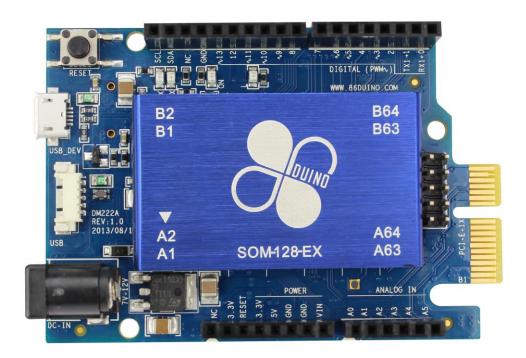


86Duino Boards

An open-source embedded platform based on Vortex86EX SoC

User's Manual





86Duino is an open-source embedded platform based on Vortex86EX SoC, easy-to-use hardware and software integrated. This Arduino-compatible board can support many x86 O/S as well as those running on the original Arduino base system.

The 86Duino is a high performance and fully static 32-bit x86 processor board compatible with Windows OS, Linux and most popular 32-bit RTOS. It integrates PCIE bus, DDR3, ROM controller, xISA, I2C, SPI, IPC (Internal Peripheral Controllers with DMA and interrupt timer/counter included), Fast Ethernet, FIFO UART, USB2.0 and SD/SATA controller within a single package to form a system-on-a-chip (SOC).

86Duino provides an ideal solution for the Arduino and embedded system with desired performance.





Product Information

- Vortex86EX Processor
 - 300MHz 32-bit x86
 - 1GB DDR3
 - LAN
 - USB 2.0
 - Micro-SD
- Open-Source Hardware
- Support DOS, Windows, Linux
- Arduino-Compatible IDE
- Arduino "Leonardo" form factor

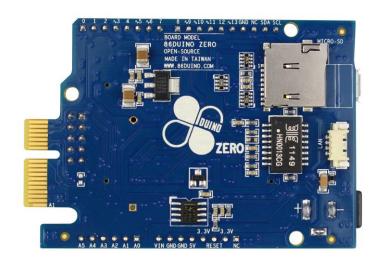
Specifications

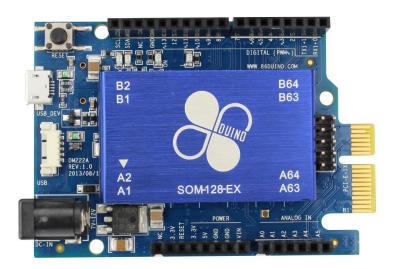
- Processor: Vortex86EX
- Clock Speed: 300 MHz
- Memory: 1GB DDR3
- Flash Memory: 8MB
- Digital I/O Pins: 14 (of which 7 provide 32bit PWM output)
- Analog Input Pins: 6 (11bit)
- Operating Voltage: 5V
- Input Voltage (recommended): 7-12V
- DC Current per I/O Pin: 16 mA
- DC Current for 3.3V Pin: 400 mA





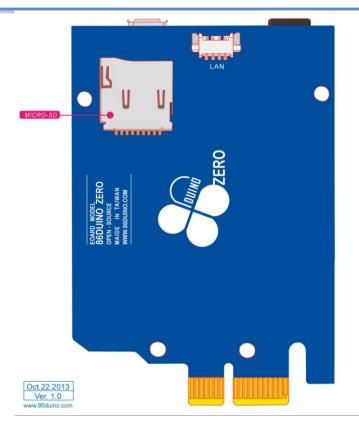


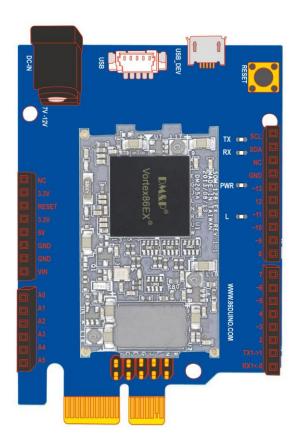




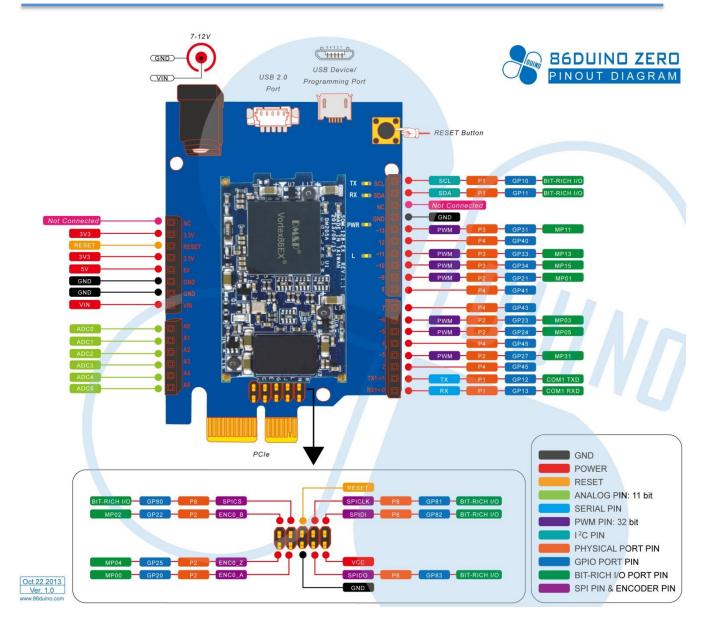
















Technical Specifications

Processor	Vortex86EX
Clock Speed	300 MHz
Memory	128MB industrial-grade DDR3 (86Duino Zero) 1GB industrial-grade DDR3 (86Duino Zero Plus)
Flash Memory	8MB
Digital I/O Pins	17 (of which 7 provide 32bit PWM output)
Analog Input Pins	6 (11bit)
Communication	I2C, SPI, UART, LAN
Operating Voltage	5V
Input Voltage (recommended)	7-12V
DC Current per I/O Pin	16 mA
DC Current for 3.3V Pin	400 mA

