



8-bit General Purpose MP MCUs

S08MP

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The S08MP16 is a cost-effective 8-bit MCU that delivers safe, accurate and inexpensive motor control for a wide range of industrial and automotive applications. An ideal entry-level solution for brushless DC (BLDC) motor applications, it features an 8-channel pulse width modulator (PWM)/flexTIMER module providing hardware dead-time insertion, analog comparators, programmable gain amplifier and a 12-bit analog-to-digital converter (ADC) with PWM hardware triggering. Also offered is an independently clocked COP and cyclic redundancy check (CRC) engine providing clock failure protection and memory content validation for safety-critical applications implementing IEC60730.

Freescale S08MP Microcontroller Block Diagram Block Diagram

SPI	16 KB Flash		13-ch., 12-bit ADC with Temperature Sensor
SCI	1 KB RAM		(6+2)-ch., 16-bit FlexTimer with PWM functions
I ² C	BDM/ICE		Programmable Gain Amplifier
RTC	CRC Generator	ICS	Programmable Delay Blocks (x2)
8-bit MTIM	KBI	COP/Watchdog	High-Speed Analog Comparators (x3)
5-bit DAC (x3)	S08 CPU Options		Packaging Options

View additional information for [8-bit General Purpose MP MCUs](#).

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