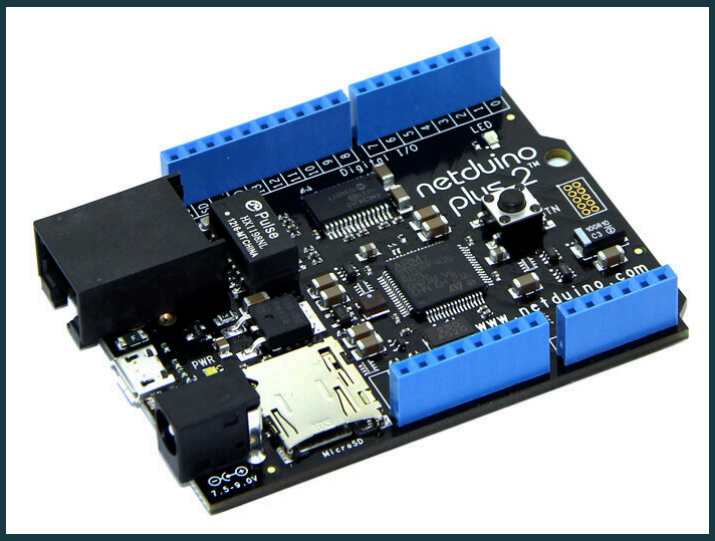
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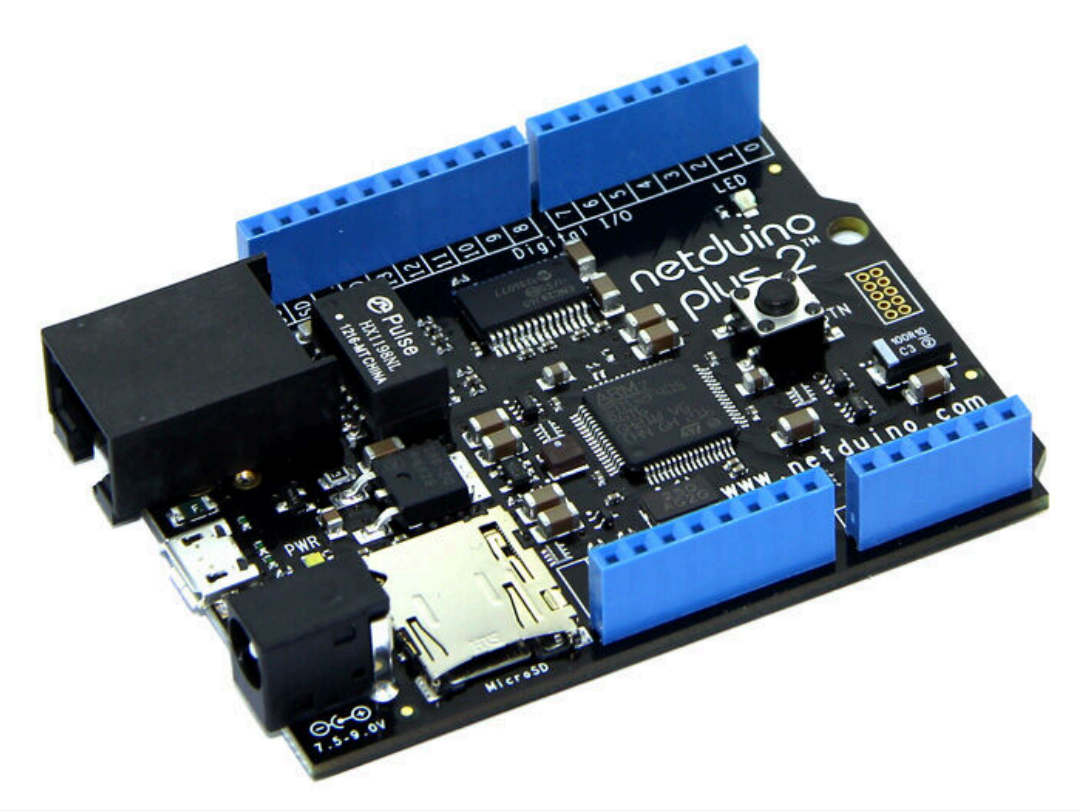
Netduino Plus 2

Netduino Plus 2: a powerful 168MHz ARM Cortex-M4 open-source development board with .NET Micro Framework, rich I/O, Ethernet, and Arduino shield compatibility.

SKU	UPDATED	PRICE
102990013	2024-08-09 02:11:27	$59.95(Excl. VAT)



Overview



The Netduino Plus 2 is an open-source electronics platform featuring a 168MHz Cortex-M4 microcontroller, 384KB of code storage, and 100+KB of RAM, running the .NET Micro Framework for high-level coding and debugging. It offers extensive I/O with 22 GPIOs, SPI, I2C, 4 UARTs, 6 PWM channels, 6 12-bit ADC channels, along with onboard Ethernet and MicroSD storage, and is pin-compatible with Arduino shields.

Key Features

Netduino is an open source electronics platform using the .NET Micro Framework. Featuring a 32-bit microcontroller and a rich development environment. Suitable for engineers and hobbyists alike. Input/Output. Interface with switches, sensors, LEDs, serial devices, and more. Netduino offers 20 GPIOs combined with SPI, I2C, 2 UARTs (1 RTS/CTS), 4 PWM channels and 6 ADC channels. Code. Debug. Repeat. .NET Micro Framework combines the ease of high-level coding and the raw features of microcontrollers. Enjoy event-based programming, multi-threading, line-by-line debugging, breakpoints and more. Very expandable. 3rd-party accessories offer pre-built functionality like GPS location, servo control and battery power.

Netduino is also pin-compatible with Arduino shields. 3rd-party drivers are required for some Arduino shields. Design files included. Netduino is an open source electronics platform. All design files and source code are included. Learn from the designs. Remix. Enjoy the freedom of open source.

Netduino Plus 2 is the new Netduino Plus.It has four times the speed (168MHz), six times the code space (384KB), and twice the available RAM (100KB+) of Netduino Plus 1. They've also given it a whole series of rich new features like four serial ports, six PWM channels and 12-bit ADC. The 6-pin ICSP header has been swapped out for a 10-pin MiniJTAG header. The goal is to enable developers to compile their own firmware using GCC and debug both native and managed code at the same time.

Features

- 168MHz Cortex-M4 MCU.
- 384KB Code Storage.
- 100+ KB Available RAM.
- 22 GPIOs combined with SPI, I2C, 4 UARTs (1 RTS/CTS),
- 6 PWM channels and 6 12-bit ADC channels.
- MicroSD storage and Ethernet IP networking.
- 3rd-party accessories offer pre-built functionality like GPS location, servo control and battery power.
- Design files and source code included.

Specifications

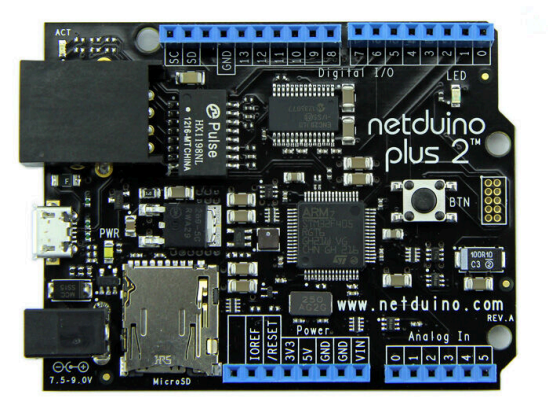
- power led: white
- user led: blue
- ethernet led: green
- STMicro 32-bit microcontroller
- Speed: 168MHz, Cortex-M4
- Code Storage: 384 KB
- RAM: 100+ KB
- all 22 digital and analog pins: GPIO
- digital pins 0-1: UART 1 RX, TX
- digital pins 2-3: UART 2 RX, TX/PWM
- digital pins 5-6: PWM, PWM
- digital pins 7-8: UART 3 RX, TX
- (also works as UART 2 RTS, CTS)

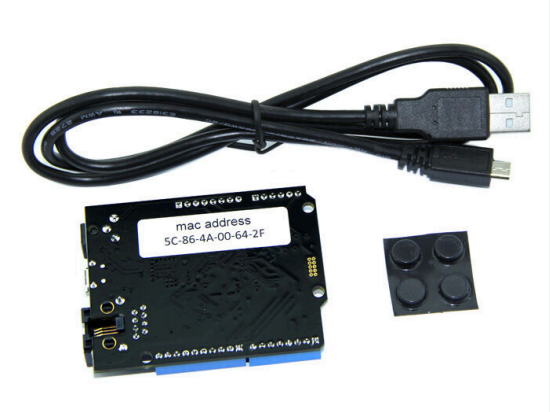
- digital pins 9-10: PWM, PWM
- digital pins 11-13: PWM/MOSI, MISO, SPCK
- digital pin SD/SC: SDA/SCL
- (also works as UART 4 RX, TX)
- ethernet: 10 mbps
- network stack: lwIP
- micro sd (up to 2 GB)
- auto card detect
- input: 7.5 - 9.0 VDC or USB powered
- output: 5 VDC and 3.3 VDC regulated
- max current: 25 mA per pin
- microcontroller max current: est. 125 mA total
- digital i/o are 3.3 V--but 5 V tolerant
- operating temperature:
- 0 - 70 °C (32 - 158 °F)
- RoHS compliant

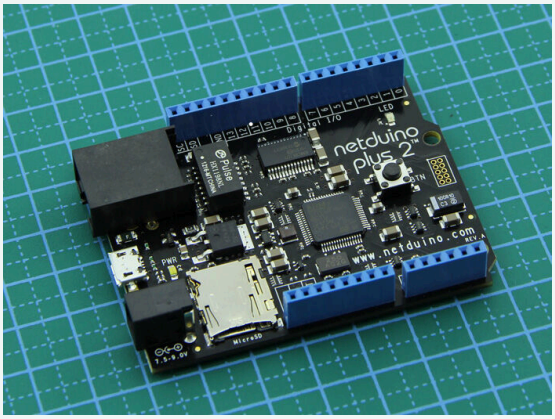
Microcontroller Documentation

- **STM32F405RG (datasheet)**
- **STM32F405RG (reference manual)**

Product Gallery







Compliance & Logistics

HSCODE	9032900090
ROHS	1

Resource Links

- https://www.seeedstudio.com/Netduino-Plus-2-p-1348.html

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