

S32K3x4-Q257 Full-Featured General Purpose Development Board

S32K3X4EVB-Q257

Archived

このページには、製造中止(生産終了)となった製品の情報が記載されています。本ページに記載されている仕様および情報は、過去の参考情報です。

Last Updated: Dec 11, 2025

This development board is no longer manufactured. NXP will maintain support for this product but recommends the S32K3X4EVB-T172 Board for optimized performance and support.

The S32K3X4EVB-Q257 is a full-featured evaluation and development board for general purpose industrial and automotive applications.

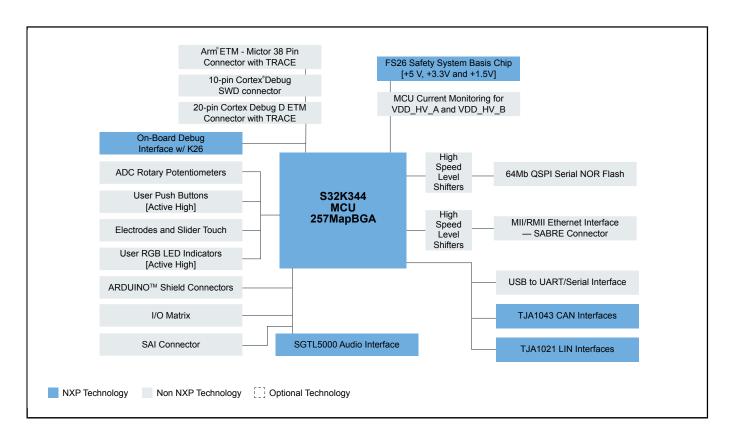
Based on the 32-bit Arm® Cortex®-M7 S32K3 MCU in a 257 MPABGA package, the full-featured S32K3X4EVB-Q257 offers dual cores configured in lockstep mode, ASIL D safety hardware, HSE security engine, OTA support, advanced connectivity and low power.

The full-featured S32K3X4EVB-Q257 brings 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.

Offering the S32K3 EVB in two configurations:

- S32K3X4EVB-Q257: all components populated
- S32K3X4EVBQ257ND: Kinetis K26 MCU not populated, require using an external debugger like IAR's I-jet, PEmicro's Multilink and CYCLONE FX or CYCLONE LC, Lauterbach's PowerDebug USB 3 and PowerDebug PRO, SEGGER J-Link, iSYSTEM's BlueBoxes iC5000/iC5700, Keil's ULINK, or Green Hills Probe.

S32K3X4EVB-Q257 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 @240 MHz	AEC-Q100, 125 °C, 3,3/5 V	2 x Cortex-M7 @240 MHz		1 Lockstep Cortex-M7 @ 240 MHz			2 x Cortex-M7 @ 240 MHz	3 x Cortex-M7 @ 240 MHz	1 LS Cortex-M7 @ 240 MHz	1 LS Cortex- 1 Cortex-N @ 240 Mi
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 SR
up to 84 I/Os	up to 143 I/Os	up to 218 I/Os		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		Low-Power Operating Modes and Peripherals (LP UART, FlexIO)	32-ch.eDMA					32-ch. eDMA				
3 x CAN (3 x FD)	6 x CAI	N (6 x FD)		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)
E		100 Mbit/s Ethernet (TSN)	ASIL B/D Safety: (ECC Memories, MPU, CRC, Watchdogs)	100 Mbit/s Ethernet (TSN)					1 Gbit/s Ethernet (TSN)			
2 x FC 2 x FC		2 x FC		2 x FC	2 x FC	2 x FC	2 x FC	2 × I ² C	2 x FC			
4 x SPI*		6 x SPI*	eMIOS Timers, Analogue Comparator, Logic Control Unit, Body Cross Triggering	4 x SP I*	6 x SP I*	4 x SP I*	4 x SP I*	6 x SP I*	6 x SPI*			
2 x 24-ch. 12-bit ADC		3 x 24-ch. 12-bit ADC	Unit, Trigger Mux	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	3 x 24-ch. 12-bit ADC			
Quad SF LQFP-48 HDQFP-172 HDQFP-100		2 x SAI (I²S)	JTAG	2 x SAI (FS)					2 x SAI (I ² S)			
		Quad SPI	S32 Design Studio IDE		Quad SPI				Quad SPI + SDHC (SDIO) HDQFP-172			
		FP-172	Real-Time Drivers (AUTOSAR® and Non-AUTOSAR)	HDQFP-172 HDQFP-100				HDQFI	P-172			
		MAPBGA-257	Security F/W Safety	HDQFF-100	MAPBGA-257	.10 3 1 1 100	1100	MAPBGA-257	MAPBGA-289			
		WAFBGA-257	Security F/W Safety Software Framework									

View additional information for S32K3x4-Q257 Full-Featured General Purpose Development Board.

Note: The information on this document is subject to change without notice.

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