

VoIP 8051 User's Guide

Table of Contents

1. Components
2. How to configure hardware?
3. How to install firmware?
4. How to install PC application?
5. How to use?
6. FAQ

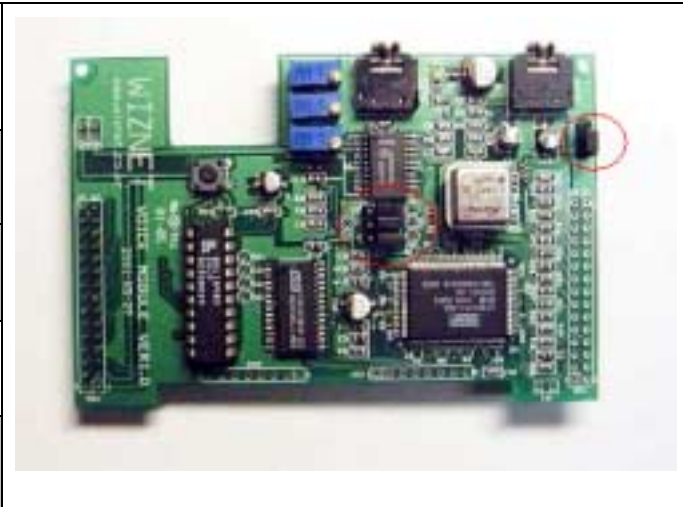
1. Components

Item	Quantity	Description
8051EVB	1	Rev 1.2
Voice Board	1	Ver 1.0
UTP Cable	1	Cross Cable
Serial Cable	1	Cross Cable
9V Adapter	1	Power Supply Adapter
LCD	1	16*2 Character LCD
CD	1	Remote Controller CD

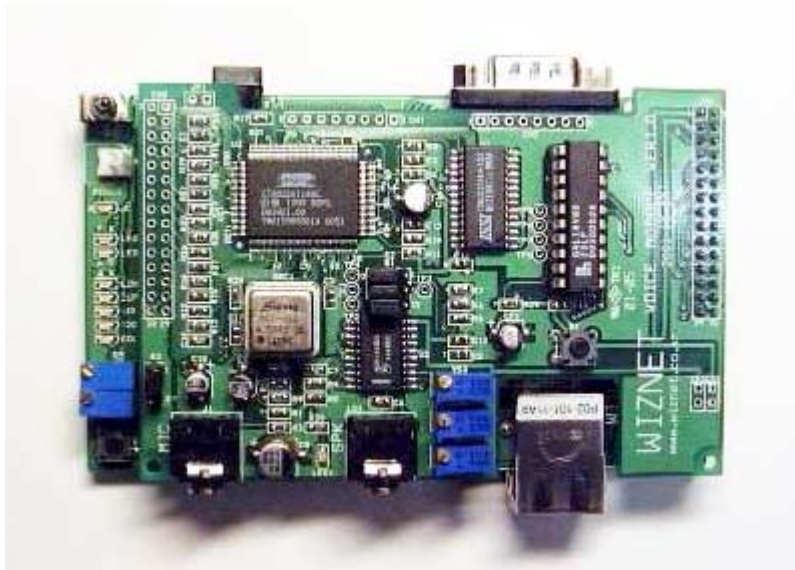
2. How to configure hardware?

① Configure Voice Board's Jumper.

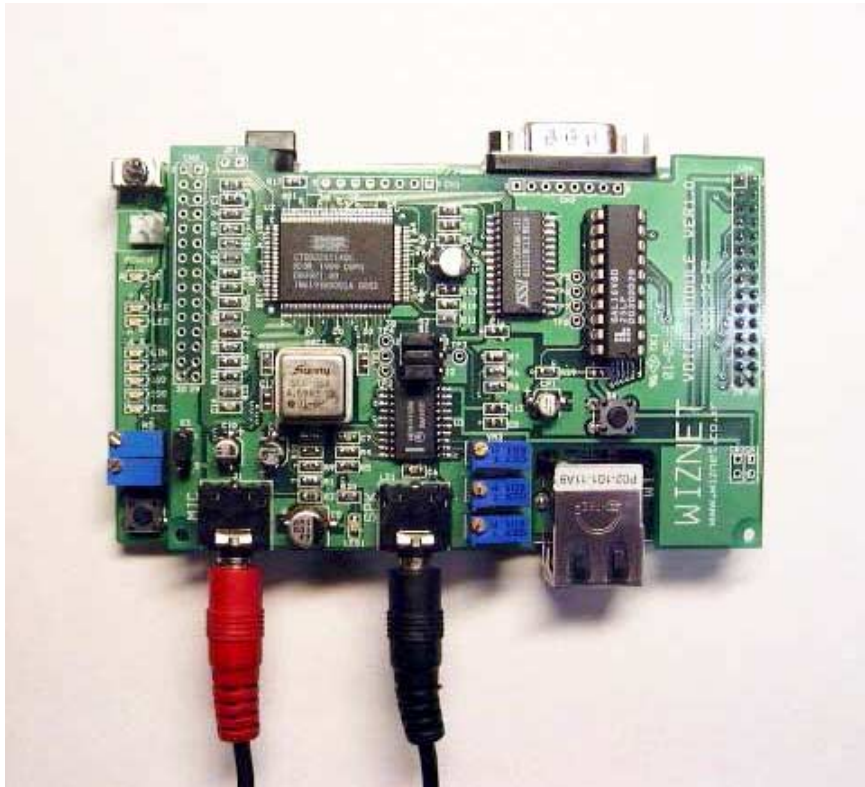
	Pin number		
S1	1	2	3
S2	1	2	3
S3	1	2	3
J2	1	2	3



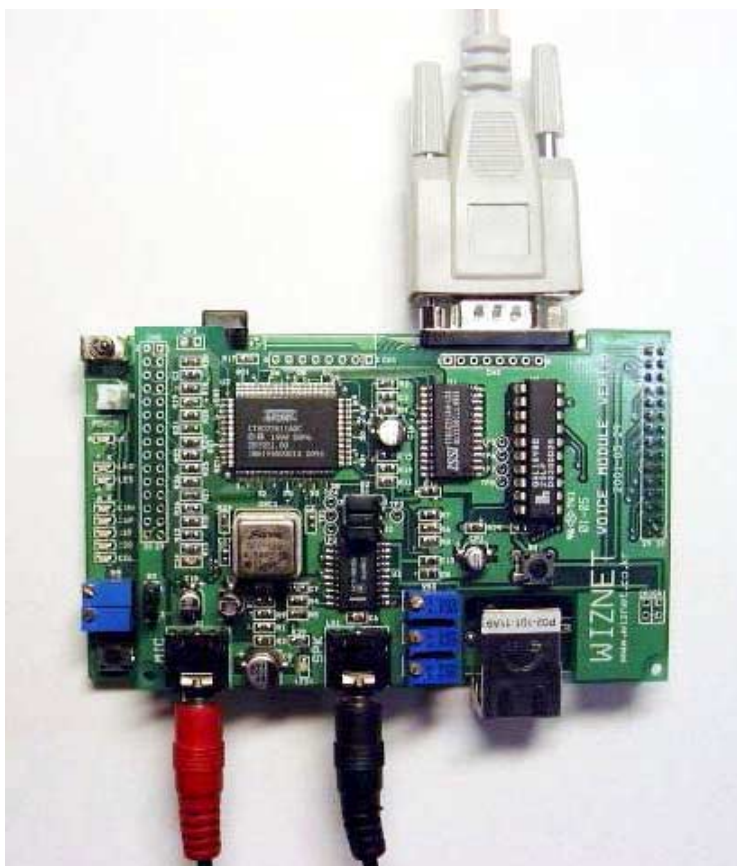
② Connect Voice Board's CN6 into 8051EVB's CN6.



- ③ Connect a loud speaker and microphone into Voice Board's **MIC** and **SPK**.



- ④ Connect 8051EVB's P1 and PC with Serial Cable.



- ⑤ Connect 8051EVB's U11 to PC's NIC(Network Interface Card, LAN card) with UTP cable(Cross cable)



- ⑥ Connect 9V Adapter to 8051EVB's CON1.



3. How to install Firmware

- ① How to write for Vice Board's PAL
 - A. Connect ROM writer and then execute ROM writing program.
 - B. Select ATMEL as PLD's provider and select ATF16V8B/BQ as part number.
 - C. Separate PAL in Voice Board and plug it in ROM writer.
 - D. Select \WPAL\WVM.jed in CD and Load.
 - E. Write it on the PAL.
 - F. Plug written PAL in Vice Board.

- ② ROM Version (In case that there is a ROM Writer)
 - A. Connect ROM writer and execute ROM writing program.
 - B. Select ATMEL as Flash memory's provider and select AT29C256 as part number.
 - C. Separate Flash memory(AT29C256) from 8051EVB and plug it in ROM writer
 - D. Select \Software\Board\Flash\VoiceModule\Vocing.hex in CD and Load it as HEX.
 - E. Write it on the Flash.
 - F. Plug written Flash to 8051EVB.
 - G. Put a cap on 2-3 of CN2 on 8051EVB.
 - H. Turn on the 8051EVB(S2).

- ③ RAM Version
 - A. Execute Hyper Terminal program on PC.
 - B. Select COM port of serial cable in modem setting.
 - C. Select as follows.
 - Data rate:9600
 - Data bit:8
 - Parity:none
 - Stop bit:1
 - Flow control:none
 - D. Put a cap on 1-2 of **CN2 on 8051EVB**.
 - E. Turn on the 8051EVB(S2).
 - F. Press capital "D" on the monitor program and select "Text file download on Hyper Terminal.
 - G. Select \Software\Board\RAM\VoiceModule\Vocing.hex in CD and download it.
 - H. After finishing download in Step G, press capital "R" on Monitor program.
 - (☞ Step A.B.C are for usage Hyper Terminal, in case of other Null Modem program, you can set properly as above setting.)
 - (☞ On usual, Step ①, ②, ③ are supported as it's set.)

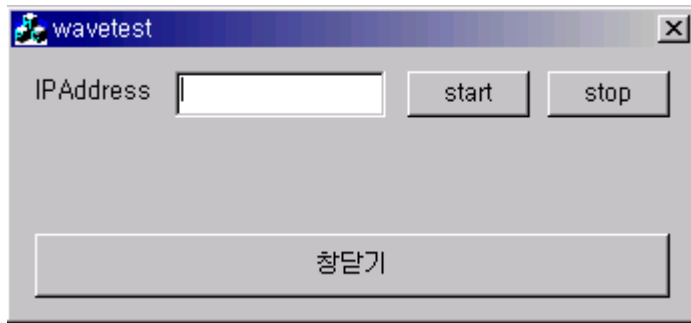
4. How to install PC Application

- ① How to install WaveTest Application.
 - A. Double-click WSoftwareWPCWVM.exe file in CD.
 - B. Set path to install program and click next..
 - C. Set group and click next.
 - D. Start to install.

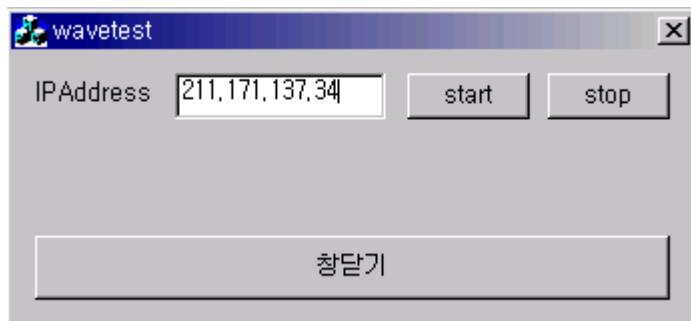
- ② How to set Null Modem program
 - A. Execute Hyper Terminal on PC. set name to connect optional and click next.
 - B. Select COM Port connected into PC in Null Modem and click next.
 - C. Set as follows.
 - bit/sec:9600
 - data bit:8
 - parity:none
 - stop bit:1
 - flow control:none

5. How to use?

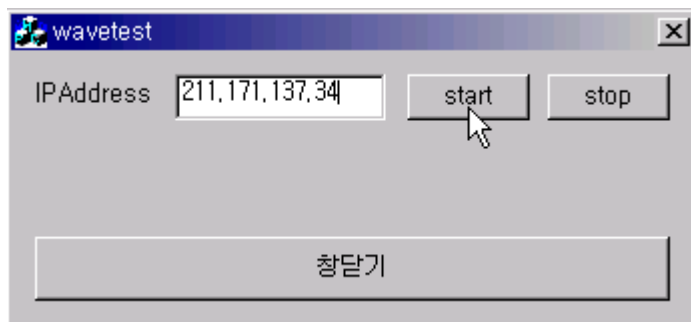
- ① After step 2. 3. 4, run wavetestsound program.



- ② Input "211.171.137.34" on IP Address window.

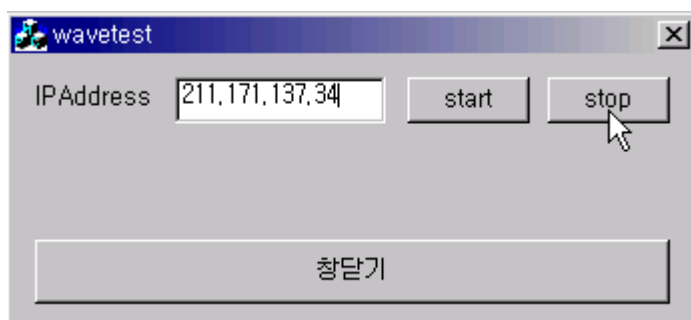


- ③ Push "Start" button.



- ④ To use "wavetestsound" program on PC and VoIP module, make a call.

- ⑤ Push "stop" button to finish a call.



6. FAQ

- ① Timeout occurs on Ping execution for testing Ethernet connection.
 - > Check whether the UTP cable is correctly connected to U11.
 - > Provided UTP cable is cross cable for direct connection. So you cannot use it for connecting to Hub. Instead of it, please use normal UTP cable.
 - > If above all two steps are correct, turn on the 3rd switch(duplex) of S3 in 8051EVB.

- ② There is no sound in VoIP module.
 - > Check a loud speaker and microphone.
 - > Check the Jumper's configuration.
 - > If Jumper's configuration is correct, reset VoIP board first and reset 8051EVB.

- ③ There's much noise.
 - > Control in rolling VR2 and VR3 of Voice Board in right and left.

- ④ Cannot download program with Serial cable.
 - > Check connection of Serial Cable.
 - > Check configuration of Null modem program.
 - > Check putting a cap on 1-2 of CN2 on 8051EVB.