Protectli Appliance

Protectli Vault FW4C 4 Port 2.5G - Intel® J3710

June 28, 2024

Specifications

Model	FW4C
Description	4x 2.5G Network Port Fanless Appliance
Processor	Intel J3710 (64 Bit, 1.6 GHz, 2MB L2 Cache)
Processor Cores	4
Processor Threads	4
Intel AES-NI	Supported
Virtualization	Intel Vt-x
Network	4x Intel I225-V Rev. B3 2.5G Ethernet, RJ-45
Video / Graphics	Intel Clear Video HD, 2x HDMI 1.4
Audio	Audio over HDMI, 1x 3.5mm Audio Jack
Memory	1x SO-DIMM DDR3L-1600, 1.35v, Max 8GB
Storage	1x mSATA
Optional Storage	1x Internal SATA 3.0 Data and Power Connector
External I/O	4x RJ-45 Ethernet
	2x USB 3.2 Gen 2 Type A
	2x HDMI
	1x 3.5mm Audio Jack
	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 Full Height mPCIe (USB) for WiFi or LTE
	1x USB 2.0 Header
	1x CMOS Reset (2 pin)
	1x Front Panel Header (9 pin)
BIOS	AMI or coreboot
Indicators	1x LED Power Button (Blue), 1x LED Power Indicator (Green), 1x LED Disk Activity Indicator (Red), 1x LED Disk Activity Indicator (Yellow)
Power	Input 12V DC, 1x DC Power Jack
Power Usage	Max 20W

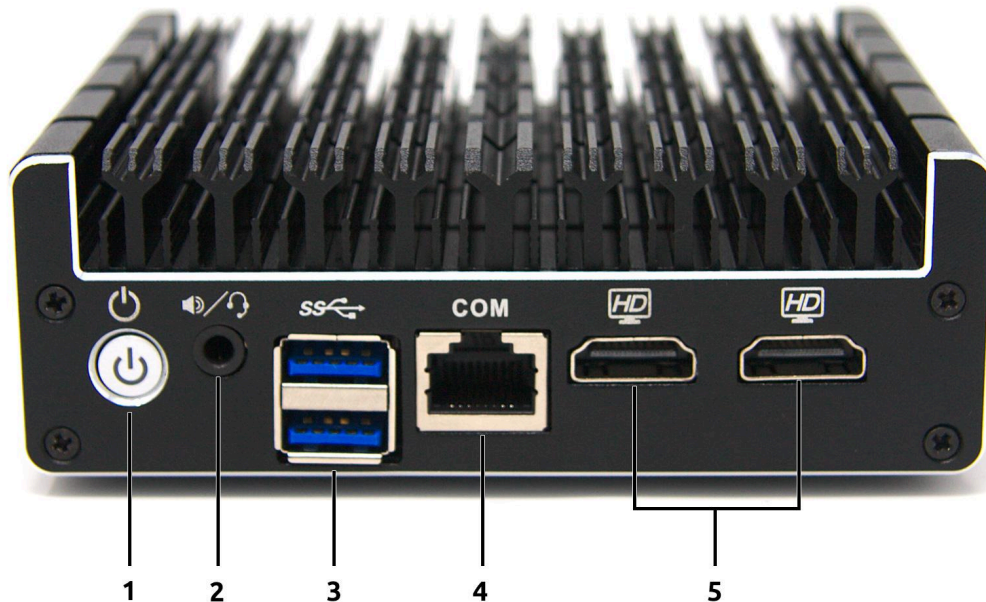|	
Chassis	Fanless, Aluminum, Black
Chassis Dimensions	4.5 x 4.3 x 1.5 in, 115 x 107.5 x 39 mm
Mounting Options	Desktop, VESA Bracket, Optional 1RU Rack Mount
Weight	1 lb 2 oz, 0.50 kg
Shipping Weight	2 lbs 13 oz, 1.2 kg
Operating Temperature	+14° - +122° F, -10° - +50° C
Operating Humidity	0 – 95% relative humidity, non-condensing
Approvals	UL (Power Supply), FCC Part 15 Class B, CE, RCM, RoHS
Country of Origin	Made in China, Assembled in USA, Canada, or Germany
Optional WiFi	1x mPCIe 802.11b/g/n (USB)
Optional LTE Cellular	1x mPCIe 4G LTE (USB)

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System Features

Front Features
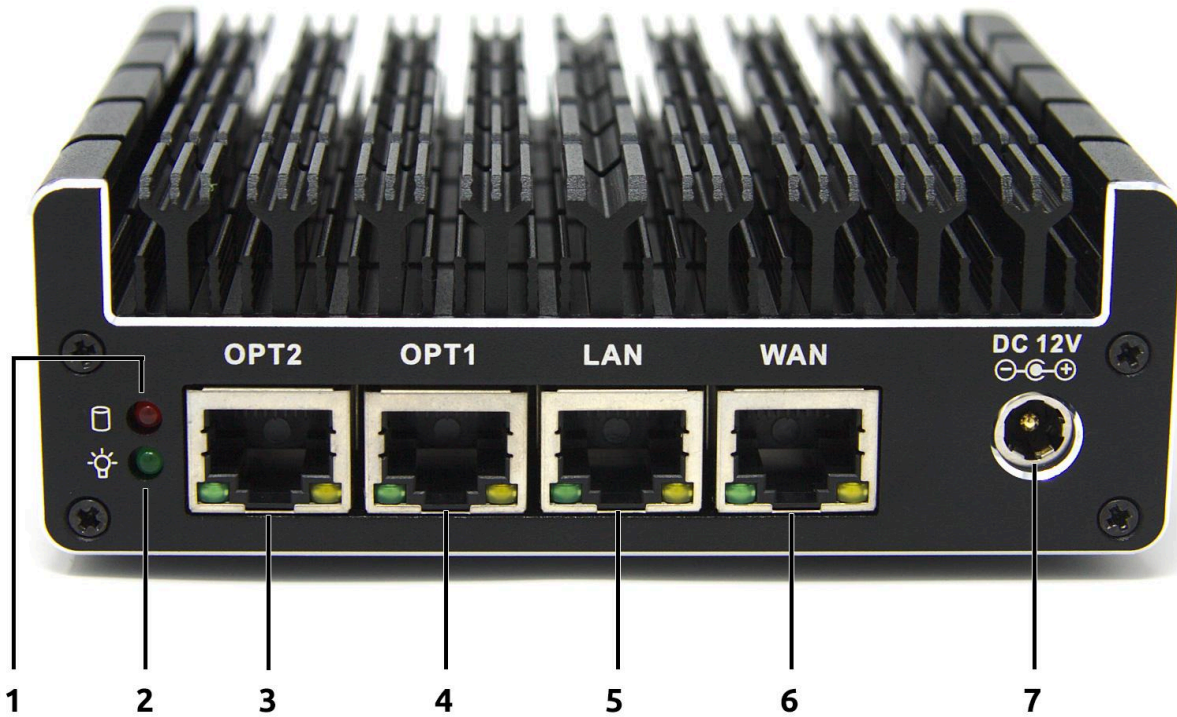
Item #	Object	Description
1	HDD Activity LED	This red LED will light up when data activity is detected on either the mSATA or SATA interfaces.
2	Power Indicator LED	This LED will stay solid green when the device is powered on.
3	Ethernet Port 4	The fourth 10/100/1000/2500 Mbps Intel® i225 ethernet port.
4	Ethernet Port 3	The third 10/100/1000/2500 Mbps Intel® i225 ethernet port.
5	Ethernet Port 2	The second 10/100/1000/2500 Mbps Intel® i225 ethernet port. This port is labeled "LAN" for

		convenience, but is not limited in its capacity.
6	Ethernet Port 1	The first 10/100/1000/2500 Mbps Intel® i225 ethernet port. This port is labeled "WAN" for convenience, but is not limited in its capacity.
7	Power Supply Connector	12V DC barrel connector for the 40W external power supply. Positive rail is the tip, negative is sleeve.

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	Speaker and Microphone Port	A 3.5mm TRRS plug can be used to output stereo sound and input mono microphone.

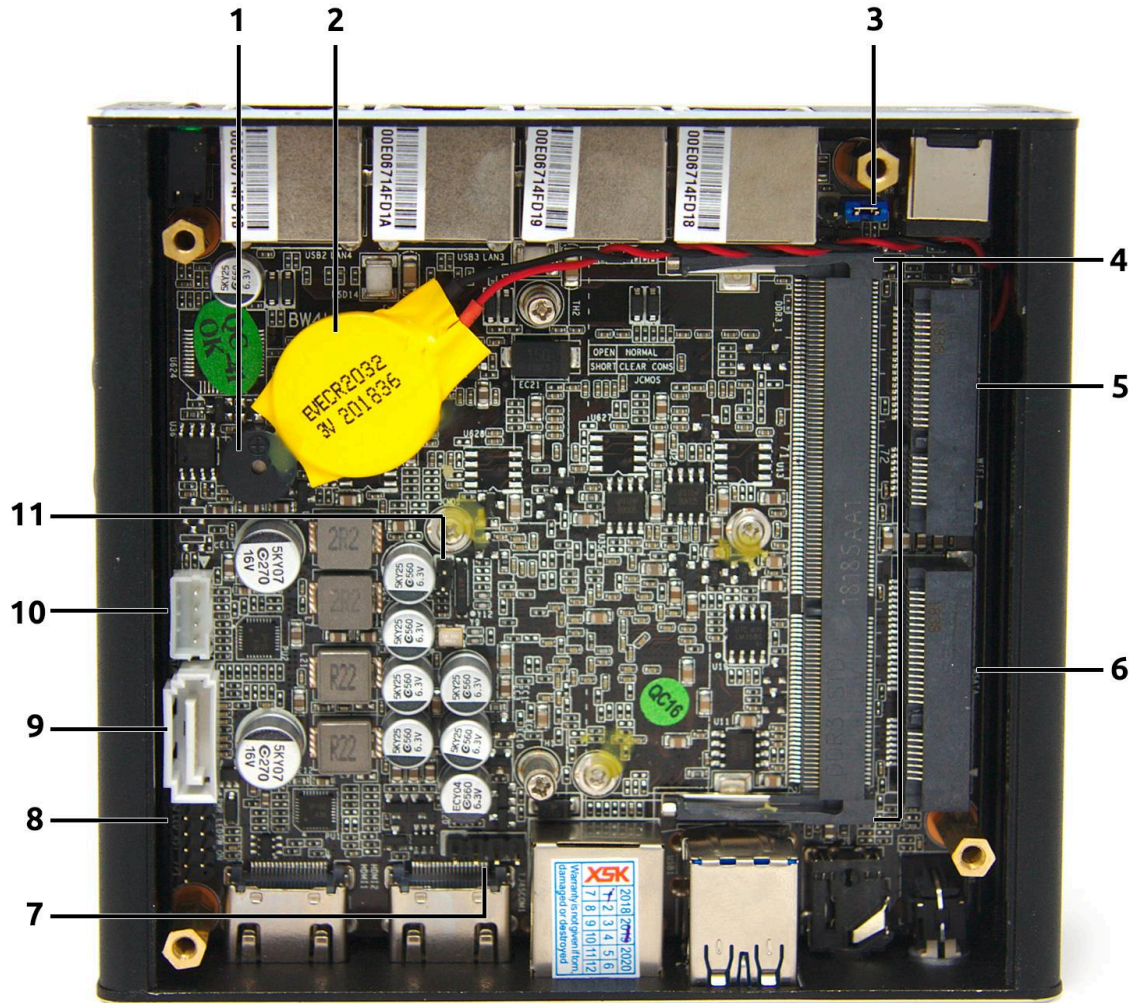| 3	Two USB3 Connectors	USB 3.2 Gen 2 Type-A connectors.
4	Serial Console Port	RS232 serial communications via RJ-45. Default port settings: ● 115200 baud ● No parity ● 8 databits ● 1 stopbit
5	Two HDMI Connectors	Dual video and audio output via HDMI.

Left Features

Item #	Object	Description
1	Antenna Ports	Two antenna ports for adding radio antennas (WiFi, LTE, etc.). The ports are covered by plugs while not in use.

Right Features

Item #	Object	Description
1	Security Slot	A security slot allows for a physical security cable lock or similar devices.

Motherboard Top View

Item #	Object	Label	Description
1	Buzzer		PC speaker.
2	CMOS Battery		3V CR2032 connected via 2-pin connector on the opposite side of the motherboard.
3	Power Restore Jumper	JPWR	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.
4	Memory Slot	DDR3_1	DDR3 SODIMM.

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5	WiFi Expansion Slot	WIFI	Connector uses USB protocol over an mPCI connector. Designed for Protectli WiFI and LTE modems, but is not limited in its capabilities.
6	mSATA Connector	MSATA	Connector for an mSATA storage device, such as an SSD.
7	USB 2.0 Header	FUSB2	Internal header for additional USB 2.0 connections.
8	Front Panel Header		Internal header for adding external device controls and indicators featured through the front panel, such as power button, reset button, activity LEDs, etc.
9	SATA Data Connector	SATADATA	SATA III data connector. Recommended for additional storage, such as a 2.5" SATA SSD.
10	SATA Power Connector	SATAPWR	SATA power connector for additional storage.
11	NVRAM Reset Jumper	JCMOS	Shorting this jumper while the CMOS battery is connected will reset the BIOS NVRAM.

Measurement View
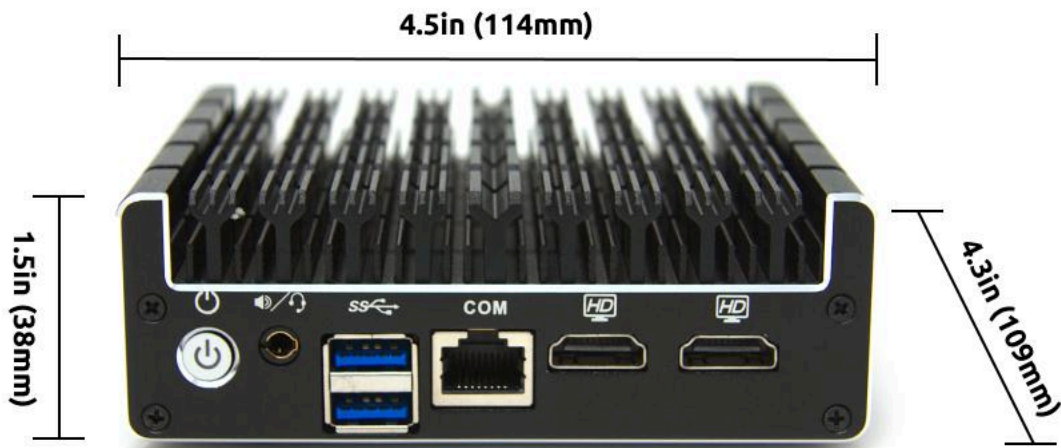
Document History

2024-06-28
- Clarified PCI and USB specifications such as speed, protocol, etc.

2024-05-17
- Clarified LTE and/or WiFi slot naming schemes

2023-08-31
- Clarify details about the i225-V network interfaces.

2023-03-21
- Initial document