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Cypress delivers high-performance, high-quality solutions at the heart of today's most advanced embedded systems, from automotive, industrial and networking platforms to highly interactive consumer and mobile devices. With a broad, differentiated product portfolio that includes NOR flash memories, F-RAM and SRAM, Traveo™ microcontrollers, the industry's only PSoC® programmable system-on-chip solutions, analog and PMIC Power Management ICs, CapSense® capacitive touch-sensing controllers, and Wireless BLE Bluetooth® Low-Energy and USB connectivity solutions, Cypress is committed to providing its customers worldwide with consistent innovation, best-in-class support and exceptional system value.

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Cypress FR/F²MC MCU Family for Automotive

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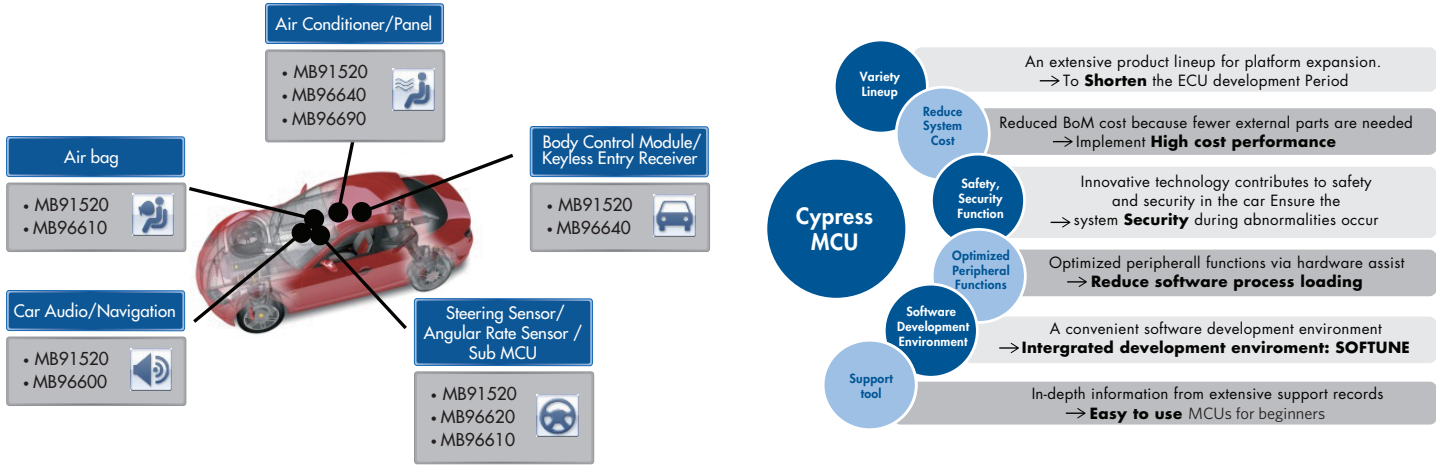
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Doc# 002-08910 Rev*A



Cypress 16bit/32bit MCUs for Automotive

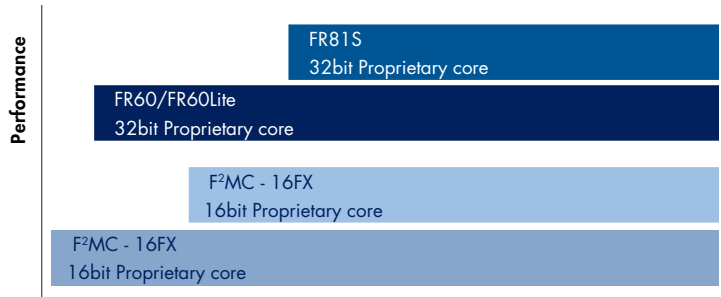
Extensive Lineup Contributes to Automotive Safety and Security

Cypress's proprietary 16bit/32bit MCUs are suitable for a variety of automotive applications. Our MCUs for automotive control systems provide the optimal solution for safety and security.



Cypress CPU Core Roadmap

The proprietary CPU core for automotive MCUs delivers high performance, speed, low power consumption and automotive-grade quality.



Cypress Automotive 16bit/32bit MCU Lineup

A variety of options can be selected (e.g., number of pins, amount of memory) based on the required usage.

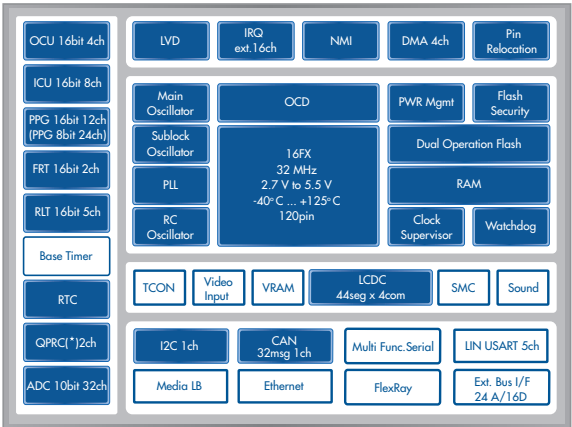
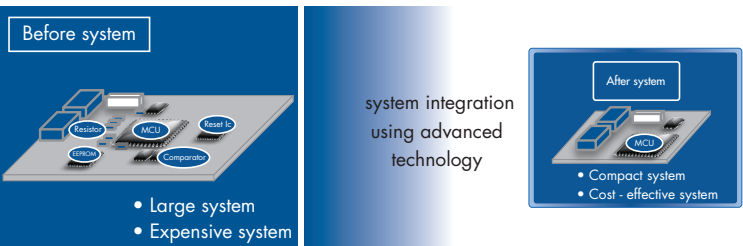
Main Flash (KB)						Available Now			
2112						MB91F528R	MB91F528U	MB91F528M	MB91F528Y
1600						MB91F527R	MB91F527U	MB91F527M	MB91F527Y
1088		MB91F526B	MB91F526D	MB91F526F	MB91F526J	MB91F526K	MB91F526L		
832		MB91F525B	MB91F525D	MB91F525F	MB91F525J	MB91F525K	MB91F525L		
576		MB91F524B	MB91F524D	MB91F524F	MB91F524J	MB91F524K	MB91F524L		
448		MB91F523B	MB91F523D	MB91F523F	MB91F523J	MB91F523K	MB91F523L		
384			MB96F637	MB96F647	MB96F657				
320		MB91F522B	MB91F522D	MB91F522F	MB91F522J	MB91F522K	MB91F522L		
256				MB96F6B6	MB96F6C6				
			MB96F636	MB96F646	MB96F656				
128	MB96F615	MB96F625	MB96F635	MB96F645	MB96F655	FR81S MB91520 series F2MC-16FX MB96600 series			
64	MB96F613	MB96F623	MB96F633	MB96F643	MB96F653				
32	MB96F612	MB96F622							
	48pin	64pin	80pin	100pin	120pin	144pin	176pin	208pin	BGA416pin

Cypress 16bit F2MC-16FX MCU Family - MB96600 Series

The F2MC-16FX MB96600 series has optimized peripheral functions for automotive body and monitoring control. It is a compact, low-cost automotive control system that integrates many traditional external parts.

Features

- F2MC-16FX MCU core
- Single-voltage Vcc 2.7 V - 5.5 V
- 32chx 10bit A/D
- 1chx CAN
- 5chx LIN - USART



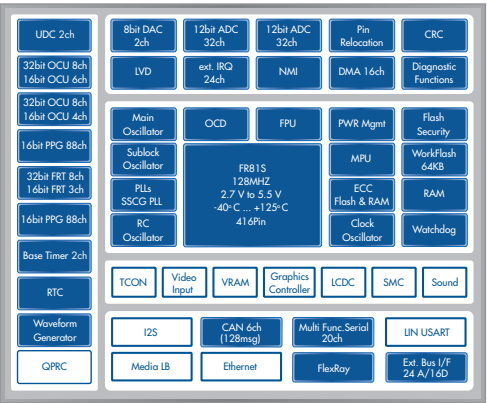
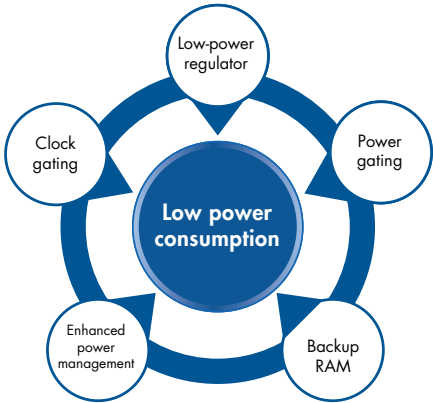
* QPRC (Quad Position & Revolution Counter)
Block diagram for MB96600. The functions are different for every product

Cypress 32bit FR81S MCU Family - MB91520 Series

The FR81S MB91520 series is an advanced, high-performance and highly reliable family of MCUs. Cypress's proprietary technology lowers power consumption, leak current, and operation current, which significantly reduces the overall power consumption of the system.

Features

- FR81S high performance MCU core
- Single-voltage Vcc 2.7 V - 5.5 V
- 6chx CAN (128 message buffer)
- 2units A/D converter
- 2chx D/AC
- 20chx MFS
- ECC
- MPU
- Diagnostic function
- OCD



* QPRC (Quad Position & Revolution Counter)
Block diagram for MB91520. The functions are different for every product

Development Environment, Support Software

Series	MCU Product	OCD ICE (*1)	Evaluation board		IDE(*2)	Flash Programmer	AUTOSAR MCAL
			Main	Daughter			
MB96600	MB96610	MB2100-01-E	MB2198-760-E	MB2198-761-02-E	SOFTUNE V3 Pro Pack	Yes	—
	MB96620			MB2198-762-02-E			
	MB96630			MB2198-763-02-E			
	MB96640			MB2198-764-02-E			
	MB96650			MB2198-765-02-E			
	MB966B0			MB2198-764-04-E			
MB91520	MB966C0			MB2198-765-04-E	SOFTUNE V6 Pro Pack	Yes	4.0.3
	MB91520B			MB2198-769-011-E			
	MB91520D			MB2198-769-021-E			
	MB91520F			MB2198-769-031-E			
	MB91520J			MB2198-769-041-E			
	MB91520K (0.5)			MB2198-769-051-E			
	MB91520K (0.4)			MB2198-769-061-E			
	MB91520L			MB2198-769-071-E			
	MB91520R			MB2198-769-063-EX-SPN			
	MB91520U			MB2198-769-073-EX-SPN			
	MB91520M			MB2198-769-083-EX-SPN			

(*1) On Chip debugger In-Circuit Emulator
(*2) Integrated Development Environment



MB96600/MB91520 series can use the same hardware development environment. please ask your representative for details.