SPP_Slave_Sniff_Test_Procedure

User Guide

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About this Document

Add a description about the contents of this document and the intended audience.

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1 Application Overview

1.1 Overview

This application demonstrates how to configure the device in Slave mode and establish SPP profile connection with remote Master device and data exchange between two devices using SPP profile and initiating sniff mode. In this Application, Redpine module configures in Slave mode and waits to accept SPP profile level connection from remote device. After successful SPP connection, Application will initiate sniff mode and will wait for data to receive from connected remote device.

1.2 Sequence of Events

This Application explains user how to:

- Configure Redpine module to act as Slave
- Configure device in discoverable and connectable mode
- Accept SPP level connection from the Smartphone
- Initiate Sniff mode

2 Application Setup

The WiSeConnect parts require that the host processor is connected to the WiSeConnect using either SPI, UART or USB host interface. The host processor firmware needs to properly initialize the selected host interface. The Redpine Wireless SAPI framework provides necessary HAL APIs to enable variety of host processors. The WiSeMCU parts offer integrated wireless connectivity and does not require host interface initialization.

2.1 WiSeMCU / WiSeConnect based Setup Requirements

- Windows PC with KEIL or IAR IDE in case of WiSeMCU
- Windows / Linux PC with Host interface (UART/ USB-CDC/ SPI/ USB) in case of WiSeConnect
- Redpine module
- BT master device

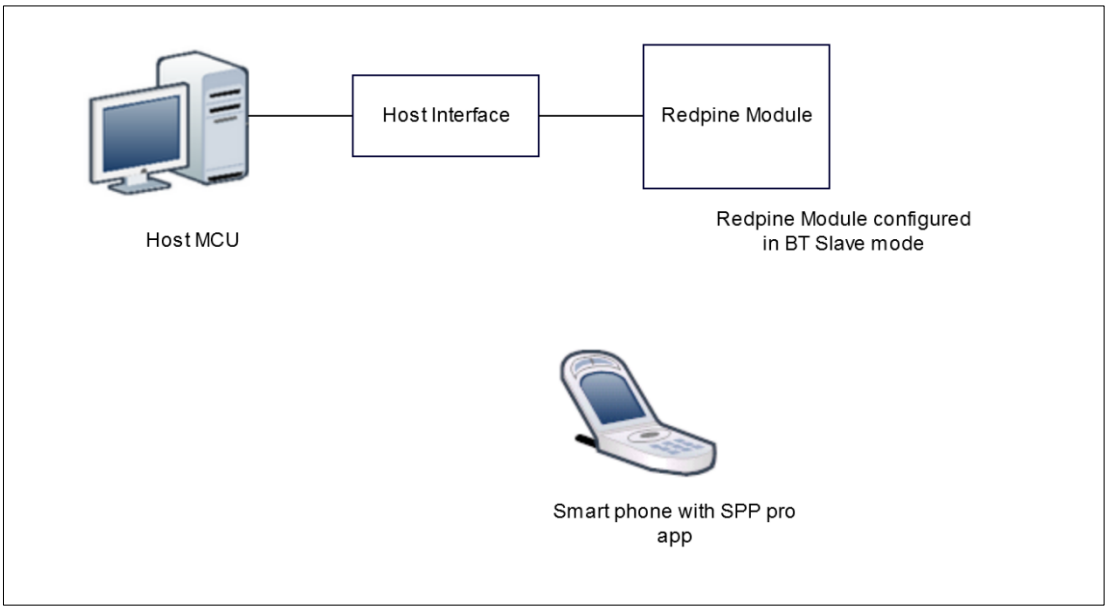


Figure 1: Setup diagram

3 Configuration and Execution of the Application

3.1 Configuring the Application

1. Open ***rsi_bt_config_DEMO_35.h*** file and update/modify following macros,
   RSI_BT_LOCAL_ANME refers name of the Redpine module to appear during scanning by remote devices.

   #define RSI_BT_LOCAL_NAME "SPP_SLAVE"

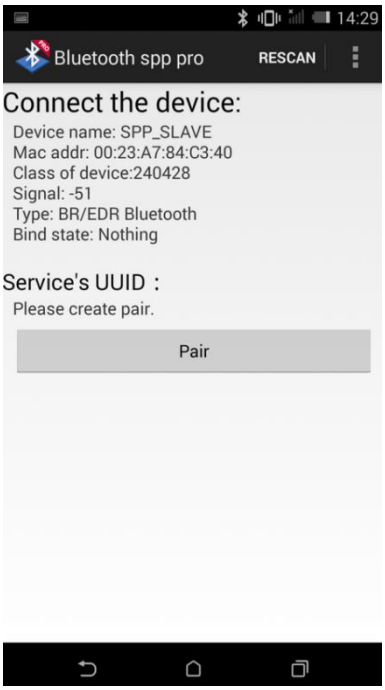
   PIN_CODE refers four bytes string required for pairing process.

   #define PIN_CODE "1234"

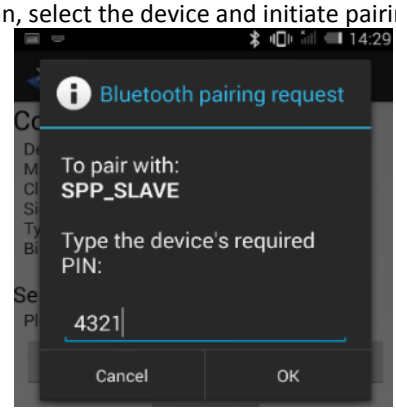
3.2 Executing the Application

1. After the program gets executed, Redpine module initializes the SPP profile and waits for the incoming connection.

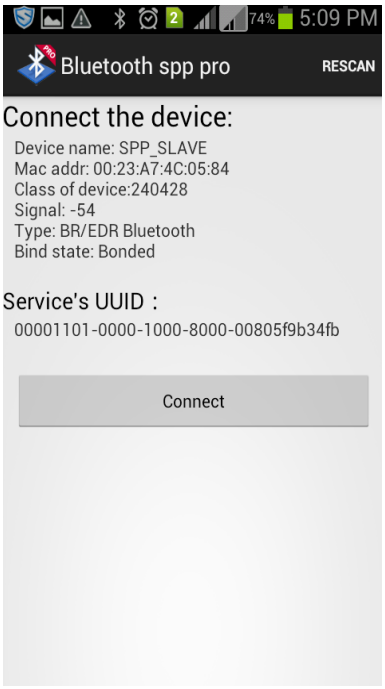
2. Open Bluetooth SPP pro app on mobile and do the scan until Redpine module (Ex: "SPP_SLAVE") gets present in the scan list.

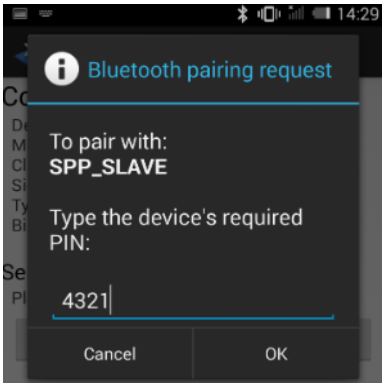


3. After the successful scan, select the device and initiate pairing to Redpine module.

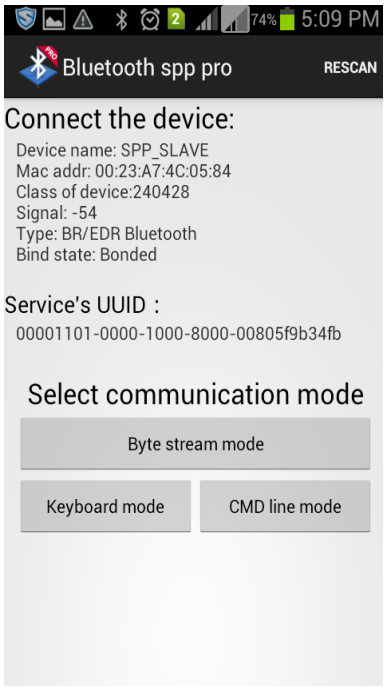


4. After initiating paring, Pairing request will pop-up at smartphone side and issue secret key which is given at Redpine module (PIN_CODE) side.





5. After successful pair, initiate SPP connection to Redpine module and give the secret key for receiving pairing request at remote device side.



6. After successful SPP connection Redpine device will enter into sniff mode.