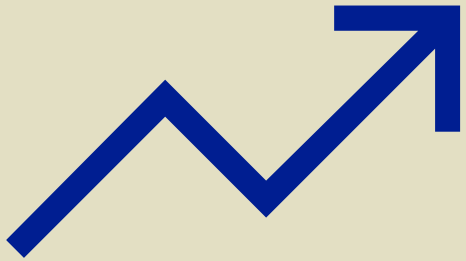
New Stellar G gateway and body

Product presentation



Meet the new Stellar G portfolio.



Stellar G3
I/O aggregation

NEW

Safe observer
Simple diagnostic
End point actuation
Audio-over-Ethernet

Stellar G5
Zonal controller Gateway

NEW

Safe observer
Body function
Thermal management
Ethernet ring switch
Audio-over-Ethernet

Stellar G6/G7
Zonal controller
X-domain controller

Safe observer
VCU offload
Comfort and Smart Access
OTA manager
Diagnostic and security
Intelligent power distribution
Climate control, AoE

More Stellar G available soon.

Stellar G portfolio

Scalable through different OEM implementations

Enable connectivity and safety

Zonal controller - X-domain controller
Safe observer
VCU offload
Comfort and Smart Access
OTA manager
Diagnostic and security
Intelligent power distribution
Climate control

Zonal controller - Gateway
Safe observer
Body function
Thermal management
Ethernet ring switch, AoE

I/O aggregation
Safe observer
Simple diagnostic
End point actuation
Embedded Switch, AoE

Stellar G 3.3V	Memory NVM/RAM sizes	Processing cores/checkers	Connectivity Ethernet, CAN FD
G7 Available now	**NVM/OTA 40M RAM 9.2M**	6/4 5/5	2x 1 Gbps Eth 20x CAN FD
G6 For design only	**NVM 31M RAM 3.8M**	4/2 3/3	2x 1 Gbps Eth **L2/L3 switch** 16x CAN FD
G5 Sampling Q4'26	**NVM 17M RAM 3.8M**	**4/2 3/3**	**3x 1 Gbps Eth 3x 10BT1S L2/L3 switch 16x CAN FD**
G3 Sampling now	**NVM 16M RAM 1.6**	**4/0 2/2**	**2x 1 Gbps Eth 1x 10BT1S L2/L3 switch 8x CAN FD**

NPU+Neon — With **NeuralART** HW accelerated Edge AI

Neon — Software based Edge AI

Stellar G3 Zonal & body integration

Highly-integrated MCU, built for advanced communication in SDVs while driving system-level cost savings

ASIL-D high-performance compute

- Quad ARM Cortex-R52® processors 500MHz
- Split-lock or lock-step mode for flexible safety and performance
- Hardware based isolation for multi-application integration

Extensible xMemory up to 17 MB for easier OTA updates

- First next generation NVM qualified for automotive
- Large capacity thanks to the exceptional density



Advanced communication

- Integrated Ethernet Switch up to 4 virtualized ports
- Audio over Ethernet with integrated PLL/clock recovery

Low power and high I/Os integration

- 50% more I/Os available versus market standards (*)
- Versatile low power mode with standby and smart power

Stellar G5 Zonal & body integration

AI-Accelerated gateway and zone-control consolidation for software-defined vehicles

High-performance computing with AI acceleration

- Six Arm Cortex-R52® cores running at 500 MHz, ASIL-D-ready
- Integrated NeuralART™ NPU for edge AI and intelligent in-vehicle processing
- Flexible safety modes with split-lock or lock-step operation

Extensible xMemory up to 16 MB

- High-density, automotive-qualified PCM for large-capacity non-volatile memory



Secure and advanced in-vehicle communication

- Integrated Gigabit Ethernet switch with up to four virtualized ports and support for TSN
- Hardware-based isolation to support multiple applications on one device
- Audio over Ethernet with integrated PLL and clock recovery

High I/O integration enabling more compact system designs

- Up to 50% more I/Os compared with market standards
- Versatile low-power modes, including standby and smart-power features

What the Stellar SR6**G3/G5** brings in.

xMemory
With up to 16 MB G3 & 17 MB G5
Continuous innovation for SDV

HW based virtualization
For multi application isolation

Safe & real-time performance
Split-lock ARM Cortex-R52® 500MHz
AI acceleration on Stellar G5

Advanced low power modes
Standby and smart power support



Modern automotive networks
Gb eth, 10Base-T1S, CAN-XL

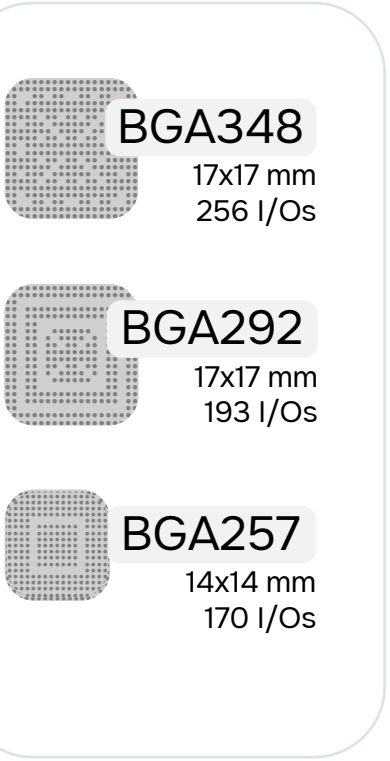
Integrated ethernet switch
Cost-efficient network topologies

Audio over Ethernet
Embedded PLL/clock recovery

Superior I/O integration
Dense analog/timed I/Os

Stellar SR6G3 block diagram.

Parts	SR6G3xx90x	SR6G3xxXMx
NVM configurations	Fixed 8.5MB	**xMemory** up to 16 MB



Memories

- RAM 1632KB
- Code NVM16 MB
- Data NVM 256KB
- Octal SPI Hyperbus

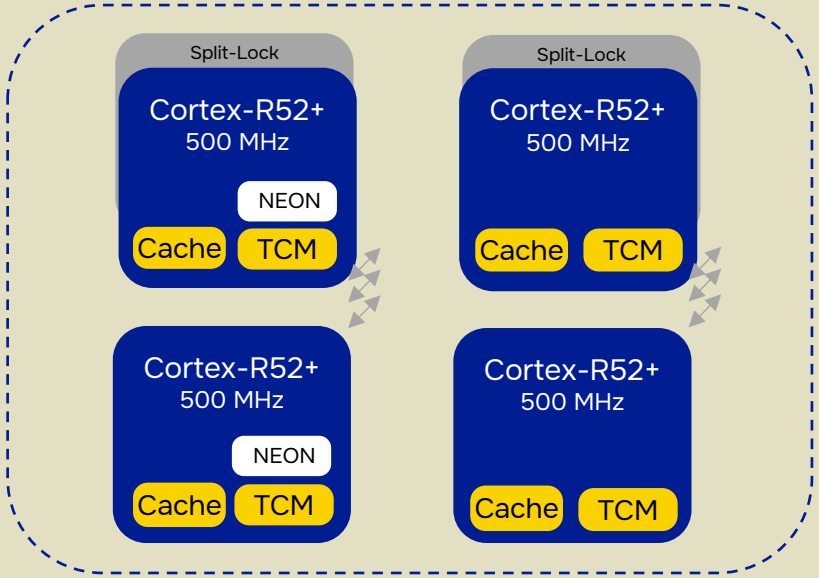
System

- HW based embedded virtualization
- Functional safety ASIL B/D
- Low-power module
- Checksum Direct memory Access
- Debug

Connectivity

- 2x Ethernet ports 100Mbit/s - 1Gbit/s
- 10BASE-T1S
- CAN FD & CAN XL
- PSI5
- SENT
- I2S/TDM
- LIN
- I2C
- SPI
- Audio over Ethernet

Safe interconnect / Firewalling



Accelerators

- Accelerator with 1x Cortex-M4
- ETHERNET Switch L2/L3

Analog / Timers

- SAR ADCs
- Low power ADC
- Generic timer module

Security

- HSM
- Crypto accelerator



© STMicroelectronics - All rights reserved. ST logo is a trademark or a registered trademark of STMicroelectronics International NV or its affiliates in the EU and/or other countries. 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.