



S32K3x4-Q172 General-Purpose Development Board

S32K3X4EVB-Q172

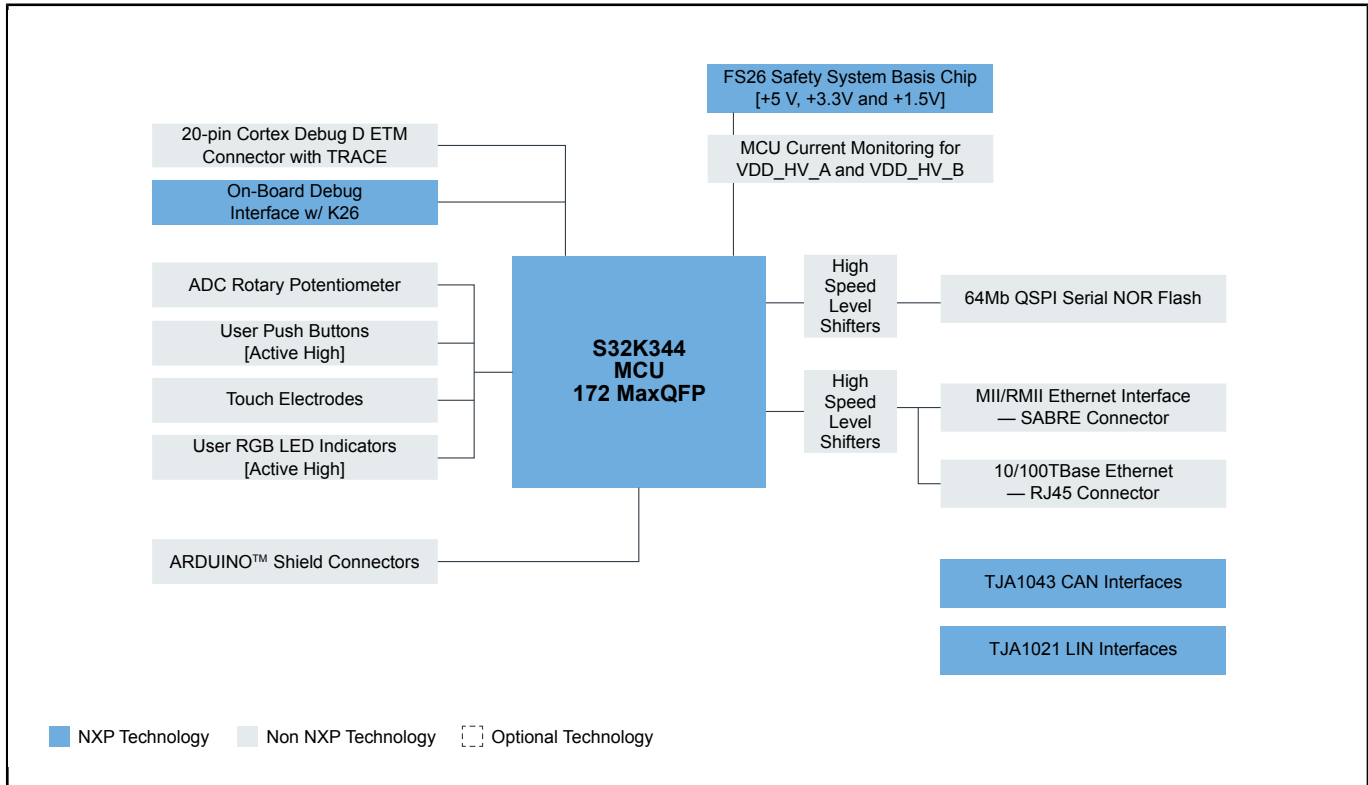
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The S32K3X4EVB-Q172 is an evaluation and development board for general-purpose industrial and automotive applications.

Based on the 32-bit Arm®Cortex®-M7 S32K3 MCU in a 172 MaxQFP package, the S32K3X4EVB-Q172 offers dual cores configured in lockstep mode, ASIL D safety hardware, HSE security engine, OTA support, advanced connectivity and low power.

The S32K3X4EVB-Q172 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 and demonstration.

S32K3X4EVB-Q172 Block Diagram Block Diagram



S32K3 Family Features Block Diagram

K311	K312	K314	Common Features	K322	K324	K341	K342	K344	K328	K338	K348	K358
1 x Arm® Cortex®-M7 @120 MHz	1x Cortex-M7 @160 MHz	1x Cortex-M7 @160 MHz	AEC-Q100, 125 °C, 3.3/5 V	2 x Cortex-M7 @160 MHz			1 Lockstep Cortex-M7 @ 160 MHz		2 x Cortex-M7 @ 160 MHz	3 x Cortex-M7 @ 240 MHz	1 LS Cortex-M7 @ 160 MHz	1 LS Cortex-M7 + 1 Cortex-M7 @ 240 MHz
1 MB Flash	2 MB Flash	4 MB Flash	HSE-B Crypto Security Engine	2 MB Flash	4 MB Flash	1 MB Flash	2 MB Flash	4 MB Flash	8 MB Flash			
128 K SRAM	192 K SRAM	512 K SRAM	FOTA (Firmware Over-the-Air)	256 k SRAM	512 k SRAM	256 k SRAM	256 k SRAM	512 k SRAM	1152 KB SRAM	1152 KB SRAM	1152 KB SRAM	1152 KB SRAM
up to 84 I/Os	up to 143 I/Os	up to 218 I/Os	Low-Power Operating Modes and Peripherals (LP UART, FlexIO)	up to 143 I/Os	up to 218 I/Os	up to 143 I/Os	up to 143 I/Os	up to 218 I/Os	up to 218 I/Os			
16-ch. eDMA	32-ch. eDMA		ASIL B/D Safety: (ECC Memories, MPU, CRC, Watchdogs)	4 x CAN (4 x FD)	6 x CAN (6 x FD)	4 x CAN (4 x FD)	4 x CAN (4 x FD)	6 x CAN (6 x FD)	8 x CAN (8 x FD)	8 x CAN (8 x FD)	8 x CAN (8 x FD)	8 x CAN (8 x FD)
3 x CAN (3 x FD)	6 x CAN (6 x FD)		100 Mbit/s Ethernet (TSN)	100 Mbit/s Ethernet (TSN)				1 Gbit/s Ethernet (TSN)				
1 x PC and 2 x PC	1 x PC and 2 x PC	2 x PC	eMOS Timers, Analogue Comparator, Logic Control Unit, Body Cross Triggering Unit, Trigger Mux	1 x PC and 2 x PC	2 x PC	1 x PC and 2 x PC	1 x PC and 2 x PC	2 x PC	1 x PC and 2 x PC			
4 x SPI*	6 x SPI*		JTAG	4 x SPI*	6 x SPI*	4 x SPI*	4 x SPI*		6 x SPI*			
2 x 24-ch. 12-bit ADC	3 x 24-ch. 12-bit ADC		S32 Design Studio IDE	2 x 24-ch. 12-bit ADC	3 x 24-ch. 12-bit ADC	2 x 24-ch. 12-bit ADC	2 x 24-ch. 12-bit ADC		3 x 24-ch. 12-bit ADC			
	2 x SAI (PS)		Real-Time Drivers (RTD) for AUTOSAR® and non-AUTOSAR	2 x SAI (PS)								
	Quad SPI		Security FW Safety Framework Application Software	Quad SPI								Quad SPI + SDHC (SDIO)
LOFP-48	MaxQFP-172			MaxQFP-172								
MaxQFP-100				MaxQFP-100		MaxQFP-100	MaxQFP-100					
	MAPBGA-257				MAPBGA-257			MAPBGA-257			MAPBGA-289	

View additional information for [S32K3x4-Q172 General-Purpose Development Board](#).

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