

# MC33696MODxxx KIT

## Quick Start User Guide

This document provides first information to use MC33696 tools.

Last update:  
V1.1: Note for FCC

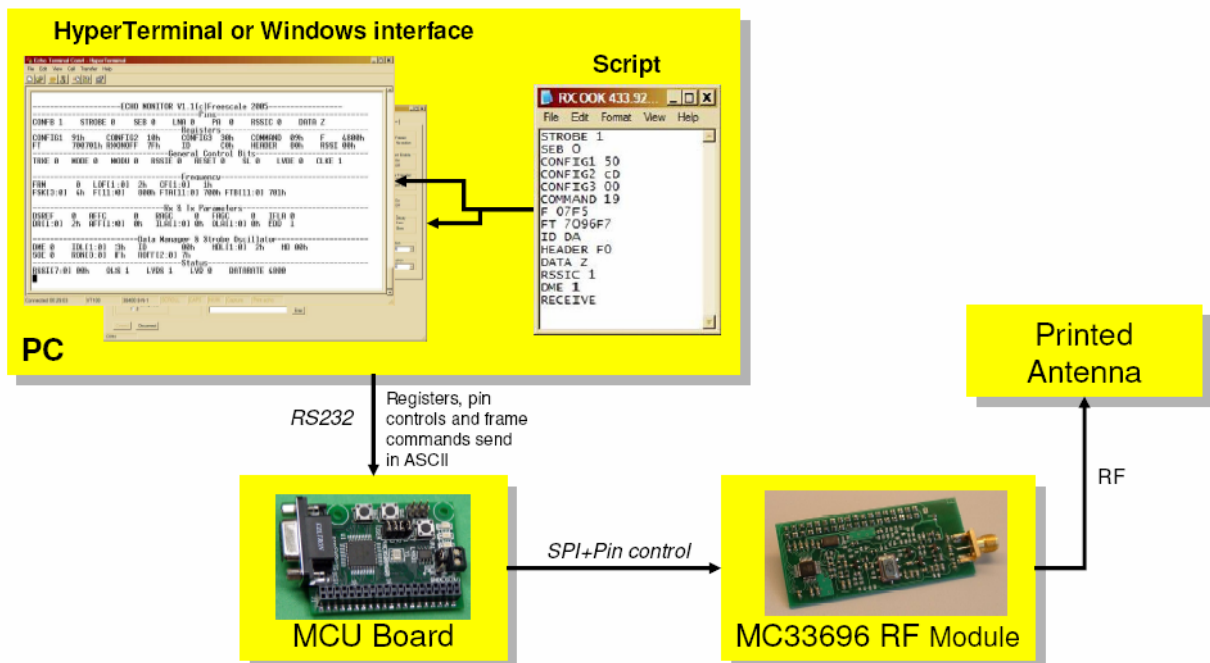
Important:  
This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Note: the manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.

### 1 OVERVIEW

MC33696MODxxx operation requires:

- An MC33696xxx RF Module with attached Printed antenna
- A DEMO9S08RG60-SP MCU board
- An RS232 cable
- A PC with RS232 port, CD player and Hyper Terminal.
- A 9V Battery



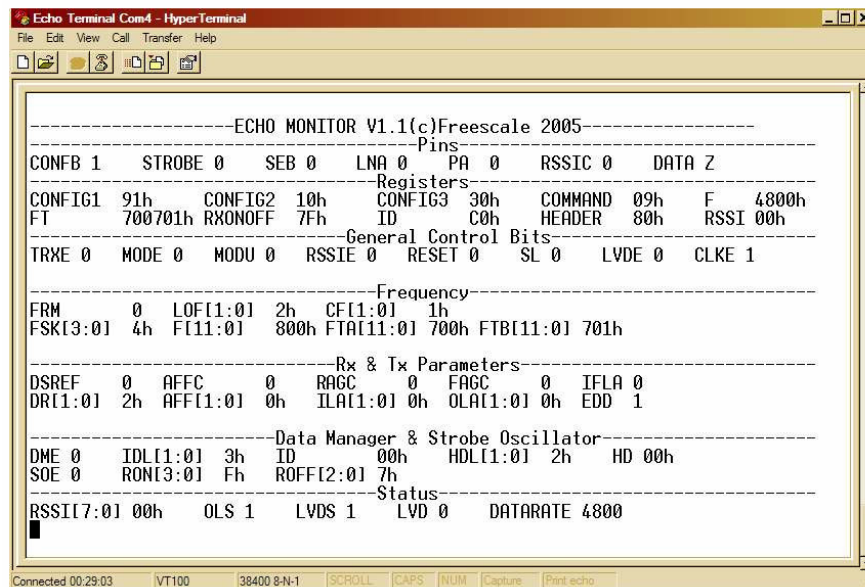
The operation of MC33696 is done by sending with Hyper Terminal a script to the MCU board that will configure MC33696 in a defined configuration.

Available script files:

- standby configuration
- continuous CW transmission
- continuous 4.8kHz OOK transmission
- continuous 4.8kHz FSK transmission
- 1 frame transmission using ID and HD
- 1 frame reception using ID and HD

## 2 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 MC33696 Registers and Pin levels



```

-----ECHO MONITOR V1.1(c)Freescale 2005-----
-----Pins-----
CONF1 1 STROBE 0 SEB 0 LNA 0 PA 0 RSSIC 0 DATA Z
-----Registers-----
CONFIG1 91h CONFIG2 10h CONFIG3 30h COMMAND 09h F 4800h
FT 700701h RXONOFF 7Fh ID C0h HEADER 80h RSSI 00h
-----General Control Bits-----
TRXE 0 MODE 0 MODU 0 RSSIE 0 RESET 0 SL 0 LVDE 0 CLKE 1
-----Frequency-----
FRM 0 LOF11:01 2h CF11:01 1h
FSK13:01 4h F11:01 800h FTA11:01 700h FTB11:01 701h
-----Rx & Tx Parameters-----
DSREF 0 AFFC 0 RAGC 0 FAGC 0 IFLA 0
DR11:01 2h AFF11:01 0h ILA11:01 0h OLA11:01 0h EDD 1
-----Data Manager & Strobe Oscillator-----
DME 0 IDL11:01 3h ID 00h HDL11:01 2h HD 00h
SOE 0 RON13:01 Fh ROFF12:01 7h
-----Status-----
RSSI17:01 00h OLS 1 LVDS 1 LVD 0 DATARATE 4800

```

## 3 SENDING A SCRIPT FILE

### 3.1 Configuration in Receive mode

- With the mouse, click on “Transfer/Send text file”
- Select the xxx.txt Script file corresponding to the wanted configuration
- For example :“RX OOK 433.92MHz IDHD00.txt” will configure the kit in receive mode at 433.92MHz to receive any Square modulated signal at 4800bps :
  - 433.92MHz, OOK
  - Receive with Data Manager
  - ID=00h, ID length=2 bits
  - HD=00h, HD length=1 bit



```

Echo Terminal Com5 - HyperTerminal
File Edit View Call Transfer Help
[Icons]

CONF B 1 STROBE 1 SEB 0 LNA 0 PA 0 RSSIC 0 DATA Z
-----Registers-----
CONFIG1 50h CONFIG2 EDh CONFIG3 00h COMMAND 39h F 07F5h
FT 7086F7h RXONOFF 7Fh ID C0h HEADER 80h RSSI 00h
-----General Control Bits-----
TRXE 1 MODE 1 MODU 1 RSSIE 1 RESET 0 SL 0 LVDE 0 CLKE 0
-----Frequency-----
FRM 1 LOF[1:0] 1h CF[1:0] 1h
FSK[3:0] 0h FI[1:0] 7F5h FTA[11:0] 708h FTB[11:0] 6F7h
-----Rx & Tx Parameters-----
DSREF 1 AFFC 0 RAGC 0 FAGC 0 IFLA 0
DRL[1:0] 1h AFF[1:0] 0h ILA[1:0] 0h OLA[1:0] 0h EDD 1
-----Data Manager & Strobe Oscillator-----
DME 0 IDL[1:0] 3h ID 00h HDL[1:0] 2h HD 00h
SOE 1 RON[3:0] Fh ROFF[2:0] 7h
-----Status-----
RSSI[7:0] 00h OLS 0 LVDS 0 LVD 0 DATARATE 4800
OK
TXSQUARE 208
Sending square wave. Press return to stop
█

Connected 00:30:31 VT100 38400 8-N-1 [SCROLL] [CAPS] [NUM] [Capture] [Print echo]
  
```

- At the end: "Sending square wave" indicates that the kit is sending a continuous modulation