STM32-P405



HEADER BOARD FOR STM32F405RGT6 ARM CORTEX M4 1024KB FLASH 168 MHZ 192KB SRAM





The ARM Cortex-M4 processor is the latest generation of ARM processors for embedded systems. It has been developed to provide a low-cost platform that meets the needs of MCU implementation, with a reduced pin count and low-power consumption, while delivering an outstanding computational performance and an advanced system response to interrupts. The ARM Cortex-M4 32-bit RISC processor features exceptional code-efficiency, delivering the high-performance expected from an ARM core in the memory size usually associated with 8- and 16-bit devices.

The STM32F405RGT6 performance line family has an embedded ARM core and is therefore compatible with all ARM tools and software. It combines the high performance ARM Cortex-M3 CPU with an extensive range of peripheral functions and enhanced I/O capabilities. STM32-P4053 is a good start-up board for learning the new ST Cortex-M4 based microcontrollers STM32F405RGT6. It has RS232 and both USB and CAN. It also features a prototype area with all microcontroller signals near it, giving the customer an easy way to implement his own schematics and add-ons.

FEATURES

- MCU: STM32F405RGT6 ARM Cortex M4 1024KB FLASH 168 Mhz 192kB SRAM USB, CAN, x2 I2C, x2 ADC 12 bit, x3 UART, x2 SPI, x3 TIMERS, up to 72Mhz operation
- Standard JTAG connector with ARM 2x10 pin layout for programming/debugging with ARM-JTAG
- USB connector
- CAN driver and connector
- RS232 driver and connector
- UEXT connector which allows different modules to be connected (as MOD-MP3, MOD-NRF24LR, etc)
- SD-MMC connector
- Backup battery connector
- → RESET button
- Status LED
- Power supply LED
- On-board voltage regulator 3.3V with up to 800mA current
- Single power supply: takes power from USB port or power supply jack
- 8 Mhz crystal oscillator
- 32768 Hz crystal and RTC backup battery connector

HARDWARE

→ STM32-P405 latest schematic

