

KW36 QPP PASS THROUGH PROFILE REFERENCE CODE INTRODUCTION



PUBLIC



SECURE CONNECTIONS
FOR A SMARTER WORLD

Background

- In BLE spec there is no standard wireless pass through profile, so different chip vendors have their own implementations, which is also called Proprietary Profile, the compatibility is a big challenge.
- There are two wireless pass through demos in NXP BLE demos. For QN90XX chip, it's called QPP. For KW3X, it's called wireless UART.
- The wireless UART is more complex. It doesn't support always-connection and have many limitations for the app. The common BLE debug tool app on phone side cannot communicate with it, while the QPP can work well.
- This demo code is target to port the QPP profile to KW3X SDK, which can simplify user's development.

Development Environment

- Toolchain supported
 - - MCUXpresso IDE 10.3.0
- Hardware requirements
 - =====
 - - Mini/micro USB cable
 - - FRDM-KW36 board
- Board settings
 - =====
- No special board setting

Prepare the Demo

=====

1. Connect a mini/micro USB cable between the PC host and the OpenSDA USB port on the board.
2. Download the program to the target board.
3. Press the reset button on your board to begin running the demo.
4. Use NXP IOT toolbox or other common BLE debug tool from third party to test the communication.



QPP Implement API Introduction

- Please refer to the document:
- <https://www.nxp.com/docs/en/user-guide/UM10997.pdf>

QPP Programming Guide

Rev. <1.2> — 4 April 2018

Application note

Document information

Info	Content
Keywords	QPP Server, QPP client in Android, QPP client in IOS
Abstract	This document demonstrates with example about how to create application working as QPP server in BLE peripherals device and application as QPP client role in BLE central device.





SECURE CONNECTIONS
FOR A SMARTER WORLD