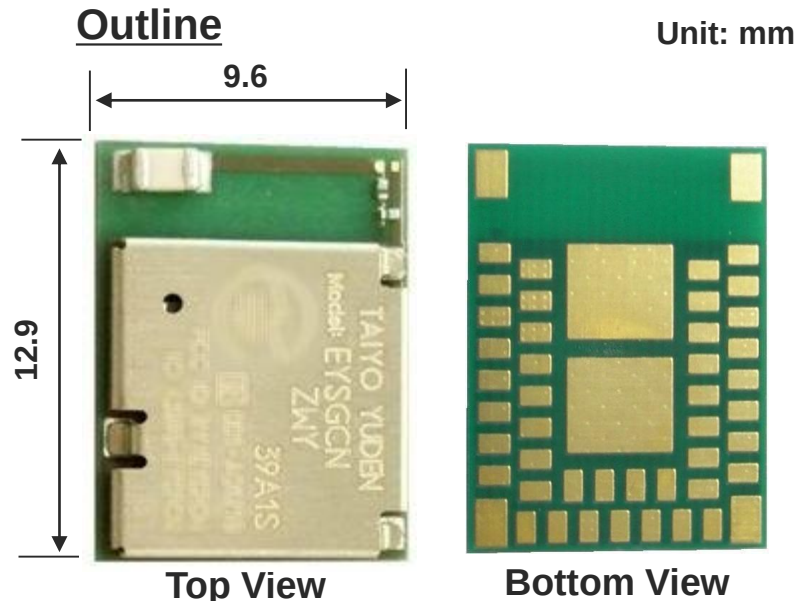
## Applications

- Cycle computer
- Heart rate monitor
- Blood pressure monitor
- Blood glucose meter
- Weighing machine
- Thermometer
- Mobile accessories
- Sports and fitness sensors
- Remote controllers / Toys

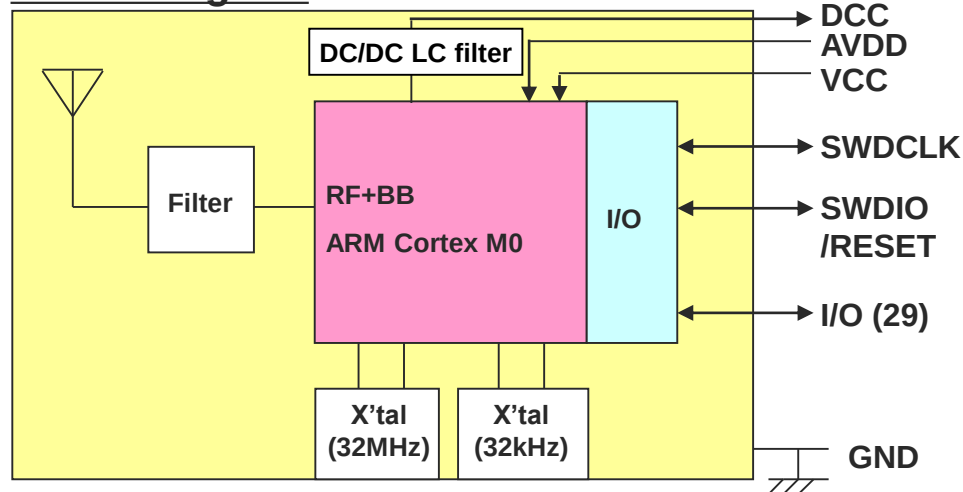
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## Block Diagram

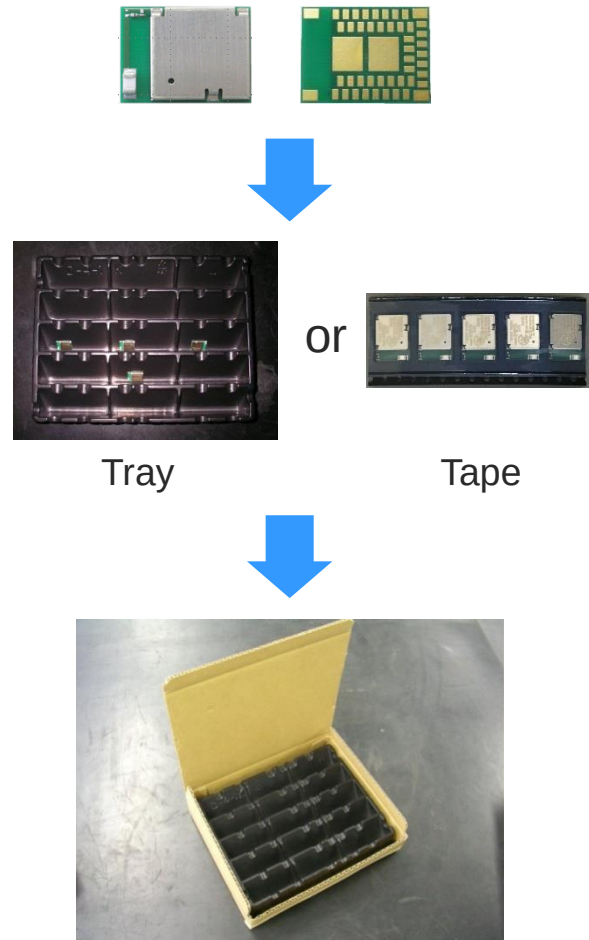




# Bluetooth® low energy Module Sample, Evaluation Board / Kit

## EYSGCNZXX, EYSGCNZWY (Module)

### Module samples



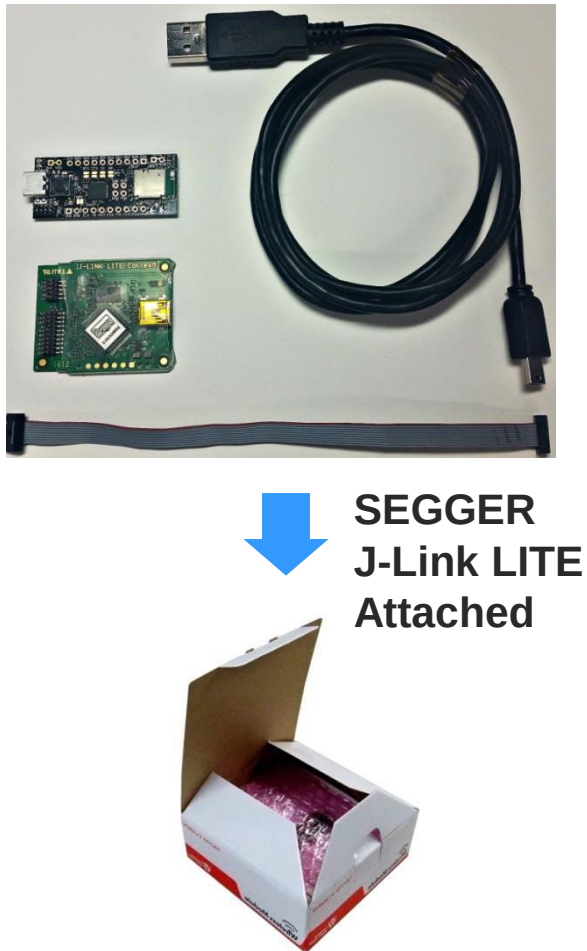
## EBSGCMZWY (EV-B)

### Evaluation board



## EKSGCMZWY (EV-K)

### Evaluation kit

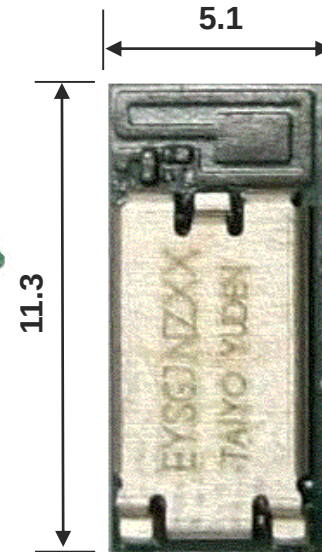


# Bluetooth® low energy Module **EYSGJNZXX**

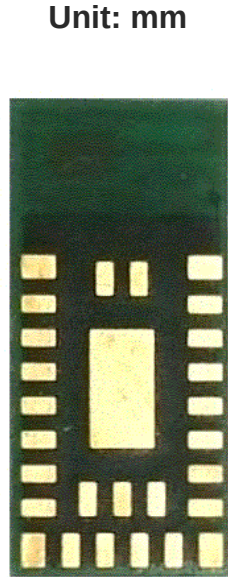
## Features

- Frequency: 2402 to 2480 MHz
- Output power: +4dBm typ.
- Single power supply: 1.8 – 3.6V
- Single Mode Bluetooth low energy Slave
- Chip: nRF51822 **Rev.3** (Nordic)
- Integrated System Clock
- ARM Cortex M0** 32bit processor
- 256kB Flash** and **16kB RAM**
- Interface: SPI, UART, I2C and 8/9/10bit ADC
- Integrated high performance pattern antenna
- Outline: **5.1 x 11.3 x 1.3mm MAX**
- Operating Temperature range: -40 to 85 deg-C**
- Bluetooth and Japan, FCC, IC qualified
- ETSI EN 300 328 v2.1.1 Conducted Test Report Available
- RoHS compliant / Complete Lead Free

## Outline



Top View



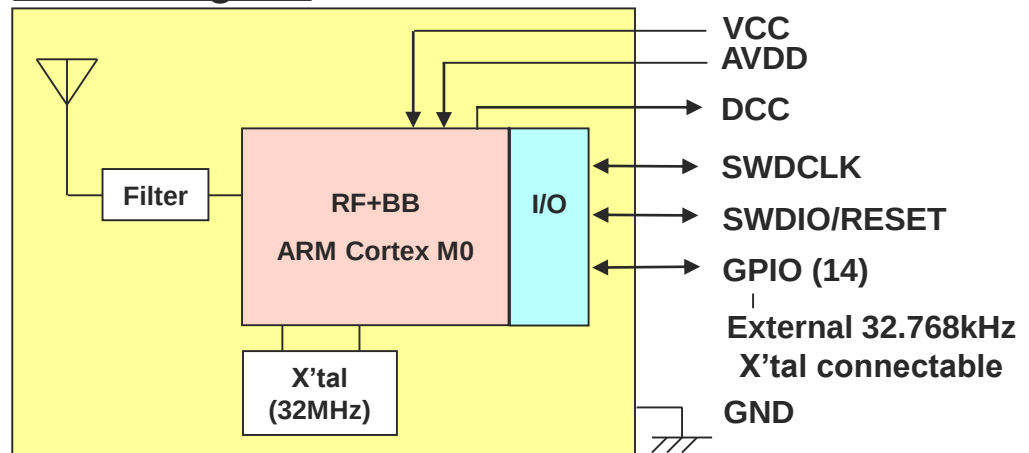
Bottom View

Unit: mm

## Applications

- Cycle computer
- Heart rate monitor
- Blood pressure monitor
- Blood glucose meter
- Weighing machine
- Thermometer
- Mobile accessories
- Sports and fitness sensors
- Remote controllers / Toys

## Block Diagram



All specifications are subject to change without notice.

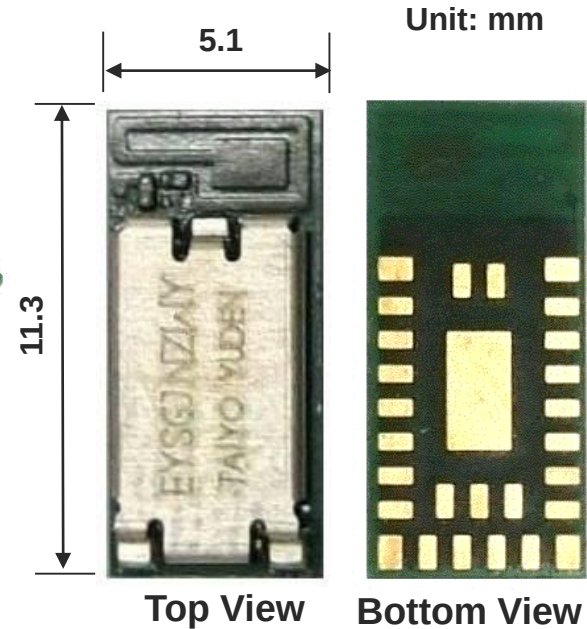
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# Bluetooth® low energy Module **EYSGJNZWY**

## Features

- Frequency: 2402 to 2480 MHz
- Output power: +4dBm typ.
- Single power supply: 1.8 – 3.6V
- Single Mode Bluetooth low energy **Slave / Master**
- Chip: nRF51822 **Rev3** (Nordic)
- Integrated System Clock
- ARM Cortex M0** 32bit processor
- 256kB Flash** and **32kB RAM**
- Interface: SPI, UART, I2C and 8/9/10bit ADC
- Integrated high performance pattern antenna
- Outline: **5.1 x 11.3 x 1.3**mm MAX
- Operating Temperature range: -25 to 85 deg-C**
- Bluetooth and Japan, FCC, IC qualified
- ETSI EN 300 328 v2.1.1 Conducted Test Report Available
- RoHS compliant / Complete Lead Free

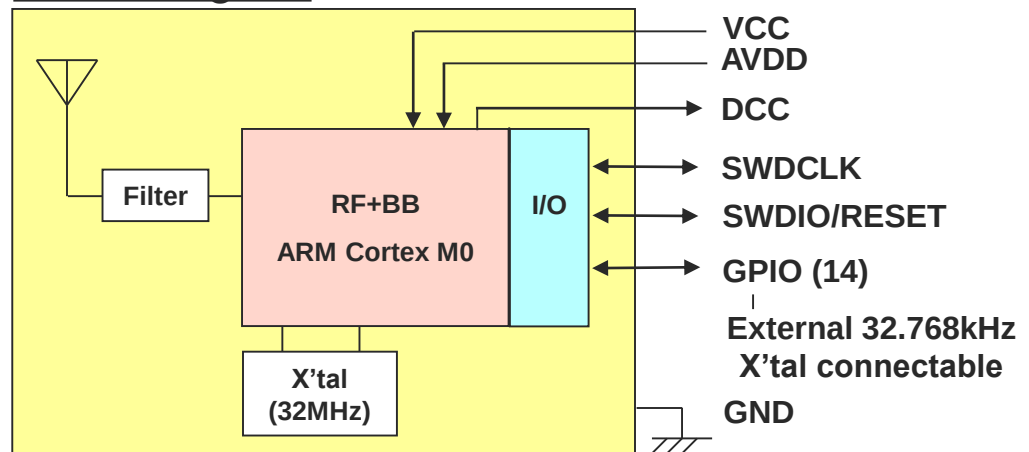
## Outline



## Applications

- Cycle computer
- Heart rate monitor
- Blood pressure monitor
- Blood glucose meter
- Weighing machine
- Thermometer
- Mobile accessories
- Sports and fitness sensors
- Remote controllers / Toys

## Block Diagram



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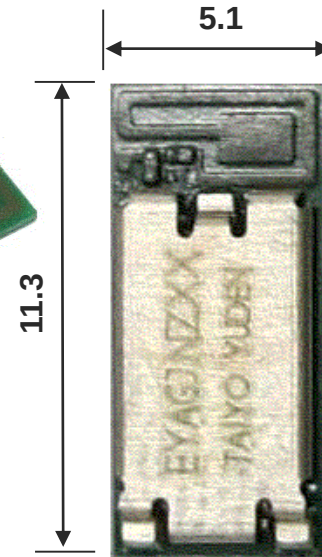
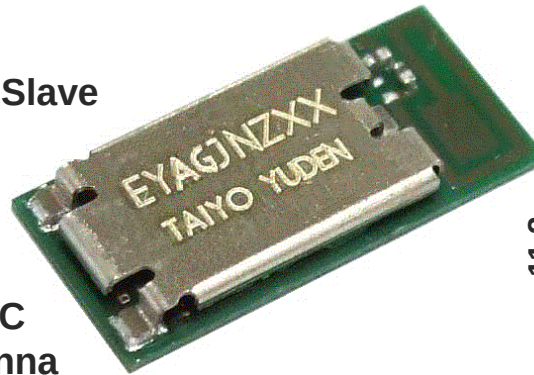


# ANT + Bluetooth® low energy Module **EYAGJNZXX**

## Features

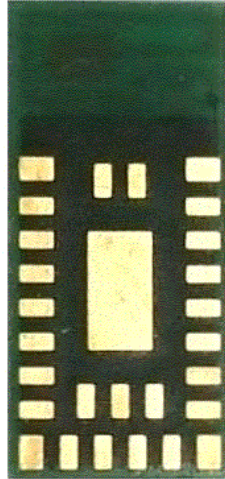
- Frequency: 2402 to 2480 MHz
- Output power: +4dBm typ.
- Single power supply: 1.8 – 3.6V
- ANT** + Single Mode Bluetooth low energy Slave
- Chip: **nRF51422 Rev 3** (Nordic)
- Integrated System Clock
- ARM Cortex M0** 32bit processor
- 256kB Flash and 32kB RAM**
- Interface: SPI, UART, I2C and 8/9/10bit ADC
- Integrated high performance pattern antenna
- Outline: **5.1 x 11.3 x 1.3mm** MAX
- Operating Temperature range: -25 to 85 deg-C**
- Bluetooth and Japan, FCC, IC qualified
- ETSI EN 300 328 v2.1.1 Conducted Test Report Available
- RoHS compliant / Complete Lead Free

## Outline



Top View

Unit: mm

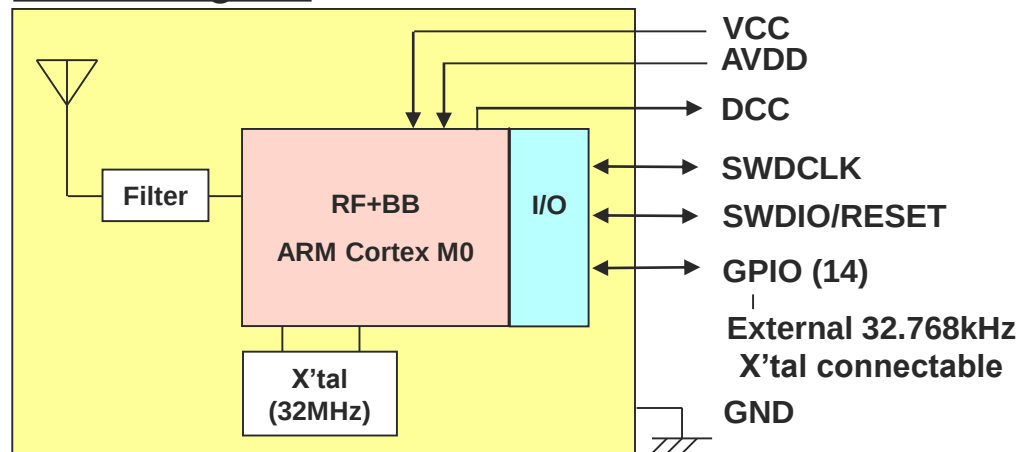


Bottom View

## Applications

- Cycle computer
- Heart rate monitor
- Blood pressure monitor
- Blood glucose meter
- Weighing machine
- Thermometer
- Mobile accessories
- Sports and fitness sensors
- Remote controllers / Toys

## Block Diagram



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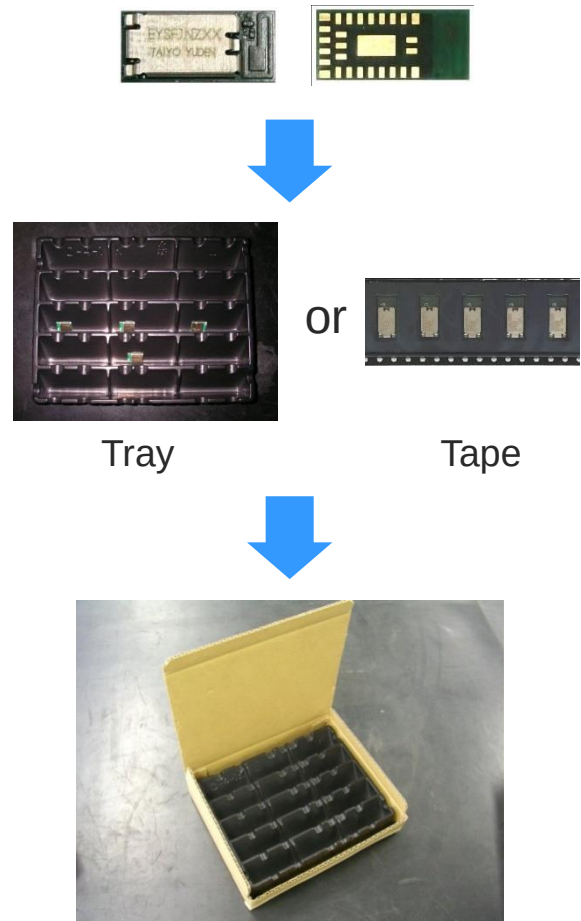
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# Bluetooth® low energy Module Sample, Evaluation Board / Kit

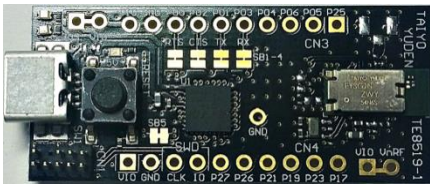
EYSGJNZXX, EYSGJNZWY,  
EYAGJNZXX (Module)

## Module samples



EBSGJNZWY, EBAGJNZXX  
(EV-B)

## Evaluation board



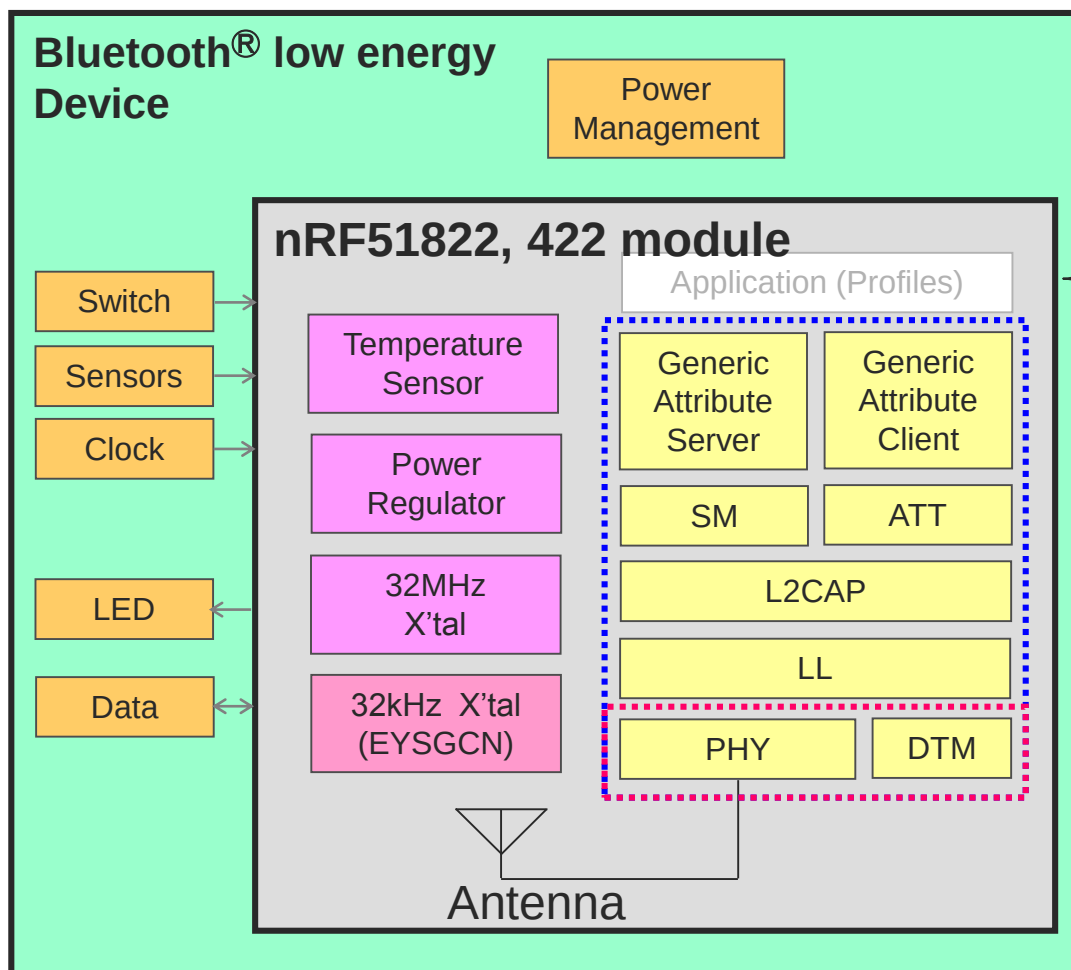
EKSGJNZWY, EKAGJNZXX  
(EV-K)

## Evaluation kit





# Application Layer image for Basic Module



- Alert Notification **Nordic SDK**
- Blood Pressure
- Cycling Speed and Cadence
- Glucose
- HID Mouse
- Heart Rate
- Phone Alert Status
- Proximity
- Running Speed and Cadence
- Time

Basic module will be written under GATT.

## Softdevice

- GAP:** Generic Access Profile  
**SM:** Security Manager  
**ATT:** Attribute Protocol  
**L2CAP:** Logical Link Control and Adaptation Protocol  
**LL:** Link Layer  
**PHY:** Physical Layer  
**DTM:** Direct Test Mode

**EYSGCN, EYSGJN, EYAGJN**  
**Basic Module**

# Bluetooth® low energy Module: **EYSGCNAWY-1X**

## Features

- Frequency: 2402 to 2480 MHz
- Output power: +4dBm typ.
- Single power supply: 1.8 – 3.6V
- Single Mode Bluetooth low energy **Slave / Master**
- Chip: nRF51822 (Nordic)
- Integrated System/Sleep Clock
- Integrated high performance ceramic chip antenna
- ARM Cortex M0** 32bit processor
- Application Embedded by Taiyo Yuden**
- (TY's App Lite: Generic Data transfer, Battery Service)**
- Interface: UART
- Outline: **9.6 x 12.9 x 2.0** mm with **1mm** pad pitch
- Operating Temperature range: -25 to 85 deg-C
- Bluetooth and Japan, FCC, IC qualified
- ETSI EN 300 328 v2.1.1 Conducted Test Report Available
- RoHS compliant / Complete Lead Free

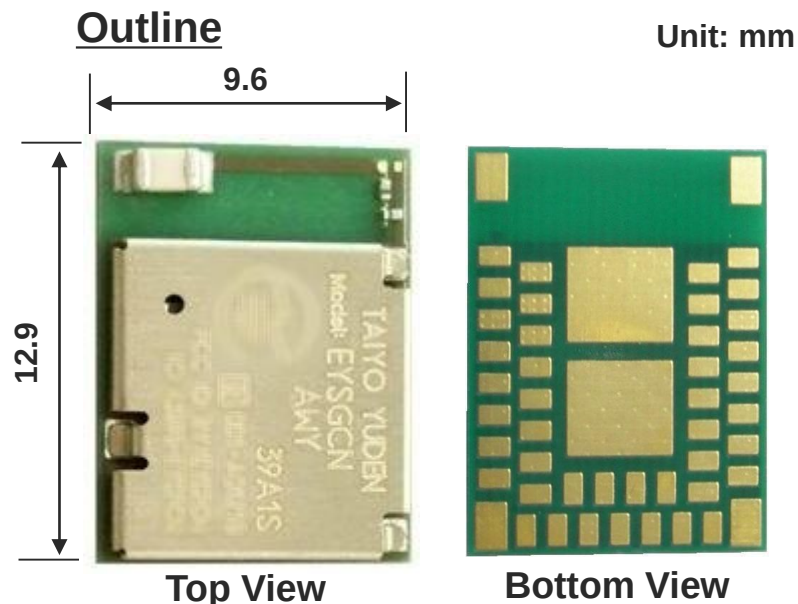
## Applications

- Cycle computer
- Heart rate monitor
- Blood pressure monitor
- Blood glucose meter
- Weighing machine
- Thermometer
- Mobile accessories
- Sports and fitness sensors
- Remote controllers / Toys

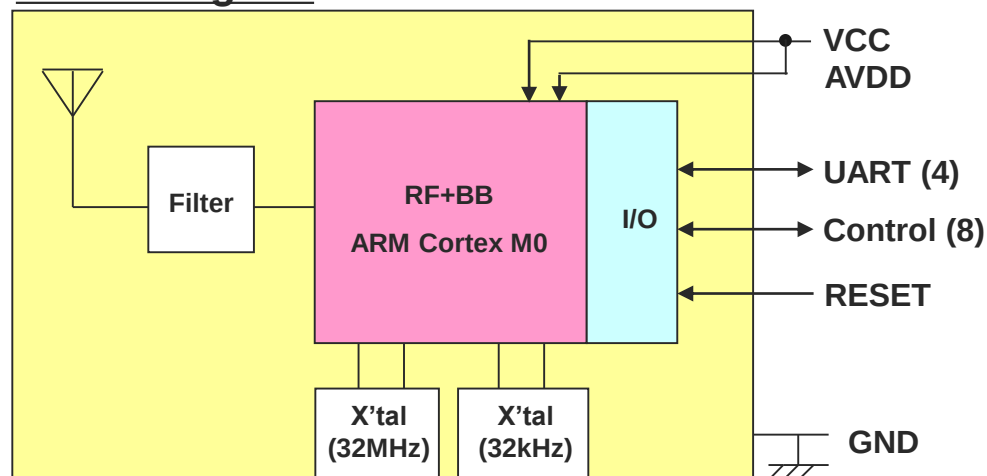
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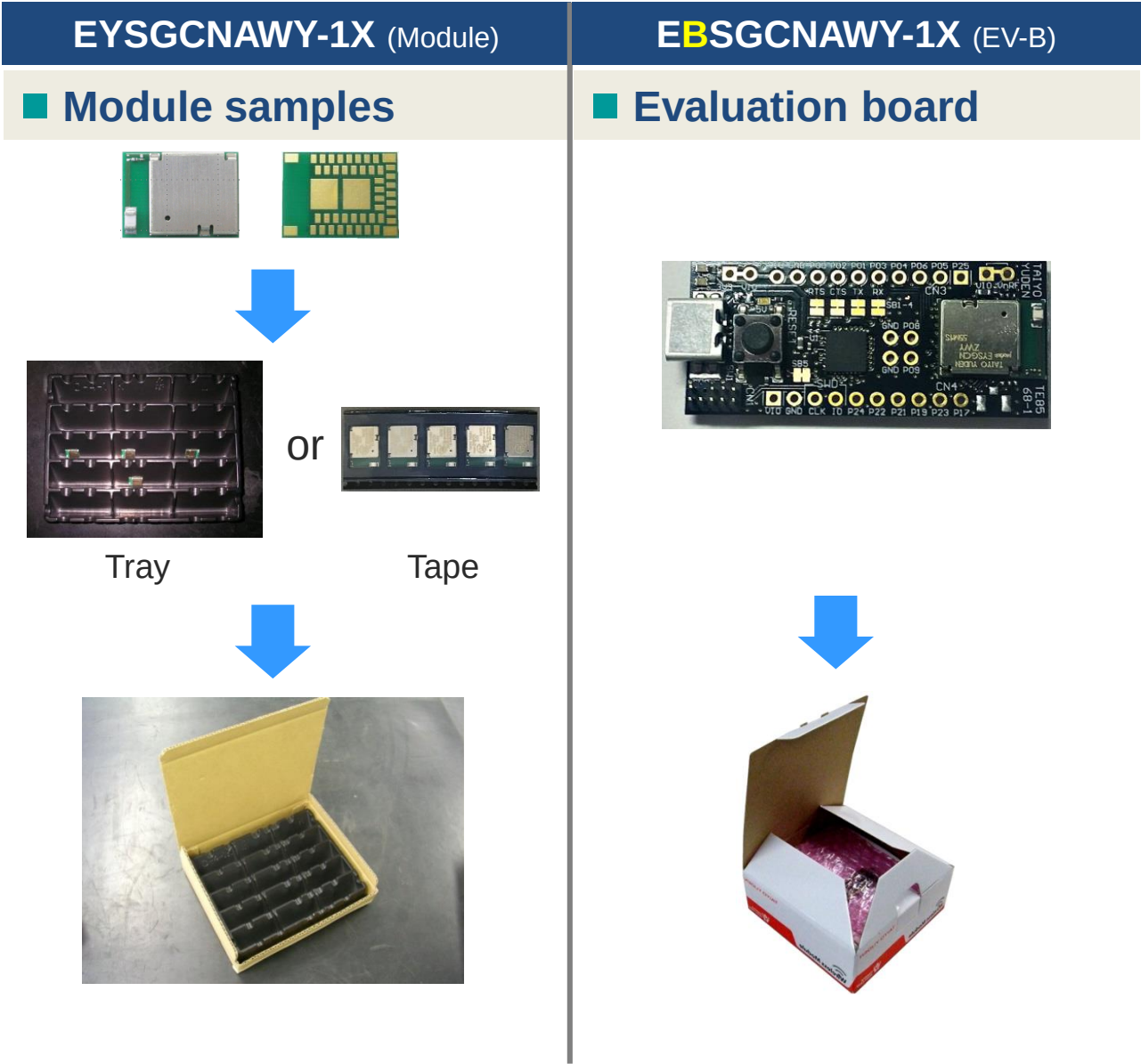
**TAIYO YUDEN**



## Block Diagram



# Bluetooth low energy Module Sample, Evaluation Board



# Bluetooth® low energy Module **EYSGJNAWY-1X**

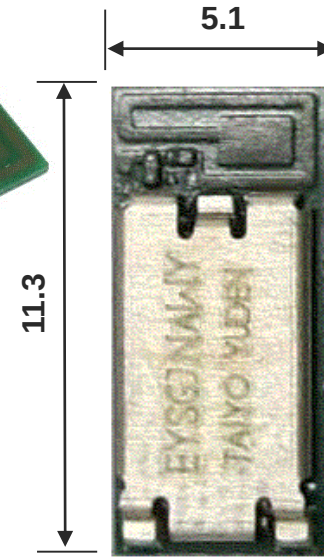
## Features

- Frequency: 2402 to 2480 MHz
- Output power: +4dBm typ.
- Single power supply: 1.8 – 3.6V
- Single Mode Bluetooth low energy **Slave / Master**
- Chip: nRF51822 **Rev3** (Nordic)
- Integrated System Clock
- ARM Cortex M0** 32bit processor
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## Applications

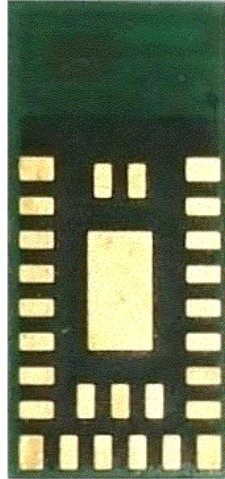
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## Outline



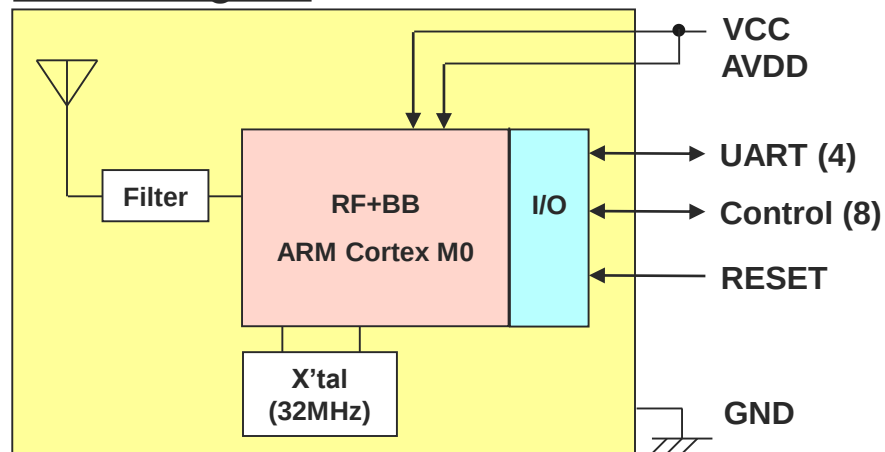
Top View

Unit: mm



Bottom View

## Block Diagram

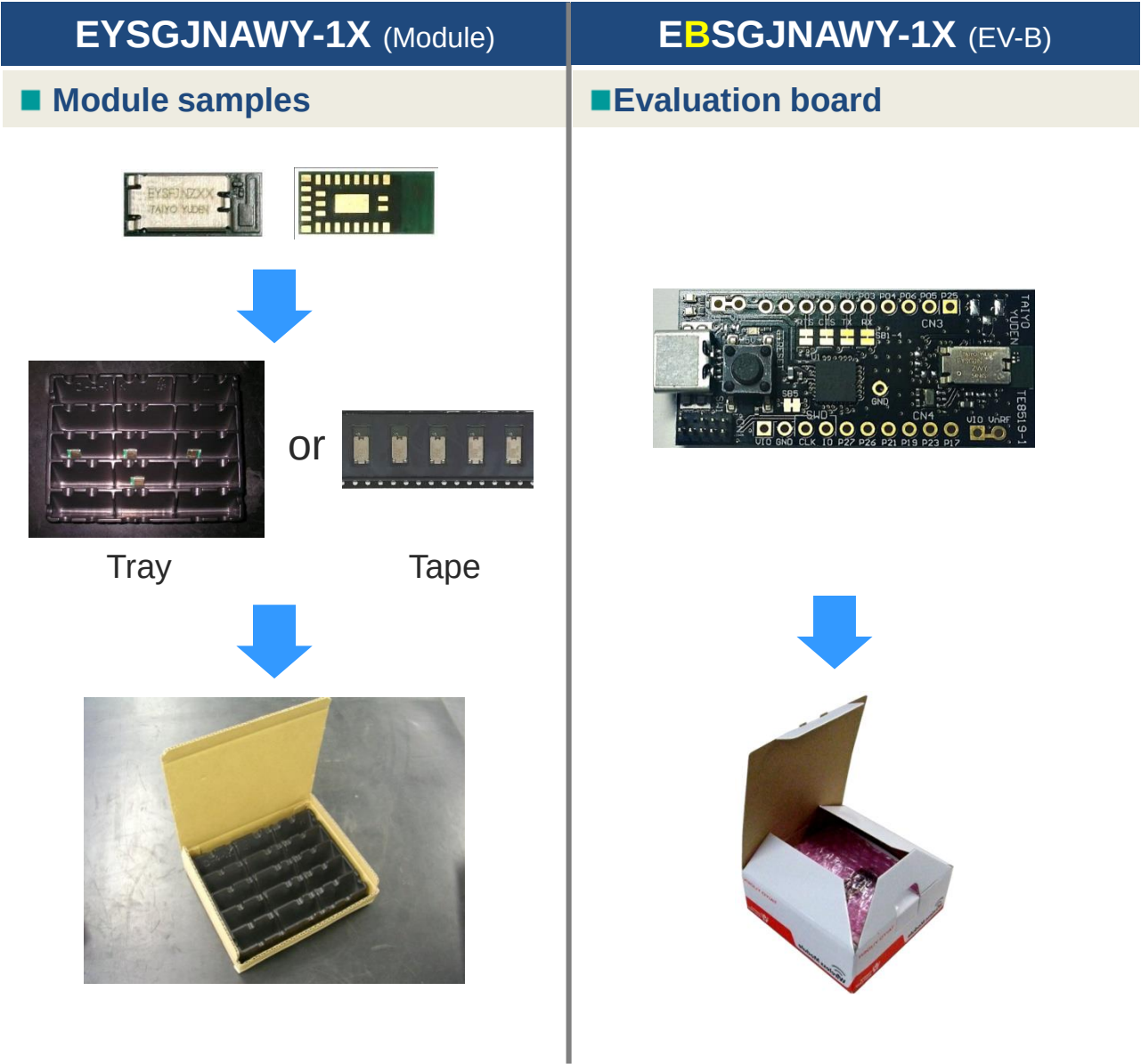


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**TAIYO YUDEN**

# Bluetooth low energy Module Sample, Evaluation Board





# Bluetooth® low energy Module: **EYSGCNAWY-WX**

## Features

- Frequency: 2402 to 2480 MHz
- Output power: +4dBm typ.
- Single power supply: 1.8 – 3.6V
- Single Mode Bluetooth low energy **Slave / Master**
- Chip: nRF51822 (Nordic)
- Integrated System/Sleep Clock
- Integrated high performance ceramic chip antenna
- ARM Cortex M0** 32bit processor
- Application Embedded by Taiyo Yuden**
- (TY's App : Generic Data transfer, Battery Service)**
- Interface: UART
- Outline: **9.6 x 12.9 x 2.0** mm with **1mm** pad pitch
- Operating Temperature range: -25 to 85 deg-C
- Bluetooth and Japan, FCC, IC qualified
- ETSI EN 300 328 v2.1.1 Conducted Test Report Available
- RoHS compliant / Complete Lead Free

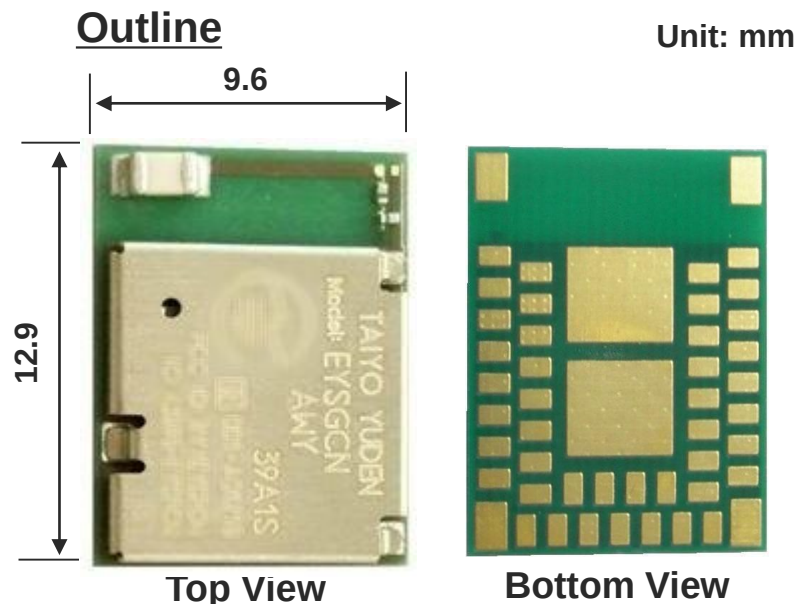
## Applications

- Cycle computer
- Heart rate monitor
- Blood pressure monitor
- Blood glucose meter
- Weighing machine
- Thermometer
- Mobile accessories
- Sports and fitness sensors
- Remote controllers / Toys

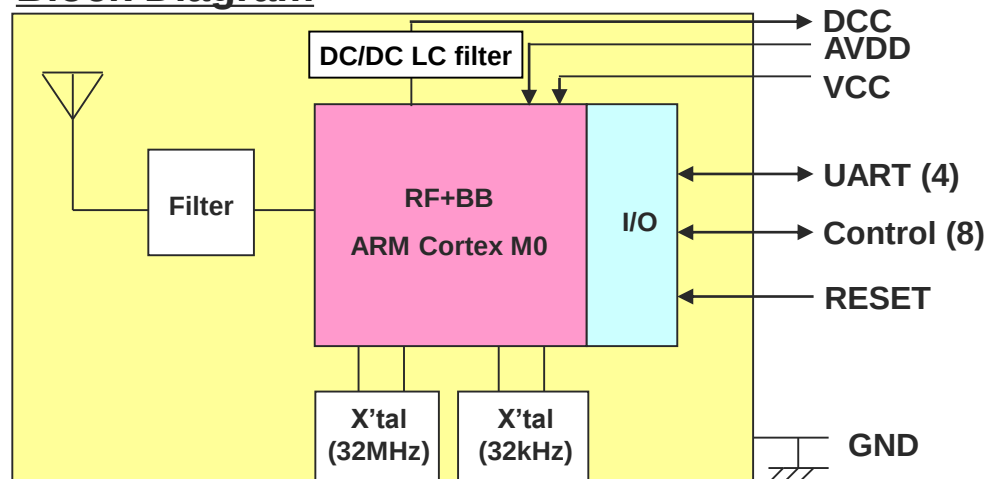
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**TAIYO YUDEN**



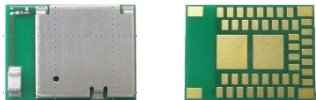
## Block Diagram



# Bluetooth low energy Module Sample, Evaluation Board

## EYSGCNAWY-WX (Module)

### Module samples



Tray

or



Tape



## EBSGCNAWY-WX (EV-B)

### Evaluation board



# Bluetooth® low energy Module **EYSGJNAWY-WX**

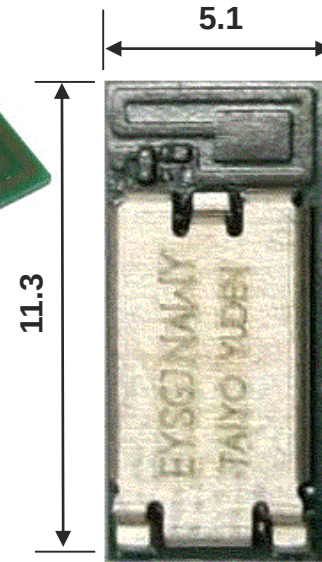
## Features

- Frequency: 2402 to 2480 MHz
- Output power: +4dBm typ.
- Single power supply: 1.8 – 3.6V
- Single Mode Bluetooth low energy **Slave / Master**
- Chip: nRF51822 Rev3 (Nordic)
- Integrated System Clock
- ARM Cortex M0** 32bit processor
- Application Embedded by Taiyo Yuden**
- (TY's App : Generic Data transfer, Battery Service)**
- Interface: UART
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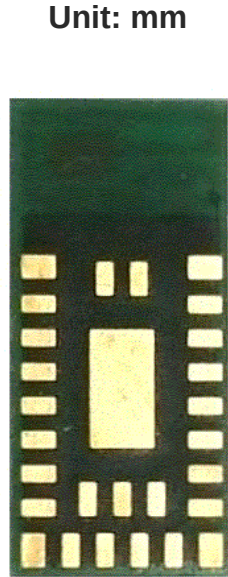
## Applications

- Cycle computer
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- Thermometer
- Mobile accessories
- Sports and fitness sensors
- Remote controllers / Toys

## Outline



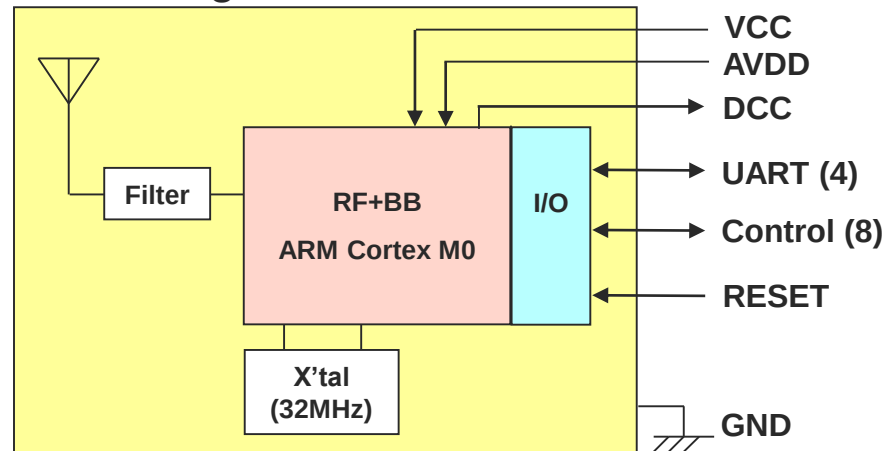
Top View



Bottom View

Unit: mm

## Block Diagram

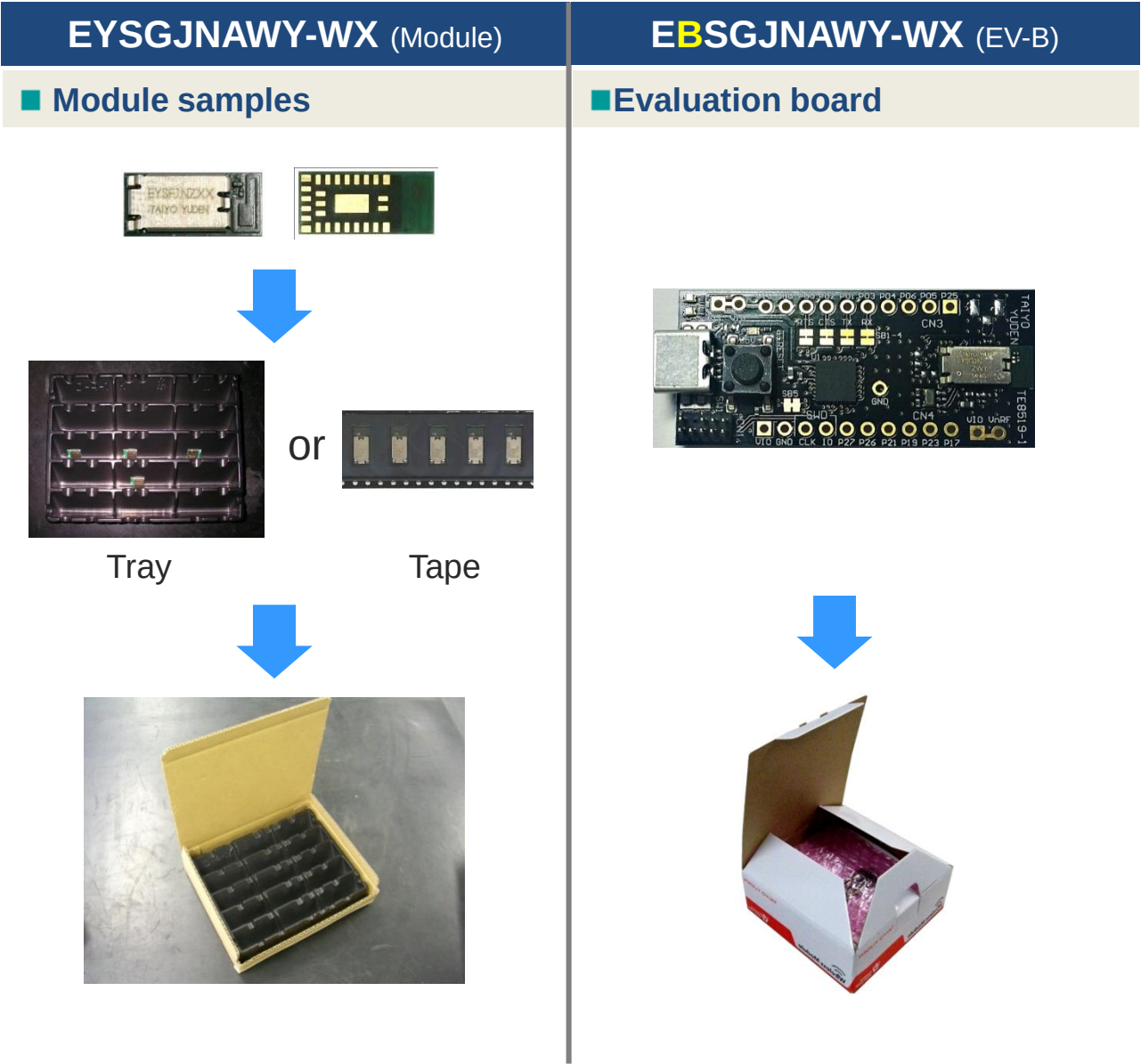


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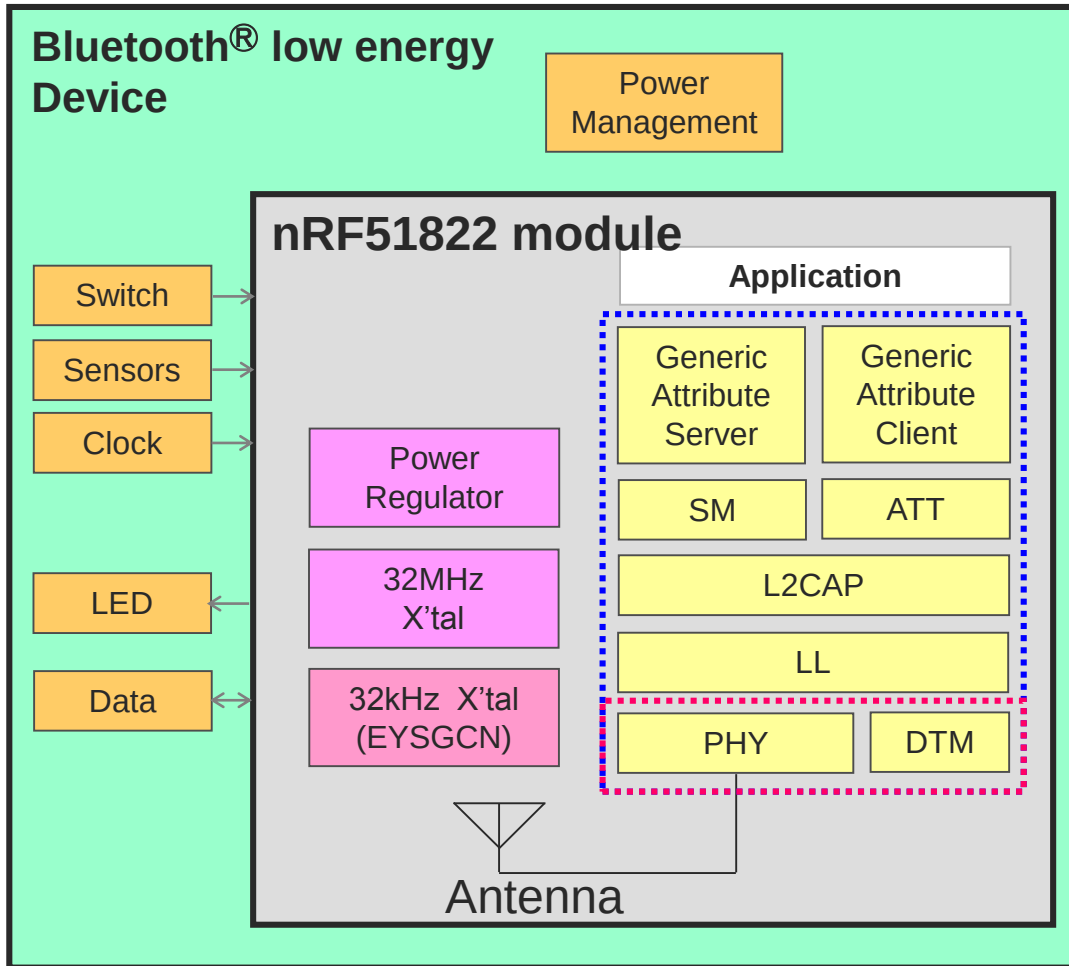
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# Bluetooth low energy Module Sample, Evaluation Board



# Application Layer image for **Application Embedded Module**



**EYSGCN, EYSGJN**  
**Application Embedded Module**

## Connection option

**-1X** module for  
**Module - Module only**

**-WX** module for  
**Module – Module**  
**Module – Smart phone**

## Softdevice

**GAP:** Generic Access Profile  
**SM:** Security Manager  
**ATT:** Attribute Protocol  
**L2CAP:** Logical Link Control and Adaptation Protocol  
**LL:** Link Layer  
**PHY:** Physical Layer  
**DTM:** Direct Test Mode



# Bluetooth® low energy standard module

| Type                                                                             | Part No.     | Size<br>(LxWxH)      | Specifi-<br>cation                                       | ANT™<br>Support | I/F                | RAM  | Certifi-<br>cation                               | Tempera-<br>ture |                                                       |
|----------------------------------------------------------------------------------|--------------|----------------------|----------------------------------------------------------|-----------------|--------------------|------|--------------------------------------------------|------------------|-------------------------------------------------------|
| High<br>Performance<br>Basic<br>(Software<br>Support :<br>Nordic)                | EYSHSNZWZ    | 3.25x8.55<br>X0.85mm | Bluetooth<br>V5.0<br>BLE<br>Single<br>Slave/<br>Master   | ✓               | UART<br>SPI<br>I2C | 64kB | Japan<br>FCC<br>IC<br>(CE)*2                     | -40~+85<br>deg-C |                                                       |
|                                                                                  | EYSHCNZWZ    | 9.6x12.9<br>X2.0mm   |                                                          | ✓               |                    | 64kB |                                                  |                  |                                                       |
|                                                                                  | EYSLCNZWW    |                      |                                                          |                 |                    | 24kB |                                                  |                  |                                                       |
|                                                                                  | EYSHJNZWZ    | 5.1x11.3<br>X1.3mm   |                                                          | ✓               |                    | 64kB |                                                  |                  |                                                       |
| Basic<br>(Software<br>Support :<br>Nordic)                                       | EYSGCNZXX    | 9.6x12.9x<br>2.0mm   | Bluetooth<br>V4.2*1<br>BLE<br>Single<br>Slave/<br>Master |                 |                    | 16kB |                                                  |                  | -40~+85<br>deg-C<br>(EYSGCN<br>ZXX,<br>EYSGJN<br>ZXX) |
|                                                                                  | EYSGCNZWY    |                      |                                                          |                 |                    | 32kB |                                                  |                  |                                                       |
|                                                                                  | EYSGJNZXX    | 5.1x11.3x<br>1.3mm   |                                                          |                 |                    | 16kB |                                                  |                  |                                                       |
|                                                                                  | EYSGJNZWY    |                      |                                                          |                 |                    | 32kB |                                                  |                  |                                                       |
|                                                                                  | EYAGJNZXX    |                      |                                                          | ✓               |                    | 32kB |                                                  |                  |                                                       |
| Application<br>Embedded –<br>Module<br>(Software<br>Support :<br>TAIYO<br>YUDEN) | EYSGCNAWY-1X | 9.6x12.9x<br>2.0mm   | Bluetooth<br>V4.1<br>BLE<br>Single<br>Slave/<br>Master   |                 | UART               | N/A  | -25~+85<br>deg-C<br>(other<br>than the<br>above) |                  |                                                       |
|                                                                                  | EYSGCNAWY-WX |                      |                                                          |                 |                    |      |                                                  |                  |                                                       |
|                                                                                  | EYSGJNAWY-1X | 5.1x11.3x<br>1.3mm   |                                                          |                 |                    |      |                                                  |                  |                                                       |
|                                                                                  | EYSGJNAWY-WX |                      |                                                          |                 |                    |      |                                                  |                  |                                                       |

※1 Supported by S130 SoftDevice, ※2 ETSI EN 300 328 v2.1.1 conducted test report available

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EYSGJNZWY