



Android/Linux +

Arduino-compatible embedded

www.udoo.org



DESCRIPTION

UDOO™ is an open hardware, low-cost computer equipped with an ARM® i.MX6 Freescale™ processor for Android and Linux, alongside an Arduino™ Due ARM SAM3X. Both CPUs are integrated on the same board. Ideal for prototyping applications requiring multimedia capabilities and/or high levels of parallel computing, maintaining the advantages offered by low-power consuming ARM Processors.

TECHNICAL SPECIFICATION

Processor

Freescale™ i.MX 6 ARM Cortex-A9 CPU Dual*/Quad core 1GHz
Atmel SAM3X8E ARM Cortex-M3 CPU (same as Arduino Due)

(* Dual Core CPU is Dual Lite version, with only one Image Processing Unit (IPU) and without the SATA interface

Memory

Low Voltage 1GB DDR3

Graphics

Integrated graphics: each processor provides 3 separated accelerators for 2D, OpenGL® ES2.0 3D and OpenVG™ (only Quad-Core Version)

Video out

HDMI interface (up to 1080p)
18/24 bit LVDS interface (up to 1920x1200) + Touch (I2C signals)

Video in

Camera connection

Mass Memory

SATA (only Quad-Core version)
SD card slot onboard

Network Interfaces

Gigabit Ethernet RJ45 (10/100/1000 MBit)
Optional WiFi Module

Audio

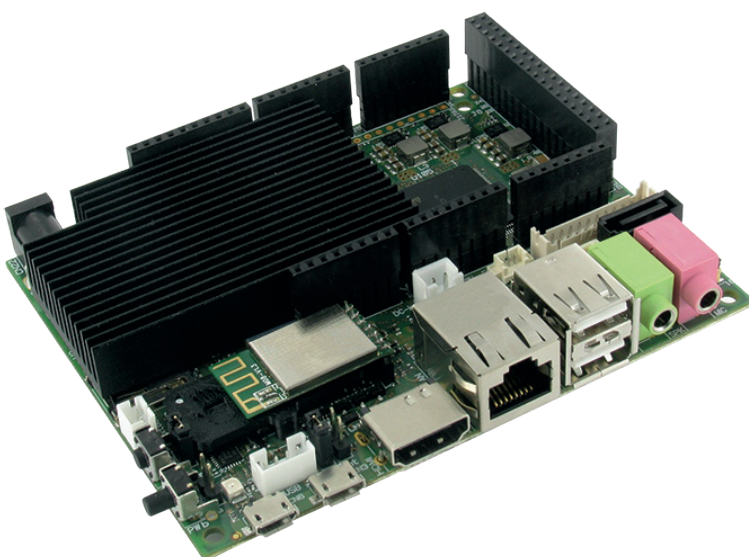
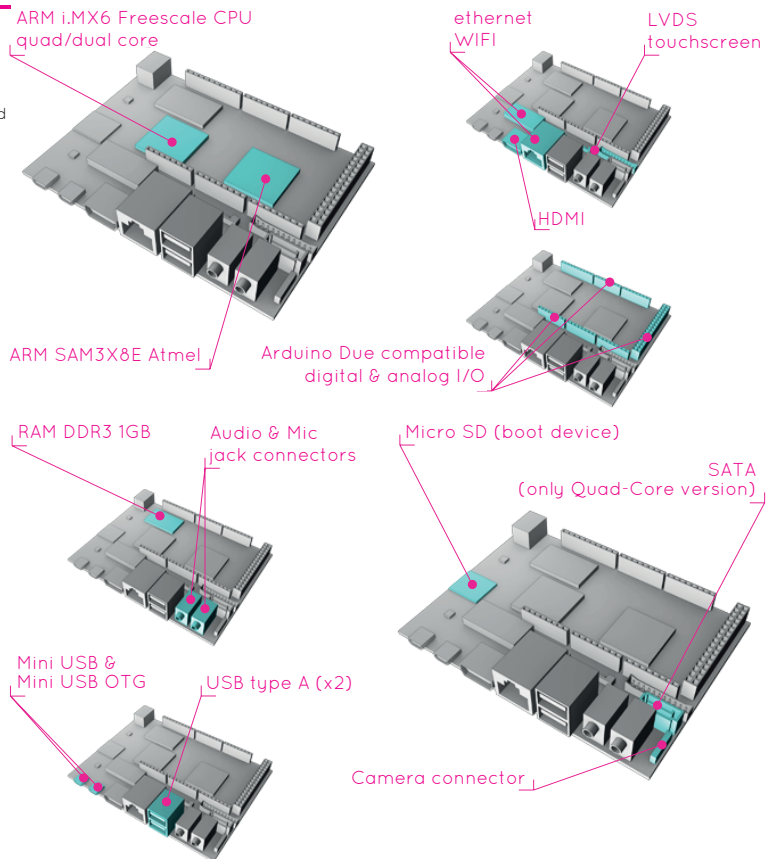
Headphone and Microphone stereo jacks

USB

1 x USB OTG (micro-A connector)
1 x USB 2.0 internal pin header (requires adapter cable)
2 x USB 2.0 type A ports
1 x USB to Serial interface (micro-B connector)

Dimension

4.33 inch x 3.35 inch (11 cm x 8.5 cm)



ARDUINO™ PINOUT

UDOO is Arduino-Compatible and features the standard Arduino™ R3 layout (1.0 pinout). Thanks to this, UDOO is fully compatible with Arduino™ shields*.

Digital I/O Pins

76 fully available GPIOs

Analog Input Pins

12

Analog Output Pins

2 (DAC)

Shared Pins

The 76 digital communications pins are shared between the two processors. They can be switched individually as input or output via software muxing.

OPERATIVE SYSTEMS

Android Jelly Bean 4.2.2
Linux Linaro (Ubuntu) 11.10

*Please note that like the Arduino Due, UDOO runs at 3.3V and the maximum voltage that the I/O pins can handle is 3.3V.