WebCAM 8051 User's Guide

Hardwired Internet Connectivity Wizard

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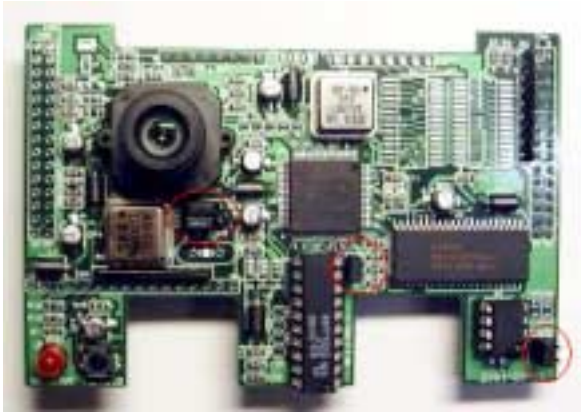
1. Component

Item	Quantity	Remarks
8051EVB	1	Rev 1.2
WebCAM Board	1	Rev 2.0
UTP Cable	1	Cross Cable
Serial Cable	1	Cross Cable
9V Adapter	1	Power Adapter
LCD	1	16*2 Character LCD
CD	1	Remote Controller CD

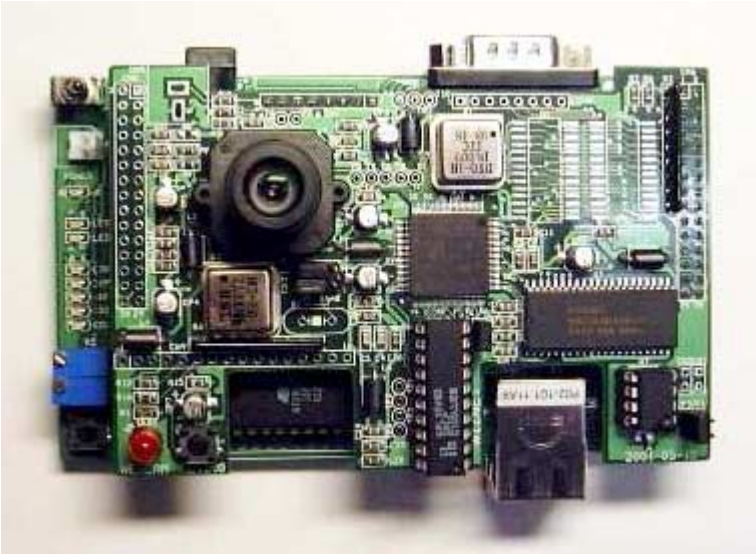
2. How to configure hardware?

① Configure WebCAM Board's Jumper

	Pin No.		
JP1	Open		
JP2	1	2	
JP3	1	2	
CN1	Open		
CN2	Open		
CN3	1	2	3
CN4	1	2	3

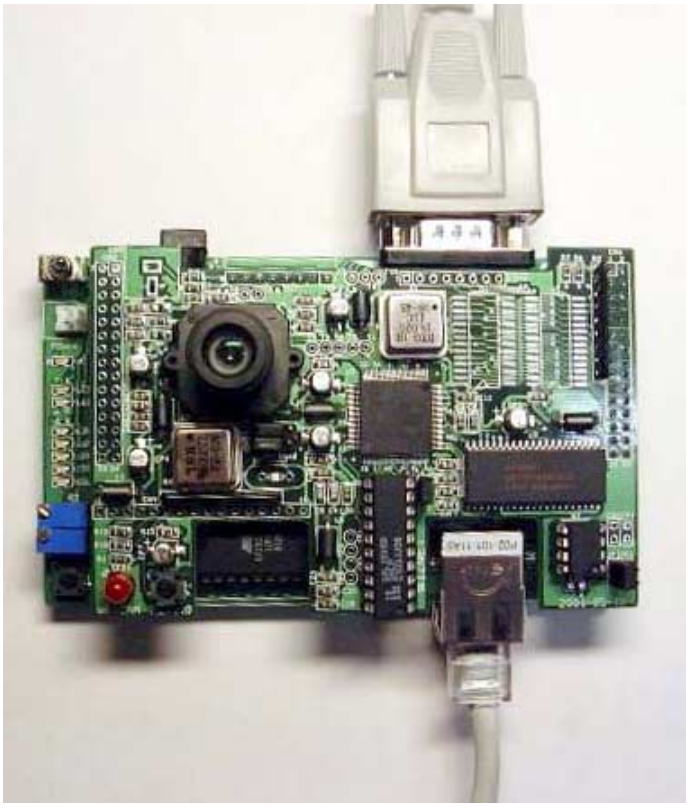


② Connect WebCAM Board's CN6 to 8051EVB's CN6. Connect WebCAM Board's CH1 to 8051EVB's CH1.

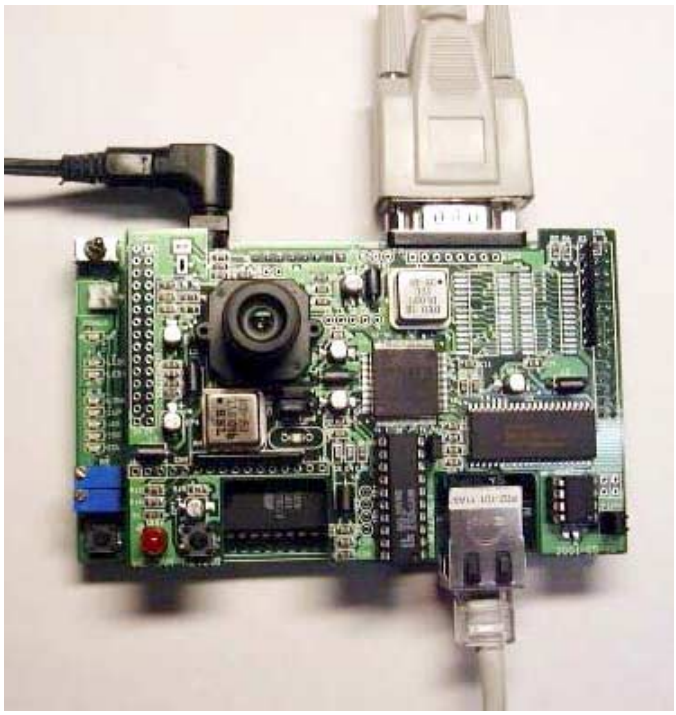


③ Connect 8051EVB's P1 to PC with Serial Cable.

④ Connect 8051EVB's U11 to PC's NIC(Network Interface Card, LAN card) with UTP cable(Cross cable)



⑤ Connect 9V Adapter to 8051EVB's CON1.



3. How to install Firmware?

① How to write for WebCAM 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 Webcam Board and plug it in ROM writer.

D. Select ₩pal₩WebCAM_module.jed in CD and Load.

E. Write it on the PAL.

F. Plug written PAL in WebCAM 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₩WebCAM₩WebCAM.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).

(☞ On usual, Step ①, ② are supported as it's set.)

4. How to install PC Application?

① How to install IJLView Application

A. Double-click ₩Software₩PC₩Webcam₩webcam.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

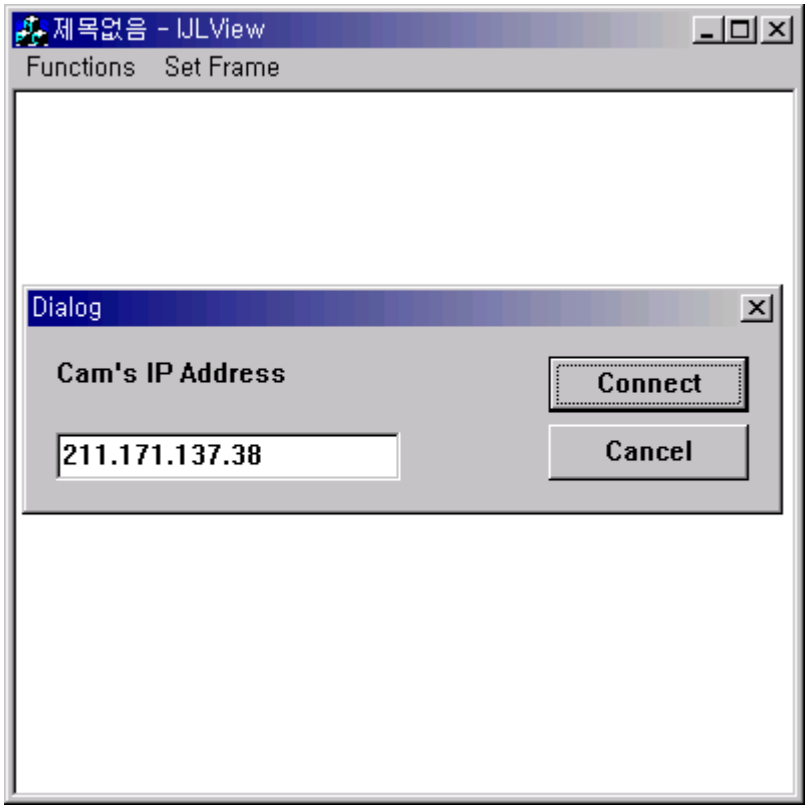
Stop bit:1

D. Flow control:None

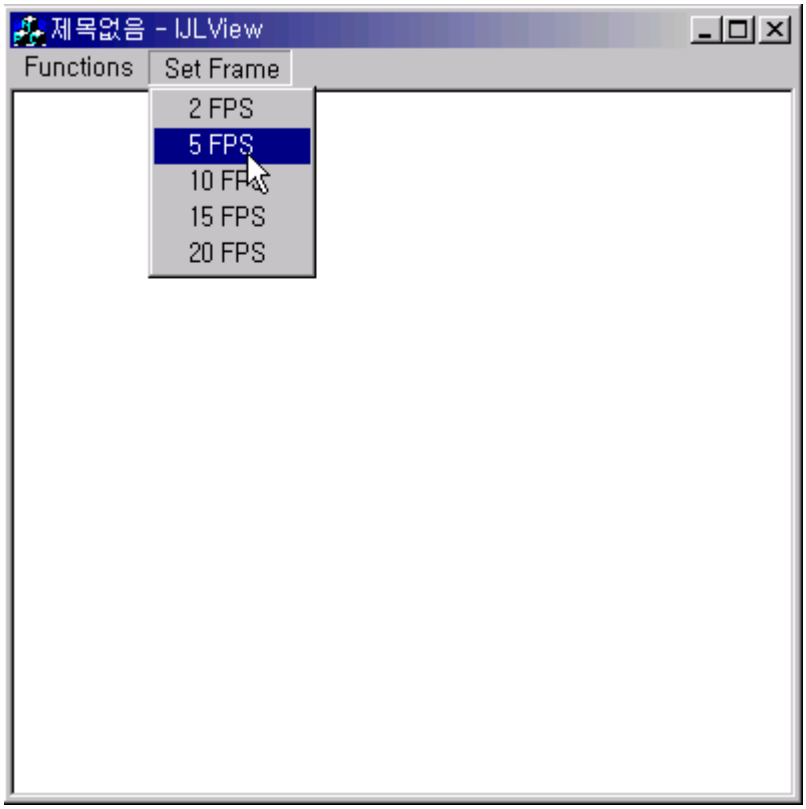
5. How to use?

① After step 2. 3. 4 , run IJLView program on PC.

② Select “Connect” in Functions Tap and input “211.171.137.38”, click “Connect” button.

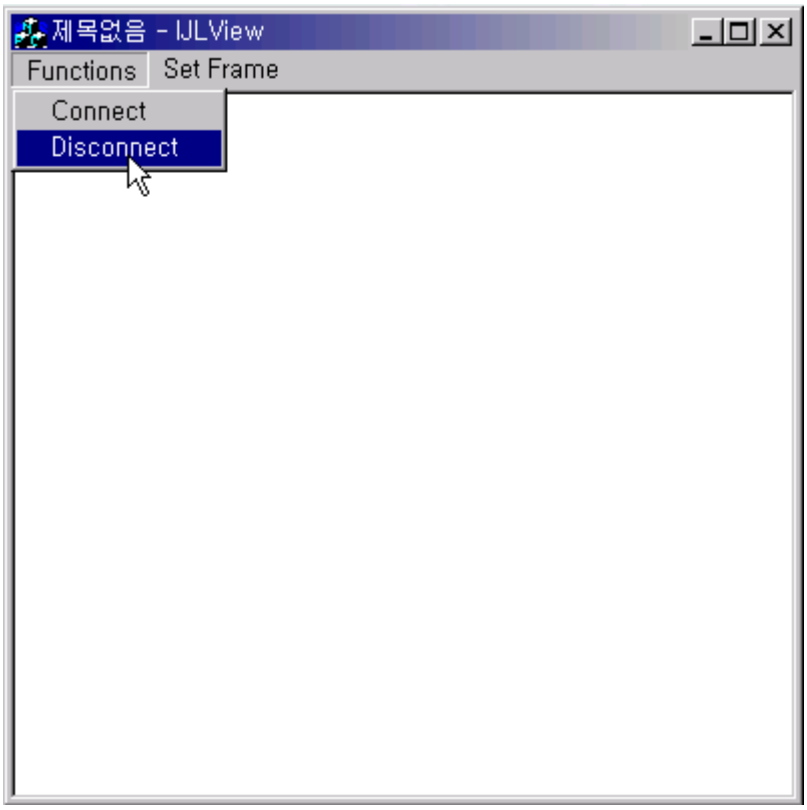


③ Select Frame number(2FPS or 5FPS) in Set Frame Tap.

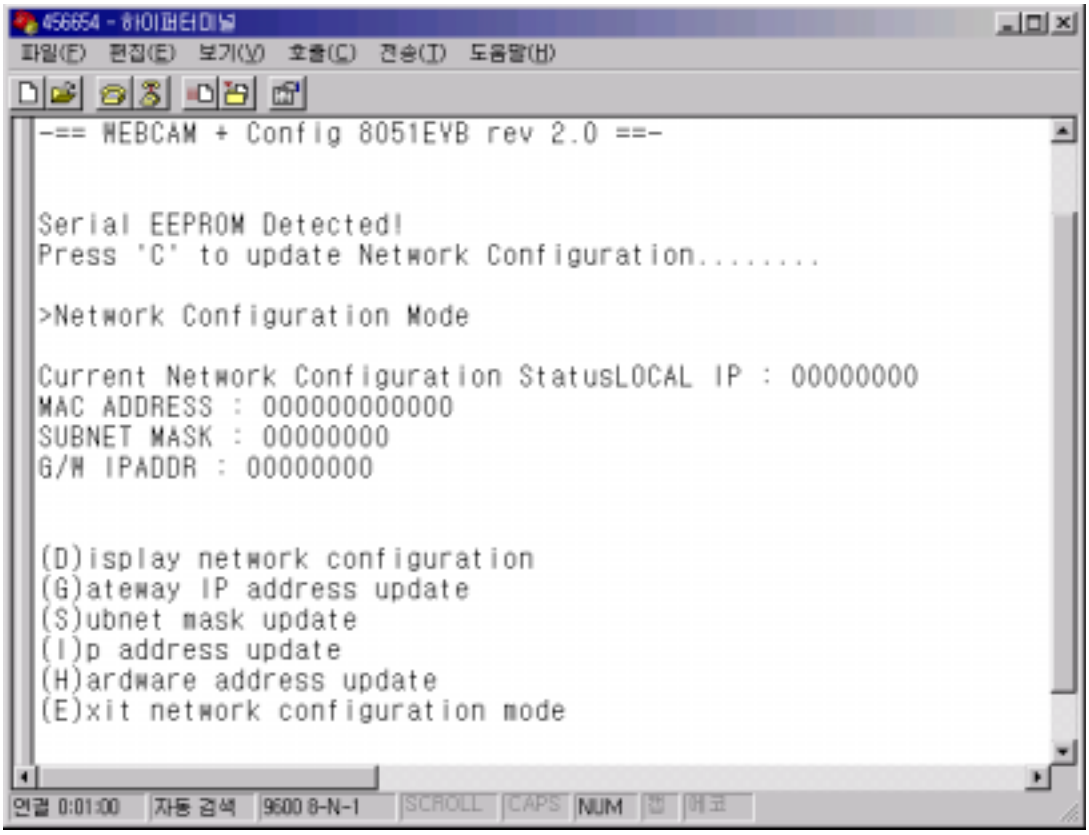


④ Through image on IJLView Program, test WebCAM.

⑤ To finish test, select “Disconnect” in Functions Tap.



⑥ (option) If it's connected into 8051EVB with Serial Cable and set to can monitor through Null Modem program, Reset and Press capital "C", change IP, Subnet Mask, Gateway, MAC address.



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 image in IJLView program's window.

-> Check the Jumper in WebCAM board

-> If Jumper's configuration is correct, reset WebCAM board first and reset 8051EVB.And then check it again.

③ Occurs error message, "Fail to Getting JPEG. Operation will be stopped" after select Set Frame in IJLView program.

-> When you connect IJLView, please check IP address is same as "211.171.137.38".

-> Reset WebCAM board first and reset 8051EVB.And then check it again..

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.