

Protectli Appliance

Protectli Vault FW6A 6 Port - Intel® 3867U

June 28, 2024



Specifications

Model FW6A

Description 6X 1G Network Port Fanless Appliance

Processor Intel 3867U (64 Bit, 1.8 GHz, 2MB Smart Cache)

Processor Cores 2

Processor Threads 2

Intel AES-NI Supported

Virtualization Intel Vt-x, Vt-d

Network 6x Intel 1G Ethernet, RJ-45

Video / Graphics Intel HD Graphics 610, 1x HDMI 1.4

Memory 2x SO-DIMM DDR4-2133 1.2v, Dual Channel , Max 64GB

Storage 1x mSATA

Optional Storage 1x Internal 2.5" SATA 3.0 SSD

External I/O 6x RJ-45 Ethernet

4x USB 3.2 Gen 2 Type A

1x HDMI

1x RJ-45 COM

2x WiFi/LTE Antenna Mounting Holes

1x 12V DC Power Jack

Internal I/O 1x Mini PCIe for mSATA

1x SATA Header, 1x SATA Power

1x Half Height mPCIe (USB 3.2 Gen 2/PCIe 3.0) for WiFi

1x CMOS Reset (2 pin) 1x CPU Fan Header (4 pin)

1x Front Panel Header (9 pin)

BIOS AMI or coreboot

1x LED Power Button (Blue), 1x LED Power Indicator (Green), 1x LED Disk

Indicators Activity Indicator (Red), 1x LED Disk Activity Indicator (Yellow)

Power Input 12V DC, 1x DC Power Jack

Power Usage Max 35W

Chassis Fanless, Aluminum, Black

Chassis Dimensions 6.1 x 5 x 2 in, 155 x 127 x 50 mm



Mounting Options Desktop, VESA Bracket, Optional 1RU Rack Mount

Weight 2 lbs 3 oz, 1.0 Kg
Shipping Weight 3 lbs 14 oz, 1.4 Kg

Operating

Temperature +14° - +122° F, -10° - +50° C

Operating Humidity 0 – 95% relative humidity, non-condensing

Approvals UL (Power Supply), FCC Part 15 Class B, CE, RoHS

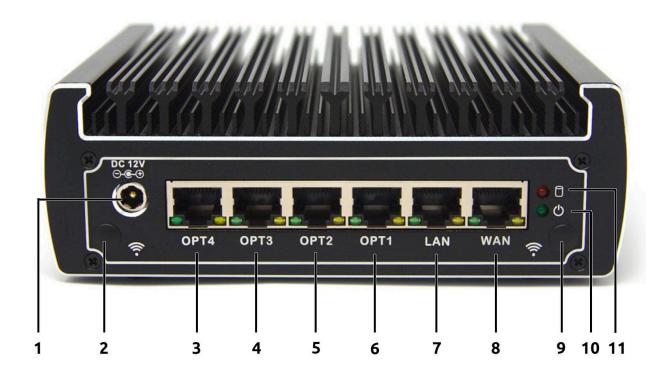
Country of Origin Made in China, Assembled in USA, Canada, or Germany

Optional WiFi 1x Half Height mPCle 802.11b/g/n (USB) or 802.11ac/a/b/g/n (PCle)



System Features

Front Features

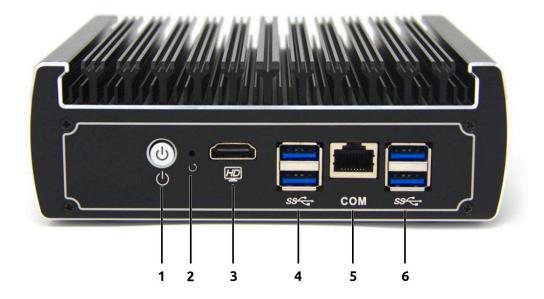


Item#	Object	Description
1	Power Supply Connector	12V DC barrel connector for the 60W external power supply. Positive rail is the tip, negative is sleeve.
2, 9	Antenna Ports	Two antenna ports for adding radio antennas (WiFi, LTE, etc.). The ports are covered by plugs while not in use.
3	Ethernet Port 6	The sixth 10/100/1000 Mbps Intel® i211 ethernet port. This port is labeled "OPT4" for convenience, but is not limited in its capacity.
4	Ethernet Port 5	The fifth 10/100/1000 Mbps Intel® i211 ethernet port. This port is labeled "OPT3" for convenience, but is not limited in its capacity.



5	Ethernet Port 4	The fourth 10/100/1000 Mbps Intel® i211 ethernet port. This port is labeled "OPT2" for convenience, but is not limited in its capacity.
6	Ethernet Port 3	The third 10/100/1000 Mbps Intel i211® ethernet port. This port is labeled "OPT1" for convenience, but is not limited in its capacity.
7	Ethernet Port 2	The second 10/100/1000 Mbps Intel i211® ethernet port. This port is labeled "LAN" for convenience, but is not limited in its capacity.
8	Ethernet Port 1	The first 10/100/1000 Mbps Intel i211® ethernet port. This port is labeled "WAN" for convenience, but is not limited in its capacity.
10	Power Indicator LED	This LED will stay solid green when the device is powered on.
11	HDD Activity LED	This red LED will light up when data activity is detected on either the mSATA or SATA interfaces.

Rear Features

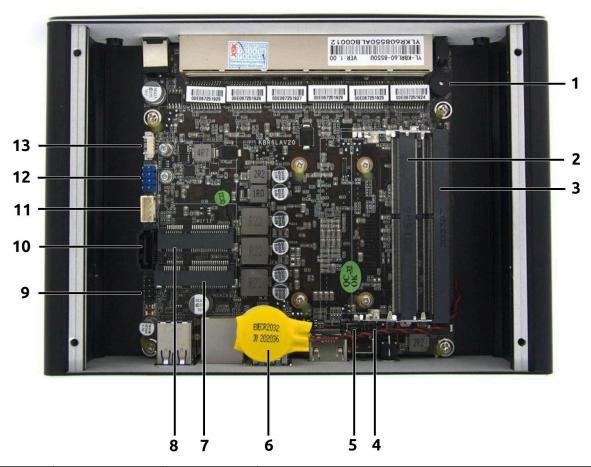




Item#	Object	Description
1	Power Button	Pressing the Power Button will power the unit on and illuminate with a blue LED.
		In OSes configured to handle ACPI signals, pressing the power button initiates a shutdown.
		Pressing and holding the Power Button for 5 seconds will force the unit to power off.
2	Reset Button (Recessed)	A momentary switch exposed via GPIO. This is not an ACPI reset button, but a general purpose button that may be programmed in the guest OS.
3	HDMI Connector	Video and audio output via HDMI.
4,6	USB3 Connectors	USB 3.2 Gen 2 Type-A connectors.
5	Serial Console Port	RS232 serial communications via RJ-45. Default port settings: • 115200 baud • No parity • 8 databits • 1 stopbit



Motherboard Top View



Item#	Object	Label	Description
1	Buzzer	BUZZ1	PC Speaker.
2	Memory Slot	SODIMM1	DDR4LP SODIMM.
3	Memory Slot	SODIMM2	DDR4LP SODIMM.
4	NVRAM Reset Jumper	JCMOS	Shorting this jumper while the CMOS battery is connected will reset the BIOS NVRAM.
5	Power Restore Jumper	AUTO_P	Jumper setting determines system state after power loss. Closing the jumper will cause the unit to



			automatically power on when power is restored after an outage.
6	CMOS Battery		3V CR2032 connected via 2-pin connector on the opposite side of the motherboard.
7	mSATA Connector	MSATA1	Connector for an mSATA storage device, such as an SSD.
8	WiFi Expansion Slot	WIFI1	Connector uses USB protocol over an mPCI connector. Designed for Protectli WiFI and LTE modems, but is not limited in its capabilities.
9	Front Panel Header	FP1	Internal header for adding external device controls and indicators featured through the front panel, such as power button, reset button, activity LEDs, etc.
10	SATA Data Connector	SATA1	SATA III data connector. Recommended for additional storage, such as a 2.5" SATA SSD.
11	SATA Power Connector	JSATA1	SATA power connector for additional storage.
12	USB 3.0 Header	FUSB1	Internal header for additional USB 2.0 connections.
13	Fan Header	CPU_FAN1	Four-pin PicoBlade-compatible header for optional PWM CPU fan.

Measurement View





Document History

2024-06-28

• Clarified PCI and USB specifications such as speed, protocol, etc. 2024-05-09

• Clarified LTE and/or WiFi slot naming schemes 2023-03-21

• Initial document.