

SPC584B-DIS: Discovery kit featuring SPC58 4B Line MCU in eQFP64

Data brief

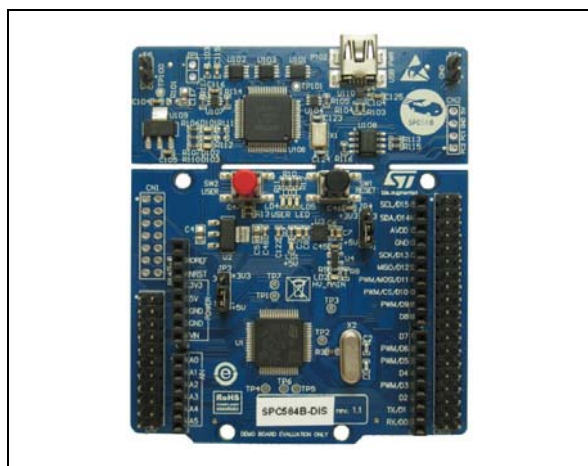


Table 1. Device summary

Order Code	Reference
SPC584B-DIS	SPC584B-DIS Discovery board with SPC584B70E1

Features

- Featuring SPC584B70E1, a 32-bit e200z4 core @120MHz, 32-bit Power Architecture Technology, 2MB Code Flash in eQFP64 package
- On-board PLS debugger and dedicated optional connector to plug a stand-alone JTAG debugger
- USB Virtual Communication port
- Two types of extension resources:
 - Extension headers for all device pins and for quick connection to prototyping expansion boards, additional modules and evaluation probing
 - Arduino Uno Revision 3 connectivity
- Flexible board power supply:
 - USB port (mini B - 5V)
 - external sources (DC): 7÷12 V, 5V or 3.3V
- Two push buttons: USER and RESET
- Eight LEDs:
 - 3 Integrated Programmer/Debugger
 - 3 LEDs User
 - 1 Reset
 - 1 Power LED: +5V

1 Description

The SPC584-DIS is the ideal discovery board for accelerating the development and securing a fast time-to-market, with a perfect balance among performances, functionalities and cost. Featuring SPC58 Chorus 4B Line microcontrollers, it addresses a wide range of automotive applications such as body and gateway, in which safety and security needs are growing.

SPC58 Chorus 4B Line is designed to meet ASIL-B functional safety level, in compliance with ISO26262, and it embeds a Hardware Security Module (HSM) meeting EVITA Medium level to grant protection and secure communication.

The board provides full access to all CPU's signals and GPIO's, and offers compatibility with Arduino shield, through dedicated connectors.

It offers easy debug with the on-board PLS debugger-programmer. PLS Universal Debug Engine Software is available for free download at <https://www.st.com/en/product/spc5-udestk-sw> and includes a code size limited full feature evaluation license.

Additional SW licenses are available at <https://www.st.com/en/product/spc5-udedebg>
Optional JTAG connector is available.

It also includes expansion connectors to connect prototyping boards or additional modules, as well as push switches and LEDs for HMI customization. ST's SPC5Studio, is an Eclipse-based Integrated Development Environment, providing a comprehensive framework to design, build and deploy your own embedded application. SPC5Studio is available for free download www.st.com/spc5studio and includes multiple free application firmware examples ready for use.

SPC584Bxx family provides a great scalability across lines offering pin-to-pin compatibility, for design-variants or future requirements, minimizing the challenges and securing the best time-to-market.

SPC584B-DIS board is fully Hardware compatible with SPC582B-DIS board; this will allow a seamless transition from SPC58 Chorus 4B Line to SPC58 Chorus 2B Line.

Learn more and share your experience joining ST Community at <https://community.st.com>.

2 System requirements, HW and SW resources

2.1 System requirements

- Windows PC

2.2 Development toolchain

SPC5Studio.

2.3 Demonstration software

Demonstration software is preloaded in the MCU flash memory for easy demonstration of the SPC584B-DIS in stand-alone mode. For more information and to download the latest version available, please refer to ST web.

3 Revision history

Table 2. Document revision history

Date	Revision	Changes
01-Aug-2018	1	Initial release.
18-Jul-2019	2	Updated title, <i>Features</i> and <i>Description</i> .
07-Aug-2019	3	Updated <i>Features</i> .
10-Jun-2020	4	Minor typos.

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