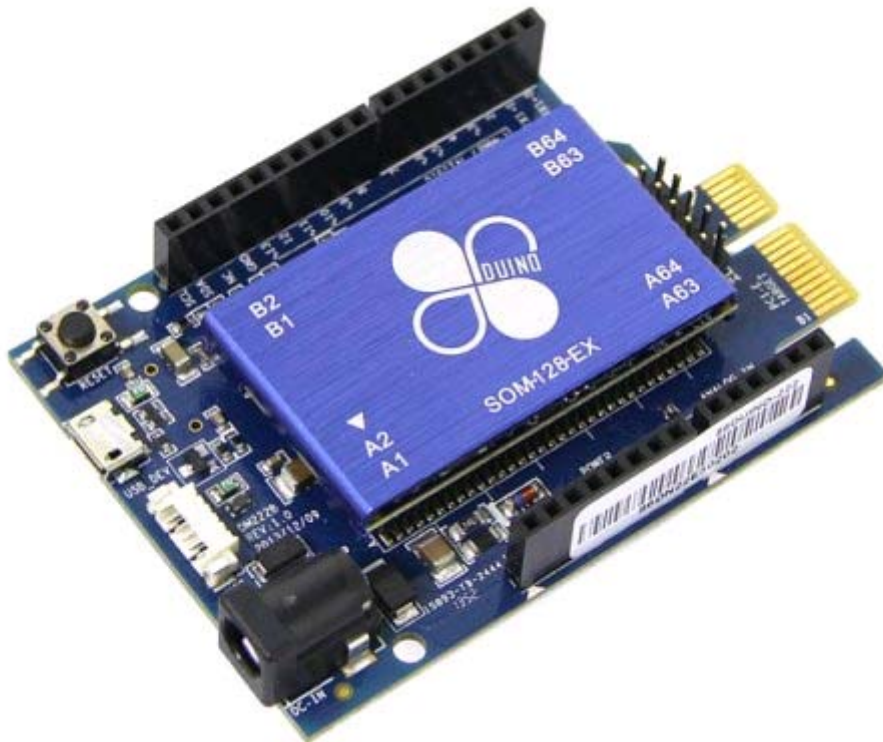


86Duino Zero - an embedded platform based on Vortex86EX SoC

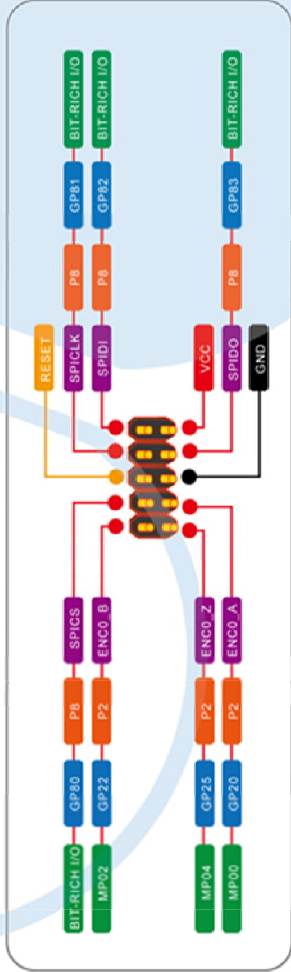
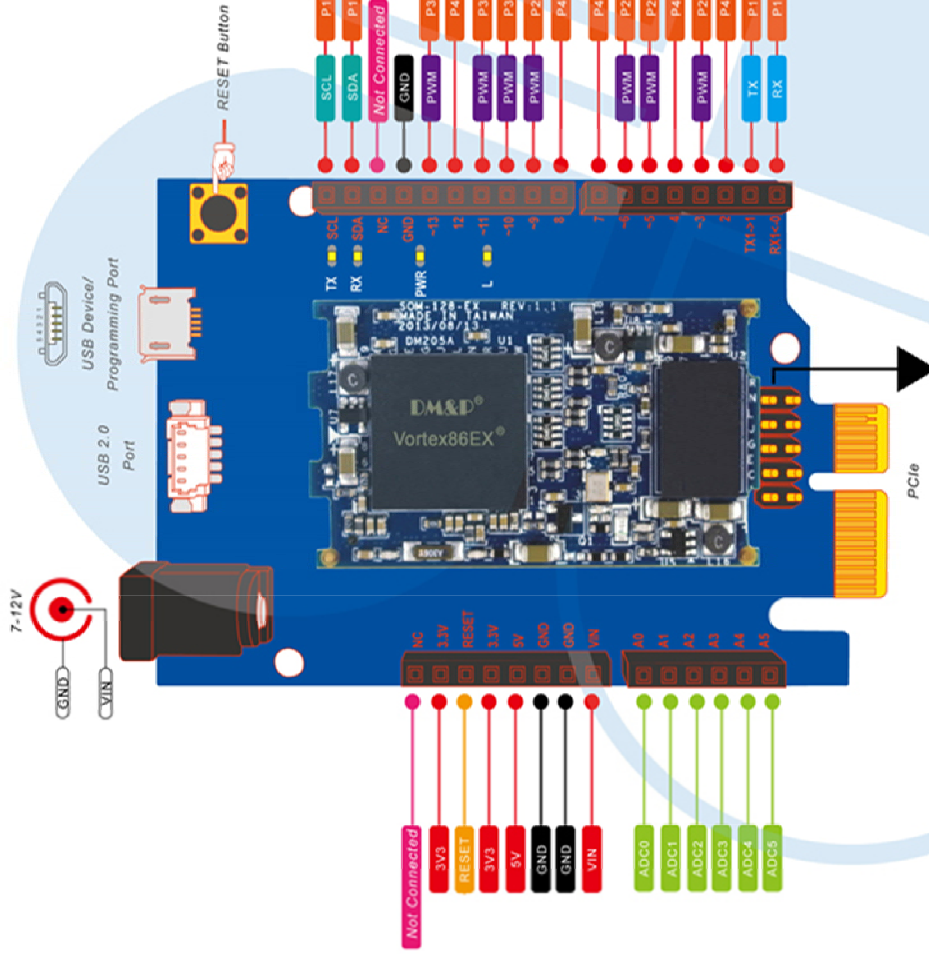


86Duino is an open-source embedded platform based on Vortex86EX SoC, easy-to-use hardware and software integrated. This Arduino-compatible board can support many x86 O/S as well as those running on the original Arduino base system.

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.

86DUINO ZERO PINOUT DIAGRAM



Black	GND
Red	POWER
Orange	RESET
Light Green	ANALOG PIN: 11 bit
Blue	SERIAL PIN
Purple	PWM PIN: 32 bit
Teal	I ² C PIN
Dark Orange	PHYSICAL PORT PIN
Light Blue	GPIO PORT PIN
Dark Green	BIT-RICH I/O PORT PIN
Pink	SPI PIN & ENCODER PIN

Features

- Vortex86EX Processor
- 300MHz 32-bit x86
- 128MB 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: 128MB 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

Documentations

- [Vortex86EX Datasheet V1.4](#)
- [Circuits Schematics for DM-205 \(Vortex86EX SOM-128-EX\)](#)
- [Circuits Schematics for DM-222 \(Daughter Board\)](#)
- [BOM/Part List for DM-222 \(Daughter Board\)](#)
- [Gerber file for DM-222 \(Daughter Board\)](#)

Weight: 52 g