



### uCPE Small

#### Intel® Xeon™ D-1500 and Broadcom® Hurricane3 based uCPE

#### Product Description

Silicom's uCPE based on the Intel® Xeon™ D-1500 and Broadcom® Hurricane3 product line is a highly flexible network edge device that brings the agility of modular LAN, WAN, management, and compute to cost-sensitive applications in SD-WAN, CPE, Security, SmallCell, MEC, vRAN, Cell Site, Cloud Edge, Aggregation Router and IoT.



With a new type of modularity x86 and networking switch engine designed specifically for networking application. Silicom uCPE is the ideal platform upon which to deploy next-generation edge applications.

#### Technical Specifications

General Technical Specifications	
<b>CPU</b>	Intel® Xeon™ D-1517 8Cores, 16 threads Base Freq. 2.1GHz, 14MB Cache, TDP 45W Platform will also support Xeon-D NS SKU's
<b>BIOS</b>	UEFI BIOS
<b>BIOS Flash</b>	SPI
<b>Switch Chips set:</b>	Broadcom® Hurricane2 BCM56160
<b>Copper PHY:</b>	Embedded CuGPHY, BCM56160
<b>MGMT PHY:</b>	Broadcom® B50210S
<b>Memory:</b>	16GB DDR4 with ECC, 2x channels DDR4 DIMMs, 1 x 16GByte DIMM
<b>Storage:</b>	512GB /SSD, M2, SATA
<b>Internal Switch:</b>	2x 10GE-KR Additional 2x10GE-KR with Xeon-D NS SKU's
<b>External Switch Ports:</b>	10x 1GbE RJ45 4x SFP+

	<p>4 of 1GbE supports POE+*</p> <p>*Total Power POE+ power limit is 65W</p> <p>Dynamic power load based on actual power consumption</p>
<b>Host Mgmt:</b>	<p>1GbE RJ45 on Management Card, Shared with BMC.</p> <p>1GbE Between BMC and Switch</p>
<b>USB 3.0:</b>	2xFront, 2x Internal Vertical
<b>Serial Console:</b>	RJ45 connector using RS232 signaling
<b>LTE:</b>	<p>M.2 Key-B, support 3042 Card. Externally accessible SIM card supported.</p> <p>Mini PCIe supporting USB2.0/3.0 and externally accessible SIM card.</p>
<b>WiFi:</b>	Not supported
<b>M.2 Expansion</b>	M.2 Key B with support up to 30x110mm. Currently used for M.2 Storage
<b>BMC:</b>	µBMC
<b>TPM:</b>	<p>TPM 2.0 – Compute</p> <p>TPM2.0 – Module</p>
<b>Power:</b>	<p>90-264VAC input,</p> <p>12VDC, 125W</p> <p>54VDC, 65W</p> <p>Dying Gasp supported on BMC</p>
<b>LED's:</b>	Management card support three tri-color configurable LED's (red, green, blue)
<b>Other Hardware:</b>	<p>Configurable Recessed button (Recommend for Factory reset)</p> <p>Configurable Large button (Recommend for power)</p>
<b>Form Factor:</b>	<p>1U rackmount Form Factor EIA 19"</p> <p>Depth 410mm</p>
<b>Expansion / Voice Module</b>	<p>PCIe x16: Support for either Voice module or 2/ M4 module. Support for Voice module is connected directly to the CPU board.</p> <p>In order to support M4 module, needs to install mid plan expansion kit. Mid plan kit is not part of BOM</p>
<b>Weight:</b>	5.46kg (192.6oz)
<b>Power Consumption:</b>	<p>Maximum: 90-130Vac 50-60Hz 4.6A / 200-240Vac 50-60Hz 2.4A</p> <p>Typical: 90-130Vac 50-60Hz 2.2A / 200-240Vac 50-60Hz 1.1A</p> <p>The total power consumption of the card depends on user application</p>
<b>Cooling:</b>	FANs, Number of Fans TBD, Design supports 5 FAN

<b>Sensors/Monitors:</b>	Thermal protection Critical Error Detection Voltage monitors Current protection
<b>Operating Temperature:</b>	0°C – 40°C (32°F – 104°F)
<b>Storage:</b>	-40°C–65°C (-40°F–149°F)
<b>Regulation:</b>	CE, FCC Class A, ROHS requirements.
<b>MTBF*:</b>	57156 hours * According to Telcordia SR-332 Issue 4. Environmental condition – GB (Ground, Fixed, and Controlled). Ambient temperature 40°C

### Order Information

P/N	Description	Notes
<b>80500-0179-G20</b>	vECPE, 1U,19",D1517(4C),DDR4/16GB/ECC,2xPS	Top level – Shippable kit, including packaging, GA candidate