



Description

The SPC58EC-DISP board is a help to discover the SPC58EC80E microcontroller with full access to CPUs, GPI/O's and peripherals such as ISO CAN FD, Ethernet, FlexRay, LIN, UART at budget price.

The SPC58EC-DISP board is designed to address body, networking with Safety ASIL-B applications, and Security HSM (Hardware Secure Module) EVITA Medium to secure on board communication systems in connected vehicles.

The discovery board includes a debugger-programmer from PLS, a JTAG connector and extension headers (4x37 pins) 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 (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.

SPC5Studio is available for free download.

An E2E Community is available on ST WEB

Features

- SPC58EC80E5 is 32-bit Power Architecture® e200z4d dual core, 4224 kB flash (4096 kB code flash + 128 kB data flash) in eTQFP144 package.
- Integrated programmer - debugger.
- JTAG interface (Standard 7x2 male 100mil)
- 2 ISO CAN FD port (DB9 connector)
- 1 Ethernet port.
- 1 FlexRay, 1 LIN (with transceiver).
- 1 USB virtual COM Port.
- Connectors Arduino UNO R3-compatible
- 3 Push buttons, 3 LEDs for user purpose.
- 2 potentiometers for ADC quick evaluation.
- Reset push button.
- All GPIOs and signals accessible by a 4x37 0.1" pin grid array allowing connection of an additional boards
- 12MHz crystal.
- Board Supply: 12 VDC (external power supply).
- Board size 150 x 101 mm

Table 1. Device summary

Order Code	Reference
SPC58EC-DISP	SPC58ECDiscovery with SPC58EC80E

1 System requirements, HW and SW resources

1.1 System requirements

- Windows PC
- USB cable: type A to mini-B
- PSU: 12VDC (2A)

1.2 Development toolchain

SPC5Studio.

1.3 Demonstration software

Demonstration software is preloaded in the MCU Flash memory for easy demonstration of the SPC58EC-DISP in stand-alone mode.

2 Revision history

Table 2. Document revision history

Date	Revision	Changes
19-Jul-2017	1	Initial release.

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