STEVAL-ICB003V1

Smart touchpanel interface based on the STMPE1208S, STLED316S and STM8S

Data brief

Features

- 4 x 7-segment LED display
- 8 touchkeys
- 8 x 3 mm LEDs
- 1 bi-color LED for on/standby indication
- 1 interrupt assert LED
- On-board buzzer
- Rotary encoder for up/down functions
- Standby management for low power operation
- Relay for switching host power
- Power supply connector for single 9 V supply
- Wakeup feature from system standby
- Embedded in-circuit programming capability through SWIM interface
- Water level sensor input for 38-43 kHz water sensors
- RoHS compliant



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AM05056v1

To increase versatility, the design includes features such as rotary encoder interface, power management and a logic level input for a water level sensor.

Description

The STEVAL-ICB003V1 demonstration board is a general-purpose front panel solution suitable for white goods, utilizing a TLED316S LED driver, STMPE1208S capacitive touch sensor and an a STM8S207K6 microcontroller from the STM8 series of 8 bit microcontrollers.

The purpose of the board is to demonstrate the capabilities of ST's STLED316S, STMPE1208S and STM8S devices in a sophisticated front panel application targeted at the front panel market segment for DVD players, DVD recorders, set-top boxes, washing machines, etc., while keeping system cost as low as possible.

The design focuses on 3 key areas: standby management for low power consumption, general touchkey and rotary encoder input and water level sensing of a 38-43 kHz output from a water level sensor.

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1 Schematic circuits

Figure 1. Control and LED display

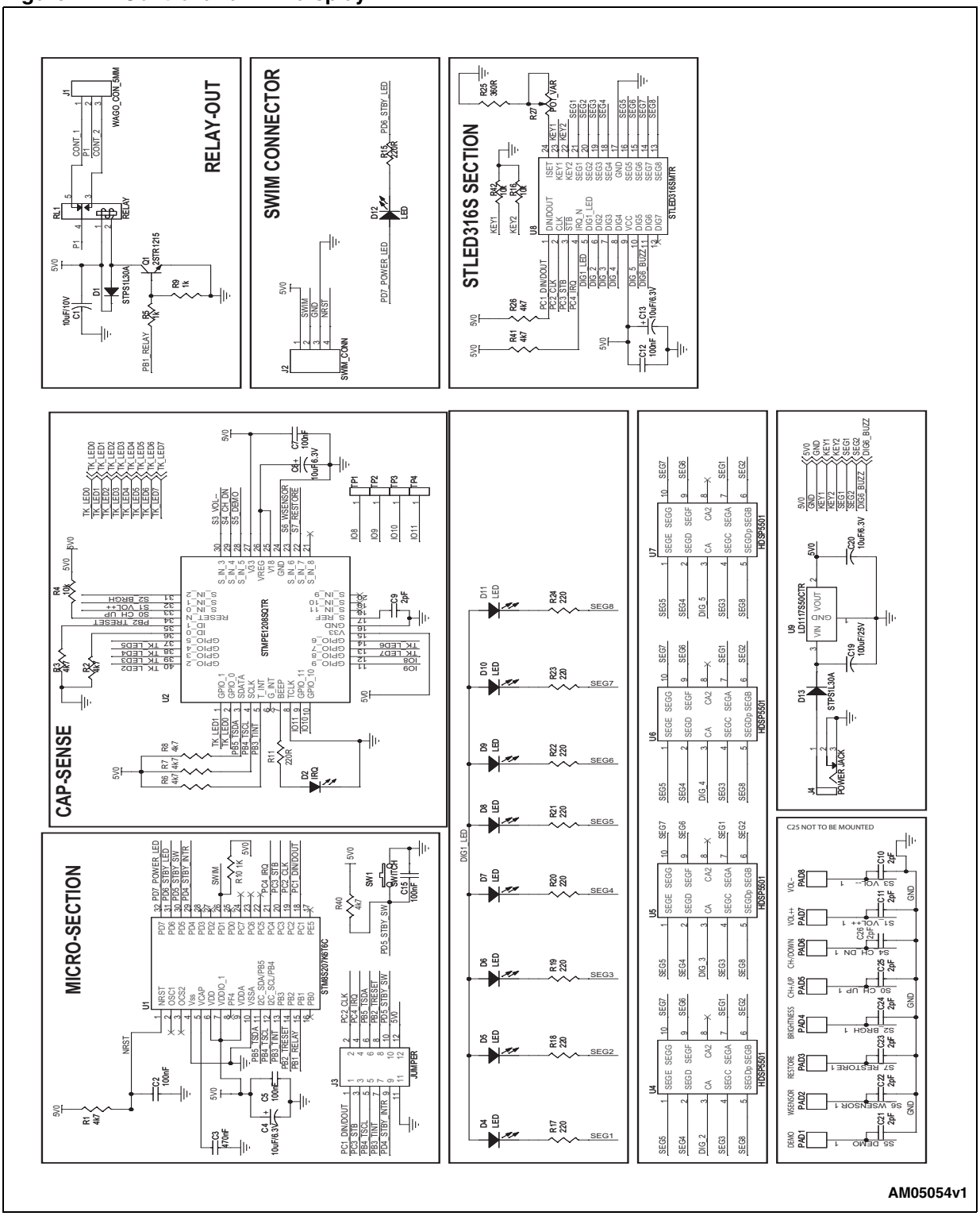
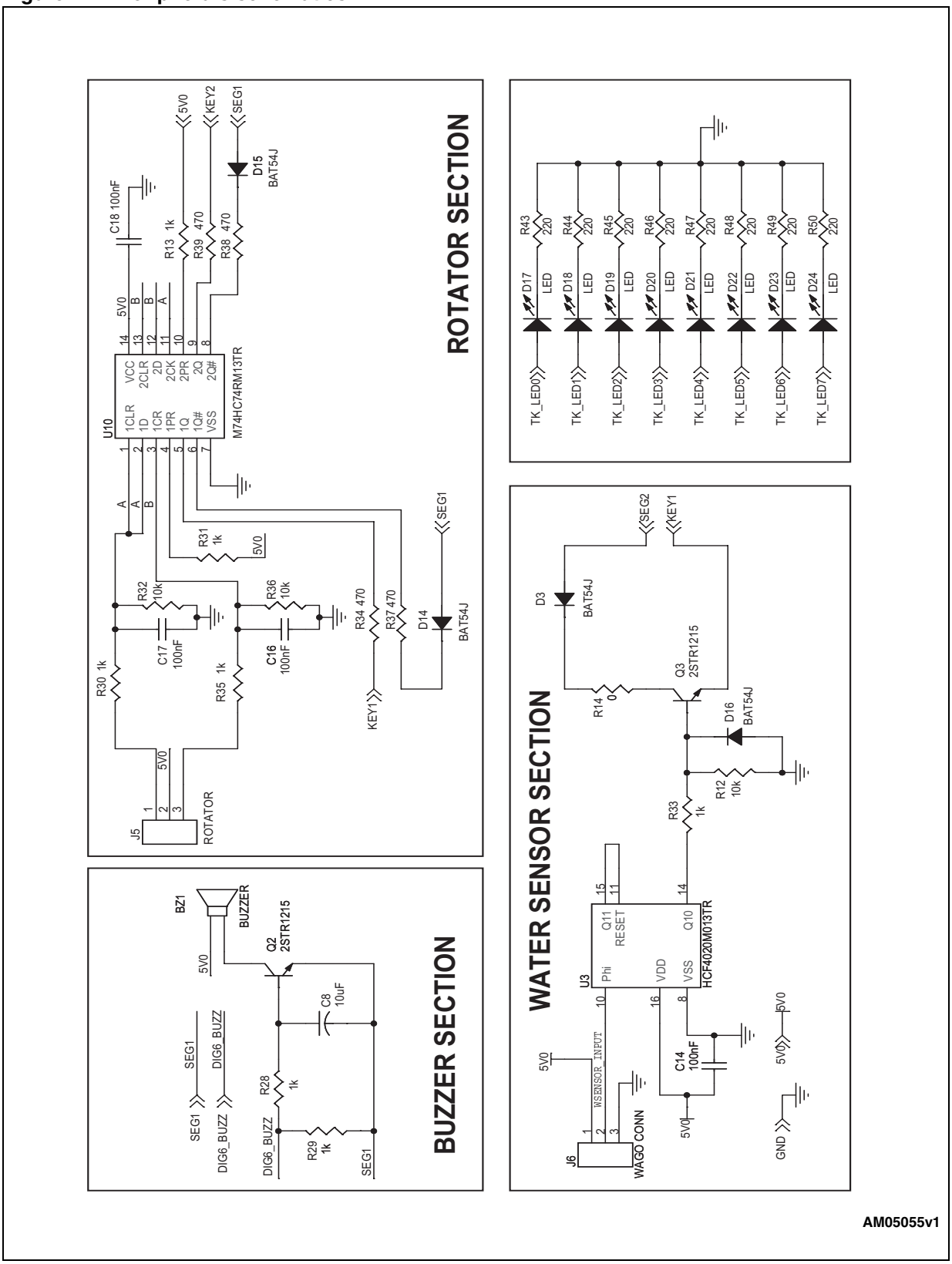


Figure 2. Peripherals schematics



2 Revision history

Table 1. Document revision history

Date	Revision	Changes
13-Jul-2009	1	Initial release.

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