



# STEVAL-IAS003V1

## Counter with STM8L101xx low-power microcontroller and LCD

Data brief

### Features

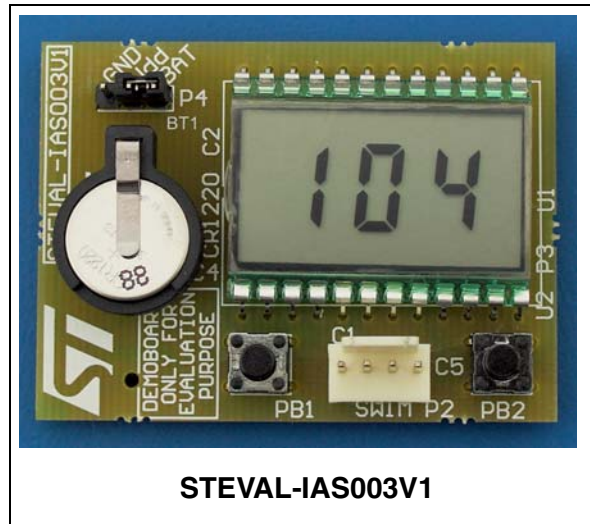
- 1.6  $\mu$ A consumption @ 18 Hz refresh rate
- 3 digit LCD glass driven by software
- 2 buttons
- CR1220 battery operated
- Minimum external components:
  - only 2 capacitors on top of mandatory parts (battery, LCD, MCU, buttons)
- Low-cost PCB (single layer)
- RoHS compliant

### Description

The STEVAL-IAS003V1 counter demonstration board is intended as an example for applications where a directly-driven LCD with the associated programmable functionality is needed. Targeted areas include the medical and healthcare field, battery-operated counters, meters and many others.

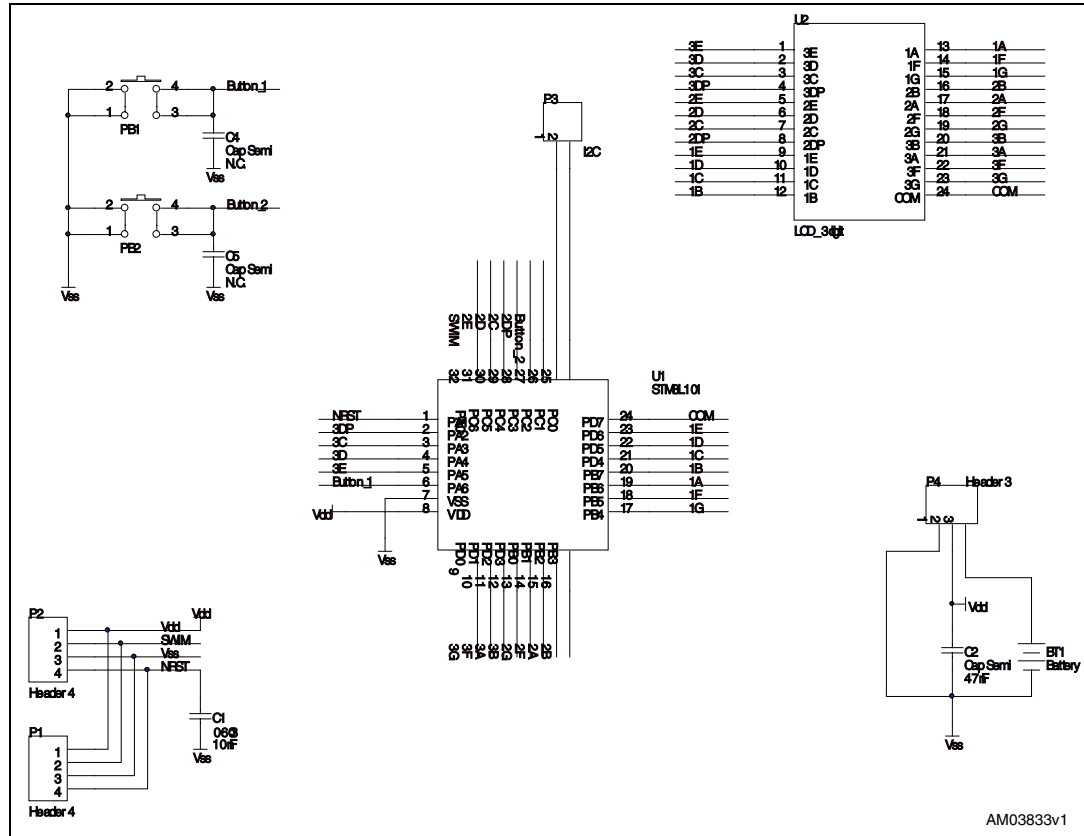
The application is focused on low power consumption, so the STM8L101xx MCU is used, and software is written to optimally use the low-power modes available. This results in an average current consumption for the entire application of below 1.5  $\mu$ A, including direct LCD drive, implemented by software.

Very low consumption is achieved by keeping the microcontroller in the active-halt low-power mode for most of the time. From this mode, the STM8L101xx is awakened regularly by the auto wake-up timer.



# 1 Circuit schematic

Figure 1. STEVAL-IAS003V1 schematic diagram



## 2 Revision history

**Table 1. Document revision history**

Date	Revision	Changes
10-Sep-2009	1	Initial release.

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