



**784ns**

Minimum Latency

**910ns**

99<sup>th</sup> Pctl. Latency

**20.45ns**

99<sup>th</sup> Pctl. Latency Std. Dev.

**99.8%**

2.5Gbps Latency <=949ns

Full Stack I/O Latency: 10GbE; 5,000,000 64B TCP Frames From 0.1 - 10Gbps To/From User-Space via PCIe Gen 5 w/ÜberLoad

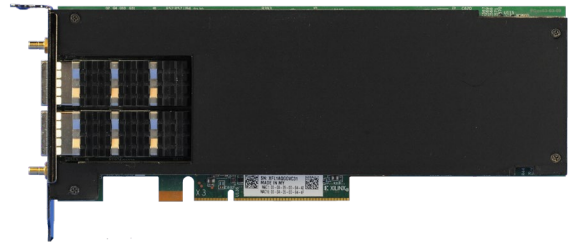
## Uncompromising Foundation

Every ÜberNIC utilizes the same architecture - hardware network stack, no compromise on latency or reliability. Both products are fully programmable via the ÜberFPGA FDK, enabling network-edge logic, message preprocessing, and custom workload offload. The difference is in platform, density, and connectivity range.

## ÜberNIC ML

### Ultra-Low-Latency Programmable SmartNIC

- ÜberFPGA FDK For Seamless Upgrades
- AMD FPGA Ecosystem
- 19W Total Draw / 2 DSFP28, 4 Interfaces Total
- Full Line Rate, Sub- $\mu$ s, No Drops
- ÜberNIC IP Suite Incl. FPGA-Based ÜberStack

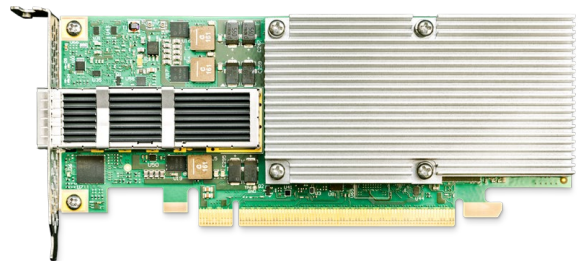


Board Manufacturer: AMD

## ÜberNIC Ultra+

### High-Density Programmable SmartNIC

- Hyperscale Throughput 1GbE to 400GbE
- Altera FPGA Ecosystem
- 54W Total Draw / 1 QSFPDD, 8 Interfaces Total
- Full Line Rate, Sub- $\mu$ s, No Drops
- ÜberNIC IP Suite Incl. FPGA-Based ÜberStack



Board Manufacturer: BittWare

## ÜberNIC IP Suite

### Base IP

- ÜberStack (HW Logic)
- ÜberSock (SW Logic)
- ÜberLoad (SW Logic)
- ÜberL2

### Add-On IP (HW Logic)

- ÜberTime
- ÜberPTP
- ÜberWR
- PTM
- ÜberFPGA FDK (eta Aug. '26)
- ÜberDump
- ÜberCapture
- ÜberDPI (eta Oct. '26)

## LMS Partners Include





	ÜberNIC Ultra+	ÜberNIC ML
<b>PLATFORM</b>		
FORM FACTOR	HH/HL	HH/HL
FPGA	AGI-023	VU23
NETWORK STACK	Hardware	Hardware
<b>NETWORK I/O</b>		
CAGE(S)	1 x QSFPDD	2xDSFP28
MAX INTERFACES	8	4
LINK SPEEDS	1/10/25/40/50/100/200/400 GbE	1/10/25 GbE
TRANSCEIVER SPEED (ONE-WAY)	72ns	21ns
<b>FPGA</b>		
LOGIC ELEMENTS	2.308M	2.252M
BLOCK RAM	204Mb	79Mb
ULTRA RAM / eSRAM	18Mb	99Mb
<b>MEMORY</b>		
DDR4	16GB	8GB
<b>PCIE</b>		
NATIVE VERSION	5	4
SUPPORTED VERSION(S)	5/4/3	4/3
LANES	16	8
CXL 1.1 & 2.0 (ON REQUEST)	Y	N
AMD SDCI	Y	Y
<b>POWER</b>		
8 INTERFACES (UNIT/INTERFACE)	54W/6.7W	N/A
4 INTERFACES (UNIT/INTERFACE)	34W/8.5W	19W/4.7W
<b>PRECISION TIME</b>		
PTP IN HOST (LinuxPTP)	Y	Y
PTP IN FPGA (ÜberPTP)	Y	Y
WHITE RABBIT IN FPGA (ÜberWR)	Y	Y
TIMESTAMPING IN FPGA (ÜberTime)	Y	Y
PTM (PRECISION TIME MEASUREMENT)	Y	N
<b>OPERATING SYSTEM</b>		
RED HAT	Y	Y
FEDORA	Y	Y
ALMALINUX	Y	Y
UBUNTU	Y	Y
DEBIAN	Y	Y
SUSE	Y	Y