



SEEVAL[®] 32
Quick Start Guide

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SEEVAL® 32 QUICK START USER'S GUIDE

SEEVAL® 32 Quick Start User's Guide

INTRODUCTION

The SEEVAL® 32 memory device programmer was designed to be a simple to use, yet powerful tool for people designing or troubleshooting serial EEPROM applications. Apart from programming and reading the contents of all Microchip Serial EEPROM devices, it can also be used to educate the user on communication between the device and a controller and to troubleshoot problems with an existing system.

INSTALLING THE SOFTWARE

Insert the SEEVAL 32 CD into the computer. Using Windows® Explorer, open the directory leading to the SEEVAL 32 CD. Once the Setup Launcher is visible, double click the file labeled "SEEVAL 32 v200 Install.exe". Follow the on-screen prompts until the Finish option appears. Select "Finish" to close the setup menus and then reboot the computer.

APPLYING THE POWER

The SEEVAL 32 board is powered by a +9.0V power supply, which is connected to the power jack, J2, on the board. Be sure to use the power supply provided in the SEEVAL 32 kit to apply power to the system.

CONNECTING TO THE COMPUTER

Connection between the SEEVAL 32 board and the PC is made through an RS-232 serial interface. The serial cable ("straight-through" type) provided with the SEEVAL 32 kit should be used.

STARTING SEEVAL 32

If power has been connected to the board and the green LED is on, and the RS-232 cable has been connected to both the board and the PC, then the program is ready to run.

Double click the SEEVAL 32 icon on the desktop. A window will appear that shows the SEEVAL 32 logo and copyright information. This window will disappear shortly and the SEEVAL 32 window will appear.

A COM port will need to be selected. Go to the "COM Port" pull-down menu at the top of the interface and select the appropriate COM port. If unsure which COM port is being used, start with COM 1. After selecting the COM port, click on the "Sys Stat" button in the upper right hand corner of the interface. The message box to the right of the button should read "Idle" and the box next to the "Verify" button should turn or remain green. If connection was not successful, a "Sys Time-out" message will appear in the message box and the box next to the "Verify" button will turn red.

Review the section "Connection Troubleshooting" if unable to get a good connection.

CONNECTION TROUBLESHOOTING

If you are unable to make a successful connection, there are several possible causes to investigate.

1. Check the green LED to make sure that power is applied to the board.
2. Make sure the RS-232 cable is attached to both the SEEVAL 32 board and the PC.
3. If you are sure that the correct COM port has been chosen, press the reset button, S1, on the circuit board.
4. Click the "Sys Stat" button to ensure communications between the circuit board and the PC are functioning. The program should respond with "Idle" in the message box and the box next to the "Verify" button should turn green.
5. If communications continue to fail, try rebooting the machine and resetting the SEEVAL 32 board using the S1 reset button.
6. It is easiest to establish communications between the PC and the SEEVAL 32 circuit board through COM1 of the computer. If the computer's infrared (IR) link is enabled, it will likely take control of COM1. Therefore, ensure that the IR link is disabled.

NOTES OF INTEREST

When working on a device as large as the 24LC512, a read cycle will take up to 2 minutes to complete. It will also take a couple of minutes to complete a write cycle when writing the SEEVAL 32 buffer array to the EEPROM.

Click the "Sys Stat" button any time to check that communications between the circuit board and the PC are functioning. The program should respond with "Idle" in the message box and the box next to "Verify" should turn green.

ADDITIONAL TROUBLESHOOTING

If communications cannot be established between the SEEVAL 32 board and the serial port of the computer, access the Device Manager for Windows and view the COM port setting. Double click the COM port of interest (usually COM2 is listed for a laptop). Select the Settings tab, then click the "Advanced" button. Change the COM port number to COM1. This manual procedure is required to take control of COM1 from most types of IR software.

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