FWA-3230A/B

1U Rackmount Network Application Platform with 4ᵗʰ gen. Intel® Xeon® Processor E3 series and Intel® Core™ i7/i5/i3 Processors

Features

- Supports Intel Xeon E3-1225/E3-1275/E3-1268 V3 and 4th generation Core™ i7-4770S/i5-4570TE/4570S and Pentium G3420/G3320TE, Celeron G1820/ G1820TE

- Supports four DDR3L Un-buffered 1333/1600 DIMMs, up to 32 GB (FWA-3230A); two DDR3L Un-buffered 1333/1600 DIMMs, up to16 GB (FWA-3230B)

- Six 10/100/1000 Mbps LAN on Board with up to 3 bypass segments

- Two 2.5" SATA HDDs / SSDs or 1x 3.5" HDD

- Up to two Advantech Network Mezzanine Cards (NMCs)

- IPMI2.0 compliant Remote Management (optional)

Introduction

The FWA-3230 1U network appliance can scale from entry-level performance using Intel® Celeron® and Pentium® processors to the mid-range segment using Intel® Xeon® E3 series processors, offering an outstanding price/performance ratio with each SKU. In addition to supporting the latest Haswell microarchitecture enhancements for increased CPU performance, virtualization support and I/O throughput, the FWA-3230 adds support for latest Gigabit Ethernet controllers, PCIe gen.3 connectivity, support for remote management and advanced LAN bypass to create state-of-the-art platforms for specific enterprise networking applications.

Memory configurations can include four DDR3L 1333/1600 DIMMs for up to 32GB in total. In the base configuration, the system comes with support for two 2.5" SATA HDDs/SSDs, LCM, RJ45 console, two USB ports and six Intel® I210-AT GbE controllers.

For I/O expandability, two standard PCIe full-height, half-length slots with rear access allow the integration of off-the-shelf PCIe adapters and up to two Advantech Network Mezzanine Card (NMC) slots offer further flexibility for additional front-panel network ports.
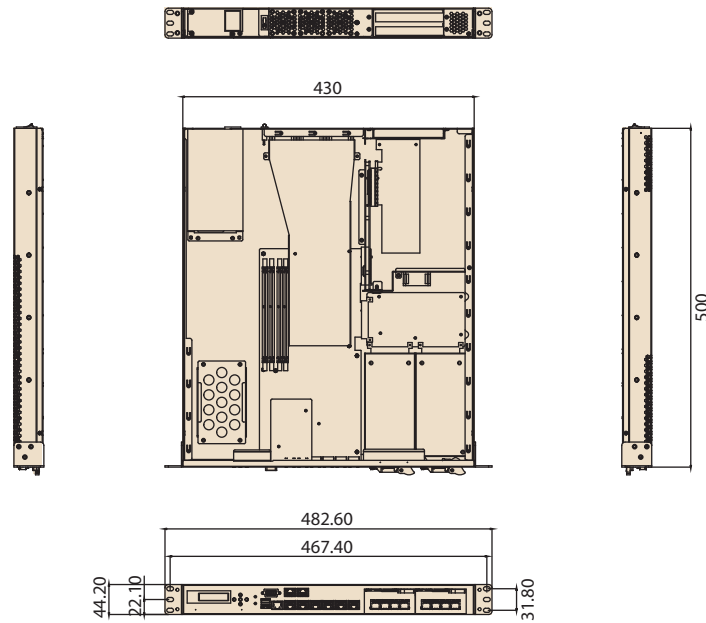
Featuring an optional server BMC in accordance with IPMI2.0, the FWA-3230 supports state-of-the-art remote and lights-out management for increased reliability, serviceability and improved total cost of ownership. Advanced features such as power supply monitoring via PMBus allow the whole platform to be remotely managed. All management firmware can be remotely upgraded using the industry standard HPM.1 protocol, same as the motherboard system BIOS. All upgrades are fail safe and support instant rollback allowing for full system recovery without the necessity for onsite service staff.

Specifications

		FWA-3230A	FWA-3230B
Processor System	CPU	Intel® Xeon® E3-1225/E3-1275/E3-1268 V3 / 4th gen. Intel vPro™ Processors (LGA1150)	Intel 4th gen. Core i7-4770S/i5-4570S/i5-4570TE Pentium G3420/ G3320TE, Celeron G1820/G1820TE vPro™ processors (LGA1150)
	L2 Cache	8 MB	8 MB / 4 MB
Chipset	PCH	Intel® C226 PCH	Intel® H81 PCH
Memory	DIMM sockets	4	2
	Technology	Dual channel DDR3L 1333/1600 MHz ECC (Intel® Xeon® Processors only) Un-buffered memory	Dual channel DDR3L 1333/1600 MHz Non-ECC Un-buffered memory
	Capacity	Up to 32 GB	Up to 16 GB
PCIe	Expansion Slots	2 x PCI-Express Gen.2 x4 FH/HL Expansion Slots(default configuration) Or 1 x PCI-Express Gen.2 x8 FH/HL Expansion Slot (optional)	Without PCIe riser card
Ethernet	LAN on Board	6 x Intel I210-AT 10/100/1000 Mbps Ethernet with optional 3 segment advanced bypass	
	NMC modules	2 x NMC modules with PCIex8 gen.3 interfaces Maximum 8GbE ports or 2 x 10GE ports. Please refer to the "Recommended NMC Module List" section for a list of currently available NMCs	
Storage	SATA	1 x 3.5" or 2 x 2.5" internal HDD / SSD	
	Flash	1 x mSATA socket 1 x USB 2.0 on board pin header for USB DOM	
Management Ports & Peripherals	USB	2 x USB3.0 Type A connectors on the front 1 x USB3.0 pin header (C226)	
	Serial	1 x RS232 Console port (RJ-45 connector)	
	LCD Module	16 x 2 graphic display, 5 buttons	
	IPMI	LOM Module (optional) with Aspeed AST1050 chip Supports IPMI 2.0, redundant BIOS and remote, failsafe BIOS udpate	Without LOM module
	VGA	1 x VGA pin header	
	TPM	Trust Platform Module (Optional)	
Power Supply	Wattage	300W redundant AC PSU (redundant DC PSUs on request)	300W non-redundant AC PSU
	Input	AC 100 ~ 240 V @ 50 ~ 60 Hz, full range PMBus support on redundant PSU	
Environment		Operating	Non-Operating
	Temperature	0 ~ 40° C (32 ~ 104° F)	-20 ~ 80° C (-4 ~ 167° F)
	Humidity	5 ~ 85 %@ 40° C (104° F)	5 ~ 95 %
Physical	Dimensions (W x L x H)	430 x 500 x 44 mm (W x L x H), 16.6" x 19.7" x 1.7"	
	Weight (N.W)	10 kg (22 lb)	

Dimensions

Unit: mm

430

500

482.60

467.40

44.20

22.10

31.80

Recommended NMC Module List

P/N	NMC-0107-10E	NMC-0108-10E	NMC-0803-10E	NMC-1004-10E
Description	4-port GbE card	4-port GbE card	8-port GbE card	2-port 10 GbE card
LAN Controller	1 x Intel® I350-AM4	1 x Intel® I350-AM4	2 x Intel® I350-AM4	1 x Intel® 82599
Ports	4 x RJ45	4 x SFP	8 x RJ45	2 x SFP+
Other	With LAN bypass option	Without LAN bypass	With LAN bypass option	Without LAN bypass

For a full list of available / recommended NMC modules, please contact your Advantech representative.

Ordering Information

Part Number	Description
FWA-3230A-00E	1U, C226 PCH, 6 + 2 GbE ports, red. AC PSU, 2NMC bays
FWA-3230B-00E	1U, H81PCH, 6GbE ports, single AC PSU, 2NMC bays

Accessories

Part Number	Description
1702002600	Power cord 3P 180cm, USA
1702002605	Power cord 3P 180cm, Europe
1702031801	Power cord 3P 180cm, UK
1700000237	Power cord 3P 180cm, JP
1700009652	Power cord 3P 180cm, China

Packing List

Part Number	Description
1700012272	SATA Data Cable 25 cm
1700018950	RJ-45 Console Cable 220 cm

USB

NMC bays

LCD Module

Management LAN ports

Console

5 buttons for LCM

Six 10/100/1000BT LAN ports

PCIe slots

System FANs

Redundant PSU