SPC56M- Discovery

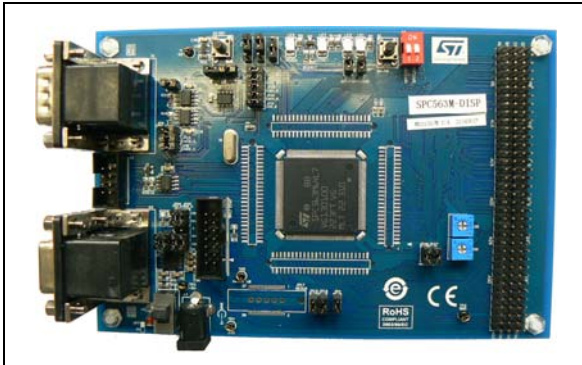## SPC563M-DISP: Discovery+ evaluation board

Features

- SPC563M64L7 32-bit Power Architecture® Book E compliant e200z335 CPU core, 1.5Mbyte on-chip in an LQFP176 package.

- Board Supply: Single 5VDC external power supply input.

- All GPIOs and DSPI/uSB signals accessible by a 4x36 100mil pin grid array allowing connection of an additional boards for dedicated applications.

- JTAG interface (7 x 2 male 100mil)

- 2 high speed CAN interface (DB9 male)

- 2 eSCI interface (DB9 female) or 1

- SCI interface + 1 K-LINE interface.

- 2 deserial serial peripheral interface (DSPI) modules (compatible with Microsecond Bus)

- 1 Optional high speed Nexus interface

- 4 LEDs: LE3 for 5 V power on,LE4 for Reset, LE1 and LE2 for GPIO99 and GPIO98 (for user)

- 12MHz crystal.

- 2 potentiometers for ADC quick evaluation

- Reset push button.

- Board size 145 x 97.5mm

Description

The SPC56M-DIS Discovery+ kit helps to discover SPC56 M line Power Architecture Microcontrollers with full access to CPUs, GPI/O's and peripherals such as CAN, UART, JTAG, K-Line, LIN at budget price.

Free ready-to-run application firmware examples are available inside SPC5Studio to support quick evaluation and development.

SPC5Studio includes visual configurable code generation engine, board support package (BSP), startup routines, interrupt services, free RTOS (optional) and a full set of low level drivers. SPC5Studio includes Hightec GNU "C" compiler, with a 30-days full free trial license. SPC5Studio is available for free download.

The SPC56 M line is designed to address cost sensitive powertrain and transmission applications.

The SPC56M key functionality is Time processing units (eTPU) a coprocessor to create events in sync with internal or external signals without flooding the CPU with interrupt to serve.

An E2E Community is available on ST WEB to get ST experts support in getting started quickly with SPC56 microcontrollers.

Table 1. Device summary

Order code	Reference
SPC563M-DISP	SPC56M DISCOVERY+ with SPC563M64L7

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Contents

1 System requirements, HW and SW resources

1.1 System requirements

- Windows PC (XP, 7)

1.2 Development toolchain

- SPC5Studio (includes Hightec GNU "C" compiler, with a 30-days full free trial license)
- SPC5-UDESTK

1.3 Demonstration software

Demonstration software is preloaded in the MCU flash memory for easy demonstration of the SPC563M64L7 in stand-alone mode.

2 Revision history

Table 2. Revision history

Date	Revision	Changes
24-Oct-2013	1	Initial release.
11-Dec-2013	2	Change the figure in the cover page.