



STEVAL-CBP006V1

UniPower front panel and standby power management controller for STB, TV sets and other consumer devices

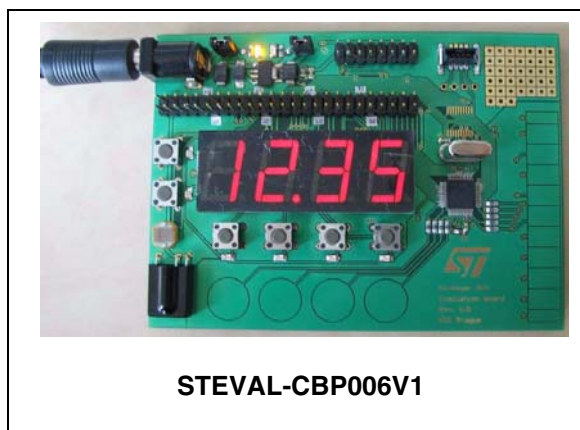
Data brief

Features

- Includes the STM8S105xx MCU with 32 Kbytes of Flash memory packaged in an LQFP48
- Alternative footprint for MCU in VFQFN32 package (within LQFP48 footprint)
- PMOS controlled switch up to 5 A
- 6 mechanical switches, 4 touch-sensing buttons, 1 slider
- 4-digit, 7-segment display and 6 controllable LEDs
- Photo-resistor for automatic display dimming
- 36 kHz-carrier infrared receiver for board remote control
- All MCU I/Os available on a header connector for implementation of additional functions
- SWIM interface for firmware programming and debugging
- Dedicated connector for interfacing with host, with signals including I²C, interrupt and reset outputs, and wakeup
- RoHS compliant

Description

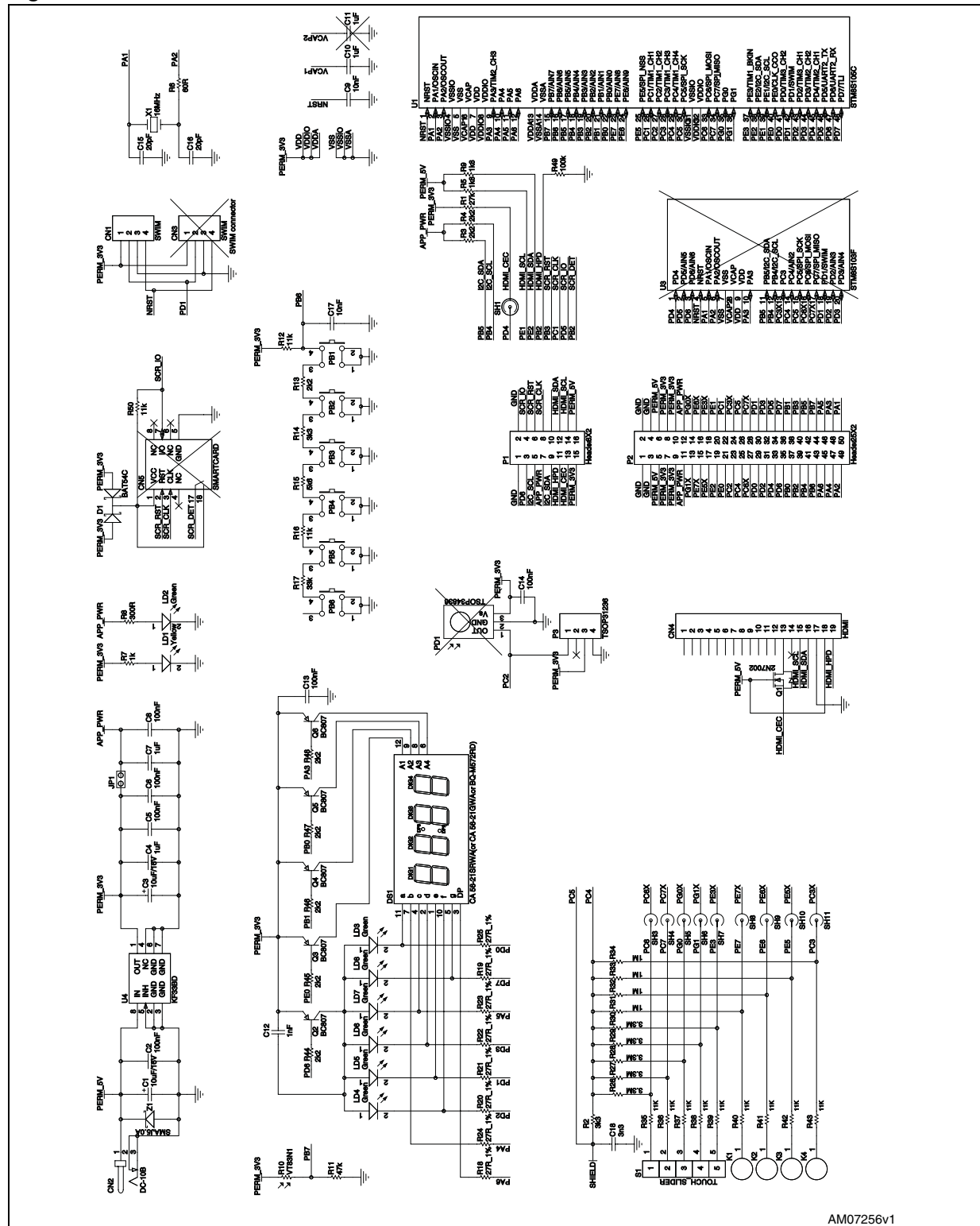
The STEVAL-CBP006V1 UniPower demonstration board is designed to provide a ready-to-use platform for power supply management and user-interface control developed around the STM8S MCU. The board can manage various wakeup sources, and perform power supply switching of the rest of the application during standby. The board also features an ST capacitive touch-sensing software library capable of turning any 8-bit STM8 microcontroller into a capacitive touch-sensing controller.



The UniPower demonstration board is preprogrammed with demonstration firmware to manage most of the system's hardware resources, such as digital and analog I/Os, LEDs and mechanical buttons. Touch-sensing functions can thus be easily combined with traditional MCU capabilities by selecting appropriate modules from the UniPower MCU firmware library. The UniPower demonstration board allows designers who are familiar with the use of standard microcontrollers to perform extensive application standby power management and create higher-end look-and-feel human interfaces by replacing conventional electromechanical switches with capacitive touchkeys. The application cost can be reduced by choosing a smaller MCU from the STM8S portfolio. The board is delivered with a SWIM interface, allowing adaptation of the firmware to application requirements. This simplifies the concept of the UniPower MCU firmware library, and makes the evaluation of the key features for end-applications easy. Maturity, robustness, flexibility and performance make this solution simple to implement and quick to market. It can be integrated into various types of consumer application, such as set-top boxes, digital TVs and home appliances. For further details about the touch-sensing software library, please refer to the STM8 touch-sensing firmware documentation.

1 Schematic diagrams

Figure 1. Circuit schematics



2 Revision history

Table 1. Document revision history

Date	Revision	Changes
16-Jun-2010	1	Initial release.

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