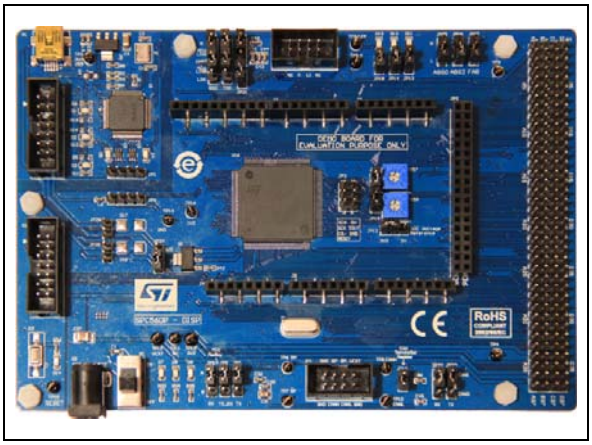
SPC56P-Discovery

SPC560P-DISP: Discovery+ evaluation board

Data brief - production data



Features

- SPC560P50L5 32-bit 64MHz e200z0h CPU;32-bit Power Architecture® Technology CPU, 576 KB Flash in an LQFP144 package.
- Shield Connectors (Arduino compatible).
- On-board USB-JTAG PLS debugger and HW selection mode to use stand-alone JTAG debuggers (2 x 7 male 100mil connector).
- Free 128 Kbyte code size limited debugging
- Board power supply: from the USB bus (5 V supply voltage) or through external +12 V PSU.
- All GPIOs and DSPI/USB signals accessible by a 4x37 100mil pin grid array allowing connection of an additional boards for dedicated applications.
- CAN, K-LINE, LIN, FlexRay interfaces.
- Main power switch.
- Reset push button.
- 2 potentiometers for ADC evaluation
- 12 MHz crystal.
- Board size 152 x 103 mm

Description

The SPC560P-DISP Discovery+ kit helps to discover SPC560 P line Power Architecture Microcontrollers with full access to CPUs, GPI/O's and peripherals such as CAN, JTAG, K-Line, LIN at budget price.

Dedicated connectors allow plugging Arduino shields (Arduino-compatible).

Free ready-to-run application firmware examples are available inside SPC5Studio (www.st.com/spc5studio) to support quick evaluation and development.

SPC5Studio includes visual configurable code generation engine, board support package (BSP), start-up 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 support. SPC5Studio is available for free download.

The SPC560 P line is designed to address cost sensitive chassis, airbag, electrical hydraulic power steering (EHPS), electric power steering (EPS), and electrical motor control applications.

An E2E Community is available on ST WEB.

Table 1. Device summary

Order code	Reference
SPC560P-DISP	SPC56P DISCOVERY+ with SPC560P50L5

This is information on a product in full production. For further information contact your local STMicroelectronics sales office.

www.st.com

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1 System requirements, HW and SW resources

1.1 System requirements

- Windows PC (Windows XP, Windows 7)

1.2 Development toolchain

- SPC5Studio (includes Hightec GNU "C" compiler, with a 30-days full free trial support)
- SPC5-UDESTK-SW (free 128 Kbyte code size limited PLS USB/JTAG debugging software for SPC5 MCUs)

1.3 Demonstration software

Demonstration software is preloaded in the MCU flash memory for easy demonstration of the SPC560P50L5 in stand-alone mode.

2 Revision history

Table 2. Revision history

Date	Revision	Changes
19-Feb-2014	1	Initial release.
19-Mar-2014	2	Updated Description.

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