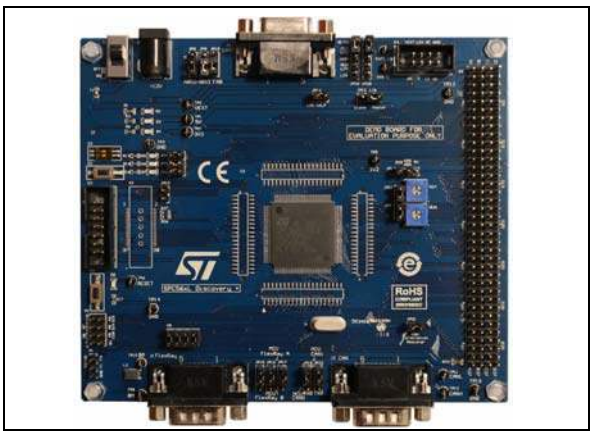
SPC56L-Discovery

SPC56EL70L5DISP: Discovery+ evaluation board

Data brief



Features

- Board Supply: Single 12 VDC external power supply input. Two regulators provide power voltages 5 V and 3.3 V.
- Main power switch and three power supply status LEDs (+12 V, +5 V and +3.3 V)
- All MCU signals accessible by a 37 x 4 100 mil pin grid array allowing connection of an additional board for dedicated applications.
- JTAG interface (7 x 2 male 100 mil connector)
- Two FlexRay channels with jumper enable and DB9 male connector.
- Two CAN channels with jumper enable and DB9 male connector
- K-Line interface.
- Two LIN interfaces (HW configurable)
- Two potentiometers for analog voltage input
- Three user LEDs.
- 40 MHz crystal.
- Reset push button.
- Specification:
  - Board size 115 x 135mm
  - 12 VDC center positive, 2.1 mm inner diameter.

Description

The SPC56xL Discovery+ kit helps you to discover SPC56L line Power Architecture® Microcontrollers with full access to CPUs, I/O signals and peripherals such as CAN, UART, FlexRay, JTAG, K-Line, LIN at budget price.

Free ready-to-run application firmware examples are available on www.st.com/SPC56Ldiscovery and inside SPC5Studio (www.st.com/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 SPC56xL family is designed to address all Automotive Applications but as well industrial safety oriented applications.

The SPC56xL devices featured specific functions to make the design of ASIL D/SIL-3 applications easier.

An E2E Community is available on ST WEB: https://my.st.com/public/STe2ecommunities/mcu.

Table 1. Device summary

Order code	Reference
SPC56EL70L5DISP	SPC56xL DISCOVERY+ with SPC56EL70L5

1 System requirements, HW and SW resources

1.1 System requirements

- Windows PC (2000, XP, Vista)
- PSU: Input 100-240 Vac (EU plug). Output 12V-2A

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 SPC56EL70L5 in stand-alone mode. For more information and to download the latest version available, please refer to www.st.com/SPC56Ldiscovery and www.st.com/spc5studio.

2 Revision history

Table 2. Revision history

Date	Revision	Changes
31-Jul-2013	1	Initial release.
25-Sep-2013	2	Updated Disclaimer.
01-Aug-2018	3	Updated *Section 1.2: Development toolchain*. Minor text changes.