



AMD
EMBEDDED
SOLUTIONS

Computing Power

AMD Ryzen™ Embedded V1605B processor
up to 3.6 GHz

Graphics

Up to 4 Independent 4K Displays
with **AMD Radeon "Vega"** graphics

Modularity

2x DDR4 Dual-channel 64-bit up to 32gb;
SSD SATA Module Slot M.2;
NVMe Module Slot M.2;
Sata 3.0 6 Gbit/s

Flexibility

Arduino™ compatible, enabling the platform
for VR, AR and Mixed Reality applications

Reliability

Processor built for the embedded market,
with great durability and lasting power

Support

Helps guaranteed by our team and by the
large community



GEAR



FEATURES

UDOO BOLT GEAR

FIELDS



 Processor

AMD RYZEN™
EMBEDDED V1605B



WORKSTATION

 CPU Core

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



HOME CINEMA

 Graphics

AMD RADEON™ VEGA 8
GRAPHICS (8 GPU CU)

 Multimedia

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

 Memory

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



CONTENT
CREATOR

 Mass Storage


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



IMMERSIVE
GAMING

 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



INFOTAINMENT &
VENDING

 Video Interface

2 X HDMI 1.4 / 2.0A
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. &
MACHINE LEARNING

 Other Interfaces

FRONT PANEL HEADER,
FAN CONTROLLER, RTC BATTERY INCLUDED

 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 FAN CONTROLLER, 10X GPIO



PROFESSIONALS

 OS



ENTERPRISE

 Power In

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



EDUCATION

 Dimensions

13CM X 13CM X 7CM - 5,12" X 5,12" X 2,75"