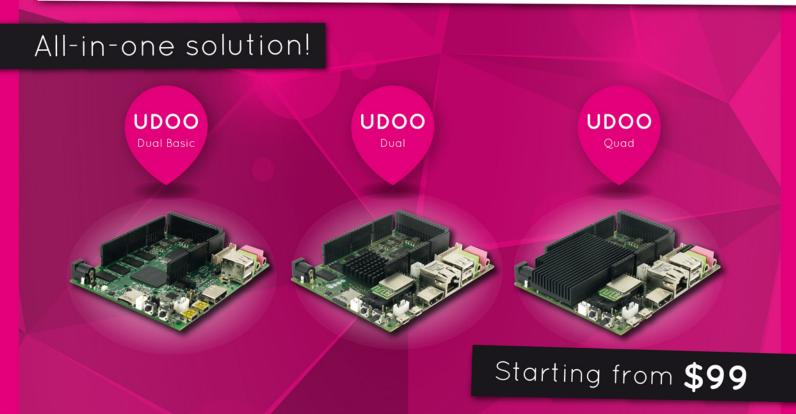


UDOO takes your DIY projects to the next level; it's a powerful tool for education and creativity





UDOO is an open hardware, low-cost single-board Android/Linux ARM computer with Arduino Due compatible integration.





Arduino-compatible embedded

www.udoo.org



DESCRIPTION

UDOO" is an open hardware, low-cost computer equipped with an ARM® i.MX6 NXP™ 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

NXP[™] i.MX6 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 MIPI* CSI

Mass Memory

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

Network Interfaces

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

Audio

Headphone and Microphone stereo 3.5 mm jacks

USB

1 x USB OTG (micro-A connector)

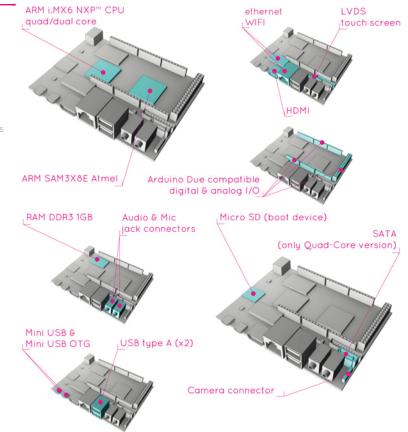
1 x USB 2.0 internal pin header (requires adapter cable)

2 x USB 2.0 type A ports

1 x USB to Serial interface (micro-B connector)

Dimension

110mm x 85mm (4.33 inch x 3.35 inch)



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

Analog Output Pins 2 (DAC)

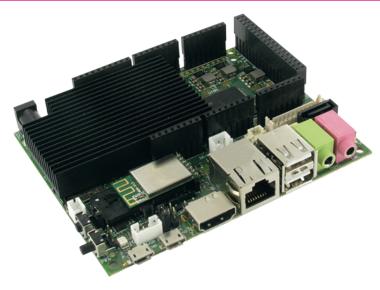
Shared Pins

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

OPERATING SYSTEMS

Android Marshmallow 6.0.1 Linux UDOObuntu2 (Ubuntu 14.04)

*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.



 $Information \ subject \ to \ change. \ Please \ visit \ www.udoo.org \ to \ find \ the \ latest \ version \ of \ the \ datasheet.$