

## 1. Products Affected

Part number	Description
BT840X	nRF52840 module with power amplifier and high performance PCB trace antenna
BT840XE	nRF52840 module with power amplifier and an u.FL connector for external antenna
BT840X-p	nRF52840 module with power amplifier and high performance PCB trace antenna,support approtect.
BT840XE-p	nRF52840 module with power amplifier and an u.FL connector for external antenna,support approtect

## 2. Description of Changes

The BT840X Series of modules use a Nordic nRF52840-QIAA SoC, a Skyworks PA SKY66112, and a SAW filter. The SAW filter is EOL by the manufacturer. A new SAW filter is used and Class II Permissive change test reports are available.

### Impact: Does the change affect product:

- Form: No
- Fit: No
- Function: Yes, See “Description of changes”.
- Quality or reliability: No.

### Reason for change

To replace an EOL SAW filter with one in production.

### Consequences of change

#### Hardware

The new device version is drop-in compatible with the current version and does not require changes to the PCB design, schematics or layout.

#### Firmware

BT840X/BT840XE: The new device version is firmware compatible with the current version.

BT840X-p/BT840XE-p: The new device version is firmware compatible with the current version if Nordic SDK 1.7.0 or newer is used. This new device version supports approtect. Please follow Nordic’s instructions on using the approtect version silicon.

#### Regulatory and Bluetooth certification

- FCC. ISED CLASS II Permissive Change reports and certificates can be downloaded from near the bottom of this webpage.

<https://www.fanstel.com/download-document>

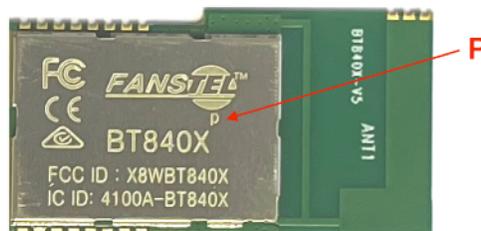
- The new device version inherits all Bluetooth QDID and requires no re-qualification for existing products.

## 3. Method of Identifying the Changed Product

**BT840X and BT840XE:** The new version device has a “2” marking above the “X” or “XE”. All BT840X and BT840XE modules with date codes 2416 or newer are new version devices.



**BT840X-p and BT840XE-p:** All BT840X-p and BT840XE-p are new version devices. There is a “P” marking above the “X” or “XE” to indicate supporting of approtect.



## 4. Contact Us

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