



NPI Communicator

S32K388 General-Purpose Automotive MCU

The **S32K388** is the latest addition to the S32K3 family of microcontrollers designed for automotive and general purpose applications.

Based on the 32-bit Arm® Cortex®-M7, the S32K388 offers high performance with options for single, dual or lockstep core configurations. It features Ethernet TSN/AVB, CAN FD and the larger number of FlexIOs in the family (202) for versatile communications options; and is designed with low-power configuration modes and fast wake-up capabilities. It complies with ISO 26262 up to ASIL D.



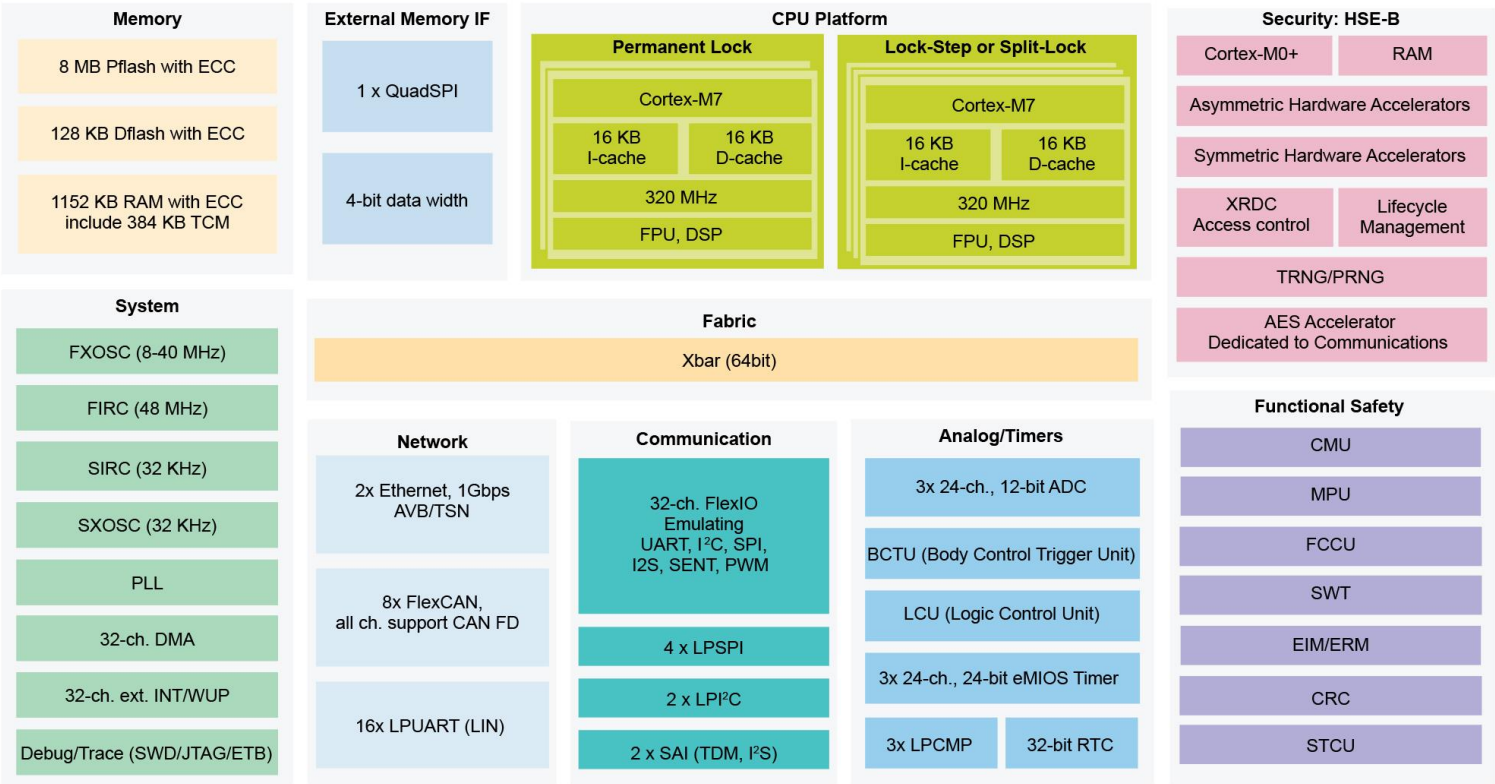
S32K388 is available for ordering NOW. Mass market launch is planned in July 23rd.

Features:

- **S32K388EVB-Q289** board, featuring the [TJA1153 transceiver](#)
- 8 MB program flash memory, 128 KB data flash memory, 1MB RAM
- HSE-B + AES accelerator
- 12-bit 1 Msps ADC, 16-bit eMIOS timer with logic control unit for motor control
- Ethernet TSN/AVB (100 Mbps/1 Gbps), CAN FD, FlexIO (SPI/IIC/IIS/SENT protocol), serial audio interface, QSPI

Software Enablement:

- Full AUTOSAR® Adaptive and Classic support, advanced Real-Time Drivers (RTD), virtualization options.
- Free of charge S32 Design Studio IDE (Eclipse, GCC and debugger) and S32 Config Tool (pins, clocks, peripherals) with third-party compilers and debuggers.
- Free of charge real-time drivers for AUTOSAR and non-AUTOSAR use and up to ASIL D compliant
- Configuration tools for both AUTOSAR and non-AUTOSAR users
- Free of charge security firmware: FlexHSE compliant NXP supplied, designed for ISO 21434
- S32 Safety Software Framework (SAF): Six fault detection and reaction libraries
- Free of charge safety peripheral drivers (SPD)
- Structural core self-test (SCST)
- Free of charge inter-platform communication framework (IPCF): Middleware for multi-core, multi-OS communication in single- and multi-chip systems
- Free of charge model-based design toolbox (MBDT) for MATLAB®: NXP supplied plug-in for Simulink® environment



S32K388EVB-Q289

Evaluation and development board for general-purpose industrial and automotive applications. The S32K388EVB-Q289 offers a multicore mode, HSE_B security engine, OTA support, advanced connectivity, 2 x 1 Gbit Ethernet ports and low power.

The S32K388EVB-Q289 offers a standard-based form factor compatible with the Arduino® UNO pin layout, providing a broad range of expansion board options for quick application prototyping.



S32K388 ENABLEMENT



COLLATERAL

AVAILABLE: [S32K3 MCU family](#) – brochure
AVAILABLE: [Motor Control Solutions based on S32K3 MCUs](#) – brochure



SUPPORT COMMUNITIES

AVAILABLE: [S32K microcontrollers](#)
AVAILABLE: [S32 Design Studio](#)
AVAILABLE: [FreeMASTER](#)
AVAILABLE: [Model-Based Design Toolbox \(MBDT\)](#)



DEVELOPMENT RESOURCES

AVAILABLE: [S32K388EVB-Q289 tool page](#)
AVAILABLE: [S32K388EVB-Q289 online GET STARTED](#)
AVAILABLE: [S32K388EVB-Q289 Delsign Files](#)
AVAILABLE: [S32DS IDE for S32 Platform](#)
AVAILABLE: [RTD for S32K3](#)
AVAILABLE: [FreeMASTER debugging tool](#)
AVAILABLE: [Model-Based Design Toolbox \(MBDT\)](#)
AVAILABLE: [Inter-Platform Comms Framework \(IPCF\)](#)
AVAILABLE: [Safety Peripheral Drivers \(SPD\)](#)
AVAILABLE: [S32 Safety Software Framework \(SAF\) for S32K3xx](#)
AVAILABLE: [Structural Core Self-Test \(SCST\)](#)
AVAILABLE: [ISELED Driver](#)

· REMOVE THE BELOW SECTION IF YOU WANT TO RE-SEND TO CUSTOMERS ·

S32K388 DISTRIBUTION-ONLY MATERIAL



ENCLOSED

- Communicator
- S32K3 SKU Requirements



DistyNet


- [6-pack](#)
- [SKU Requirements](#)
- [Attach List](#)




CONTACTS

[Sneha Vadde](#) for product questions. [Dacil Cruz](#) for MarCom affairs.
Check our [S32K Engineering Support Community](#)

S32K388 SUGGESTED STOCKING

 SILICON PART NUMBER	DESCRIPTION	Flash Size / RAM	PACKAGE	AVAILABLE	MOQ	/Suggested STOCKING	LEAD-TIME
S32K388HHT0MJBST	S32K388 Arm Cortex-M7, 320MHz, 8 MB Flash, CAN FD, HSE B security, 289 MAPBGA – S32K MCUs for General-Purpose	8 MB / 1 MB	289 MAPBGA	NOW	760	400	18 weeks

 TOOL PART NUMBER	DESCRIPTION	SUPPORTED DEVICE	AVAILABLE	/Suggested STOCKING	LEAD-TIME
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S32K388EVB-Q289	S32K388EVB-Q289 Evaluation and Development Board for General-Purpose Industrial and Automotive applications	S32K388	NOW	2	18 weeks
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CALL TO ACTION:

Please use this communicator to build your own product and board pages and use the recommended stocking to enter your orders.