Migrating *SR2* to *SR2_NG*

by

Soft dB

In association with

Convergence Instruments

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1 Introduction

With the growing presence of the Windows x64 architecture comes an increasing demand for support of the *SR2* platform, tools and applications on that architecture. *SR2* was developed before x64, and was never supported on that architecture. However our newer *SR3* platform and libraries are supported on x64, in addition to x86.

SR2_NG (*Next* Generation) is an upgrade to *SR2* that allows it to be supported by the *SR3* set of tools and libraries. As part of the *SR3* platform, *SR2_NG* benefits from all the improvements of the newer *SR3* platform, including support on the x86 and x64 Windows architectures.

The *SR2_NG* platform is physically identical to *SR2*. However it has significant improvements in terms of firmware, and software capabilities. This means that any *SR2*-based system can be transformed into an *SR2_NG* system, using a simple firmware upgrade procedure, and provided the high-level software is migrated to use the newer *SR3* tools and libraries.

2 Firmware Upgrade

The firmware upgrade is performed by a special migration tool called *SR2_to_SR2NG*. The procedure for installing and using the tool is very straightforward, and outlined below.

Note: The SR2_to_SR2NG migration tool only works on an x86 platform.

1. Unzip the package *SR2_to_SR2NG_Installer_V110*

2. Go inside the *Volume* folder and run *Setup.exe*. This installer installs two executables named *SR2_to_SR2NG* and *SR2NG_to_SR2*, as well as the drivers for the *SR2* and *SR2NG* platforms.

3. After the package has been installed connect and power-up an *SR2* board, or *SR2*-based system to the PC. The LED on the board should glow red for a brief moment, then glow orange or green. If it is green jump to step 8.

4. If the LED does not turn green Windows has started the process to load the *SR2* driver, and should be presenting a dialog to the user.

5. In this dialog make the proper selections to <u>specify</u> the location of the driver.

6. When asked to navigate to the directory *C:\Program Files\SR2_to_SR2NG\Drivers* and specify the *SRm2.inf* file.

7. Windows should then load the driver, and the LED should turn green shortly after.

8. Make sure the board is properly powered and that the USB connector is attached solidly. Go to the *Start* menu and select *All Programs\SR2_to_SR2NG\SR2_toSR2NG.exe*.

9. Wait until the firmware upgrade completes. Do not interrupt the operation. If anything happens during the firmware upgrade the board will need to be returned to the factory for a repair.

10. After the firmware upgrade completes cycle power on the board or system. Be sure to leave the board off for at least 1s. Upon restart the PC should discover the board as an *SR2_NG*.

3 Software Migration

After the board has been upgraded to an *SR2_NG,* use the *SR3* development tools and libraries to migrate the high-level PC software to the new platform. The *SR3* libraries are very similar to the old

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SR2 libraries, and they offer new and improved features. The *SR2_NG* platform is supported as part of the *SR3* platform.

4 In Case You Change Your Mind...

The *SR2NG_to_SR2.exe* application can be found in the *All Programs\SR2_to_SR2NG* folder. This application reverts the *SR2_NG* firmware to that of a standard *SR2* board. Proceed as outlined in section 2, except in step 8: choose the *SR2NG_toSR2.exe* application.