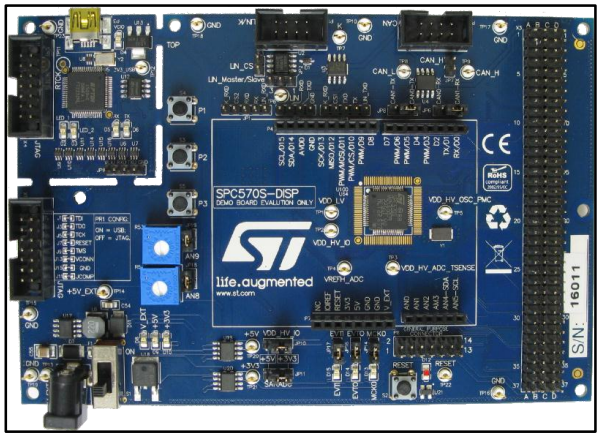
SPC57S-Discovery

SPC570S-DISP Discovery+ evaluation board

Data brief



Features

- The SPC570S50Ex 32-bit CPU implements two e200z0h processor cores:
  - Core_0 - Main core (80MHz)
  - Core_0s – Checker (safety)
- On-board USB-JTAG PLS debugger and HW selection mode to use it or a third party JTAG debuggers.
- 256 kByte code size limited debugging free of charge evaluation license included.
- Board power supply through the USB bus (5 V supply voltage) or external +12 V PSU.
- User push buttons and LEDs
- Reset button
- 2 potentiometers for ADC evaluation
- Extension headers (4x37 pin - 100 mil) for all device pins and for quick connection to prototyping expansion boards, additional modules and evaluation probing.
- JTAG interface (2x7 male 100mil)
- USB port (mini - B)
- 40 MHz crystal
- Board size 105 x 150mm

Description

The SPC57S-Discovery board helps you to discover SPC57 S Line Power Architecture® Microcontrollers with full access to CPUs, I/O signals 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 a free GCC compiler. SPC5Studio is available for free download. The SPC57 S Line is designed to address all Automotive Applications but as well industrial safety oriented applications.The SPC570S devices feature specific functions to make automotive applications with integrity level up to ASIL-D of ISO 26262. An E2E Community is available on ST WEB.

Table 1: Device summary

Order code	Reference
SPC570S-DISP	SPC57S-Discovery with SPC570S50E1

For further information contact your local STMicroelectronics sales office

www.st.com

1 System requirements,HW and SW resources

1.1 System requirements

- Windows PC
- USB type A to mini-B cable (included)

1.2 Development toolchain

- SPC5Studio

1.3 Demonstration software

Demonstration software is preloaded in the MCU flash memory for easy demonstration of the SPC570S-DISP in stand-alone mode. For more information and to download the latest version available, please refer to ST web.

2 Revision history

Table 2: Revision history

Date	Revision	Changes
09-Feb-2016	1	Initial release.
05-Apr-2016	2	Updated *"Features"* and *" Device summary"*.