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

AMD

Windows 10 Linux HDMI®

MAIN FIELDS OF APPLICATION

Coffee & Vending

Industrial Automation

Smart Devices

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
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 Preamplified Stereo Speaker (up to 3W)
Serial Ports	2 x UART

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
Power Supply	+19V_{DC} (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

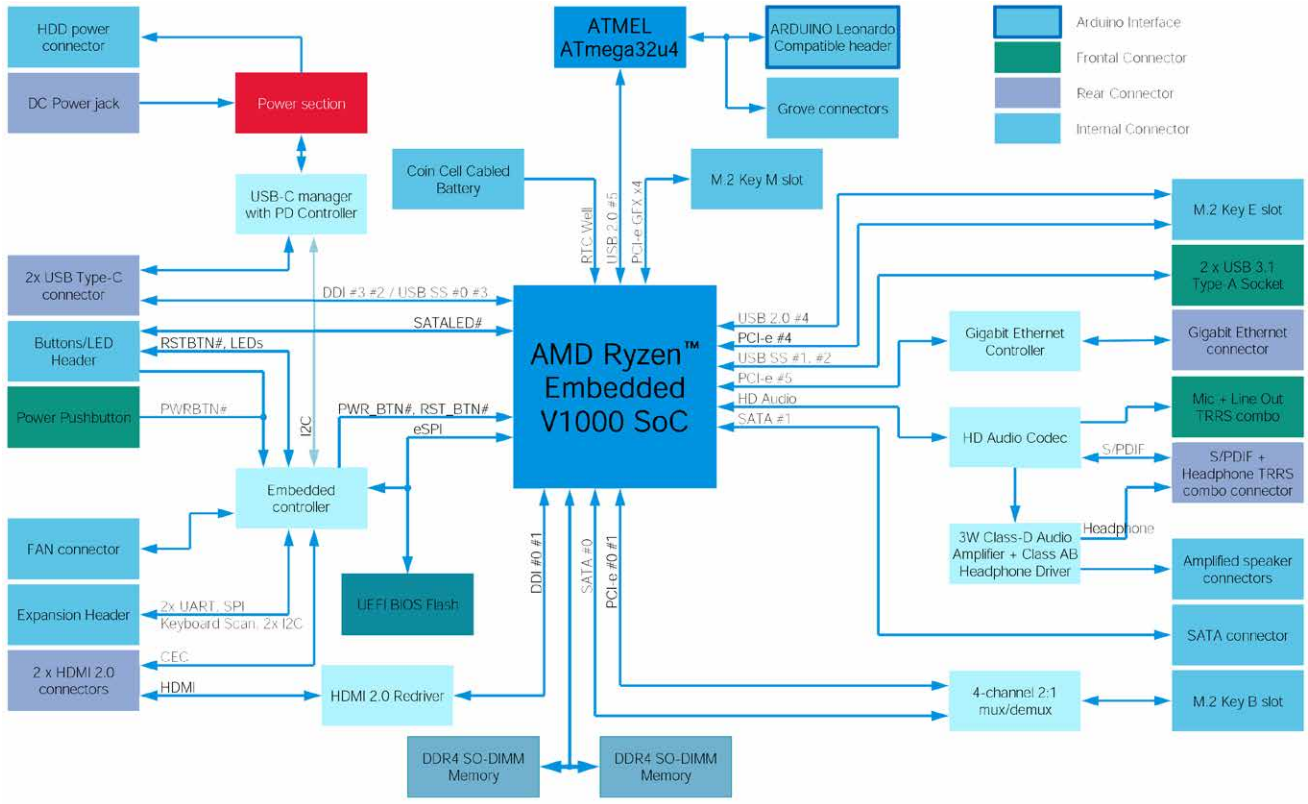
*Measured at any point of SECO standard heatspreader for this product, during any and all times (including start-up). Actual temperature will widely depend on application, enclosure and/or environment. Upon customer to consider application-specific cooling solutions for the final system to keep the heatspreader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

Information subject to change. Please visit www.edge.seco.com to find the latest version of this datasheet

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BLOCK DIAGRAM



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DEVICE MANAGER

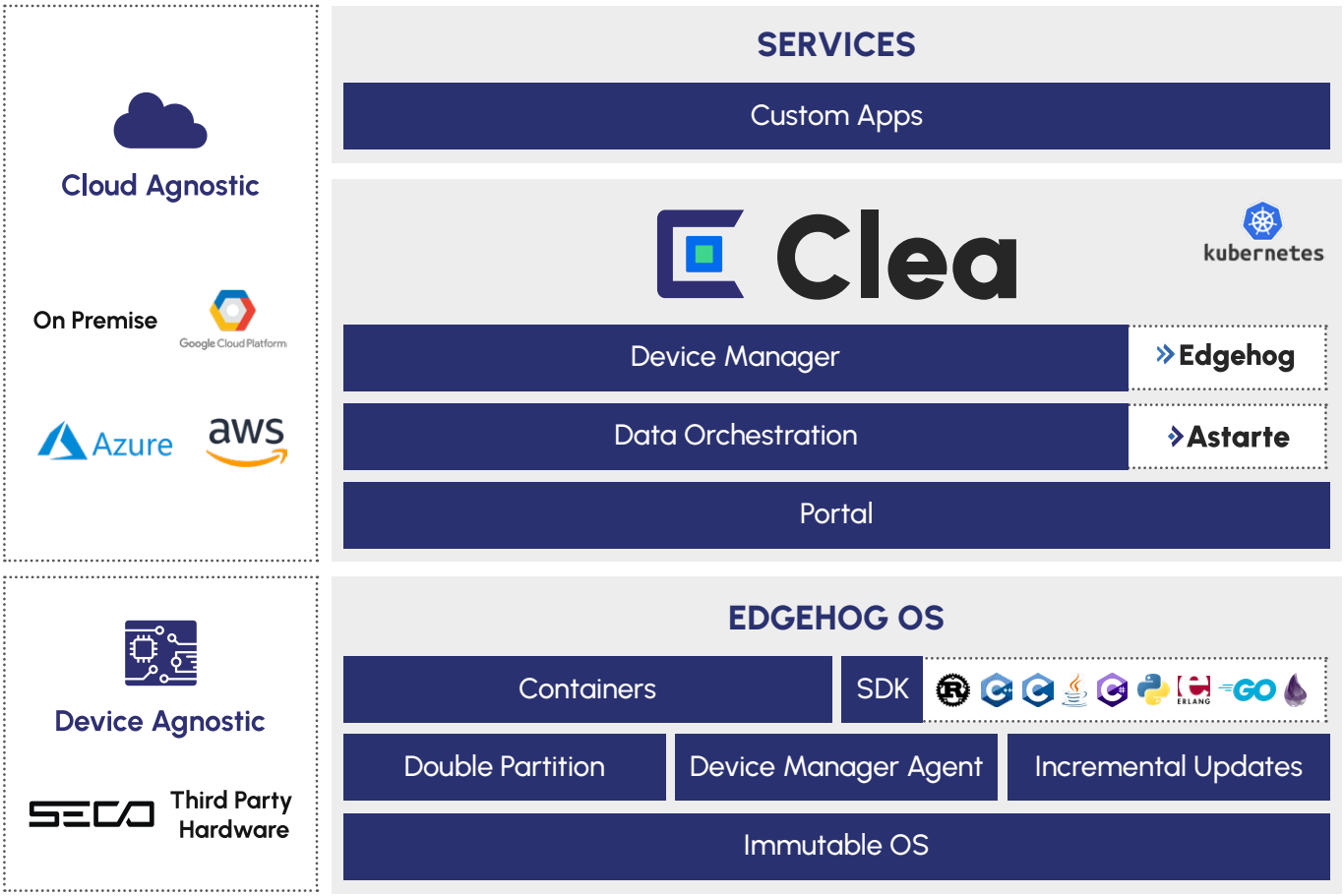
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CLEA DOCS

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