



QuickUSB Programmer
User Guide

Bitwise™
..... systems

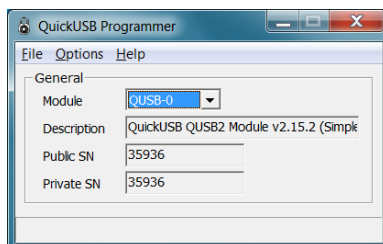
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Overview

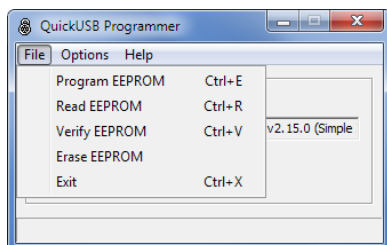
The QuickUSB Programmer application gives users the ability to upgrade the QuickUSB firmware in their QuickUSB Modules or QuickUSB ChipPack EEPROMs. The QuickUSB Programmer is used to update to newer versions of the same I/O Model of firmware or to change the firmware I/O model.



Programming Firmware

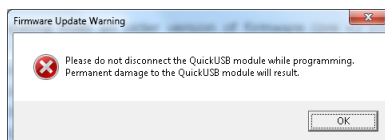
To update the firmware in your QuickUSB Module or QuickUSB ChipPack EEPROM, perform the following four steps:

Step 1: Select Program EEPROM



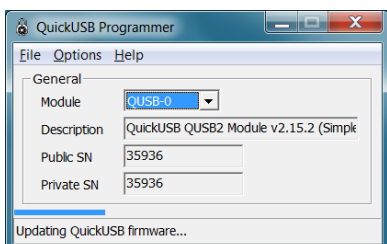
Select "File" → "Program EEPROM" and browse to the desired *.qusb firmware file.

Step 2: Do Not Disconnect Module



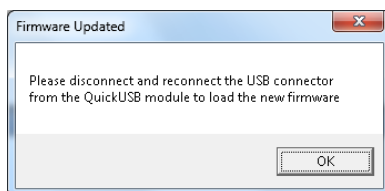
WARNING: Please not interrupt the programming process in any way or irreparable hardware damage may result.

Step 3: Program Firmware



The programmer will write the new firmware to the EEPROM. This process should take only a few seconds.

Step 4: Power-Cycle Module



Unplug and plug-in the QuickUSB Module to load the newly programmed firmware.

The User Interface

The “General” Section

“Module”

Shows the currently selected QuickUSB Module or QuickUSB ChipPack EEPROM. If you have more than one QuickUSB Module attached to your computer, you may select between the different modules with the “Module” drop-down list. All actions by the QuickUSB Programmer are performed on the selected QuickUSB Module.

“Description”

The “Description” text box shows a description of the firmware currently loaded in the QuickUSB Module. The description is in the following format: “QuickUSB QUSB2 Module v<version number> (<I/O Model>)”, where <version number> is the version of the firmware and <I/O Model> is the I/O Waveform Model (see the QuickUSB User Guide for more information about firmware I/O Models).

“Public SN”

The “Public SN” text box shows the public serial number of the currently selected QuickUSB Module. The public serial number can be customized using the QuickUSB Customizer installed with the QuickUSB Library.

“Private SN”

The “Private SN” text box shows the private serial number of the QuickUSB Module. This serial number is assigned by Bitwise Systems and cannot be changed.

The Menu Bar

The “File” Menu

“iChipPack License”

(This option is only visible when an unprogrammed device is found) Select to program an unprogrammed EEPROM with firmware using an iChipPack license. You will be prompted for your iChipPack account information (if it was not already entered) and a firmware IO Model to use. Once a device has been programmed successfully you may freely change the IO Model on that device without having to use additional iChipPack licenses.

“Program EEPROM”

Select to program a QuickUSB Module or QuickUSB ChipPack EEPROM. The QuickUSB Programmer will prompt for the desired *. firmware file. After selecting the file, the QuickUSB Programmer will program the EEPROM with the selected file.

Please note that if your module currently contains a v2.10.0 or earlier version of firmware you will be prompted to enter the four-digit serial number of the module prior to writing a newer version of firmware. The QuickUSB Module serial number may be found printed on a sticker located on the bottom side of the module.

“Read EEPROM”

Read the firmware out of the QuickUSB device and store as a IIC file. This file may then be used to program other QuickUSB devices that already contain licensed firmware.

“Verify EEPROM”

Select to verify the firmware in a QuickUSB Module or QuickUSB iChipPack EEPROM matches a selected version of firmware byte-for-byte. The QuickUSB Programmer will prompt for the desired *.qusb file to perform the comparison against. It will then read the data from the EEPROM and the selected *.qusb file and compare the data byte-for-byte.

"Erase EEPROM"

Select to fully erase an EEPROM. **WARNING!** This will erase the firmware from your device and cause the device to enumerate as an unprogrammed QuickUSB Module after a power-cycle. In order to use the device after this you will have to use an iChipPack license to reprogram the firmware.

"Exit"

Select to Exit the QuickUSB Programmer utility.

The "Options" Menu

"Preserve Customization"

Select to preserve customization information in the EEPROM. If this option is checked, the QuickUSB Programmer will preserve the customized PID and any customized strings. If unchecked, the values will be restored to the factory defaults.

"Preserve Defaults"

Select to preserve Default Settings in the EEPROM. If checked, the QuickUSB Programmer will remember the user-specified non-volatile default settings in the EEPROM when reprogramming the EEPROM. If unchecked, the values will be restored to the factory defaults.

"Preserve GPIF"

Select to preserve changes made to the GPIF Settings. If checked, the QuickUSB Programmer will retain the user-specified GPIF data when programming the EEPROM. If unchecked, the values will be restored to the factory defaults.

"Set ChipPack Account and Password"

Links to the QuickUSB ChipPack Licensing Server.

The "Help" Menu

"About"

Select to view information about the QuickUSB Programmer utility. The About Dialog displays QuickUSB Programmer application information, as well as QuickUSB DLL and Driver information.



"ChipPack"

Opens the QuickUSB ChipPack webpage.