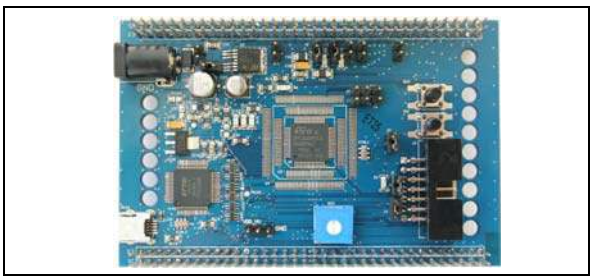
SPC56D-Discovery

SPC560D-DIS Discovery evaluation board

Data brief



Features

- SPC560D40L1 32-bit 48 MHz e200z0h CPU, 32-bit Power Architecture® Technology CPU, 256 kB Code Flash in an LQFP64 package.
- On-board USB-JTAG PLS debugger and HW selection mode to use stand-alone JTAG debuggers.
- Board power supply: through external +12 V PSU or from the USB bus (5 V supply voltage).
- Seven LEDs: D6 for 5 V power on,D2 for Reset, D101, D102, D103 for PLS debugger section, D7 and D8 for PC3 and PC2 outputs (for user)
- Two push buttons (reset and user)
- A potentiometers for ADC input (user)
- Two extension headers (2 x 36 pin - 100 mil) for all LQFP64 pins and for quick connection to prototyping boards, additional modules and easy probing.
- JTAG interface (2 x 7 male 100 mil connector)
- USB port (mini -B)
- 16 MHz crystal
- Specification:
- Board size 100 x 65 mm
- MCU: SPC560D40L1 - LQFP64
- 2 extension headers 2 x 36 pin - 100 mil
- DC connector (+12 V input)
- Mini USB - B
- JTAG 2 x 7 - 100 mil connector

Description

The SPC560D-DIS Discovery is a low cost and quick way to discover SPC56 D line.

Based on SPC56D40L1, the discovery board includes a JTAG debugger from PLS, LEDs, push buttons and extension headers to connect prototyping boards or additional modules.

PLS UDE software is available for free download and includes a perpetual 256 kByte. debugging/programming license.

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 support. SPC5Studio is available for free download.

The SPC56 D line is designed to address the specific need of entry level car body applications but as well many other markets where high temperature operation, high reliability, low power stand-by operation with quick wake up and real-time loads diagnostic are required. 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
SPC560D-DIS	SPC56D-Discovery with SPC560D40L1

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 (XP, Vista, 7 or 8)
- USB type A to mini-B cable‘Development toolchain
- SPC5Studio (includes Hightec GNU "C" compiler, with a 30-days full free trial support)

1.2 Demonstration software

Demonstration software is preloaded in the MCU flash memory for easy demonstration of the SPC560D40L1 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
04-Oct-2013	1	Initial release.
19-Mar-2014	2	Updated Description.
13-Jul-2015	3	Typos. Modified *Section 1.1: System requirements*.
03-Aug-2018	4	Updated *Features*. Minor text changes.

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