uCPE Small

Intel® Pentium D-1517 and Broadcom® Hurricane3 based uCPE

Product Description

Silicom's uCPE based on the Intel® Pentium D-1517 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	
CPU	Intel Xeon D-1517 4 Cores, 8 threads Base Freq. 1.6GHz, 6MB Cache, TDP 25W 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:	1x16GB DDR4 with ECC, 1 Memory channel For Small system (V250) based on Xeon-D1517, only one SODIMM (16GByte) is tested along all the production process
Storage:	256GB /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+ 4 of 1GbE supports POE+* *Total Power POE+ power limit is 65W Dynamic power load based on actual power consumption
Host Mgmt:	1GbE RJ45 on Management Card, Shared with BMC. 1GbE Between BMC and Switch
USB 3.0:	2xFront, 2x Internal Vertical
Serial Console:	RJ45 connector using RS232 signaling
LTE:	M.2 Key-B, support 3042 Card. Externally accessible SIM card supported. Mini PCIe supporting USB2.0/3.0 and externally accessible SIM card.
WiFi:	Not supported
M.2 Expansion	M.2 Key B with support up to 30x110mm. Currently used for M.2 Storage
BMC:	µBMC
TPM:	TPM 2.0 – Compute TPM2.0 – Module
Power:	90-264VAC input, 12VDC, 125W 54VDC, 65W Dying Gasp supported on BMC
LED's:	Management card support three tri-color configurable LED's (red, green, blue)
Other Hardware:	Configurable Recessed button (Recommend for Factory reset) Configurable Large button (Recommend for power)
Form Factor:	1U rackmount Form Factor EIA 19" Depth 410mm
Expansion / Voice Module	PCIe x16: Support for either Voice module or 2/ M4 module. Support for Voice module is connected directly to the CPU board. In order to support M4 module, needs to install mid plan expansion kit. Mid plan kit is not part of BOM
Weight:	5.46kg (192.6oz)
Power Consumption:	Maximum: 90-130Vac 50-60Hz 4.6A / 200-240Vac 50-60Hz 2.4A Typical: 90-130Vac 50-60Hz 2.2A / 200-240Vac 50-60Hz 1.1A The total power consumption of the card depends on user application

Silicom Ltd. Connectivity Solutions

Cooling:	FANs, Number of Fans TBD, Design supports 5 FAN, front-to-back airflow.
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
80500-0179-G20	vECPE, 1U,19″,D1517(4C),DDR4/16GB/ECC,2xPS	Top level – Shippable kit, including packaging, GA candidate