

Raising the Maker World  
to the Next Level

## CPU

AMD Ryzen™ Embedded V1000  
QUAD CORE/EIGHT THREAD  
UP TO 3.6 GHZ

## GPU

AMD RADEON™ VEGA 8  
GRAPHICS (8 GPU CU)



## I/O

ARDUINO  
LEONARDO-COMPATIBLE  
Embedded Controller I/Os

## USB

2X USB 3.0 TYPE-A  
2X USB TYPE-C

## VIDEO

2X HDMI 2.0  
2X DP (USB TYPE-C)

# BOARDS

# UDOO BOLT V3

# UDOO BOLT V8

# FIELDS

## FEATURES



 Processor

AMD RYZEN™  
EMBEDDED V1202B

AMD RYZEN™  
EMBEDDED V1605B



AAA GAMING

 CPU Core

DUAL CORE/QUAD THREAD  
@ 2.3GHZ (3.2GHZ BOOST)

QUAD CORE/EIGHT THREAD  
@ 2.0GHZ (3.6GHZ BOOST)



VR-READY

 Graphics

AMD RADEON™ VEGA 3  
GRAPHICS (3 GPU CU)

AMD RADEON™ VEGA 8  
GRAPHICS (8 GPU CU)

 Multimedia

DIRECTX® 12, OPENCL™, OPENGL®, THE VULKAN® API  
H.265 DECODE & ENCODE (8-BIT), VP9 DECODE



MEDIA CENTER

 Memory

2X DDR4 DUAL-CHANNEL 64-BIT SO-DIMM SOCKETS  
WITH ECC SUPPORT UP TO 32GB 2400 MT/S

 Mass Storage


32GB EMMC 5.0 HIGH SPEED DRIVE  
SSD SATA MODULE SLOT M.2 SOCKET KEY B 2260  
(FEATURED ALSO PCI-E X2)  
NVME MODULE SLOT M.2 SOCKET KEY M 2280  
(PCI-E X4 GEN 3 INTERFACE)  
SATA 3.0 6 GBIT/S STANDARD CONNECTOR



HACKING

 Networking

GIGABIT ETHERNET (RJ-45) REALTEK RTL8111G  
WIFI/BT COMBO MODULE SLOT M.2 SOCKET 1 KEY E 2230

 USB

2X USB 3.0 TYPE-A  
2X USB TYPE-C:  
- USB 3.1 GEN 2  
- DISPLAYPORT ALTERNATE MODE  
- USB POWER DELIVERY (USB-PD) 3.0



ROBOTICS

 Video Interface

2 X HDMI 1.4 / 2.0A (CEC)  
2 X DP ALTERNATE MODE ON USB TYPE-C

 Audio Interface

HD AUDIO CODEC REALTEK ALC888  
3.5" COMBO CONNECTOR: HEADPHONE + MICROPHONE  
3.5" COMBO CONNECTOR: S/PDIF OPTICAL + STEREO  
PRE-AMPLIFIED STEREO SPEAKER CONNECTORS




A.I.

 Other Interfaces

FRONT PANEL HEADER, CONSUMER-IR RECEIVER,  
FAN CONTROLLER, RTC BATTERY INCLUDED



INTERACTIVE ART

 I/O

ARDUINO LEONARDO-COMPATIBLE I/O:  
- 12X ANALOG INPUTS  
- UP TO 23X DIGITAL I/O (7 PWM)  
- 1X UART, 1X I2C, 1X SPI

3X GROVE CONNECTORS:  
- 1X ANALOG INPUT, 1X UART OR DIGITAL I/O,  
1X I2C OR DIGITAL I/O

EMBEDDED CONTROLLER I/O:  
- 2X UART, 2X I2C, 1X SPI, 1X KEYBOARD SCAN, 1X FAN CONTROLLER, 10X GPIO



WORKSTATION

 OS



 Power In

DC IN JACK 19V 65W  
USB TYPE-C POWER DELIVERY



EDUCATIONAL

 Dimensions

12CM X 12CM - 4.72" X 4.72"