

Network Security Platforms



NCP-5120



NCP-3108



FWA-6480

Selection Guide

Specification		Network Processor Platform		x86 Processor Platforms
		NCP-5120	NCP-3108	FWA-6480
Processor System	CPU	Cavium OCTEON CN3860	Cavium OCTEON CN3860	Dual-Core/Quad-Core Dual Intel® Xeon™ 5200/5400
	Max. Speed	1 G	500 MHz	3.0 GHz/2.83 GHz
	L2 Cache	2 MB	2 MB	6 MB/12 MB
Memory	Technology	DDR2 400 ECC Registered	DDR2 400/533/677 ECC Registered	DDR2 DIMM, support ECC/Registered, 533 MHz or 667 MHz
	Max. Capacity	8 GB	4 GB	16 GB
Ethernet	Interface	100/1000Base-T	100/1000BaseT	10/100/1000Base-TX
	Controller	Cortina IXF1010 x 2	Cavium OCTEON CN3860	Intel 82571 x 4 Intel 82573
	Connector	RJ-45 x 20	RJ-45 x 4 SFP x 4	RJ-45 x 8 (SFP x 4)
Console & Management Port	Connector	RJ-45 x 1	DB9 x 1	RJ-45 x 2
Miscellaneous	LCD	-	1	16 Characters, 2 Lines
	PCI Express	-	-	PCIe x 8 x 2
	PCI	-	-	1
	PMC Slot	1	-	-
	PCI-X	-	1	-
	USB	-	2	2
Dimensions (W x H x D)	mm	426 x 44 x 456	426 x 44 x 403.6	430 x 88 x 515
	inches	16.8 x 1.7 x 18	16.8 x 1.7 x 15.9	17 x 3.5 x 20.2
Weight	kg	10	5 kg	18
	lb	22	11	40
Reference Page		2-2	2-4	2-6



FWA-3800



FWA-3240



FWA-3710



FWA-710

x86 Processor Platforms			Tabletop Platforms
FWA-3800	FWA-3240	FWA-3710	FWA-710
Intel Core 2 Duo/ Pentium D/Pentium 4	Intel EP80579 Integrated Processor (Tolapai) supports 600/1066/1200 MHz processor	Intel Pentium M/ Celeron M	Intel Pentium M/Celeron M processor
2.66 GHz/3.4 GHz/ 3.4 GHz	1.2 GHz	2.0 GHz/1.5 GHz	2.0 GHz/1.5 GHz
2 MB/4 MB/2 MB	256 KB	2 MB/512 KB	2 MB/512 KB
DDR2 533/667/800 DIMM	DDR2 800/667/533/400 MHz SODIMM	DDR2 533/400 SODIMM	DDR2 533/400 SODIMM
4 GB	2 GB	2 GB	2 GB
10/100/1000Base-TX	10/100/1000Base-T	10/100/1000Base-TX	10/100/1000Base-TX
Intel 82573 x 6	3 x GE from Intel EP80579 Integrated Processor + Marvell 88E1111 PHY 1 x GE from Intel 82574L	Intel 52573 x 4 Intel 82562FE x 1	Intel 52573 x 4 Intel 82562FE x 1
RJ-45 x 6	RJ-45 x 4	RJ-45 x 5	RJ-45 x 5
RJ-45 x 1	RJ-45 x 1	DB9 x 1	DB9 x 1
16 Characters, 2 Lines	16 Characters, 2 Lines	16 Characters, 2 Lines	-
PCIe x4	PCIe x4	PCIe x4	-
MINI PCI	-	MINI PCI	-
-	-	-	-
1	2	2	-
430 x 44 x 435	426 x 44 x 236	426 x 44 x 280	252 x 44 x 167
17 x 1.7 x 17.1	16.8 x 1.7 x 9.3	16.7 x 1.7 x 11	9.9 x 1.7 x 6.6
4.5	4.2	4.5	1.2
9.9	9.3	9.9	2.6
2-8	2-10	2-12	2-14

NCP-5120

Dual Cavium OCTEON™ MIPS64 Multi-core Processor-based Network Appliance

NEW



Features

- Dual 1 GHz OCTEON™ MIPS64 Processors with 16 cores each
- Supports security and de/compression engine
- Up to 20 Gigabit Ethernet ports
- Supports one 64-bit/66 MHz PMC Slot
- Supports one 2.5" SATA HDD
- One 10/100 Mbps Ethernet port for management function
- Designed for NEBS



Introduction

The NCP-5120 is a 1U rackmount network applications platform designed for mission-critical performance-demanding applications. With the increasing demand and complexity in networking environments, system integrators and solution providers are seeking platforms that can manage high-speed packet processing.

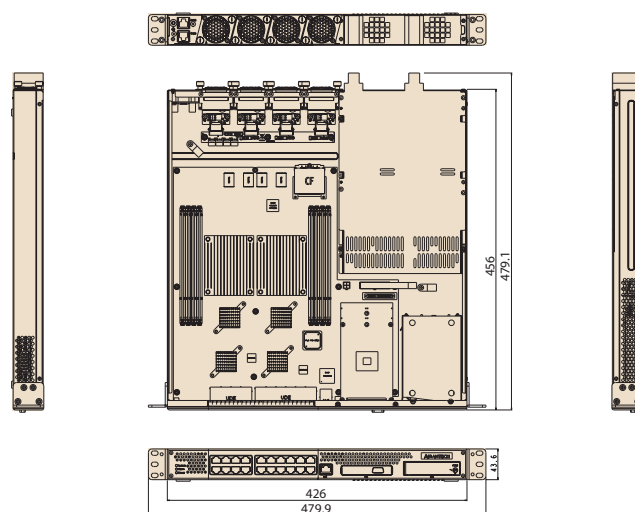
Based on a new generation high-performance OCTEON network processors, the NCP-5120 offers up to sixteen 1 GHz cores. The chipset supports a variety of I/O interfaces from Gigabit Ethernet interfaces and SPI 4.2 to PCI-X. The built-in security and compression/decompression engine provides reliable security functions at top speed.

The NCP-5120 comes with specially designed platform features, including redundant power supplies and a front-accessible HDD bay. In addition, a uniquely-designed thermal mechanism and hot-swappable fan modules enhance platform reliability.

Specification

Processor System	Processor	Dual Cavium OCTEON CN38XX/CN58XX series
	Max. Speed	1 GHz
	Processor Cores	4 – 16
	Encryption Engine	Yes
	Reg-ex Acceleration	Yes
	TCP Acceleration	Yes
	Inter Processor Communication	Direct, multi-channel SPI 4.2 between OCTEON processors (Primary configured as host and secondary configured as target mode)
System Memory	Memory Socket	Eight 240-pin DIMM slots
	Memory type and capacity	ECC registered DDR2 400 MHz DIMMs, up to 8 G per processor
Boot Flash	Flash Type	4 x S29GL01GP
	Max Flash Size	4 GB
Networking Interface	Data Port Controller	Intel® IXF1010 10-port 100/1000 Gigabit Ethernet MAC x 2 Broadcom® BCM5488 8-port Gigabit Ethernet Transceiver x 2 Broadcom® BCM5482 dual-port Gigabit Ethernet Transceiver x 2
	Ethernet Data Port	100/1000 Base-T ports x 20 with LED indicators Supports 802.1Q, 802.1P and 802.3AD in software and CPLD
	Management Port Controller	Intel 82545GM PCI-X 64/66 GbE LAN
	Management Port	10/100/1000Base-T port x 1 with LED indicator Supports 802.1Q and 802.1P
Expansion	PMC Slot	One 64-bit/66 MHz PMC Slot
Storage System	Controller	Silicon Image SiI 3124-2 SATA PCI 64-bit/66 MHz
	Storage Interface	One 2.5" SATA removable HDD tray
I/O Interface	Serial Port	RJ-45 RS-232 x 2, one for each processor
	Debug Port	JTAG pin header x 2, one for each processor
Miscellaneous	Hardware Monitor	Winbond W83791G x 1
	EEPROM	Atmel® AT24C256 x 3
	CPLD	Xilinx® XC2C284-7FT256C x 1

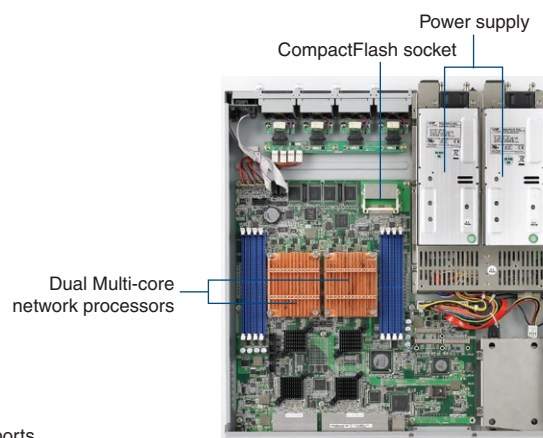
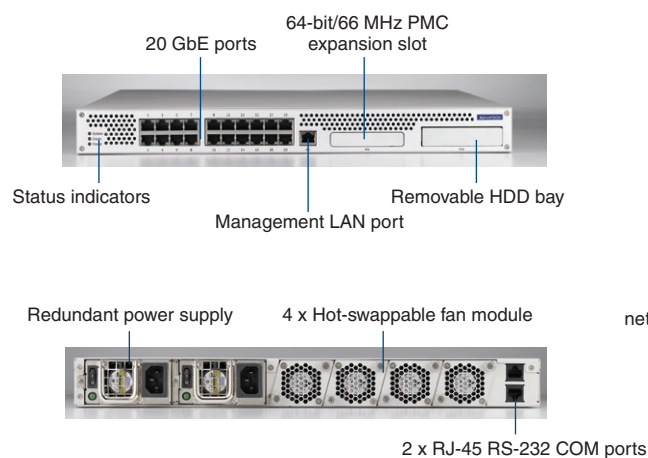
Dimensions



Unit: mm (inch)

Specifications Cont.

Power	Type/Watt	1 + 1 redundant hot-swappable SPS / 250 W + 250 W	
	Input	AC 90 ~ 264 VAC full range	
Cooling	CPU Heatsink	Passive copper fin heatsink	
	Fan	4 x hot-swappable fans	
SW support	Bootloader	Cavium SDK 1.4 U Boot 1.1	
	Operating system	Linux Kernel 2.6.14 Debian MIPS	
Environment	Operating Enviroment	Temperature: 0 to 40° C	Humidity: 20% to 90% RH
	Storage Temperature	Temperature: -20 to 70° C	Humidity: 5% to 95% RH
Physical Dimensions	Dimension (W x H x D)	426 x 44 x 456 mm (16.8" x 1.7" x 18")	
	Weight	10 kg (22 lb)	



Ordering Information

Note: Please contact local sales for details!

NCP-3108

Single Multi-core MIPS64-based Cavium OCTEON™ Network Appliance

NEW



Features

- OCTEON™ MIPS64 processor with 16 cores
- Up to 8 Gigabit Ethernet ports
- Supports one 64-bits/66 MHz PCI-X slot
- Supports one 3.5" SATA HDD or two 2.5" SATA HDD
- Supports security, regular expression and de-/compression engine

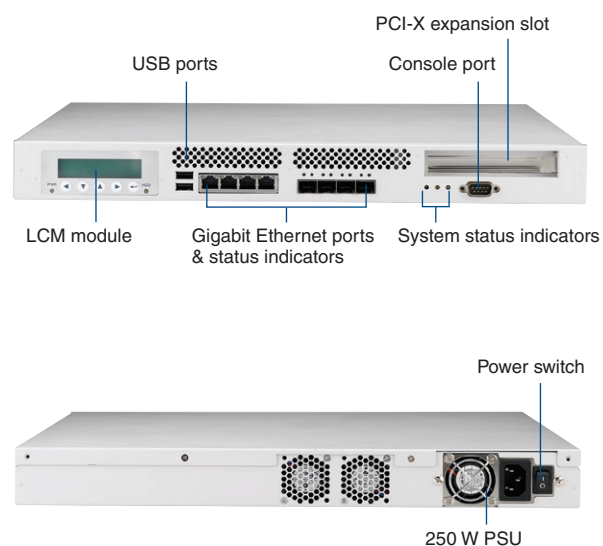
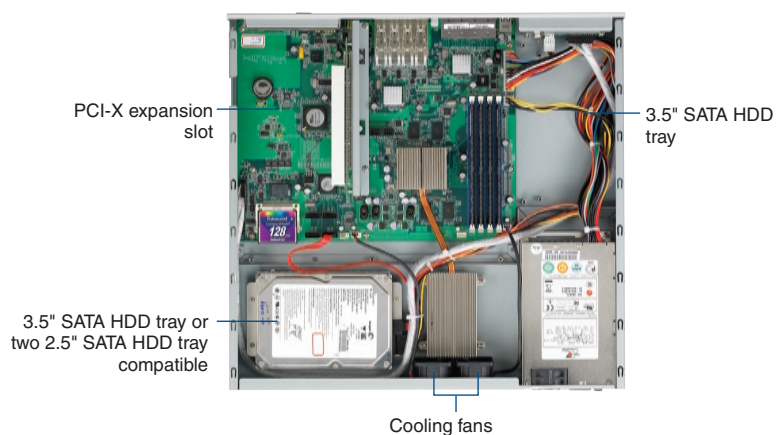
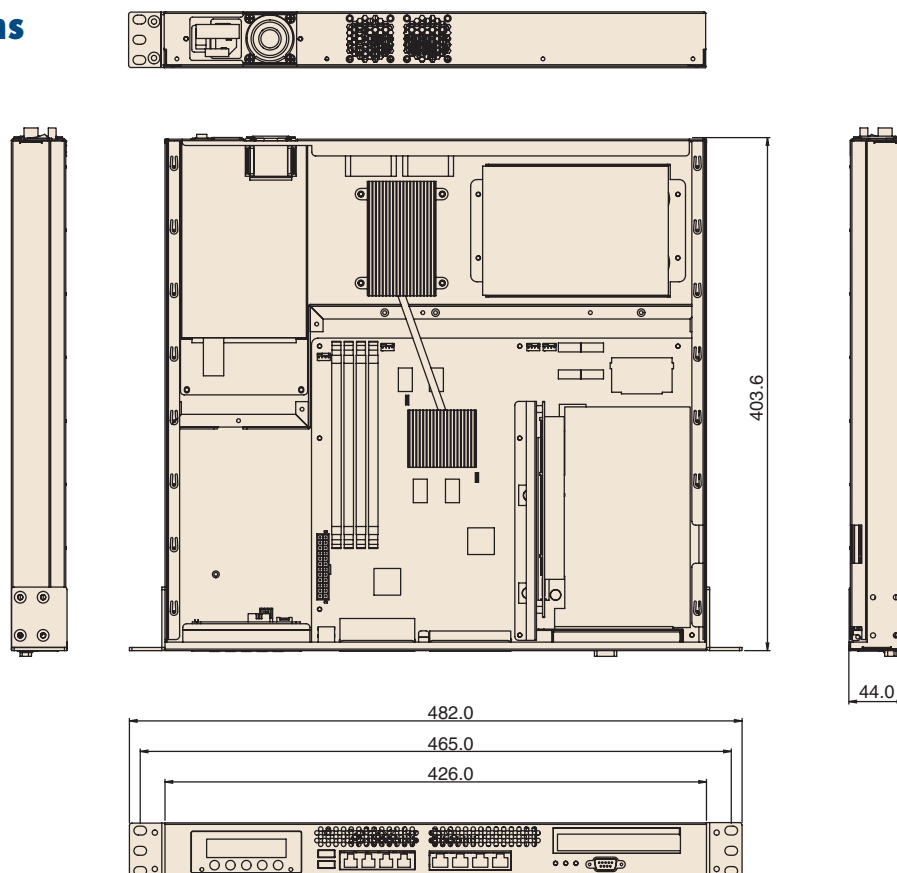


Specifications

Processor System	Processor	Cavium OCTEON CN3860
	Max Speed	500 MHz
	Processor Cores	16
	Encryption Engine	Yes
	Reg-ex Acceleration	Yes
	TCP Acceleration	Yes
System Memory	Technology	ECC registered DDR2 400/533/667 MHz DIMMs
	Capacity	Up to 8 GB
	Memory Socket	Four 240-pin DIMM slots
RLDRAM	RLDRAM type	MT49H32M9BM-33
	Size	256 MB
Boot Flash	Flash type	S29JL064H x 1
	Max Flash size	8 MB
Networking Interface	Ethernet Port	Option I. Eight 100/1000 Base T Gigabit Ethernet Ports. Option II. Four 100/1000 Base T Gigabit Ethernet Ports Four SFP connectors.
Expansion	PCI-X Slot	One 64-bits/66 MHz PCI-X Slot
Storage System	Controller	Silicon Image SiI3124-II SATA PCI 64-bits/66 MHz
	Storage Interface	One 3.5" SATA HDD Bay or two 2.5" SATA HDD Bay
	Compact Flash Socket	1CF socket typell
Peripheral	Serial Port	1 x DB9 RS-232
	USB	2
	LCM Module	1
	Notification LED	16 x LAN activity and connection 3 x Power, HDD and system status
Power	Type/Watt	AC: Zippy H1U-6250P 250 W/DC: DP1A-6251F
	Input	AC 100 ~ 264 Vac Full Range/DC -36 ~ -72 V _{DC} (-48 V normal)
Cooling	CPU Heatsink	Passive copper fin heatsink with heatpipe
	Fan	2
Physical Characteristics	Dimension (W x D x H)	426 x 403.6 x 44 mm (16.8" x 15.9" x 1.7")
	Weight	8 KG
Environment	Operating	Temperature: 0 to 40° C Humidity: 20 % to 90 % RH
	Non-Operating	Temperature: -20 to 70° C Humidity: 5% to 95 % RH

Dimensions

Unit: mm (inch)



Ordering Information

Note: Please contact local sales for details!

FWA-6480

Two Dual/Quad-Core Intel® Xeon® Processor-based 2U Rackmount Platform with up to 8 PCIe GbE LAN Ports

NEW



Features

- Dual Intel® Xeon® Processors with 4/6 MB L2 cache, FSB support 1066/1333 MHz
- Support Dual-Core/Quad-Core Intel® Xeon® 5100/5200/5300/5400 series processors
- DDR2 533/667 ECC Registered Memory, up to 16 GB
- Eight 10/100/1000 Mbps LAN ports with LAN bypass
- Supports 8 RJ-45 connectors or 4 SFP's and 4 RJ-45 connectors
- Supports PCIe or PCI-X add-in cards
- Supports two hot-swappable front 3.5" SATA HDD

Introduction

Built with functionality and availability in mind, the FWA-6480 Network Application Platform provides high-performance and an abundant feature set for enterprise-level network communication appliances. Designed with the Intel 5100 MCH chipset, the FWA-6480 can support both single or dual processors with Intel Xeon 64-bit Quad-Core or Dual-Core 5400/5300/5200/5100 series processors. Utilizing Intel VT technology, it significantly improves system performance for networking environments. Incorporating an Intel I/O controller Hub, ICH9R and other I/O subsystems, the system provides optimized computing efficiency and high-speed I/O bandwidth ideal for networking applications.

The FWA-6480 supports DDR2 533/667 MHz ECC registered memory, Serial ATA and PCI Express technologies, which optimize the system for space constrained installations. It supports different I/O combinations, as the Intel 5100 MCH can provide either three PCIe x8 interfaces or 6 PCIe x4. Furthermore, this ultra dense platform is built with a redundant power supply, which further increases the system's fault tolerance level.

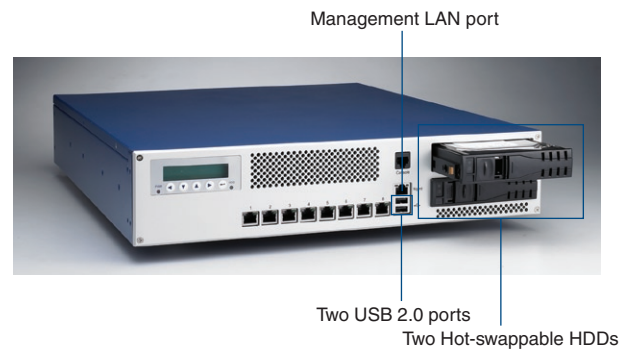
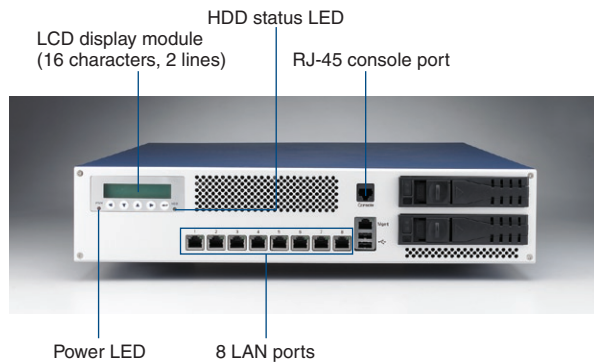
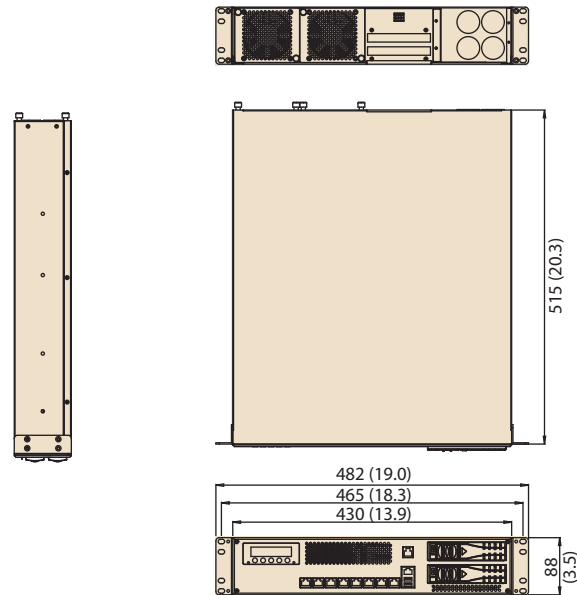
This 2U rackmount system supports two hot-swappable 3.5" SATA HDD's and CompactFlash for OS and network security applications. Also located on the front panel is an RJ-45 serial port, a 10/100 management LAN port, two USB ports and an LCD module for local system management, maintenance, and diagnostics.

Specifications

Processor System	CPU	2 x Intel Dual-Core 5100/5200 Series and Intel Quad-Core 5300/5400 series processor	
	Max. Speed	Dual-Core up to 3.0 GHz and Quad-Core up to 2.8 GHz	
	Front Side bus	1066/1333MHz	
	Chipset	Intel 5100P (San Clemente) + ICH9R	
Memory	Technology	Dual Channel DDR2 533/677 MHz ECC registered	
	Capacity	Up to 16 GB with 4 DIMMs, 4G dual rank memory module	
BUS	PCI-E	2 x PCIe x8 connects to IO board 5 x PCIe x1 connects to IO board 1 x PCIe x8 slot for riser card	
	Riser Card	2 x PCI-E x8 slots Supports full-height cards and external access, such as 10 G Ethernet card	
	PCI	1 x PCI 32-bit/33 MHz slot	
Ethernet	Management Port	1 x Intel 82573E 10/100/1000Base-T Ethernet	
	Interface	4 x 10/100/1000BaseT via RJ-45 interface and 4 x GbE via SFP interface from Intel 82571 Ethernet Controller supports 2 LAN Bypass Segements	
Storage	SATA	Supports 2 x 3.5" hot-swappable SATA HDD, front accessible	
	Compact Flash socket	1 x CF socket	
Peripheral	USB	1 x USB2.0 in the front	
	Serial	1 x Console port in the front by RJ-45 connector	
	LCD Module	1	
Power	Watt	500 W, 2U height (1+1 redundant, 500 W each)	
	Input	AC 100 ~ 240 V @ 50 ~ 60 Hz, full range	
Environment		Operating	Non-Operating
	Temperature	0 ~ 40° C (32 ~ 104° F)	-20 ~ 75° C (-4 ~ 167° F)
	Humidity	5 ~ 85% @ 40° C (104° F)	5 ~ 95%
Physical	Dimension (W x H x D)	430 x 88 x 515 mm (16.9" x 3.5" x 20.3")	
	Weight	18 kg (40 lb)	

Dimensions

Unit: mm (inch)



Ordering Information

Note: Please contact local sales for details!

FWA-3800

1U Rackmount Intel® Core™2 Duo Processor-based Platform with 6 PCIe LAN Ports

NEW



Features

- Supports Intel® Core™2 Duo Processor
- Intel® Q965 chipset, 1066 MHz FSB
- Dual-channel DDR2 memory, up to 4 GB
- 6 x PCIe GbE LAN ports w/LAN bypass
- 1 x proprietary PCIe x4 connector for LAN expansion board
- Supports 1 x 3.5" SATA HDD

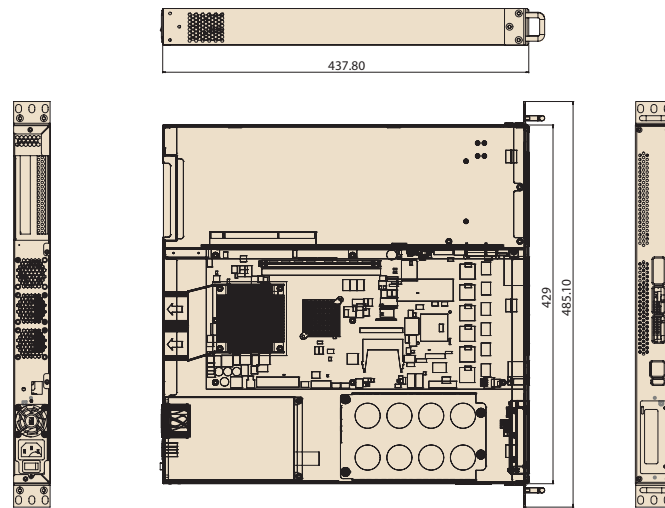
Introduction

A high-performance and power-efficient network security platform, the FWA-3800 is specifically designed for advanced Internet security applications where performance is in high demand. The FWA-3800 adopts the latest Intel Core 2 Duo processor and Intel Q965 chipset. This supports up to 4 GB of dual-channel DDR2 SDRAM on two DIMMs. The platform reserves space for one 3.5" SATA HDD and one CompactFlash slot for storing or upgrade OS and other network security applications. By leveraging PCI Express (PCIe) technology, the FWA-3800 takes full advantage of the ICH8D0 PCIe capability to maximize I/O throughput. The platform has six PCIe x1 lanes connected directly to the Intel 82573 Ethernet controllers to offer 6 ports of Gigabit Ethernet at wire speed. For easy access, the front panel also has an RJ-45 console port and LCD Module for local system management, maintenance, and diagnostics. It is FCC, CE, UL, CCC and RoHS compliant.

Specifications

Processor System	CPU	Intel Core 2 Duo / Intel Pentium D 4	
	Max Speed	2.66 GHz/ 3.4 GHz/ 3.4 GHz	
	Chipset	Intel Q965 and ICH8D0	
	Front Side Bus	1066/ 800 MHz	
	BIOS	Award™ 16 Mbit SPI	
Memory	Technology	Dual-channel DDR2 533/ 667/ 800 MHz	
	Max. Capacity	Up to 4 GB with 2 slots	
Onboard Expansion	PCI Express (PCIe)	1 proprietary internal PCIe x4 connector for LAN expansion board	
	Riser Card	2 PCI-X 100 slots (Option) support full-height cards and external access	
	Mini PCI	One 32-bit/33 MHz Mini PCI slot	
Ethernet	Interface	6 x 10/100/1000 Mbps Intel 82573 PCIe-based ports	
	LAN Bypass	3 segments in pairs	
Storage	SATA	Supports 1 x 3.5" SATA HDD. Max. data transfer rate 300 MB/s	
	CompactFlash Socket	1 CF socket	
Peripheral	USB	1 (USB2.0)	
	Serial	1 (RJ-45)	
	LCD Module	1	
Power	Watt	250 W	
	Input	AC 100 ~ 240 V @ 50 ~ 60 Hz, full range	
Environment		Operating	Non-Operating
	Temperature	0 ~ 40° C (32 ~ 104° F)	-20 ~ 75° C (-4 ~ 167° F)
	Humidity	5 ~ 85 % @ 40° C (104° F)	5 ~ 95 %
Physical	Dimensions (W x H x D)	430 x 44 x 435 mm (17" x 1.7" x 17.1")	
	Weight	4.5 kg (9.9 lb)	

Dimensions



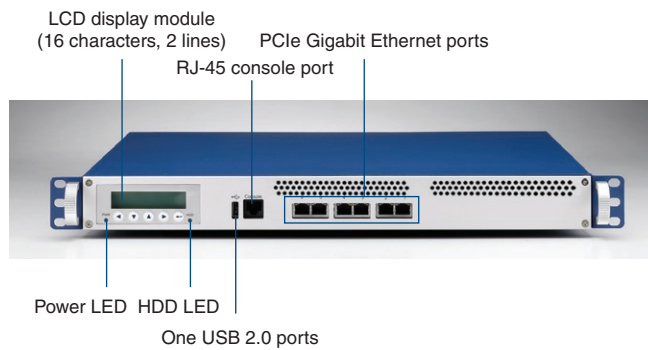
Unit: mm (inch)

Ordering Information

Part Number	LAN	LAN Bypass	Power Supply	PCI-X / PCI slot
FWA-3860E	6	3	250 W	N/A
FWA-3860RE	6	3	250 W	2 (PCI only support 3.3 V)

Accessories

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



FWA-3240

1U Rackmount Intel Tolapai-based Platform with 4 Front LAN Ports & LCD Display

NEW



Features

- 1U Rackmount Network Application Platform
- Intel EP80579 Integrated Processor (Tolapai) solution
- One internal proprietary PCIe x4 expansion slot
- Single channel DDR2 SODIMM support up to 2 GB
- 4 x 10/100/1000 Mbps GbE LAN ports
- Console port for local setting

Introduction

The FWA-3240 incorporates Intel's Tolapai System-on-Chip which combines Intel's QuickAssist Technology and integrates an Intel Pentium M class core, memory controller and I/O controller. The high-performance CPU core supplies the horse power needed to perform deep packet inspection and other complex operations and is particularly optimized for entry to mid-range network security appliances.

Security applications can run existing x86 software applications because of backward code compatible with earlier Intel processors. Most network security platforms already run on Intel x86 processors and can run existing software applications on Tolapai because it is backward compatible with earlier Intel processors. Typical appliance workloads which require IP-SEC encryption, acceleration and compression of content can offload processing on to the QuickAssist Integrated Accelerator which increases the effective data throughput and performance and reduces the overall power consumption of a given application.

The FWA-3240 features a low-power design, and supports up to 2 GB DDR2 on one single-channel SO-DIMM. It provides a total of four GbE LANs, three of which are from the Tolapai on-chip MACs (Intel 82574-derived) and the fourth from a PCIe-based Intel 82574 Ethernet controller.

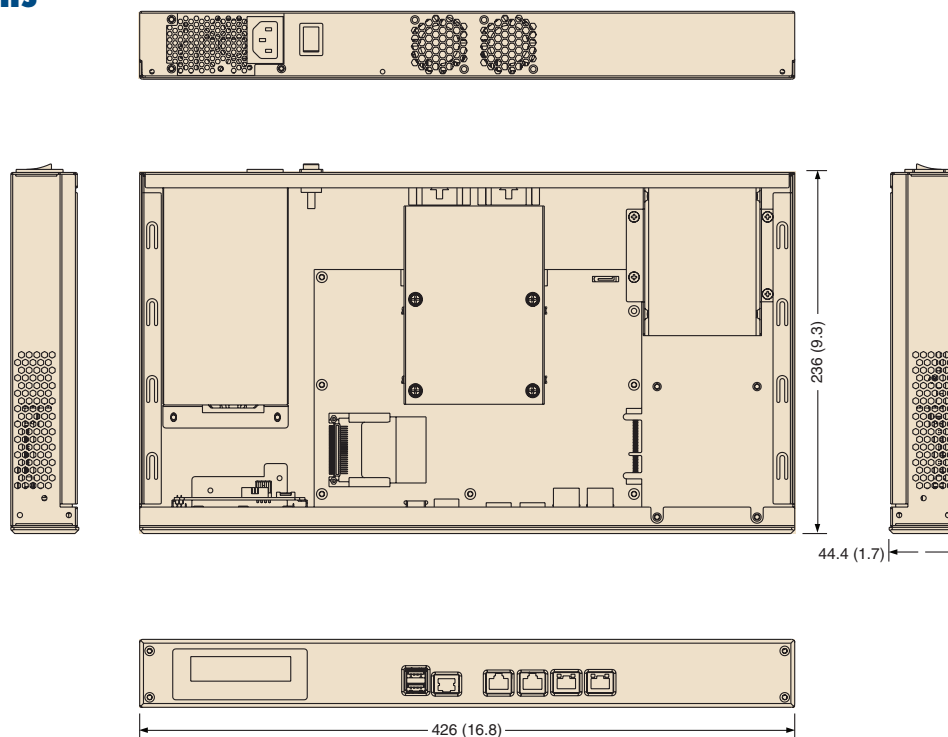
The on-chip MACs are routed to 3 Marvell PHY devices.

The system supports one 2.5" SATA HDD and CompactFlash for OS and/or Internet security applications. The front panel provides a RS-232 serial port with RJ-45 socket, 2 USB ports and a LCD Module for local system management, maintenance and diagnostics. The system is fully FCC, CE and RoHS compliant.

Specifications

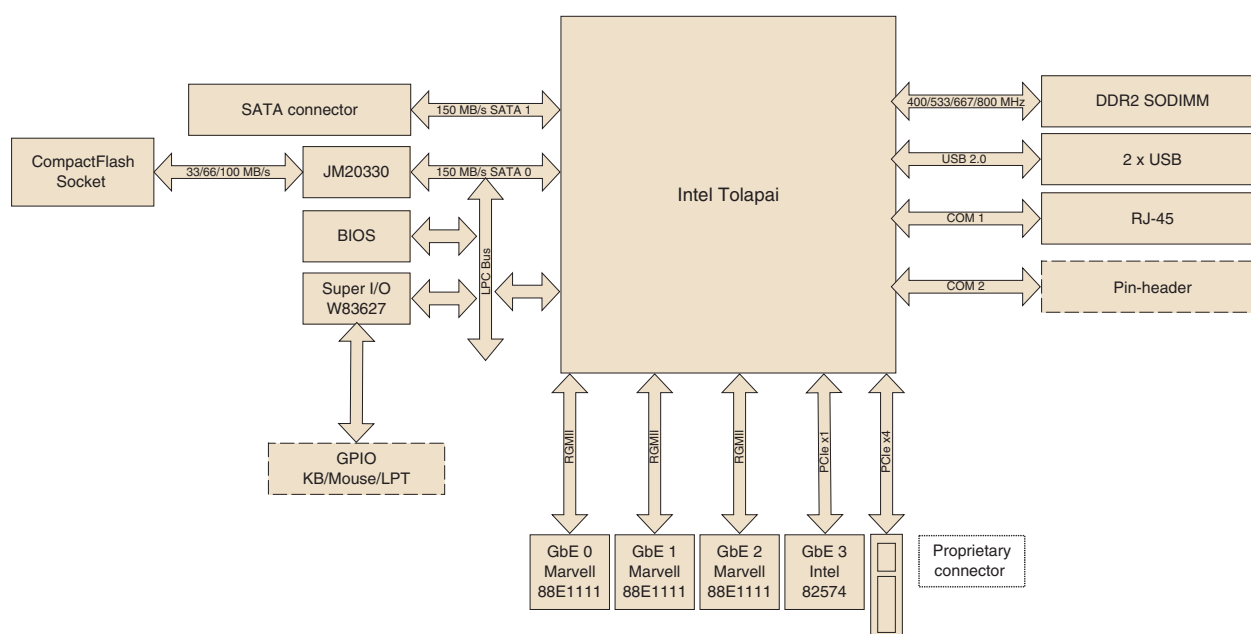
Processor System	CPU & Chipset	Intel EP80579 Integrated Processor (Tolapai) supports 600/1066/1200 MHz processor	
	Max. Speed	1.2 GHz	
	Front Side Bus	400/533 MHz	
	BIOS	Award™ 4 Mbit Flash	
Memory	Technology	Single channel DDR2 800/667/533/400 MHz SODIMM	
	Capacity	Up to 2 GB with 1 slot	
Expansion	Onboard Expansion slots	One proprietary internal PCIe x4 connector	
Ethernet	Interface	4 x 10/100/1000Base-T	
	Controller	Three GbE from Intel EP80579 Integrated Processor + Marvell 88E1111 PHY One GbE from Intel 82574, with bypass function	
Storage	SATA	1 x 2.5" HDD bay Max. data transfer rate at 150 MB/sec	
	Controller	JMicron (SATA to IDE bridge)	
	Compact Flash Socket	1 x CF socket on IDE 0 (Primary)	
Peripheral	USB	2 x USB 2.0	
	Serial	1 x RS-232 with RJ-45 connector	
	LCD Module	16 characters, 2 lines, 5 buttons	
	Pin headers	K/B, Mouse, LPT, COM	
Power	Watt	180 W	
	Input	90 ~ 240 V AC, auto range	
Environment		Operating	Non-Operating
	Temperature	0 ~ 40° C (32 ~ 104° F)	-20 ~ 75° C (-4 ~ 167° F)
	Humidity	5 ~ 85 % @ 40° C (104° F)	5 ~ 95 %
Physical	Dimensions (W x H x D)	426 x 44 x 236 mm (16.8" x 1.7" x 9.3")	
	Weight	4.2 kg (9.3 lb)	

Dimensions



Unit: mm (inch)

Block Diagram



FWA-3710

1U Rackmount Intel® Pentium® M Processor-based Platform with 4 PCIe LAN Ports



Features

- Supports Intel® Pentium® M or Celeron® M Processor
- Dual-channel DDR2 400/533 SODIMM, up to 2 GB
- Four 10/100/1000 Mbps LAN ports
- One proprietary PCIe expansion connector onboard
- Supports one fixed 3.5" IDE or SATA HDD
- One 10/100 Mbps LAN port for management



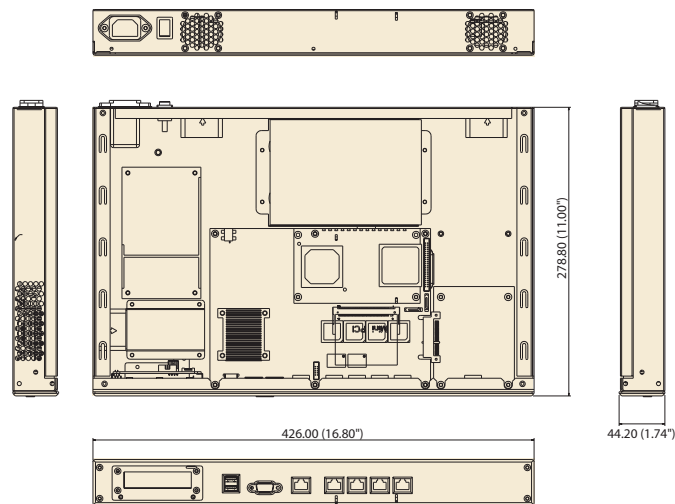
Introduction

Conceived as a powerful but low power consumption rackmount Internet security platform, the FWA-3710 series was specifically designed for mainstream IDS/IPS, Anti-virus, VPN gateway and Unified Threat Management (UTM) applications. Using the latest Intel Pentium M processor combined with the Mobile Intel 915GM Express chipset and Intel's ICH6M I/O Controller Hub, the FWA-3710 series provides unprecedented performance, connectivity and throughput without compromising on system thermal design. It supports up to 2 GB of DDR2 system memory at 400 or 533 MHz on dual-channel SODIMM banks. By leveraging PCI Express technology, the platforms maximize I/O throughput by taking full advantage of the ICH6-M's PCI Express (PCIe) capability. Four PCIe lanes connect directly to the Ethernet controllers to provide bi-directional 2 Gb/s peak bandwidth for Gigabit Ethernet support at wire speed. The system supports one optional 3.5" IDE or SATA HDD, and CompactFlash for OS and Internet security applications. The front panel has a 9-pin RS-232 serial port and one 10/100 managed LAN port, with an LCD module for local system management, maintenance and diagnostics. It is FCC, CE, CCC, and UL compliant.

Specifications

Processor System	CPU	Intel Pentium M / Celeron M processor
	Max. Speed	2.0 GHz/1.5 GHz
	Chipset	Intel 915GM + ICH6M
	Front Side Bus	533/400 MHz
	BIOS	Award™ 4 Mbit Flash
Memory	Technology	Dual-channel DDR2 533/400 SODIMM
	Capacity	Up to 2 GB with 2 slots
Expansion	Onboard Expansion Slots	1 proprietary internal PCIe x4 connector
		1 32-bit/33 MHz Mini PCI Slot
Ethernet	Fast Ethernet	1 10/100 Intel 82562 FE port for management
	Gigabit Ethernet	4 10/100/1000 Mbps PCIe GbE ports
	GbE Controller	4 x Intel 82573
	LAN Bypass	2 segment on GbE ports
Storage	Controller	Supports 3.5" HDD x 1 on IDE 0, or SATA HDD x 1
		- ATA100 connector x 1 on IDE 0 (Secondary)
		- Max. data transfer rate 100 MB/s
		- Supports 3.5" ATA HDD
	SATA	SATA interface
Peripheral	USB	- SATA connector x 1 on separate SATA channels
		- Max. data transfer rate 150 MB/s
		- Support 3.5" SATA HDD
		- Support 3.5" SATA HDD
	CompactFlash Socket	1 CF socket on IDE 0 (Primary/Master)
Peripheral	USB	2 (USB 2.0)
	Serial	1 (RS-232)
	LCD Module	1
	K/B, Mouse, LPT, CRT, COM	Pin Headers

Dimensions



Unit: mm (inch)

Specifications Cont.

Power	Watt	180 W	
	Input	90 ~ 240 V AC, auto range	
Environment		Operating	Non-Operating
	Temperature	0 ~ 40° C (32 ~ 104° F)	-20 ~ 75° C (-4 ~ 167° F)
	Humidity	5 ~ 85 % @ 40° C (104° F)	5 ~ 95 %
Physical Characteristics	Dimensions (W x H x D)	426 x 44 x 280 mm (16.7" x 1.7" x 11")	
	Weight	4.5 kg (9.9 lb)	

Ordering Information

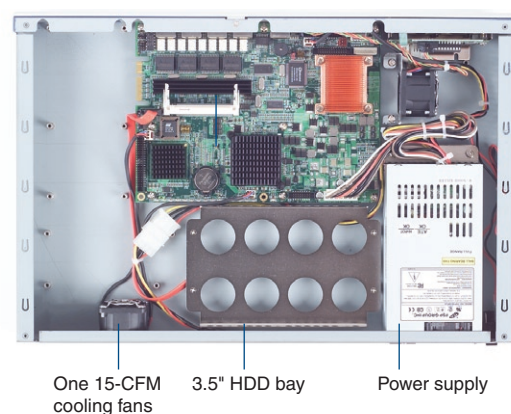
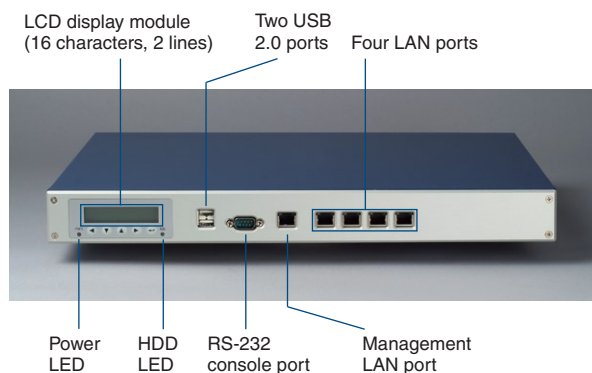
Part Number	Processor	LAN	Power Supply	Ethernet Controller
FWA-3710E	-	5	180 W	4 x Intel 82573

Packing List

Part Number	Description
1701160101	VGA port cable (for system installation use)
1703080160	PS/2 Y cable mini-DIN 16 cm
1703092000	Console cable D-sub 9-pin 2 m

Accessories

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



FWA-710

Tabletop Intel® Pentium® M Processor-based Platform with 4 PCIe LAN Ports



Features

- Supports Intel® Pentium® M or Celeron® M Processor
- Dual-channel DDR2 400/533 SODIMM, up to 2 GB
- Four 10/100/1000 Mbps LAN ports
- One MINI PCI Slot
- Supports one fixed 2.5" IDE HDD
- One 10/100 Mbps LAN port for management



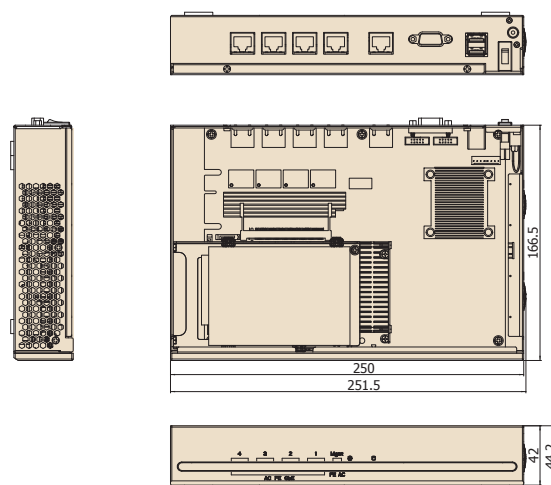
Introduction

Conceived as an exceptional but low power consuming tabletop Internet security platform, the FWA-710 series was specifically designed for SMBs/SOHOs that require a single device to combine functions such as IDS/IPS, anti-virus, VPN gateway and Unified Threat Management (UTM) in to a multi-functional gateway. Using the latest Intel Pentium M processor combined with the Mobile Intel 915GM Express chipset and Intel ICH6M I/O Controller Hub, the FWA-710 series provides unprecedented performance, connectivity and throughput without compromising on system thermal design. It supports up to 2 GB of DDR2 system memory at 400 or 533 MHz on dual-channel SODIMM banks. By leveraging PCI Express technology, the platforms maximizes I/O throughput by taking full advantage of the ICH6-M's PCI Express (PCIe) capability. Four PCIe lanes connect directly to the Ethernet controllers to provide bi-directional 2 Gb/s peak bandwidth for Gigabit Ethernet support at wire speed. The system supports one optional 2.5" IDE HDD, and one CompactFlash device for OS and Internet security applications. The rear I/O panel has a 9-pin RS-232 serial port and one 10/100 managed LAN port. It is FCC, CE, UL, CCC, and RoHS compliant.

Specifications

Processor System	CPU	Intel Pentium M/Celeron M processor	
	Max. Speed	2.0 GHz/1.5 GHz	
	Chipset	Intel 915 GM + ICH6-M	
	Front Side Bus	533/400 MHz	
	BIOS	Award™ 4 Mbit Flash	
Memory	Technology	Dual-channel DDR2 533/400 SODIMM	
	Capacity	Up to 2 GB with 2 slots	
Expansion	Onboard Expansion Slot	One 32-bit/33 MHz Mini PCI slot	
Ethernet	Fast Ethernet	One 10/100 Intel 82562 FE port for management	
	Gigabit Ethernet	Four 10/100/1000 Mbps GbE ports	
	GbE Controller	4 x Intel 82573	
	LAN Bypass	Two segment on GbE ports	
Storage	Controller	Supports 2.5" HDD x 1 on IDE 0	
	IDE	ATA100 connector x 1 on IDE 0 (Secondary)	
		Max. data transfer rate 100 MB/s	
	CompactFlash Socket	Supports 2.5" ATA HDD	
Peripheral	USB	2 USB 2.0	
	Serial	1 RS-232	
	K/B, Mouse, LPT, CRT, COM	Pin headers	
Power	Watt	65 W	
	Input	100 ~ 240 V AC, auto-range	
Environment		Operating	Non-Operating
	Temperature	0 ~ 40° C (32 ~ 104° F)	-20 ~ 75° C (-4 ~ 167° F)
	Humidity	5 ~ 85 % @ 40° C (104° F)	5 ~ 95 %
Physical	Dimensions (W x H x D)	252 x 44 x 167 mm (9.9" x 1.7" x 6.6")	
	Weight	1.2 kg (2.6 lb)	

Dimensions



Unit: mm (inch)

Ordering Information

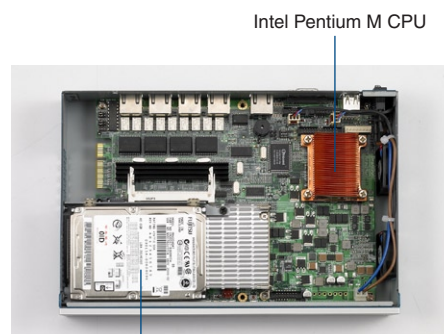
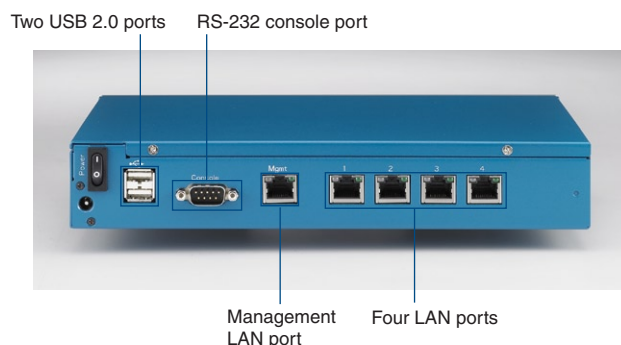
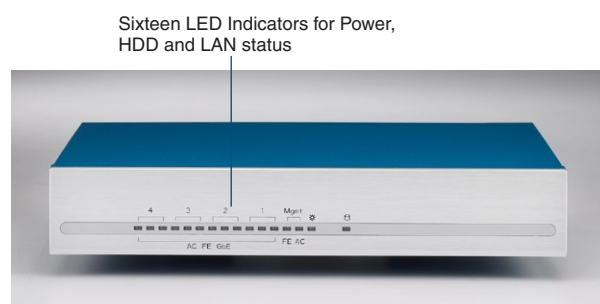
Part Number	Processor	LAN	AC Adapter	Ethernet Controller
FWA-710E	-	5	65 W	4 x Intel 82573

Packing List

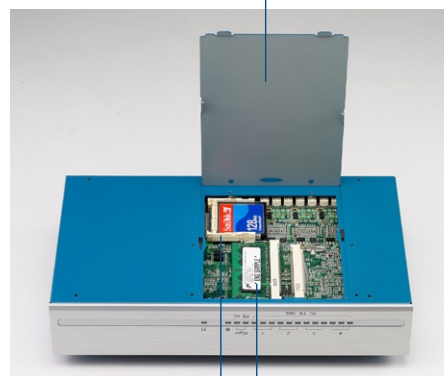
Part Number	Description
1701160101	VGA port cable (for system installation use)
1703080160	PS/2 Y cable mini-DIN 16 cm
1703092000	Console cable d-sub 9-pin 2 m
1701440054	Flat cable 44 pin, 2.0 mm pitch connectors 5 cm

Accessories

Part Number	Description
1700001947	2P 180 cm, USA
1700001948	2P 180 cm, Europe
1700001949	2P 180 cm, UK
1700002141	2P 180 cm, JP



Removable cover allows easy maintenance and software upgrade



Memo

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There is no text or other markings on the paper.