

## Sequoia v8 - Long Life Ryzen™ Quad-Core LLM1v8SQ

### Flexible Customization

The Simply NUC LLM1v8SQ (code named Sequoia) is a mini computer built with an AMD® Ryzen™ V1807B processor, delivering innovation in a small space for embedded solutions. A wireless-AC card can be installed into one of three M.2 slots, leaving another key B slot available for an LTE modem or NVMe SSD, and the final available slot for a lightning fast NVMe or SATA SSD. The bottom of the chassis is designed to accommodate mounting options including DIN rail and VESA plate. 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

Sequoia has several features that make it optimal for your embedded solutions. Built to stand the test of time, Simply NUC is committed to supporting the manufacture and sales of Sequoia in the same form, fit, and function for seven years from launch (Nov 2019). This work horse includes an M.2 key B slot that will accommodate an LTE modem for remote usage. Sequoia also features two serial ports, two gigabit Ethernet ports, two locking mini Display Ports, and wi-fi and cellular options to accommodate a plethora of embedded usages including AI, robotics, industrial computer, and POS.



### Rugged Features

Sequoia is a mini computer that's small in size but not on toughness or reliability. Engineered and manufactured in Germany, it supports an automotive-grade power supply range (8 to 32Vdc) with locking connector, provides locking video port connectors, and withstands a maximum relative humidity of 95% @ 40C and a wide operational temperature range of 0 to 60C. Sequoia also features a built-in health monitoring system which includes controllable fan, hardware monitoring and a watchdog timer. When it comes to rugged environments, Sequoia is built to last.

### Highlighted features

- AMD® Ryzen™ V1807B
- AMD® Radeon™ Vega 11 Graphics
- M.2 slot supports SATA or NVMe SSDs
- Two DDR4 SO-DIMM Sockets
- M.2 slot for LTE modem or NVMe SSD
- M.2 slot for Wi-Fi/ Bluetooth antenna
- RP-SMA Dual-Band Antennas
- MicroSD Card Reader
- Two mDP++ (4K 60Hz, HDR)
- Two Intel® Gigabit LAN
- Three USB 3.1 ports
- Security cover for SIM card
- One Serial RS-232
- One Serial RS-485 w/ RS-232 capability
- 0-60° C operating temperature
- 19V DC 90W power supply adapter
- DIN Mount or VESA Mounting plate
- 7 year supply (from Nov 2019)
- Extended service warranty options (1, 3, 5-years)

### Customization

- Supports DDR4-2666 Ram 4GB-32GB
- Supports M.2 SSD SATA 128GB-512GB or NVMe 256/512GB SSD
- Supports M.2 for LTE or 256/512GB NVMe SSD
- Supports M.2 SSD for WiFi/ Bluetooth
- Extended Temp ratings 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

<p><b>Processor</b></p> <ul style="list-style-type: none"> <li>• AMD® Ryzen™ V1807B CPU (3.35GHz, 3.8GHz Turbo, 4C/8T, 35W.)</li> </ul>	<p><b>Graphics</b></p> <ul style="list-style-type: none"> <li>• AMD® Radeon™ Vega 11 Graphics, up to 1.3 GHz</li> <li>• Two mini-DP++ (4K, 60Hz, HDR) - option for using locking connectors</li> </ul>	<p><b>System Memory</b></p> <ul style="list-style-type: none"> <li>• Two DDR4 SO-DIMM sockets, 32GB Max, 1.2V</li> </ul>
<p><b>Storage Capabilities</b></p> <ul style="list-style-type: none"> <li>• M.2 22x42 key M slot for SATA SSD (up to 512GB) or NVMe SSD (256 or 512GB)</li> <li>• M.2 22x42 key B slot for LTE modem or NVMe SSD (256 or 512GB)</li> <li>• MicroSD Card Reader</li> </ul>	<p><b>Peripheral Connectivity</b></p> <ul style="list-style-type: none"> <li>• 2x Intel® i219 10/100/1000 Mbps RJ45 Ethernet</li> <li>• Three Super-Speed USB 3.1 ports (1x front and 2x rear USB 3.1 gen 1 type ports)</li> <li>• M.2 22x30 key E slot for Wi-Fi/Bluetooth antenna</li> <li>• (Optional) Intel® Dual Band Wireless-AC 8265 (802.11ac), 2x2, up to 867 Mbps</li> <li>• (Optional) Dual Mode Bluetooth 5</li> <li>• (Optional) LTE / 4G EMEA, APAC / Diversity / GNSS</li> <li>• Wireless 802.11ac + BT 5 Radio is Removable or Disableable for security</li> </ul>	<p><b>Front Panel Header</b></p> <ul style="list-style-type: none"> <li>• Reset, HDD LED, Power LEDs, power on/off</li> </ul>
<p><b>Audio</b></p> <ul style="list-style-type: none"> <li>• Up to 7.1 surround audio via mDP</li> </ul>	<p><b>Baseboard Power Requirements</b></p> <ul style="list-style-type: none"> <li>• 19VDC 90W power supply adapter with detachable power cord.</li> <li>• 8 – 32V DC power supply range with locking connector (automotive grade)</li> <li>• US Cord included, others available</li> </ul>	<p><b>Service Features</b></p> <ul style="list-style-type: none"> <li>• 7 year supply (from November 2019)</li> <li>• TAA compliant</li> <li>• Extended service warranty options (1, 3, and 5 years)</li> </ul>
<p><b>Hardware Management Features</b></p> <ul style="list-style-type: none"> <li>• Controlled FAN (PWM + Tacho), hardware monitoring and watchdog</li> </ul>		<p><b>Mechanical Chassis Information</b></p> <ul style="list-style-type: none"> <li>• 4.5" x 4.6" x 1.8" (116.4 x 46.5 x 119.2 mm)</li> <li>• VESA/DIN Mount Kit (Plate and Screws)</li> <li>• 0.7kg (1.5lbs) Fully-Assembled with Antennas (no power adapter)</li> </ul>

## Certification and Regulations

<p><b>Product Safety Regulations and Standards</b></p> <ul style="list-style-type: none"> <li>• IEC 60950-1</li> <li>• UL 60950-1</li> <li>• EN 60950-1</li> <li>• CAN/CSA-C22.2 No. 60950-1</li> </ul>	<p><b>EMC/RF Regulations and Standards (Class B)</b></p> <ul style="list-style-type: none"> <li>• CISPR 52</li> <li>• FCC CFR Title 47, Chapter I, Part 15, Subparts B, C, E</li> <li>• ICES-005</li> <li>• EN 55052</li> <li>• ETSI EN 500 528 501 489-1</li> <li>• ETSI EN 501 489-17 501 895</li> <li>• EN 62511</li> <li>• AS/NZS 2772.2 4268</li> <li>• VCCI V-2, V-5, V-4</li> <li>• KN-52</li> <li>• CNS 15458</li> <li>• EN 55024</li> <li>• ETSI EN</li> <li>• ETSI EN</li> <li>• AS/NZS</li> <li>• KN-24</li> </ul>	<p><b>Environmental Regulations</b></p> <ul style="list-style-type: none"> <li>• RoHS Directive 2011/65/EU</li> <li>• WEEE Directive 2012/19/EU</li> <li>• China RoHS</li> </ul>
<p><b>Environment Operating Temp</b></p> <ul style="list-style-type: none"> <li>• iTemp: 0° C to +60° C</li> <li>• Option for extended temp range of -40° C to +85° C</li> <li>• Non-condensing Humidity</li> </ul> <p><b>Storage Temperature</b></p> <ul style="list-style-type: none"> <li>• -20° C to +70° C</li> </ul>		<p><b>Certified Operating Systems</b></p> <ul style="list-style-type: none"> <li>• Windows 10 64-bit (Pro &amp; Home)</li> <li>• Windows 10 IoT Enterprise</li> <li>• Windows Server 2019</li> <li>• Certified with Ubuntu 18.04 LTS; compatible with various Linux distros. (Contact Simply NUC for specifics)</li> </ul>