

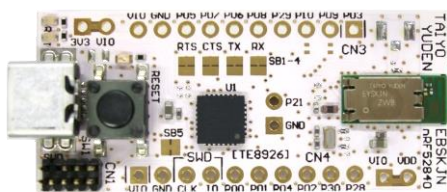
EVALUATION BOARD MANUAL

EBSKJN Series

EVALUATION KIT MANUAL

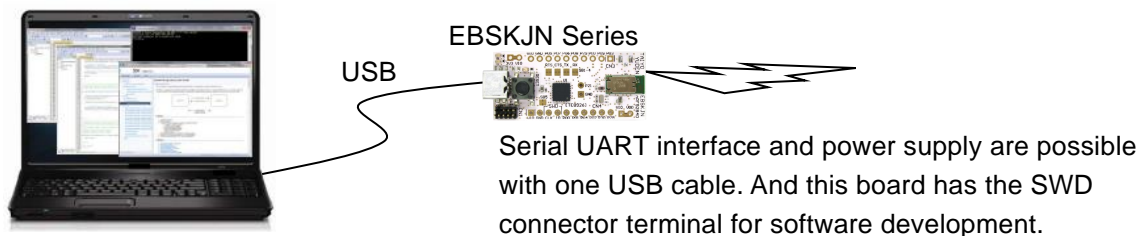
EKSKJN Series

for EYSKJN Series Bluetooth[®] low energy Module



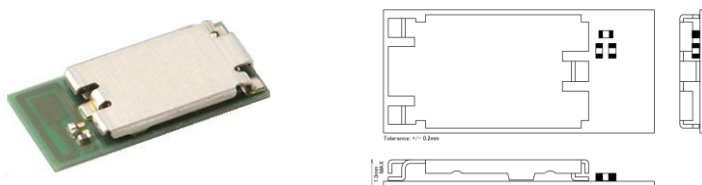
Introduction

This evaluation board is applicable for Taiyo Yuden's **Bluetooth® low energy** module, EYSKJN Series.



Mounted module

EYSKJN (11.3mm x 5.1mm x 1.3mm_MAX)



Nordic nRF52840 / ARM® Cortex™-M4F 32 bit processor
 28-pin Land Grid Array / 15GPIOs / SWD

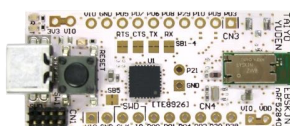
- Mounted module -

With this board, users can develop various applications.

Content

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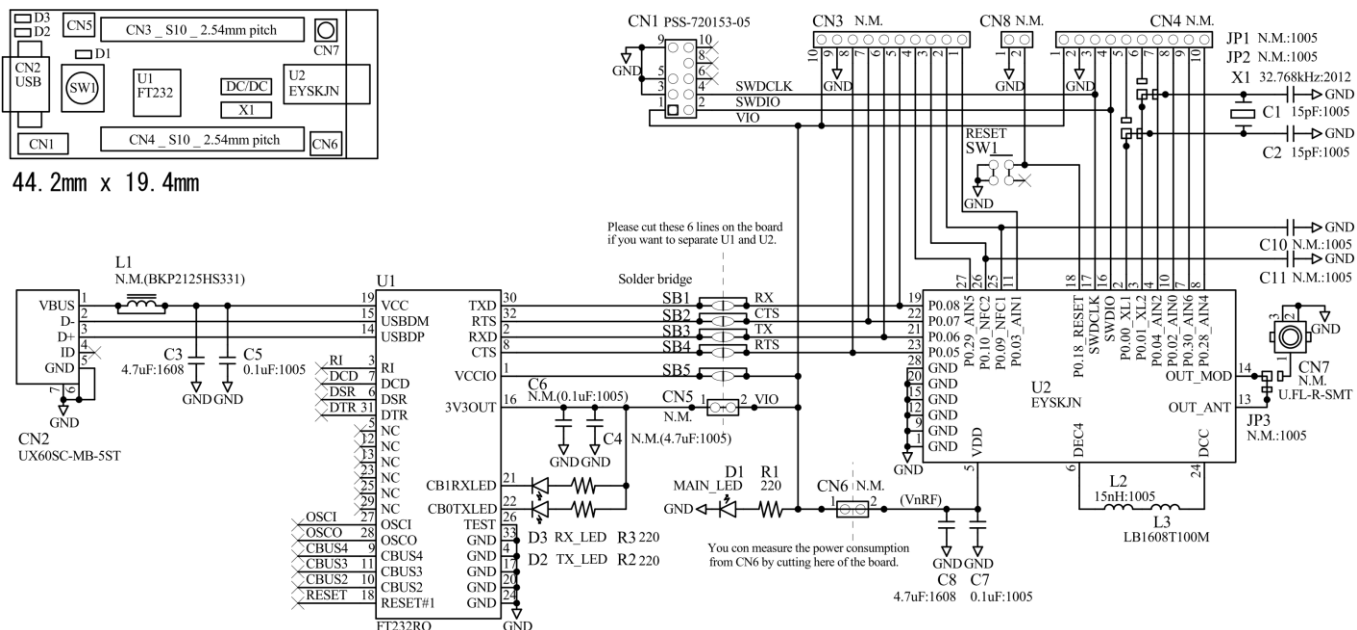
1. EBSKJN



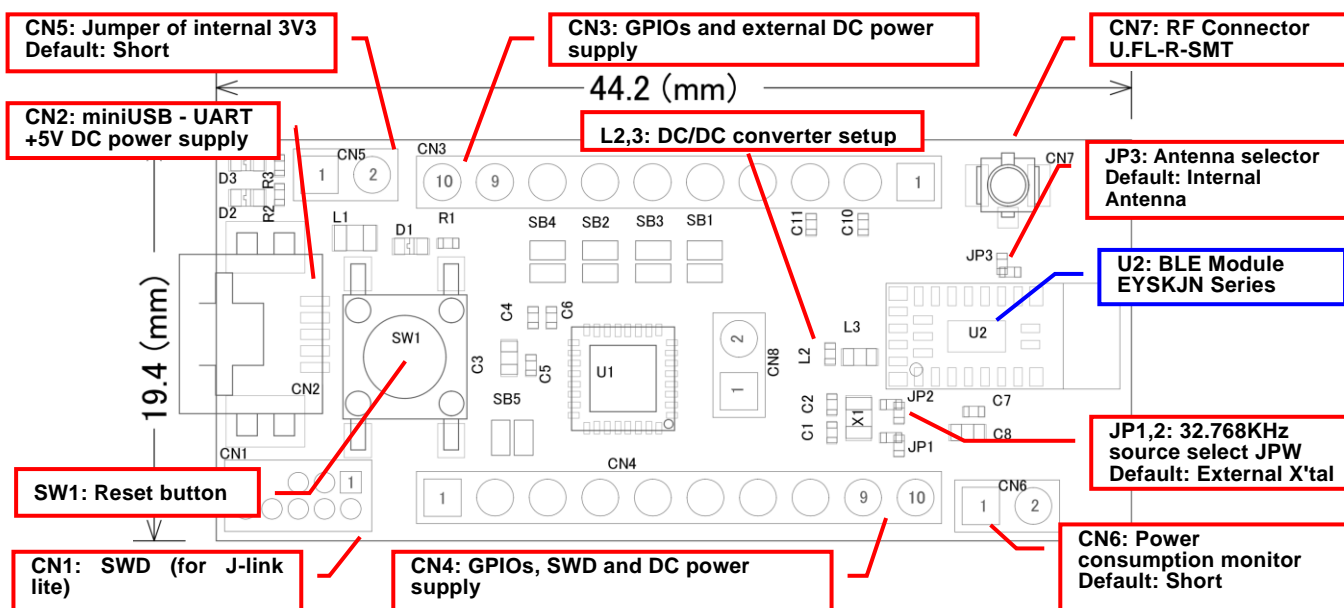
2. EKSKJN



Evaluation board circuit schematic



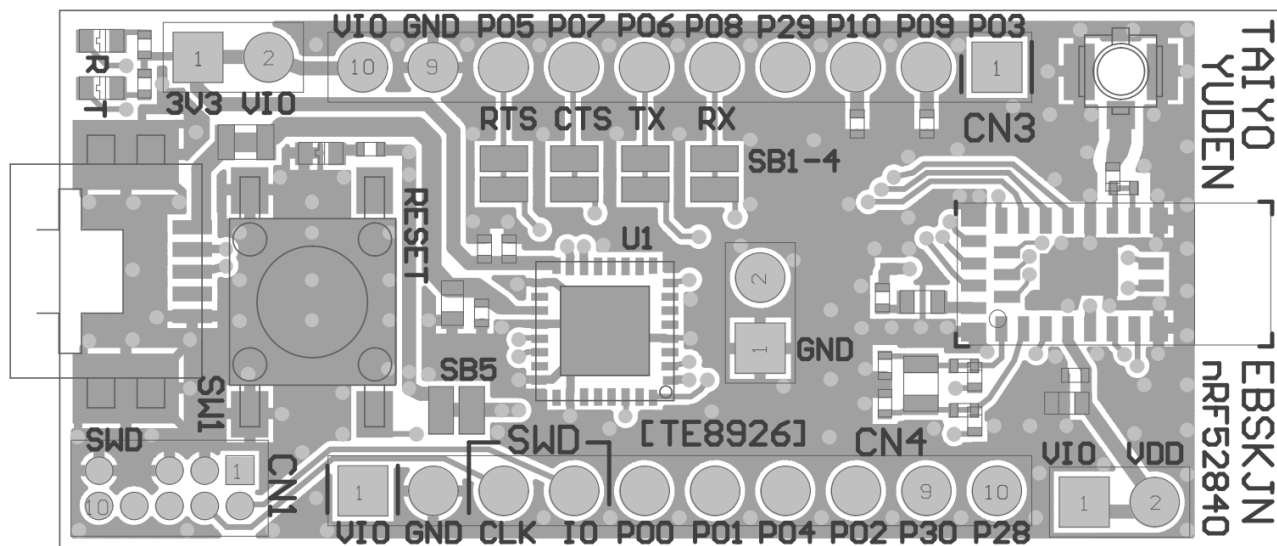
Evaluation board layout



- 1) All pin headers are 2.54mm pitch. And distance between **CN3** and **CN4** is **15.24mm**.
- 2) **CN3-CN8**, **C4**, **C6**, **C10**, **C11**, **R4**, **L1**, **JP1-JP3**, **SB1-5** are not mounted (N.M.).
- 3) **D1 (LED)**: 3.3V Indicator
- 4) **D2 (LED)**: UART TX Indicator
- 5) **D3 (LED)**: UART RX Indicator
- 6) **SW1 (Push button)**: Module Reset (active low)

EBSKJN, EKSKJN

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Silkscreen PrintingPin Descriptions

Pin No.	CN3	CN4	CN8
1	P0.03_AIN1	VIO	GND
2	P0.09_NFC1	GND	P0.18/RESET
3	P0.10_NFC2	SWDCLK	
4	P0.29_AIN5	SWDIO	
5	P0.08	P0.00 (default NC)	
6	P0.06	P0.01 (default NC)	
7	P0.07	P0.04_AIN2	
8	P0.05_AIN3	P0.02_AIN0	
9	GND	P0.30_AIN6	
10	VIO	P0.28_AIN4	

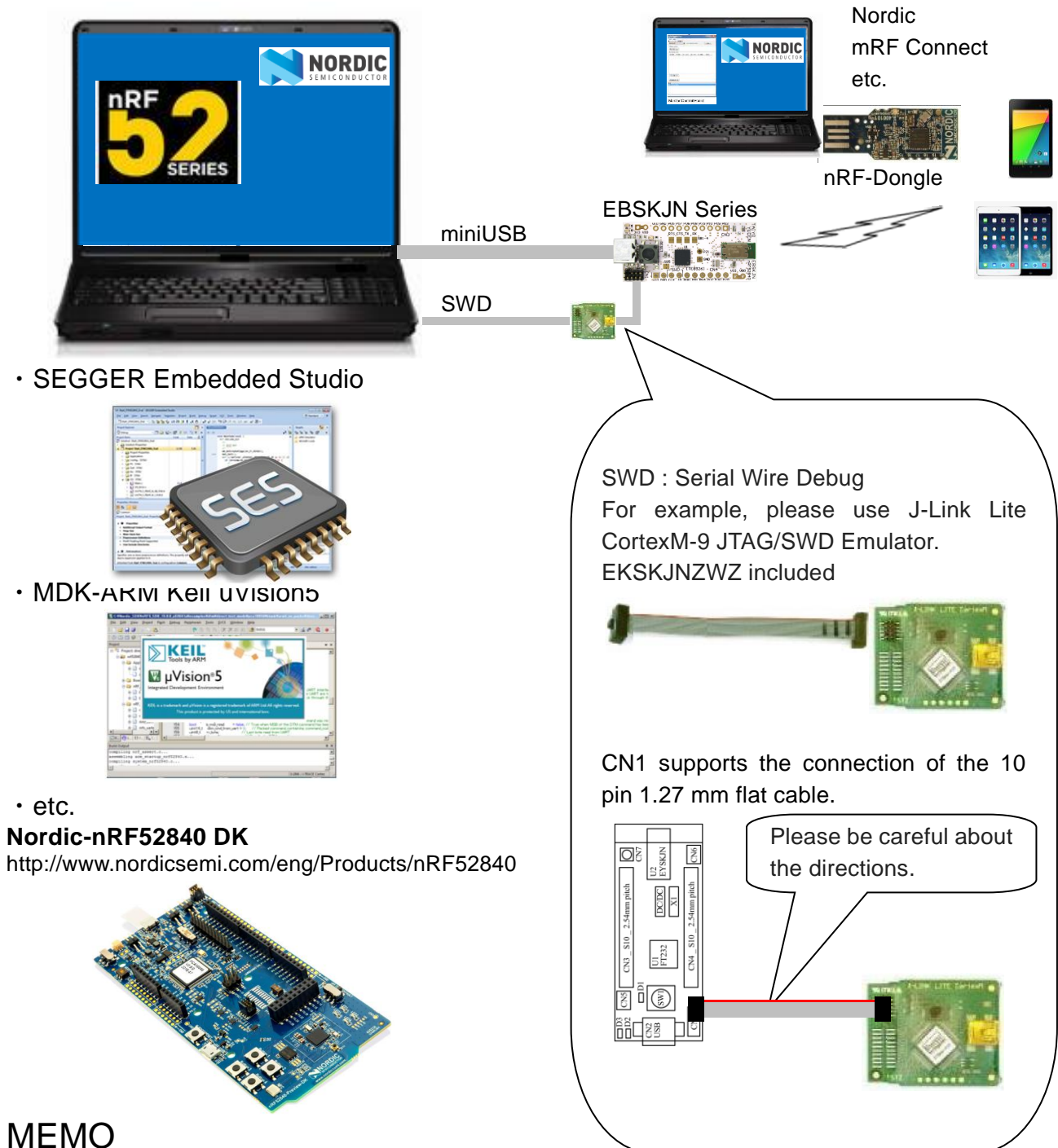
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How to use

It is very easy just to tie this board to the PC with a USB cable. It is not necessary to change the setting of the board. The power supply of the module supplies by default 3.3V from 3V3OUT of FT232RQ.

For software development

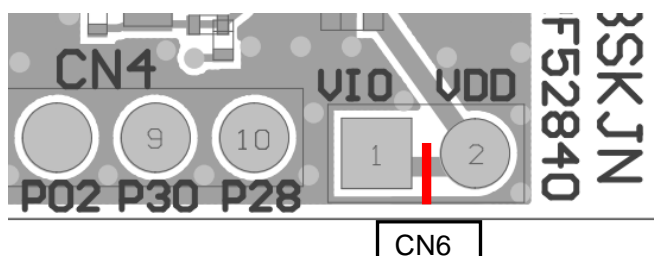
Nordic-DK and Use case



MEMO

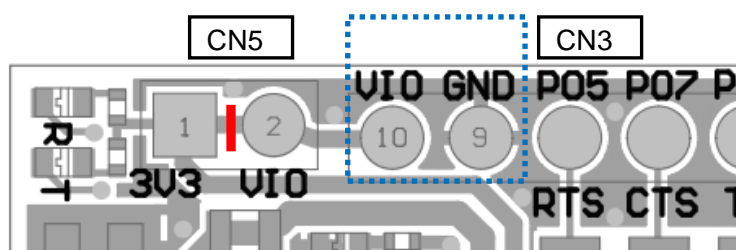
1) Current measurement

To measure the current, please cut the shorting 1pin and 2 pin of CN6. And connect an ampere-meter between the pins of connector CN6 to monitor the current directly.



2) About the power supply of the module

When you use external power supply, please supply power from 9pin and 10pin of CN3. On this configuration, you cut short circuit 1pin and 2pin of CN5 and should separate 3V3OUT of FT232RQ.



3) USB to serial UART interface

It needs to install driver of FT232RQ to use USB for UART interface. The drivers are available on FTDI website.

<http://www.ftdichip.com/Drivers/D2XX.htm>

In addition, by the application development, please assign GPIO as follows.

GPIO	UART
P0.05	RTS
P0.06	TX
P0.07	CTS
P0.08	RX

4) Size and Coordinate information

