

SAFEASSURE FUNCTIONAL SAFETY PROGRAM

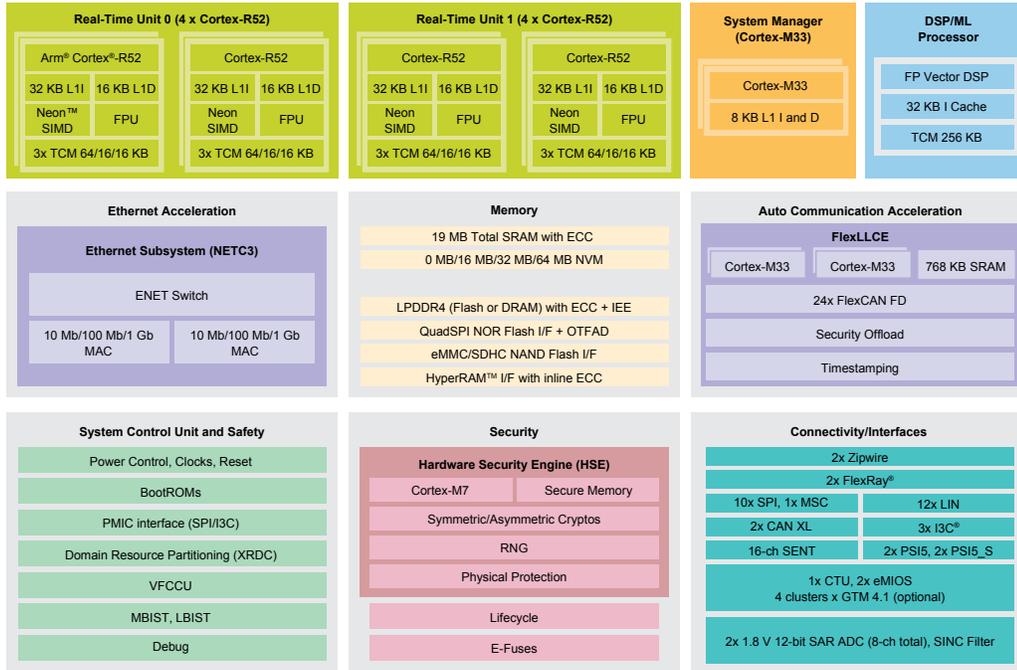
Functional safety. Simplified.

The S32Z2 processors are part of NXP's SafeAssure functional safety program, which is designed to help system manufacturers more easily achieve system compliance with International Standards Organization (ISO) 26262 and

International Electrotechnical Commission (IEC) 61508 functional safety standards. The program highlights our hardware and software solutions that are optimally designed to support functional safety implementations and come with a rich set of enablement collateral.

For more information, visit www.nxp.com/SafeAssure.

S32Z2 SAFE AND SECURE HIGH-PERFORMANCE REAL-TIME PROCESSORS



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Key Features	Benefit(s)
Up to gigahertz-class real-time processing	Highest performance real-time processors beyond traditional microcontrollers (MCUs) to support more applications integration and more complex control applications
"Core-to-Pin" hardware virtualization	End-to-end, hardware isolation for diverse, multi-tenant real-time applications, providing freedom from interference, improved system resiliency for high availability and support for ASIL D functional safety applications
Up to 64 MB of flash memory	Scalable solution that can support larger applications and storage than traditional MCUs. Supports larger zero-downtime Over-the-Air (OTA) updates
LPDDR interface for DRAM and flash expansion memory	Supports eExecute-in-Place (XiP) for large applications and ability to support AUTOSAR Adaptive Platform island for software-defined vehicles (SDV)
Integrated DSP/ML processor	Accelerates advanced, predictive control algorithms using math/digital signal processing (DSP) and machine learning (ML)
Advanced networking with integrated Time-Sensitive Networking (TSN) Gigabit Ethernet switch and flexible communications accelerator	Provides Ethernet networking for zonal architectures and multi-chip, real-time processing farms and efficient CAN data filtering and routing to provide data seamlessly to virtual ECUs
Zipwire interprocessor communication interface	Supports remote actuation for coordinated processing
Optional complex timers support	Supports advanced, time-critical control applications
Certified for ISO/SAE 21434 with Hardware Security Engine (HSE) and safe cryptography accelerators for LPDDR and CAN interfaces	Provides accelerated Public Key Infrastructure (PKI) support for secure boot and Over-the-Air (OTA) upgradability. Enhanced safety and security for memory and CAN interfaces

www.nxp.com/S32Z2

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