SPC574K-DISP: Discovery Evaluation Board
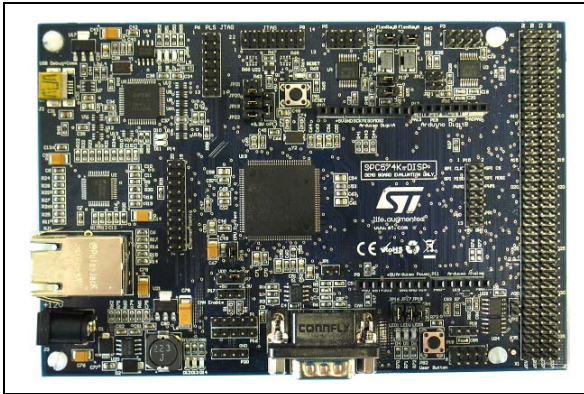
Features

- Microcontroller SPC574K72E5
    - Two main 32-bit Power Architecture CPU's core 200z4 running in lockstep
    - One 32-bit Power Architecture CPU's core I/O processor core e200z2
    - 2624 KB on-chip flash memory
- On-board USB-JTAG PLS debugger and HW selection mode to use a stand-alone JTAG debuggers.
- Board power supply through external +12V PSU.
- Communication interfaces
    - JTAG interface (2x7 male 100mil)
    - USB port (mini -B)"CAN with DB9 male connector and CAN FD transceiver."FlexRay
    - ETHERNET port
    - 40 MHz crystal.
    - Reset button.
    - User push button and 3 user LEDs
    - Extension headers (4x37 pin - 100 mil) for all device pins and for quick connection to prototyping and evaluation boards, additional modules and evaluation probing.
    - Board size 150 x 100mm.

Description

The SPC57K-Discovery board helps you to discover SPC57K line Power Architecture$^®$ Microcontrollers with full access to CPUs, I/O signals and peripherals such as CAN, UART, JTAG, K-Line, LIN at budget price.

Free ready-to-run application firmware examples are available inside SPC5Studio on www.st.com 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 MCUs SPC57K family targets automotive powertrain controller applications for four-cylinder gasoline and diesel engines, chassis control applications, transmission control applications, as well as low-end hybrid applications. It is designed to address all Automotive Applications but as well industrial safety oriented applications.

The SPC57K devices featured specific functions to make automotive applications with integrity level up to ASIL D of ISO 26262.

An E2E Community is available on ST WEB

Table 1. Device summary

Order codes	Reference
SPC574K-DISP	SPC57K-Discovery with SPC574K72E5

1 System requirements, HW and SW resources

1.1 System requirements

- Windows PC
- USB cable: type A to mini-B
- PSU: 12 V -2 A power supply (Included - EU Plug)

1.2 Development toolchain

SPC5Studio (includes Hightec GNU "C" compiler, with a 30-days full free trial support)

1.3 Demonstration software

Demonstration software is preloaded in the MCU flash memory for easy demonstration of the SPC574K-DISP in stand-alone mode.

For more information and to download the latest version available, please refer to ST web.

1   Revision history

Table 1. Document revision history

Date	Revision	Changes
19-Jan-2017	1	Initial release.
01-Aug-2018	2	Updated *Section 1.1: System requirements*. Minor text changes.