

FWA-1112VC

Fan-Less Network Appliances for the Diverse Deploying Scenario

Preliminary



Features

- Intel® Atom® C3000-series processor
- Fan-less design
- IP4X compliance
- Wide-operating temperature support from -20 ~ 70 °C by SKU option
- Design reserved for 5G and Advanced-LTE module
- Design reserved for 802.11ax (WiFi6) module
- Reliability enhancement with better ESD/Surge protection design
- 6x ethernet interfaces with 6xRJ-45 connector or 4x RJ-45 + 2x 10G/1G SFP+ connector by SKU



Specifications

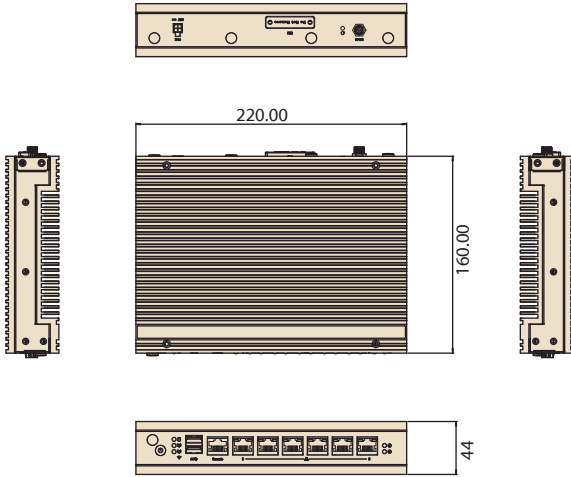
PN		FWA-1112VC-2CA1S	FWA-1112VC-4CA1S	FWA-1112VC-8CA1S	FWA-1112VCL-4CA1S	FWA-1112VCL-8CA1S	
Processor	CPU	Intel® Atom® C3338	Intel® Atom® C3558	Intel® Atom® C3758	Intel® Atom® C3558	Intel® Atom® C3758	
	Core Count	2C	4C	8C	4C	8C	
	Base Frequency	1.5GHz	2.2GHz	2.2GHz	2.2GHz	2.2GHz	
	TDP	8.5W	16W	25W	16W	25W	
	QAT Technology	NA	Yes	Yes	Yes	Yes	
	BIOS	AMI Efi 64Mbit					
Memory	Technology	DDR4 1866MHz	DDR4 2133MHz	DDR4 2400MHz	DDR4 2133MHz	DDR4 2400MHz	
	Socket	1 x 260-pin SO-DIMM					
	Max. Capacity	32GB					
Storage	m.2 storage	1 x m.2280 SATAIII SSD					
	eMMC storage	Default not installed; 4GB/8GB/16GB/32GB is optional by project support					
	Controller	Intel® SoC MAC with 1 x Marvell 88E1543 PHY, 2 x Intel i210					
Network	Connector	6 x RJ45	6 x RJ45	4 x RJ45 + 2 x 10G/1G SFP+	6 x RJ45	4 x RJ45 + 2 x 10G/1G SFP+	
	PoE	PoE is optional by project support					
	VPD	Yes					
	SSID	Yes					
I/O	Console	1 x RJ45 port					
	USB	2 x USB3.0 Type A port					
	HDMI/VGA	NA					
Expansion	M.2	1 x M-key for 2280 SATAIII SSD 1 x B-key for 3042/3052 LTE/5G module 1 x E-key for 2230 Wifi module					
	Mini-PCIe	NA					
	SIM	Default 1 x Mini-SIM socket; 2nd Mini SIM socket for the 2nd LTE module is optional by project support					
	TPM	TPM2.0 on-board; None TPM is optional by project					
LED	LED	2 x Fixed LED: Power, HDD	2 x Fixed LED: Power, HDD	2 x Fixed LED: Power, HDD	2 x Fixed LED: Power, HDD	2 x Fixed LED: Power, HDD	
		4 x SW defined LED: LTE, LTE&Wifi, status1, status2	4 x SW defined LED: LTE, LTE&Wifi, status1, status2	2 x SW defined LED: LTE, LTE&Wifi	4 x SW defined LED: LTE, LTE&Wifi, status1, status2	2 x SW defined LED: LTE, LTE&Wifi	2 x SW defined LED: LTE, LTE&Wifi
PW on/off	Button	1 x Power Button					
External Power Adaptor	Power Type	ATX mode					
	Watts	36W					
	Input	100 ~ 240V _{ac} , 50/60Hz					
	Connector	DC Jack Lockable					
	Output	12V _{dc} 3A, 36W					
PoE Adaptor	Option; PoE is optional by project						
Environment	Operating (0.7m/s air flow)	-20 ~ 70 °C (-4 ~ 158 °F)	-20 ~ 70 °C (-4 ~ 158 °F)	-20 ~ 60 °C (-4 ~ 140 °F)	0 ~ 40 °C (32 ~ 104 °F)	0 ~ 40 °C (32 ~ 104 °F)	
	Non-operating	Temperature -40 ~ 85 °C (-40 ~ 185 °F) and 40 °C @ 95% RH Non-Condensing					
Mechanical	Material	Iron chassis with aluminum heat-sink					
	Dimensions	220 x 160 x 44 mm (8.7" x 6.3" x 1.7")					
	Weight	2.3Kg (5.07lb)					
	Mounting	Rack Mount, Wall Mount					
OS	OS	Linux					
SW	SW	QuickStart Linux Image, Server iManager					
Others	IP Rating	IP4X					
	Safety	UL, CB, CCC					
	EMC	CE EN55032/EN55024 ClassB, FCC ClassB, AS/NZS CISPR32, IEC-61000-4-5, EN 300 386					
Certification	ROHS	ROHS, REACH, WEEE					

- Design and validation for 0 ~ 40 °C SKU will be conducted at DVT phase, final spec TBD
- PoE design is reserved but not included; available by project support
- eMMC design is reserved but not included; available by project support
- Default RF module slot is 1 x M.2 B-key 3042/3052 for LTE/5G and 1 x M.2 E-key 2230 for Wifi5/Wifi6
- 2 x LTE or Mini-PCIe Wifi design is reserved by BOM option, available by project support

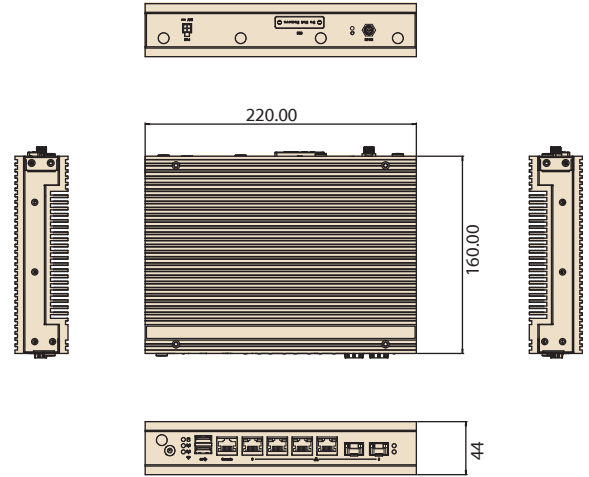
Dimensions

Unit: mm

6 x RJ45 SKU

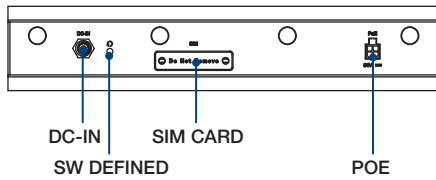


4 x RJ45 + 2 x 10G/1G SFP+ SKU

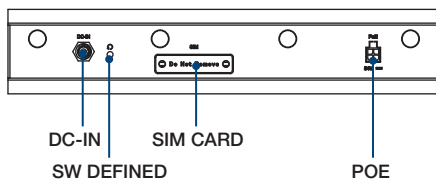


Front Panel External I/O Mechanical Layout/Drawing

6 x RJ45 SKU

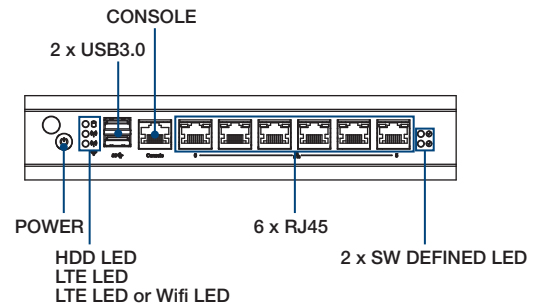


4 x RJ45 + 2 x 10G/1G SFP+ SKU

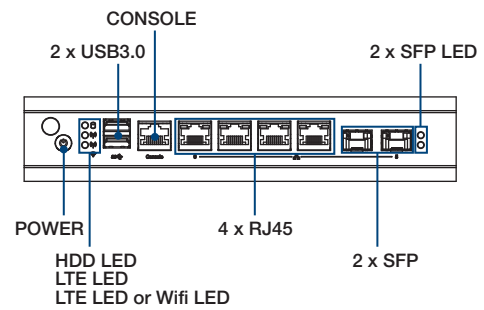


Rear Panel External I/O Mechanical Layout/Drawing

6 x RJ45 SKU



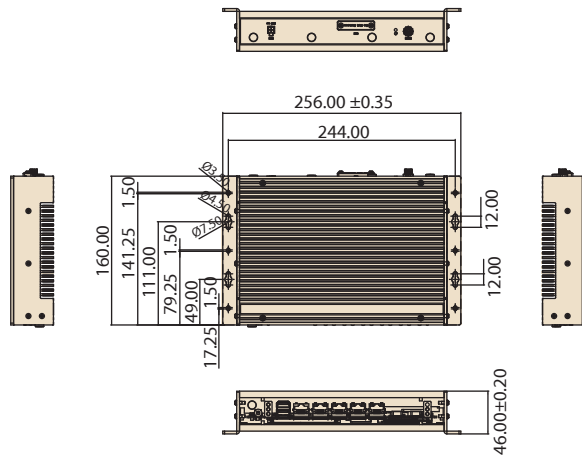
4 x RJ45 + 2 x 10G/1G SFP+ SKU



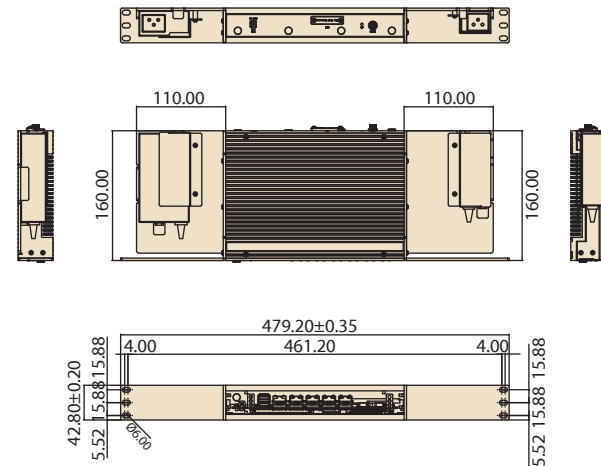
Dimensions

Unit: mm

Wall Mount Kit



Rack Mount Kit



Ordering Information

Part No.	CPU	Core	Fan-less	Ethernet	Console	USB 3.0	So-DIMM DDR4 slot	M.2 2280 SSD slot	M.2 3042/3052 LTE/5G slot	M.2 3042 2nd LTE slot*	Mini-PCIe Wifi slot*	M.2 2230 Wifi slot	eMMC*	PoE*	DC input
FWA-1112VC-4CA1S	Intel Atom® C3558 2.2GHz	4	-20 ~ 70 °C	6 x RJ45	1 x RJ45	2	1	1	1	NA	NA	1	Optional	Optional	36W
FWA-1112VC-8CA1S	Intel Atom® C3758 2.2GHz	8	-20 ~ 60 °C	4 x RJ45 + 2 x 10G/1G SFP+	1 x RJ45	2	1	1	1	NA	NA	1	Optional	Optional	36W
FWA-1112VCL-4CA1S	Intel Atom® C3558 2.2GHz	4	0 ~ 40 °C*	6 x RJ45	1 x RJ45	2	1	1	1	NA	NA	1	Optional	Optional	36W
FWA-1112VCL-8CA1S	Intel Atom® C3758 2.2GHz	8	0 ~ 40 °C*	4 x RJ45 + 2 x 10G/1G SFP+	1 x RJ45	2	1	1	1	NA	NA	1	Optional	Optional	36W

Optional Accessories

Item	Description	PN
36W Power Cord	Canada, USA, Philippines, Thailand, Taiwan	1700001524
	Europe, Indonesia, Israel	170203183C
	Malaysia, Singapore, UK	170203180A
	Japan	1700008921
	Korea	1700018409
	China	1700019146
	Brazil	1700022814-11
	India	1700025113-11
Power Adaptor	AC-to-DC Adaptor, DC 12V 36W	96PSA-A36W12W7-5
PoE Adaptor	A/D 100-240V 65W 54V C14 4PIN MINI HOUSING 62368	XFWA-FSP065-DWAN3
Mounting Kit	Wall Mounting Kit	TBD
	Rack Mounting Kit	TBD
RF Kit	Wifi Kit	TBD
	LTE Kit	TBD

Packing List

Description	Qty
PW adaptor	1unit
FWA-1112VC system	1unit