Austin Design Center
11000 North Mopac Expressway
Stonelake Bldg. 6 Suite 500
Austin, Texas 78759

EVB-USB2602-CRB Users Guide
Rev B1

Updated 2005-06-02

Customer Evaluation Board for SMSC USB2602
Integrated USB2.0 Compatible 4-port HUB and Flash Media Controller

EVB-USB2602-CRB Rev B1
EVB-USB2602-QFP128 B

Features

- Operates from a single voltage (+5.0V, regulated) wall wart external power supply
- Low cost 2-Layer PCB design
- Serial EEPROM for configuration information – can be update from USB
- USB 2.0 HUB with three down-stream USB ports with individual port power control, over-current sense and green LED indicators
- Multi-TT enabled
- High-speed/Full-speed capable
- Supports these Media Types: Compact Flash, Micro Drive, MultiMediaCard, xD picture Card, Smart Media, Secure Digital, Memory Stick, High Speed Memory Stick, Memory Stick Pro
- Access to up to Four Memory Devices at the same time
- Less than 1mA VBUS current consumption

The EVB-USB2602-CRB features the integrated USB2602 USB 2.0 HUB and card reader. The board has one power connector to 5.0V external supply (J1: 2.1mm, tip -- POS), one upstream USB port on J2 and one USB down-stream port J3 on the rear side of the board. On the front side are two USB down-stream ports J6 and J7, and all card media sockets. This board demonstrates the first integrated USB HUB and card reader low-cost implementation in a single package.

Board Illustrations

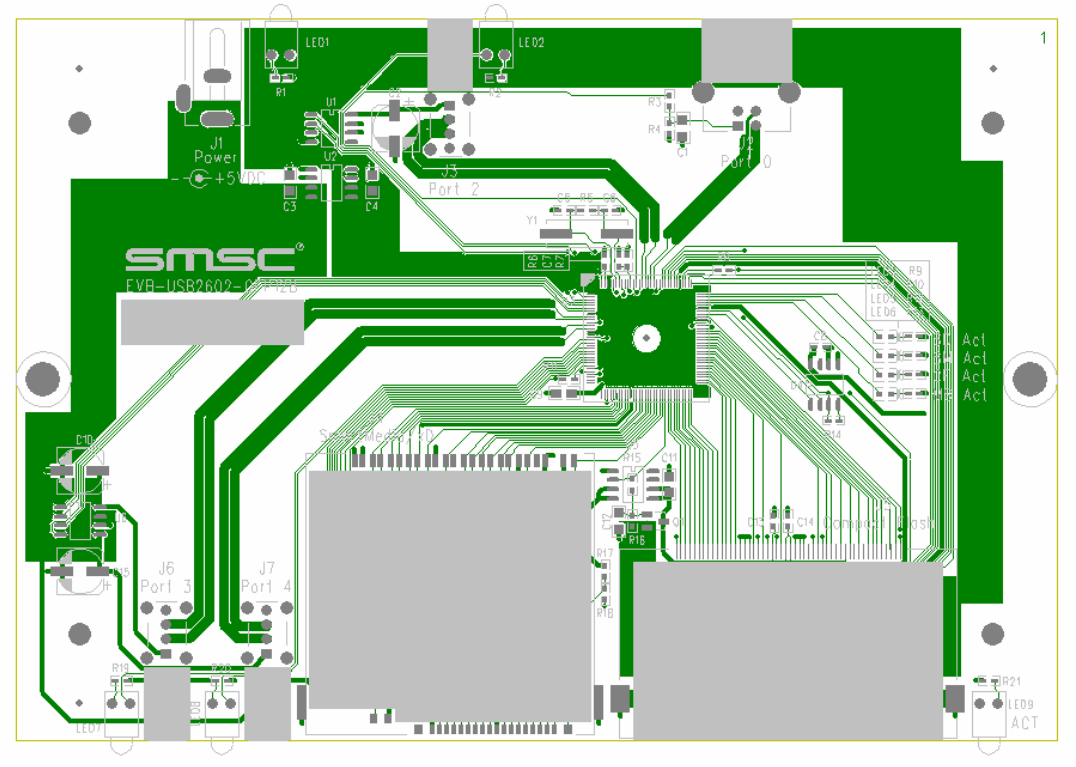

Figure 1. Top side.

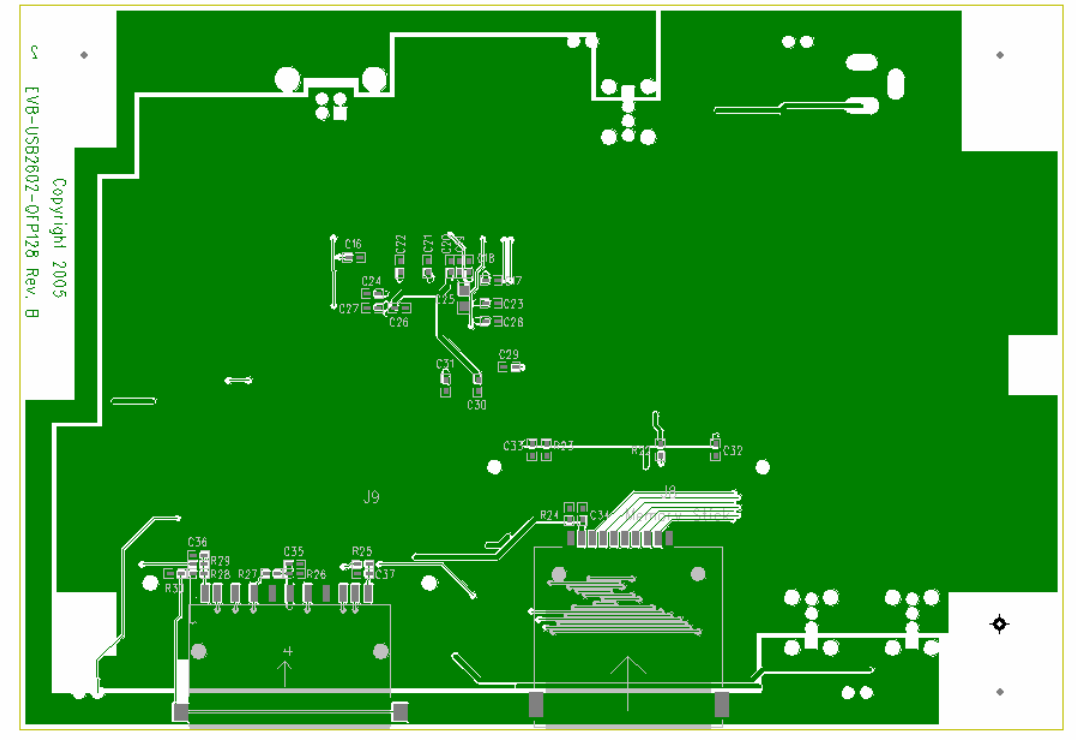

Figure 2. Bottom side.

EEPROM Configuration Settings

The board features an on-board EEPROM for configuration for VID/PID/DID of both Hub controller and card reader controller and serial number for the card reader. The USBDM windows application is used for viewing and changing the configuration stored in EEPROM. USBDM has several tabs to view and set different sections of the configuration. For more details see Software Release Notes. Figures 3 through 5 shows the default configuration for the EVB-USB2602-CRB.

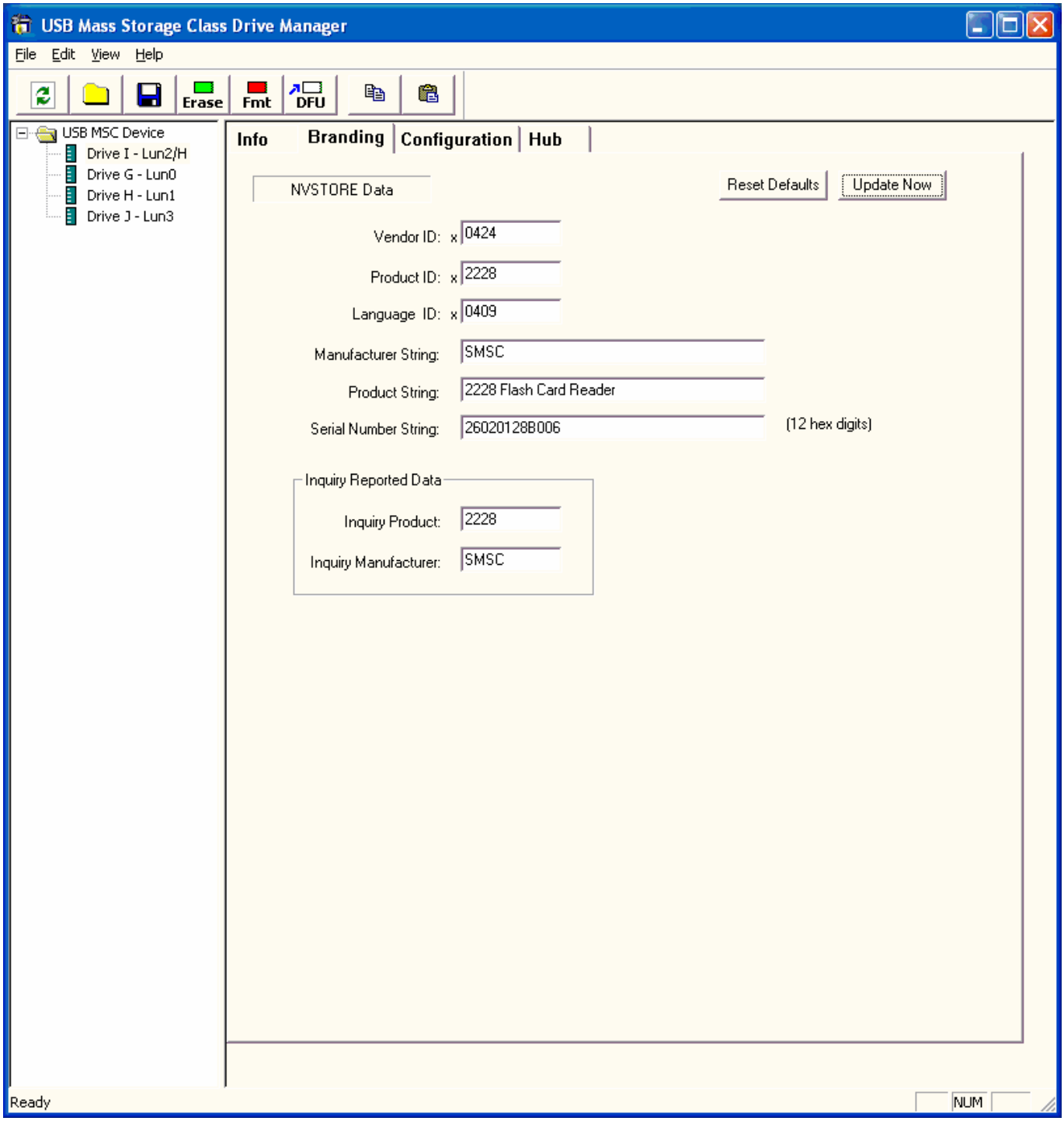

Figure 3. USBDM Branding Tab – VID/PID and string descriptor configuration.

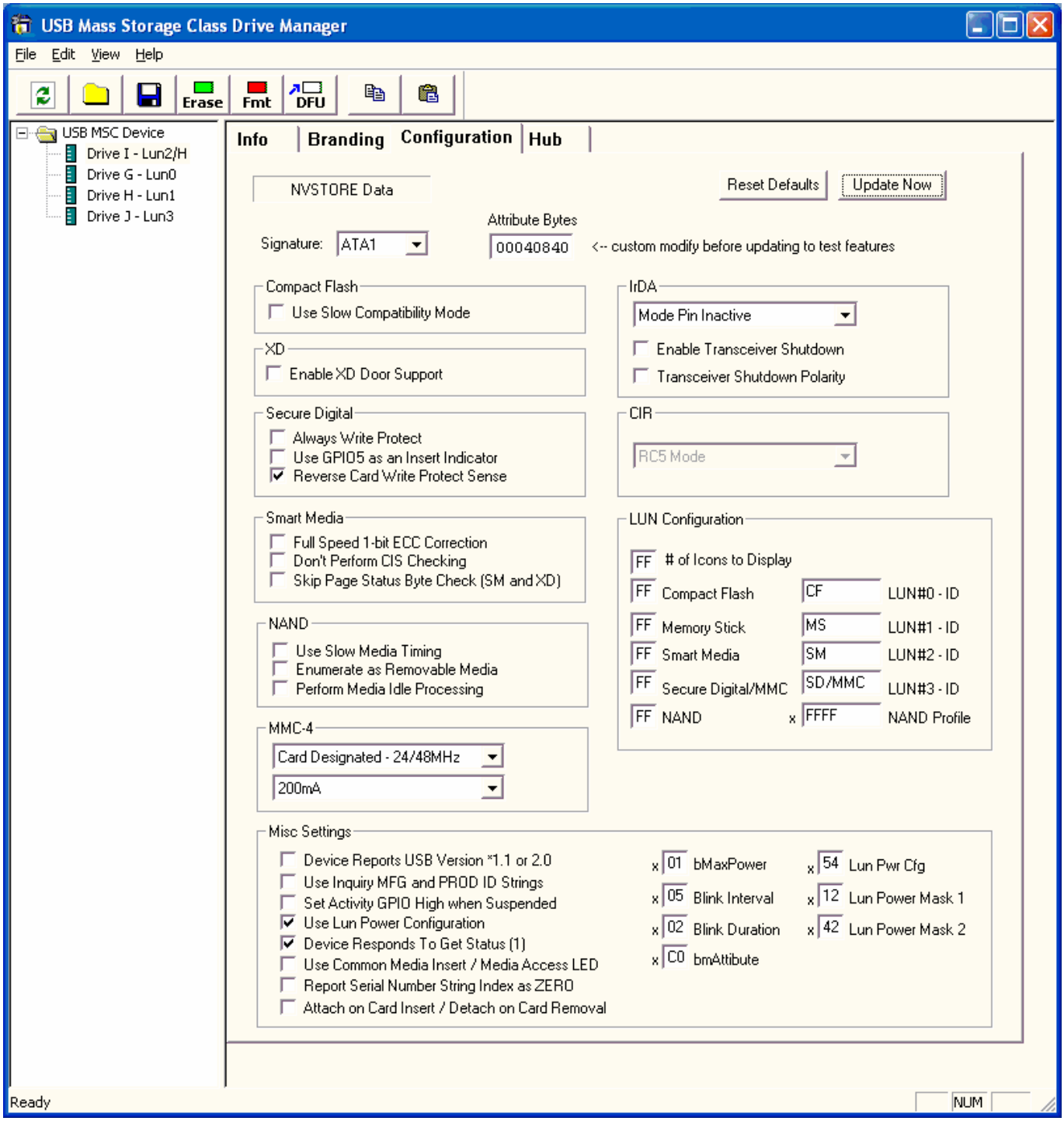

Figure 4. USBDM Configuration Tab – Card reader configuration.

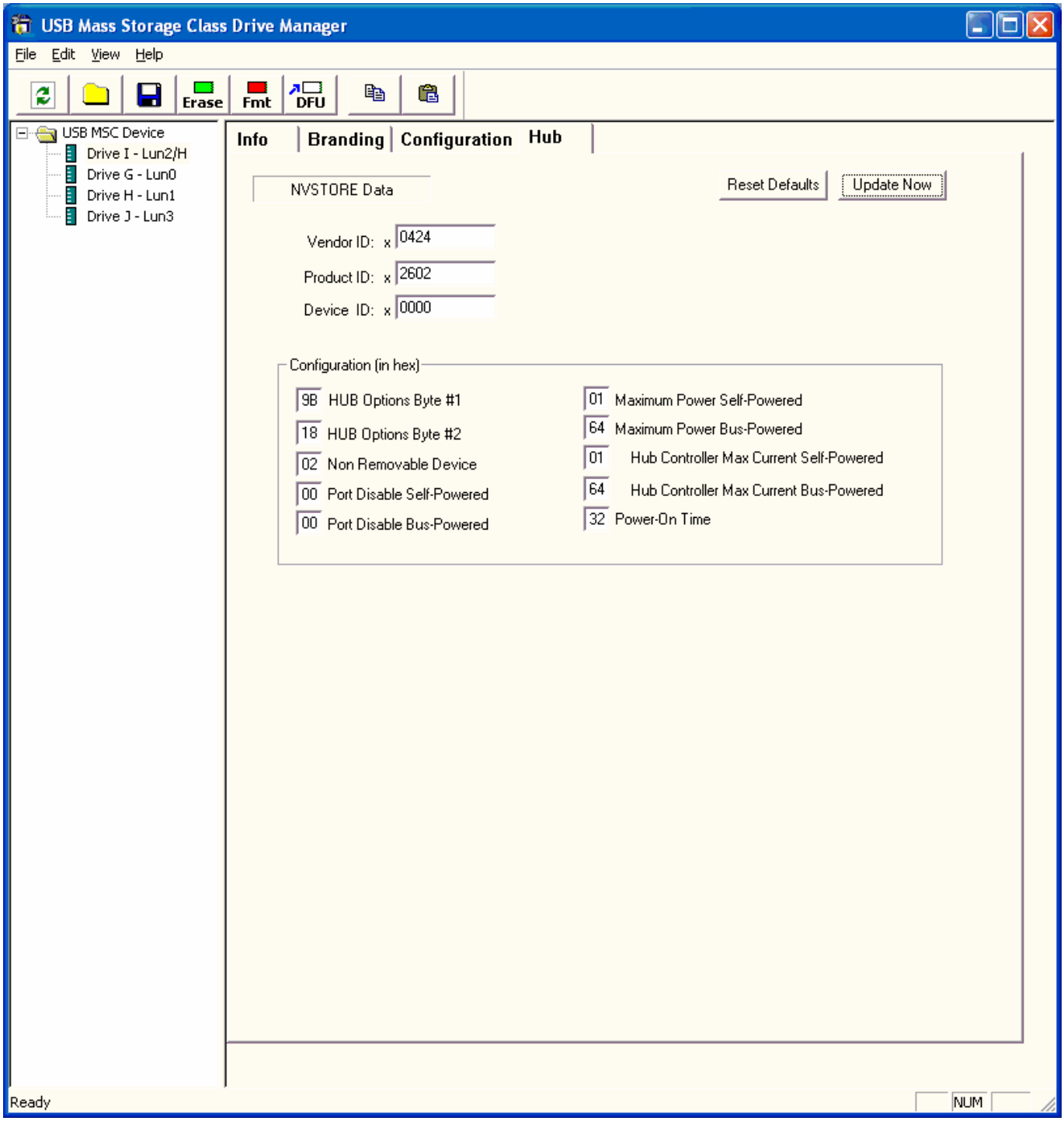

Figure 5. USBDM Hub Tab – USB Hub configuration.