



# STEVAL-CCM001V1

Digital photo frame demonstration board  
based on the STM32F103RB microcontroller

Data Brief

## Features

- 320 x 240 resolution TFT (2.4" diagonally) interfaced through SPI2
- Micro SD card interfaced through SPI1
- Mini USB type-B connector
- On-board power supply for DPF
- LED power indicator
- Rechargeable battery circuit available
- On-board JTAG connector for firmware upgrade and changes
- Additional ESD protection device on USB
- USB interface available for use of mass-storage devices
- Supports both 2-axis and 3-axis MEMS, used for iPhone-like picture orientation
- Push-button switches for reset and user switching
- Joystick control



## Description

The STEVAL-CCM001V1 demonstration board is a standalone digital photo frame application designed using the STM32F103RB Cortex M3 microcontroller.

The digital photo frame is used to display digital images in slideshow style. Unlike the static display of traditional photo frames, the images in the digital photo frame change automatically at regular intervals which are set by the user.

The application is capable of managing JPEG decompression with the 20 KB of RAM in the STM32F103RB microprocessor. The FAT16 / FAT32 system library is used for reading JPEG images from the Micro SD card.

The STEVAL-CCM001V1 can be powered by an external battery, as well as by a USB connector.

# 1 Block diagram and schematics

Figure 1. STEVAL-CCM001V1 system block diagram

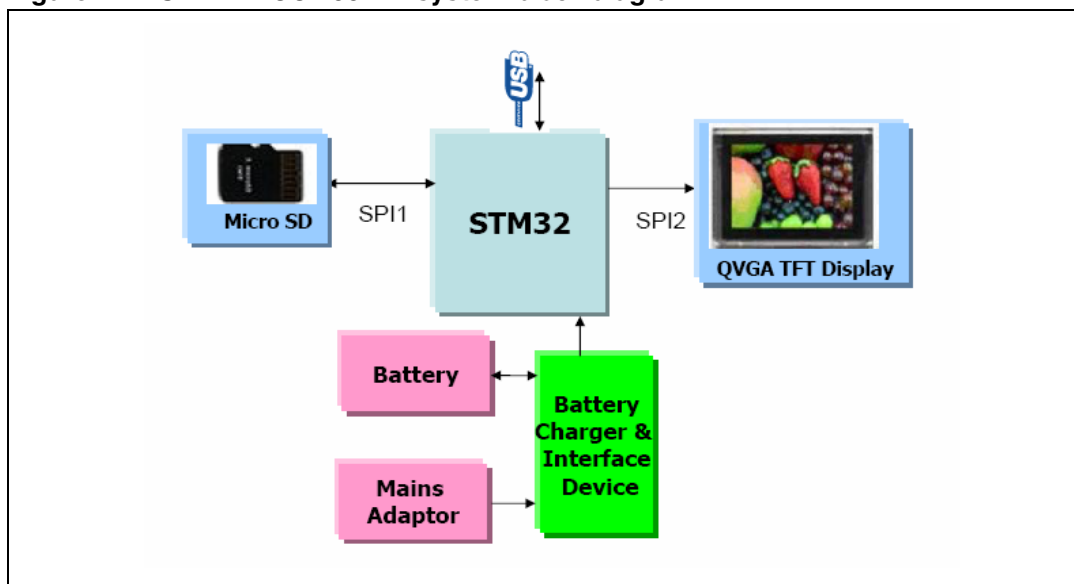
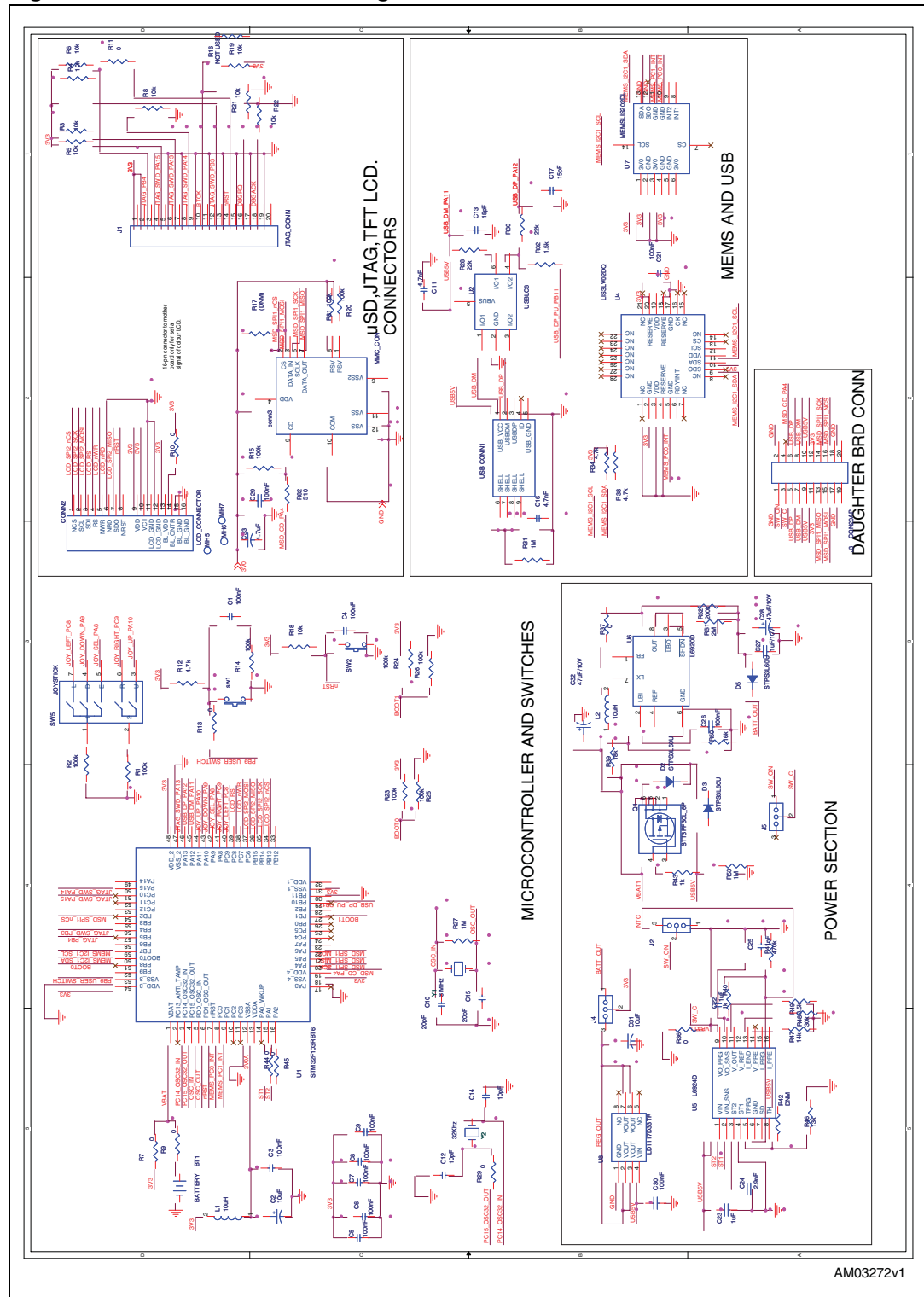


Figure 2. Internal schematic diagrams



## 2 Revision history

**Table 1. Document revision history**

Date	Revision	Changes
21-Nov-2008	1	Initial release.

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