WCH USB Configuration Tool CH34xSerCfg Instruction

Version: 1B

http://wch.cn

1. Introduction

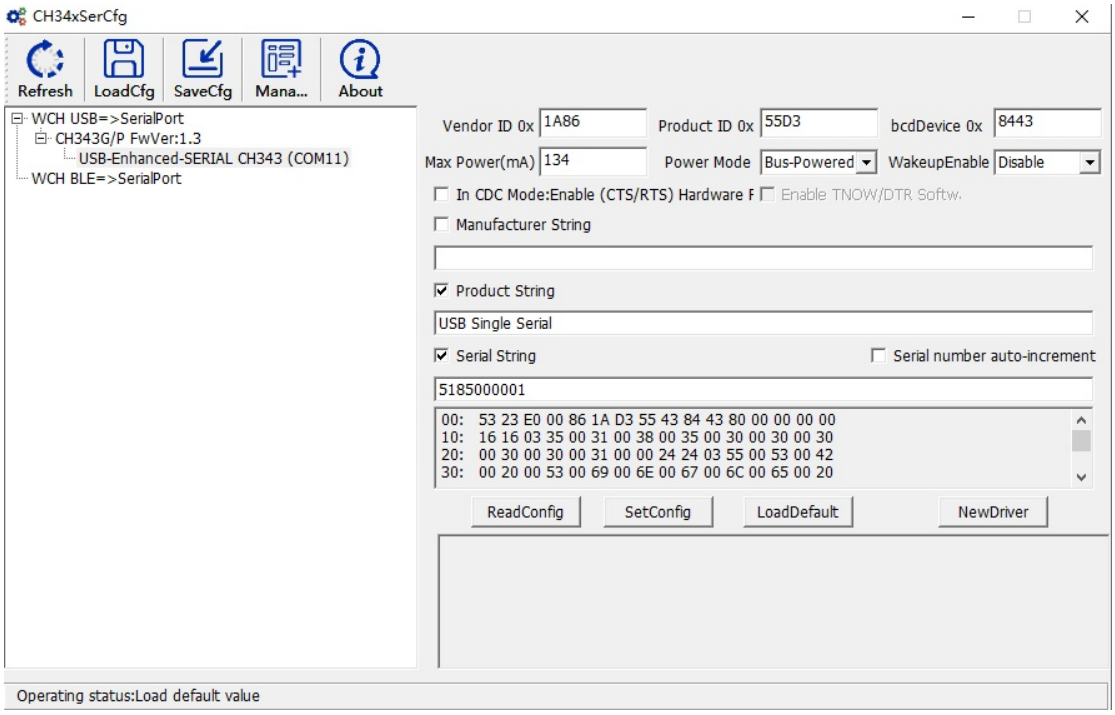
CH34xSerCfg configuration tool is used for the WCH serial port chip that supports the USB configuration function. Via this tool, the chip's manufacturer Vendor ID, product ID, maximum current value, BCD version number, manufacturer information and product information string descriptors can be modified and configured.

Software supports: CH340B, CH343P, CH342F, CH347, CH344, CH348, CH9101, CH9102F, CH9103.

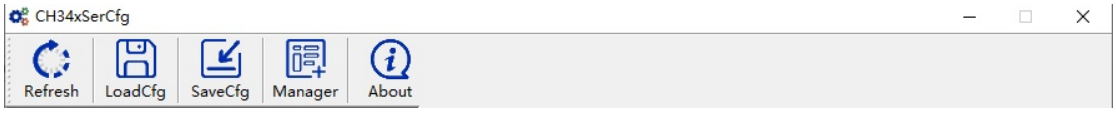
(Note: CH342F/CH9102F with the 4th digit from last of batch number is a letter, that is, it has built-in EEPROM to support configuration.)

2. CH34xSerCfg function description

This section describes the functions of the CH34xSerCfg tool. Before use, you need to install the VCP driver of the corresponding product, which can be downloaded from the official website.



2.1 Menu bar



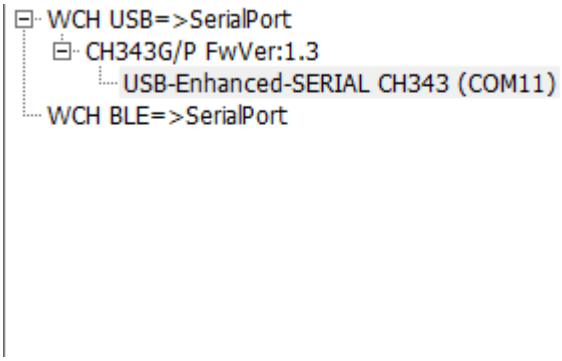
"Refresh": Refresh the USB to serial port device currently existing in the system and display it in the device display box on the left.

"LoadCfg": If the chip configuration was saved before, click "LoadCfg" to load the corresponding parameters to the chip;

"SaveCfg ": Save the current configuration parameters as a configuration file.

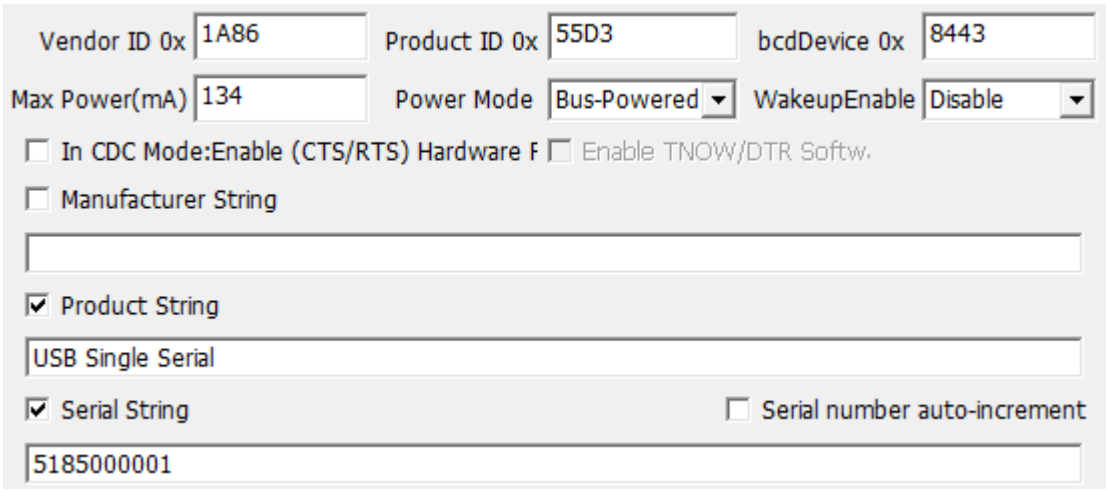
"Manager": Open the system device manager.

2.2 Device display box



"Device display box" displays the WCH USB to serial port device under the current system, and displays the chip model and firmware version.

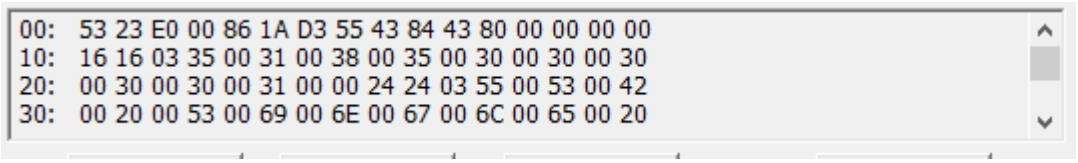
2.3 USB parameter configuration area



Parameter	Parameter description
Vendor ID(VID)	USB manufacturer ID, the VID of each manufacturer is unique
Product ID(PID)	USB product ID, which can be modified
bcdDevice (BCD)	The built-in version number of the chip, it is generally not recommended to modify
Max Power(mA)	The value of the bus current required by the device
Power Mode	USB Power Mode

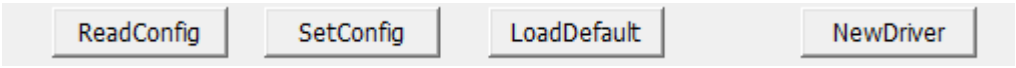
	● Bus-Powered ● Self-Powered
Wakeup Enable	Wake up Enable ● Enable ● Disable
In CDC Mode: Enable (CTS/RTS) Hardware Flow Control	When using the system's own CDC driver, force open (CTS/RTS) flow control
Manufacturer String	Manufacturer Description String
Product String	Product Description String
Serial String	USB product serial number. After configuring the product serial number, the serial number of the device will remain unchanged when the device is connected to different USB ports of the PC.
Serial Number Auto Increment	This option will automatically increment (+1) the serial number of the product

2.4 EEPROM data display area



“EEPROM data display area”: Display the content of the internal EEPROM of the chip.

2.5 Configure function button



“ReadConfig”: Read the USB parameters of the currently selected device and display them in the corresponding attribute boxes of “USB parameter configuration area”.

“SetConfig”: Write the current configuration parameter attribute value to the device and take effect.

“LoadDefault”: Restore the attribute parameters of the currently selected device to the default value.

“NewDriver”: Generate a new driver that matches the currently configured USB attribute parameters.

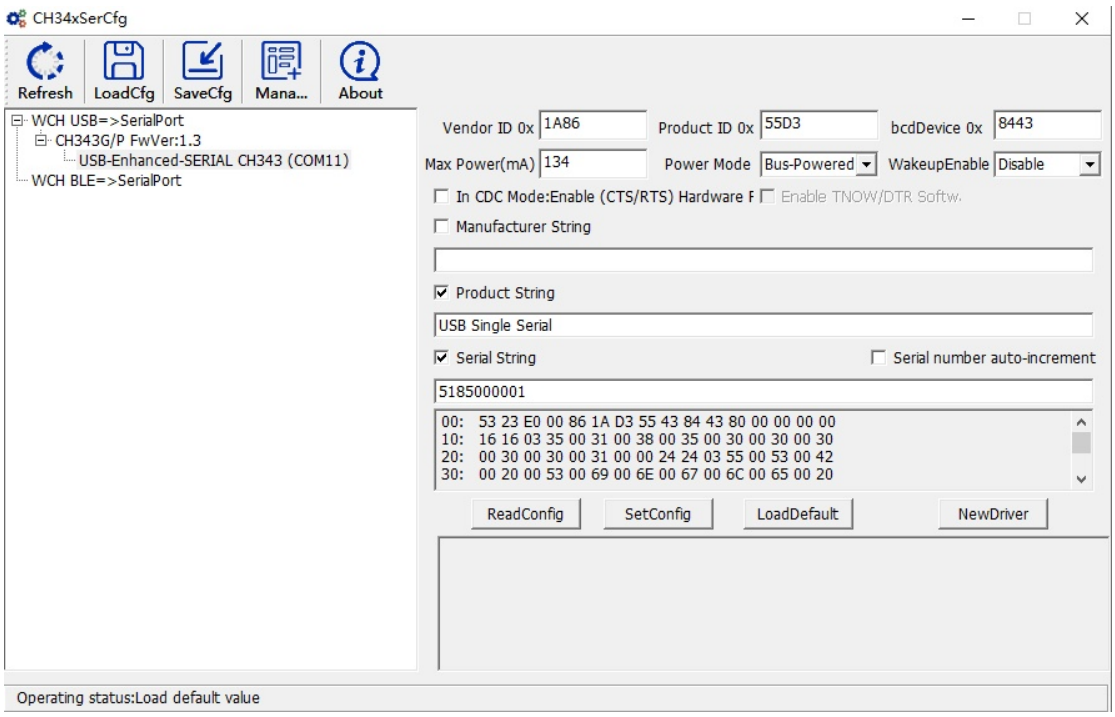
Precautions:

If the VID or PID of device is modified, the original VCP driver will not work with this hardware, and the device can only use the system's own CDC driver (CH340/CH348 series do not support the system CDC driver). If you need to use the VCP driver, you can click “Generate New Driver” generates a new VCP driver which matched the new VID or PID, but the new driver does not have Microsoft's digital signature, it’s limited on some systems.

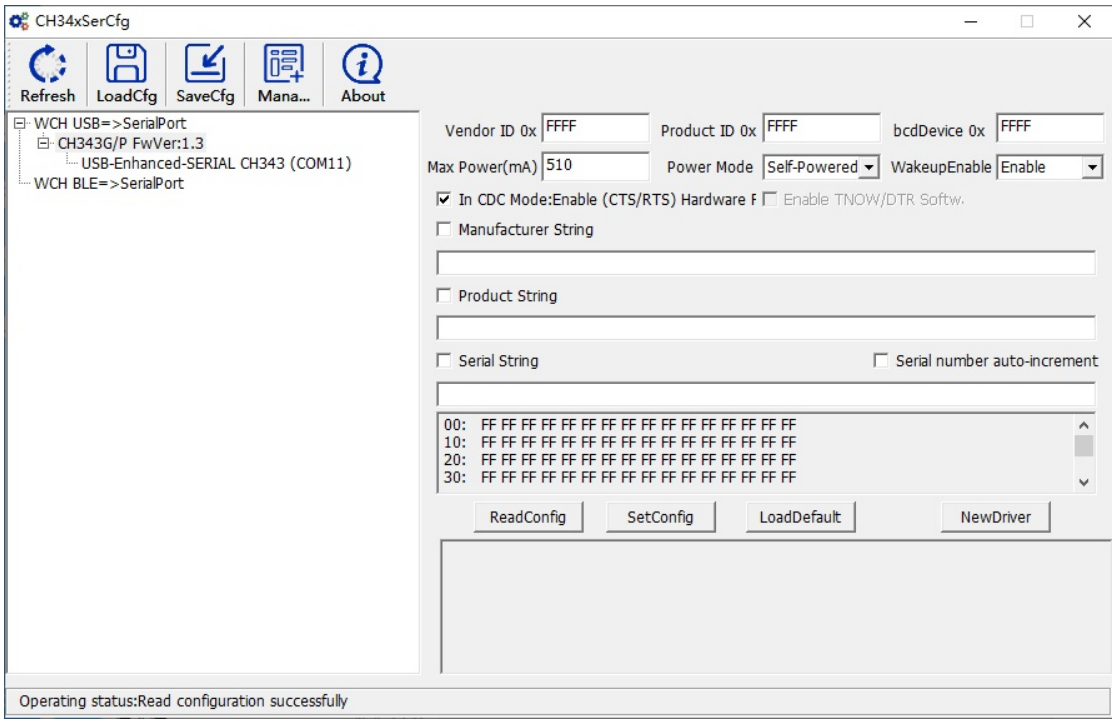
USB to serial port chip CH343P/CH9102F/CH9101 supports restoring the default configuration when RTS is connected a pull-down resistor during powered on. USB to multi serial ports chip CH342F/CH347/CH344/CH348/CH9103 supports this function too via RTS0.

3. Configuration operation instruction

Step 1: Plug in the device, click “Refresh”, and select the device to be configured in the “Device Display Box” on the left.



Step 2: Click “ReadConfig” button to obtain the USB parameters of the current device and display the contents in the corresponding attribute box. If the displayed attribute value is “0xFFFF” or empty after reading, you can click “LoadDefault” button to obtain the default parameters corresponding to the chip.



Step 3: Enter the modification value in the required modification attribute box.

Step 4: After confirmation, click “SetConfig” button to complete the configuration procedure.

Step 5: Reset or power cycle the device to take effect.