LLM2v8CY – AMD Ryzen™ Embedded V2748 Processor

Flexible Customization

The Simply NUC Cypress Long Life Mini is a computer built with an AMD® Ryzen™ Embedded V2000-series processor, delivering innovation in a small space for embedded solutions. A wireless-AX card can be installed into one of two M.2 slots, leaving the other available slot for a lightning fast SSD. The bottom of the chassis is designed to accommodate mounting options including DIN rail and VESA plate. And there are board SKU options for embedded designs. Finally, whether it's Windows® 10, Linux, or another OS, these systems are verified to run a wide range of operating systems so you can build the exact solution your clients want.

Feature Rich, Mainstream Performance

Cypress is a mini computer that's small in size with features that make it optimal for your embedded solutions. Its rich feature set makes Cypress ideal for mainstream performance usages such as on-prem edge analytics. It offers Intel Wi-fi 6 and a 2.5Gb Ethernet port for flawless communication in cluttered environments, TPM for secure communications, and four superspeed USB ports for I/O flexibility. And with two DisplayPort (via type-C ports) and two HDMI ports Cypress has plenty of bandwidth to drive four 4K monitors at 60Hz for sophisticated digital signage usages. If more I/O is required a functional lid upgrade can provide extra data, video, or LAN ports.

Build Embedded Solutions

Built to stand the test of time, Simply NUC is committed to supporting the manufacture and sales of Cypress in the same form, fit, and function for seven years from launch. It supports a wide power supply range (12 to 24Vdc) and has an operating temperature range of 0 to 50C for a wide range of embedded usages. Cypress also comes in board SKU options with a serial port header and three USB headers enabling deeply embedded usages such as kiosk, vending machines, and POS.

Highlighted features

- AMD® Ryzen™ Embedded V2748 Processor
- AMD® Radeon™ Vega 7 Graphics
- Two DDR4 SO-DIMM Sockets
- M.2 Slot Supports PCIe Gen3 or SATA SSDs
- Secondary M.2 Slot for SATA SSDs
- Two HDMI 2.1 (4K@120Hz) Ports
- Two DisplayPort 1.4 via USB-C Ports
- Intel® Wi-Fi 6 + Bluetooth 5.0
- 10/100/1000/2500Mbps Ethernet
- One USB 3.2 Gen 2 Type-A Port
- One USB 2.0 Type-A Port
- Two USB 3.2 Gen 2 Type-C Ports
- TPM Down (Infineon 2.0)
- $19V_{DC}$ 90W Power Supply Adapter
- 12V – 24V Power Supply Range
- Kensington Lock Slot
- VESA Mount Kit Included
- 0°-50°C Operating Temperature

Customization

- Supports Primary M.2 PCIe and SATA
- Supports DDR4 RAM 4GB-64GB
- Supports DDR4 ECC RAM 16GB-64GB
- Supports Primary M.2 Gen3 PCIe and SATA SSD 128GB-8TB
- Supports Secondary SSD 128GB-2TB
- Customizable Lid Options Available
- Two USB 2.0 Internal Headers
- One USB 3.2 Gen 2 Internal Header
- One RS-232 Serial Internal Header

Simply NUC Services
You can order this NUC in your various configurations, as well as your corporate OS Image loaded and ready to deploy.

Technical Specification

Processor
- AMD® Ryzen™ V2748 Processor (2.9GHz@35W, Turbo 4.15GHz, 8C/16T)

Storage Capabilities
- M.2 Socket Supporting 22x80 M.2 SSDs, SATA or Gen3 PCIe, 8TB Max
- Secondary M.2 Socket Supporting 22x80 M.2 SATA SSDs, 2TB Max

Audio
- Up to 7.1 Surround via HDMI

Hardware Management Features
- Trusted Platform Module (TPM) 2.0

Graphics
- AMD® Radeon™ Vega 7 Graphics
- Two HDMI 2.1 ports (Supports up to 4k @120Hz)
- Two USB Type-C Ports with DisplayPort 1.4 (Supports up to 4k @60Hz)

Peripheral Connectivity
- 10/100/1000/2500Mbps RJ45 Ethernet
- One USB 3.2 Gen 2 Type-A Port
- One USB 2.0 Type-A Port
- Two USB 3.2 Gen 2 Type-C Ports
- Two HDMI 2.1 Ports
- Intel® AX200 Wi-Fi 6 + BT 5.0

Baseboard Power Requirements
- $12V_{DC}$ to $24V_{DC}$ Input Voltage Range
- $19V_{DC}$, 90W AC-DC Power Adapter with Detachable Power Cord Supplied

System Memory
- Two 1.2V DDR4 SO-DIMM Sockets Enabling:
  - 4GB to 64GB 3200MHz
  - ECC 16GB to 64GB 2666MHz

Mechanical Chassis Information
- 4.6" x 4.4" x 2" (118mm x 113mm x 53mm)
- VESA Plate and Screws Included
- 0.7kg (1.5lbs) Fully-Assembled

Service Features
- 7-Year Supply (from Sept. 21)
- TAA Compliant
- Extended Support Service Options (1-, 3-, and 5-yr)

Expansion Capabilities
- Two USB 2.0 Headers
- One USB 3.2 Gen 2 Header
- One Serial Header
- Customizable Functional Lid Options

Certifications and Regulation

Safety Regulations and Standards
- IEC 62368-1
- EN 62368-1
- CAN/CSA 62368-1

Environmental Operating Temp
- 0°C to +50°C
- Non-Condensing Humidity

EMC/RF Regulations and Standards
- FCC CFR Title 47, Chapter I, Part 15, Subpart B
- EN 55035
- CISPR 32
- ICES-003
- ETSI EN.301 489-1
- ETSI EN.301 489-17

Environmental Regulations
- RoHS Compliant
- REACH Compliant

Certified Operating Systems
- Windows 10 64-bit (Pro & Home)
- Windows 10 IoT Enterprise
- Linux