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What is "Embedded - Microcontrollers"?

"Embedded - Microcontrollers" refer to small, integrated circuits designed to perform specific tasks within larger systems. These microcontrollers are essentially compact computers on a single chip, containing a processor core, memory, and programmable input/output peripherals. They are called "embedded" because they are embedded within electronic devices to control various functions, rather than serving as standalone computers. Microcontrollers are crucial in modern electronics, providing the intelligence and control needed for a wide range of applications.

Applications of "Embedded - Microcontrollers"

Details	
Product Status	Obsolete
Core Processor	ST7
Core Size	8-Bit
Speed	12MHz
Connectivity	I²C, SPI, USB
Peripherals	DMA, PWM, WDT
Number of I/O	47
Program Memory Size	32KB (32K x 8)
Program Memory Type	FLASH
EEPROM Size	-
RAM Size	5K x 8
Voltage - Supply (Vcc/Vdd)	3V ~ 5.5V
Data Converters	A/D 8x8b
Oscillator Type	External
Operating Temperature	0°C ~ 70°C (TA)
Mounting Type	Surface Mount
Package / Case	64-LQFP
Supplier Device Package	-
Purchase URL	https://www.e-xfl.com/product-detail/stmicroelectronics/st72f651ar6t1e

STEVAL-IFS003V1

Temperature sensor board based on STLM75/STDS75 and ST72F651AR6

Data Brief

Features

- ST72F651 microcontroller used for temperature monitoring, data logging and fan speed regulation
- USB-powered board capable of working in stand-alone mode using the GUI

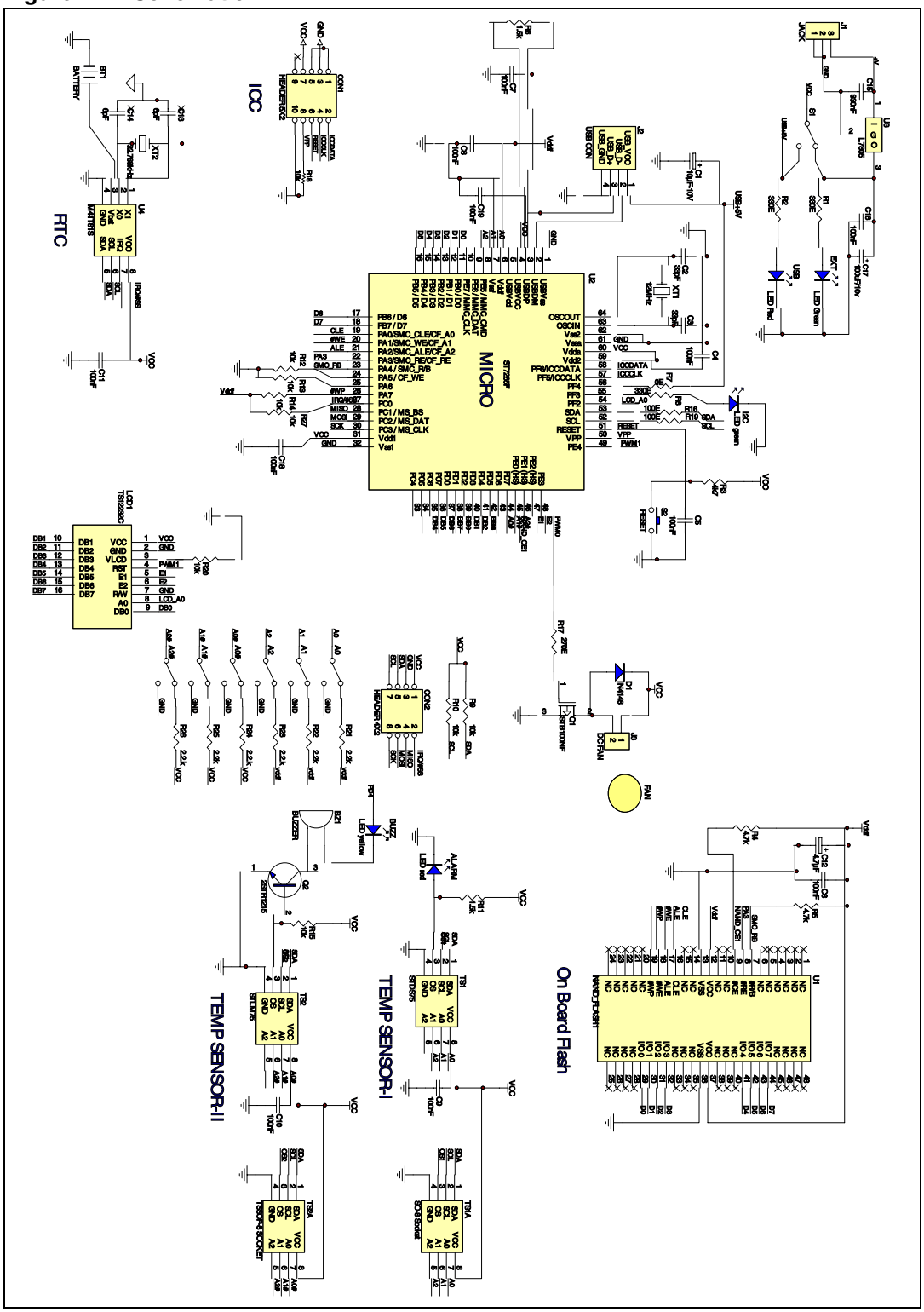
STEVAL-IFS003V1

Description

The purpose of this product evaluation board is to demonstrate the features of temperature sensors STDS75 and STLM75. The board consists of the ST72F651AR6 microcontroller, the STLM75 and STDS75 temperature sensors, and a NAND flash. The board functions in two operating modes: stand-alone / external power mode and USB-powered mode. When this product evaluation board is connected to a computer through a USB cable, it will also function as a mass storage device. The default state of the board is “mass storage mode”, and can be switched to “temperature sensor mode” using the GUI (graphical user interface).

1 Block diagram

Figure 1. Schematic



2 Revision history

Table 1. Document revision history

Date	Revision	Changes
26-Oct-2007	1	Initial release

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