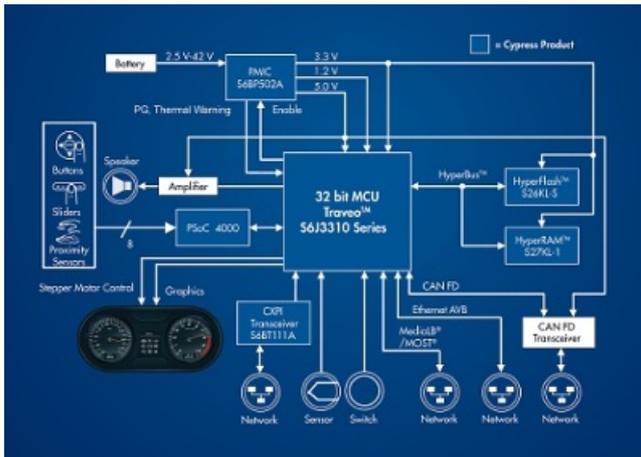


MCU with eight CAN FD channels

Cypress Semiconductor has announced an expansion of its automotive portfolio. The MCUs support CAN FD; the S6J335X series provides as much as eight CAN FD channels.



The CAN FD MCU as part of a car network (Photo: Cypress)

The expansion aims to help enable manufacturers to bring high tech automotive systems historically available only in luxury models to mainstream vehicles. As a key part of the expansion, Cypress introduced the first series of its Traveo micro-controller (MCU) family on the 40 Nm process technology node, which enables higher performance and more cost-efficient implementations of instrument clusters and body electronics.

The 40 Nm Traveo S6J331X/2/3/4 series provides automotive manufacturers with a platform for classic instrument clusters. The series is based on the ARM Cortex-R5 processor with 240-MHz performance and supports CAN FD for increased data bandwidth for faster networking. The MCUs integrate up to 4 MiB of internal flash for application storage, enhanced secure hardware extension (eSHE) for robust security, and a Hyperbus interface that enables seamless connections with Hyperflash and HyperRAM memories.

Additionally, the series includes a 16-bit audio-DAC, a multi-channel mixer, and \hat{r} S interfaces to output the complex, high-quality sounds required in today's instrument clusters. The series also supports Ethernet AVB for increased bandwidth in multimedia application and reduced programming time.

The 40nm Traveo S6J335X series provides automotive manufacturers with the performance of the other series, along with support for a maximum of eight channels for CAN FD, enabling automotive network gateways. It includes up to 12 channels of Multi-Function Serial (MFS), up to 64 channels of 12-bit ADC inputs, and up to 64 channels of base timers, including PWMs. The series supports ambient temperature of -40 °C to +125 °C.

The MCU series is sampling now and will be in production in the second half of 2016. It is available in 144-pin, 176-pin and 208-pin TEQFP packages. Cypress exhibits at the Embedded World 2016 in Nuremberg, from February 23 to 25, in Hall 4A, booth 148.

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