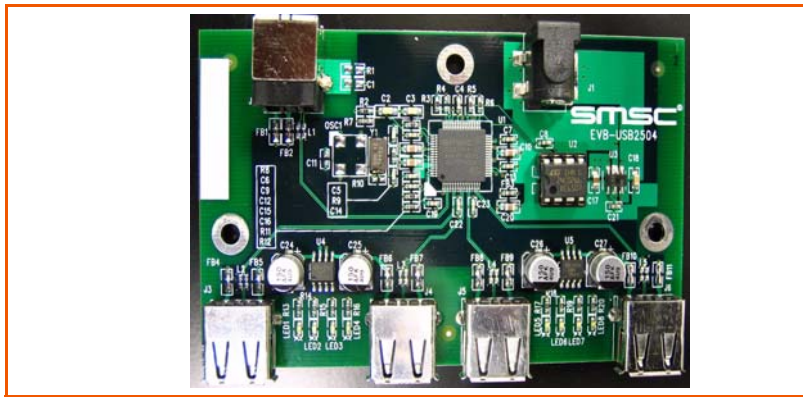




**SMSC**<sup>TM</sup>  
SUCCESS BY DESIGN

## EVB-USB2504 Evaluation Board



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## 1 Overview

### 1.1 Features

- Operates from a single voltage (+5.0V, regulated) wall wart external power supply
- Onboard +3.3V Regulator
- Self-powered operation
- Serial EEPROM for configuration information mounted in a socket
- Full set of green and amber LED indicators
- Individual port over-current sense and power switching
- Multi-TT enabled
- High-speed/Full-speed capable
- 100mS down stream port power on time
- 1mA VBUS current consumption

### 1.2 General Description

The primary purpose of this board is to demonstrate a full-featured HUB configuration for the SMSC USB2504 4-port HUB. This does not represent a minimal cost design. The EEPROM allows for modifications to the the base configuration - for example one more down stream ports can be disabled or configured as non-removable for compound device application. The DID, PID or DID information can be changed for HUB.

A windows utility E2PROMAPP is included in the package to allow modifications of the base configuration EEPROM. The bin file evb-usb2504\_02.bin contains the base configuration. A screen shot from the application is shown in figure 1. After changes has been selected click the button "Create EEPROM File". Note that if the output file name is the same as the input file name it will be overwritten with the new values. The output file name can be changed before creating a new bin file. The bin file format is compatible with most EEPROM programmers.

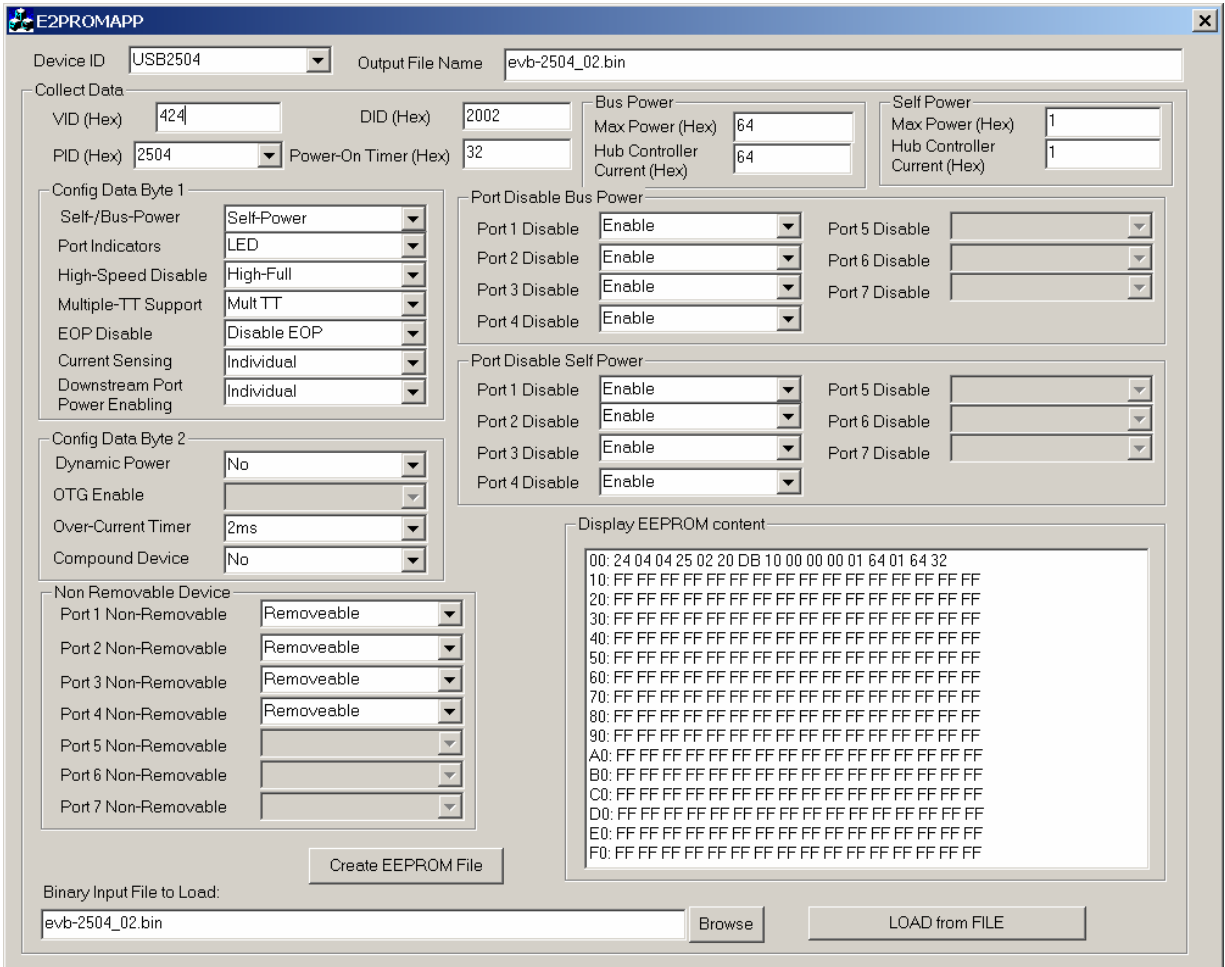


Figure 1.1 E2PROMAPP EEPROM Configuration Utility.