



## uCPE Modular Universal CPE

### uCPE Modular Universal CPE Based on Intel® Atom™ C3000

#### Product Description

Silicom's uCPE based on the Intel® Atom C3000 product line is a highly flexible yet low-cost 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, and IoT.

With a new type of modularity designed specifically for cost and agility, uCPE is the ideal platform upon which to deploy next-generation edge applications.



#### Key Features

- Low-cost modular architecture consolidates multiple functions into a single box, reducing footprint, power, and complexity.
- Mix-and-match LAN, WAN, management, and compute modules allow uCPE features to be tailored to unique customer needs.
- Compliant with OCP uCPE 2.1 specifications.
- Silicom's MicroBMC provides secure remote management, software/firmware update, and phone home zero touch provisioning.

#### Technical Specifications

General Technical Specifications	
<b>CPU</b>	C3558, 4 cores, Base Freq. 2.2GHz, 8MB, TDP 16W
<b>BIOS</b>	Coreboot
<b>BIOS Flash</b>	SPI
<b>Operating System</b>	Support Linux, ship without OS
<b>Memory</b>	8GB Memory Down with ECC. (Platform supports up to 16GB memory down and an optional SODIMM that also supports up to 16GB)
<b>Storage</b>	64GB eMMC
<b>Internal Switch</b>	2x2.5Gb KR between CPU and Switch 1x1GbE between uBMC and Switch
<b>External port Switch</b>	Marvell 88E6190X (X required for SFP) 4x1GbE 2x1GbE (POE+) 2xSFP

<b>Host Mgmt.</b>	1GbE RJ45 on Management Card. Shared with BMC. Intel i210. 1GbE Between uBMC and Switch
<b>USB 3.0</b>	2xFront, 2xInternal
<b>Serial Console</b>	RJ45 RS232 Console
<b>LTE</b>	M.2 Key-B, support 3042 Card. Externally accessible SIM card supported. Or Mini PCIe slot with externally accessible SIM card. LTE, is not part of BOM.
<b>WiFi</b>	Mini PCIe Slot for WiFi. Wifi is not part of BOM,
<b>M.2 Expansion</b>	M.2 Key B with support up to 30x110mm. Currently used for M.2 Storage Note: There is a board population option to support USB to the card for the possible IoT card. The default build option is not to support this feature.
<b>BMC</b>	BMC. See uBMC specification for additional details
<b>TPM</b>	TPM 2.0
<b>Power</b>	12V@60W External Power Adapter with locking connector. Dying Gasp supported on BMC 54V@65W External Power Adapter with locking connector for POE+ ports
<b>LED's</b>	Management card support three tri-color configurable LED's (red, green, blue)
<b>Form Factor</b>	Desktop Form Factor (WxDxH) = 223x305x44mm Supports two side by side in 19" rack Rack Mount Option Wall Mount Option Branding Option
<b>Weight</b>	2.2kg (77.60oz) without optical modules
<b>Power Consumption</b>	Maximum <ul style="list-style-type: none"> <li>• Input 1:110Vac / 1.8A ~ 240Vac / 0.8A, 50Hz to 60Hz</li> <li>• Output 1: 12V / 5A</li> <li>• Input 2: 110Vac / 1.8A ~ 240Vac / 1.2A, 50Hz to 60Hz</li> <li>Output 2: 54V / 1.2A</li> </ul> Typical: <ul style="list-style-type: none"> <li>• Input 1:110Vac / 0.47A ~ 240Vac / 0.3A, 50Hz to 60Hz</li> <li>• Output 1: 12V / 2.12A</li> <li>• Input 2: 110Vac / 1.2A ~ 240Vac / 0.8A, 50Hz to 60Hz</li> <li>Output 2: 54V / 1.1A</li> </ul> The total power consumption of the card depends on user application
<b>Cooling</b>	12VDC 40mmx40mmx20mm 10.1 CFM FAN. Built-in thermal protection
<b>Sensors/Monitors</b>	Thermal monitors 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 EN 55032: 2012 + AC: 2013; EN55024: 2010, FCC Subpart B Class B, CB Scheme IEC 60950-1:2005 (second Edition) + Am 1:2009 + Am 2:2013, ROHS requirements
<b>MTBF*</b>	143887.77 hours * According to Telcordia SR-332 Issue 4. Environmental condition – GB (Ground, Fixed, and Controlled). Ambient temperature 40°C

## Order Information

Silicom has available standard configuration uCPE systems for immediate customer usage. uCPE is easily reconfigured and customized across a wide range of customer specifications during production.

P/N	Description	Notes
<b>80500-0150-G05</b>	Shippable Kit: uCPE, Desktop, XS Module, Empty Right Slot, C3558 (4C), DDR4 8GB ECC, EMMC 64GB, including +12V, +56V Power supplies	Top level – Shippable kit, including packaging, GA