



Ibiza 1U Universal CPE

Compact Intel® Atom™ x7000 C/E/RE Series Universal CPE for SD-WAN and SD-Branch Applications

Product Description

Silicom's Ibiza 1U series based on the Intel® Atom™ x7000 series processor replaces traditional purpose-built CPE hardware with a wide array of wired and wireless LAN/WAN options for maximum site installation flexibility while still maintaining a small footprint and optimum price point.

LAN connectivity includes dual-band 802.11ax Wi-Fi 6, as well as 2.5 Gbps RJ-45 ports supporting external Wi-Fi access points at full bandwidth. PoE++ output power of up to 60W per 2.5G port can optionally be included.

WAN connectivity includes a 1 Gbps port that can be populated as copper RJ-45 or fiber SFP to align with site-specific needs. PCIe low profile (LP) expansion slot supports standard add-in cards for additional connectivity. Single or dual 4G LTE or 5G sub-6 uplinks can optionally be included.



Multiple WAN and LAN options, combined with multicore Intel® CPU Virtualization Technology (Intel® VT), enable flexible and powerful SD-WAN and SD-Branch solutions. Multiple integrated software and hardware security features can optionally be enabled for maximum protection against unauthorized access.

Supported AVX, AVX2, and VAES all boost the speed of encryption, decryption, and AI workloads.

A Lights-Out Management (LOM) processor can optionally be included for remote management of the uCPE and Intel host CPU. The LOM has access to the 1G copper/fiber port, as well as an optional dedicated LTE uplink.



Key Features

Front I/O Features



Rear I/O Features



- Note: 4x SIM card slots located on the enclosure side (not shown)

Technical Specifications

General Technical Specifications	
CPU	• 2, 4, and 8 core Intel® Atom™ x7000 series
Memory	• LPDDR5-4800 memory down, 4 to 32 GB total w/ECC
Storage	• 1x eMMC HS400 v5.1 SSD down • Optional NVMe SSD card(s)*
WAN / LAN	• 1x 1 Gbps copper RJ-45/fiber SFP port (BOM option) • 4x 2.5 Gbps RJ-45 ports w/optional PoE++ (max 60W/port)
WLAN	• Optional Wi-Fi AP card, dual-band / dual-concurrent • Optional Wi-Fi client card (CNVIO based)*
WWAN	• Optional up to 2x 4G LTE radio cards, dual SIM slots per card • Optional up to 2x 5G sub-6 radio cards, dual SIM slots per card
Expansion	• 1x PCIe low-profile (LP) gen3 expansion card slot*
Display	• Optional 2x mini-DisplayPort up to 4K resolution*
Local access	• Cisco RJ-45 and micro-USB console port (auto-detect) • 1x USB-A 3.2 gen1 host port • 1x USB-A 2.0 host port

Security	• TPM 2.0 • Optional Intel® Secure Boot • Optional Intel® Boot Guard • Optional Verified Boot
Buttons	• 1x protruding button, programmable function and filter time • 1x recessed button, programmable function and filter time
LED	• 3x front panel tricolor RGB LED's, user configurable
Bootloader	• Embedded Slim Bootloader UEFI
Management	• Optional Lights-Out Management (LOM) processor • WAN uplink via 1 Gbps RJ-45/SFP port and optional dedicated LTE card • Telemetry, host CPU ACPI control, Serial over LAN (SoL), Virtual Media
Power input	• 1x +12 VDC mains barrel jack, external desktop PSU, regional AC cord options • 1x optional +54 VDC isolated PoE, external desktop PSU, regional AC cord options
Environmental	• 0 to +40C operating temperature • Fan-cooled (fanless may be possible for some 2-core SKUs)
Mounting options	• Default desktop feet; rack-mount and wall-mount kits available
Physical	• 1U sheet metal enclosure • Dimensions 219 x 250 x 43 mm W x D x H (8.6 x 9.9 x 1.7 in)

- Optional NVMe SSD card occupies 1x radio card slot
- PCIe LP gen3 slot mechanically supports up to x8 lane cards. x4 lanes electrically connected
- CNVIO-based Wi-Fi client card slot only supported on Intel® Atom™ x7000E series CPUs
- Mini-DisplayPort outputs only supported on Intel® Atom™ x7000E series CPUs

Order Information

P/N	Description	Power	Notes
80500-0240-G00-SL00A	4-core Base x7000E 1G RJ-45	Mains input: 1x 12 VDC PoE input:— PoE output:—	Intel® Atom® X7425E, 4C @ 1.5 GHz 8 GB memory with ECC 128 GB eMMC SSD WAN / LAN: 1x 1 Gbps RJ-45 4x 2.5 Gbps RJ-45 WWAN:— WLAN:— Expansion:— Preloaded Debian Linux
80500-0240-G01-SL00A	4-core Base x7000E 1G SFP	Mains input: 1x 12 VDC PoE input:— PoE output:—	Intel® Atom® X7425E, 4C @ 1.5 GHz 8 GB memory with ECC 128 GB eMMC SSD WAN / LAN: 1x 1 Gbps SFP cage 4x 2.5 Gbps RJ-45 WWAN:— WLAN:— Expansion:— Preloaded Debian Linux
80500-0240-G02-SL00A	2-core Base x7000C 1G SFP	Mains input: 1x 12 VDC PoE input:— PoE output:—	Intel® Atom® X7203C, 2C @ 2.0 GHz 4 GB memory with ECC 128 GB eMMC SSD WAN / LAN: 1x 1 Gbps SFP cage 4x 2.5 Gbps RJ-45 WWAN:— WLAN:— Expansion:— Preloaded Debian Linux
80500-0240-G03-SL00A	4-core Base x7000C 1G SFP	Mains input: 1x 12 VDC PoE input:— PoE output:—	Intel® Atom® X7405C, 4C @ 2.2 GHz 8 GB memory with ECC 128 GB eMMC SSD WAN / LAN: 1x 1 Gbps SFP cage 4x 2.5 Gbps RJ-45 WWAN:— WLAN:—

			Expansion:— Preloaded Debian Linux
80500-0240-G04-SL00A	8-core Base x7000C 1G SFP	Mains input: 1x 12 VDC PoE input:— PoE output:—	Intel® Atom® X7809C, 8C @ 2.4 GHz 16 GB memory with ECC 128 GB eMMC SSD WAN / LAN: 1x 1 Gbps SFP cage 4x 2.5 Gbps RJ-45 WWAN:— WLAN:— Expansion:— Preloaded Debian Linux
80500-0241-G00			Wall-mount accessory kit (unit)
80500-0242-G00			Wall-mount accessory kit (PSU)
80500-0243-G00			Rack-mount accessory kit (unit & PSU)

- Features (CPU, memory, I/O, etc.) are configurable and customizable at customer request.
- OEM-specific SKUs, preloaded OS/application images, and custom colors/branding options are available.