

**Wireless Module**  
***Bluetooth Smart* Module**  
**EYSFCNZXX**  
**Overview**

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Dec. 25, 2013 Version 1.0

# Bluetooth® Smart Module: EYSFCNZXX

## Features

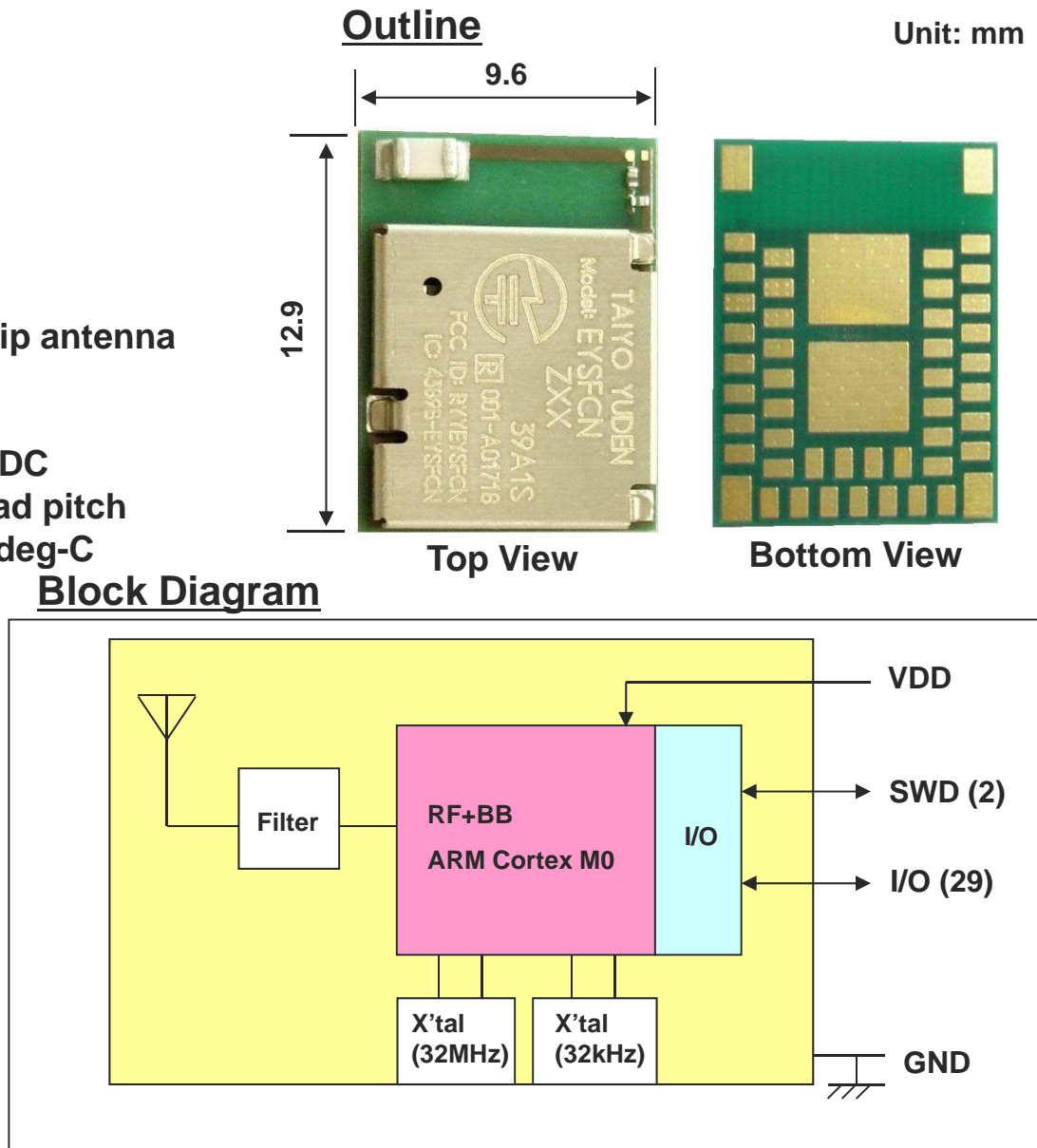
- Frequency: 2402 to 2480 MHz
- Output power: +4dBm typ.
- Single power supply: 1.8 – 3.6V
- Single Mode Bluetooth Smart Slave
- Chip: nRF51822 (Nordic)
- Integrated System/Sleep Clock
- Integrated high performance ceramic chip antenna
- ARM Cortex M0** 32bit processor
- 256KB flash and 16KB RAM**
- 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: -20 to 75 deg-C
- Bluetooth and Japan, FCC, IC qualified
- 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

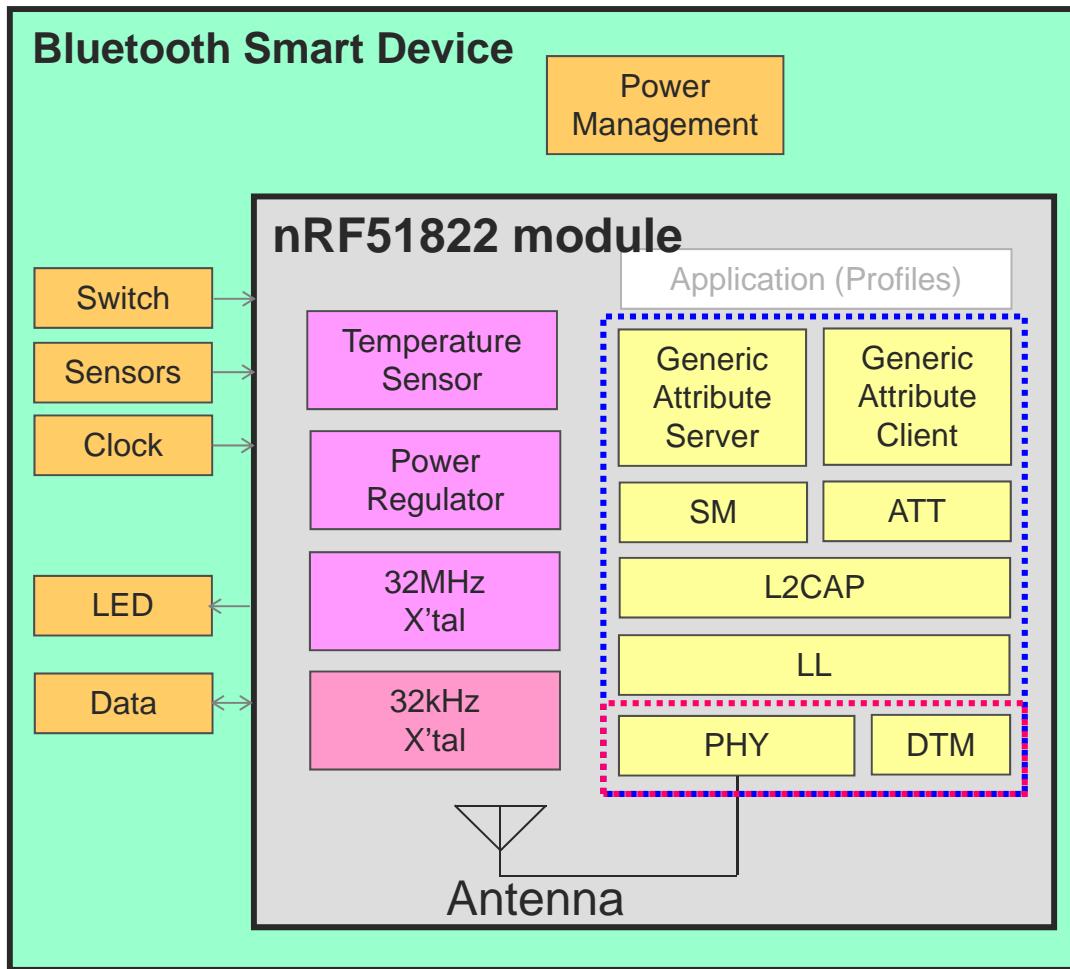
All specifications are subject to change without notice.

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# 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.

## Software Device ❑

- 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

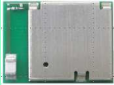


**EYSFCNZXX**  
**Basic Module**

# Bluetooth Smart<sup>®</sup> standard module

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Name	Part No.	Software Support	TELEC	FCC, IC	BT Logo	Sample	EV-Board EV-kit	MP
Basic (Soft device) W/ Antenna	EYSFCNZXX	Nordic (Product key for Website)	Yes	Yes	Yes	Now	Now	Now

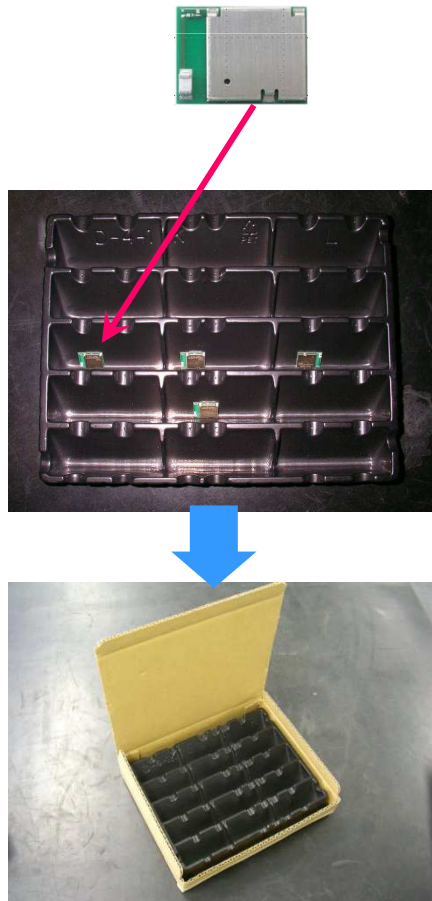
# Evaluation Board and sample image

Item	Part #	Image	Attachment
Basic Module	EYSFCNZXX		<ul style="list-style-type: none"> <li>• Doc (Data Report, EVB Manual)</li> <li>• <a href="#">Product key for Nordic site</a></li> </ul>
Basic Module Evaluation Kit	EKSFCNZXX		<ul style="list-style-type: none"> <li>• Doc (Data Report, EVB Manual)</li> <li>• <a href="#">Product key for Nordic site</a></li> <li>• TY EVB (EVB and Coin Battery)</li> <li>• Nordic DK (2 Boards, USB, Cables, Software)</li> </ul>
Basic Module Evaluation Board	EBSFCNZXX		<ul style="list-style-type: none"> <li>• Doc (Data Report, EVB Manual)</li> <li>• <a href="#">Product key for Nordic site</a></li> <li>• TY EVB (EVB and Coin Battery)</li> <li>• Distributor information for Nordic DK</li> </ul>

# EYSFCNZXX, EBSFCNZXX, EKSFCNZXX

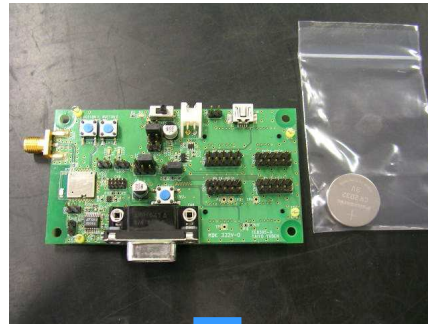
## EYSFCNZXX (Module)

### Taiyo Yuden Module



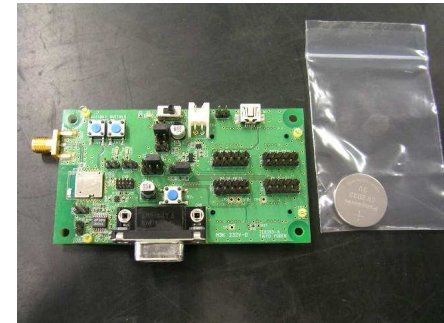
## EBSFCNZXX (EV-Board)

### Taiyo Yuden Evaluation board



## EKSFCNZXX (EV-Kit)

### Taiyo Yuden Evaluation board



### Nordic nRF51822-DK



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