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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 Cluster Solutions

Cypress Semiconductor Corporation

198 Champion Court, San Jose CA 95134
phone +1 408.943.2600 fax +1 408.943.6848
toll free +1 800.858.1810 (U.S. only) Press "1" to reach your local sales representative

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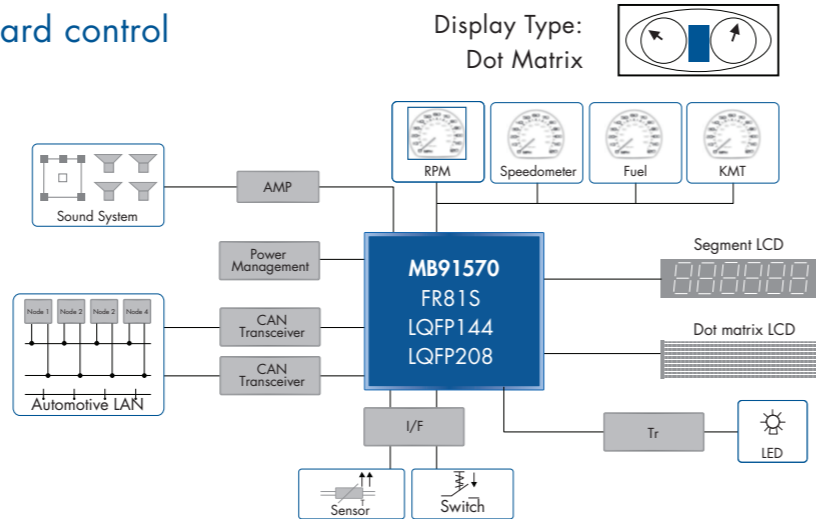


Cypress 32bit Core MCUs for Dashboard Control

Cypress FR Family – MB91570 Series

Single-chip solution for segment dashboard control

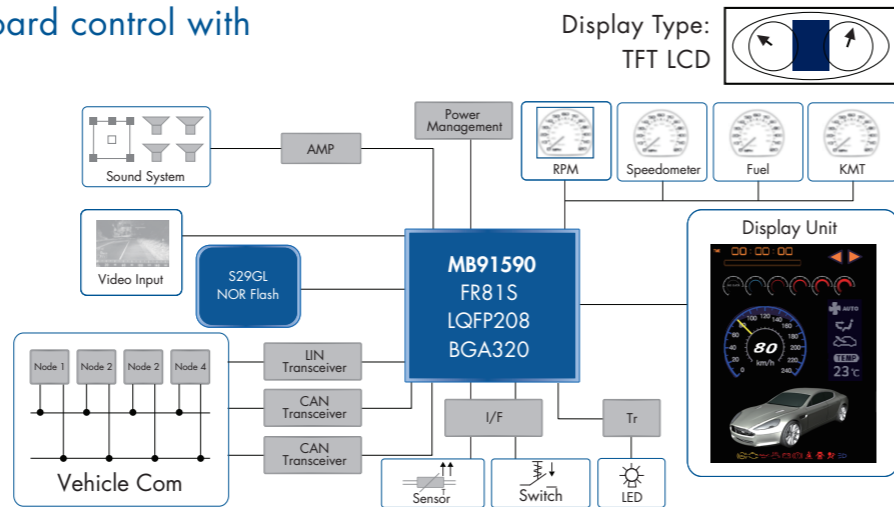
The MB91570 series controls displays for automotive dashboards and industrial control applications. The FR81S CPU core controls the dot-matrix LCD segments that display individual meters (e.g., tachometer, speedometer) and meter control, as well as the dot-matrix display of characters, numbers and symbols. These functions can also be performed simultaneously with the CAN communications functions.



Cypress FR Family – MB91590 Series

Single-chip solution for the dashboard control with a color liquid crystal

The MB91590 series, which contains the FR81S CPU core, integrate control of the TFT LCD color displays, video input, meter control and CAN communication for automotive dashboard functions and automotive HMI systems. A built-in NOR-type flash memory macro enables reading at high speed and low current consumption.



Cypress FR Family Product Lineup

MB91570 Series

Products	Frq. MHz	Pow.V	Memory Type	FLASH (KB)	RAM (KB)	PKG	Note	
MB91F575	80	4.5 ~ 5.5	Main Flash + Work Flash	576 +64	48	LQFP144	ADC 40ch, SMC 6ch, CAN 32/64 Msg-buffer, Sound Generator, Timer, Serial, LCDC	
MB91F577				1088 +64	72			
MB91F578				1600 + 64	112			LQFP144 LQFP208
MB91F579				2112 +64	144			

MB91590 Series

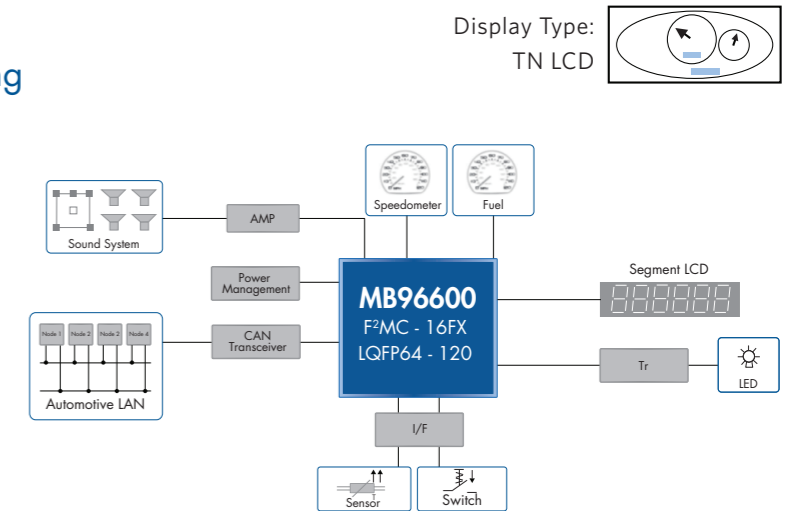
Products	Frq.MHz	Pow.V	Memory Type	FLASH (KB)	RAM (KB)	VRAM (KB)	PKG	Note	
MB91F591	80	2 power supplies 3.0 ~ 3.6	Main Flash + Work Flash	576 +64	48	260	LQFP208	ADC 40ch, SMC 6ch, CAN 32/64 Msg-buffer, Sound Generator, Timer, Serial, GDC	
MB91F592									800
MB91F594									1088 +64
MB91F59A	128	4.5 ~ 5.5		1600 +64	264	1792	BGA320	ADC 40ch, SMC 6ch, CAN 32/64 Msg-buffer, Sound Generator, Timer, Serial, GDC	
MB91F59B				2112 +64					

Cypress 16bit MCUs for Dashboard Control

Cypress F²MC-16FX Family – MB96600 Series

Large pin count for flexibility in designing automotive meters

The MB96600 series, which feature the F²MC-16FX CPU, has been proven in many automotive and industrial applications. The stepper motor control is integrated with the segment control of the LCD, CAN and other functions. Flash E²PROM emulation with hardware support helps reduce the system cost.



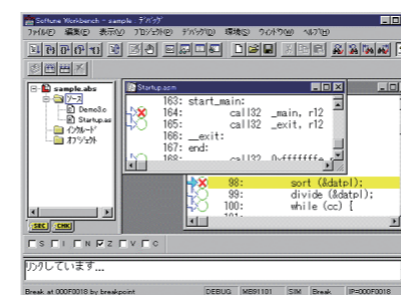
Cypress F²MC-16FX Family Product Lineup

MB96600 Series

Products	Frq. MHz	Pow.V	Memory Type	FLASH (KB)	RAM (KB)	PKG	Note
MB96F673	32	2.7 ~ 5.5	Dual Op. Flash	64.5 +32	4	LQFP64	ADC 12ch, SMC 2ch, Sound Generator, Timer, Serial, No CAN option
MB96F675				128.5 +32			
MB96F683				64.5 +32	4	LQFP80	
MB96F685				128.5 +32			
MB96F693				64.5 +32	8	LQFP100	
MB96F695				128.5 +32			
MB96F696				256.5 +32			
MB96F6A5				128.5 +32	8	LQFP120	
MB96F6A6	256.5 +32	16	ADC 32ch, SMC 5ch, Sound Generator, Timer, Serial, No CAN option				

Development Tools

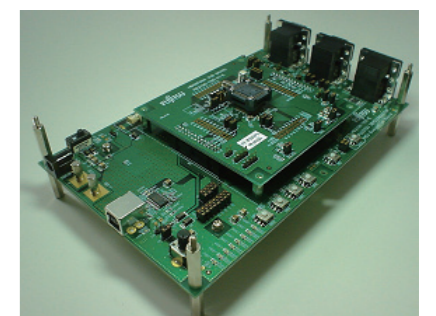
The integrated development environment SOFTUNE, 1 line type emulator and various evaluation boards provide a comprehensive development tool. Cypress's FR81S and F²MC-16FX MB96600 series provides on-chip debugging. Debugging with a visitor's system is also possible for added versatility.



Development Tool SOFTUNE



Emulator



Evaluation Board