

## SPC584B-DIS: Discovery kit featuring SPC58 4B Line MCU in eTQFP64



**Features** 

- Featuring SPC584B70E1, a 32-bit e200z4 core at 120 MHz, 32-bit power architecture technology, 2 MB code flash in eTQFP64 package
- On-board PLS debugger and dedicated optional connector to plug a standalone 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 5 V)
  - External sources (DC): 7÷12 V, 5 V, or 3.3 V
- Two push buttons: USER and RESET
- Eight LEDs:
  - 3 integrated programmer/debugger
  - 3 LEDs user
  - 1 reset
  - 1 power LED: +5 V

#### Product status link

SPC584B-DIS

Product summary	
Order code	SPC584B-DIS
Reference	SPC584B discovery with SPC584B70E1

### **Description**

The SPC584B-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 the 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 software licenses are available at https://www.st.com/en/product/spc5udedebg 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 SPC5-STUDIO, is an eclipse-based integrated development environment, providing a comprehensive framework to design, build, and deploy your own embedded application. SPC5-STUDIO is available for free download from www.st.com/ spc5studio and includes multiple free application firmware examples ready for use.



The SPC584B 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.

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# 1 System requirements, HW and SW resources

## 1.1 System requirements

Windows PC

## 1.2 Development toolchain

SPC5-STUDIO

#### 1.3 Demonstration software

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

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# **Revision history**

Table 1. Document revision history

Date	Revision	Changes
01-Aug-2018	1	Initial release.
18-Jul-2019	2	Updated title, Features and Description.
07-Aug-2019 3	Updated Features.	
	Minor text changes.	
10-Jun-2020	4	Minor typos.
22-Jul-2024 5	Updated title and Features on cover page.	
	Minor text changes.	
02-Sep-2024	6	Updated Cover image and Device summary on cover page.
	O	Minor text changes.

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