

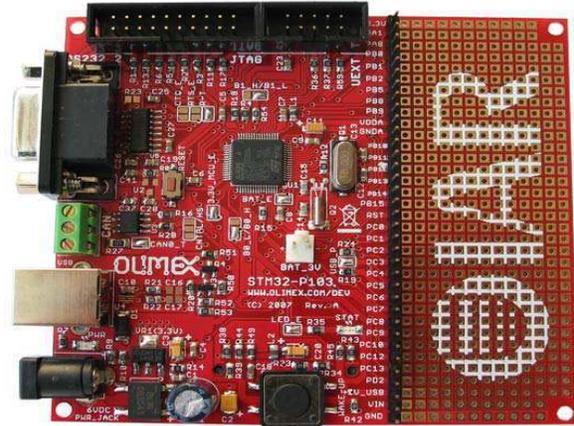


Olimex - STM32-P103 - MCU - Development Kit

Product Overview:

The ARM Cortex-M3 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 outstanding computational performance and an advanced system response to interrupts. The ARM Cortex-M3 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 STM32F103 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-P103 is good start-up board for learning the new ST Cortex-M3 based microcontrollers STM32F103RBT6. It has RS232 and both USB and CAN, the prototype area with all microcontrollers port near it allow customer easy to implement his own schematics and add-ons.



Kit Contents:

- STM32-P103 HEADER BOARD
- STM32F103RBT6 microcontroller

Key Features:

- MCU: STM32F103RBT6 ARM 32 bit CORTEX M3™ with 128K Bytes Program Flash, 20K Bytes RAM, 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 allow 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
- Extension headers for all uC ports
- PCB: FR-4, 1.5 mm (0,062"), solder mask, silkscreen component print
- Dimensions: 100 x 90mm (3.94 x 3.5")

Ordering Information:

Products:

Part Number	Manufacturer	Farnell P/N	Newark P/N
STM32-P103	Olímex	1701513	25R5110

Associated Products:

Part Number	Manufacturer	Description	Farnell P/N	Newark P/N
ARM-USB-OCD	Olímex	USB JTAG Debugger	1701506	33R0172
ARM-JTAG-EW	Olímex	JTAG Dongle Interface	171507	25R4408
STM32F103RBT6	ST	32BIT MCU, CORTEX M3, 128K FLASH	1447640	33R0174

Similar Products:

Part Number	Manufacturer	Description	Support Device	Farnell P/N	Newark P/N
STM32-103STK	Olímex	KIT, STARTER, ST ARM CORTEX-M3	STM32F103RBT 6	1701515	25R5111

Document List:

Datasheets:

Part Number	Description	Size
STM32-P103	STM32-P103 users manual	910KB

Application Notes:

File Name	Size
Smartcard interface with the STM32F10x microcontrollers	153KB
EEPROM emulation in in STM32F10x microcontrollers	122KB
How to achieve 32-bit timer resolution using the link system in STM32F101xx and STM32F103xx microcontrollers	71.3KB
STM32F10xxx hardware development: getting started	72.9KB
STM32F10x in-application programming using the USART	63.7KB
Using the STM32F101xx and STM32F103xx DMA controller	153KB
EMC Design Guide for ST Microcontrollers	122KB

Hardware & Software:

File Name	Size
STM32-P103 schematic	64KB
JTAG connector (top view)	63.7KB
Blinking LED C source for EW-ARM 5.11	153KB
Sample mouse driver C source for EW-ARM 5.11	122KB
Mass Storage C source for EW-ARM 5.11	71.3KB
USB-to-RS232 Virtual COM port C source for EW-ARM 5.11	1.5MB
Blinking LED project for GCC + Eclipse + OpenOCD	153KB
OpenOCD + Eclipse set of projects 1.00	122KB
Blinking LED C source for EW-ARM 5.11	910KB

Others Resources:

File Name	Size
The complete list of projects	63.7KB

