

C1098 PC Tester

USER MANUAL

Release 1.0, Mar 15, 2010

Introduction

C1098 PC Tester is a Windows based tool for testing/developing the C1098 module. Via this tool, user can control the module to get a JPEG picture by sending commands through the serial port on PC. This tool support all the C1098 commands mentioned on the C1098 User Manual.

A. Hardware requirement

- 1. C1098 JPEG Compression Module
- 2. C1098-EV232 Evaluation Board
- 3. PC with RS232 port
- 4. RS232 cable to PC

Please refer to the C1098-EV232 for the set up of the system

B. Software Installation

- 1. Create a folder in your PC, e.g. C1098
- 2. Copy the following files to the folder C1098
 - i. C1098PcTester.exe
 - ii. JPEGDecoder.dll

C. Tool Interface

Double click the file “C1098PcTester.exe” to open the tool and the below interface will be appeared.

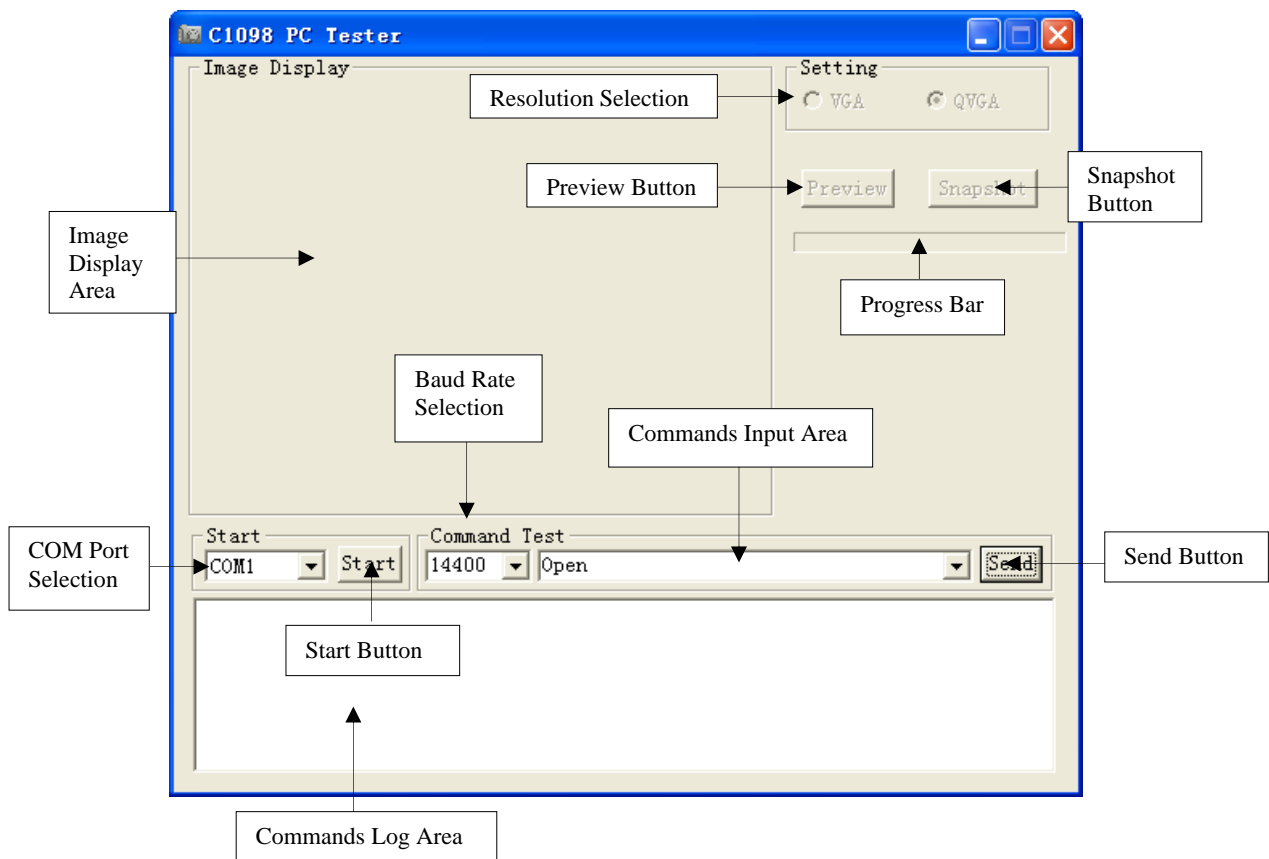


Fig. 1-Tool Interface Appearance

D. Buttons Description

COM Port Selection: Select the COM port for making connection with the module.

Start Button: Connect to C1098 and initialize it, then set package size, and get a jpeg snapshot picture.

Baud Rate Selection: Select the baud rate (14400, 28800, 57600, 115200, 230400 and 460800).

Commands Input Area: Area for user input command and its parameters. The format of the command should be “XX” or “XX (0x??, 0x??, 0x??, 0x??)” where XX is the command name and ?? is the parameter in hex format. e.g., a Sync Command, the input should be
“Sync (0x00, 0x00, 0x00, 0x00)”

Send Button: Send commands in the Commands Input Area to C1098 module.

Commands Log Area: Display commands log information.

Image Display Area: Area for showing the received JPEG image.

Resolution Selection: Select VGA or QVGA resolution.

Preview Button: Preview jpeg pictures.

Snapshot Button: Get a snapshot jpeg picture and save it in the same folder with the file name snapshot.jpg.

Progress Bar: Show the progress status.

E. How to use PC Tester

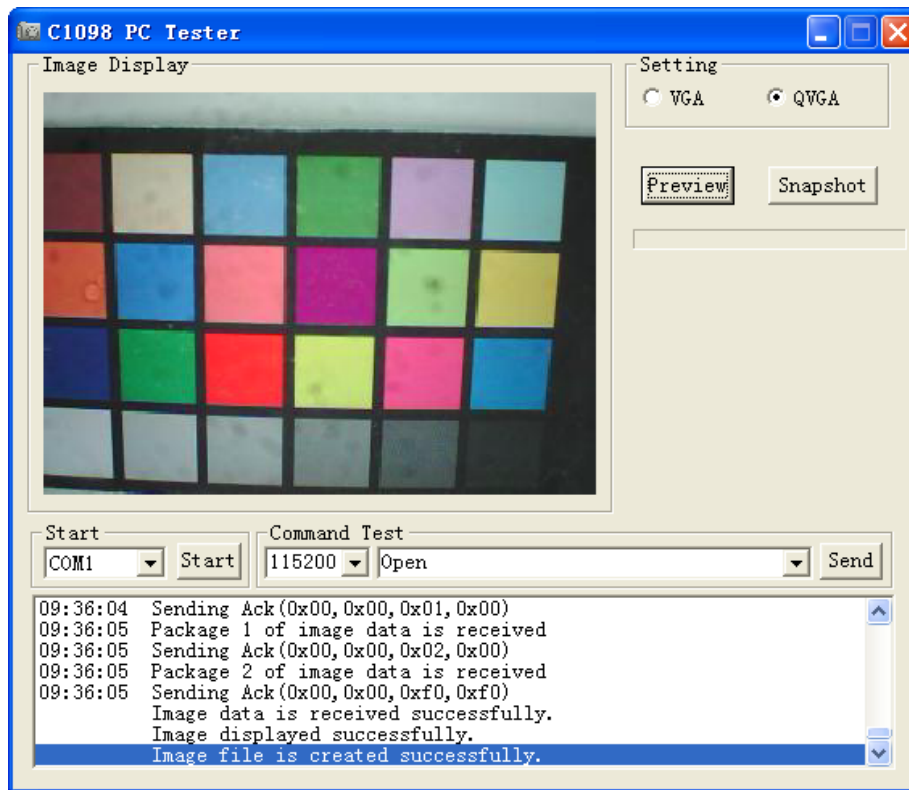
First of all, please make sure C1098 module is powered on and is connected to PC correctly.

- a) Select a COM port (COM1, COM2, COM3...) for making connection.
- b) Select one Baud Rate (14400, 28800....) or just leave it alone with its default value 14400.
- c) Press **Start** Button.

Now, PC Tester is doing the whole thing for you.

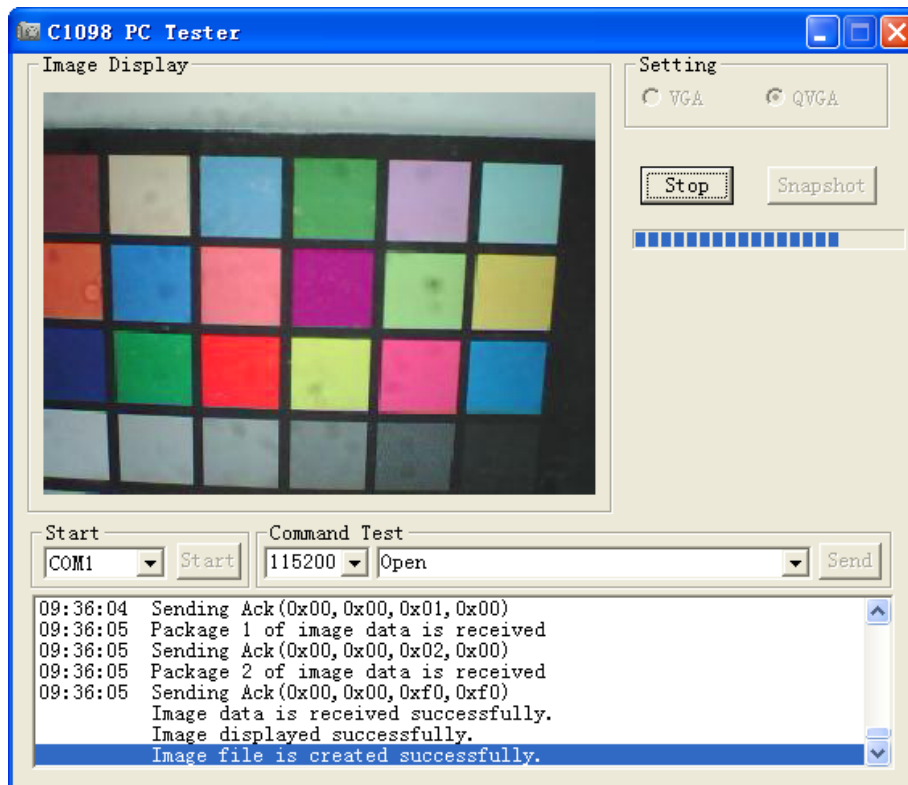
1. Connect to C1098 module.
2. Initialize it, set image's resolution to QVGA.
3. Set package size to 5120 Bytes.
4. Get a jpeg snapshot picture.
5. Enable buttons on the top right side if the connection is successful.

During the process, information is displayed in the Commands Log Area.



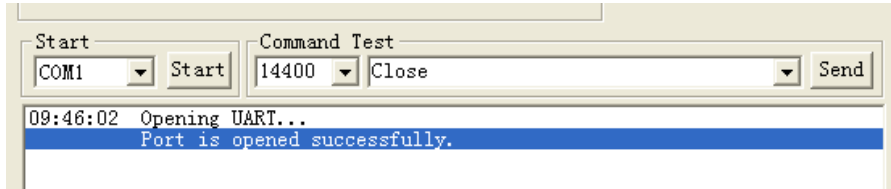
Then user can select resolution.

After pressing **Preview** button, the image will be displayed in the window incessantly and press it again to stop it.

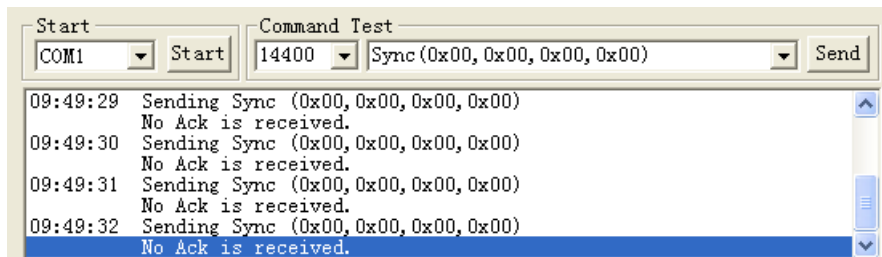


User can also type commands manually (e.g. get a QVGA jpeg snapshot picture)

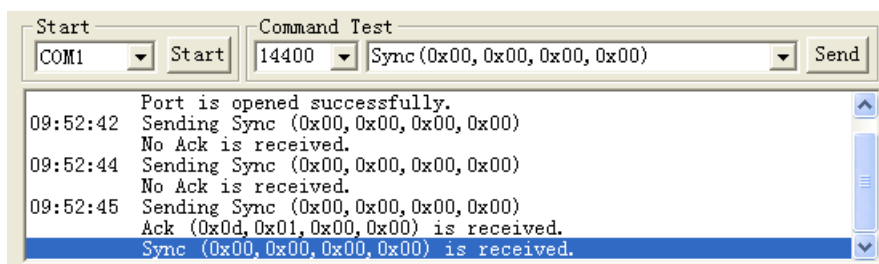
- a) Select a COM port (COM1, COM2, COM3...) for making connection .
- b) Select “Open” in the **Command Input Area** and press **Send** button to open the selected serial port.



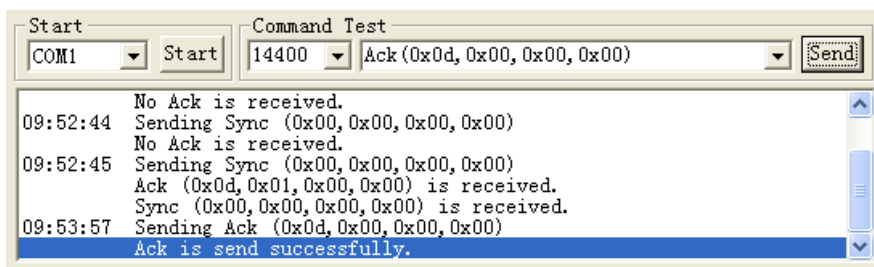
- c) Select “Sync (0x00,0x00,0x00,0x00)” in the **Command Input Area** and press **Send** button within 25 times.
- d) If the connection cannot be made, the message “No Ack is received.” is always displayed on the **Commands Log Area**. Please reset the module and make sure the module is connected correctly to PC with 3.3V power input. Then, repeat step c. If the connection still cannot be made after a few try, the module or connection may have problem.



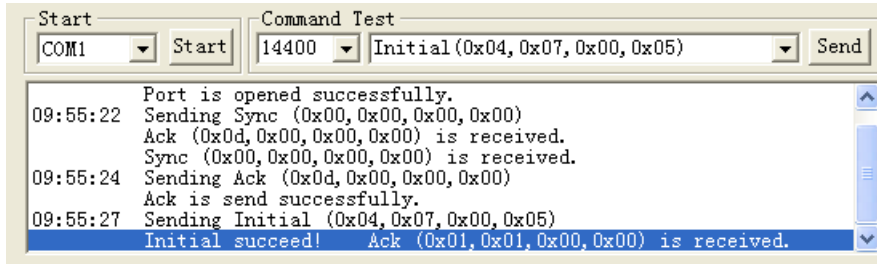
- e) If the connection is made successfully, the following messages will be seen:
 “Sending Sync (0x00, 0x00, 0x00, 0x00)”
 “Ack (0x0d, 0x00, 0x00, 0x00) is received”
 “Sync (0x00, 0x00, 0x00, 0x00) is received”



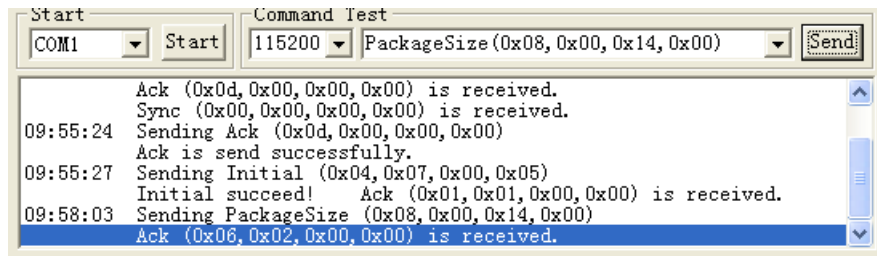
- f) Select “Ack (0x00,0x00,0x00,0x00)” in the **Command Input Area** and press **Send** button to send ACK command to C1098 module.



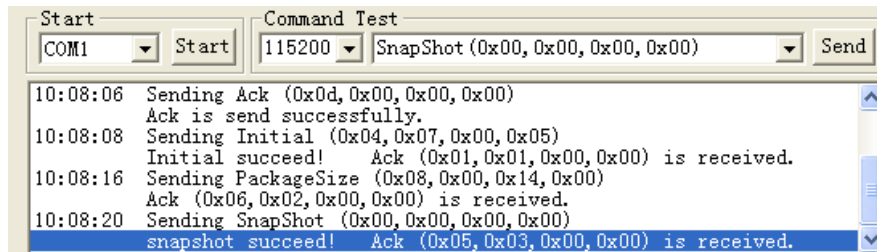
- g) Select “Initial (0x04,0x07,0x00,0x05)” in the **Command Input Area** and press **Send** button.



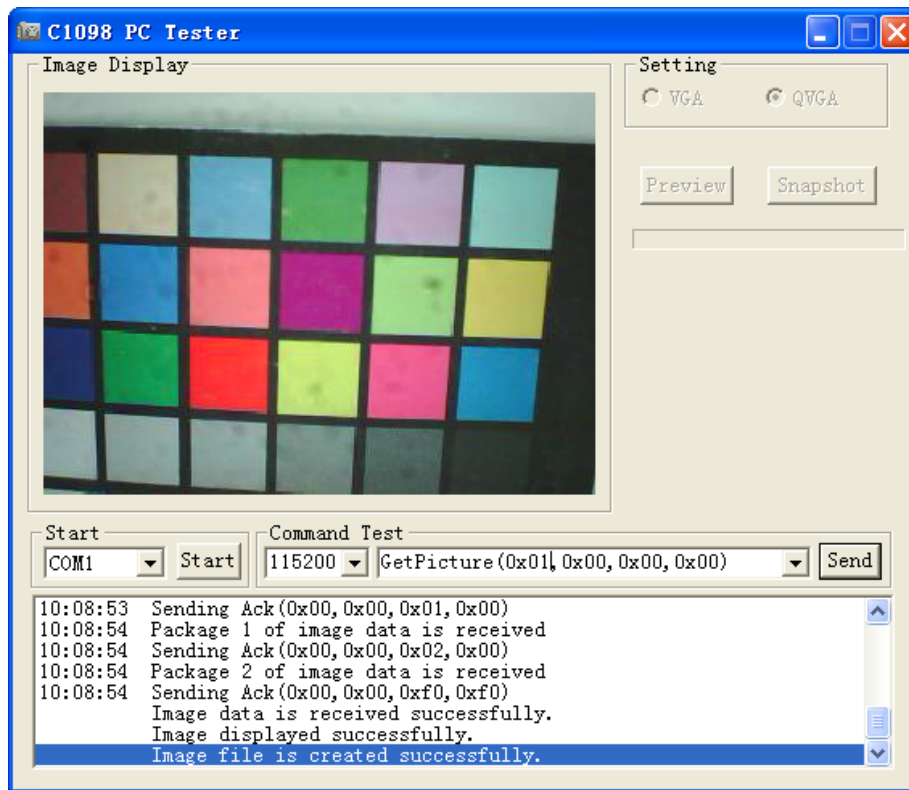
- h) Select Baud Rate 115200bps and “PackageSize (0x08,0x00,0x14,0x00)” in the **Command Input Area** and press **Send** button.



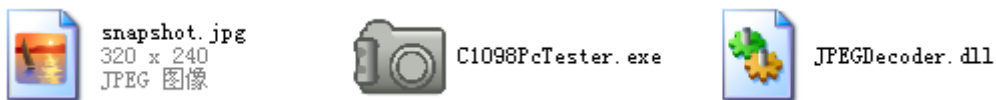
- i) Select “SnapShot (0x00,0x00,0x00,0x00)” in the **Command Input Area** and press **Send** button.



- j) Select “GetPicture (0x01,0x00,0x00,0x00)” in the **Command Input Area**, press **Send** button.



A snapshot jpeg picture will be displayed in the window and a file named snapshot.jpg will be saved in the same folder.



Note:

1. User can modify commands' parameters to meet his need according to the C1098 user manual mentioned,
e.g. "Initial (0x02,0x07,0x00,0x07)" means VGA jpeg picture with baud rate 460800bps.
2. After "Initial" command, user should change Baud Rate correctly according to "Initial" parameter 1. Otherwise PC Tester couldn't connect to C1098 module.
3. It is not advised to change baud rate before "Initial" command. If user really wants to, please use "Connect" instead of "Sync" and "Ack". This command will try to connect to C1098 using different baud rate and then initialize it with the value which user has changed before.
4. If there is any error or failure that shown on the **Commands Log Area**. Please power off the module to reset the module and power on it again. C1098PcTester.exe may also need to reopen
5. To close the opened serial port, select "Close" in the **Command Input Area** and then press **Send** button.