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# FTDI Chip VM800B Datasheet Embedded Video Engine Basic module



General Purpose Multi Media Controller

### 1 Introduction

The VM800B is a development module for FTDI's FT800, which is used to develop and demonstrate the functionality of the FT800 Embedded Video Engine, EVE.

This module behaves as an SPI slave, and requires a SPI Master for proper microcontroller interfacing and system integration.

VM800B modules support 3 different LCD panel size options and are designed for industrial or commercial environments with precision fitted bezels in either black (-BK) or pearl (-PL).

- VM800B35A-xx is the 3.5" LCD
- VM800B43A-xx is the 4.3" LCD
- VM800B50A-xx is the 5.0" LCD

### 1.1 Features

The VM800B utilises the FTDI FT800 Embedded Video Engine, EVE. Graphic, audio and touch features of the FT800 chip can be accessed with the VM800B. For a full list of the FT800's features please see the FT800 datasheet. The VM800B has the following features:

- Ready to use LCD module.
- Integrated with resistive touch screen LCD panel
- On board LCD backlight LED Driver
- On board audio power amplifier and micro speaker
- Flexible power supply. Powering the VM800B using either a 2.1mm power jack , SPI master connector or via USB Micro-B port
- 5 V tolerant buffers when used with a 5V SPI Master.
- Precision fitted bezel in black(-BK) or pearl (-PL)



## 2 Ordering Information

Note that the kits below require a 5V/1A power supply. It is NOT provided in the development kit, but is offered as an optional accessory with the following part types:

Part No.	Description
VM800B35A-BK	Credit Card Size VM800B module, supports 3.3/5v MCU Adapter Board, 3.5 inch TFT LCD display panel preinstalled, black bezel
VM800B43A-BK	Credit Card Size VM800B module, supports 3.3/5v MCU Adapter Board, 4.3 inch TFT LCD display panel preinstalled, black bezel
VM800B35A-BK	Credit Card Size VM800B module, supports 3.3/5v MCU Adapter Board, 5.0 inch TFT LCD display panel preinstalled, black bezel
VM800B35A-PL	Credit Card Size VM800B module, supports 3.3/5v MCU Adapter Board, 3.5 inch TFT LCD display panel preinstalled, pearl bezel
VM800B43A-PL	Credit Card Size VM800B module, supports 3.3/5v MCU Adapter Board, 4.3 inch TFT LCD display panel preinstalled, pearl bezel
VM800B35A-PL	Credit Card Size VM800B module, supports 3.3/5v MCU Adapter Board, 5.0 inch TFT LCD display panel preinstalled pearl bezel
VA-PSU-UK1	Accessory - UK Model 5V/1A USB Power Supply (Mfr # JX-B0520C-1-B)
VA-PSU-US1	Accessory - US Model 5V/1A USB Power Supply (Mfr # JX-B0520B-1-B)
VA-PSU-EU1	Accessory - EU Model 5V/1A USB Power Supply (Mfr # JX-B0520A-1-B)
VA800A-SPI	Accessory - High Speed Micro USB to SPI adapter for BASIC boards based on FT232H MPSSE design
VA-FC-1M-BKW	Accessory - Flat USB A to Micro B Cable 1M- Black and White
VA-FC-1M-BLW	Accessory - Flat USB A to Micro B Cable 1M- Blue and White
VA-FC-STYLUS1	Accessory - Resistive Touch Screen Pen Stylus

#### Table 2-1 – Ordering information