



uCPE Medium

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, Small Cell, 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	
CPU	Intel® Xeon™ D-1541 8Cores, 16 threads Base Freq. 2.1GHz, 14MB Cache, TDP 45W Platform will also support Xeon-D NS SKU's
BIOS	UEFI BIOS
BIOS Flash	SPI
Switch Chips set:	Broadcom® Hurricane2 BCM56160
Copper PHY:	Embedded CuGPHY, BCM56160
MGMT PHY:	Broadcom® B50210S
Memory:	32GB DDR4 with ECC, 2x channels DDR4 DIMMs, 2 x 16GByte SODIMM
Storage:	512GB /SSD, M2, SATA
Internal Switch:	2x 10GE-KR Additional 2x10GE-KR with Xeon-D NS SKU's
External Switch Ports:	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>
Host Mgmt:	<p>1GbE RJ45 on Management Card, Shared with BMC.</p> <p>1GbE Between BMC and Switch</p>
USB 3.0:	2xFront, 2x Internal Vertical
Serial Console:	RJ45 connector using RS232 signaling
LTE:	<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>
WiFi:	Not supported
M.2 Expansion	M.2 Key B with support up to 30x110mm. Currently used for M.2 Storage
BMC:	µBMC
TPM:	<p>TPM 2.0 – Compute</p> <p>TPM2.0 – Module</p>
Power:	<p>90-264VAC input,</p> <p>12VDC, 125W</p> <p>54VDC, 65W</p> <p>Dying Gasp supported on BMC</p>
LED's:	Management card support three tri-color configurable LED's (red, green, blue)
Other Hardware:	<p>Configurable Recessed button (Recommend for Factory reset)</p> <p>Configurable Large button (Recommend for power)</p>
Form Factor:	<p>1U rackmount Form Factor EIA 19"</p> <p>Depth 410mm</p>
Expansion / Voice Module	<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>
Weight:	5.46kg (192.6oz)
Power Consumption:	<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>
Cooling:	FANs, Number of Fans TBD, Design supports 5 FAN

Sensors/Monitors:	Thermal protection Critical Error Detection Voltage monitors Current protection
Operating Temperature:	0°C – 40°C (32°F – 104°F)
Storage:	-40°C–65°C (-40°F–149°F)
Regulation:	CE, FCC Class A, ROHS requirements.
MTBF*:	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
80500-0180-G20	vECPE, 1U,19",D1541(8C),DDR4/32GB/ECC,2xPS	Top level – Shippable kit, including packaging, GA candidate