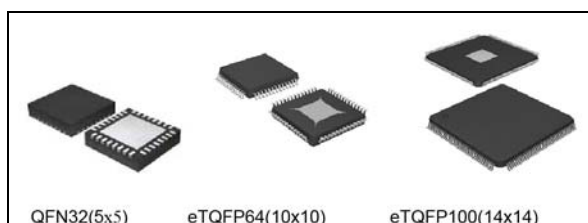


## A scalable approach to your body, networking and security platforms

Data brief



### Features

- Package availability ranges from QFN32 up to the eTQFP100
- Core: single z2d core up to 80 MHz
- Code: 512 kbytes to 1 Mbytes Flash
- Data: 64 kbytes data Flash
- RAM: up to 96 kbytes RAM
- Timer: 32ch, 16-bit counter timed I/O
- ADC: 32ch 1x 12-bit
- Networking: Up to 6xLIN, 7 x ISO CAN FD
- Low Power: HALT, STOP and STBY Smart Standby Unit
- Safety: ASIL-B, CRC unit, FCCU
- Other: MPU, eDMA, 4xSPI, I2C, Cross Triggering Unit, PIT, RTC/API, STM
- Package: QFN32, 2TQFP64, eTQFP100
- Supply: 5V or 3.3V with internal regulator
- Temperature: -40°C / +105°C or +125°C

### Description

The SPC58 2B-Line constitutes a general-purpose MCU family targeting Body, Networking and Security applications. Built on the legacy of successful 90nm products, SPC56xB/C/D, this new product generation in 40nm offers the widest range of compatible devices from 512k up to 6M bytes Flash combined with the latest communication interfaces like ISO CAN FD and Ethernet with AVB capability.

Designed according to ISO 26262, the SPC58 B/C/G-Lines family supports ASIL-B (optional ASIL-D) as well as a high Security level according to EVITA medium.

The SPC58 2B-Line offers a high integrated, high performance devices available in high-efficiency pin count packages like eTQFP100 featuring an e200z2 core with seven ISO CAN FD. The 2B-Line is fully scalable and compatible up to eLQFP100. The 40nm technology allows to further reduce the power consumption in RUN mode, while the advanced low power modes manage even complex contact monitoring sequences in STANDBY mode and without CPU intervention.

**Table 1. Device summary**

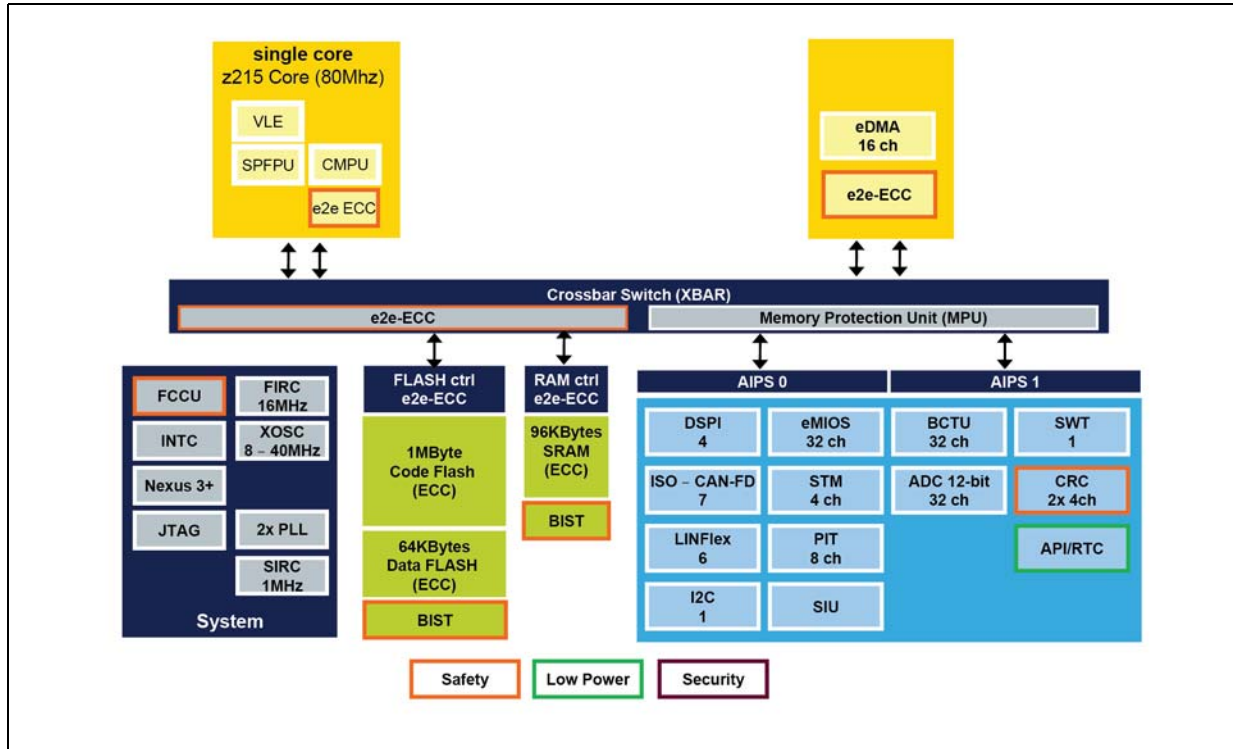
Part number			Package	References
512 KByte	768 KByte	1 mByte		
SPC582B50Q2	SPC582B54Q2	SPC582B60Q2	QFN32	SPC582BXX
SPC582B50E1	SPC582B54E1	SPC582B60E1	eTQFP64	
SPC582B50E3	SPC582B54E3	SPC582B60E3	eTQFP100	

# 1 Overview

## 1.1 Block diagram

Functional blocks diagram of SPC58 2B-Line MCU.

Figure 1. Block diagram



## 2 Software library

The product family is provided with a set of software libraries downloadable by ST web, registration is required, to facilitate application development.

- The offer includes:
- Flash drivers for run-time and off-line device programming
- MCAL developed and distributed by ST
- Core Self Test
- Safety adapted MCAL
- RTOS/Kernel RTOS from ETAS, Vector and Green Hills products
- AS BSW from Vector Informatik GmbH

### 2.1 Tools

A set of ST and third parties tools are available to explore the product family starting from budgetary cost evaluation boards to top class solutions.

Figure 2. Third parties tools



### 3 Revision history

Table 2. Document revision history

Date	Revision	Changes
06-Mar-2017	1	Initial release.

**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. 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.

© 2017 STMicroelectronics – All rights reserved

## Данный компонент на территории Российской Федерации

### Вы можете приобрести в компании MosChip.

Для оперативного оформления запроса Вам необходимо перейти по данной ссылке:

<http://moschip.ru/get-element>

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

В нашем ассортименте представлены ведущие мировые производители активных и пассивных электронных компонентов.

Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

### Офис по работе с юридическими лицами:

105318, г.Москва, ул.Щербаковская д.3, офис 1107, 1118, ДЦ «Щербаковский»

Телефон: +7 495 668-12-70 (многоканальный)

Факс: +7 495 668-12-70 (доб.304)

E-mail: [info@moschip.ru](mailto:info@moschip.ru)

Skype отдела продаж:

moschip.ru

moschip.ru\_4

moschip.ru\_6

moschip.ru\_9