



### 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 |   |
|----------------------------------|---|
| <b>CPU</b>                       | Intel® Xeon™ D-1541 8Cores, 16 threads Base Freq. 2.1GHz, 14MB Cache, TDP 45W<br>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>                   | 32GB DDR4 with ECC, 2x channels DDR4 DIMMs, 2 x 16GByte SODIMM  |
| <b>Storage:</b>                  | 500GB /SSD, M2, SATA  |
| <b>Internal Switch:</b>          | 2x 10GE-KR<br>Additional 2x10GE-KR with Xeon-D NS SKU's   |
| <b>External Switch Ports:</b>    | 10x 1GbE RJ45<br>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>(WxDxH) = 430 x 411 x 44mm</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, front-to-back airflow  |

|                               |  |
|-------------------------------|--|
| <b>Sensors/Monitors:</b>      | Thermal protection<br>Critical Error Detection<br>Voltage monitors<br>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<br>* 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>80500-0180-G20</b> | vECPE, 1U,19",D1541(8C),DDR4/32GB/ECC,2xPS | Top level – Shippable kit, including packaging, GA candidate |