Teensy 3.1 + header

PRODUCT ID: 1625

DESCRIPTION

Teensy 3.1 is a small, breadboard-friendly development board designed by Paul Stoffregen and PJRC. Teensy 3.1 brings a low-cost 32 bit ARM Cortex-M4 platform to hobbyists, students and engineers, using an adapted version of the Arduino IDE (Teensyduino) or programming directly in C language. **Teensy 3.1 is an upgrade over 3.0: now with 64K of RAM, 256K of Flash, 5V tolerant digital inputs, 12 bit DAC, dual ADC, and CAN bus support.** Teensy 3.1 is a drop-in replacement upgrade for 3.0 and can run any sketches designed for 3.0.

Based on a 32 bit ARM chip, Teensy 3.1 aims to greatly increase the computing capability and peripheral features, but maintain the same easy-to-use platform that has made Teensy 2.0 so successful.

Please note: Teensy 3 and 2 are not official Arduino-brand products. Although the Teensyduino IDE has been adapted so that many simple Arduino projects will work with the Teensy, there will still be a lot of libraries and shields that will not work with this device! If you're new to microcontrollers, we suggest going with a classic Arduino UNO since all Arduino projects, examples and libraries will work with it.

Technical Specifications:

- 32 bit ARM Cortex-M4 72MHz CPU (M4 = DSP extensions) Here is Freescale's reference manual for the chip (warning 1227 pages) as well as the Datasheet and User Guide!
- 256K Flash Memory, 64K RAM, 2K EEPROM
- 21* High Resolution Analog Inputs (13 bits usable, 16 bit hardware)
- 34* Digital I/O Pins (21 shared with analog)
- 12 PWM outputs
- 1 12-bit DAC output
- 8 Timers for intervals/delays, separate from PWM
- USB with dedicated DMA memory transfers
- CAN bus
- 3 UARTs (serial ports)
- SPI, I2C, I2S, IR modulator
- I2S (for high quality audio interface)
- Real Time Clock (with user-added 32.768 crystal and battery)
- 16 general purpose DMA channels (separate from USB)
- Touch Sensor Inputs