

MC33493MODxxx KIT

Operational Description

This document provides informations on MC33493 tools.

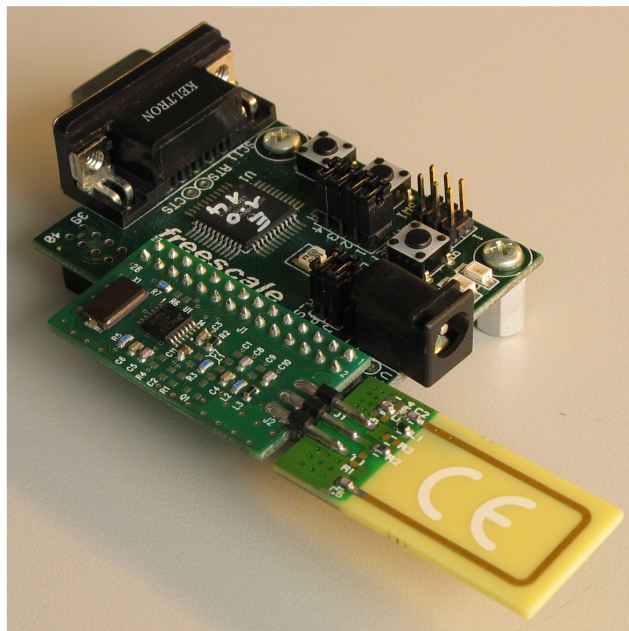
Last update:

V1.0: first release

V1.1: add frame duration in chapter 3

1 OVERVIEW

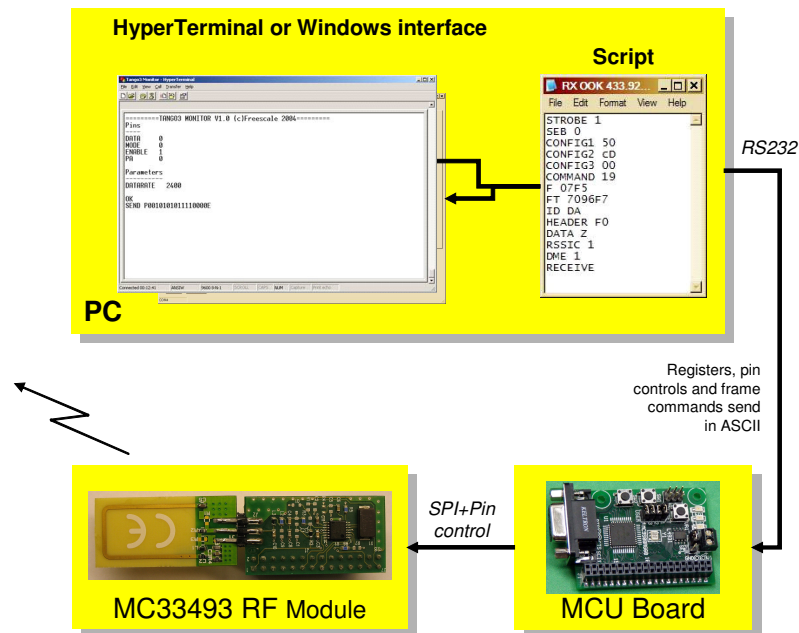
MC33493MODxxx tools are designed for customer evaluation of MC33493 integrated circuit.



MC33493MODxxx tool can be used to send an RF signal. Some configuration files ("script") are provided to allow one frame transmission to make a link between one MC33493MODxxx kit and a receiver. Each transmission is under user control.

MC33493MODxxx operation requires:

- An MC33493MODxxx RF Module : it contains all RF components including MC33493 IC, crystal, and a printed antenna
- A DEMO9S08RG60 MCU board : it contains MCU, a power supply regulator to provide a 3V voltage from the 9V battery and an RS232 connector
- An RS232 cable
- A PC with RS232 port, CD player and Hyper Terminal.
- A 9V Battery



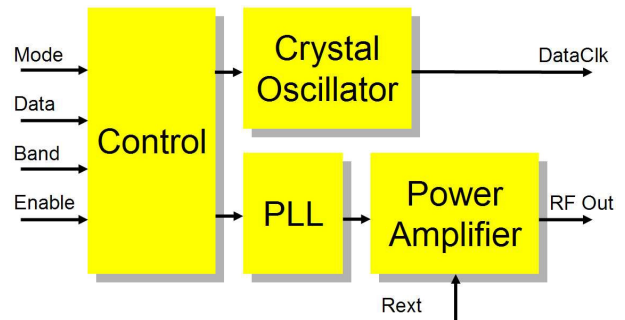
The operation of MC33493 is done by sending with Hyper Terminal a script to the MCU board that will configure MC33493 in a defined configuration.

2 MC33493 PRESENTATION

MC33493 is a highly integrated circuit designed for data transfer application. It includes a PLL with a fully integrated VCO and a reference oscillator using an external crystal. It can be controlled by a microcontroller.

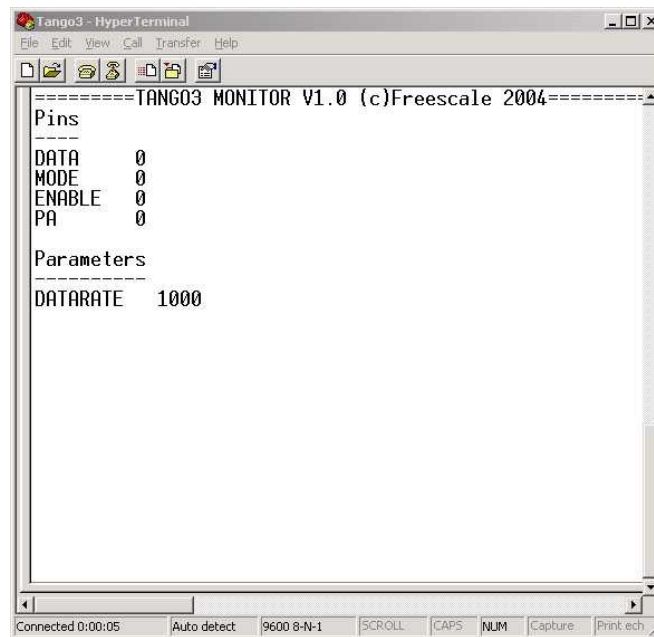
Its main features are :

- selectable frequency bands : 315-433MHz and 868-916 MHz
- OOK and FSK modulation
- Adjustable output power up to 5dBm
- 1.9V-3.6V supply voltage range
- Very low standby current 0.1nA at 25°C
- TSSOP14 package



3 LAUNCHING THE KIT

- Plug the RF Module on the MCU board
- Connect the MCU board to the PC using the RS232 cable
- Launch HyperTerminal using the proper xxx.ht file according to available COM port
- Connect the 9V battery
- Screen on HyperTerminal receives status of MC33493 Pin levels



- With the mouse, click on “Transfer/Send text file”
- Select the xxx.txt Script file corresponding to the wanted configuration
- For exemple :“TX OOK 433.92MHz 10 bits Frame.txt” will configure the kit in Transmit mode at 433.92MHz to send a 10 bits frame at 4800bps (2ms duration).
- At the end : OK indicates that transmission is finished, MC33493 goes back in sleep mode.