32-bit automotive MCU

STMicroelectronics has released the first 32-bit automotive MCU (micro-controller unit) with ISO CAN FD modules.

(Photo: STMicroelectronics)

The first 32-bit automotive MCU with ISO CAN FD controllers is a member of the SPC58 MCU family built on Power Architecture. The controllers target body, interior, and gateway applications. The whole family is developed in ST's in-house 40-Nm technology and produced at the company's 12-inch fab in Crolles, France.

The component is ASIL-B compatible and features up to seven CAN controllers, all ISO CAN FD compliant, organized in two sub-systems with their own shared memory for improved performance. Each CAN controller offers message-buffering and filtering capability:

- Transmit buffers: 0 to 32
- Transmit event Fifo: 0 to 32
- RX buffers: 0 to 32
- 2 RX Fifos: 0 to 64 buffers each

The product offers acceptance filters for up to 128 FD base frame format (FBFF) messages or up to 64 FD extended frame format (FEFF) messages.