

## SPC58XXADPT176S microcontroller premium evaluation board for SPC58XE84L7, SPC58ENXXL7 and SPC58XG84L7



### 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/SPC57XXMB

#### SPC58XXMB/SPC57XXMB

- 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             |  |
|---------------------------------|--|
| <a href="#">SPC58XXADPT176S</a> |  |
| Product summary                 |  |
| Order code                      | SPC58XXADPT176S  |
| Reference                       | Socketed mini module for SPC58 E/N/G in QFP176 package. Requires SPC57XXMB. <sup>(1)</sup> |
| Order code                      | SPC58XXMB  |
| Reference                       | Motherboard for SPC58/SPC57 family devices.  |
| Order code                      | SPC57XXMB  |
| Reference                       | Motherboard for SPC58/SPC57 family devices.  |

1. 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 SPC58EE84L7, SPC58NE84L7, SPC58ENXXL7, SPC58EG84L7 and SP58NG84L7 STMicroelectronics' automotive microcontrollers.

The complete system consists of an SPC58XXMB/SPC57XXMB 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.

## Revision history

**Table 1. Document revision history**

| Date        | Version | Changes  |
|-------------|---------|--|
| 02-Nov-2017 | 1       | Initial release.   |
| 05-Mar-2019 | 2       | Updated title, Description and <i>Table 1: Device summary</i> .  |
| 09-Dec-2019 | 3       | Updated features.<br>Added product status link table and product summary table.<br>Minor text changes. |

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