

Development Kits for Rapid POC



UDOO BOLT SBC based on AMD Embedded Ryzen V1000B family of Applications Processor

Raising the Maker World to the Next Level



HIGHLIGHTS	
CPU AMD Ryzen Embedded V1000B family	CONNECTIVITY 1x GbE; 2x USB3.0; 2x USB3.1 Gen2; Slot M.2 Socket 1 Key E 2230 for optional Wi-Fi/BT combo
GRAPHICS AMD Radeon™ VEGA with up to 8 Compute Units GPU	MEMORY 2 x DDR4 ECC and non-ECC SODIMM slots, support DDR4-2400 memories up to 32GB total



MAIN FIELDS OF APPLICATION



FEATURES	
Processor AMD Ryzen™ Embedded V1202B with GPU AMD Radeon™ Vega 3, dual core dual thread @ 2.3GHz (3.2 Boost), TDP 12-25W AMD Ryzen™ Embedded V1605B with GPU AMD Radeon™ Vega 8, quad core dual thread @ 2.0GHz (3.6 Boost), TDP 12-25W	Other Interfaces Arduino Leonardo-Compatible I/O: - 12x analog inputs - Up to 23 Digital I/O (7 PWM) - 1 x UART, 1 x I2C, 1 x SPI 3 x GROVE Connectors: - 1 x Analog Input - 1 x UART or Digital I/O - 1 x I2C or Digital I/O EMBEDDED CONTROLLER I/O: - 2 x UART - 2 x I2C - 1 x SPI - WAKE# signal - 1 x Keyboard Scan - 1 x Fan Controller - 16 x GPIO Other IR receiver (RC5 compatible), RTC battery
Memory 2 x DDR4 ECC and non-ECC SODIMM slots, support DDR4-2400 memories up to 32GB total	
Graphics GPU AMD Radeon™ VEGA with up to 8 Compute Units DirectX® 12 supported H.265 (10-bit) decode and 8-bit video encode VP9 decode 4 independent displays supported	
Video Interfaces 2 X HDMI 1.4 / 2.0A 2 X DP Alternate Mode on USB Type-C	
Video Resolution Up to 4K	
Mass Storage 32GB eMMC 5.0 High Speed Drive Optional SSD SATA module slot M.2 Key B 2260 Optional NVMe module slot M.2 Key M 2280 SATA 3.0 6 Gbps standard connector	
Networking 1x Gigabit Ethernet RJ45 connector Slot M.2 Socket 1 Key E 2230 for optional Wi-Fi/BT combo	
USB 2 x USB 3.0 Type-A socket 2 x USB 3.1 Gen2 Type-C connector (alternate mode with DP), Dual Role Port (DRP), USB Power Delivery (USB-PD) 3.0	
Audio HD Audio codec Line Out + Mic In combo TRRS audio jack 3.5" connector S/PDIF Optical + Stereo Out Pre-amplified Stereo Speaker (up to 3W)	
Serial Ports 2 x UART	
Power Supply +19VDC (60W), DC Power Jack USB Type-C Power Delivery sink profile 20V/3A(60W)	
Operating System Linux Windows 10 64bit	
Operating Temperature* 0°C ÷ +70°C	
Dimensions 120 x 120 mm	

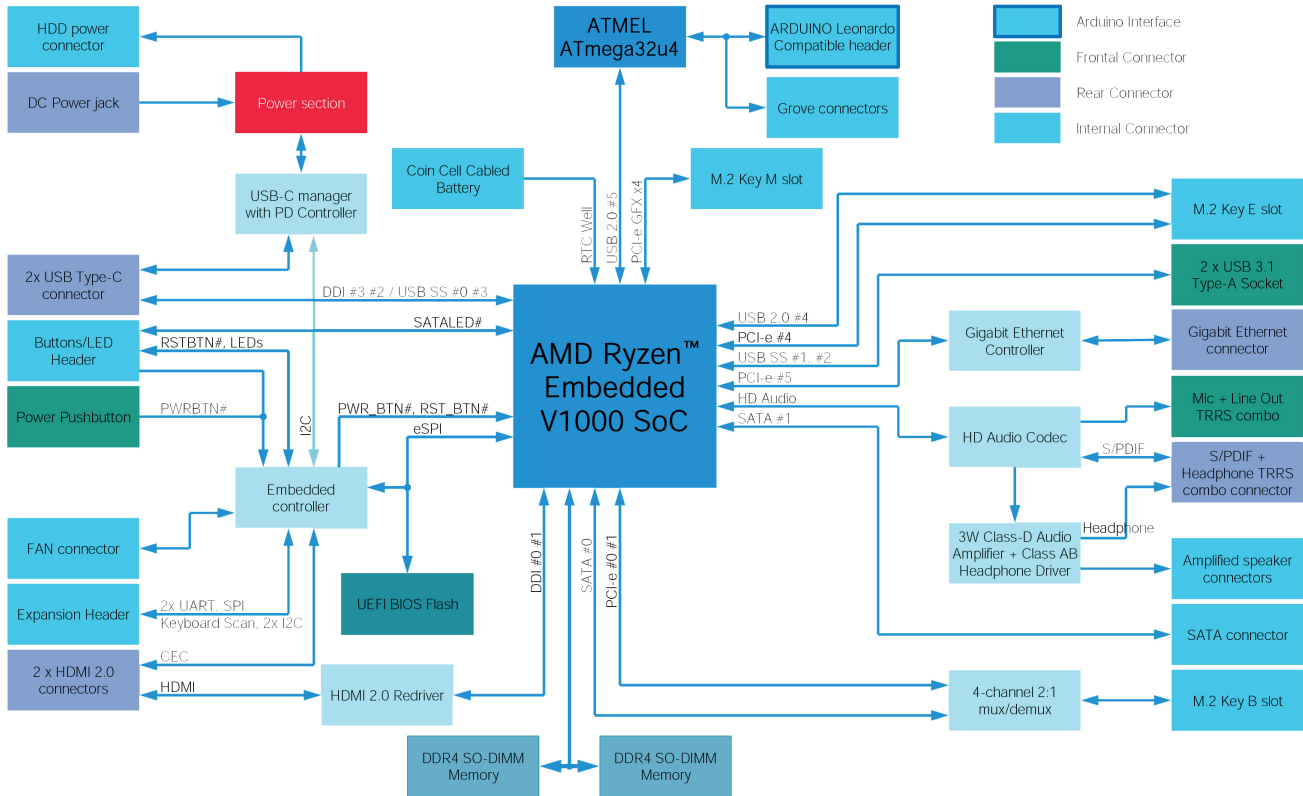
*Measured at any point of SECO standard heatspreader for this product, during any and all times (including start-up). Actual temperature will widely depend on application, enclosure and/or environment. Upon customer to consider application-specific cooling solutions for the final system to keep the heatspreader temperature in the range indicated.



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BLOCK DIAGRAM



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