

SPC58NHADPT302S premium evaluation board for SPC58 H line



Features

SPC58NHADPT302S

- Open top MCU socket for BGA 302 package
- 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 LEDs status
- 5.0 V standalone supply with on board 1.2 V and 3.3 V regulator
- 1 GB Ethernet interface with RJ45
- eMMC onboard 8GB Flash memory
- eMMC SD card reader JEDEC/MMC standard version 5.0 compliant
- 10-pin Interprocessor SIPI connector
- 14-pin standard JTAG connector
- 38-pin Mictor Nexus parallel connector
- 10-pin JTAG/LFAST SAMTEC connector
- Three 5x2 I/O Connector: GPIO, AN, SPI, CAN, LIN (No transceiver)
- Mini module dimensions: 133.7 mm X 118.4 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 SPC58NHADPT302S Premium Evaluation Boards System supports the 32-bit SPC58 H line STMicroelectronics' automotive microcontrollers.

Product status link	
SPC58NHADPT302S	
Product summary	
Order code	SPC58NHADPT302S
Reference	Socketed mini module for SPC58 H line, in BGA302 package. Works with SPC58XXMB (optional). ⁽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.

The complete system consists of a motherboard and an [SPC58NHADPT302S](#) daughter card which plugs into the motherboard. Different daughter cards are available for evaluating the whole family of the 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
30-Nov-2018	1	Initial release.
13-Dec-2019	2	Updated features. Added product status link table and product summary table. Minor text changes.
16-Feb-2021	3	Removed SPC57XXMB reference. 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.

© 2021 STMicroelectronics – All rights reserved