



S32K3x4-Q257功能齐全的通用开发板

S32K3X4EVB-Q257

Last Updated: Mar 8, 2023

此开发板已停产。恩智浦将保留对这款产品的支持，但建议使用**S32K3X4EVB-T172**板来优化性能和支持。

S32K3X4EVB-Q257是面向通用工业和汽车应用的功能完备的评估和开发板。

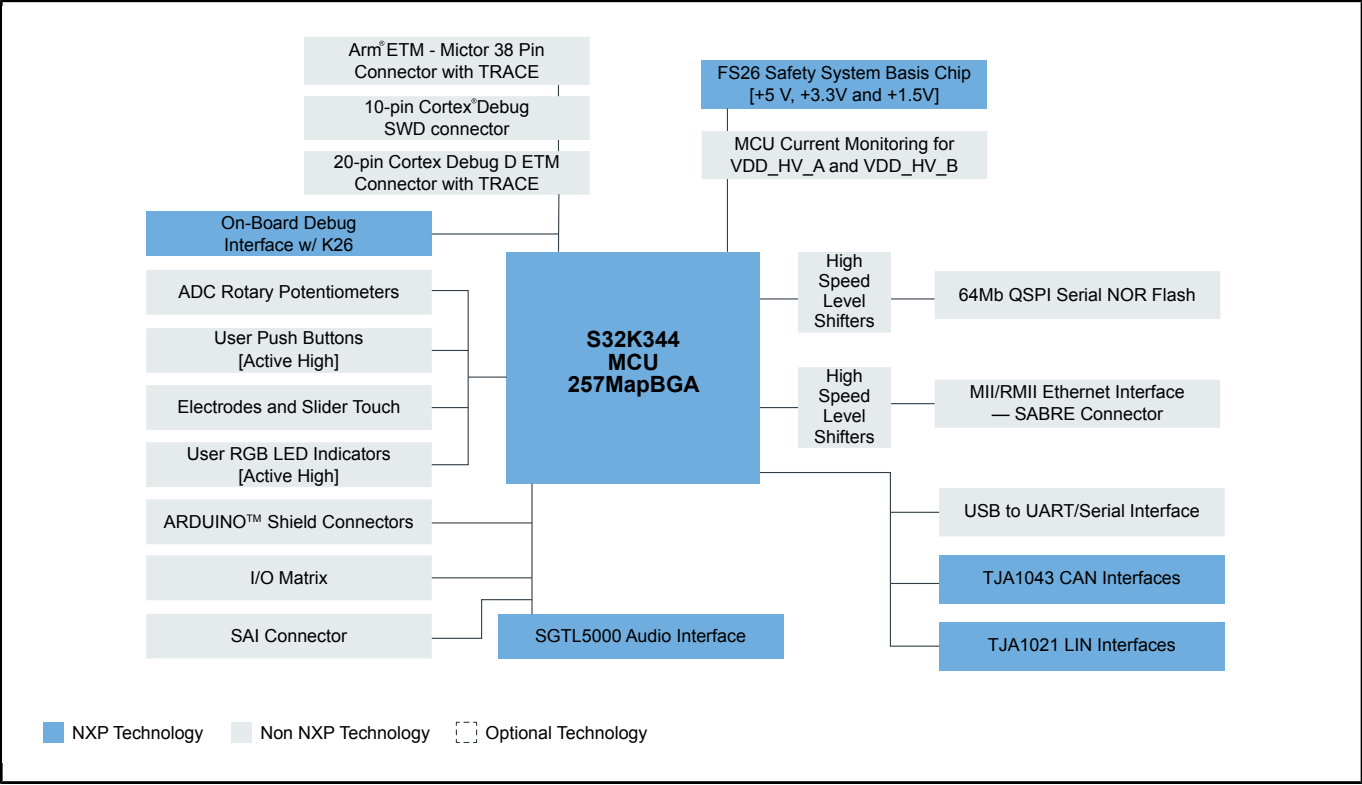
全功能**S32K3X4EVB-Q257**基于采用**257 MPABGA**封装的**32位Arm® Cortex®-M7 S32K3** MCU，提供以锁步模式配置的双核、**ASIL D**安全硬件、**HSE**安全引擎、**OTA**支持、高级连接和低功耗模式。

全功能**S32K3X4EVB-Q257**带来了与**Arduino® UNO**引脚布局兼容的标准规格，为快速应用原型制作和演示提供了广泛的扩展板选项。

提供两种配置的**S32K3** EVB：

- **S32K3X4EVB-Q257**：所有组件已安装
- **S32K3X4EVBQ257ND**：**Kinetis K26 MCU**未安装，需要使用外部调试器，如**IAR**的**I-jet**、**PEmicro**的**Multilink**和**CYCLONE FX**或**CYCLONE LC**、**Lauterbach**的**PowerDebug USB 3**和**PowerDebug PRO**、**SEGGER J-Link**、**iSYSTEM**的**BlueBoxes iC5000/iC5700**、**Keil**的**ULINK**或**Green Hills Probe**。

S32K3X4EVB-Q257框图 Block Diagram



S32K3系列特性 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-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)	32-ch, eDMA					32-ch, eDMA			
3 x CAN (3 x FD)	6 x CAN (6 x FD)		eMIOs Timers, Analogue Comparator, Logic Control Unit, Body Cross Triggering Unit, Trigger Mux	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)
		100 Mbit/s Ethernet (TSN)	JTAG	100 Mbit/s Ethernet (TSN)					1 Gbit/s Ethernet (TSN)			
2 x IFC	2 x IFC	2 x IFC	S32 Design Studio IDE	2 x IFC	2 x IFC	2 x IFC	2 x IFC	2 x IFC	2 x IFC			
4 x SPI*		6 x SPI*	Real-Time Drivers (AUTOSAR® and Non-AUTOSAR)	4 x SPI*	6 x SPI*	4 x SPI*	4 x SPI*	6 x SPI*	6 x SPI*			
2 x 24-ch, 12-bit ADC		3 x 24-ch, 12-bit ADC	Security FW Safety Software Framework Application Software	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			
		2 x SAI (I/S)		2 x SAI (I/S)					2 x SAI (I/S)			
		Quad SPI		Quad SPI					Quad SPI + SDHC (SDIO)			
LOFP-48	HDQFP-172			HDQFP-172					HDQFP-172			
HDQFP-100				HDQFP-100		HDQFP-100	HDQFP-100					
		MAPBGA-257		MAPBGA-257				MAPBGA-257	MAPBGA-289			

View additional information for [S32K3x4-Q257](#)功能齐全的通用开发板.

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