

STEVAL-CCM007V2

STM32-based NAND Flash driver demonstration board (with TFT MB785/P)

Data brief



Description

The STEVAL-CCM007V2 is a demonstration board for a NAND Flash driver based on the STM32F205ZET6 microcontroller.

It supports 512 byte and 2 kilobyte page SLC NAND Flash, and dynamic detection of NAND Flash based on "Device ID".

The firmware automatically detects which NAND Flash is mounted on the PCB, and functions accordingly.

Features

- Designed for 512 byte and 2 kilobyte page size NAND Flash interfacing using the FSMC interface of the STM32
- Supports both the FAT (ELM_FS) file system and USB mass storage device mode
- Supports garbage collection, wear leveling, bad block management & ECC check
- Displays BMP images stored in NAND Flash on MB785 TFT
- · RoHS compliant

Schematic diagram STEVAL-CCM007V2

1 Schematic diagram

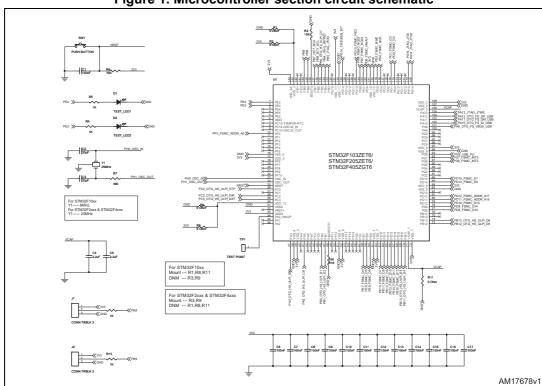
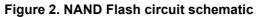
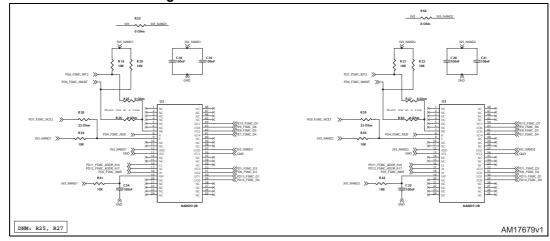


Figure 1. Microcontroller section circuit schematic

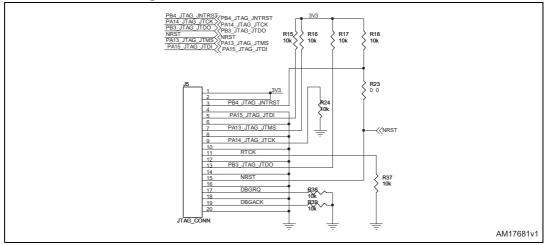




STEVAL-CCM007V2 Schematic diagram

Figure 3. USB full speed circuit schematic





Schematic diagram STEVAL-CCM007V2

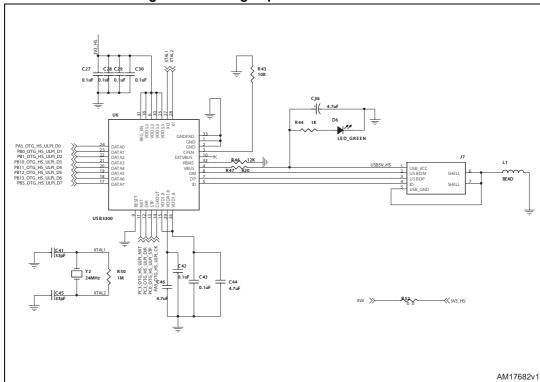
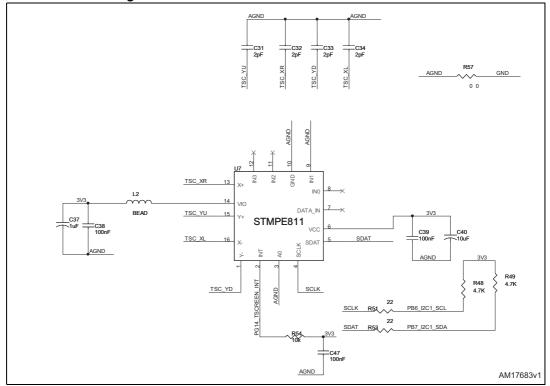


Figure 5. USB high speed circuit schematic





STEVAL-CCM007V2 Schematic diagram

D4 USB5V_FS 3V3 STPS1L30U GND VOUT VOUT VIN NC VOUT VOUT NC C26 10uF USB5V_HS>> LD1117D33TR STPS1L30U C48 10uF R45 D7 GND>> -<<3∨3 1k LED_GREEN AM17684v1

Figure 7. Power section circuit schematic

Figure 8. TFT connector circuit schematic

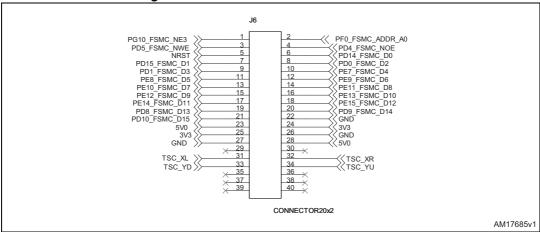
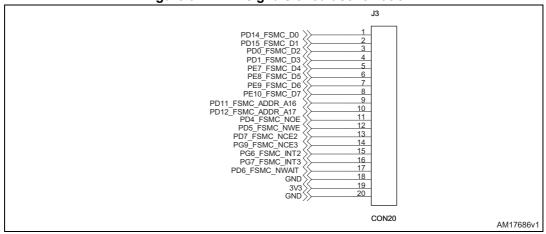


Figure 9. NAND signals circuit schematic



Revision history STEVAL-CCM007V2

2 Revision history

Table 1. Document revision history

Date	Revision	Changes
30-Sep-2013	1	Initial release.

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