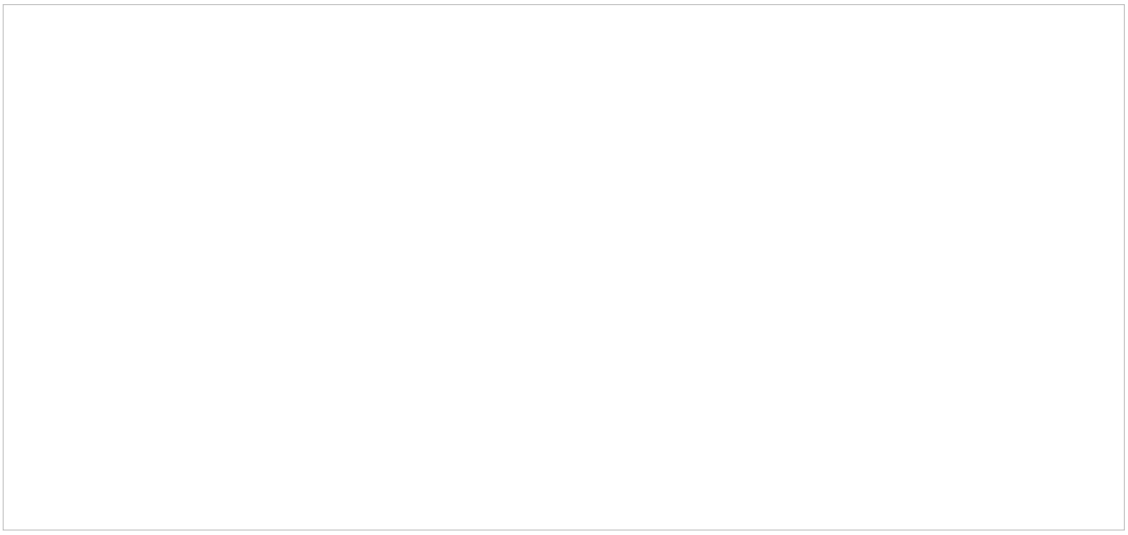
Development boards with CAN ports

The Teensy 3.6 and 3.5 development boards are based on Cortex M4 processors. They feature two respectively one CAN port.



The Teensy 3.6 provides two CAN interfaces without transceivers (Photo: Kickstarter)

Teensy is the name of a family of micro-controller development boards designed for all sorts of do-it-yourself (DIY) electronic projects. In late 2008, the Teensy family was introduced. It supported USB connectivity. The version 3.0 used a 32-bit MCU and was launched on Kickstarter. Many people used the Arduino-compatible series for video walls in conjunction with addressable LEDs. Paul Stoffregen has recently launched the versions 3.5 and 3.6. They are the first supporting two CAN channels. The boards are equipped with a 120-MHz respectively a 180-MHz Cortex M4 processor from NXP. There are also tiny add-on modules providing two SN65HVD320D CAN transceiver chips from Texas Instruments and 120-Ω termination resistors. An extra Rs pin for each transceiver allows switching to high-speed mode (strong pull down to GND) or low-power mode (strong pull up to V_{CC}).

The tiny add-on module is equipped with CAN transceivers and termination resistors (Photo: Kickstarter)

The recommended library for this board is the FlexCAN lib included with Teensyduino installation. An updated version of the library can be found here. The Arduino IDE is the primary method used to program the Teensy modules. The Teensy 3.6 features 1-MiB flash memory, 256-KiB RAM, and 4-KiB EEPROM. The two USB port runs at 480 Mbit/s. The second USB port is intended for host mode to be connected to keyboards or memory sticks. The boards offer 32 general-purpose DMA channels, 22 PWM outputs, four I^2C ports, and 11 touch-sensing inputs.

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