



S32K39/37微控制器，面向电气化应用

S32K39-37 **NEW**

Preproduction

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S32K39和S32K37芯片和支持（文档、软件和板）可供特定客户使用（需要保密协议）。如需了解更多信息和样品供货情况，请联系支持人员或当地销售代表。

S32K39是一款集性能、集成、组网、信息安全及功能安全功能于一体的新型电动汽车（EV）牵引逆变器控制设备。

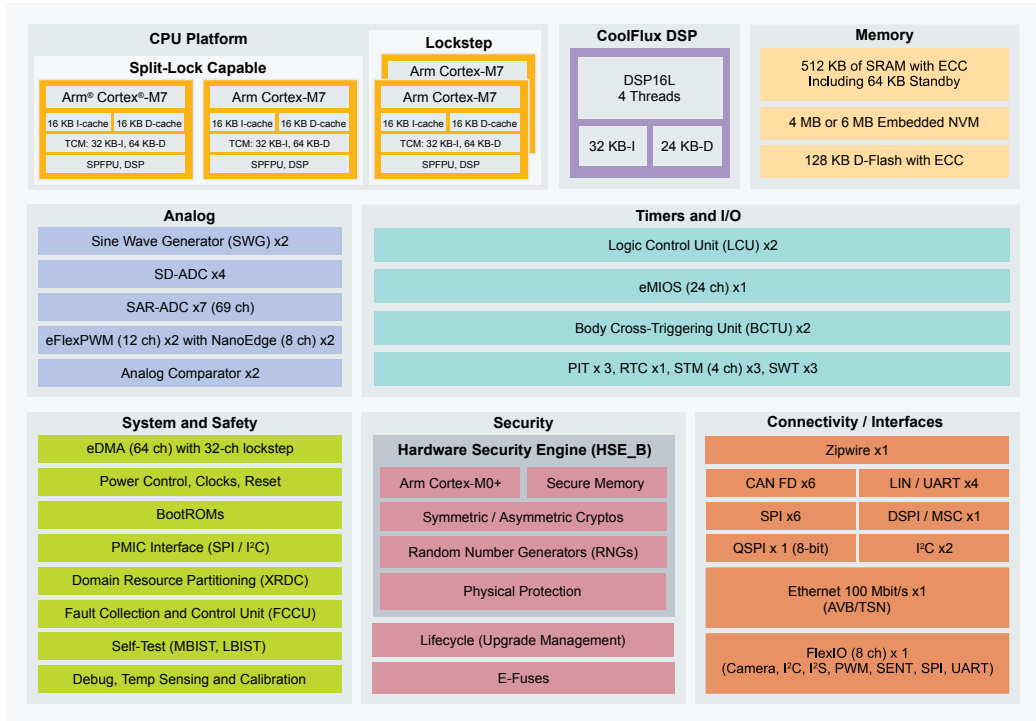
它有足够的计算能力支持由超过200kHz控制环路控制的六相或两个三相电机，同时托管AI/ML算法或其他监控应用。它支持使用时间敏感网络（TSN）以太网的远程智能启动应用，用于新的区域车辆架构。采用ASIL D软件解析器和模拟集成，降低了系统成本。

S32K37的高计算能力是高端电池管理系统（BMS）应用的理想之选。

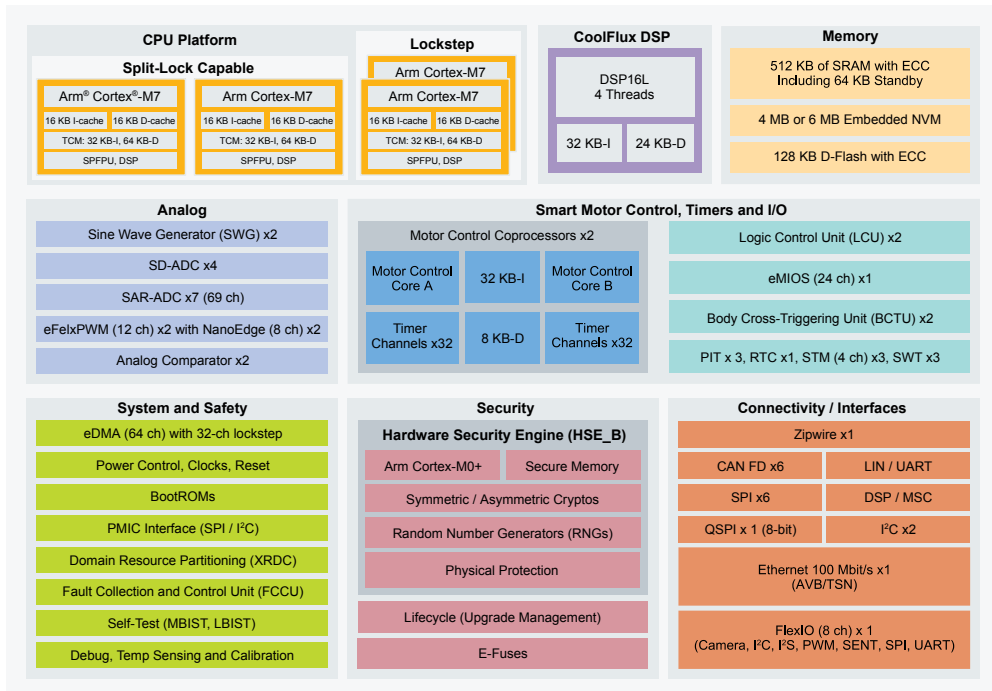
S32K39/37 MCU系列特性 Block Diagram

Common Features	K396	K394	K376	K374
AEC-Q100, 125°C, 3.3/5 V	1 lockstep Cortex-M7 + 2 split-lock Cortex-M7 @ 320 MHz			
HSE_B Hardware Security Engine	4x sigma-delta ADC with programmable DSP			
FOTA Firmware Over-the-Air	2x motor control coprocessors			
Low-Power Operating Modes and Peripherals LPUART, FlexIO	6 MB Flash	4 MB Flash	6 MB Flash	4 MB Flash
ASIL D Safety (ECC Memories, Lockstep Cores, CRC, Watchdog)	800 KB SRAM (512 KB System RAM + 288 KB TCM)			
eMIOS Timer, Analog Comparators, Logic Control Units, Trigger Mux (es)	Up to 211 I/Os			
JTAG	64-ch DMA with 32-ch lockstep			
S32 Design Studio IDE	6x CAN (FD), 4x LPUART (LIN)			
Real-Time Drivers (AUTOSAR® and non-AUTOSAR)	100 Mbit/s Ethernet (AVB/TSN)			
Security Firmware S32 Safety Software Framework Application Software	Zipwire			
	2 x I ² C, 6x SPI			
	2x eFlexPWM with 12-ch each (8-ch each high-resolution PWM)			
	7x SAR-ADC 12-bit, 1 Msps (69 analog inputs) 2x SWG (Sine Wave Generator)			
	QuadSPI			
	MAPBGA-289			
	176LQFP-EP			

S32K37 MCU特性 Block Diagram

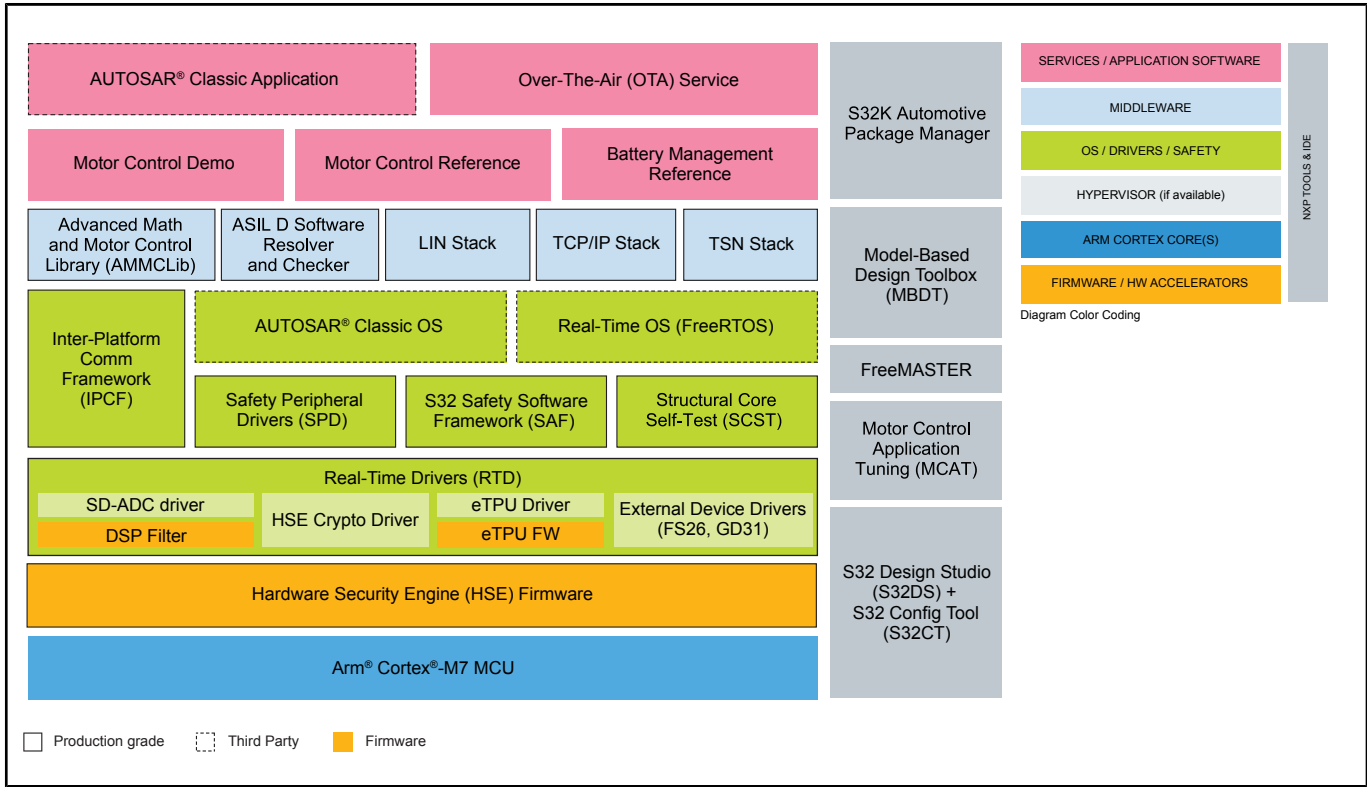


S32K39 MCU特性 Block Diagram



■ Features added from the S32K37x

S32K39软件支持 Block Diagram



View additional information for [S32K39/37 微控制器](#)，面向电气化应用。

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