

nRF8001 and nRF8002 interoperability with Apple iPhone 4S (iOS 5)

nAN-25

Application Note v1.1



1 Apple guidelines

Applications that are required to work with Apple operating systems must follow the guidelines for sending security requests, timing parameters and accepting random central device addresses defined in this document:http://developer.apple.com/hardwaredrivers/BluetoothDesignGuidelines.pdf

2 Setting up the nRF8001 build code D for interoperability with Apple iPhone 4S

For the nRF8001 build code D chip to operate correctly with your Apple iPhone 4S the following conditions need to be applied:

- Ensure iOS 5.1 beta 3 or later is used in the Apple iPhone 4S.
- Ensure that you have nRFgo Studio v1.12 or later.

3 Setting up the nRF8001 build code C for interoperability with Apple iPhone 4S

For the nRF8001 build code C chip to operate correctly with your Apple iPhone 4S (which uses iOS 5) the following conditions need to be applied:

- You need to ensure that the device security is set to **No security required** in nRFgo Studio (this is the default setting for device security):
 - 1. Open nRFgo Studio and select the Security tab.
 - 2. Under **Security Settings** set the **Device security** to **No security required.** This option sets the local database permissions on nRF8001, so that security is not required to access characteristics.

Note: Do not use the ACI Bond command to connect the nRF8001 build code C chip to your Apple iPhone 4S.

4 Setting up the nRF8002 build code BX for interoperability with Apple iPhone 4S

For the nRF8002 build code BX chip to operate correctly with your Apple iPhone 4S the following conditions need to be applied:

- Ensure iOS 5.1 beta 3 or later is used in the Apple iPhone 4S.
- Ensure that you have nRFgo Studio v1.12 or later.

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Revision History

| Date | Version | Description |
|---------------|---------|---|
| February 2012 | 1.1 | Added chapter 2 that describes the interoperability requirements on nRF8001 build code D. Added chapter 4 that describes the interoperability requirements on nRF8002 build code BX. |
| November 2011 | 1.0 | First release |