We are proud supporters of open source software, with over 15 years experience. We strongly agree with A. Kay, who used to be quoted by Steve Jobs stating that "People who are really serious about software should make their own hardware."

Therefore, ServerU is designed, supported and certified hardware for open source, because we are serious about software.



Server



8001 NW 64th St. Miami, FL 33166

contactus@serveru.us

www.serveru.us

+1 (305) 421-9956



## Rack-mount servers

**A REEEEEE** 

designed for BSD and Linux systems

## We are ServerU

# We make Server hardware for open source flavors of Unix-like systems.

ServerU is a joint effort of open source specialist company with more than 15 years expertise, and ServerU itself, a US company based on Miami, FL.

We focus on designing and making rack-mount 1U professional servers completely supported on open source *Unix-like* systems.

We make hardware which is supported on FreeBSD, OpenBSD & Linux. We also focus on BSD and Linux based appliance solutions, like ProApps, pfSense, Vyatta (VyOS), Endian and others.

It's a known FACT that most networking server vendors like HP, IBM and DELL won't support open source systems other than a couple of Enterprise Linux flavors. Therefore we designed, assembled, tested, certified, and we DO support ServerU enterprise servers on most BSD and Linux systems. The story beyond ServerU is motivated on ProApps, Enterprise Professional Appliance made on top of FreeBSD operating system. Aiming to deliver a complete solution made up of ProApps and a hardware specially designed for it, we made and have been serving since 2012 a number of ProApps customers with ServerU hardware.



We are proud supporters of open source software, with over 15 years experience.

We strongly agree with A. Kay, who used to be quoted by Steve Jobs stating that "People who are really serious about software should make their own hardware."

Therefore, ServerU is designed, supported and certified hardware for open source, because we are serious about software.

### ServerU Netmap L-400

ServerU Netmap L-400 is a perfect 1U network appliance for medium-sized companies and organizations. It's powered with 6 Intel Gigabit LAN with independent RX and TX multithread queues, MSI-X supported and ready for Netmap high performance packet processing.

With 8GB RAM (up to 16GB), 4 embedded Intel processors core and 6 Intel Server Networking ports (up to 14x1Gbit/s expansible) it's suitable for up to 2.6Gbit/s aggregate throughput.

### KEY FEATURES

- ► Hand picked 6 port Intel Gigabit NICs
- Netmap ready (FreeBSD & pfSense)
- Up to 14 Gbit/s expansion ports
- ▶ Up to 4x1Gbit/s SFP (fibre) expansion

### PERFECT FOR

- BGP & OSPF Routing
- Firewall & Security Appliances
- IDS/IPS & Anti-DDoS
- WAF (Web Application Firewall)

### TECHNICAL OVERVIEW

Here is a summary description for ServerU Netmap L-400

Business Size:	For SMB (small & medium) and medium-to-big business.
	Exceeds typical SOHO
Recommended use:	BGPv4 & OSPF Routing, Stateful Firewall, IDS/IPS,
	Web App Firewall, Anti-DDoS, NGFW, Web Proxy & Content
	Filtering, E-mail security & server, SMTP Firewall & VPN
Designed for:	ProApps, FreeBSD, pfSense, OpenBSD, Linux, Vyatta (VyOS),
	Endian & ROS (no Windows)
Certifications:	FCC Class A, UL, RoHS, CE Emission, ANATEL
Processor:	Intel® C2518 "Rangeley" 4x1.74Ghz (Quad Core)
	Embedded with AES-NI support
Chipset:	Intel® "Rangeley" w/ VT-x virtualization support;
Memory Technology:	1x 8GB DDR3 on 240P DIMM socket (up to 16GB on
	2x240P DDR3 DIMM)
Network Interfaces:	6x Intel Gigabit server ports w/ 2x i210AT chipset and
	4x 88E1543 chipset - igb(4) driver
Network Features:	WDT, RTC, MSI-X, CPU Affinity w/ 4 and 8 Queues
Physical I/O:	4-key Pad & 2-line LCM Display (fully scriptable, yeah!)
BIOS	AMI BIOS, 16Mbit SPI Flash ROM

#### Designed with security in mind:

Defense in Depth:	Perfect for bastion Host, Tier-1, Tier-2 and Tier-3 control
Diversity of Defense:	FreeBSD, Linux or OpenBSD; ProApps, pfSense or Mikrotik;



## Netmap L-400 & L-800 Overview





### ServerU Netmap L-800

ServerU Netmap L-800 is our best offer for embedded network-centric appliance at High End class. This device was specially designed for mission-critical high-performance and high-availability operations on big and medium business.

Powered by default with 6 Intel Gigabit Server network cards – igb(4) device – with multiple multithreaded and independent queues, MSI-X interrupt control and ready for Netmap technology which provides high performance packet capturing and processing.

With 8GB RAM (up to 16GB) and 8 Intel High End embedded processors it's a networking server suitable for up to 5.6Gbit/s and 2.7Mpps aggregate throughput and up to 18Mpps / 40Gbps accelerated performance in Netmap mode.



- 6 NICs w/ Intel igb(4) driver w/ bypass
- Hand-picked server chipsets
- Netmap Ready (FreeBSD & pfSense)
- Up to 14 Gigabit expansion ports
- Up to 4x10GbE SFP+ expansion

- BGP & OSPF routing
- Firewall & UTM Security Appliances
- Intrusion Detection & WAF
- CDN & Web Cache / Proxy
- E-mail Server & SMTP Filtering

### TECHNICAL OVERVIEW

Here is a summary description for ServerU Netmap L-800

Business Size:	For big and medium sized business
Recommended use:	BGPv4 & OSPF Routing, Stateful Firewall, IDS/IPS, WAF
	CDN, Caching Proxy, Web Proxy, Web Content Filtering,
	Web Hosting, E-mail Server, SMTP Firewall and VPN
Designed & tested for:	ProApps, FreeBSD, pfSense, OpenBSD, Linux, Vyatta (VyOS),
	Endian & ROS (no Windows)
Certifications:	FCC Class A, UL, RoHS, CE Emission, ANATEL
Processor:	Intel® C2758 "Rangeley" 8x2.41Ghz (Octa Core) Embedded
Chipset:	Intel® "Rangeley" w/ VT-x virtualization support
Memory Technology:	1x 8GB DDR3 on 240P DIMM socket (up to 16GB on 2x240P)
Network Interfaces:	6x Intel Gigabit server ports w/ 2x Intel i210AT chipset and
	4x Intel 88E1543 chipset - igb(4) driver (netmap ready)
Network Features:	All 3 segments with full 3rd generation bypass support;
	WDT, RTC, MSI-X, CPU Affinity w/ 4 and 8 threads per port
Physical I/O:	4-key Pad & 2-line LCM Display (fully scriptable, yeah!)
BIOS:	AMI BIOS, 16Mbit SPI Flash ROM

### Designed with security in mind:

Defense in Depth:	Perfect for bastion Host, Tier-1, Tier-2 and Tier-3	
	perimeter control	
Diversity of Defense:	FreeBSD, Linux or OpenBSD; ProApps, pfSense or Mikrotik	
Fail Safe:	3rd generation Intel Bypass technology	
	(power or system failure)	

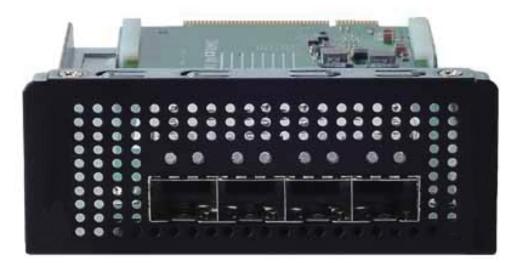
## Expansion Options for L-800 & L-400

With a 3rd Generation PCIe x8 NIC expansion slot w/ high bandwidth bus, ServerU Netmap L-800 and L-400 can be grown in performance, bandwidth and perimeter ports according to your needs.

These front-facing and easily swapped modules allow for a safe and guaranteed expansion for NICs of type RJ-45 copper, fiber, bypass and speeds from 1Gbps to 10Gbps (SFP, SFP+ and Copper).







IGbit/s Copper	Ports	Chipset	Bypass
G808-1	8x Gbe RJ-45 ports	8x Intel i210 AT; PEX8618	4 pairs G3
G808-2	8x Gbe RJ-45 ports	8x Intel i210 AT; PEX8618	N/A
G428-1	4x Gbe RJ-45 ports	l x Intel i350 AM4	2 pairs G3
G428-2	4x Gbe RJ-45 ports	l x Intel i350 AM4	N/A
I Gbit/s SFP (Fiber)	Ports	Chipset	Bypass
S406-1	4x Gbe SFP ports	i350-AM4	N/A
10GbE Copper*	Ports	Chipset	Bypass
I0GbE Copper* T202-1	Ports 2x 10Gbe RJ-45 ports		<b>Bypass</b> N/A
		Intel X540	
T202-I	2x 10Gbe RJ-45 ports 2x 10Gbe RJ-45 ports	Intel X540	N/A
T202-1 T203-1	2x 10Gbe RJ-45 ports 2x 10Gbe RJ-45 ports	Intel X540 Intel X540	N/A I pair G3
T202-1 T203-1 10GbE SFP+ (Fiber)*	2x 10Gbe RJ-45 ports 2x 10Gbe RJ-45 ports Ports	Intel X540 Intel X540 Chipset	N/A I pair G3 <b>Bypass</b>

\*10GbE expansion ports available only on ServerU Netmap L-800