1.0 INTRODUCTION

Both PCI and PCIe UARTs have interface with EEPROM, which is used to store info like Device ID and Vendor ID etc.. The EEPROM can be programmed by either a stand-alone programmer or the software program utility provided by Exar. This user manual is a step by step guide for using Exar's EEPROM utility program. It can be used for both PCI and PCIe UARTs.

2.0 CONDITIONS

The "COM5" software driver needs to be installed first for both PCI and PCIe UARTs.
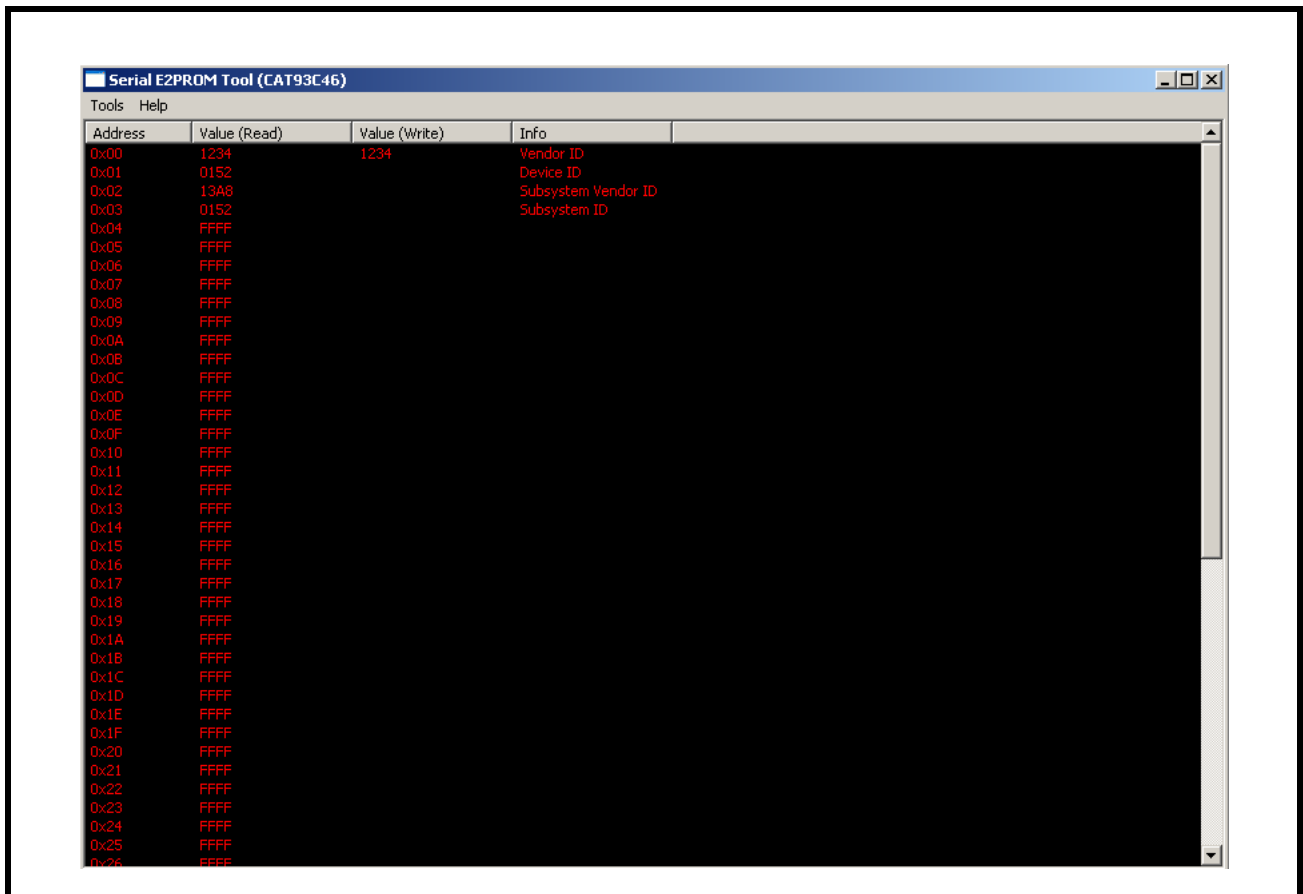
3.0 PROGRAMMING STEPS

Step 1: Make sure there is no pull-up resistor on EECS pin.

Step 2: Power up system and install "COM5" driver

Step 3: Click the "e2prom.exe" icon.

Step 4: "Serial E2PROM tool" will pop up. It is shown in Figure 1.

FIGURE 1. SERIAL E2PROM TOOL

The address column shows the offset address. For the PCI UARTs, the address 0x0 indicates Vendor ID, the address 0x1 indicates Device ID, the address 0x2 indicates the Subsystem Vendor ID and the address 0x3 indicates the Subsystem ID. They are labeled in the "Info" column. For the PCIe UARTs, those labels do not apply. Please refer to the AN206 on exar's website for programming examples.

Step 5: Read operation

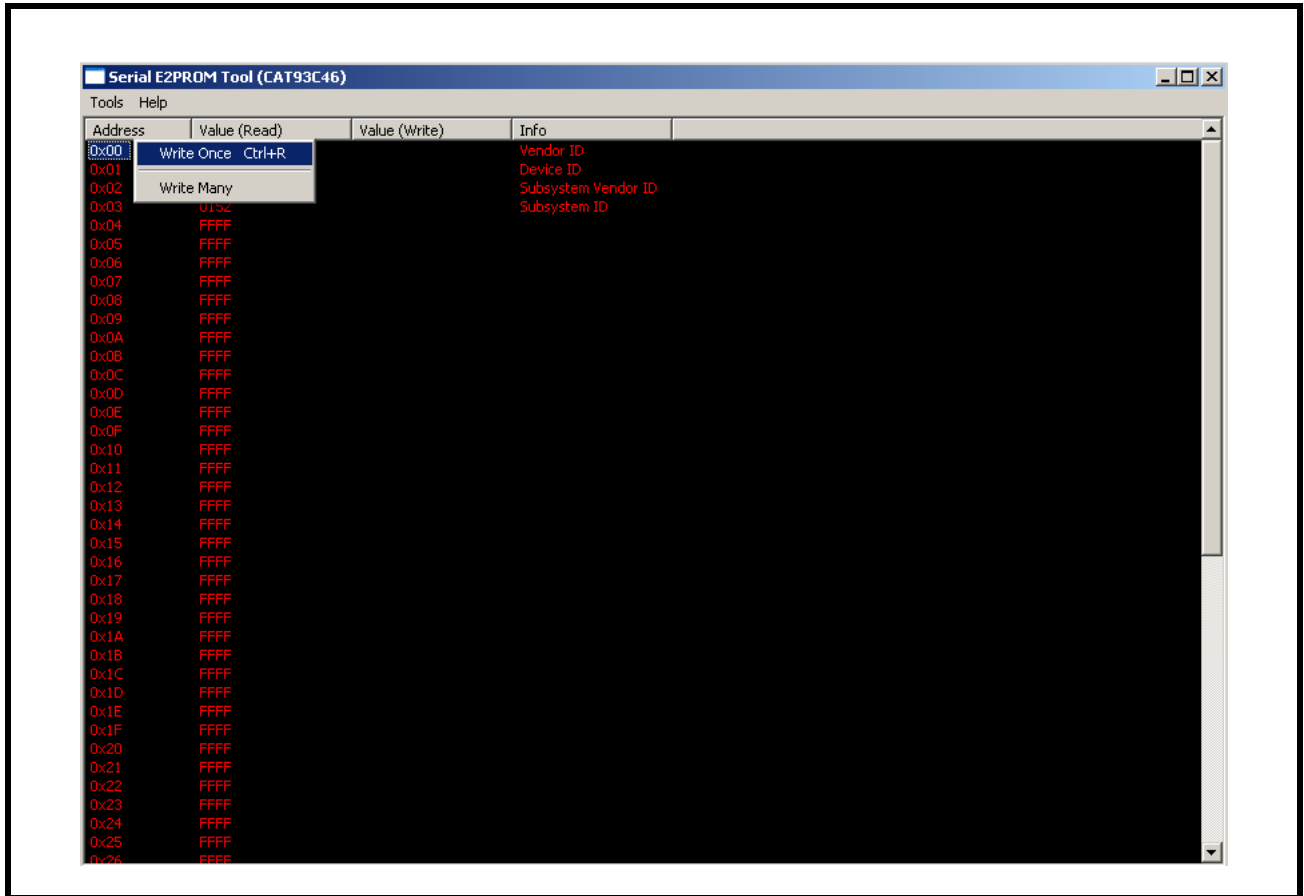Values shown in the second column are the values read from the EEPROM.
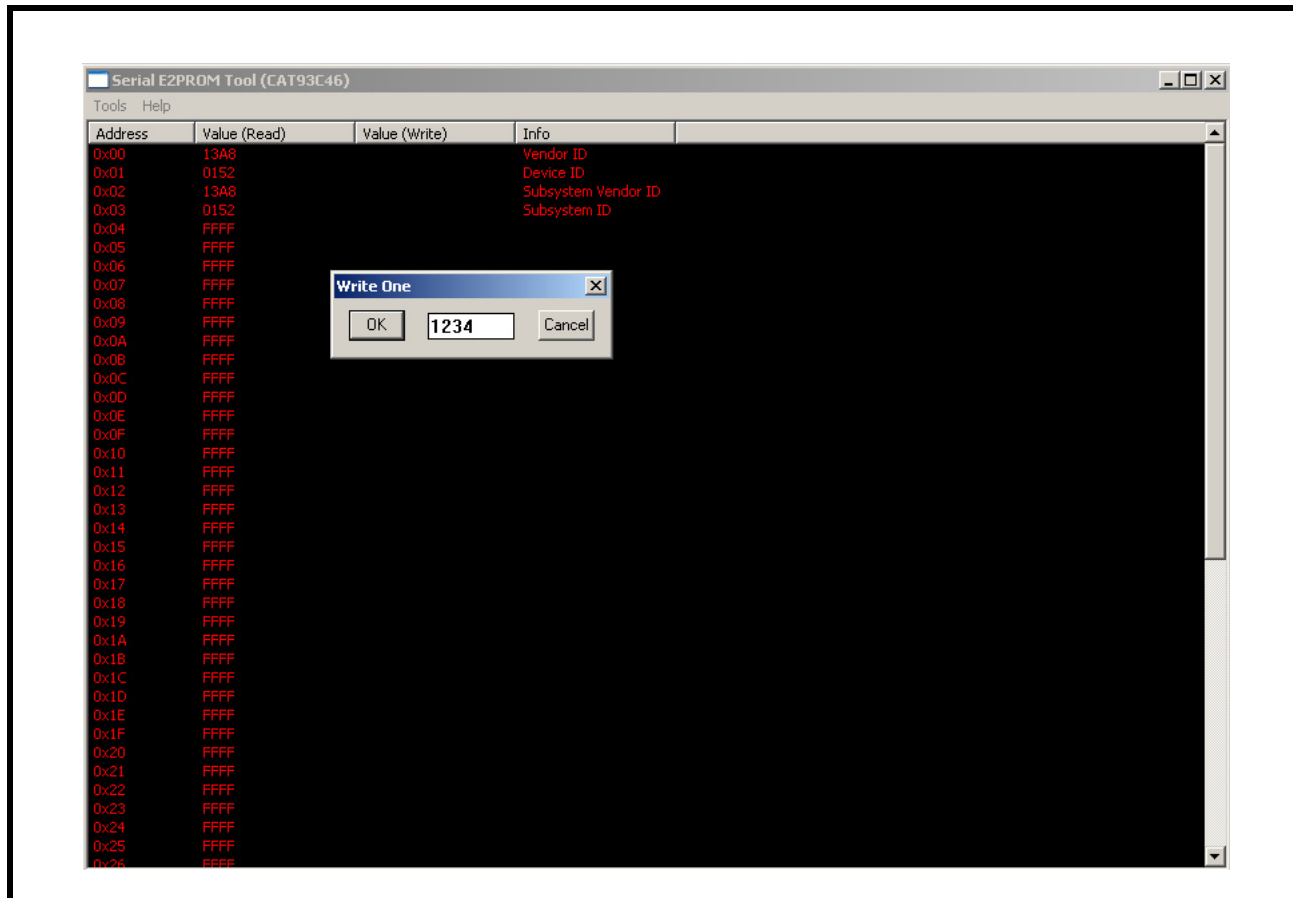
FIGURE 2. READ VALUES
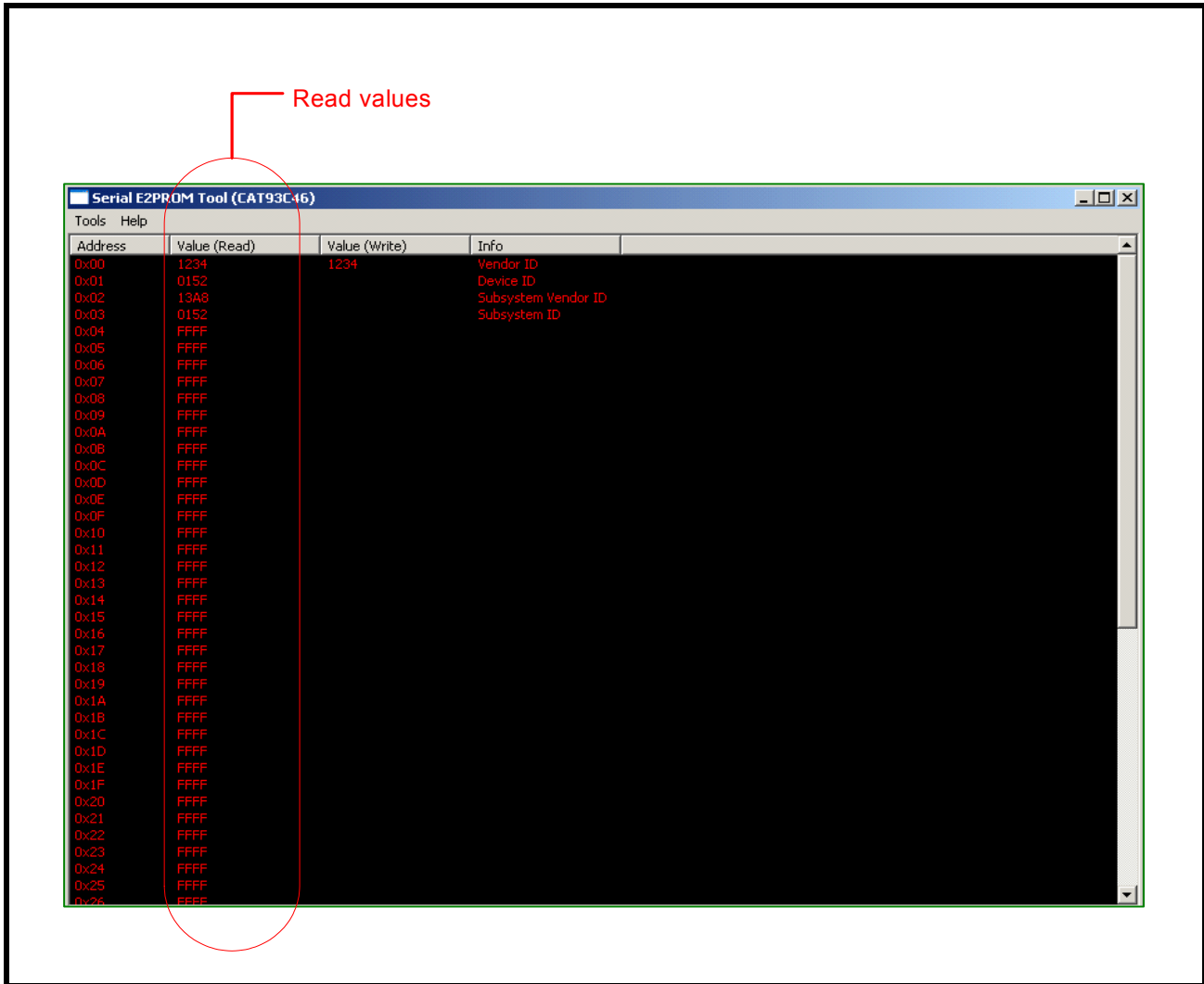
Step 6: Write operation

• Right click the target address and select "write once"

FIGURE 3. WRITE OPERATION I

- Enter the value and press "OK"

FIGURE 4. WRITE OPERATION II

Step 7: Turn off PC. Install pull-up resistor so that the PCI/PCIe UART loads the values from the EEPROM.

4.0   CHANGING THE IDS IN THE DRIVER

If new Vendor ID (other than the default Exar's Vendor ID 0x13A8) is programmed in EEPROM, then the Vendor ID in "ser15x.inf" file (in the driver package) needs to be modified to match the one programmed in EEPROM. If new Device ID (other than the default Exar's Device ID) is programmed in EEPROM, please modify the Device IDs both in "ser15x.inf" file (in the driver package) and in "xrapi.h" file. Then rebuild the driver and use the new driver.

5.0   SUPPORT

For any questions, please email uarttechsupport@exar.com.

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