# FWA-3260

## 1U Rackmount Network Application Platform with Intel® Xeon® Processor D Family

**Preliminary**

## Features

- Intel® Xeon® Processor D System On Chip up to 16 cores and 1.5MB last level cache per core
- 4 x DDR4 ECC UDIMMs/RDIMMs and RDIMMs, up to 2400MHz and up to 128GB
- 4 server class GbE ports implemented by an Intel i350 Ethernet Controller with advanced LAN bypass support
- 2 GbE management ports
- 2 x 10GE SFP+ ports
- 2 Network Mezzanine Card bays for PCIe gen.3 based port expansion with 1GbE and 10GbE and 40GbE ports
- 1 x PCIex8 full-height / half-length add-on cards
- Two 2.5" SATA HDDs/SSDs and two M.2 SSD sockets
- IPMI2.0 compliant Remote Management (optional)

RoHS COMPLIANT 2002/95/EC   CCC   c(UL)us   CE   FCC

## Introduction

The FWA-3260 1U network appliance features Intel's® Xeon® Processor D System On Chip to meet the need for higher core count, larger and faster memory as well as increased IO performance without sacrificing cost efficiency in a compact footprint. With up to 16 Xeon class cores and 1.5MB last level cache per core tightly integrated with DDR4 memory controllers and a rich IO subsystem, the Xeon® D SoC performs extremely well in applications tailored for multicore designs. Besides supporting memory capacities up to 128GB, Xeon® D also brings enhanced reliability and availability features previously only available on high end Xeon® E5 series processors into a midrange appliance footprint. Two integrated 10GE controllers with 128TX/RX queues per port, support for SR-IOV and optimizations for network overlays such as VxLAN and NVGRE as well as high performance PCIe gen.3 interfaces complement the processor subsystem of the SoC.

With an optimized system design the FWA-3260 adds four server class copper ports based on the Intel i350-AM4 Ethernet controller, Advanced LAN bypass capabilities as well as flexible, scalable and high performance port expansion via two PCIe gen.3 Network Mezzanine bays. Support for a PCIex8 gen.3 full height / half length card provides additional flexibility to integrate special purpose IO cards or QuickAssist™ offload adapters such as Advantech's PCIE-3215.

In the base configuration, the system comes with support for two 2.5" SATA HDDs/SSDs, two M.2 sockets, LCM, RJ45 console, two USB ports and two additional GbE management ports.

While the FWA-3260A SKU is optimized for highest performance and system reliability supporting redundant, hot swap power supplies, the FWA-3260B is tailored for best cost in entry level applications.

Featuring an optional server BMC in accordance with IPMI2.0, the FWA-3260 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.
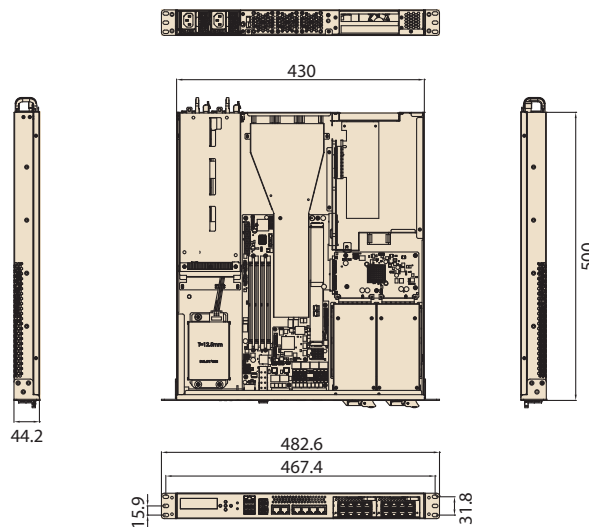
The system is FCC,CE,CB,UL,CCC and RoHS compliant.

## Specifications

| | | FWA-3260A | FWA-3260B |
|---|---|---|---|
| Processor System | CPU | Intel® Xeon D up to 16 cores | Intel® Xeon D up to 4 cores |
| | LLC Cache | 1.5MB per core | 1.5MB per core |
| Memory | DIMM sockets | 4 | |
| | Technology | Dual channel DDR4-2400MHz ECC | |
| | Capacity | 64GB (UDIMM)/128GB (RDIMM) | |
| PCIe | Expansion Slot | 1 x PCIe x8 riser card<br>Supports full-height/half-length cards | Without PCIe riser card |
| Ethernet | LAN on board | 4 x Intel® I350-AM4 10/100/1000 Mbps Ethernet with optional 2 segment advanced bypass<br>2 x Intel® I210-AT 10/100/1000 Mbps Ethernet for Management<br>2 x 10GE SFP+ (integrated in Xeon® D) | |
| | NMC modules | 2 x NMC modules with PCIex8 gen.3 interfaces<br>Maximum 8 GbE ports, 4 10GE ports or 2 40GE ports<br>Please refer to the "Recommended NMC Module List" section for a list of currently available NMCs | |
| Storage | SATA3.0 | 2 x 2.5" Internal HDD/SSD | |
| | Flash | 2 x M.2 sockets (1x 2280 or 2x 2240) | |
| System management & Peripherals | USB | 2 x USB3.0 ports in the front<br>1 x USB2.0 port on board | |
| | Serial | 1 x RS232 Console port (RJ-45 connector) | |
| | LCD Module | 16 x 2 graphic display, 5 buttons | |
| | IPMI | LOM Module (optional) with Aspeed AST1250 chip<br>Supports IPMI 2.0, redundant BIOS and remote, failsafe BIOS update | Without LOM module |
| | TPM | Trust Platform Module (Optional) | |
| Power supply | Watt | 300W redundant AC PSU (redundant DC PSUs on request) | 250W non-redundant AC PSU |
| | Input | AC 100 ~ 240 V @ 50 ~ 60 Hz, full range<br>PMBus support | AC 100 ~ 240 V @ 50 ~ 60 Hz, full range |

# Dimensions

Unit: mm

430

500

44.2

482.6
467.4
15.9
31.8

## Specifications (Cont.)

| Environment | | Operating | Non-operating |
|---|---|---|---|
| | Temperature Humidity | 0 ~ 40° C (32 ~ 104° F)<br>5 ~ 85 % @ 40 °C (104° F) | -20 ~ 80° C (-4 ~ 167° F)<br>5 ~ 95 % |
| Physical | Dimensions | 430 x 500 x 44 mm (W x L x H), 17" x 19.7" x 1.7" | |
| | Weight (N.W) | 10 Kg (22lb) | |

## Recommended NMC Module List

| Part Number | NMC-0120 | NMC-0121 | NMC-0806 | NMC-1008 | NMC-4005 | NMC-4006 |
|---|---|---|---|---|---|---|
| Description | 4-port GbE card | 4-port GbE card | 8-port GbE card | 2-port 10 GbE card | 4-port 10 GbE card | 2-port 40 GbE card |
| LAN Controller | 1 x Intel® I350-AM4 | 1 x Intel® I350-AM4 | 2 x Intel® I350-AM4 | 1 x Intel® 82599 | 1 x Intel® XL710 | 1 x Intel® XL710 |
| Ports | 4 x SFP | 4 x RJ45 | 8 x RJ45 | 2 x SFP+ | 4 x SFP+ | 2 x QSFP |
| Other | With LAN bypass | With LAN bypass | With LAN bypass | With LAN bypass | Without LAN bypass | Without LAN bypass |

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

## Related Product

| Part Number | PCIE-3215 |
|---|---|
| Description | Dual/Single Intel® QuickAssist |
| LAN Controller | 2 or 1 x Intel® DH8950/25 PCH |
| Ports | - |
| Other | active / passive heatsink |

## Ordering Information

| Part Number | Description |
|---|---|
| FWA-3260A-00E | Intel Xeon D-1528(6C), 6GbE + 2 10GE ports, red. AC PSU, 2 NMC bays |
| FWA-3260A-01E | Intel Xeon D-1548(8C), 6GbE + 2 10GE ports, red. AC PSU, 2 NMC bays |
| FWA-3260B-00E | Intel Xeon D-1508(2C), 6GbE + 2 10GE ports, single AC PSU, 2 NMC bays |
| FWA-3260B-01E | Intel Xeon D-1527(4C), 6GbE + 2 10GE ports, single AC PSU, 2 NMC 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 |