



Palma Distributed Unit 2U Ice-Lake-SP (ICX-SP) Based

Product Description

Designed for Edge computing services with a focus on 4G/5G DUs (Distributed Units), the Palma platform's features a front panel IO for RU (Radio Unit) connectivity, together with Silicom Time Sync (STS) Technology, 5G L1 Acceleration, and Remote Management capabilities such as ZTP.

The Palma platform offers up to 32 cores per socket and higher performance per core than the previous generation. It offers expanded memory bandwidth, with 16DIMMs per socket and PCIe-Gen 4.0 connectivity.

Palma's I/O interface supports PTP (1588) and SyncE for Time Synchronization, with 1G/10G/25G and 100G connectivity as ordering options. Palma's design also enables hosting of multiple eASIC / FPGA cards for service acceleration in both wireline and wireless deployments.



Key Features

- Thermally optimized solution for E-temp
- DU-optimised: features TimeSync and FEC Accelerator on main board
- Simplest and most reliable design

Technical Specifications

General Technical Specifications	
CPU:	Intel Xeon Ice Lake (ICX-SP), Socket P+, 4189 pin, Single Socket 32C/2.2GHz/270W/ XCC, Intel QDF Code QVM7
Chipset:	LBG-R, C621A
Memory:	128GB, with ECC 8x16GB@3200 installed Supports up to 16 DIMMs/ DDR4 with ECC,8 DDR channel controllers DDR Maximum Speed 3200MT/s
Storage:	2TB 2.5" SATA HDD
PCI#1, 3:	PCIe x16G4
PCI#2, 4:	PCIe x8G3
BIOS:	UEFI(Vendor: American Megatrends Inc. Version: 0312)
Operating System:	Linux/ CentOS
Host Eth. Ports:	4 x I350 copper
Host Mgmt.:	(1) 1GbE RJ45 Management via BMC. Web interface(admin/admin)
USB 3.0:	2x Front, 2xInternal
Host Serial Console:	Not Supported
Remote Host Access:	Access to Host video output via Eth. BMC (Web interface)
BMC:	AST2600
TPM:	TPM 2.0
Power Supply:	1x AC power supply 1600W
Power Supply voltage rate:	90 -220VAC
Form Factor:	2U rackmount Form Factor EIA 19", 670mm x 447mm x88mm•Depth: 670mm, Chassis does not include mounting ears
Weight:	~20kg
Cooling:	4FANS
Sensors/Monitors:	Thermal protection Critical Error Detection Voltage monitors Current protection
Operating Temperature:	10°C -35°C (50°F -95°F)
Storage:	-40°C-65°C (-40°F-149°F)
SKU1 Features:	
Time Sync SKU1:	P410G8TS81-SR STS2 installed at Slot 3 Single slot, x8G4 at x16 mechanical connector 8Ports, 8x10G, 1xQSFP+, 4x SFP+ QSFP+: 10GBase-SR, 10GBase-LR SFP+: 10GBase-SR, 10GBase-LR
TimeSync SMA:	x5 SMAs: PPS in, PPS out, 10MHz in, 10MHz out, GNSS antenna
Profile: IEEE-1588 (2008) (Annex-J.3 Delay Request-Respond Default Profile	Ordinary Clock -Server Ordinary Clock-Client (including slave only OC) Boundary Clock
Profile: IEEE-1588 (2008) Annex-J.4 Peer-to-Peer	Ordinary Clock -Server Ordinary Clock-Client (including slave only OC) Boundary Clock

Profile: ITU-T G.8265.1 Telecom Profile for Frequency Synchronization	Telecom Grandmaster Telecom Slave
Profile: ITU-T G.8275.1 PTP Telecom Profile for Phase with Full timing Support	Telecom Grandmaster (T-GM) Telecom Boundary Clock (T-BC) Telecom Time Slave Clock (T-TSC)
Profile: ITU-T G.8275.2 PTP Telecom Profile for Phase with Partial timing Support	Telecom Grandmaster (T-GM) Assisted / Partial Telecom Boundary Clock (T-BC) Assisted / Partial Telecom Time Slave Clock (T-TSC)
Device Types:	Ordinary Clock Boundary Clock Transparent Clock (peer-delay-message exchange)
References:	Default BMCA (Best Master Clock Algorithm)
Selection:	Alternate BMCA based on ITU G.781 -Synchronization layer functions for frequency synchronization based on the physical layer
On board FEC Accelerator:	Silicom PML 5G/4G FEC HW accelerator x16G3, P3IMB-M-P2 installed at slot 1
SKU2 Features:	
Time Sync SKU2:	Silicom TimeSync SKU2, 12 ports P425G410G8TS81-XR STS4 installed at Slot 3-4 Dual slot, x16G4
Network Ports:	12Ports, 1xQSFP+ , 4xSFP+, 1xQSFP28 QSFP+: 10GBase-SR, 10GBase-LR SFP+: 10GBase-SR, 10GBase-LR QSFP28: 25/10GBase-SR, 25/10GBase-LR
On board FEC Accelerator:	Silicom PML 5G/4G FEC HW accelerator x16G3, P3IMB-M-P2 installed at slot 1, same as SKU1

Order Information

P/N	Description	Notes:
90500-0169-E01	DU, Palma A0, 2U,19", 32C/2.2Ghz/270w, DDR4/128GB/ECC, 1xPSU, SKU1	Includes:1xACpower cable, SKU1, 8 ports TimeSync
90500-0169-E00	DU, Palma A0, 2U,19", 32C/2.2Ghz/270w, DDR4/128GB/ECC, 1xPSU, SKU2	Includes:1xACpower cable, SKU2, 12 ports TimeSync