

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

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

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.

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

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. 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.

IMPORTANT NOTICE – PLEASE READ CAREFULLY

STMicroelectronics NV and its subsidiaries (“ST”) reserve the right to make changes, corrections, enhancements, modifications, and improvements to ST products and/or to this document at any time without notice. Purchasers should obtain the latest relevant information on ST products before placing orders. ST products are sold pursuant to ST’s terms and conditions of sale in place at the time of order acknowledgement.

Purchasers are solely responsible for the choice, selection, and use of ST products and ST assumes no liability for application assistance or the design of Purchasers’ products.

No license, express or implied, to any intellectual property right is granted by ST herein.

Resale of ST products with provisions different from the information set forth herein shall void any warranty granted by ST for such product.

ST and the ST logo are trademarks of ST. For additional information about ST trademarks, please refer to www.st.com/trademarks. All other product or service names are the property of their respective owners.

Information in this document supersedes and replaces information previously supplied in any prior versions of this document.

© 2020 STMicroelectronics – All rights reserved