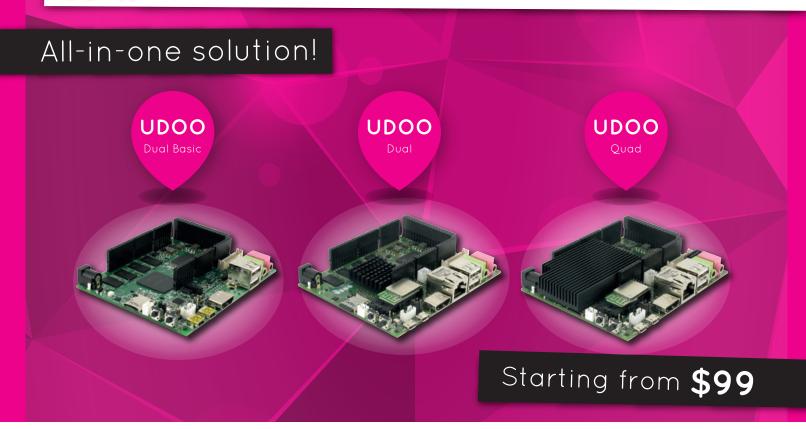


UDOO takes your DIY projects to the next level; it's a powerful tool for education and creativity





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





# Arduino-compatible embedded

www.udoo.ora



## DESCRIPTION

 $UDOO^{\circ} is \ an \ open \ hardware, low-cost \ computer \ equipped \ with \ an \ ARM^{\circ} \ i.MX6 \ NXP^{\mbox{\tiny M}} \ processor \ for \ Android^{\mbox{\tiny M}} \ and \ Linux^{\mbox{\tiny O}}, \ alongside \ an \ Arduino^{\mbox{\tiny TM}} \ Due \ ARM \ SAM3X. \ Both \ CPUs \ are integrated \ on \ the \ same \ board.$ 

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

## LISB

1 x USB OTG (micro-A connector)

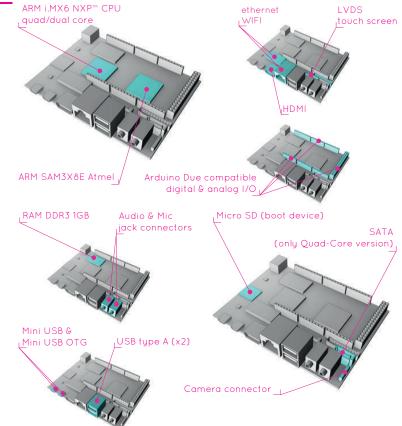
1 x USB 2.0 internal pin header (requires adapter cable)

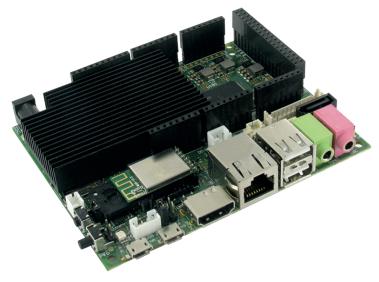
2 x USB 2.0 type A ports

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

## Dimension

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





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

# 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.

