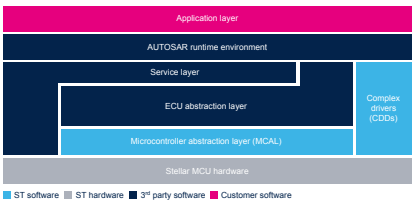
SR6PXMCAL/A20, SR6GXMCAL/A20

Data brief

Stellar SR6 Px and Gx lines–MCU MCAL



Stellar

Product summary	
MCU MCAL reference	**Part number**
SR6PXMCAL/A20	SR6P3x
	SR6P6x
SR6GXMCAL/A20	SR6G6x
	SR6G7x

Features

- Designed for automotive applications
- Compliant with AUTOSAR release 20-11with extension to R22-1 for multicore and to R24-11 for Ethernet
- Compliant with MISRA C® guidelines
- Optimized code
- Supported standard drivers: MCU, BMC, WDG, GPT, FLASH, MEM, FEE, FEE_MEMACC, SPI, CAN, LIN, FR, ETH, ADC, DIO, PORT, ICU, OCU, PWM
- Supported complex drivers: CRYPTO AESL, DMA, I²C, UART (ask for the full list to ST representative)
- Support compilers of Hightec and GHS
- Quality package
- User manual and integration manual
- Safety kit for certification up to ASIL-D

Description

AUTOSAR is a standardized automotive software architecture that facilitates the exchange and update of software and hardware throughout the service life of a vehicle. It enables a transition from electronic control unit (ECU)-specific software development to an application-oriented approach.

ST provides for the Stellar SR6 automotive MCUs a complete set of drivers for the AUTOSAR microcontroller abstraction layer (MCAL). With MCAL drivers, a system supplier can use one set of standardized basic software drivers across different applications within a single configuration tool. ST develops MCAL drivers in-house, leveraging knowledge of hardware peripherals to create efficient and optimized drivers. An ISO 26262–certified process is applied to the design and implementation of MCAL drivers.

The complete AUTOSAR suite is provided in close cooperation with software partners, allowing reuse of their long-term software experience. As a result, an optimized AUTOSAR software bundle is available.

AUTOSAR ST MCAL is an ST-licensed product. To order an activation code, contact ST local representatives or ST franchised distributors.

1 General information

Stellar SR6 devices embed the Arm® Cortex®-R52+ and Cortex®-M4 cores.

For information on the Arm® Cortex®-R52+ and Cortex®-M4 cores, refer to the technical reference manuals, available from the www.arm.com website.

Note: Arm and Cortex are registered trademarks of Arm Limited (or its subsidiaries or its affiliates) in the US and/or elsewhere.

arm

Revision history

Table 1. **Document revision history**

Date	Revision	Changes
29-Jan-2026	1	Initial release.

IMPORTANT NOTICE – 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.

In the event of any conflict between the provisions of this document and the provisions of any contractual arrangement in force between the purchasers and ST, the provisions of such contractual arrangement shall prevail.

The 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 acknowledgment.

The 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 the 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.

If the purchasers identify an ST product that meets their functional and performance requirements but that is not designated for the purchasers' market segment, the purchasers shall contact ST for more information.

ST and the ST logo are trademarks of ST. For additional information about ST trademarks, 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.