

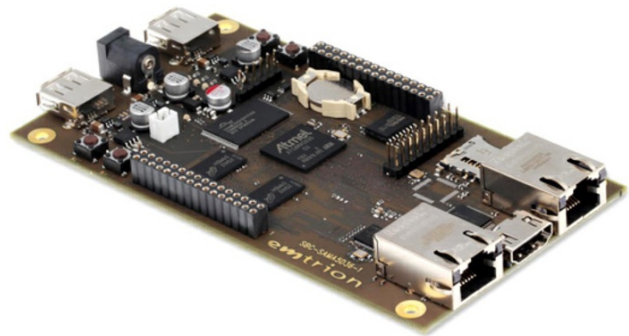
SINGLE BOARD COMPUTER

Processor module with two CAN channels

Emtrion's (Germany) SBC-SAMA5D36 processor module is a single-board-computer based on the processor ATSAMA5D36A-CU from Atmel. The module offers two CAN interfaces.

THE PROCESSOR IS BASED ON AN ARM CORTEX-A5 core running at up to 536 MHz. 256 MiB DDR2 SDRAM and 512 MiB SLC NAND flash are soldered to store code and data. A μ SD card socket is provided for further mass storage. The processor incorporates two CAN interfaces. Both interfaces are available at the extension connector. The interface CAN1 is always available. The transmit output of CAN0 is multiplexed with the CTS input of UART0. The signals have LVTTTL level and appropriate CAN transceivers must be added.

The board contains connectors for two Ethernet interfaces; one is a 10/100 Mbit interface and the other a 1 Gbit interface. Two USB 2.0 host interfaces and one USB 2.0 device interface are available. A PC monitor can be connected to an HDMI connector or bare TFT LCD display can be connected by a 40 way FFC connector. Further peripheral functions are available on two 32-way extension connectors. The board can either be powered via the USB device interface, from a 5-V power supply, or through a rechargeable Lithium battery, which is controlled by the onboard power management chip.



(Photo: Emtrion)