

Scalable, Versatile, Reliable

Scalable 1U & 2U Network Appliances Powered by 12th/13th/14th Gen. Intel® Core™ Processors

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P-cores & E-cores
Hybrid Processors
up to 24 Cores/ 32 Threads

DDR5 non-ECC/ECC
Up to 64GB
4800MHz/5600MHz

10GbE/ 2.5GbE/ 1GbE
Multiple Ethernet Interface

Advanced LAN Bypass
2 Pairs for Traffic Management

DPDK
Boosted Performance

Redfish Empowered
IPMI 2.0 by Advantech BMC

Performance Benchmarks of 8th/12th/13th Gen Intel® Core™ Processors

Intel's latest 12th and 13th Gen CPUs surpass their 8th Gen predecessors in performance and energy efficiency, marking a significant technological advancement.

Higher is better (increase ratio)

i3 Series

Module	8 th	12 th	13 th
Cores/Thread	4/4	10/12	10/12
Base Freq.	3.8GHz	3.3GHz	3.4GHz

i5 Series

Module	8 th	12 th	13 th
Cores/Thread	6/6	12/12	12/16
Base Freq.	3.9GHz	2.5GHz	2.5GHz

i7 Series

Module	8 th	12 th	13 th
Cores/Thread	8/8	16/16	16/24
Base Freq.	3.3GHz	2.1GHz	2.1GHz

Performance Benchmark is based on single thread rating of CPU from PASSMARK

13th/14th Gen Intel® Core™ Processors

- P-cores(Performance-cores) drive single & lightly-threaded performance enhancing IoT workloads
- E-cores(Efficient-cores) enhance MT performance for background task management, multi-tasking and focused MT throughput scenarios

Up To

24

Cores
8 Performance
16 Efficient

Up To

32

Threads
2T per P-core
1T per E-core

Up To

36

MB
Non-Inclusive
LL Cache

Tailored to project specifications, the FWA-3034 can be optimized with turbo boost functionality, allowing it to surpass its base frequency and deliver superior computing performance.

Intel® Core™ Processors (14th Gen) vs. Prior-Generation Processors

Up to

1.05x

(est.)
faster single-thread performance

Up to

1.18x

(est.)
faster multithread performance

Up to

1.05x

faster in CPU plus GPU image-classification inference performance

Source: Intel Product Brief, Edge AI Solutions Intel® Core™ processors (14th Gen)

Advantech Guarantees Dependable Computing Through the Implementation of Software Solutions

Advantech Platform Security²

Sustainable compliance with NIST SP 800-193, a cost-effective firmware-based solution

Enterprise-level Security

TPM 2.0 technology delivers enterprise-level security, protection against both digital and physical threats

Advantech Server iManager³

Server iManager evolves into a Linux-based software framework, harnessing the power of innovation

IPMI 2.0

IPMI streamlines the surveillance of real-time sensor data, enabling the meticulous tracking of vital metrics for system health

FWA-3034

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FWA-3034	
Intel Platform	12 th /13 th /14 th Gen Intel® Core™ i9/i7/i5/i3 processors Intel® Pentium® G7400 Intel® Celeron® G6900
Core Count	4-24 cores
Base Frequency	Up to 3.4 GHz
Networking	Up to 2 x 10GbE SFP+, 8 x 2.5GbE RJ45, 2 x 1GbE SFP
Memory	2 x DDR5 Non ECC/ ECC/UDIMM Slots
Expansion	1 x Advantech PCIe Gen4 NMC mezzanine expansion slot
PCIe Expansion	1 x PCIe Gen4 x 8 FH/HL card
Storage	1 x 2280 M.2 M-Key slot for SATA SSD or PCIe x 4 Gen4 NVMe SSD
TPM	TPM 2.0 module (optional)
Dimensions (W x H x D)	438 x 44 x 420 mm (17.2" x 1.7" x 16.5")

FWA-4134

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FWA-4134	
Intel Platform	12 th /13 th /14 th Gen Intel® Core™ i9/i7/i5/i3 processors
Core Count	Up to 24 cores
Base Frequency	Up to 3.6 GHz
Networking	2 x 1GbE RJ45
Memory	4 x DDR4 Non ECC/ ECC UDIMM Slots (Max. 128 GB)
PCIe x 8	1 x PCIe3.0 x 8 slot, PCIe3.0 x 4 bandwidth (optional)
NMC	4-8 NMC slots
Mini PCIe	1
Storage	2-4 x 3.5" or 2.5" HDD/SSD
TPM	TPM 2.0 module (optional)
Dimensions (W x H x D)	438 x 88 x 520 mm (17.24" x 3.4" x 20.4")

Application Scenarios

Next Generation Firewall

Cloud Service Gateway

Unified Threat Management

Remark

¹ Performance benchmark
² Advantech Platform Security
³ Server iManager