

Red Oak- Long Life Ryzen™ Dual-Core LLM1r5RK/LLM1r3RK/LLM1r1RK

Flexible Customization

The Simply NUC LLM1r5RK, LLM1r3RK, and LLM1r1RK (code named Red Oak) are mini computers built with an AMD® Ryzen™ Embedded R1505G, R1305G, or R1102G processors, delivering innovation in a small space for embedded solutions. A wireless-AC 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. There are also 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. [Build Embedded Solutions](#)

Simply NUC is committed to supporting the manufacture and sales of Red Oak in the same form, fit, and function for seven years from launch (June 2020). Red Oak also comes in a board SKU option with a serial port and USB header enabling other embedded usages such as kiosk, vending machines, and POS.

Affordable Mainstream Performance

Red Oak is a mini computer that's small in size with features that make it optimal for your embedded solutions, and its price point makes Red Oak affordable for mainstream performance usages with a tight budget. It supports a wide power supply range (12 to 19Vdc), offers a gigabit Ethernet port, and 4 USB ports for I/O flexibility. With two mini-DisplayPort ports Red Oak is ideal for dual-display digital signage usages.

Highlighted features

- AMD® Ryzen™ R1505G, R1305G, or R1102G Processors
- AMD® Radeon™ Vega 3 Graphics
- M.2 slot supports PCI or SATA SSDs
- Two DDR4-2400 SO-DIMM Sockets
- M.2 slot for Wi-Fi/ Bluetooth radio
- Two mDP++ (4K 60Hz, HDR)
- 1x 10/100/1000 Mbps Ethernet
- 2x front USB2.0
- 2x rear USB 3.1 gen 2 type A ports
- Audio combo mic in / line out
- Simply NUC Universal chassis
- 19V DC 65W power supply adapter
- 12V – 19V power supply range
- Replaceable lid for expandable functionality
- 1x USB 2.0 header on the board
- VESA Mounting plate included
- 7 year supply (from June 2020)
- Extended support service (1, 3, 5-years)

Customization

- Supports M.2 SSD 128GB-2TB
- Supports DDR4 RAM 8GB-64GB
- Supports M.2 Wi-Fi/ Bluetooth
- Customizable lid options available



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 Specifications

Processor <ul style="list-style-type: none"> • AMD® Ryzen™ R1505G, R1305G, or R1102G CPU (2.4 GHz, 3.3 GHz Turbo, Dual Core, 2C/4T, 25W), (1.5 GHz, 2.8GHz Turbo, 2C/4T, 8W), (1.2 GHz, 2.6 GHz Turbo, 2C/2T, 6W) 	Graphics <ul style="list-style-type: none"> • AMD® Radeon Vega 3 graphics • Two mini-DP++ (4K, 60Hz, HDR) - option for using locking connectors 	System Memory <ul style="list-style-type: none"> • Two DDR4-2400 SO-DIMM sockets, 64GB Max, 1.2V
Storage Capabilities <ul style="list-style-type: none"> • M.2 22x80 key M slot for PCIe x4 NVMe or SATA SSD (up to 512GB) 	Peripheral Connectivity <ul style="list-style-type: none"> • One Gigabit Ethernet from Realtek® • 2x rear USB 3.1 gen 2 type A ports • 2x front USB2.0 • M.2 22x30 key E slot for Wi-Fi/ Bluetooth antenna • Intel® Dual Band Wireless-AC 3168 (802.11ac), 1x1, up to 433Mbps • Dual Mode Bluetooth v4.2 • Wireless 802.11ac + BT v4.2 Radio is Removable or Disableable for security 	Front Panel Header <ul style="list-style-type: none"> • Reset, HD LED, Power LEDs, power on/off
Audio <ul style="list-style-type: none"> • Audio combo mic in / line out 	Baseboard Power Requirements <ul style="list-style-type: none"> • 19VDC 65W power supply adapter with detachable power cord • 12V-19VDC power supply range • US or UK Cord included, others available 	Service Features <ul style="list-style-type: none"> • 7 year supply (from June 2020) • TAA compliant • Extended Support Service options (3, and 5 years)
Hardware Management Features <ul style="list-style-type: none"> • TPM down (Infineon 2.0) 	Mechanical Chassis Information <ul style="list-style-type: none"> • 4.6" x 4.4" x 2" (118 x 113 x 53 mm) • VESA plate and screws included • 0.7kg (1.5lbs) Fully-Assembled 	

Certification and Regulations

Product Safety Regulations and Standards <ul style="list-style-type: none"> • IEC 62368-1 • EN 62368-1 • CAN/CSA 62368-1 	EMC/RF Regulations and Standards (Class B) <ul style="list-style-type: none"> • FCC CFR Title 47, Chapter I, Part 15 Subparts. B • EN 55024 • EN 55032 • EN 55035 • CISPR 32 • ICES-003 	Environmental Regulations <ul style="list-style-type: none"> • RoHS Compliant • REACH Compliant
Environment Operating Temp <ul style="list-style-type: none"> • 0° C to +50° C • Relative Humidity: 10%~90% Storage Temperature <ul style="list-style-type: none"> • -20° C to +80° C 	<ul style="list-style-type: none"> • ETSI EN.301 489-1 • ETSI EN.301 489-17 	Certified Operating Systems <ul style="list-style-type: none"> • Windows 10 64-bit (Pro & Home) • Windows 10 IoT Enterprise • Windows Server 2019 • Certified with Ubuntu 18.04 LTS; compatible with various Linux distros. (Contact Simply NUC for specifics)