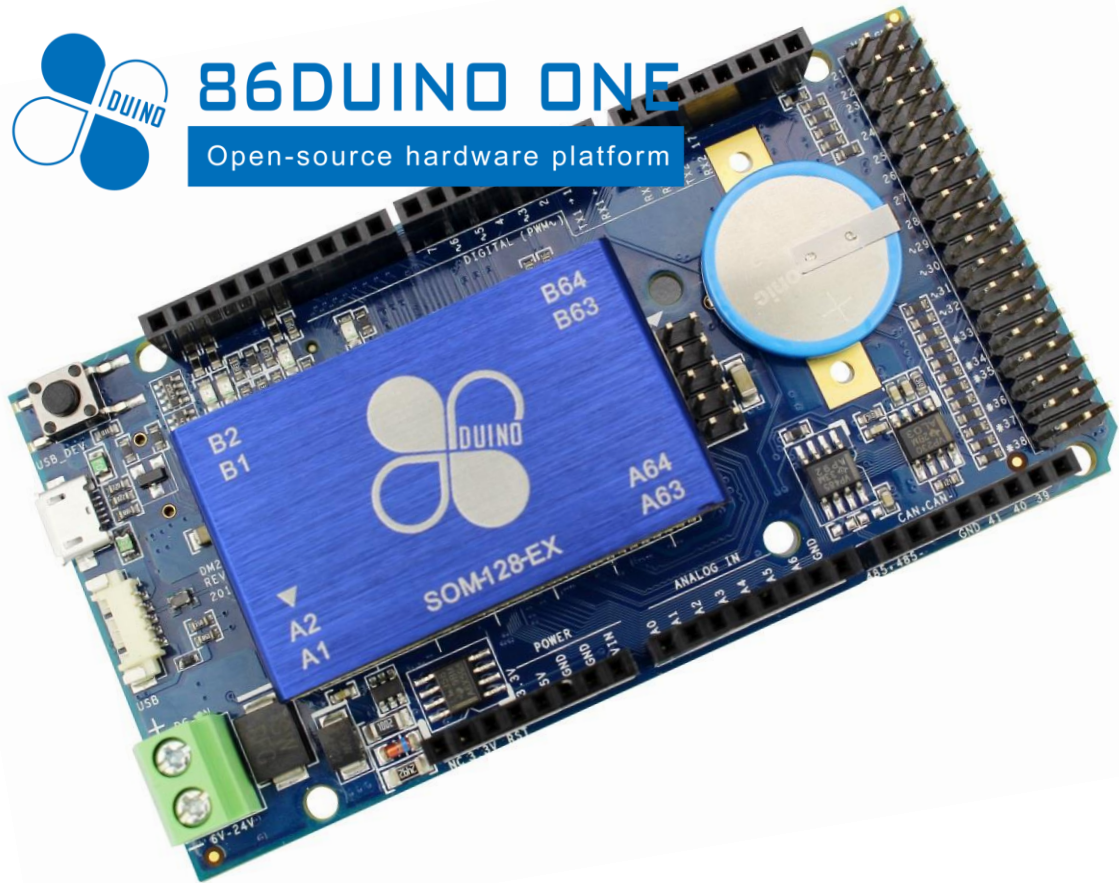




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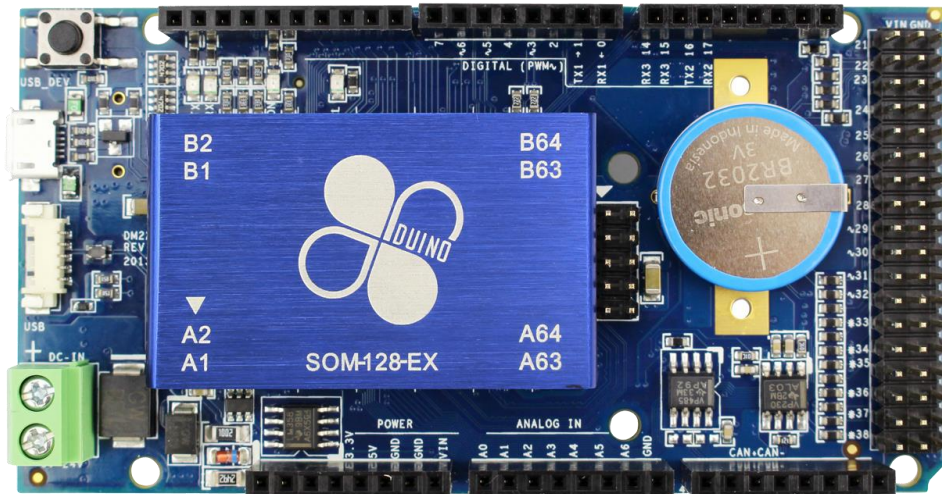
Open-source hardware platform



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
 - 128MB/1GB DDR3
 - LAN
 - USB 2.0
 - Micro-SD
- Open-Source Hardware
- Support DOS, Windows, Linux
- Arduino-Compatible IDE

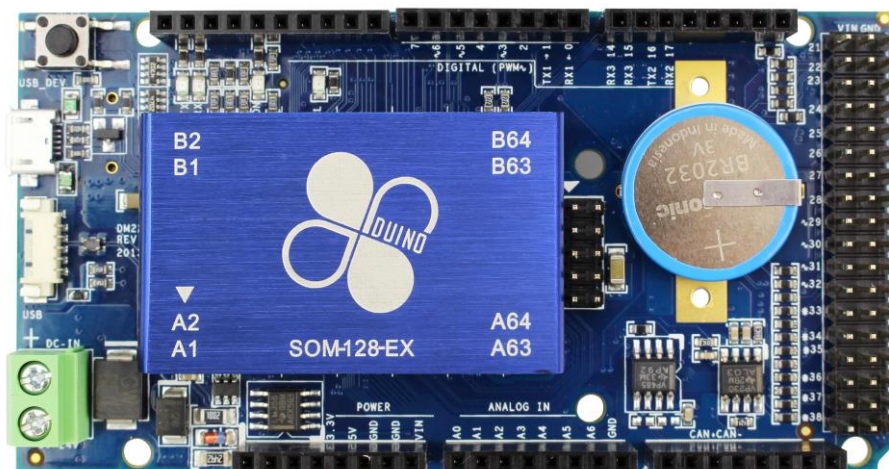
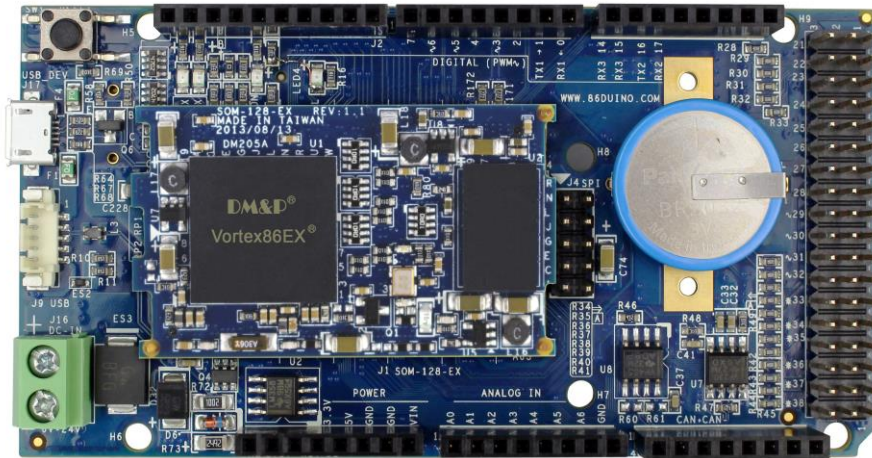
Specifications

- Processor: Vortex86EX
- Clock Speed: 300 MHz
- Memory: 128MB / 1GB DDR3
- Flash Memory: 8MB
- Digital I/O Pins: 45 (of which 11 provide 32bit PWM output)
- Analog Input Pins: 7 (11bit)
- Operating Voltage: 5V
- Input Voltage (recommended): 6-24V
- DC Current per I/O Pin: 16 mA
- DC Current for 3.3V Pin: 400 mA



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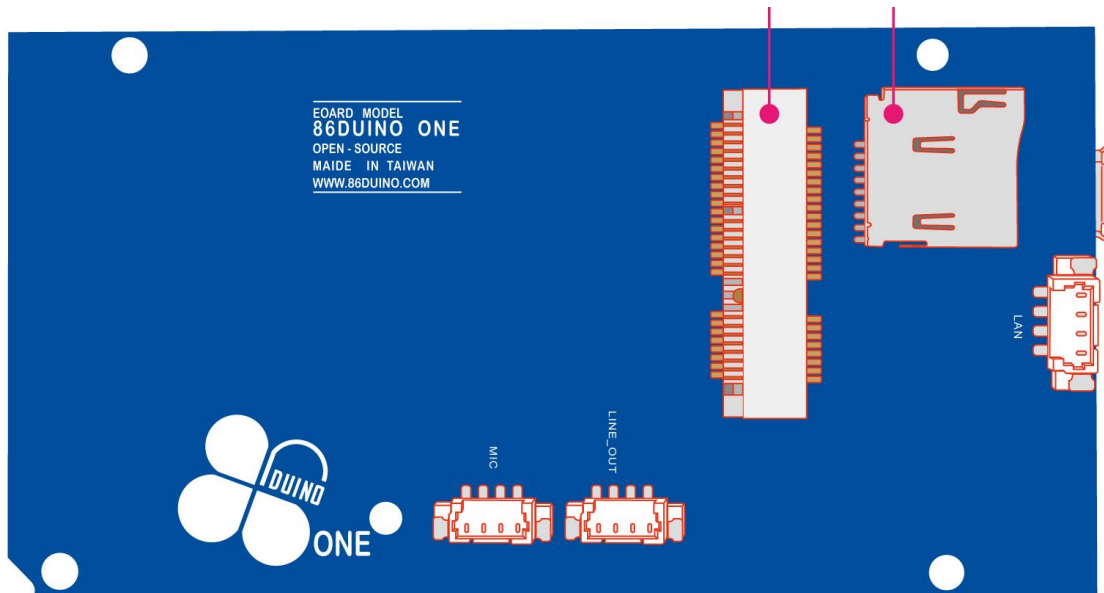
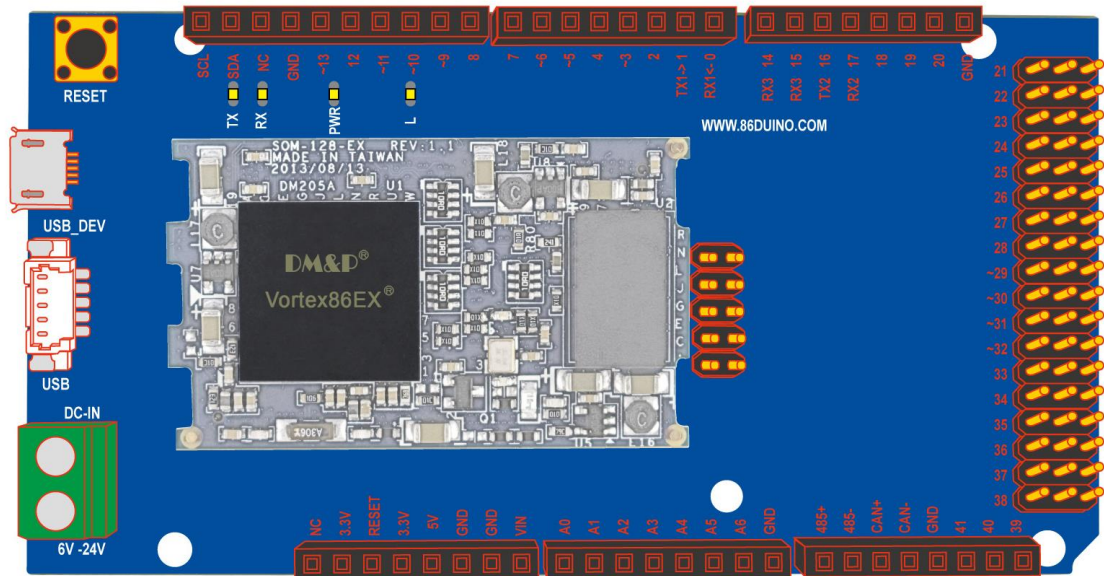
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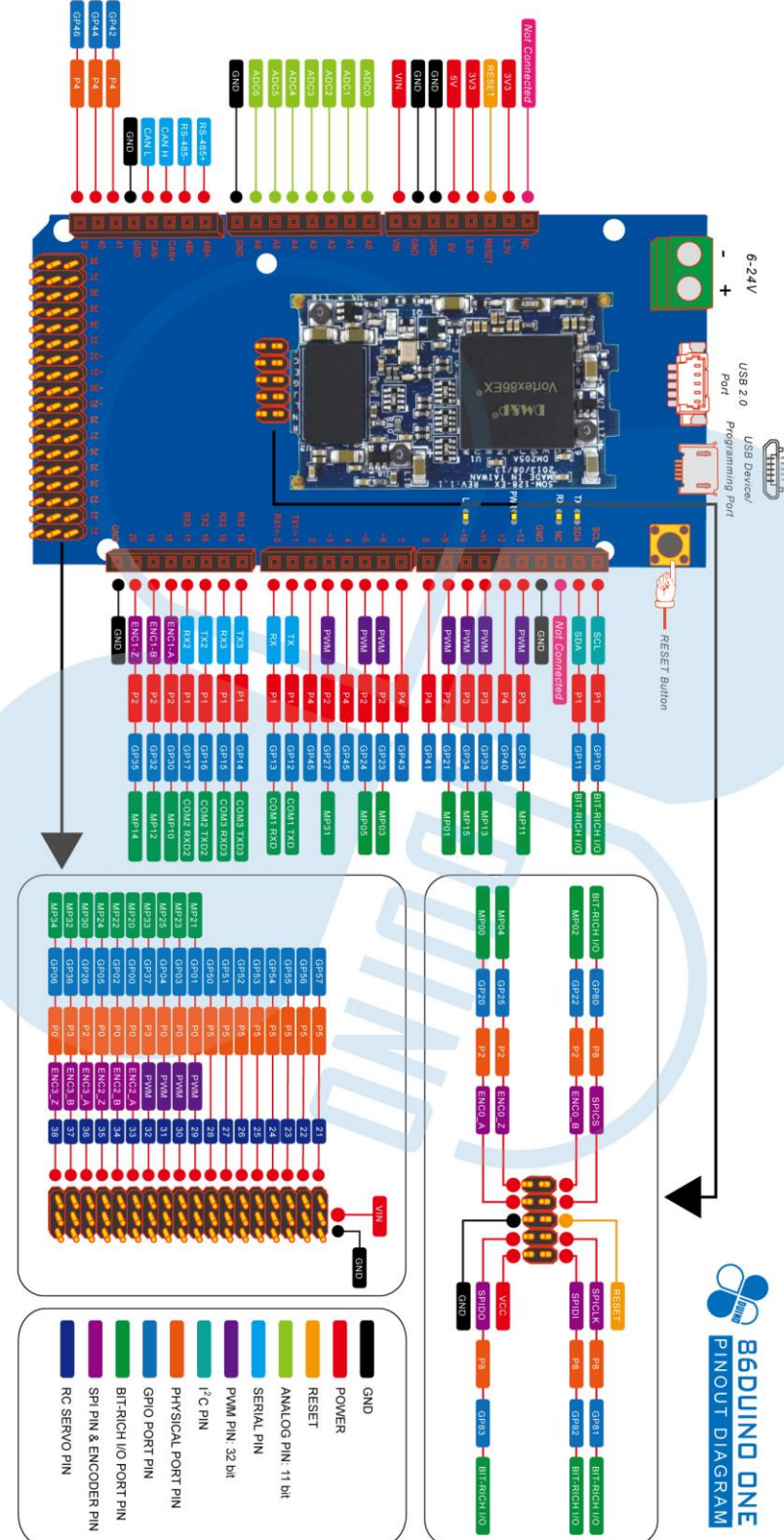




86DUINO ONE

Open-source hardware platform

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Ver. 2.0
www.86duino.com



Technical Specifications

Processor	Vortex86EX
Clock Speed	300 MHz
Memory	128MB industrial-grade DDR3 (86Duino One) 1GB industrial-grade DDR3 (86Duino One Plus)
Flash Memory	8MB
Digital I/O Pins	45 (of which 11 provide 32bit PWM output)
Analog Input Pins	7 (11bit)
Communication	I2C, SPI, UART, RS485, CAN, LAN
Sound	High Definition Audio
Sensor	LSM330DLC (6-axis Accelerometer & Gyro)
Operating Voltage	5V
Input Voltage (recommended)	6-24V (with anti-power protection)
DC Current per I/O Pin	16 mA
DC Current for 3.3V Pin	400 mA