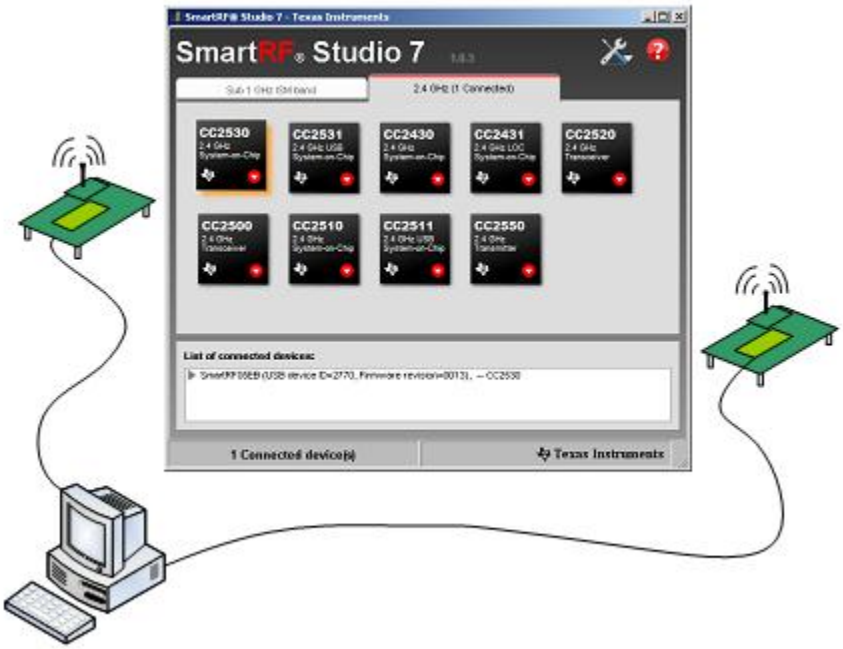
SmartRF Studio 7 & SmartRF Protocol Packet Sniffer Oveview

Testing Tool : SmartRF Studio 7

SmartRF™ Studio is a Windows application that can be used to evaluate and configure Low Power RF-ICs from Texas Instruments. The application will help designers of RF systems to easily evaluate the RF-ICs at an early stage in the design process. It is especially useful for generation of configuration register values, for practical testing of the RF system and for finding optimized external component values.

SmartRF Studio can be used both as a standalone application or together with applicable evaluation boards that are shipped in the RF-IC development kits.

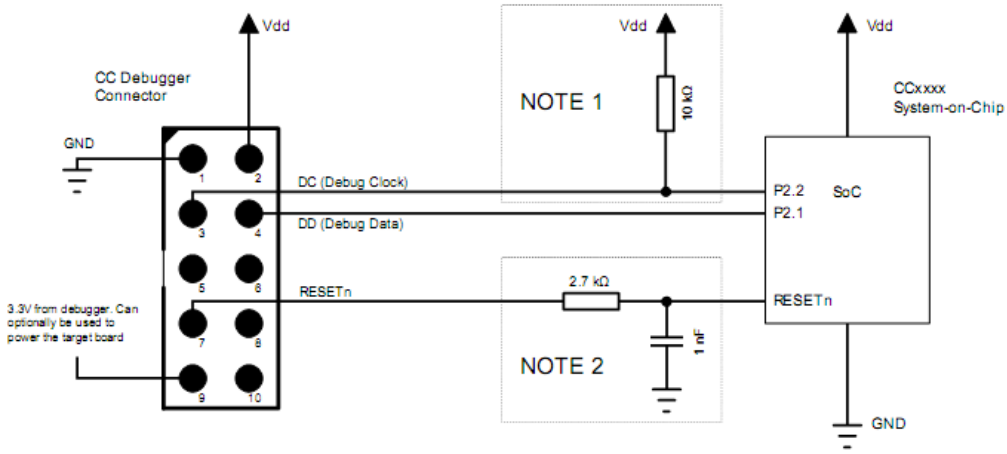


Features :

- Free
- Quick and simple performance testing
  - Continuous TX for antenna testing and RF spectrum analysis
  - Continous RX for radiation testing
  - Packet sending and receiving
- Generate end export register values from common RF parameters
  - Frequency, data rate, modulation, output power
- Read and write individual registers

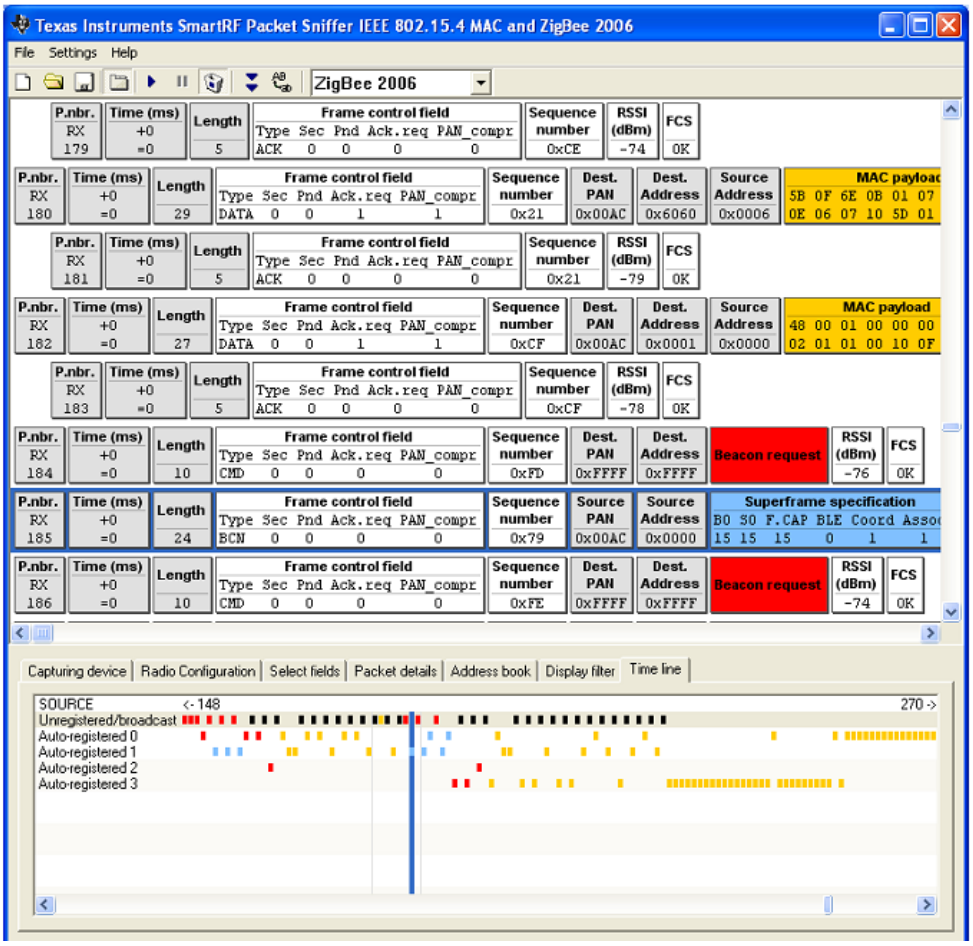
Minimum Connection needed:

Same as the debugging connection of the SoC



Testing Tool: SmartRF Protocol Packet Sniffer

The Packet Sniffer is a PC software application used to display and store RF packets captured with a listening RF Device. The RF Device is connected to the PC via USB. Various RF protocols are supported. The Packet Sniffer filters and decodes packets and displays them in a convenient way, with options for filtering and storage to a binary file format.



Features

- Free Software
- Packet sniffer for Bluetooth® low energy networks.
- Packet sniffer for ZigBee and IEEE 802.15.4 networks.
- Packet sniffer for RF4CE networks.
- Packet sniffer for SimpliciTI™ networks.
- Packet sniffer for Generic protocols (raw packet data).
- Save/Open file with captured packets.
- Select fields to be displayed and hidden.
- Filtering of packets to be displayed.
- Packet details by display of raw data received by the radio.
- Accurate timestamping of received packets.
- Address book with list of all known nodes in the network.

- A simple time line that displays all packets in the sequence they have been received.

Minimum Connection needed:

In order to use the packet sniffer capabilities of the CC Debugger, it is also necessary to connect the SPI bus to the SoC. The SPI interface is used by the CC Debugger for reading the captured RF packets from the SoC.