

Data brief

# SPC58XXADPT176S microcontroller premium evaluation board for SPC58XE84E7, SPC58ENXXE7 and SPC58XG84E7



#### **Features**

#### SPC58XXADPT176S

- Open top MCU socket
- Flexible MCU clocking options:
  - 40 MHz crystal EVB clock circuit
  - 8 MHz EVB clock oscillator circuit
  - External clock via SMA connector
- · User reset switch with reset status LEDs
- 14-pin standard JTAG connector
- 10-pin header connector for JTAG/LFAST LVDS interface
- 10-pin header connector for SIPI interface
- Minimodule dimension: 127 mm X 114.3 mm
- Max Top components height 19.4 mm
- PCB thickness 1.6 mm
- Max Bottom components height 3.5 mm
- · Standard connectors to SPC58XXMB

#### SPC58XXMB

- SPC58 modular evaluation system
- Single 12 V external power supply
- Four on-board regulators:
  - 5.0 V, 3.3 V and 1.25 V switching regulators
  - 5 V linear regulator for the ADC supplies and references
- Master power switch and regulator status LEDs
- Two 240-way high-density expansion connectors for MCU daughter cards
- All MCU signals readily accessible at a port-ordered group of 0.1" pitch headers
- · RS232/SCI physical interface and standard DB9 female connector
- Two FlexRAY channels interface with a DB9 connector (for both transceivers) and two alternative connectors
- · LINFlexD interface with two different style connectors
- Two high speed CAN-FD channels and two female standard DB9 connectors
- Ethernet interface with a standard RJ45 Ethernet connector
- One potentiometer for analog voltage input and four user switches and 4 user LEDs, freely connectable

#### Product status link

SPC58XXADPT176S

Product summary		
Order code	SPC58XXADPT176S	
Reference	Socketed mini module for SPC58 E/N/G in QFP176 package. Requires SPC58XXMB. (1)	
Order code	SPC58XXMB	
Reference	Motherboard for SPC58/ SPC57 family devices.	

 The MCU is not included, it must be purchased separately. Please contact your sales representative for more details.

#### **Description**

The SPC58XXADPT176S Premium Evaluation Boards System supports the 32-bit SPC58EE84E7, SPC58NE84E7, SPC58EN84E7, SPC58EG84E7 and SPC58NG84E7 STMicroelectronics' automotive microcontrollers.

The complete system consists of an SPC58XXMB motherboard and an SPC58XXADPT176S daughter card which plugs into the motherboard. Different



daughter cards are available for evaluating the whole family of device in all supported packages. All daughter cards are similar in design and concept.

The evaluation system (motherboard and daughter card) allows full access to the CPU, all the CPU's I/O signals, and the motherboard peripherals (such as CAN, SCI, LIN and FlexRAY). The daughter card itself can be used as a standalone unit when access to the I/O pins or peripherals is not needed.

The MCU is not included, it must be purchased separately. Please contact your sales representative for more details.

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### **Revision history**

**Table 1. Document revision history** 

Date	Version	Changes
02-Nov-2017	1	Initial release.
05-Mar-2019	2	Updated title, Description and Table 1: Device summary.
09-Dec-2019	3	Updated features.  Added product status link table and product summary table.  Minor text changes.
23-Jun-2020	4	Updated title, product summary and description in cover page.  Minor text changes.

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