

2022 Vol. 1.0

To Make Your Embedded Idea a Reality

- Network Security Appliance
- Autonomous Driving Controller
- In-Vehicle Computer
- Embedded Boards



Company Profile

Founded in 1987, Acrosser is a global pioneer in the evolution of industrial computing. For several decades now, Acrosser had provided innovative embedded computer solutions and high-quality hardware products at very competitive prices to over thousands of customers world-wide, substantially helped them reduce time-to-market and gain high-level competence to succeed and win in the marketplace.



Business Scope



Wide Array of Standard Industrial PC Products

Acrosser designs a wide array of commercially-off-the-shelf(COTS) single board computer (SBC) products, all following International Open Standards. Acrosser manufactures SBCs; such as embedded PC/104(+), EPIC, embedded ATX, mini-ITX, industrial ISA, PCI, PCI-Express, among others. These products/ solutions provide easy-maintenance, faster-upgrade and offer international compatibility advantages; thereby saving your initial investment/s. Acrosser offers a broad range of product lines (SBCs, embedded) computers, panel PCs, networking appliances) that efficiently performs in various widely-used major operating systems such as: Windows®7, Windows®8, Windows®10, Linux Fedora, Linux Ubuntu, and many others.



In-Depth and Versatile Applications Experience

Since 1987, Acrosser had and continues to assist its customers develop various embedded systems for different automation, such as: network security, wireless appliance, gaming, medical, industrial automation, surveillance, POS, KIOSK, digital signage, home and building automation, instrumentation, marine, military, transportation, etc. Acrosser's team of professionals has the necessary knowledge of the vertical markets, and can help its customers develop the right solutions to easily pass the required certificates in projects, such as: FDA for medical, GLI, Comma 6A for gaming, and FCC/ CE for all products.



Top Quality Assurance with Long Life-Cycle Supply

Acrosser, through the years, had been and continues to be among preferred vendors of thousands of customers world-wide, some of which rank among the top Fortune 500 companies. Acrosser's implementation of 100% ESS (Environmental Stress Screen) burning, dynamic vibration and various functional tests on every mass production unit help its customers save from costly RMA repairs. As for its commitment to high quality products, Acrosser designs all products based on its embedded roadmap with a minimum 5-year product life. Along with a very strict revision control system, Acrosser provides its customers with stable, long term products supply.

Acrosser values and encourages participation from all its employees, and believes that everyone contributes to Acrosser's overall success. With a mission statement "Making Your Embedded Idea a Reality", Acrosser keeps its major promise to all its customers by continuously developing innovative solutions, and providing professional and cost-effective OEM/ODM/JDM custom design services in a timely manner. In the bottom-line, Acrosser will assist you and your company in becoming a market leader, and substantially help in building and achieving a win-win business partnership together.

ACROSSER

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In-Vehicle Computer

Acrosser In-Vehicle Computer (Car PC, Vehicle PC, On-Board Computer, Bus PC, vehicle applications, ADAS solutions, or car computer) is designed to perform multiple in-car functions, including infotainment, fleet management, telematics, video surveillance, taxi dispatch, and law enforcement. A newer unique need in the intelligent traffic system, asset management, job dispatch, video surveillance, and fuel-saving has come to the market recently.

Currently, Acrosser In-Vehicle Computer is powered by Intel® Core i™ and Intel® Atom™ CPUs. Both models provide unique features and functions to cater to different industries. All in-vehicle computers are designed to meet the harsh environment during the move.

In-Vehicles Application

Acrosser In-Vehicle PC Plays Significant Role in Telematics



CAN Bus



POE



Wide temp



Delay Time on/off



ANTI VIBRATION



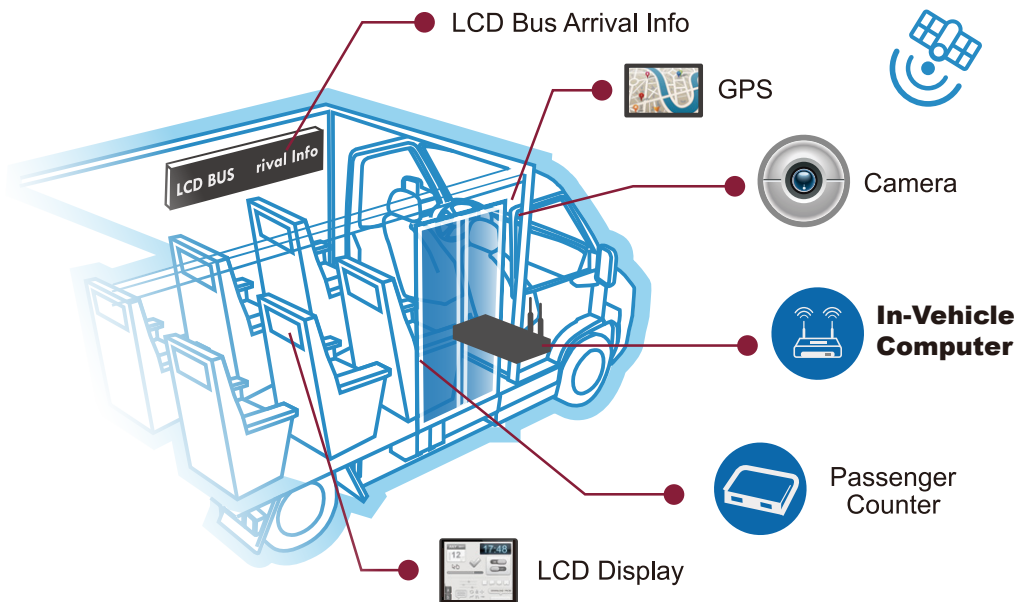
Server-Grade Performance



Power Management



Wireless



AIV-TGH7EX

11th Gen Intel® Core™ i7/i5/i3 Processor (Tiger Lake)
Fanless In-Vehicle Computer



Product Matrix

In-Vehicle Computers



Form Factor	In-Vehicle Computer		
Model Name	AIV-TGH7EX	AIV-Q170V1FL	AIV-APL1V1FL
Specification			
CPU	Intel® 11th Generation Core™ Processor i7-11850HE / i5-11500HE / i3-11100HE	Intel® Sky-lake-S i7-6700 TE / i5-6500 TE / i3-6100 TE	Intel® Pentium™-N4200
Memory	1 DDR4 3200 SODIMM	2 x DDR4-SO-DIMM	2 x DDR3L 1866 MHz ,SO-DIMM, support up to 8GB
Video			
Video Interface	1 HDMI , 2 DP	1 x HDMI (With locking bracket) 1 x VGA 1 x DVI-D	1 x VGA port (DB15) 1 x DVI connector
Storage			
SATA	2 x SATA III port	2 x SATA III port	2 x SATA III port
SSD	2 x swappable 2.5 inch SSD bay	2 x swappable 2.5 inch SSD bay	-
CF	-	1 x CF	-
Disk Bay	2 x Anti-shock 2.5" HDD Bay with easy swappable bracket	2 x Anti-shock 2.5" HDD Bay with easy swappable bracket	2 x swappable 2.5" Disk bay with Anti-vibration/Anti-shock solution for SSD only
I/O			
Expansion Slot	1 x mini PCIe, 1 x M.2 B Key(3052)	3 x mini PCIe	3 x mini PCIe
Ethernet	-	4 x POE GbE LAN	2 x GbE RJ45, Intel i210AT
Serial Port	2 DB9 Type RS-232/RS422/485 2 DB9 Type RS-232	4 x RS232/422/485	3 x RS232 1 x RS232/422/485
USB	4 Type A USB 3.2 Gen2	8 x USB 3.0	4 x USB 3.0
GPIO	-	4 In, 4 Out	4 In, 4 Out
Audio	1 Mic-in, 1 Line-in, 1 Line-out	1 x MIC in, 1 x Audio out	1 x MIC in, 1 x Audio out
Remote Control	N/A	1 x Remote control switch	1 x Remote control switch
SIM	-	2 x External SIM Slot	2 x External SIM Slot
Can Bus (2.0A/2.0B)	1 DB9 CANBus	YES	YES
Power Requirement			
Power Input	DC 9V ~ 32V with power ignition	DC 9V ~ 36V with power ignition	DC 9V ~ 36V with power ignition
Software			
OS Support	Windows 10 Enterprise Linux Kernel 4.4	Windows 10 Enterprise Linux Kernel 4.4	Windows 10 Enterprise Linux Kernel 4.4
Mechanical & Environment			
Dimension	220mm(W) x 175mm(D) x 73mm(H)	270 x 170 x 63 mm	260 x 195 x 63 mm
Weight	TBD	6.2 Kg	4 Kg
Operating Temp	-40°C to 70°C (-40°F to 158°F)	-25 ~ 60°C (-13 ~ 140°F)	-25 ~ 60°C (32 ~ 140°F)
Vibration/Shock/Safety	Comply IEC 60068-2-64 / Comply IEC 60068-2-27 / CE, FCC Class B, E-Mark 13		
Optional Wireless Module			
4G	GPRS/EDGE/WCDMA/HSUPA/HSDPA		
GPS / WiFi / Bluetooth	YES, IEEE 802.11 b/g/n, YES		
Reference			
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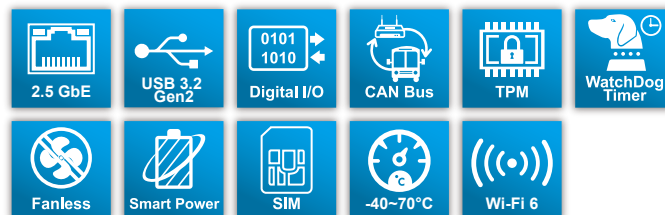
AIV-TGH7EX Series

11th Gen Intel® Core™ i7/i5/i3 Processor(Tiger Lake)
Fanless In-Vehicle Computer



Features

- Intel® 11th Generation Core™ i7/i5/i3 Processor
- Support 1 DDR4 3200 SODIMM, up to 32GB
- Support 2.5GbE, USB 3.2 Gen2
- CAN Bus provide
- Two front easy access 2.5" SATA III storage bay
- 9-32Vdc w/in-vehicle power ignition control
- Fanless design
- Wide Operating Temperature -40~70°C



CE FCC

Others

TPM	Optional By Request
Watchdog Timer	255 Levels
Smart Management	Wake on LAN, PXE supported
HW Monitor	Monitoring temperature, voltages. Auto throttling control when CPU overheats.

Software

OS Support	Windows 10, Linux
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Power Requirement

Power Input	9V to 32V, DC-in
Power Interface	3-pin Terminal Block : V+, IGN, V- With Power Ignition Control

Mechanical & Environment

Dimension	220mm(W) x 175mm(D) x 73mm(H) (8.66" x 6.89" x 2.87")
Weight	TBD
Mounting	Wallmount
Operating Temperature	-40°C to 70°C (-40°F to 158°F)
Storage Temp	-40°C to 80°C (-40°F to 176°F)
Humidity	5% to 90% Humidity, non-condensing
Shock	IEC 60068-2-27 SSD : 50G @ wallmount, Half-sine, 11ms
Vibration	IEC 60068-2-64 SSD : 5Grms, 5Hz to 500Hz, 3 Axis
EMC	CE / FCC class A/ E-Mark

*Please adopt wide operation temperature RAM, SSD, HDD to get better and stable system performance.

Specification

System

CPU	Intel® 11th Generation Core™ i7/i5/i3 Processor (Tiger Lake-H) i7-11850HE (8C/16T, 2.60GHz, up to 4.70GHz) i5-11500HE (6C/12T, 2.60GHz, up to 4.50GHz) i3-11100HE (4C/8T, 2.40GHz, up to 4.40GHz)
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Chipset	Intel® HM570E
Memory	1 DDR4-3200 Memory supports up to 32GB (ECC)

Video

Graphic Controller	Intel® Iris® X Graphics
Interface	1 HDMI , 2 DP

Storage

SATA	2 SATA III (6Gbps) support S/W RAID 0, 1
Storage Device	2 Front-access 2.5" SSD/HDD Tray

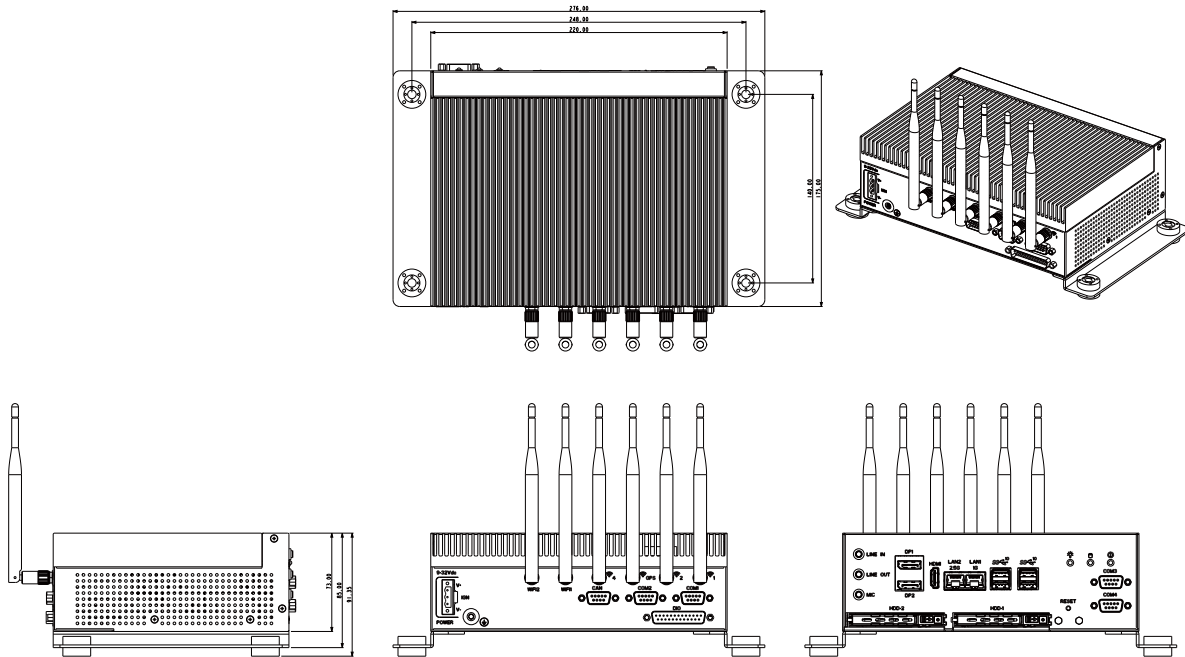
I/O

LAN	LAN 1 : RJ45 Type Intel® I225 2.5GigE LAN LAN 2 : RJ45 Type Intel® I219 GigE LAN
Serial	2 DB9 Type RS-232/RS422/485 2 DB9 Type RS-232
USB	4 Type A USB 3.2 Gen2
DIO	16 DIO, DB25 Type connector
Audio	1 Mic-in, 1 Line-in, 1 Line-out
CAN BUS	1 DB9 CANBus
LED	Power, HDD, Status
Button	1 Power Press Button
Antenna Hole	6 Antenna Holes

Expansion

Mini PCIe	1 x Half Size Mini PCIe slot
M.2	1 x M.2 B Key(3052)
SIM Slot	1 Nano SIM Slot (Internal)

Dimension



I/O Connectors



Packing List

- 1 x AIV-TGH7EX
- 2 x Wall mount bracket
- 1 x 3-Pin Terminal block
- 1 x Screws Package

Order Information

AIV-TGH7E7-A10	AIV-TGH7EX, Intel i7-11850HE, CANBus
AIV-TGH7E5-A10	AIV-TGH7EX, Intel i5-11500HE, CANBus
AIV-TGH7E3-A10	AIV-TGH7EX, Intel i3-11100HE, CANBus

Optional Accessory

DDR4 32G	Certified DDR4 32GB 3200MHz RAM
DDR4 16G	Certified DDR4 16GB 3200MHz RAM
DDR4 8G	Certified DDR4 8GB 3200MHz RAM
DDR4 4G	Certified DDR4 4GB 3200MHz RAM
5G Module	5G & GNSS Module with Dual Antenna
4G Module	4G & GNSS Module with Dual Antenna
WiFi & Bluetooth Module	WiFi & Bluetooth Module with Dual Antenna

AIV-Q170V1FL

Intel® 6th-Gen Core™ i7/i5/i3 Skylake in-vehicle fanless embedded computer



Features

- Intel® 6th Generation Core™ Desktop Processor
- Support 4 X POE GbE LAN port with RJ45 connector
- Support 2 x swappable 2.5 inch SSD bay
- Support 3 x Mini PCI-e
- In-vehicle power design : 9-36Vdc power input with power ignition



Specification

System

CPU	Intel® Sky-lake-S 6th Gen Core™ i7-6700 TE Intel® Sky-lake-S 6th Gen Core™ i5-6500 TE Intel® Sky-lake-S 6th Gen Core™ i3-6100 TE
Chipset	Intel® Q170 chipset
Memory	2 x DDR4-SO-DIMM

Video

Chipset	Intel® HD Graphics 530
Video Memory	Integrated
Video Interface	1 x HDMI (With locking bracket) 1 x VGA 1 x DVI-D

Storage

SATA	2 x SATA III port
Disk Bay	2 x swappable 2.5 inch SSD bay
CF	1 x CFast

I/O

Ethernet	2 x GbE, RJ45, Intel i210IT chipset
PoE	4 X POE GbE LAN port with RJ45 connector (802.3at ,total 60W max)
USB	8 X USB 3.0
Serial Port	4 X COM - DB9 (RS232/RS422/485)
CAN Bus	CAN Bus 2.0B or OBD II (J1939) by SKU
GPIO	GPIO 4-in / 4-out,
Audio	3 x Audio jack Green: Audio out Blue: Remote switch Pink : Mic in
Mini-PCI-e	3 x Mini PCI-e socket
SIM Card	2 x SIM card Socket

Others

WatchDog Timer	1~255 sec. software programmable(0=Disable)
TPM	On-board TPM 2.0 (By request)
G Sensor	1 x G Sensor board

Software

OS Support	Windows 10 (64 bit) / Linux kernel to 4.4 or above(64 bit)
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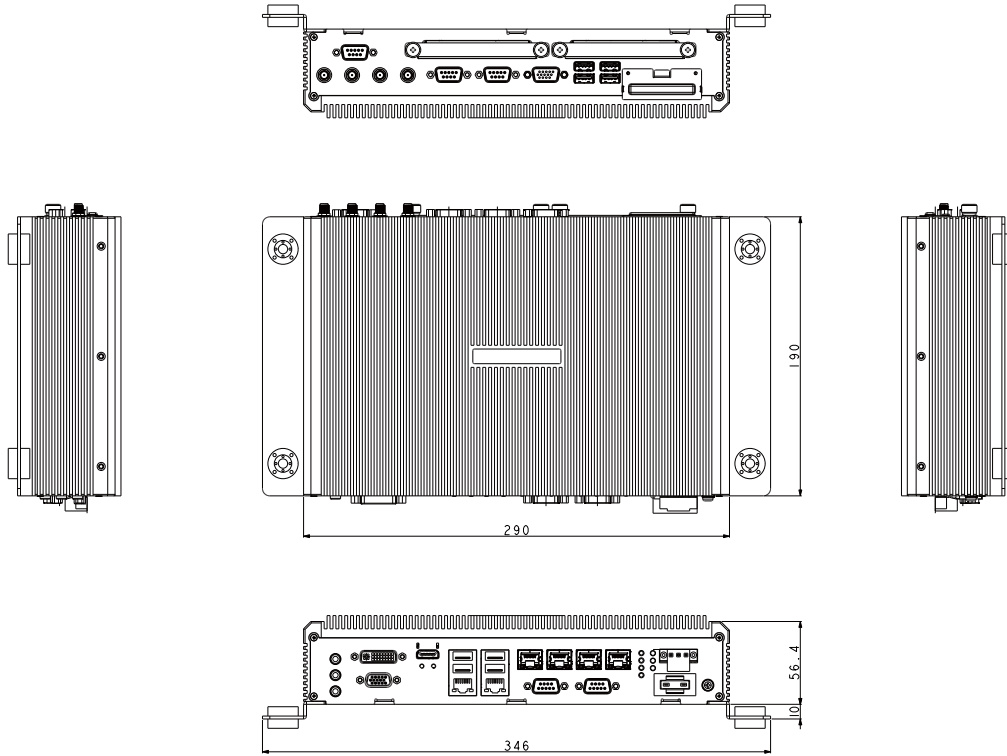
Power Requirement

Power Input	Power sub system spec:9-36Vdc Power Input with power ignition function
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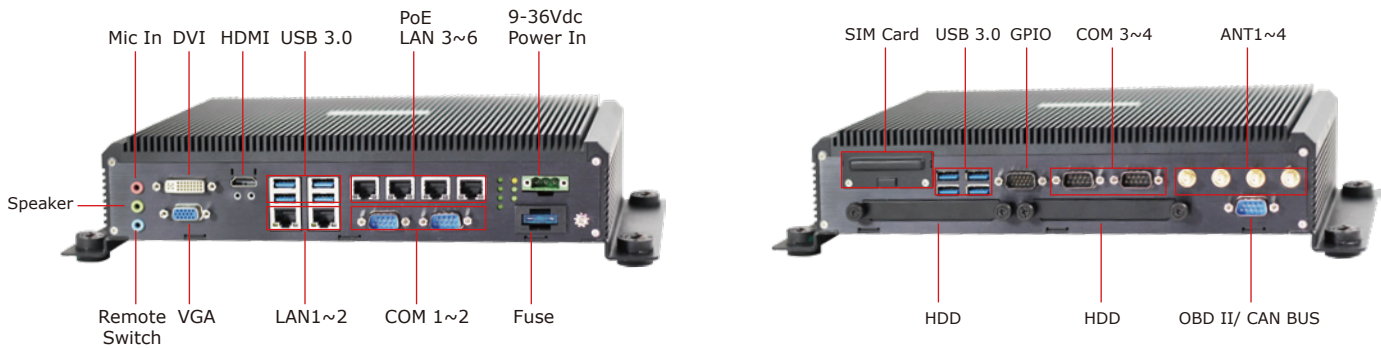
Mechanical & Environment

Dimension	270mm x 170 mm x 63 mm
Operating Temp.	-25 ~ 60°C
Chassis	Aluminum extrusion heat sink & metal chassis
Thermal Design	Fan less
Weight	6.2 Kg
Storage Temp	-40~80°C (-40~176°F)
Safety	CE / FCC class B / E Mark ,

Dimension



I/O Connectors



Packing List

- 1 x AIV-Q170V1FL
- 1 x System Driver CD
- 1 x Terminal block female 3pin
- 1 x HDMI locking bracket
- 1 x 8 bit GPIO/CAN Cable
- 1 x Remote switch cable

Ordering Information

AIV-Q170V1FL	AIV-Q170V1FL (with CAN Bus)
AIV-Q170V1FL-OBDD	AIV-Q170V1FL-OBDD (with OBD II)
AIV-Q170V1FLS	AIV-Q170V1FLS (with CAN Bus , S SKU for install Sierra wireless module use)
AIV-Q170V1FLS-OBDD	AAIV-Q170V1FLS-OBDD (with OBD II, S SKU for install Sierra wireless module use)

Optional Module List

- EC20/EC25 (Quectel)(4G + GPS + Glonass)module
- Sierra MC7430(APAC)(4G + GPS + Glonass)for s model only
- Sierra MC7455(America)(4G + GPS + Glonass)for s model only
- Jwx6058 (Qualcomm. QCA6174A-5)Wi-Fi5+BT5.0
- G sensor Board (ADXL345)
- 4GB DDR4 2133 SO-DIMM 1Rx8
- 8GB DDR4 2133 SO-DIMM 2Rx8

AIV-APL1V1FL

New Intel Pentium-N4200 Fan Less In-Vehicle Computer



Specification

System

CPU	Intel® Pentium™-N4200
Chipset	Intel Apollo lake SoC
Memory	2 x DDR3L 1866 MHz ,SO-DIMM, support up to 8GB

Video

Graphic Controller	Intel HD Graphics 505
Video Interface	1 x VGA port (DB15) ,1 x DVI

Storage

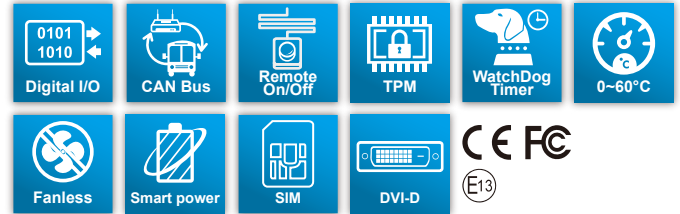
SATA	2 x SATA III port
Disk Bay	2 x swappable 2.5" Disk bay with Anti-vibration/ Anti-shock solution for SSD only

I/O

Expansion Slot	3 x Mini PCI-e(Reserve for Wi-Fi and 4G LTE)
Ethernet	2 x GbE RJ45, Intel i210AT
Serial Port	1 x RS-232/422/485 3 x RS-232
USB	4 X USB 3.0
GPIO	8-bit GPIO (4 In, 4 Out)
Audio	1 x MIC in 1 x Audio out
Antenna Hole	1 x SMA for GPS 1 x SMA for 4G 2 x SMA for Wi-Fi & Bluetooth
SIM	SIM Slot x 2, SIM card changeable without opening case, latch to protect SIM uncertainly touch
CAN BUS	DB9 connector, support CAN 2.0A/2.0B protocol (J1939 for optional)
TPM	On-board TPM 1.2 / 2.0(By Request)

Features

- Rugged fan-less design
- Support New Intel Pentium N4200 processors
- 1 x DDR3L 1866 MHz SO-DIMM, up to 8GB
- Support CAN 2.0A/2.0B or ODB II (By SKU)
- VGA & DVI video output
- 2 x swappable 2.5" HDD bay
- Variety Wireless Communication
- Support 9-36Vdc with power ignition



Others Feature

WatchDog Timer 1~255 sec. software programmable

Software

OS Support Windows 10 (64 bit)& Linux kernel to 4.4 or above(64 bit)

Power Requirement

Power Input 9-36Vdc with power ignition

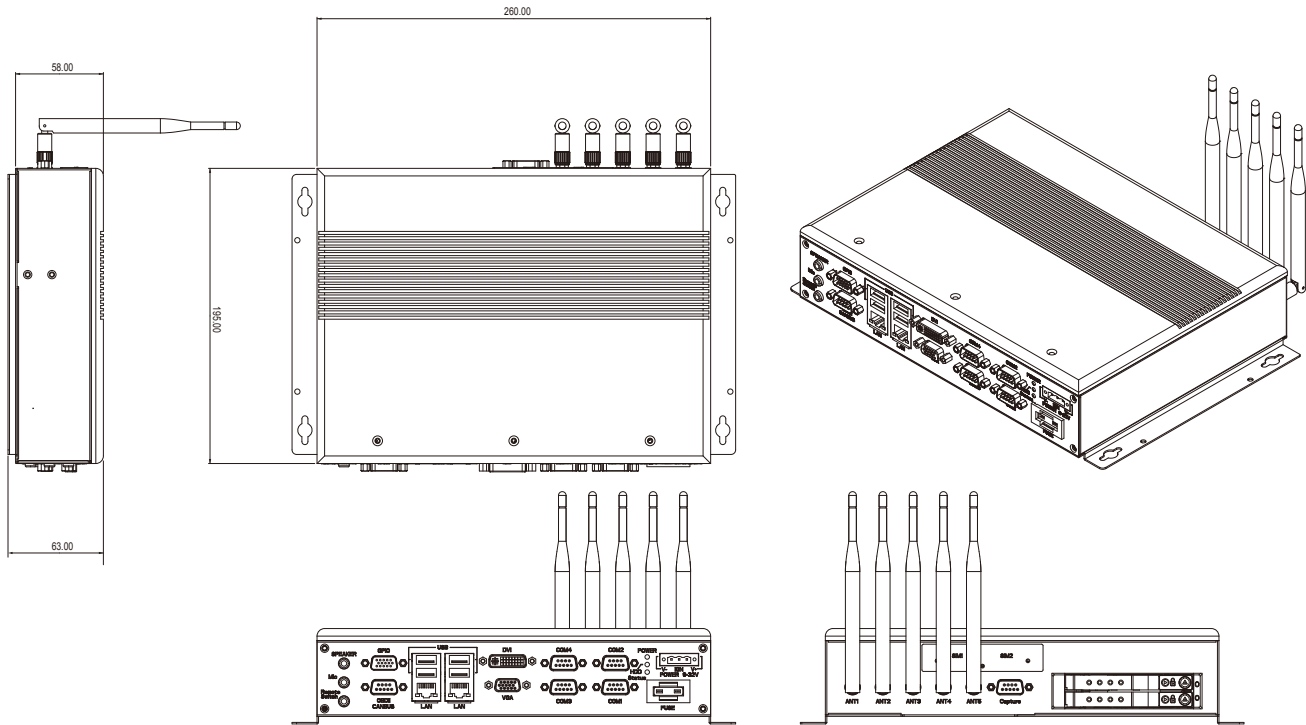
Mechanical & Environment

Dimension	260mm x 195mm x 63mm
Operating Temp.	-25°C ~ 60°C
Vibration	IEC 60068-2-64, 5~500Hz, 3GRMS(SSD)
Shock	IEC 60068-2-27, 50G 500m/s ² 11MS
Storage Temp	-40~80°C (-40~176°F)
Safety	CE, FCC class B, E-Mark

Smart In-Vehicle Power Management

O/S Anti-Crash	Smart O/S boot/shut-down control by power subsystem
System boot / Shut-down delay	Delay time from 0 seconds to 60 minutes setting in BIOS
System boot fail retry	3 times boot fail retry
Power on/off switches	<ul style="list-style-type: none"> • System power switch by remote cable switch • System power input serial connection to car battery and ignition switch
Car battery protection	Low battery voltage monitoring and configurable auto shutdown low battery voltage level

Dimension



I/O Connectors



Packing List

- 1 x AIV-APL1V1FL
- 1 x User Guide CD with driver
- 1 x GPIO/CAN Cable
- 1 x Terminal block (Plug-DC connector)
- 1 x Remote Switch Cable
- 1 x Antenna for GPS (option)
- 2 x Antenna for Wi-Fi & Bluetooth (option)
- 1 x Antenna for 4G LTE (option)
- 1 x Spare Fuse

Ordering Information

AIV-APL1V1FL-PT1 AIV-APL1V1FL- Intel Pentium N4200+CAN 2.0
 AIV-APL1V1FL-PT1OB AIV-APL1V1FL- Intel Pentium N4200+OBD II

Optional Modules

EC20/EC25	Quectel 4G + GPS + Glonass module
MC7455/MC7430	Sierra 4G + GPS + Glonass module
Jwx6058	Qualcomm. (QCA6174A-5) Wi-Fi5+BT5.0
SC330N4	Yuan Analog Capture card 4ch With Testing Cable
G-SenSor	G-SenSor board

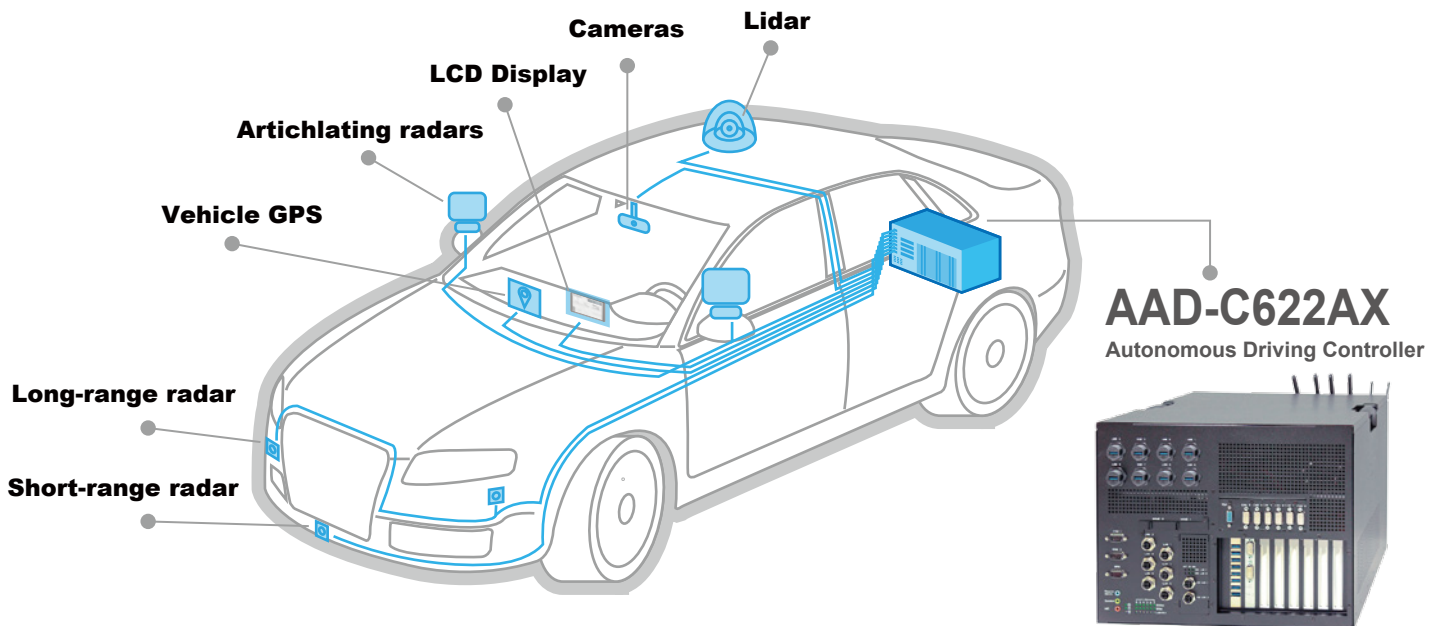
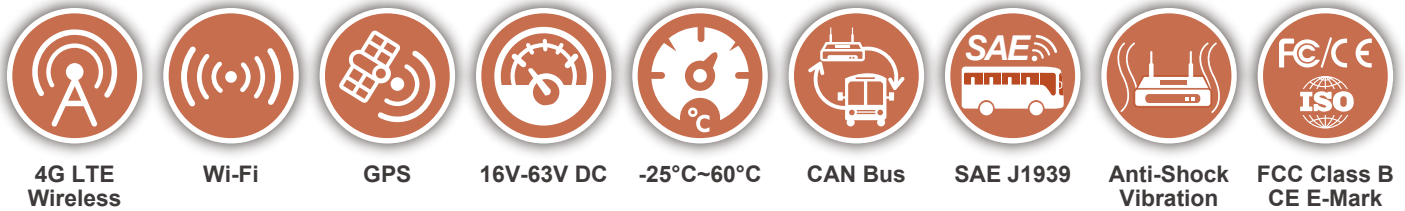
Autonomous Driving Controller

Autonomous Driving Controller, Automated driving systems, vehicle servers, autonomous computers, are so complicated and miscellaneous, the automated driving system integrators need partners with years of experience in network appliances and in-vehicle computers.

Acrosser Technology, founded in 1987, is a pioneer in the evolution of industrial computing. For several decades, Acrosser has provided innovative network appliances and in-vehicle computer solutions to thousands of customers, helping them reduce the time-to-market and gaining higher competence to win the market.

Autonomous Vehicles Application

Acrosser Autonomous Vehicles Plays Significant Role in Telematics



Product Matrix

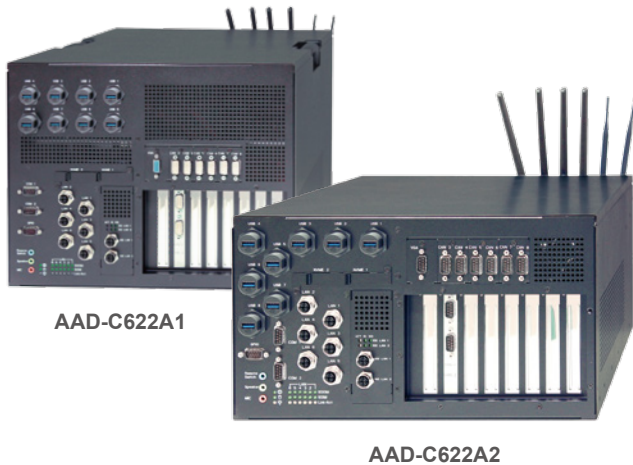
Autonomous Driving Controller



Form Factor	Autonomous Driving Controller	
Model Name	AAD-C622AX	AIV-C622V1
Specification		
CPU	Intel®2nd Gen Xeon Scalable processor	Intel®2nd Gen Xeon Scalable processor Intel Xeon Gold 5217 8C/16T
Memory	6 x DDR4-2933 RDIMM (up to 384GB)	6 x DDR4-2933 RDIMM (up to 384GB)
Video		
Video Interface	1 x VGA (By optional accessory kit)	1 x VGA
Storage		
SATA	2 x SATA III (6Gbps) support S/W RAID 0, 1	4 x SATA III ports
Disk Bay	2 x NVME swappable SSD bay	4 x 2.5" Hot swappable SSD bay(All in one)
I/O		
Expansion Slot	5 PCIe slots: - 3 x PCIe x16 Gen3 slot (x8 signal) - 2 x PCIe x16 Gen3 slot (x4 signal)	3 x Exp. PCIe Gen3 x16 slot (GPU Card)
Ethernet	6 x M12 X-coded I210-IT GbE LAN, 2 x M12 X-coded X550-AT2 10GbE LAN (By optional accessory kit)	2 x GbE RJ-45 (intel i210-iT) 2 x 10GbE RJ-45 (PCH C622) 1 x GbE RJ-45 Management port
Serial Port	2 x RS232/RS422/485	4 x RS232/RS422/485
USB	8 x Anti-loosening USB3.2	12 x USB 3.2
GPIO	4 In, 4 Out	4 In, 4 Out
Audio	<ul style="list-style-type: none"> ● Green: Audio out ● Blue: Use for Remote on/off switch ● Pink : Mic in 	<ul style="list-style-type: none"> ● Green: Audio out ● Blue: Remote switch ● Pink : Mic in
SIM	2 x SIM card Socket	1 x SIM card Socket
Can Bus (2.0A/2.0B)	YES	YES
Power Requirement		
Power Input	DC 12 V 1000W / DC 24/48 V 1200W	DC 18~36V 1300W / 36~72V 1900W
Software		
OS Support	Ubuntu 18.04LTS.	Ubuntu 18.04LTS.
Mechanical & Environment		
Dimension	AAD-C622A1 : 359 (W) x 280 (H) x 510 (D) mm AAD-C622A2 : 359 (W) x 200 (H) x 510 (D) mm	400 (W) x 190 (H) x 510 (D) mm
Operating Temp	-20 ~ 60°C with GPU cards	-25 ~ 50°C (-13~122°F) /-25 ~ 45°C (-13~113°F)
Vibration/Shock/Safety	CE / FCC class B / E Mark / cULus / RoHS IEC 60068-2-64, 5~500Hz, 3GRMS(CF/SSD) IEC 60068-2-27, 50G 500m/s2 11MS	
Optional Wireless Module		
4G	GPRS/EDGE/WCDMA/HSUPA/HSDPA	
GPS / WiFi / Bluetooth	YES, IEEE 802.11 b/g/n, YES	
Reference		
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AAAD-C622AX-Series

AI Industrial Grade Autonomous Vehicle Server with 5 PCIe slots, support 3 GPU Cards

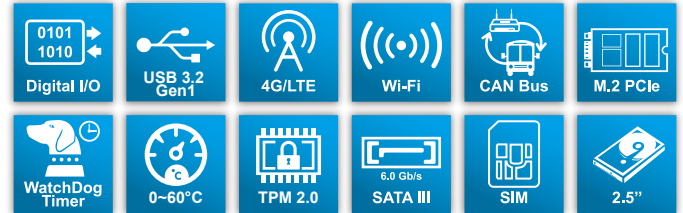


AAAD-C622A1

AAAD-C622A2

Features

- Intel® C622 Cascade Lake Platform
- Intel® 2nd Gen Xeon Scalable Processor
- 6 x RDIMM DDR4-2933
- 3 x PCIe x16 Gen3 slot (x8 signal), 2 x PCIe x16 Gen3 slot (x4 signal)
- 1,000W power board design to supports 3 NVIDIA graphics cards
- 8 x Anti-loosening USB3.2 (13/16"-28 UN type female Connector)
- 6 x M12 X-coded GbE LAN, 2 x M12 X-coded 10GbE LAN
- 2 x M.2 NVME swappable SSD bay, 2 x 2.5" SATA-III internal Storage Bay,
- 12Vdc or 24/48Vdc Power Input, Ignition Power Control



Others

WatchDog Timer 1-255 sec. software programmable(0=Disable)

Security TPM 2.0 (Infineon chipset)

Software

OS Support Ubuntu 18.04.LTS.

Power Requirement

Power Input
 AAD-C622A1 :
 12Vdc power input with power ignition control,
 max. 1,000W
 AAD-C622A2 :
 24/48Vdc Power Input with power ignition control,
 max. 1,200W

Mechanical & Environment

Dimension
 AAD-C622A1 :
 359*280*510 mm without wall mount kit
 AAD-C622A2 :
 359*200*510 mm without wall mount kit

Operating Temp. -20 ~ 60°C with GPU cards

Chassis Metal Enclosure

Thermal Design Smart Cooling Fan

Storage Temp -40~80°C (-40~176°F)

Safety CE / FCC class B / E Mark / cULus / RoHS
 Vibration IEC 60068-2-64, 5~500Hz, 3GRMS(CF/SSD)
 Shock IEC 60068-2-27, 50G 500m/s² 11MS

Specification

System

CPU Intel®2nd Gen Xeon Scalable processor, (LGA3647)

Chipset Intel® C622 PCH

Memory 6 x DDR4-2933 RDIMM (up to 384GB)

Video

Video Memory Integrated

Video Interface 1 x VGA DB15 (Optional Accessory : ADB-VGA2)

Storage

SATA 2 x SATA III internal SSD bay

NVME 2 x NVME swappable SSD bay

I/O

Ethernet 6 x M12 X-coded I210-IT GbE LAN,
 2 x M12 X-coded X550-AT2 10GbE LAN
 (By optional accessory kit)

USB 8 x Anti-loosening USB3.2
 (13/16"-28 UN type female Connector)

Serial Port 2 x COM – DB9 (RS232/RS422/485)

CAN Bus Expand by optional accessory kit.
 - CAN FD module (DB9 type)
 - CAN 2.0 (DB9 type)

GPIO 4 in/ 4 out, DB9

Audio

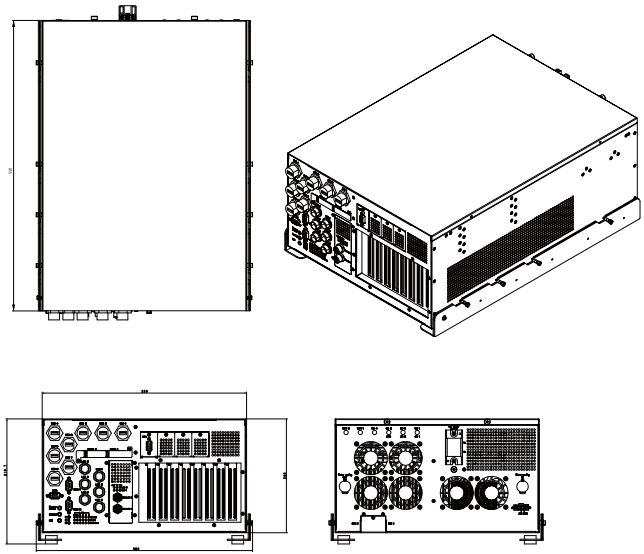
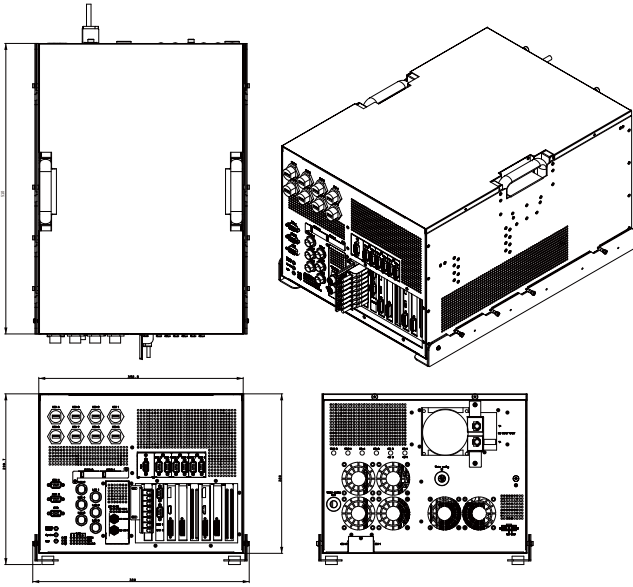
- Green: Audio out
- Blue: Use for Remote on/off switch
- Pink : Mic in

Mini-PCIe 1 x Full size mPCIe socket
 1 x M.2 B Key 3042 type socket

Exp. PCIe slot 5 PCIe slots:
 - 3 x PCIe x16 Gen3 slot (x8 signal),
 - 2 x PCIe x16 Gen3 slot (x4 signal)

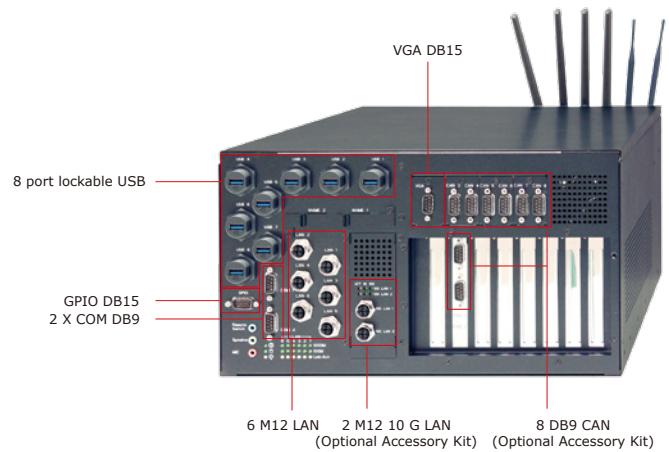
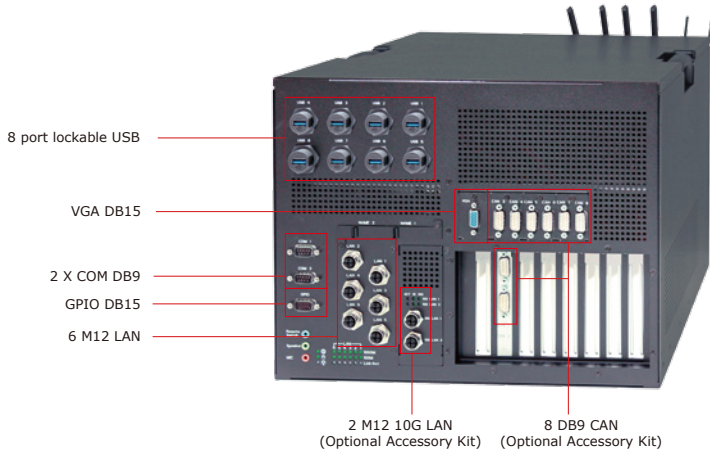
SIM Card 2 x SIM card Socket

Dimension



AAD-C622A1 (12Vdc) / AAD-C622A2 (24/48Vdc)

I/O Connectors



AAD-C622A1 (12Vdc) / AAD-C622A2 (24/48Vdc)

Packing List

- 1 x AAD-C622A1/A2
- 1 x Ignition Terminal Block
- 1 x System Bracket
- 6 x M12 GbE M12 X-Coded Cable
- 1 x GPU Card Retaining Set

Optional Module List

- 8/16/32GB DDR4 2933 RDIMM
- 5G + GPS + GNSS module (100070174)(SIM8202G-M2)
- Wi-Fi +BT Module (100070170)
- 2 ports M12 X-coded 10G kit (100070177)
- 8 ports CAN FD Kit (100070180)
- 8 ports CAN 2.0B kit (100070181)
- 8 port USB card =>100070172
- 1 DB15 VGA (100090084)(ADB-VGA2)

AIV-C622V1

Autonomous Vehicle Server



Features

- Intel® C622 Platform
- Intel® 2nd Gen Xeon Scalable Processor
- 6 x RDIMM DDR4-2933 (up to 384GB)
- 3x Exp. PCIe Gen3 x16 slot (GPU Card)
- 12 x USB3.2 (5Gbps)
- 4 x 2.5" SATA-III Hot-swappable with All-In-One Storage Bay
- 2 x 10GbE, 2 x GbE RJ-45
- 1 x Management port
- DC+DC/Redundant PSUs



Others

WatchDog Timer	1-255 sec. software programmable(O=Disable)
Security	TPM 2.0 (Infineon chipset)
Mgmt	IPMI 2.0 (ASPEED AST2500 BMC)

Software

OS Support	Ubuntu 18.04LTS.
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Power Requirement

Power Input	DC 18~36V 1300W / 36~72V 1900W
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Mechanical & Environment

Dimension	400 (W) x 190 (H) x 510 (D) mm
Operating Temp.	-25 ~ 50°C (-13~122°F)with 2 x 250W GPU cards installed & 100% CPU/GPU loading. -25 ~ 45°C (-13~113°F)with 3 x 250W GPU cards installed & 100% CPU/GPU loading.
Chassis	Aluminum extrusion heat sink & metal chassis
Thermal Design	Smart Cooling Fan
Storage Temp	-40~80°C (-40~176°F)
Safety	CE / FCC class B / E Mark / cULus / RoHS
Vibration	IEC 60068-2-64, 5~500Hz, 3GRMS(CF/SSD)
Shock	IEC 60068-2-27, 50G 500m/s ² 11MS

Specification

System

CPU	Intel®2nd Gen Xeon Scalable processor Ex. Intel Xeon Gold 5217 8C/16T,3.0GHz
Chipset	Intel® C622 PCH
Memory	6 x DDR4-2933 RDIMM (up to 384GB)

Video

Video Memory	Integrated
Video Interface	1 x VGA

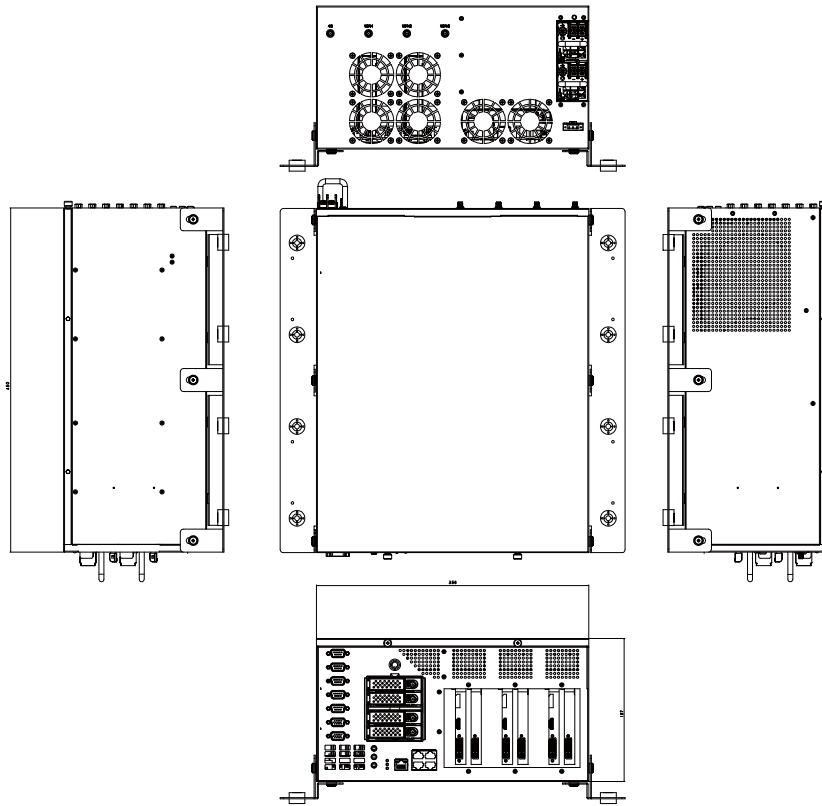
Storage

SATA	4 x SATA III port (RAID 0/1/5/10)
Disk Bay	4 x 2.5" Hot swappable SSD bay (All in one)

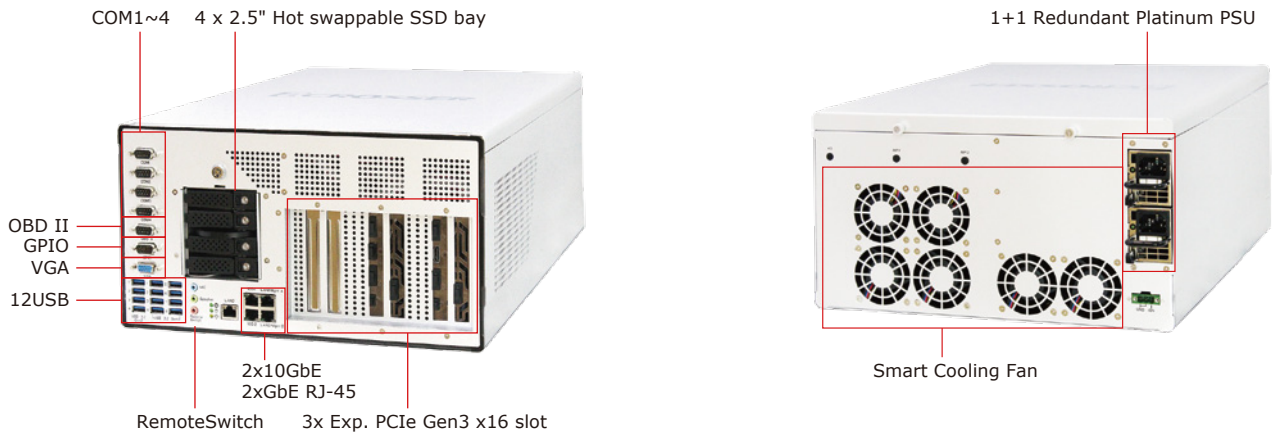
I/O

Ethernet	2 x GbE RJ-45 (intel i210-iT) 2 x 10GbE RJ-45 (PCH C622) 1 x GbE RJ-45 Management port
USB	12 x USB 3.2 Gen1(5 Gbps)
Serial Port	4 x COM - DB9 (RS232/RS422/485)
CAN Bus	CAN Bus 2.0B OBD II (Option)
GPIO	GPIO 4-in / 4-out,
Audio	3 x Audio jack • Green: Audio out • Blue: Remote switch • Pink : Mic in
Mini-PCIe	1 x Mini PCIe socket (for WiFi) 1 x M.2 socket (for 4G,)
Exp. PCIe slot	3 x Exp. PCIe Gen3 x16 slot (GPU Card)
SIM Card	1 x SIM card Socket

Dimension



I/O Connectors



Packing List

- 1 x AIV-C622V1
- 1 x System Driver CD
- 1 x Terminal block female 3pin
- 1 x HDMI locking bracket
- 1 x 8 bit GPIO/CAN Cable
- 1 x Remote switch cable

Optional Module List

- Sierra MC7430 (4G + GPS + Glonass module)
- Sierra MC7455 (4G + GPS + Glonass module)
- Jwx6058 (Qualcomm. QCA6174A-5)Wi-Fi5+BT5.0
- 8/16/32GB DDR4 2933 RDIMM

Network Security Appliance

Acrosser manufactures network appliances and network applications for your UTM and Next-Generation Firewall (NGFW). Under the x86 based structure, this Microbox Network and network appliance can perform applications from UTM appliance, rackmount server, firewall, VPN, gateway security, VOIP, SDN/NFV, vCPE, SD-WAN to bandwidth management, and intrusion detection. Acrosser provides high-quality Network Server Hardware/ Network appliances for network security applications. (Both Intel network security solution and AMD network security solution). Currently, Acrosser supplies customers with 2 main network products: 2U/1U Rackmount and Micro Box or desktop network. These high-quality network server hardware and network appliances are ideal for network security hardware and network communication applications. All products feature scalable platforms including Intel Atom, Core 2 Duo, Core I with single core up to quad-core.

NGFW Platform

The Essential Features of Next-Generation Firewalls



Intrusion Prevention



Anti-Spam



Firewall



Anti-Virus



VPN



Web Filtering



VOIP

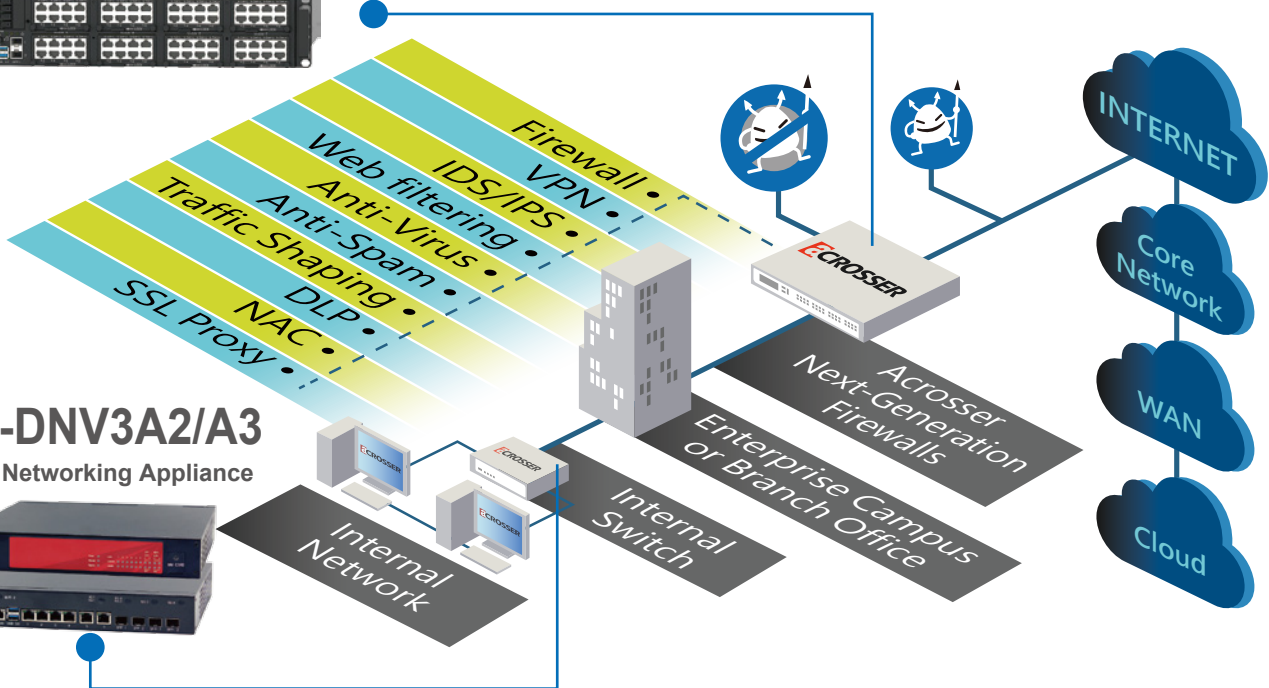
ANR-C627N1- series

Networking 2U Rackmount



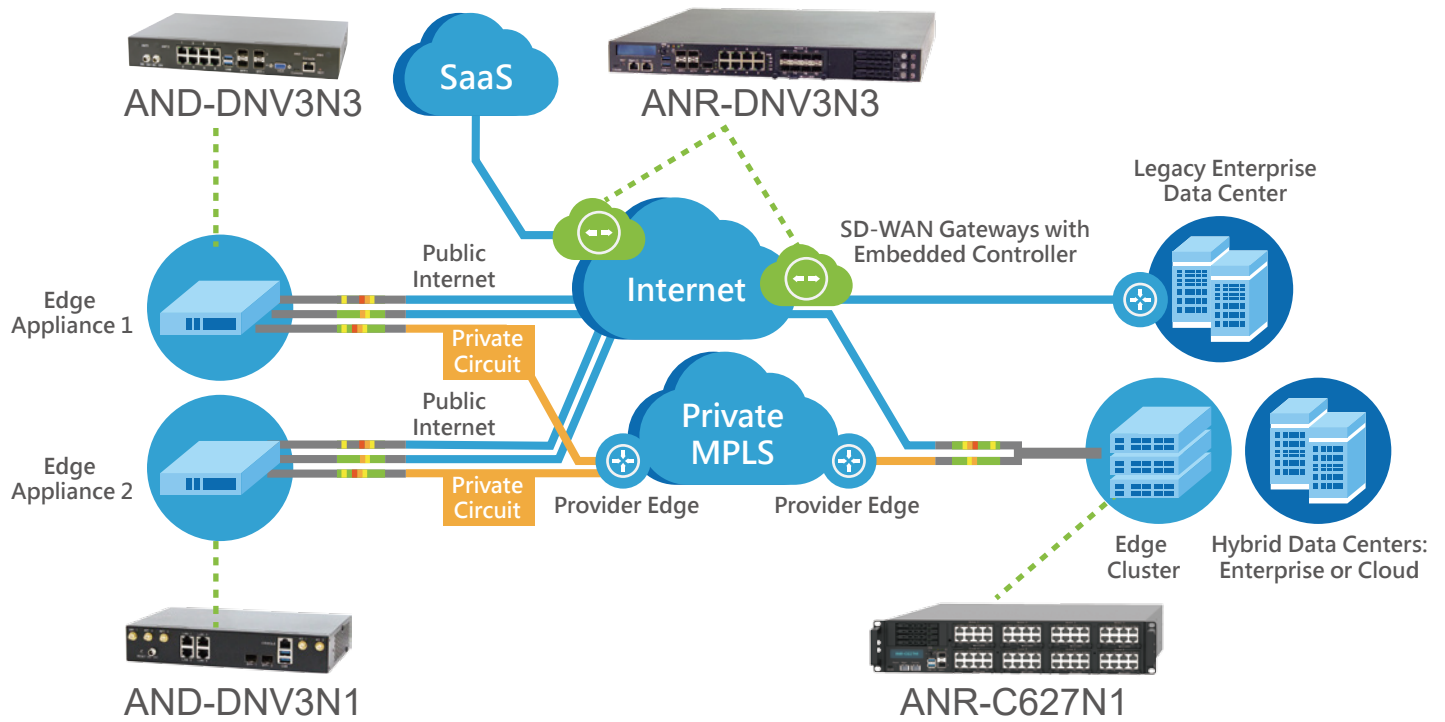
AND-DNV3A2/A3

Desktop Networking Appliance



SD-WAN White-box solution

(VPN, UTM, uCPE and SD-WAN solutions.)



Product Matrix

Network Security Appliance



Form Factor		2U Rackmount	
Model Name		ANR-C627/622N1	ANR-C627/622N1U
System	CPU type	2 x Intel® Xeon® Scalable Processors	2 x Intel® Xeon® Scalable Processors
Chipset	Chipset	Intel® PCH C627/C622	Intel® PCH C627/C622
Memory	Technology	24 x RDIMM/LRDIMM DDR4-2666/2400	24 x RDIMM/LRDIMM DDR4-2666/2400
	Maximum support	768GB (RDIMM) / 1536GB (LRDIMM)	768GB (RDIMM) / 1536GB (LRDIMM)
Ethernet	SFP+ 10G Fiber	2	2
	RJ45 GbE	-	-
	Bypass	-	-
Expansion	PCIe	Gen3 x16	Gen3 x16
	Mini PCIe	-	-
	Networking Module	8 x Exp. NIM (1G/10G/40G, Fiber / Copper / Bypass)	8 x Exp. NIM (1G/10G/40G, Fiber / Copper / Bypass)
LCM	LCM	Graphic LCM	Graphic LCM
Storage	HDD	4 x 2.5" SATA-III Hot-swappable (S/W RAID 0/1/5/10)	2 x 2.5" U.2 Hot-swappable (RAID 0/1)
	CF / CFast / mSATA	CFast & mSATA	CFast & mSATA
Console	Console	RJ45 & micro-USB	RJ45 & micro-USB
	Video out	VGA	VGA
	USB	2 x USB 3.0 (front-side), 2 x USB 2.0 (rear-side)	2 x USB 3.0 (front-side), 2 x USB 2.0 (rear-side)
	Dimension	440mm x 670mm x 89mm	440mm x 670mm x 89mm
Thermal	PWM Smart Cooling Fan	PWM Smart Cooling Fan	
Reference page		24	

Product Matrix

Network Security Appliance



Form Factor		1U Rackmount	
Model Name		ANR-W480A1/A2	ANR-C246E1
System	CPU type	Intel® 10th Gen Comet Lake-S Xeon W, Core™ i9 / i7 / i5 / i3	Intel® 8/9th Gen Coffee Lake-S Xeon E, Core™ i7 / i5 / i3
Chipset	Chipset	Intel® W480E PCH	Intel® C246 PCH
Memory	Technology	4 x UDIMM DDR4	2 x SO-DIMM DDR4
	Maximum support	-	-
Ethernet	SFP+ 10G Fiber	0/0	-
	RJ45 GbE	9/9	8
	Bypass	2/2	2
Expansion	PCIe	0/1	-
	Mini PCIe	-	1
	Networking Module	2 x Exp. NIM (1G/10G/40G, Fiber / Copper / Bypass)	.2 x Exp. NIM (1G/10G/40G, Fiber/Copper/LAN Bypass)
LCM	LCM	Graphic LCM	Graphic LCM
Storage	HDD	2 x 2.5" SATA III	2 x 2.5"/3.5" SATA-III
	mSATA	-	1 x mSATA
	M.2	1 x M.2	-
I/O	Console	1 x RJ45, 1 x mUSB	1 x RJ45
	Video out	VGA	HDMI
	USB	2 x USB 3.2 (front-side)	2 x USB 3.2 Gen1.(Front-Side)
Dimension		440mm x 44mm x 470mm	430mm x 44mm x 200mm
Thermal		PWM Smart Cooling Fan	PWM Smart Cooling Fan
Reference page		26	28

Network Security Appliance



Form Factor		1U Rackmount	
Model Name		ANR-SKB1Nx-ACN	ANR-SKB2Nx-ACN
System	CPU type	Intel® 7th Gen CPU Kabylake-S Core™ i7-7700 / i5-7500 Intel® 6th Gen CPU Skylake-S Pentium™ G4400	Intel® Xeon® Processor E3-1268 v5 / E3-1275 v6 Intel® 7th Gen CPU Kabylake-S Core™ i7-7700 Intel® 6th Gen CPU Skylake-S Pentium™ G4400
Chipset	Chipset	Intel® H110 PCH	Intel® C236 PCH
Memory	Technology	2 x UDIMM DDR4-2666, non-ECC	2 x UDIMM DDR4-2666, non-ECC,
	Maximum support	32GB	32GB
Ethernet	SFP GbE	-	2
	RJ45 GbE	6	6
	Bypass	3	3
Expansion	PCI-e	-	1
	M.2	-	-
	Networking Module	1/2 x Exp. NIM	1/2 x Exp. NIM
LCM	LCM	-	-
Storage	HDD	2 x 2.5" HDD Bay	2 x 2.5" HDD Bay
	CF / CFast / mSATA	1 x CFast socket / 1 x mSATA socket	1 x CFast socket / 1 x mSATA socket
I/O	Console	1 x RJ45	1 x RJ45
	Video out	HDMI 1.4	HDMI 1.4
	USB	2 x USB 3.0	2 x USB 3.0
Dimension		440mm x 44mm x 358mm	440mm x 44mm x 358mm
Thermal		2 x Smart cooling fan	2 x Smart cooling fan
Reference page		30	32

Product Matrix

Network Security Appliance



Form Factor		1U Rackmount	
Model Name		ANR-C236N1-series	ANR-EP3KN1-series
System	CPU type	Intel® Xeon® E3-1275v6 Intel® 7th Gen. KabyLake-S Core i7 / i5 / i3	AMD Snowy Owl EPYC™ 3000 SoC
Chipset	Chipset	Intel® PCH C236	SoC
Memory	Technology	4 x UDIMM DDR4-2400, ECC/non-ECC	8/4 x UDIMM DDR4-2666/2400
	Maximum support	64GB	-
Ethernet	SFP+ GbE	2	-
	RJ45 GbE	12	1
	Bypass	4	-
Expansion	PCI-e	1 x Exp. PCIe slot	1 x Exp. PCIe Gen3
	Networking Module	1 x Exp. NIM (1G/10G/40G, Fiber / Copper / Bypass)	4/3 x Exp. NIM (1G/10G/40G, Fiber / Copper / Bypass)
LCM	LCM	16 x 2 characters LCD module with 4 buttons	16 x 2 characters LCD module with 4 buttons
Storage	HDD	2 x 2.5" SATA III Hot-swappable (S/W RAID 0/1)	4/2 x 2.5"/3.5" SATA-III
	mSATA	1 x mSATA	-
	CF / CFast / M.2	1 x CFast	1 x CF , 2 x M.2M
I/O	Console	1 x RJ45	1 x RJ45, 1 x mUSB
	Video out	HDMI	VGA
	USB	2 x USB 3.0, 2 x USB 2.0	2 x USB 3.0
Dimension		440mm x 44mm x 500mm	440mm x 44mm x 550mm
Thermal		PWM Smart Cooling Fan	Smart Cooling Fan
Reference page		34	36

Network Security Appliance



Form Factor		1U Rackmount	
Model Name		ANR-DNN3N3-series	ANR-DNN3N3-8C
System	CPU type	Intel® Atom® C3958 Processor / Intel® Atom® C3858 Processor Intel® Atom® C3758 Processor / Intel® Atom® C3558 Processor	Intel® Atom® C3758 Processor
Chipset	Chipset	Intel® Denverton SoC	Intel® Denverton SoC
Memory	Technology	4 x ECC DIMM DDR4	2 x ECC DIMM DDR4
	Maximum support	-	-
Ethernet	SFP / SFP+ GbE	1 SFP, 2/4 SFP+	4 SFP+
	RJ45 GbE	9	8
	Bypass	2	-
Expansion	PCI-E	-	-
	Networking Module	1 x Exp. NIM (1G/10G/25G/40G Fiber/Copper/LAN Bypass)	1 x Exp. NIM (1G/10G/25G/40G Fiber/Copper/LAN Bypass)
LCM	LCM	Graphic LCM	-
Storage	HDD	3 x 2.5" SATA-III Hot-swappable(Drive bay)	-
	CF / CFast / M.2	1 x CFast socket	1 x CFast socket
I/O	Console	RJ45 / micro-USB	1 x RJ45
	Video out	VGA	-
	USB	2 x USB 3.1	2 x USB 3.1
Dimension		430mm x 44mm x 400mm	430mm x 400mm x 44mm
Thermal		2 x smart cooling fan	2 x smart cooling fan
Reference page		38	40

Product Matrix

Network Security Appliance



Form Factor		Desktop	Desktop
Model Name		AND-DNV3N1-series	AND-DNV3N3-series
System	CPU type	Intel® Atom C3558/C3308 Processor	Intel® Atom C3758/C3558/C3338 Processor
Chipset	Chipset	Intel® Denverton SoC	Intel® Denverton SoC
Memory	Technology	1 x So-DIMM DDR4	1 x SO-DIMM DDR4(C3338) / 2 x SO-DIMM DDR4(C3558,C3758)
	Maximum support	-	-
Ethernet	SFP+ GbE	2	2/4
	RJ45 GbE	4	8
	Bypass	1	1
Expansion	PCIe	-	-
	Mini PCIe	1	2
Storage	SSD Bay	1x 2.5" SSD bay	-
	HDD	-	1 x 2.5" SATA-III
	CF / CFast / M.2	1 x M.2B	1 x CFast socket / 1 x M.2
I/O	Console	1 x RJ45	1 x RJ45 / 1 x mUSB
	Video out	-	VGA
	USB	2 x USB 3.0	2x USB 3.0
Dimension		250mm x 44mm x 165mm	300mm x 44mm x 201mm
Thermal		Fanless	Smart cooling fan(C3758)/Fanless(C3338, C3558)
Reference page		42	44

Network Security Appliance



Form Factor		Desktop
Model Name		AND-DNV3A2/A3
System	CPU type	Intel® Atom® C3558/C3758 Processor
Chipset	Chipset	Intel® Denverton SoC
Memory	Technology	1 x So-DIMM DDR4
	Maximum support	-
Ethernet	SFP / SFP+ GbE	2 SFP, 2 SFP+
	RJ45 GbE	6
	Bypass	-
Expansion	Mini PCIe	-
	M.2	1 x M.2 Socket for optional WiFi module . 1 x M.2 B key socket for 4G/5G module, support dual SIM sockets.
Storage	HDD	1 x 2.5" SATA-III
	EMMC	Optional on board eMMC 32GB or 64GB
	NVME	M.2 M key socket for 2242/2260/2280 NVME SSD
	CF / CFast	-
I/O	Console	1 x RJ45
	Video out	-
	USB	2 x USB 3.2 Gen1
Dimension		270mm x 44mm x 160mm
Thermal		Fanless Design(For AND-DNV3A2)
Reference page		46

Product Matrix

Network Security Appliance



Form Factor		Desktop	Microbox
Model Name		AND-EL6KE1/E2	AND-APL1E1/E2
System	CPU type	Intel®Celeron® J6412 Processor	Intel®Atom E3940/Intel®Celeron N3350
Chipset	Chipset	Intel®Elkhart Lake SoC	-
Memory	Technology	1 x So-DIMM DDR4	On board 2GB LPDDR4 memory, Optional 1x SO-DIMM slot
	Maximum support	-	8GB
Ethernet	SFP GbE	1	-
	RJ45 GbE	4	4
	Bypass	-	1(for N3350)
Expansion	PCIe	-	-
	Mini PCIe	-	1 (for E3940)
	M.2	1 x M.2B	-
Storage	HDD	1 x 2.5" SATA-III	1 x 2.5" HDD Bay, 1 x 2.5" SATA-III
	EMMC	-	On board 8GB eMMC
	mSATA	1 x mSATA socket	-
I/O	Console	1 x RJ45	1 x RJ45
	Video out	HDMI	-
	USB	2 x USB 2.0	2 x USB 3.2 Gen1
Dimension		210mm x 44mm x 105mm	165mm x 40mm x 92mm
Thermal		Fanless	Smart cooling fan
Reference page		48	50

Exp. NIM

ACC-NM1Z1-01C8B

1G Copper x8 (RJ-45, Bypass)



ACC-NM1Z1-01C8

1G Copper x8 (RJ-45)



ACC-NM1Z1-01F8

1G Fiber x8(SFP)



ACC-NM1Z1-01H8B

1G Hybrid x8 (SFP x4 + RJ-45 x4, Bypass)



ACC-NM1Z1-01H8

1G Hybrid x8 (SFP x4 + RJ-45 x4)



ACC-NM1Z1-10F2

10G Fiber x2 (SFP+)



ACC-NM1Z1-10F4

10G Fiber x4 (SFP+)



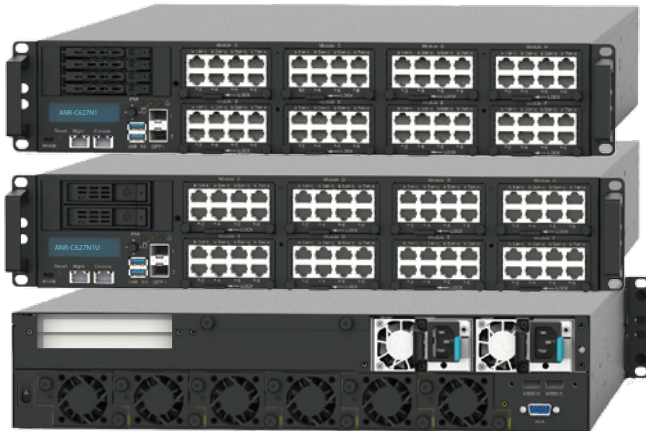
ACC-NM1Z1-40F2

40G Fiber x2 (QSFP+)



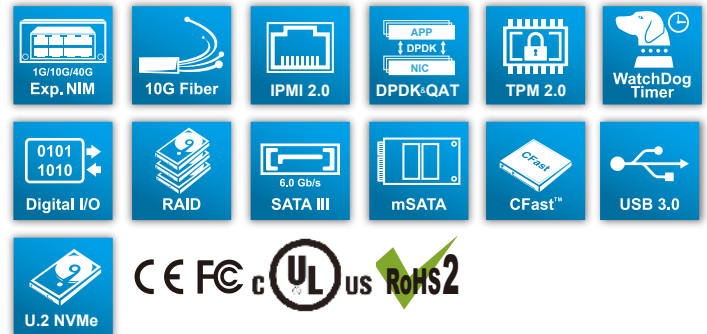
ANR-C627/C622N1-series

2U Rackmount IoT Gateway/Network Server Intel® PCH C627/C622 + Purley Platform, 8 Exp. NIM, & 1+1 Redundant PSU & U.2 NVMe



Features

- Intel® C627/C622 Platform
- 2 x Intel® Xeon® Scalable Processors
- 24 x RDIMM/LRDIMM DDR4
- 8 x Exp. NIM (1G/10G/25G/40G, Fiber/Copper/LAN Bypass)
- 1 x Management port
- 2 x 10G Fiber (SFP+)
- 4 x 2.5" SATA-III Hot-swappable / 2 x U.2 NVMe Hot-swappable
- 1 x mSATA & 1 x CFast
- Hot-swappable smart cooling fan
- 1+1 Redundant Platinum PSU (800W)



Others

Battery	Lithium Battery, 3V 220mAH (CR2032)
Hardware Monitoring	CPU Volt. CPU & SYS Temp. FAN Speeds
Security & Mgmt.	TPM 2.0 (Infineon chipset) IPMI 2.0 (ASPEED AST2500 BMC) Chassis Intrusion Detection
DPDK & QAT	Support DPDK & QAT

Power Requirement

Power Supply Unit	1+1 Redundant Platinum PSU (800W) 100-240VAC
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Software

OS Support	Linux Kernel 4.4 or above, (64-bit)
------------	-------------------------------------

Mechanical & Environment

Dimensions	440 (W) x 89 (H) x 670 (D) mm
Operating Temp.	0~ 40°C (32~104°F)
Storage Temp.	-20~80°C (-4~176°F)
Relative Humidity	0 to 90% @40°C, non-condensing
Certifications	CE, FCC Class A, RoHS 2, cULus

Model Name

ANR-C627N1 ANR-C622N1	2U Rackmount IoT Gateway/Network Server .Intel® PCH C627/C622 + Purley platform .8 x Exp. NIM (1G/10G/25G/40G, Fiber/Copper/LAN Bypass) .1 x Management port .2 x 10G Fiber (SFP+) .4 x 2.5" SATA-III Hot-swappable (S/W RAID 0/1/5/10) .1+1 Redundant Platinum PSU (800W)
ANR-C627N1U ANR-C622N1U	2U Rackmount IoT Gateway/Network Server .Intel® PCH C627/C622 + Purley platform .8 x Exp. NIM (1G/10G/25G/40G, Fiber/Copper/LAN Bypass) .1 x Management port .2 x 10G Fiber (SFP+) .2 x U.2 NVMe Hot-swappable (S/W RAID 0/1) .1+1 Redundant Platinum PSU (800W)

Specification

System

CPU	Two way Intel® Xeon® Scalable Processors
Chipset	Intel® PCH C627 (QAT:100Gbps) Intel® PCH C622 (QAT:n/a)
Memory	24 x RDIMM/LRDIMM DDR4
BIOS	AMI
WatchDog Timer	Software programmable 0~255 sec.

Video

Video Interface	VGA
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Ethernet

Chipset	1 x Intel® I210
1G	1 x GbE Copper (RJ45) via I210(Mgmt)
10G	2 x 10G Fiber (SFP+)
LAN bypass	Support with Exp. NIM

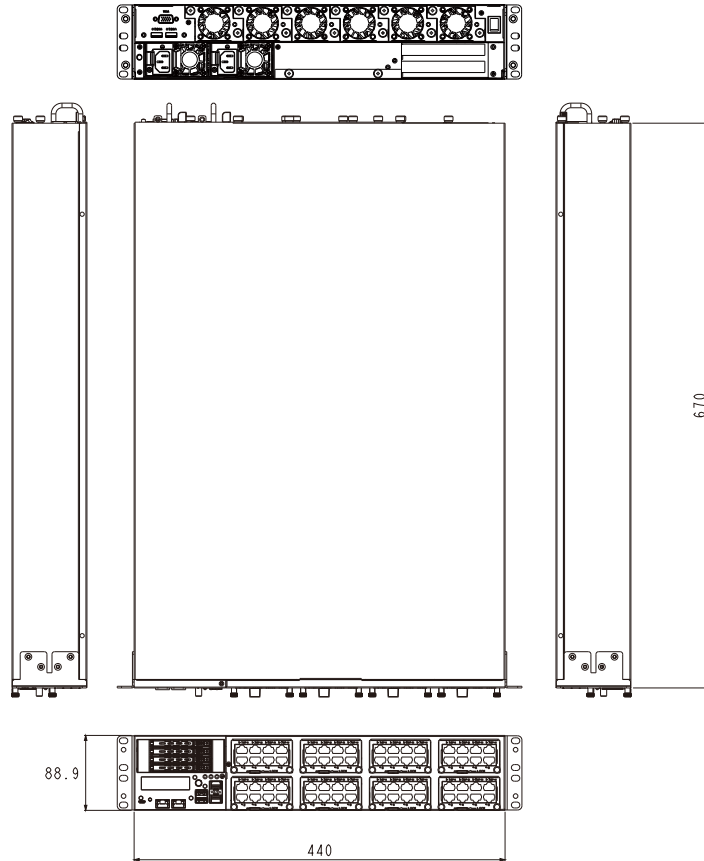
Storage

HDD Bay	4 x 2.5" SATA-III Hot-swappable or 2 x U.2 NVMe Hot-swappable(option)
mSATA	1 x mSATA socket
CFast	1 x CFast socket

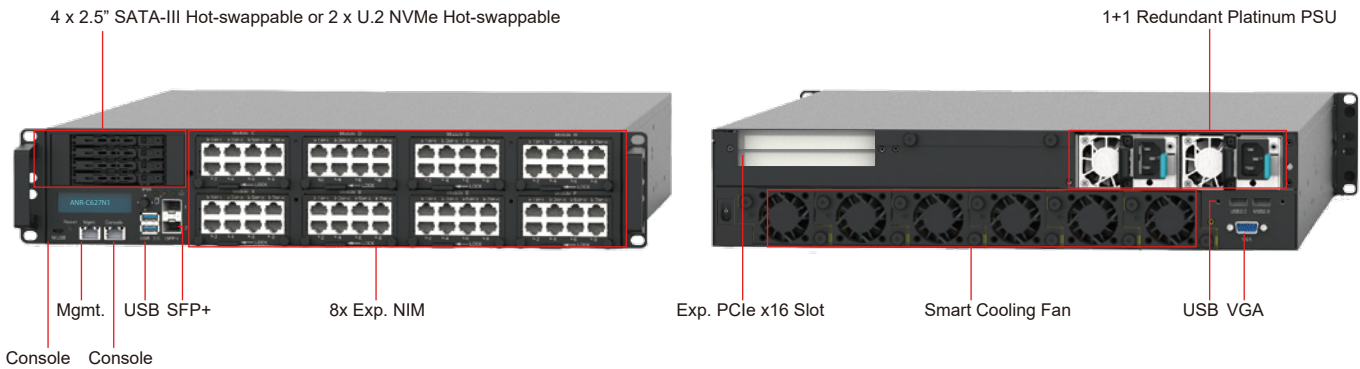
I/O

Console port	1 x Serial console (RJ-45) 1 x USB console (micro-USB)
USB port	2 x USB 3.0 (front-side) 2 x USB 2.0 (rear-side)
LCM	Graphic LCM
GPIO	8-bit GPIO (4-In, 4-Out), on-board pin header
Exp. NIM	8 x Exp. NIM Hot-swappable (1G/10G/25G/40G, Fiber/Copper/LAN Bypass)
Exp. PCIe slot	1 x Exp. PCIe Gen3 x16 slot (FHFL)

Dimensions



I/O Connectors



ANR-C627/622N1-series

Packing List

- ANR-C62xN1/N1U system x 1
- SATA cable x 4/SATA cable x 2
- CD utility x 1
- RJ45 console cable (RJ45 <-> DB9) x 1
- USB console cable (Micro-B <-> Type A) x 1
- USA / EU / JPN / UK / AS / NZS / SA / India power cord x 2
- Rack bracket x 1
- Box packing x 1
- Screw pack x 1
- Slide Rail x 1

Ordering Information

ANR-C627N1	2U Rackmount IoT Gateway/Network Server, Intel® PCH C627 + Purley platform, 8x Exp. NIM, 1xMgmt., 2 SFP+, 4 SATA-III, 1+1 Redundant Platinum PSU
ANR-C622N1	2U Rackmount IoT Gateway/Network Server, Intel® PCH C622 + Purley platform, 8x Exp. NIM, 1xMgmt., 2 SFP+, 4 SATA-III, 1+1 Redundant Platinum PSU
ANR-C627N1U	2U Rackmount IoT Gateway/Network Server, Intel® PCH C627 + Purley platform, 8x Exp. NIM, 1xMgmt., 2 SFP+, 2 U.2 NVMe, 1+1 Redundant Platinum PSU
ANR-C622N1U	2U Rackmount IoT Gateway/Network Server, Intel® PCH C622 + Purley platform, 8x Exp. NIM, 1xMgmt., 2 SFP+, 2 U.2 NVMe, 1+1 Redundant Platinum PSU

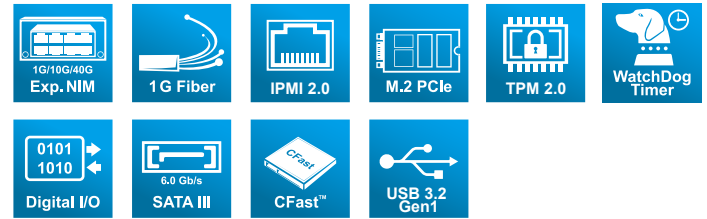
ANR-W480A1/A2

1U Rackmount Network server Intel® 10th Gen Comet Lake-S Xeon W, Core™ i9, i7, i5, i3, 2 Exp. NIMs & 1+1 Redundant PSU



Features

- 4 x UDIMM DDR4
- 2 x Exp. NIM (1G/10G/40G, Fiber/Copper/LAN Bypass)
- 2 x Console port (RJ45, Micro USB)
- 2 x 1G Fiber
- 9 x GbE Copper with 2-pairs LAN Bypass
- 2 x 2.5" SATA-III
- 1 x M.2
- Optional 1+1 Redundant PSU (300W)



Specification

System

CPU	Intel® Xeon® W-1290E Intel® Xeon® W-1270E Intel® Comet Lake-S Core™ i9-10900E Intel® Comet Lake-S Core™ i7-10700E Intel® Comet Lake-S Core™ i5-10500E Intel® Comet Lake-S Core™ i3-10100E
Chipset	Intel® W480E PCH
Memory	4 x UDIMM DDR4
BIOS	AMI
WatchDog Timer	Software programmable 0~255 sec.

Ethernet

Ethernet port	9 x GbE Copper (RJ-45) 2 x 1G Fiber
LAN Bypass	2-Pair Bypass

Storage

HDD Bay	2 x 2.5"/3.5" SATA-III
M.2	1 x M.2 B key Socket 2242 or 2280

I/O

Console port	1 x Serial Console (RJ-45) 1 x USB Console (Micro-USB)
USB port	2 x USB 3.2 Gen1.(Front-Side)
Expansion	2 x NIM module.(PCIe x 8)(for ANR-W480A1) 2 x NIM module (PCIe x 8, PCIe x 4) (For ANR-W480A2) 1 x PCIe x 8 slot (For ANR-W480A2)
LCD Module	16 characters x 2 lines with 4-key button(optional)
GPIO	8-bit GPIO (4-In, 4-Out), on-board pin header
Exp. NIM	1G/10G/40G, Fiber/Copper/LAN Bypass

Video

Video Interface	VGA(Rear-Side)
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Others

Battery	Lithium Battery, 3V 220mAH (CR2032)
Hardware Monitoring	CPU Volt. CPU & SYS Temp. FAN Speeds
Security	TPM 2.0

Power Requirement

Power Unit	1x ATX PSU(300W), 100-240V or optional 1+1 Redundant PSU(300W) 100-240V
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Software

OS Support	Linux kernel 5.2 and above
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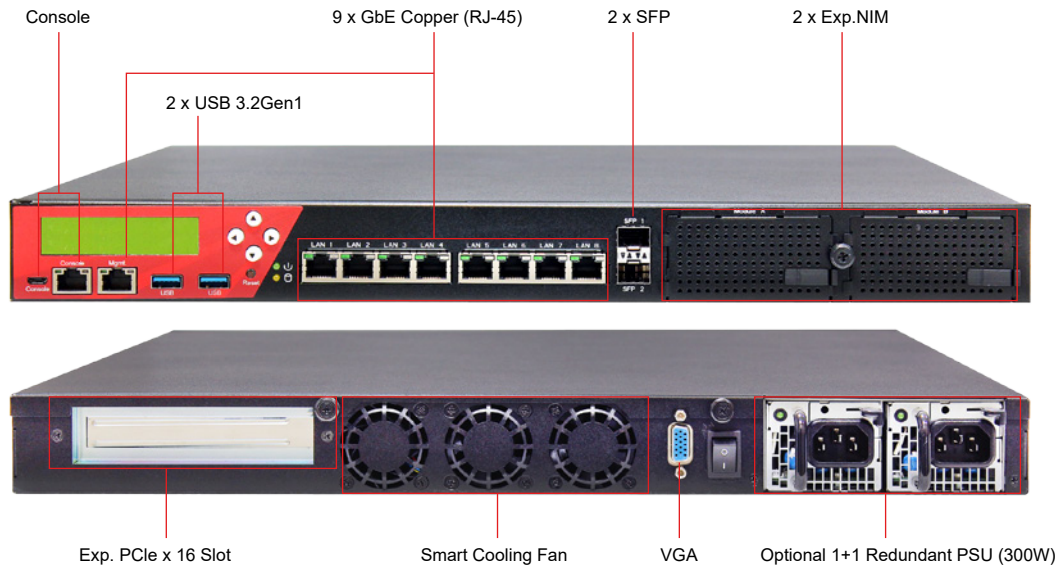
Mechanical & Environment

Dimensions	440(W) x 44(H) x 470(D)mm
Operating Temp.	0~ 40°C (32~104°F)
Storage Temp.	-20~80°C (-4~176°F)
Relative Humidity	0 to 90% @40°C, non-condensing
Certifications	CE, FCC Class A, RoHS 2,

Model Name

ANR-W480A1	.1U Rackmount Network Server .Intel® 10th Gen Xeon W, Core™ i9/i7/i5/i3 .2 x Exp. NIM (1G/10G/40G, Fiber/Copper/LAN Bypass) .9 x 1G GbE .2 x 1G Fiber .2 x 2.5" SATA-III .1 x M.2 .1+1 Redundant PSU (300W) or ATX PSU (300W)
ANR-W480A2	.1U Rackmount Network Server .Intel® 10th Gen Xeon W, Core™ i9/i7/i5/i3 .1 x Exp. NIM(1G/10G/40G/Copper/Fiber/LAN Bypass) .1 x Exp. NIM(1G/10G/Copper/Fiber/LAN Bypass) .9 x 1G GbE .2 x 1G Fiber .2 x 2.5" SATA-III .1x PCIe x8 slot .1 x M.2 .1+1 Redundant PSU (300W) or ATX PSU (300W)

I/O Connectors



ANR-W480A1/A2

Packing List

- ANR-W480A1/A2 system x 1
- SATA cable x 2
- RJ45 console cable (RJ45 <-> DB9) x 1
- USA / EU / JPN / UK / AS / NZS / SA / India power cord x 1 or 2 (Redundant PSU)
- Rack bracket x 1
- Box packing x 1
- Screw pack x 1

Ordering Information

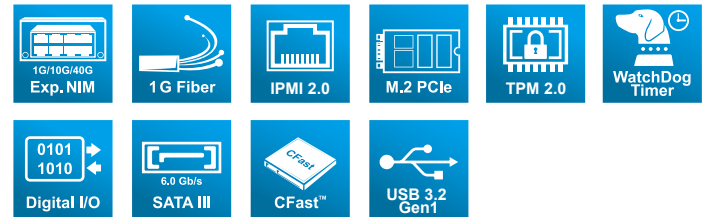
ANR-W480A1	<ul style="list-style-type: none"> .1U Rackmount Network Server .Intel® 10th Gen Xeon W, Core™ i9/i7/i5/i3 .2 x Exp. NIM (1G/10G/40G, Fiber/Copper/LAN Bypass) .9 x 1G GbE .2 x 1G Fiber .2 x 2.5" SATA-III .1 x M.2 .1+1 Redundant PSU (300W) or ATX PSU (300W)
ANR-W480A2	<ul style="list-style-type: none"> .1U Rackmount Network Server .Intel® 10th Gen Xeon W, Core™ i9/i7/i5/i3 .1 x Exp. NIM(1G/10G/40G/Copper/Fiber/LAN Bypass) .1 x Exp. NIM(1G/10G/Copper/Fiber/LAN Bypass) .9 x 1G GbE .2 x 1G Fiber .2 x 2.5" SATA-III .1x PCIe x8 slot .1 x M.2 .1+1 Redundant PSU (300W) or ATX PSU (300W)

ANR-C246E1

1U Rackmount Network server Intel® 8/9th Gen Coffee Lake-S Xeon E, Core™ i7, i5, i3, 1 Exp. NIM

Features

- Intel® 8/9th Gen Xeon E, Core™ i7/i5/i3
- 2 x SO-DIMM DDR4
- 1 x Exp. NIM (1G/10G/40G, Fiber/Copper/LAN Bypass)
- 8 x GbE Copper (RJ-45)
- 2 x 2.5" SATA-III
- 1 x mPCIe/mSATA socket



Specification

System

CPU	Intel® Xeon® E-2278GE Intel® Coffee Lake-S Core™ i7-9700E Intel® Coffee Lake-S Core™ i7-8700E Intel® Coffee Lake-S Core™ i5-9500E Intel® Coffee Lake-S Core™ i3-9100E
Chipset	Intel® C246 PCH
Memory	2 x SO-DIMM DDR4
BIOS	AMI
WatchDog Timer	Software programmable 0~255 sec.

Ethernet

Ethernet port	8 x GbE Copper (RJ-45)
LAN Bypass	2-Pair Bypass

Storage

HDD Bay	2 x 2.5"/3.5" SATA-III
mSATA	1 x mSATA Socket shared with mPCIe socket

I/O

Console port	1 x Serial Console (RJ-45)
USB port	2 x USB 3.2 Gen1.(Front-Side)
Expansion	Optional 1x NIM slot
LCD Module	16 characters x 2 lines with 4-key button
GPIO	8-bit GPIO (4-In, 4-Out), on-board pin header
Exp. NIM	1G/10G/40G, Fiber/Copper/LAN Bypass

Video

Video Interface	HDMI(Rear-Side)
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Others

Battery	Lithium Battery, 3V 220mAH
Hardware Monitoring	CPU Volt. CPU & SYS Temp. FAN Speeds
Security	Optional TPM 2.0

Power Requirement

Power Unit	1x ATX PSU(220W), 100-240V
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Software

OS Support	Linux kernel 5.2 and above
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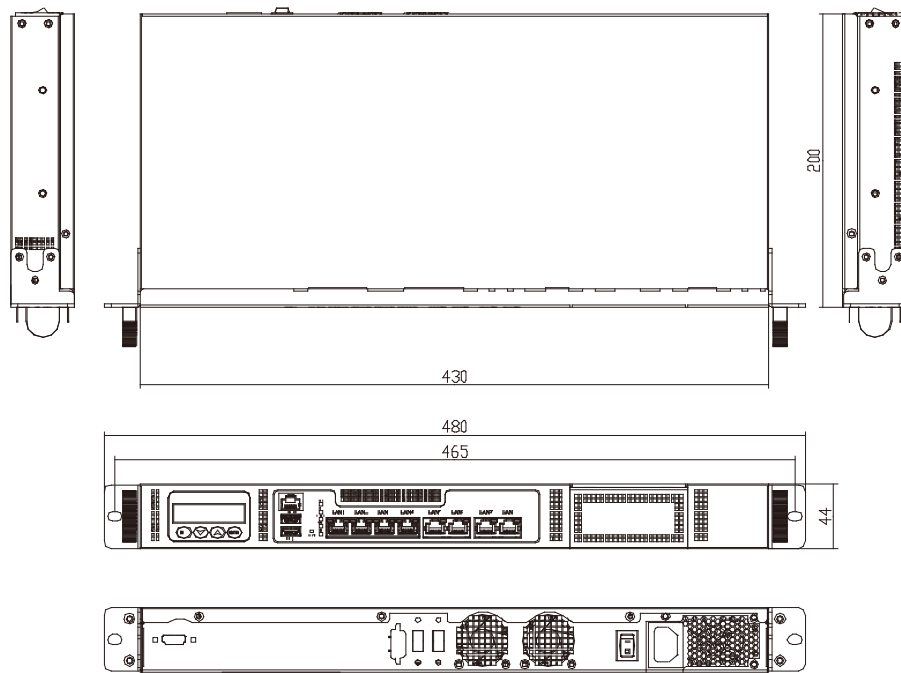
Mechanical & Environment

Dimensions	430(W) x 44(H) x 200(D)mm
Operating Temp.	0~ 40°C (32~104°F)
Storage Temp.	-20~80°C (-4~176°F)
Relative Humidity	0 to 90% @40°C, non-condensing
Certifications	CE, FCC Class A, RoHS 2,

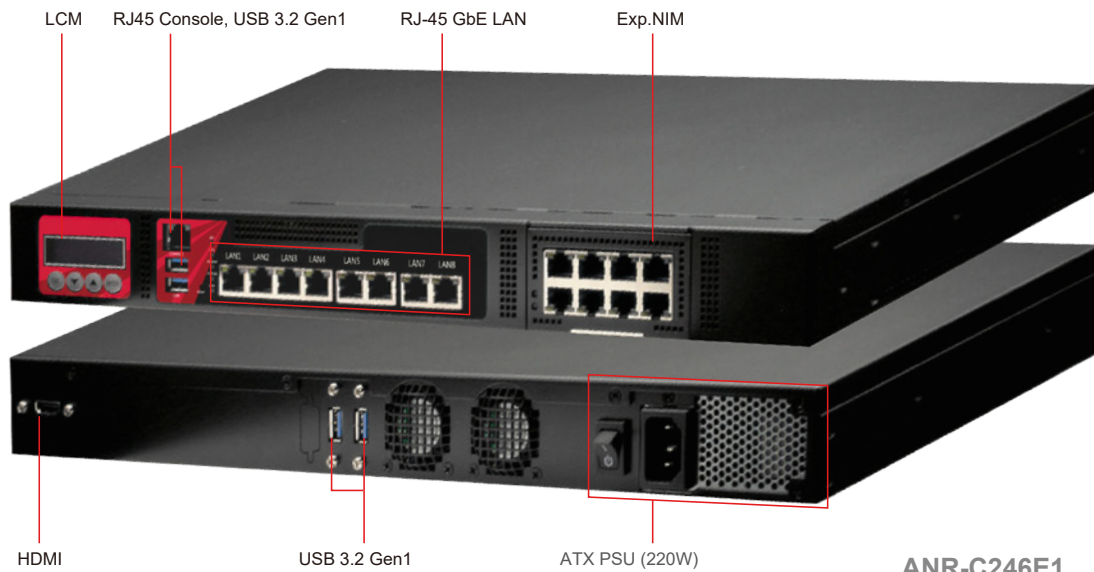
Model Name

ANR-C246E1	.1U Rackmount Network Server .Intel® 8/9th Gen Xeon E, Core™ i7/i5/i3 .1 x Exp. NIM (1G/10G/40G, Fiber/Copper/LAN Bypass) .8 x 1G GbE .2 x 2.5" SATA-III .1 x mSATA/mPCIe socket .ATX PSU (220W)
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Dimension



I/O Connectors



ANR-C246E1

Packing List

- ANR-C246E1 system x 1
- HDD/SSD kit x 2
- RJ45 console cable (RJ45 <-> DB9) x 1
- USA / EU / JPN / UK / AS / NZS / SA / power cord x 1
- Rack bracket x 1
- Screw pack x 1

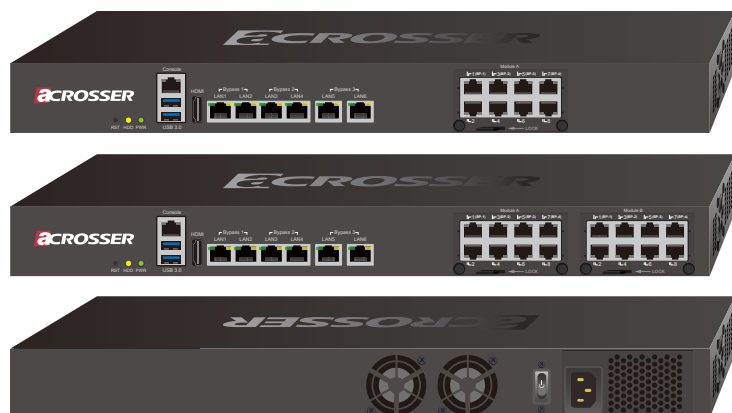
Ordering Information

ANR-C246E1

- .1U Rackmount Network Server
- .Intel® 8/9th Gen Xeon E, Core™ i7/i5/i3
- .1 x Exp. NIM (1G/10G/40G, Fiber/Copper/LAN Bypass)
- .8 x 1G GbE
- .2 x 2.5" SATA-III
- .1 x mSATA/mPCIe socket
- .ATX PSU (220W)

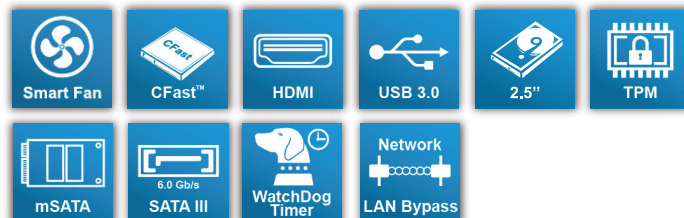
ANR-SKB1Nx-ACN

1U Rackmount Intel® PCH H110 Networking, 6 GbE LANs with Bypass



Features

- Intel® H110 Platform
- Intel® 7th Gen CPU Kabylake-S Core™ i7-7700
- 2 x UDIMM DDR4-2666, non-ECC, (up to 32GB)
- 6 x GbE Copper with Bypass
- 2 x 2.5" HDD
- 2 x Smart cooling fan



Specification

System

CPU	Intel® 7th Gen CPU Kabylake-S Core™ i7-7700 Intel® 7th Gen CPU Kabylake-S Core™ i5-7500 Intel® 6th Gen CPU Skylake-S Pentium™ G4400
Chipset	Intel® H110 PCH
Memory	2 x 288-pin UDIMM DDR4-2666, non-ECC, (up to 32GB)
BIOS	AMI
WatchDog Timer	Software programmable 0~255 sec.

Video

Video Interface	HDMI 1.4
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Ethernet

Chipset	Intel® I211-AT (10/100/1000Mbps), LAN[1:6]
Connector	6x GbE Copper (RJ-45)
LAN Bypass	(1 st LAN bypass) by LAN[1:2] (2 nd LAN bypass) by LAN[3:4] (3 rd LAN bypass) by LAN[5:6]

Storage

HDD Bay	2 x 2.5" HDD Bay
mSATA	1 x mSATA socket
CF	1 x CFAST socket

I/O

Console port	1 x Serial console (RJ-45)
USB port	2 x USB 3.0 (front-side)
Exp. NIM	1/2 x Exp. NIM

Others

Battery	Lithium Battery, 3V 220mAh (CR2032)
Hardware Monitoring	CPU Volt. CPU & SYS Temp. FAN Speeds
Security & Mgmt.	TPM 2.0

Power Requirement

Power Supply Unit	Single ATX PSU (250-300W) 100-240VAC
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Software

OS Support	Linux Kernel 4.4 & above, (64-bit)
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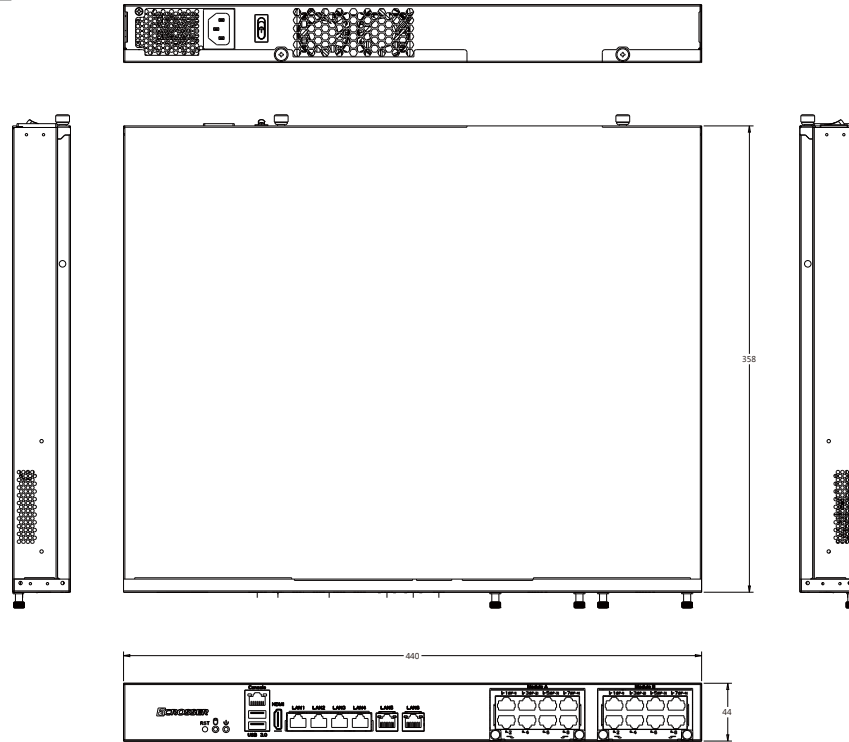
Mechanical & Environment

Dimensions	440 (W) x 44 (H) x 358 (D) mm
Operating Temp.	0~ 40°C (32~104°F)
Storage Temp.	-20~80°C (-4~176°F)
Relative Humidity	0 to 90% @40°C, non-condensing
Certifications	CE, FCC Class A, cULus, RoHS 2

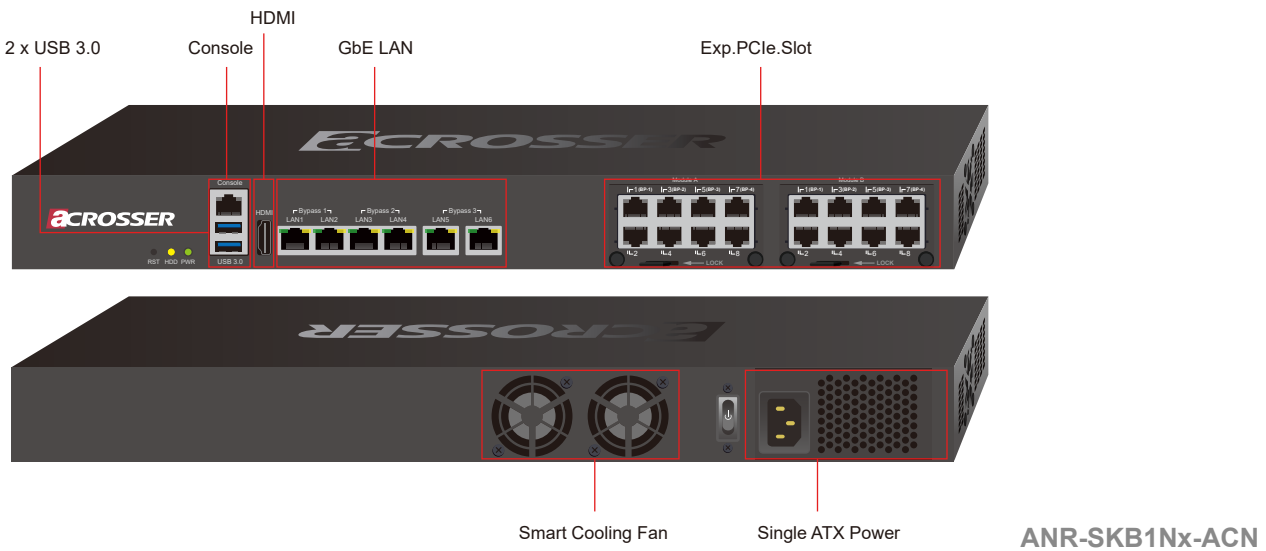
Model Name

ANR-SKB1N1-ACN	Networking 1U Rackmount w/ Intel® H110 PCH, 6x GbE LANs w/Bypss 1 x Exp. NIM Single ATX PSU
ANR-SKB1N2-ACN	Networking 1U Rackmount w/ Intel® H110 PCH, 6x GbE LANs w/Bypss 2 x Exp. NIM Single ATX PSU

Dimensions



I/O Connectors



Packing List

- ANR-SKB1Nx-ACN-system x 1
- SATA cable x 2
- CD utility x 1
- Console cable (RJ-45 to DB9) x 1
- EU power cord x 1
- Rack bracket x 1
- Box packing x 1
- Screw for bracket (for rack + HDD bracket) x 14

Ordering Information

ANR-SKB1N1-ACN	Networking 1U Rackmount w/ Intel® H110 PCH, 6x GbE LANs w/Bypss 1 x Exp. NIM Single ATX PSU
ANR-SKB1N2-ACN	Networking 1U Rackmount w/ Intel® H110 PCH, 6x GbE LANs w/Bypss 2 x Exp. NIM Single ATX PSU

ANR-SKB2Nx-ACN

1U Rackmount Intel® PCH C236 Networking, 6 GbE LANs with Bypass, 2 SFP



Features

- Intel® C236 Platform
- Intel® Xeon® Processor E3-1275 v6
- Intel® 7th Gen CPU Kabylake-S Core™ i7-7700
- 2 x UDIMM DDR4-2666, non-ECC, (up to 32GB)
- 6 x GbE Copper with Byass
- 2 x 1G SFP
- 2 x 2.5" HDD
- 2 x Smart cooling fan



Others

Battery	Lithium Battery, 3V 220mAH (CR2032)
Hardware Monitoring	CPU Volt. CPU & SYS Temp. FAN Speeds
Security & Mgmt.	TPM 2.0

Power Requirement

Power Supply Unit	Single ATX PSU (250-300W) 100-240VAC
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Software

OS Support	Linux Kernel 4.4 & above, (64-bit)
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Mechanical & Environment

Dimensions	440 (W) x 44 (H) x 358 (D) mm
Operating Temp.	0~ 40°C (32~104°F)
Storage Temp.	-20~80°C (-4~176°F)
Relative Humidity	0 to 90% @40°C, non-condensing
Certifications	CE, FCC Class A, cULus, RoHS 2

Model Name

ANR-SKB2N1-ACN	Networking 1U Rackmount w/ Intel® C236 PCH, 6x GbE LANs w/Byppss, 2x 1G Fiber 1 x Exp. NIM Single ATX PSU
ANR-SKB2N2-ACN	Networking 1U Rackmount w/ Intel® C236 PCH, 6 x GbE LANs w/Byppss, 2x 1G Fiber 2 x Exp. NIM Single ATX PSU

Specification

System

CPU	Intel® Xeon® Processor E3-1268 v5 Intel® Xeon® Processor E3-1275 v6 Intel® 7th Gen CPU Kabylake-S Core™ i7-7700 Intel® 6th Gen CPU Skylake-S Pentium™ G4400
Chipset	Intel® C236 PCH
Memory	2 x UDIMM DDR4-2666, non-ECC, (up to 32GB)
BIOS	AMI
WatchDog Timer	Software programmable 0~255 sec.

Video

Video Interface	HDMI 1.4
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Ethernet

Chipset	Intel® I211-AT (10/100/1000Mbps), LAN[1:6] Intel® I210-IS (1000Mbps), SFP[1:2]
Connector	6x GbE Copper (RJ-45) 2x 1G Fiber
LAN Bypass	(1 st LAN bypass) by LAN[1:2] (2 nd LAN bypass) by LAN[3:4] (3 rd LAN bypass) by LAN[5:6]

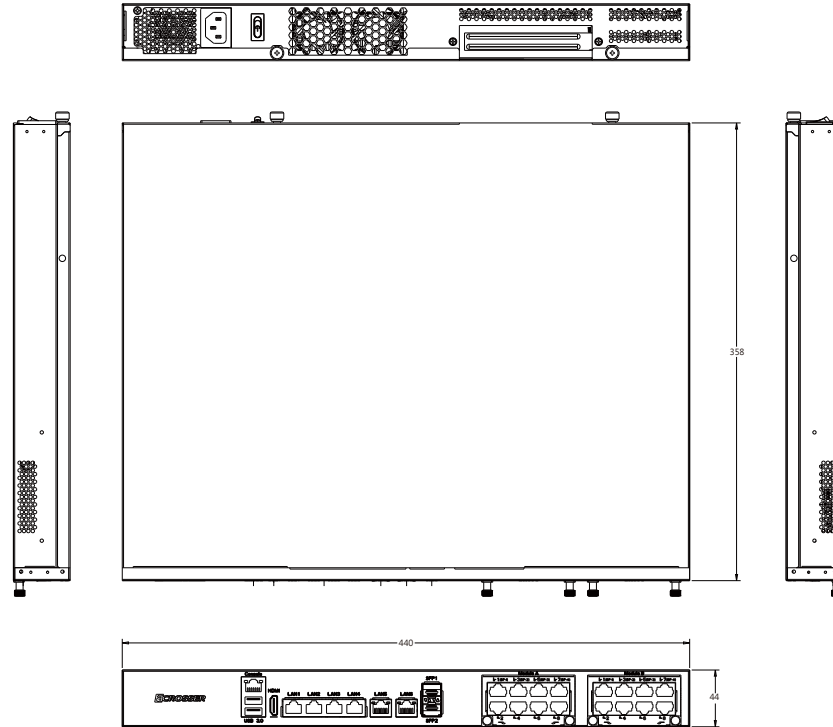
Storage

HDD Bay	2 x 2.5" HDD Bay
mSATA	1 x mSATA socket
CF	1 x CFAST socket

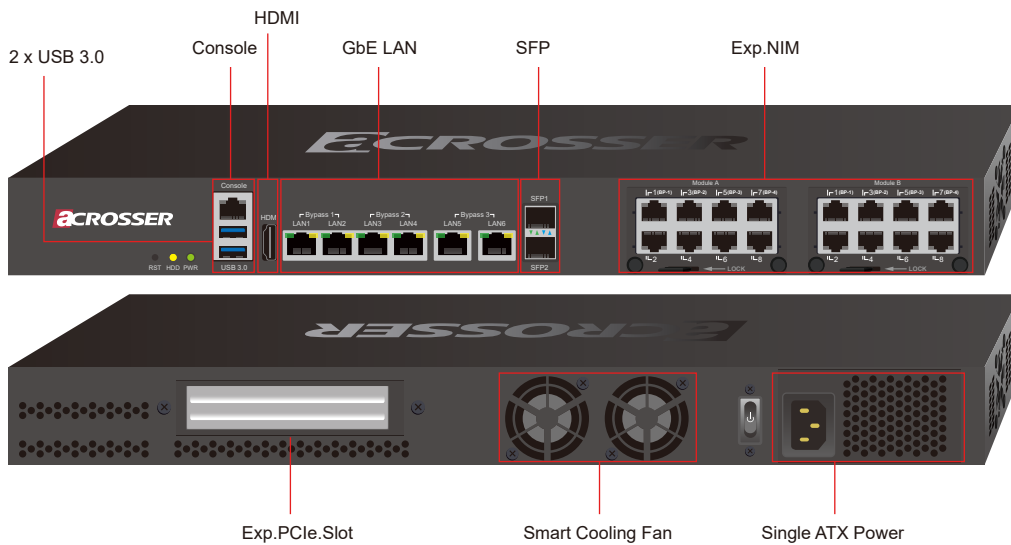
I/O

Console port	1 x Serial console (RJ-45)
USB port	2 x USB 3.0 (front-side)
Exp. NIM	1/2 x Exp. NIM
Exp. PCIe slot	1 x Exp. PCIe x8 slot

Dimensions



I/O Connectors



ANR-SKB2Nx-ACN

Packing List

- ANR-SKB2Nx-ACN-system x 1
- SATA cable x 2
- CD utility x 1
- Console cable (RJ-45 to DB9) x 1
- EU power cord x 1
- Rack bracket x 1
- Box packing x 1
- Screw for bracket (for rack + HDD bracket) x 14

Ordering Information

ANR-SKB2N1-ACN	Networking 1U Rackmount w/ Intel® C236 PCH, 6x GbE LANs w/Bypass, 2x 1G Fiber 1 x Exp. NIM Single ATX PSU
ANR-SKB2N2-ACN	Networking 1U Rackmount w/ Intel® C236 PCH, 6 x GbE LANs w/Bypass, 2x 1G Fiber 2 x Exp. NIM Single ATX PSU

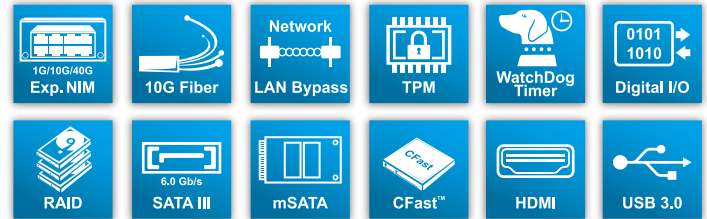
ANR-C236N1- series

Networking 1U Rackmount Intel® PCH C236 + Kabylake Platform, 1 Exp. NIM, 2 SFP+, 12 GbE LANs & 1+1 Redundant PSU



Features

- Intel® C236 Platform
- Intel® Xeon® E3-1275 v6
- Intel® 7th Gen CPU Kabylake-S Core™ i7/i5/i3
- 4 x UDIMM DDR4-2400, ECC/non-ECC, (up to 64GB)
- 1 x Exp. NIM (1G/10G/40G Fiber/Copper/LAN Bypass)
- 2 x SFP+ (10G Fiber)
- 12 x GbE Copper (4-pair bypass) & 1 Mgmt. port
- 2 x 2.5" Hot-swappable (RAID 0/1), 1 x mSATA & 1 x CFAST
- 3 x Smart cooling fan
- 1+1 Redundant PSU



Others

Battery	Lithium Battery, 3V 220mAH (CR2032)
Hardware Monitoring	CPU Volt. CPU & SYS Temp. FAN Speeds
Security & Mgmt.	TPM 1.2 (default) / 2.0 (Optional) IPMI 2.0 Compliance (by project) Chassis Intrusion Detection

Power Requirement

Power Supply Unit	1+1 Redundant PSU (250-300W) 100-240VAC
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Software

OS Support	Linux Kernel 4.4 or above, (64-bit)
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Mechanical & Environment

Dimensions	440 (W) x 44 (H) x 500 (D) mm
Operating Temp.	0~ 40°C (32~104°F)
Storage Temp.	-20~80°C (-4~176°F)
Relative Humidity	0 to 90% @40°C, non-condensing
Certifications	CE, FCC Class A, RoHS 2, cULus

Model Name

ANR-C236N1-K2D0T	Networking 1U Rackmount, Intel® C236 PCH + Kabylake platform, .1x Exp. NIM (1G/10G/40G, Fiber/Copper/LAN Bypass) .12x GbE LANs (4-pair bypass) + 1x Mgmt. .2x SFP+ (10G Fiber) .1+1 Redundant PSU
ANR-C236N1-K2D00	Networking 1U Rackmount, Intel® C236 PCH + Kabylake platform, .1x Exp. NIM (1G/10G/40G, Fiber/Copper/LAN Bypass) .12x GbE LANs (4-pair bypass) + 1x Mgmt. .1+1 Redundant PSU
ANR-C236N1-K1D00	Networking 1U Rackmount, Intel® C236 PCH + Kabylake platform, .1x Exp. NIM (1G/10G/40G, Fiber/Copper/LAN Bypass) .12x GbE LANs (4-pair bypass) + 1x Mgmt. .Single PSU,

Specification

System

CPU	Intel® Xeon® E3-1275 v6 Intel® 7 th Gen CPU Kabylake-S Core™ i7-7700 Intel® 7 th Gen CPU Kabylake-S Core™ i5-7500 Intel® 7 th Gen CPU Kabylake-S Core™ i3-7101E
Chipset	Intel® PCH C236
Memory	4 x 288-pin UDIMM DDR4-2400, ECC/non-ECC, (up to 64GB)
BIOS	AMI
WatchDog Timer	Software programmable 0~255 sec.

Video

Video Interface	HDMI 1.4
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Ethernet

Chipset	Intel® I210/I350 (10/100/1000Mbps), LAN[1:8] / LAN[9:12] Intel® X710-BM2 (10G Fiber), SFP+[1:2]
Connector	12x GbE Copper (RJ-45) 2x 10G Fiber (SFP+)
LAN bypass	4-pair

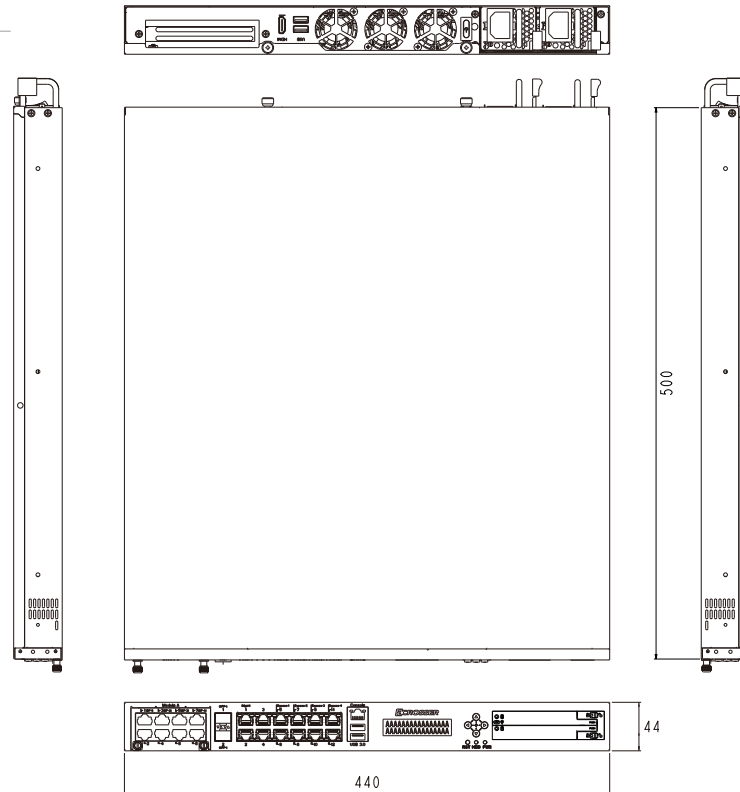
Storage

HDD Bay	2 x 2.5" SATA-III Hot-swappable (S/W RAID 0/1)
mSATA	1 x mSATA socket (support full-size module)
CFAST	1 x CFAST socket

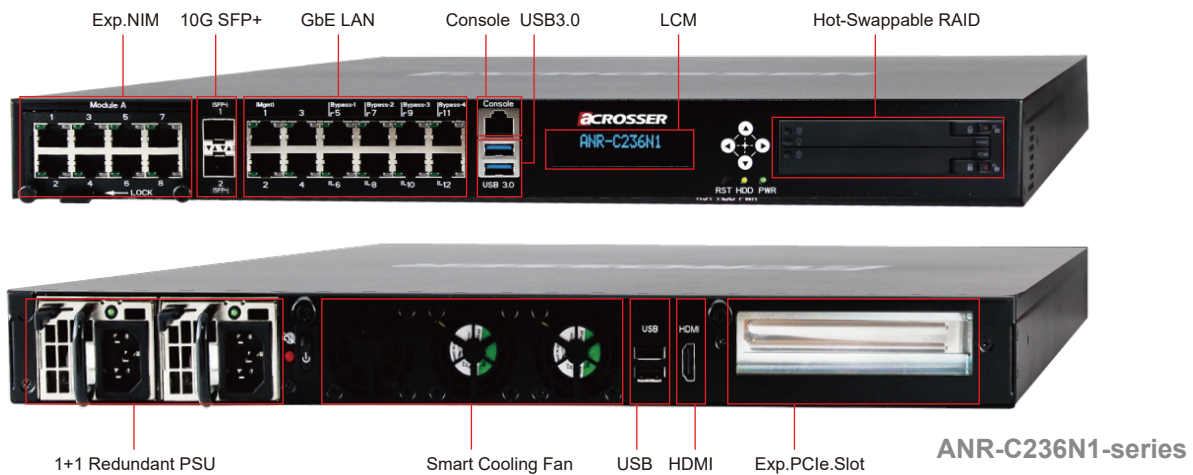
I/O

Console port	1 x Serial console (RJ-45)
USB port	2 x USB 3.0 (front-side) 2 x USB 2.0 (rear-side)
LCM	16 x 2 characters LCM with 4-key button
GPIO	8-bit GPIO (4-In, 4-Out), on-board pin header
Exp. NIM	1 x Exp. NIM (1G/10G/40G, Fiber/Copper/LAN Bypass)
Exp. PCIe slot	1 x Exp. PCIe slot
OPMA slot	1 x OPMA slot (for IPMI 2.0 module, by project)

Dimensions



I/O Connectors



Packing List

- ANR-C236N1 series system x 1
- SATA cable x 2
- CD utility x 1
- Console cable (RJ-45 <-> DB9) x 1
- USA / EU / JPN / UK / AS / NZS / SA / India power cord x 2
- Rack bracket x 1
- Box packing x 1
- Screw pack x 1
- Slide Rail x 1

Ordering Information

ANR-C236N1-K2D0T	Networking 1U Rackmount Intel® C236 PCH + Kabylake platform 1 Exp. NIM, 12 GbE LANs + 1 Mgmt., 2 SFP+ 1+1 Redundant PSU
ANR-C236N1-K2D00	Networking 1U Rackmount Intel® C236 PCH + Kabylake platform, 1 Exp. NIM, 12 GbE LANs + 1 Mgmt., 1+1 Redundant PSU
ANR-C236N1-K1D00	Networking 1U Rackmount Intel® C236 PCH + Kabylake platform 1 Exp. NIM, 12 GbE LANs + 1 Mgmt., Single PSU

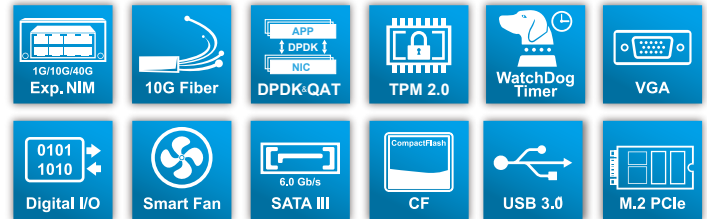
ANR-EP3KN1-series

1U Rackmount IoT Gateway/Network Server AMD Snowy Owl EPYC™ 3000 Platform, 4/3 Exp. NIMs & 1+1 Redundant PSU



Features

- AMD Snowy Owl EPYC™ 3000 SoC
- 8/4 x UDIMM DDR4-2666/2400
- 4/3 x Exp. NIMs (1G/10G/40G, Fiber/Copper/LAN Bypass)
- 1 x Management port
- 2 x 10G Fiber (SFP+)
- 2 x M.2 NVMe
- 3 x Smart Cooling Fan
- 1+1 Redundant PSU / 1 x Single PSU



Specification

System

CPU	AMD Snowy Owl EPYC™ 3451 (16C, 2.15G) AMD Snowy Owl EPYC™ 3351 (12C, 1.90G) AMD Snowy Owl EPYC™ 3251 (8C, 2.50G) AMD Snowy Owl EPYC™ 3151 (4C, 2.70G)
Chipset	SoC
Memory	ANR-EP3KN1-16/12 (4 NIMs SKU) 8 x UDIMM DDR4-2666/2400 ANR-EP3KN1-08/04 (3 NIMs SKU) 4 x UDIMM DDR4-2666/2400
BIOS	AMI
WatchDog Timer	Software programmable 0~255 sec.

Video

Video Interface	VGA
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Ethernet

LAN bypass	Exp. NIMs supported
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Storage

HDD Bay	ANR-EP3KN1-16/12 (4 NIMs SKU) 4 x 2.5" / 2 x 3.5" SATA-III Hot-swappable ANR-EP3KN1-08/04 (3 NIMs SKU) 2 x 2.5" / 2 x 3.5" SATA-III Hot-swappable
M.2	2 x M.2 M-Key support NVMe (4 NIMs SKU only)
CF/CFast	1 x CF socket (CFast for optional)

I/O

Console port	1 x Serial console (RJ-45) 1 x USB console (Micro-USB)
USB port	2 x USB 3.0 (front-side)
LCM	Graphic LCM
GPIO	8-bit GPIO (4-In, 4-Out), on-board pin header
Exp. NIM	4/3 x Exp. NIMs (1G/10G/40G, Fiber/Copper/LAN Bypass)
Exp. PCIe slot	1 x Exp. PCIe Gen3 [16X] slot (FHFL)

Mini PCIe	LTE module supported (optional)
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Others

Battery	Lithium Battery, 3V 220mAH (CR2032)
Hardware Monitoring	CPU Volt. CPU & SYS Temp. FAN Speeds
Security & Mgmt.	TPM 2.0 (Infineon chipset) Chassis Intrusion Detection
DDPK	Support DDPK

Power Requirement

Power Supply Unit	ANR-EP3KN1-16/12 (4 NIMs SKU) 1+1 Redundant Platinum PSU (400W) 100-240VAC ANR-EP3KN1-08/04 (3 NIMs SKU) 1 x Single PSU (300W)
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Software

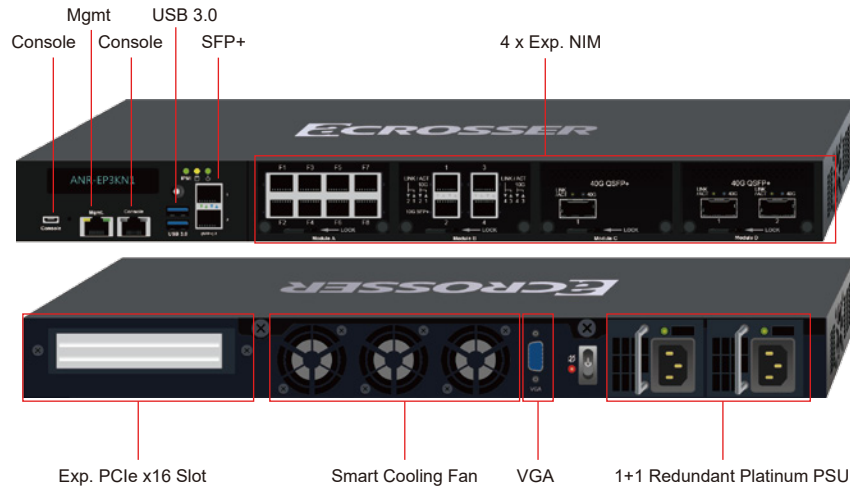
OS Support	Linux Kernel 4.4 or above(64-bit)
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Mechanical & Environment

Dimensions	440(W) x 44(H) x 550(D) mm
Operating Temp.	0~ 40°C (32~104°F)
Storage Temp.	-20~80°C (-4~176°F)
Relative Humidity	0 to 90% @40°C, non-condensing
Certifications	CE, FCC Class A, RoHS 2, cULus

Model Name

ANR-EP3KN1-16/12	.1U Rackmount IoT Gateway/Network Server .AMD Snowy Owl EPYC™ 3000 SoC .4/3 x Exp. NIM (1G/10G/40G, Fiber/Copper/LAN Bypass)
ANR-EP4KN1-08/04	.1 x Management port .2 x M.2 NVMe .1+1 Redundant PSU (400W)/1 x Single PSU (300W)



Packing List

- ANR-EP3KN1 system x 1
- SATA cable x 2
- CD utility x 1
- RJ45 console cable (RJ45 <-> DB9) x 1
- USB console cable (Micro-B <-> Type A) x 1
- USA / EU / JPN / UK / AS / NZS / SA / India power cord x 2
- Rack bracket x 1
- Box packing x 1
- Screw pack x 1
- Slide Rail x 1

Ordering Information

ANR-EP3KN1-16/12	1U Rackmount IoT Gateway/Network Server, AMD Snowy Owl EPYC™ 3000 SoC, 4x Exp. NIM, 1xMgmt., 4 SATA-III, 2 M.2 NVMe, 1+1 Redundant Platinum PSU
ANR-EP3KN1-08/04	1U Rackmount IoT Gateway/Network Server, AMD Snowy Owl EPYC™ 3000 SoC, 3x Exp. NIM, 1xMgmt., 2 SATA-III, 1 Single PSU

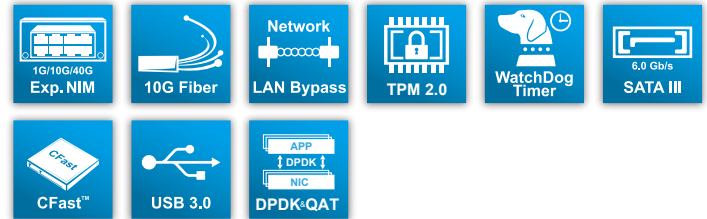
ANR-DNV3N3-series

1U Rackmount IoT Gateway/Network Micro Server Intel® Denverton Platform, 1 Exp. NIM, & 1U Redundant PSU



Features

- Intel® Denverton C3000 Platform
- 4~16 core SoC options
- 4 x UDIMM DDR4
- 1 x Exp. NIM (1G/10G/25G/40G Fiber/Copper/LAN Bypass)
- 1 x Mgmt. port (Reserved)
- 3 x 2.5" Hot-swappable(Drive Bay), 1 x CFast
- 2 x smart cooling fan
- 1+1 Redundant PSU



Others

Battery	Lithium Battery, 3V 220mAh (CR2032)
Hardware Monitoring	CPU Volt. CPU & SYS Temp. FAN Speeds
Security & Mgmt.	TPM 2.0 (Infineon chipset) Chassis Intrusion Detection
QAT & DPDK	Support QAT & DPDK

Power Requirement

Power Supply Unit	1+1 Redundant ATX PSU (280W) 100-240VAC
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Software

OS Support	Linux Kernel 4.8 and above, (64-bit)
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Mechanical & Environment

Dimensions	430 (W) x 44 (H) x 400 (D) mm
Operating Temp.	0~ 40°C (32~104°F)
Storage Temp.	-20~80°C (-4~176°F)
Relative Humidity	0 to 90% @40°C, non-condensing
Certifications	CE, FCC Class A, RoHS 2, cULus

Model Name

ANR-DNV3N3	1U Rackmount IoT Gateway/Network Micro Server .Intel® Denverton-NS platform .1 x Exp. NIM (1G/10G/25G/40G,Fiber/Copper/LAN Bypass) .9 x GbE, 2~4 x SFP+ .ATX or 1+1 Redundant PSU
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Specification

System

CPU	Intel® Atom® C3958 Processor Intel® Atom® C3858 Processor Intel® Atom® C3758 Processor Intel® Atom® C3558 Processor
Chipset	Intel® Denverton SoC
Memory	4 x ECC DIMM DDR4
BIOS	AMI
WatchDog Timer	Software programmable 0~255 sec.

Video

Video Interface	VGA
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Ethernet

Chipset	Intel® I210, I211, X553
Connector	8 x GbE Copper (RJ-45)(optional 4xPoE) 1 x GbE/Management port(Reserved) 1 x GbE Fiber(SFP) 2/4 x SFP+(C3558/C3758 or above)
LAN bypass	2-pairs

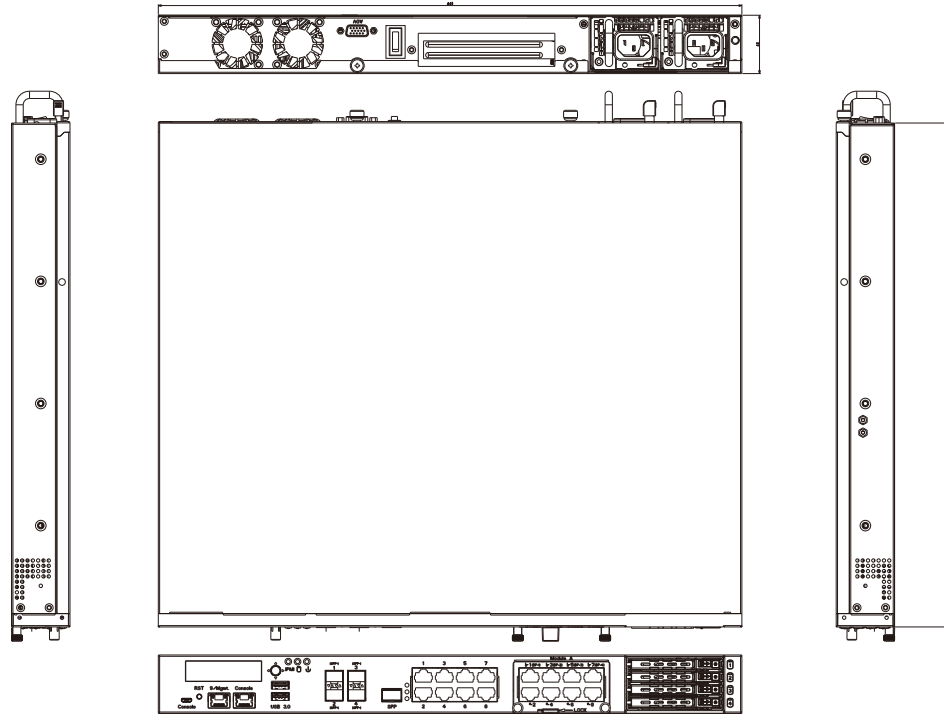
Storage

HDD Bay	3 x 2.5" SATA-III Hot-swappable(Drive bay)
CFast	1 x CFast socket

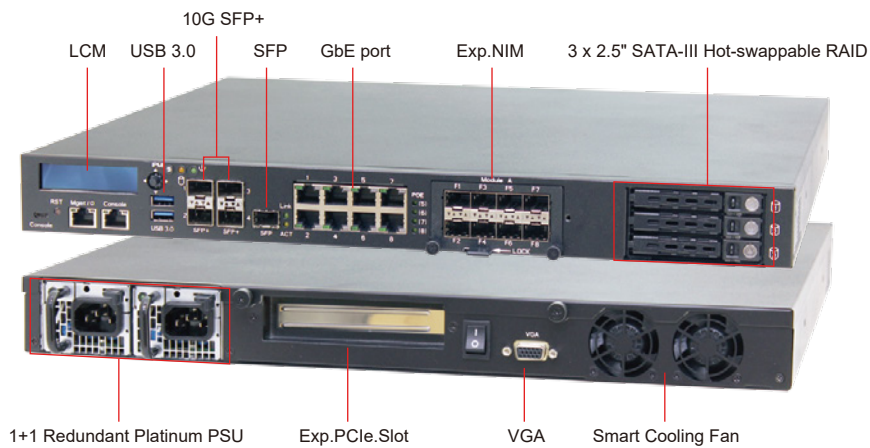
I/O

Console port	1 x Serial console (RJ-45)
USB port	1 x USB console (micro-USB)
LCM	Graphic LCM
GPIO	8 bit GPIO (4-In, 4-Out), on-board pin header
Exp. NIM	1 x Exp. NIM Hot-swappable (Not for C3558) (1G/10G/25G/40G, Fiber/Copper/LAN Bypass)
Expansion	1 x Exp. PCIe Gen3 x8(FHHL)(Not for C3558) (Not available if NIM is used)

Dimensions



I/O Connectors



ANR-DNV3N3-series

Packing List

- ANR-DNV3N3 series system x 1
- Console cable (RJ-45 to Serial) x 1
- Rackmount bracket
- CD with Driver and Manual
- USA / EU / JPN / UK / AS / NZS / SA / India power cord x 1
- Screw Pack x 1
- Screw Pack

Ordering Information

ANR-DNV3N3-04	Intel Atom C3558 (4-core) Soc, 9 GbE Copper (2-pair bypass), 1 SFP and 2 SFP+, 2 USB 3.1, 3x2.5" SATA III, 1 VGA and ATX PSU.
ANR-DNV3N3-08P	Intel Atom C3758 (8-core) Soc, 9 GbE Copper (2-pair bypass & 4xPoE), 1 SFP and 4 SFP+1NIM/1 PCIe x8 Exp.Slot, 2 USB 3.1, 3x2.5" SATAIII, 1 VGA, and ATX PSU.
ANR-DNV3N3-12R	Intel Atom C3558 (12-core) Soc, 9 GbE Copper (2-pair bypass), 1 SFP and 4 SFP+, 1NIM/1 PCIe x8 Exp.Slot, 2 USB 3.1, 3x2.5" SATAIII, 1 VGA, and 300W Redundant PSU.
ANR-DNV3N3-16R	Intel Atom C3958 (16-core) Soc, 9 GbE Copper (2-pair bypass), 1 SFP and 4 SFP+, 1NIM/1 PCIe x8 Exp.Slot, 2 USB 3.1, 3x2.5" SATAIII, 1 VGA, and 300W Redundant PSU.

ANR-DNV3N3-8C

1U Rackmount IoT Gateway/Network Micro Server Intel® Denverton Platform With 1 Exp. NIM



Features

- Intel® Denverton C3000 Platform
- 8 core SoC
- 2 x UDIMM DDR4
- 1 x Exp. NIM (1G/10G/25G/40G Fiber/Copper/LAN Bypass)
- 1 x 2.5"(Drive Bay), 1 x CFast
- 2 x smart cooling fan



Specification

System

CPU	Intel® Atom® C3758 Processor
Chipset	Intel® Denverton SoC
Memory	2 x ECC DIMM DDR4
BIOS	AMI
WatchDog Timer	Software programmable 0~255 sec.

Ethernet

Chipset	Intel® I210, I211, X553
Connector	8 x GbE Copper (RJ-45) 4 x SFP+

Storage

HDD Bay	1 x 2.5" SATA-III(brive bay)
CFast	1 x CFast socket

I/O

Console port	1 x Serial console (RJ-45)
GPIO	8 bit GPIO (4-In, 4-Out), on-board pin header
Exp. NIM	1 x Exp. NIM Hot-swappable (1G/10G/25G/40G, Fiber/Copper/LAN Bypass)

Others

Battery	Lithium Battery, 3V 220mAH (CR2032)
Hardware Monitoring	CPU Volt. CPU & SYS Temp. FAN Speeds
Security	Chassis Intrusion Detection
QAT & DDPK	Support QAT & DDPK

Power Requirement

Power Supply Unit	ATX PSU 100-240VAC
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Software

OS Support	Linux Kernel 4.8 and above, (64-bit)
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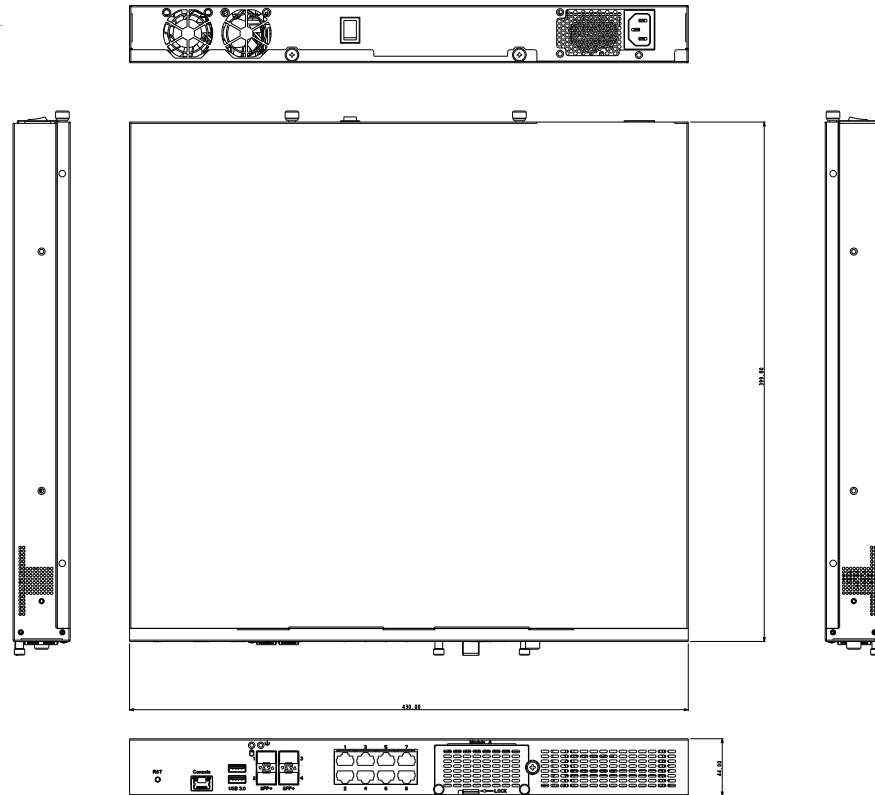
Mechanical & Environment

Dimensions	430 (W) x 44 (H) x 400 (D) mm
Operating Temp.	0~ 40°C (32~104°F)
Storage Temp.	-20~80°C (-4~176°F)
Relative Humidity	0 to 90% @40°C, non-condensing
Certifications	CE, FCC Class A, RoHS 2, cULus

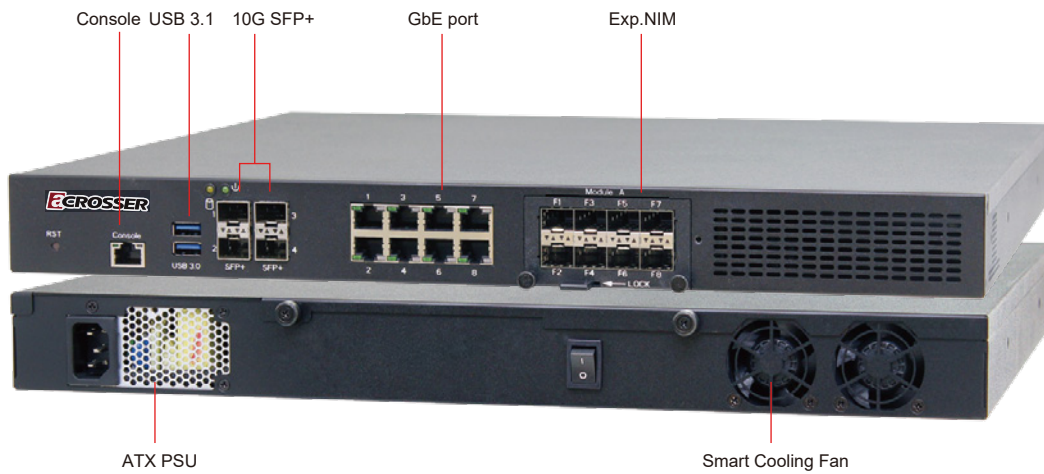
Model Name

ANR-DNV3N3-8C	1U Rackmount IoT Gateway/Network Micro Server .Intel® Denverton-NS platform .1 x Exp. NIM (1G/10G/25G/40G,Fiber/Copper/LAN Bypass) .8 x GbE, 4 x SFP+ .ATX PSU
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Dimensions



I/O Connectors



ANR-DNV3N3-8C

Packing List

- ANR-DNV3N3-8C system x 1
- Console cable (RJ-45 to Serial) x 1
- Rackmount bracket
- CD with Driver and Manual
- USA / EU / JPN / UK / AS / NZS / SA / India power cord x 1
- Screw Pack x 1
- Screw Pack

Ordering Information

ANR-DNV3N3-8C Intel Atom C3758 (8core) Soc, 8 GbE Copper , 4 SFP+, 1NIM, 2 USB 3.1, 1x2.5" SATA III, ATX PSU.

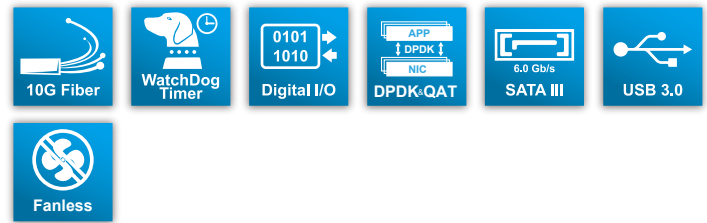
AND-DNV3N1-series

Intel® Denverton Platform, Desktop Networking Appliance



Features

- Intel® Denverton C3000 Platform
- 1 x SO-DIMM DDR4
- Fanless Design



Others

Battery	Lithium Battery, 3V 220mAH (CR2032)
Hardware Monitoring	CPU Volt. CPU & SYS Temp.
Security	TPM 2.0 (Infineon chipset)
QAT & DPDK	Support QAT & DPDK

Power Requirement

Power Supply Unit	12V(40W)
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Software

OS Support	Linux Kernel 4.8 or above, (64-bit)
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Mechanical & Environment

Dimensions	250 (W) x 44 (H) x 165 (D) mm
Operating Temp.	0~ 40°C (32~104°F)
Storage Temp.	-20~80°C (-4~176°F)
Relative Humidity	0 to 90% @40°C, non-condensing
Certifications	CE, FCC Class A, RoHS 2, cULus

Model Name

AND-DNV3N1-02	Desktop Networking Appliance Intel® Denverton-NS platform 4 x GbE Copper 40W AC Adppter 1x 2.5" SSD Bay, 2x USB 2.0 1x M.2 B key socket for 4G
AND-DNV3N1-04F	Desktop Networking Appliance Intel® Denverton-NS platform 4 x GbE Copper : 2x 10GbE Fiber 40W AC adapter 1x 2.5" SSD Bay, 2x USB 3.0 1x Mini PCIe socket for WiFi 1x M.2 B key socket for 4G or SSD

Specification

System

CPU	Intel® Atom® C3308/C3558 Processor (2/4 core)
Chipset	Intel® Denverton SoC
Memory	1 x SO-DIMM DDR4
BIOS	AMI
WatchDog Timer	Software programmable 0~255 sec.

Ethernet

Chipset	Intel® I211
Connector	2 x 10GbE Fiber (SFP+) (for C3558) 4 x GbE Copper (RJ-45)
LAN Bypass	1 x pair

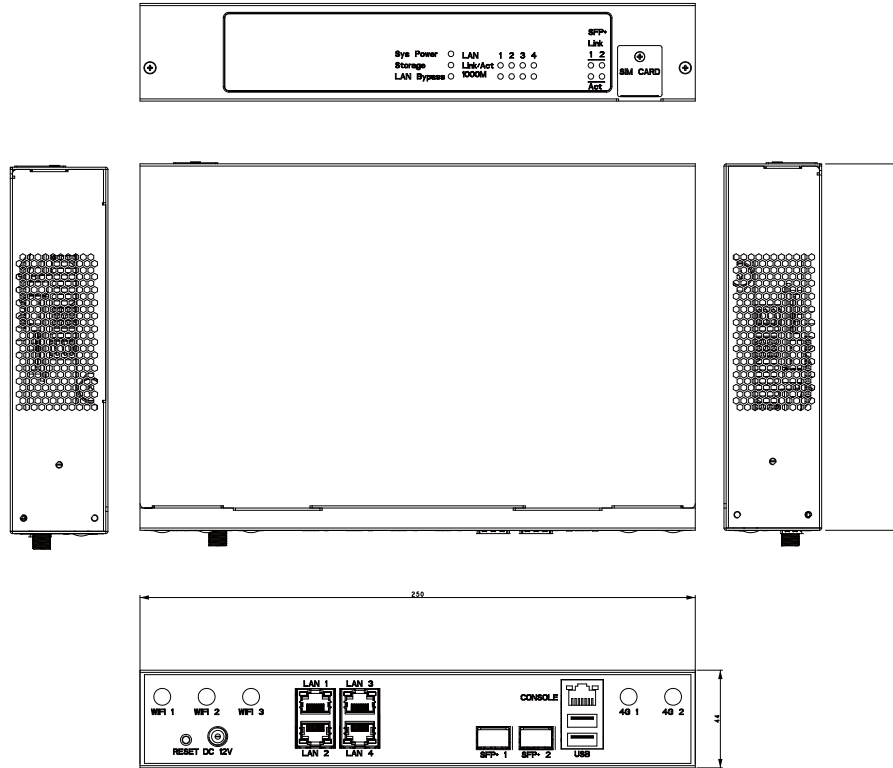
Storage

SSD Bay	1x 2.5" SSD bay
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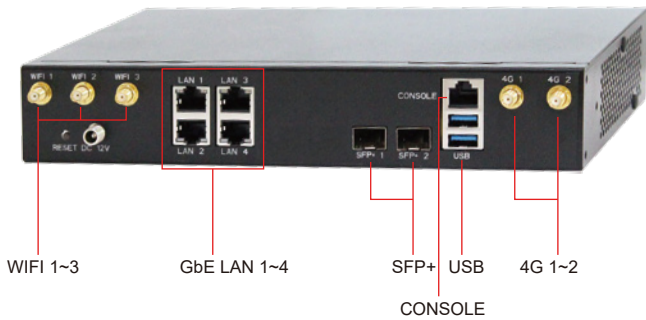
I/O

Console port	1 x Serial console (RJ-45),
USB port	2 x USB 2.0/3.0
Antenna port	4 x SMA for WLAN (IEEE 802.11a/b/g/n/ac)
GPIO	8-bit GPIO (4-In, 4-Out), on-board pin header
Expansion	1 x Mini PCIe Socket, For WiFi5 (for C3558) 1 x M.2B Socket with dual SIM sockets

Dimensions



I/O Connectors



AND-DNV3N1-series

Packing List

- AND-DNV3N1 system x 1
- SATA cable x 1
- USA / EU / JPN / UK / AS / NZS / SA / power cord x 1
- Box packing x 1
- Screw for bracket (HDD bracket) x 14

Ordering Information

AND-DNV3N1-02	Desktop Networking Appliance Intel® Denverton-NS platform 4 x GbE Copper 40W AC Adppter 1x 2.5" SSD Bay, 2x USB 2.0 1x M.2 B key socket for 4G
AND-DNV3N1-04F	Desktop Networking Appliance Intel® Denverton-NS platform 4 x GbE Copper : 2x 10GbE Fiber 40W AC adapter 1x 2.5" SSD Bay, 2x USB 3.0 1x Mini PCIe socket for WiFi 1x M.2 B key socket for 4G or SSD

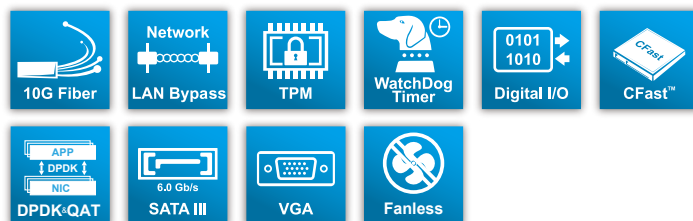
AND-DNV3N3-series

Intel® Denverton Platform, PoE Desktop Networking Appliance



Features

- Intel® Denverton C3000 Platform
- 2~8 core SoC options
- 1/2 x SO-DIMM DDR4
- 1 x 2.5" SSD, & 1 x CFAST
- smart cooling fan(C3758)
- Fanless Design (C3338, C3558)
- Dual DC-in for redundancy



Others

Battery	Lithium Battery, 3V 220mAH (CR2032)
Hardware Monitoring	CPU Volt. CPU & SYS Temp.
Security	TPM 2.0 (Infineon chipset)
QAT & DPDK	Support QAT & DPDK

Power Requirement

Power Supply Unit	12V(40 or 60W),54V(150W)for PoE
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Software

OS Support	Linux Kernel 4.8 or above, (64-bit)
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Mechanical & Environment

Dimensions	300 (W) x 44 (H) x 201 (D) mm
Operating Temp.	0~ 40°C (32~104°F)
Storage Temp.	-20~80°C (-4~176°F)
Relative Humidity	0 to 90% @40°C, non-condensing
Certifications	CE, FCC Class A, RoHS 2, cULus

Model Name

AND-DNV3N3-02/04/08	Desktop Networking Appliance Intel® Denverton-NS platform 8 x GbE Copper 2/4 x SFP+,Optional PoE AC Adapter
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Specification

System

CPU	Intel® Atom® C3758 Processor (8 core) Intel® Atom® C3558 Processor (4 core) Intel® Atom® C3338 Processor (2 core)
Chipset	Intel® Denverton SoC
Memory	1 x SO-DIMM DDR4(C3338) 2 x SO-DIMM DDR4(C3558,C3758)
BIOS	AMI
WatchDog Timer	Software programmable 0~255 sec.

Video

Video Interface	VGA
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Ethernet

Chipset	Intel® I211, X553
Connector	8 x GbE Copper (RJ-45) 2/4 x 10GbE Fiber (SFP+)for(C3558/C3758) 6 x GbE PoE Copper (RJ-45)(optional)
LAN bypass	One Pair

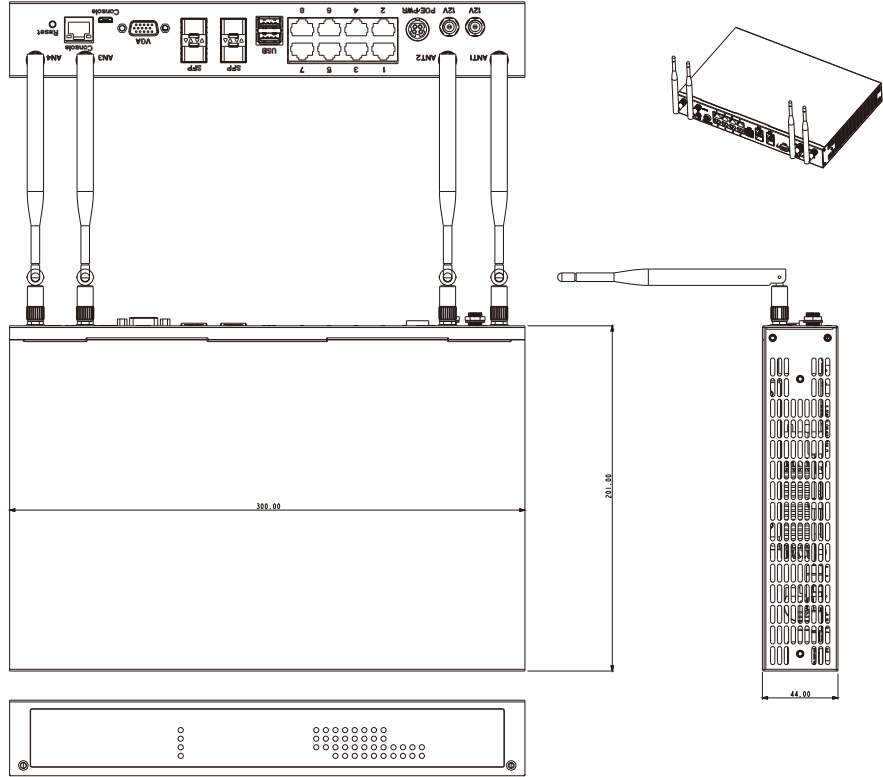
Storage

HDD Bay	1 x 2.5" SATA-III port
CFAST	1 x CFAST socket
M.2 NVME	1 x M.2 2280 socket (C3758 only)

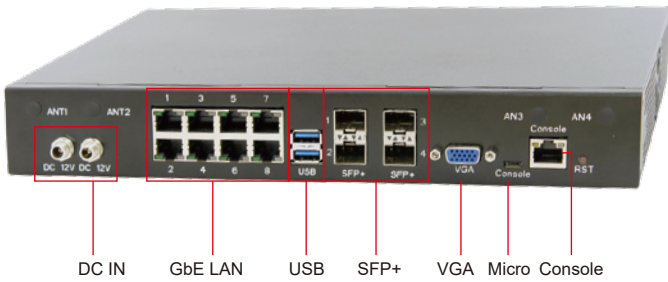
I/O

Console port	1 x Serial console (RJ-45), 1 x USB console (micro-USB)
USB port	2 x USB 3.0
Antenna port	4 x SMA for WLAN (IEEE 802.11a/b/g/n/ac)&4GLTE
GPIO	8-bit GPIO (4-In, 4-Out), on-board pin header
Expansion	2 x Mini PCIe Socket, one with SIM Socket

Dimensions



I/O Connectors



AND-DNV3N3-series

Packing List

- AND-DNV3N3 series system x 1
- SATA cable x 1
- CD utility x 1
- Console cable (RJ-45 to DB9) x 1
- USA / EU / JPN / UK / AS / NZS / SA / India power cord x 2
- Box packing x 1
- Screw for bracket (for rack + HDD bracket) x 14

Ordering Information

AND-DNV3N3-02	Intel Atom® C3338(2-core) SoC, 8GbE Copper (1-pair bypass), 2 USB 3.0, 1x2.5" SATAIII, 1xCFast, 2xmPCIe socket (for WLAN and 4G LTE), 1 VGA and 2x DC-In
AND-DNV3N3-04	Intel Atom® C3558(4-core) SoC, 8GbE Copper (1-pair bypass), 2xSFP+, 2 USB 3.0, 1x2.5" SATAIII, 1xCFast, 2x mPCIe socket (for WLAN and 4G LTE), 1 VGA and 2x 12V DC-In
AND-DNV3N3-04P	Intel Atom® C3558(4-core) SoC, 8GbE Copper (1-pair bypass & 6xPoE), 2x SFP+, 2 USB 3.0, 1x2.5" SATAIII, 1xCFast, 2x mPCIe socket (for WLAN and 4G LTE), 1 VGA and 2x 12V DC-In and 48V DC-In.
AND-DNV3N3-08	Intel Atom® C3758(8-core) SoC, 8GbE Copper (1-pair bypass), 4 SFP+, 2 USB 3.0, 1 VGA, 1x2.5" SATAIII, 1xCFast, 1xM.2(for NVME SSD) 2x mPCIe socket (for WLAN and 4G LTE), 1 VGA and 2x 12V DC-In

AND-DNV3A2/A3

Intel® Denverton Platform, Desktop Networking Appliance



Features

- Intel® Denverton C3000 Platform
- 4/8 core SoC
- 1 x SO-DIMM DDR4
- 1 x 2.5" SSD Bay
- Fanless Design (For AND-DNV3A2)



Specification

System

CPU	Intel® Atom® C3558/C3758 Processor (4/8 core)
Chipset	Intel® Denverton SoC
Memory	1 x SO-DIMM DDR4
BIOS	AMI
WatchDog Timer	Software programmable 0~255 sec.

Ethernet

Chipset	Intel® I211, I210IS
Connector	6 x GbE Copper (RJ-45) 2 x GbE Fiber (SFP) 2 x 10GbE Fiber (SFP+)

Storage

HDD Bay	1 x 2.5" SATA-III port
EMMC	Optional on board eMMC 32GB or 64GB
NVME	M.2 M key socket for 2242/2260/2280 NVME SSD (For A3)

I/O

Console port	1 x Serial console (RJ-45),
USB port	2 x USB 3.2 Gen1
Expansion	1 x M.2 Socket for optional WiFi module . 1 x M.2 B key socket for 4G/5G module, support dual SIM sockets.



Others

Battery	Lithium Battery, 3V 220mAh (CR2032)
Hardware Monitoring	CPU Volt. CPU & SYS Temp.
QAT & DDPK	Support QAT & DDPK

Power Requirement

Power Supply Unit	12V DC input 40/60W AC Adapter
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Software

OS Support	Linux Kernel 4.8 or above, (64-bit)
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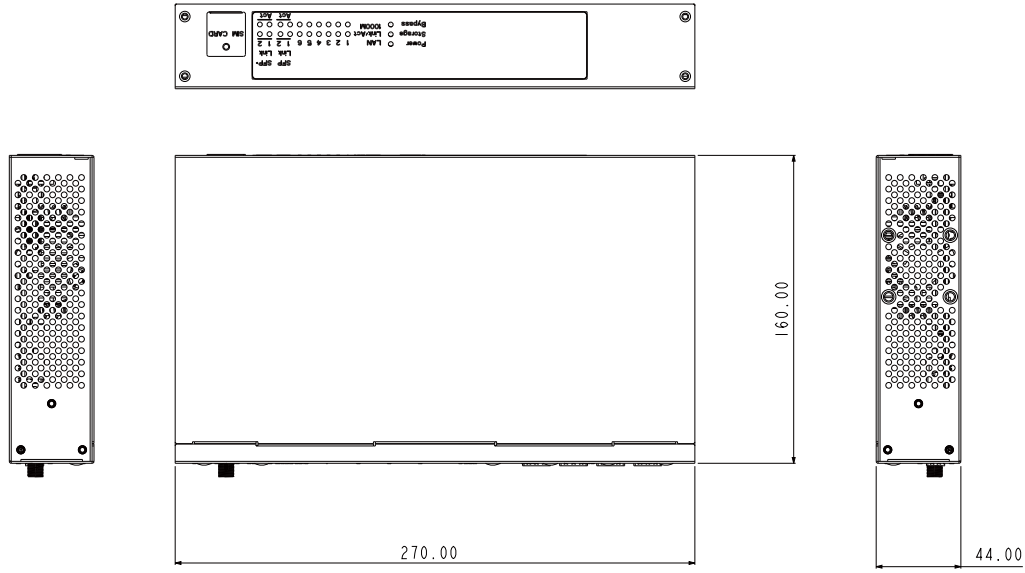
Mechanical & Environment

Dimensions	270 (W) x 44 (H) x 160 (D) mm
Operating Temp.	0~ 40°C (32~104°F)
Storage Temp.	-20~80°C (-4~176°F)
Relative Humidity	0 to 90% @40°C, non-condensing
Certifications	CE, FCC Class A, RoHS 2,

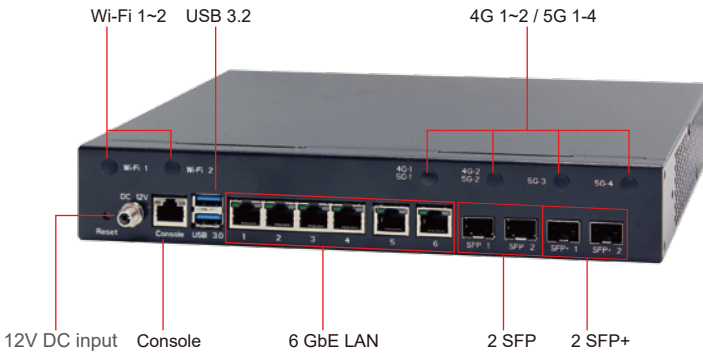
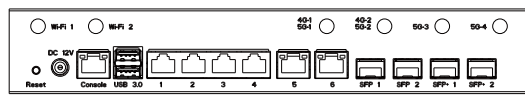
Model Name

AND-DNV3A2	Desktop Networking Appliance Intel® Atom C3558 SoC 6 x GbE Copper 2 x SFP, 2 x SFP+ 40W AC Adapter
AND-DNV3A3	Desktop Networking Appliance Intel Atom C3758 SoC 6x GbE Copper 2x SFP, 2x SFP+ 60W AC Adapter

Dimensions



I/O Connectors



AND-DNV3A2/A3

Packing List

- AND-DNV3A2/A3 system x 1
- SATA cable x 1
- USA / EU / JPN / UK / AS / NZS / SA / power cord x 1
- Box packing x 1
- Screw for bracket (HDD bracket)

Ordering Information

AND-DNV3A2	Desktop Networking Appliance Intel® Atom C3558 SoC 6 x GbE Copper 2 x SFP, 2 x SFP+ 40W AC Adapter
AND-DNV3A3	Desktop Networking Appliance Intel Atom C3758 SoC 6x GbE Copper 2x SFP, 2x SFP+ 60W AC Adapter

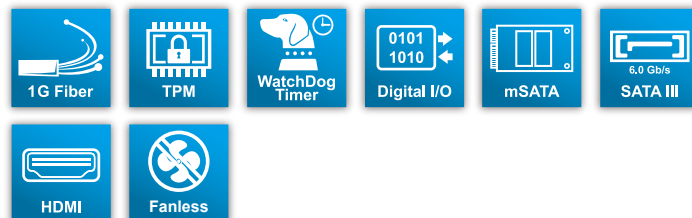
AND-EL6KE1/E2

Intel® Elkhart Lake Platform, Desktop Networking Appliance



Features

- Intel® Elkhart Lake Platform
- 4 core SoC
- 1 x SO-DIMM DDR4
- 1 x 2.5" SSD, & 1 x mSATA
- Fanless Design
- Dual DC-in for redundancy



Specification

System

CPU	Intel®Celeron® J6412 Processor (4 core)
Chipset	Intel®Elkhart Lake SoC
Memory	1 x SO-DIMM DDR4
BIOS	AMI
WatchDog Timer	Software programmable 0~255 sec.

Video

Video Interface	HDMI
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Ethernet

Chipset	Intel® I211, i210
Connector	4 x GbE Copper (RJ-45) 1 x 1GbE Fiber (SFP)
LAN bypass	None

Storage

HDD Bay	1 x 2.5" SATA-III port
mSATA	1 x mSATA socket

I/O

Console port	1 x Serial console (RJ-45)
USB port	2 x USB
GPIO	8-bit GPIO (4-In, 4-Out), Optional on-board pin header
Expansion	Mini Card Socket (PCIe + USB 2.0, full size) with SIM x1 Mini Card Socket (PCIe, half size) x1 M.2 B key socket (USB3.2 Gen1) with SIM (for E2 only)
Antenna port	6 x SMA for WLAN&4GLTE

Others

Battery	Lithium Battery, 3V 220mAH (CR2032)
Hardware Monitoring	CPU Volt. CPU & SYS Temp.
Security	Optional TPM 2.0 (Infineon chip)
Crypto	AES-NI

Power Requirement

Power Supply Unit	2x DC 12V 40W Adapter
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Software

OS Support	Linux Kernel 4.8 or above, (64-bit)
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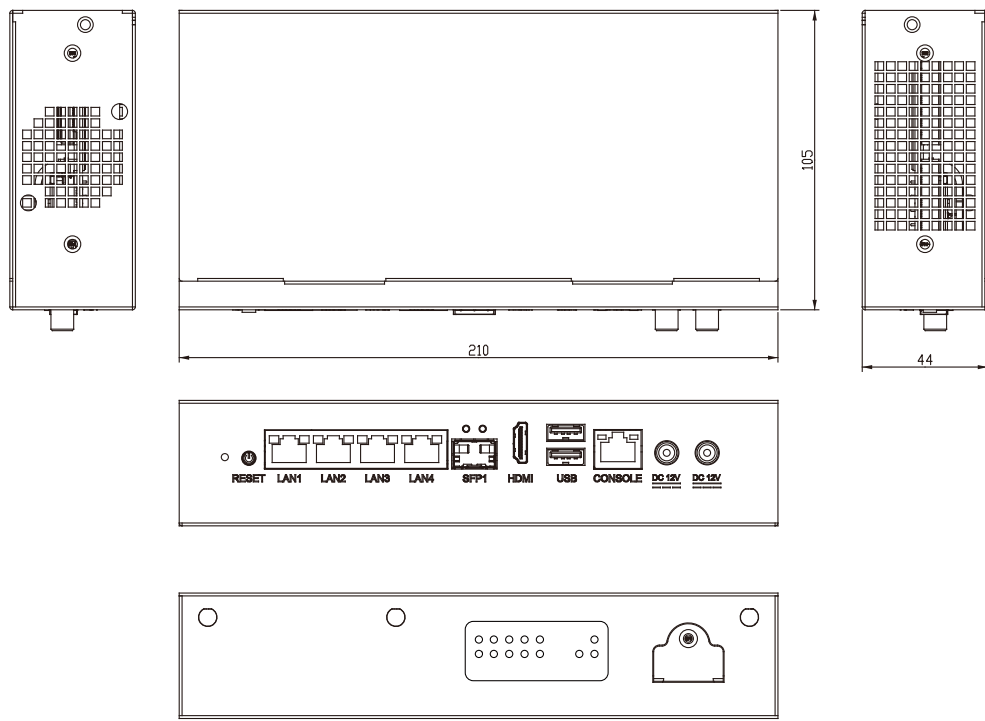
Mechanical & Environment

Dimensions	210 (W) x 44 (H) x 105 (D) mm
Operating Temp.	0~ 40°C (32~104°F)
Storage Temp.	-20~80°C (-4~176°F)
Relative Humidity	0 to 90% @40°C, non-condensing
Certifications	CE, FCC Class A, RoHS 2

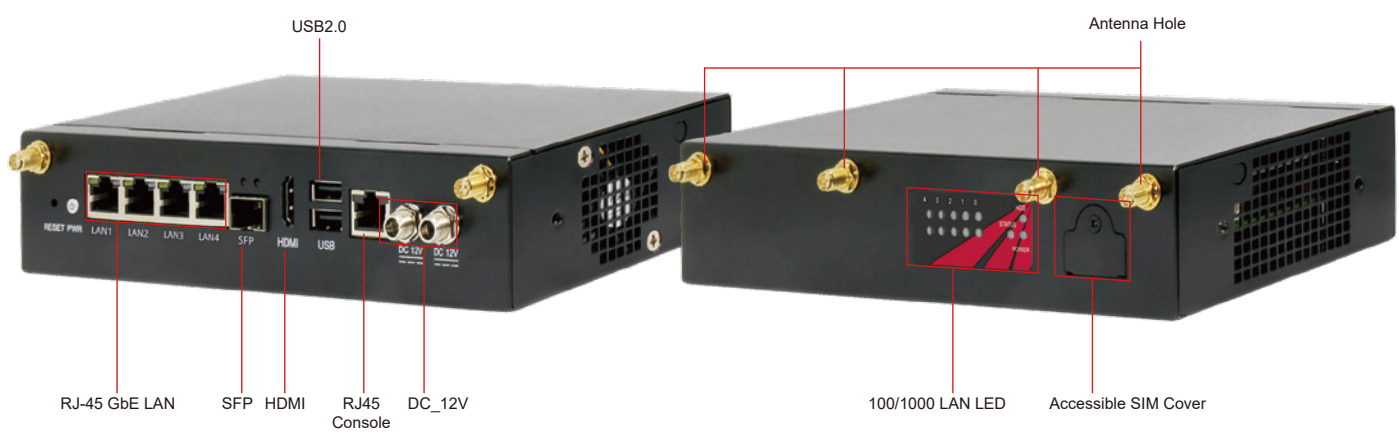
Model Name

AND-EL6KE1	Desktop Networking Appliance Intel® Elkhart Lake platform 4 x GbE Copper 1 x SFP, 2 x DC 12V Adapter Options for WiFi and 4G
AND-EL6KE2	Desktop Networking appliance Intel Elkhart Lake platform 4 x GbE copper, 1 x SFP 2 x DC 12V adapter Options for WiFi, 1 x 4G + 1 x 5G

Dimensions



I/O Connectors



AND-EL6KE1/E2

Packing List

- AND-EL6KE1/E2 series system x 1
- SATA kit x 1
- USA / EU / JPN / UK / AS / NZS / SA / India power cord x 2
- AC adapter
- Screw for bracket (for rack + HDD bracket) x 14

Ordering Information

AND-EL6KE1	Desktop Networking Appliance Intel® Elkhart Lake platform 4x GbE Copper 1x SFP, 1x DC 12V Adapter Options for WiFi and 4G
AND-EL6KE2	Desktop Networking appliance Intel Elkhart Lake platform 4x GbE copper, 1x SFP 2x DC 12V adapter Options for WiFi, 1x 4G + 1x 5G

AND-APL1E1/E2

Intel® Apollo Lake Networking Microbox



Features

- Intel® Apollo Lake Celeron N3350, Atom E3940
- On board 2GB LPDDR4 memory, Optional 1x SO-DIMM slot
- 4 x GbE, 2 x USB 3.2 Gen1
- 1 x Mini PCIe Expansion
- 1 x 2.5" SATA 3 bay, On board 8GB eMMC



CE FC

Specification

System

CPU	1. Intel® Atom®E3940 Quad-core, clock speed 1.6GHz 2. Intel® Celeron® N3350, Dual-core, clock speed 2.41GHz
Memory	On board 2GB LPDDR4 memory. Optional 1x DDR3L SO-DIMM slot, Max. 8GB(for E3940)
BIOS	AMI UEFI
WatchDog Timer	Software programmable 1~255 sec.

Video

Graphic Controller	Integrated graphics support for processors with Intel Graphics Technology
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Ethernet

Chipset	4 x Intel® i 211
Connector	4 x GbE RJ-45 with LED
LAN bypass	1 pair Bypass (for N3350)

Storage

SATA	1 x SATAIII port
EMMC	On board 8GB eMMC
HDD Bay	1 x 2.5" HDD Bay

I/O

Expansion	1 x Mini PCIe socket with SIM socket (for E3940)
Console Port	1 x Console (1 x RJ45)
USB	2 x USB 3.2 Gen1
Antenna Hole	Optional 2 x SMA for Wi-Fi (or 4G) (for E3940)

Power Requirement

Power Input	DC in 12V / Adapter
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Software

OS Support	Linux Kernel 4.1.27
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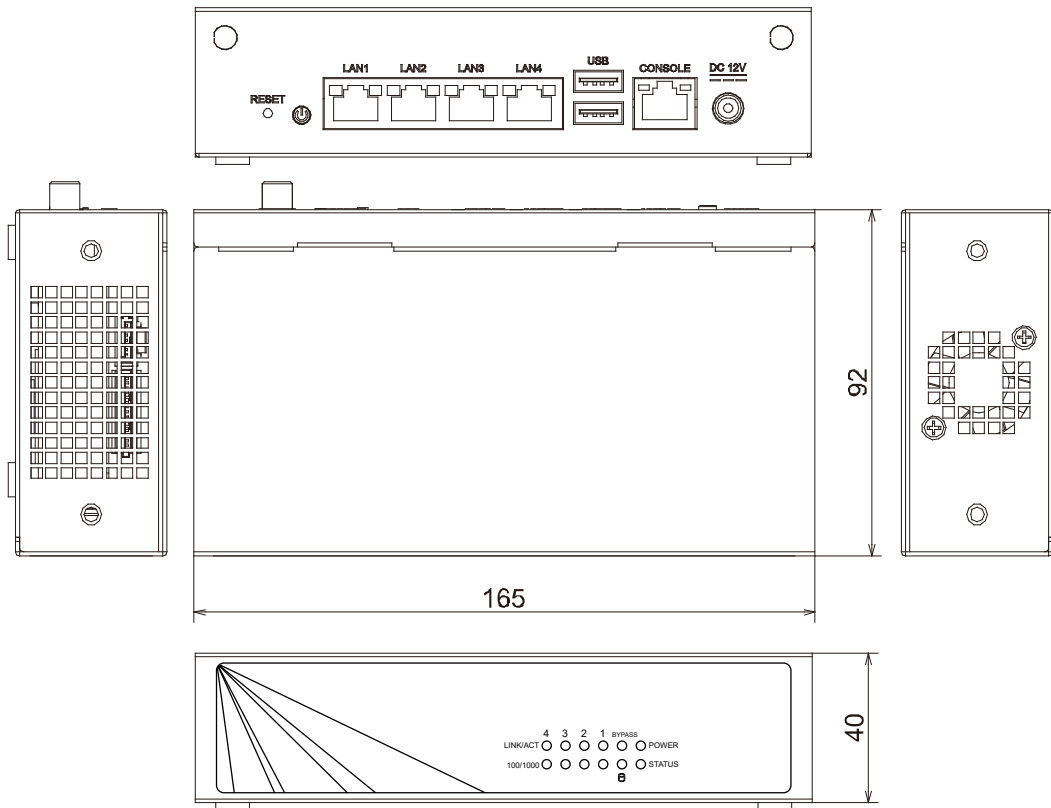
Mechanical & Environment

Dimension	165 x 92 x 40 mm
Operating Temp.	0~40°C
Storage temp.	-20~80°C

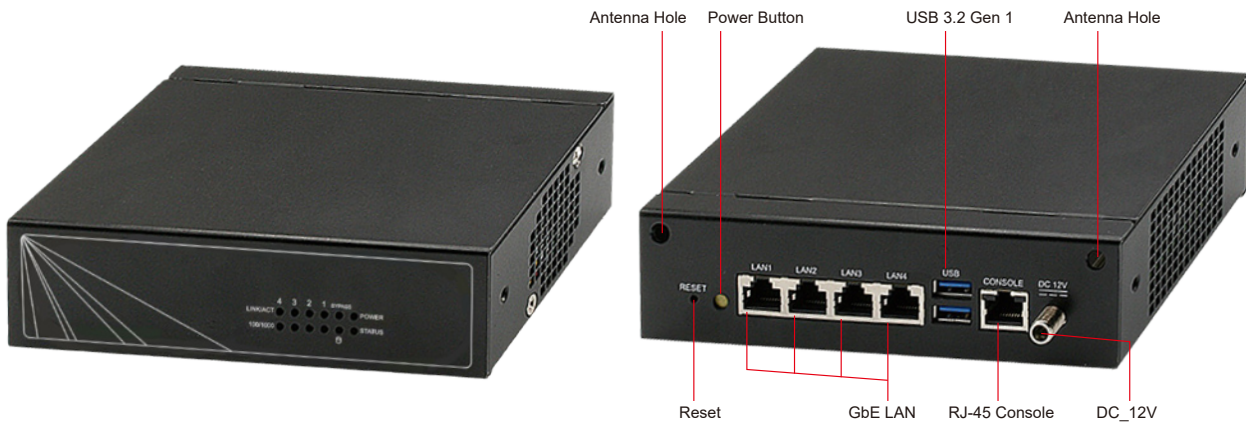
Model

AND-APL1E1	Intel Celeron N3350 Dual Core SoC 4x GbE, 1 pair LAN Bypass 2x USB 3.2 Gen1, 1x SATA3,
AND-APL1E2	Intel Atom E3940 Quad Core SoC 4x GbE, 2x USB 3.2 Gen1, 1x SATA3, 1x mPCIe for WiFi or 4G

Dimension



I/O Connectors



Packing List

- 1 x AND-APL1Ex system
- 1 x SATA Cable
- 1 x SATA Power Cable
- 1 x Power Adaptor
- 1 x Power Cord (Option for USA/UK/EU/JPN/AU/RSA)

Ordering Information

AND-APL1E1	Intel Celeron N3350 Dual Core SoC 4x GbE, 1 pair LAN Bypass 2x USB 3.2 Gen1, 1x SATA3,
AND-APL1E2	Intel Atom E3940 Quad Core SoC 4x GbE, 2x USB 3.2 Gen1, 1x SATA3, 1x mPCIe for WiFi or 4G

Embedded Boards

Acrosser's Embedded Boards products include industrial Half-Size card, Type 6 module, Type 7 Module, Type 10 module, AMD COM, and a small form factor COM Express Basic board.

IoT Factory Automation system

IoT-enabled Automation Solution



Digital
Signage



KIOSK



HOME
Automation



Industrial

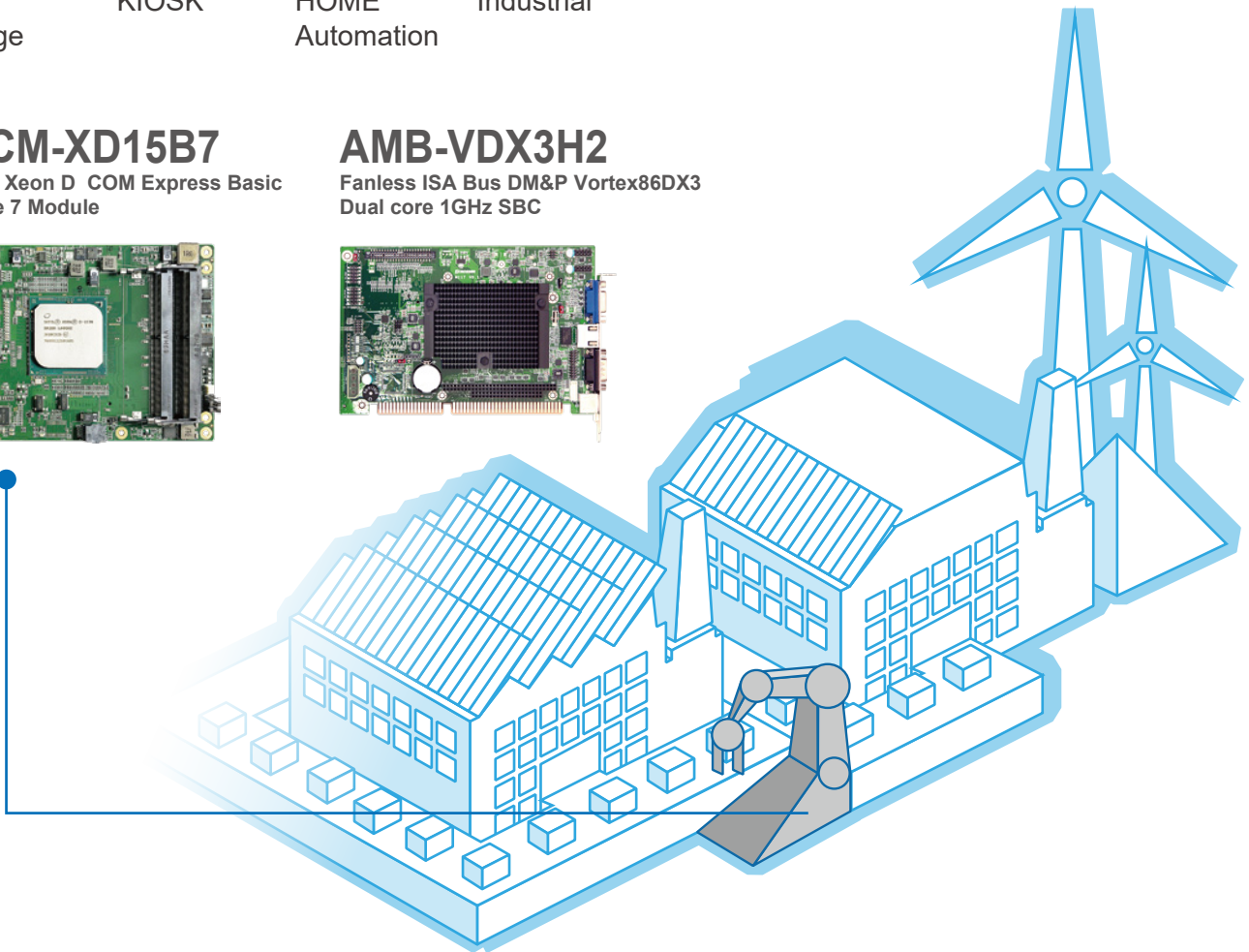
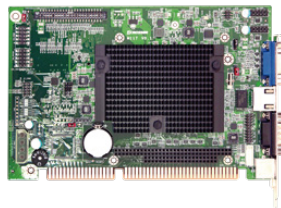
ACM-XD15B7

Intel Xeon D COM Express Basic
Type 7 Module



AMB-VDX3H2

Fanless ISA Bus DM&P Vortex86DX3
Dual core 1GHz SBC



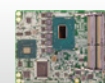
Product Matrix

Embedded Boards



Form Factor	COM Express type 10	COM Express type 7
Model Name	ACM-TGLUE0	ACM-ICLDE7
CPU	Intel®11 th Core™ I Processor	Xeon® D, LLC, up to 10c/20t CPU TDP up to 70W
Chipset	SoC	Intel Xeon D SoC
Memory	Onboard LPDDR4 4266 memory 16GB In-band ECC supported by SoC	4 x DDR4 SODIMM(Support ECC function) up to 128GB Default configuration: 4 x 32GB
Video Interface	1 x eDP, 1 x DDI port	-
E-IDE(44pin) / IDE(40pin)	-	-
SATA	2	2
CF	-	-
Expansion Slot	4 x PCI-e 3.0 Lanes	24 x PCI-e 3.0 Lanes, 4 x PCI-e 3.0 x2 Lanes
Ethernet	1 x Intel I225LM GbE Lan, supports PXE Boot	1 x Intel I210AT GbE Lan, supports PXE Boot
USB	2 x USB 3.2 Gen2, 8 x USB 2.0	4 x USB 3.2 Gen1 , 4 x USB 2.0
GPIO	8-bit Digital I/O	8-bit Digital I/O
Serial Port	2 x COM Interface (TX/RX only)	2 x COM Interface (TX/RX only)
Parallel Port	-	-
Audio	High Definition Audio interface	Intel HD Audio Channel
WatchDog Timer	0 ~ 255 seconds	1 ~ 255 seconds
Hardware Monitor	YES	YES
Page	55	56

Embedded Boards



Form Factor	COM Express type 7	COM Express type 6
Model Name	ACM-XD15B7	ACM-XE21B6
CPU	Xeon® D1548	Intel® Core i7-9850H
Chipset	Intel Xeon D SoC	Intel CM246
Memory	2 x DDR4-2400MHz, SO-DIMM, up to 32GB Default configuration: 2 x 8GB	2 x 2666 DDR4 SODIMM up to 64GB, Default configuration: 32GB (2 x 16GB) : ACM-XE21B6 64GB (2 x 32GB) : ACM-XE21B6-64G
Video Interface	-	3 x DDI/1 x Analogic
E-IDE(44pin) / IDE(40pin)	-	-
SATA	2	4
CF	-	-
Expansion Slot	24 x PCI-e 3.0 Lanes, 7 x PCI-e 2.0 Lanes	16 x PCI-e 3.0 Lanes, 8 x PCI-e 2.0 Lanes
Ethernet	1 x Intel I210AT GbE Lan, 2 x 10 GbE LAN	-
USB	4 x USB 3.0, 8 x USB 2.0	4 x USB 3.1, 8 x USB 2.0
GPIO	8-bit Digital I/O, 4-bit DI and 4-bit DO	8-bit Digital I/O, 4-bit DI and 4-bit DO
Serial Port	2 x COM Interface (TX/RX only)	2 x COM Interface (TX/RX only)
Parallel Port	-	-
Audio	-	-
WatchDog Timer	1 ~ 255 seconds	0 ~ 255 seconds
Hardware Monitor	YES	YES
Page	57	58

Product Matrix

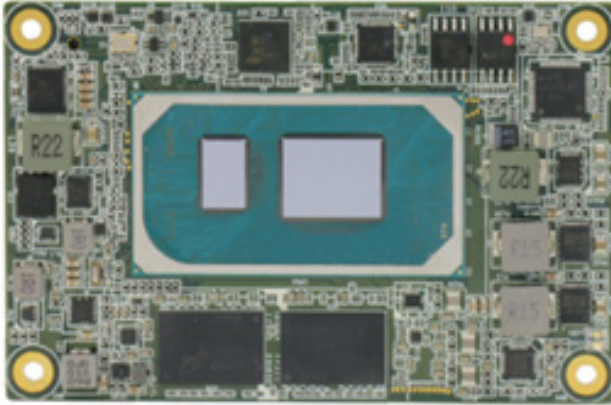
Embedded Boards



Form Factor	ISA Half-Size
Model Name	AMB-VDX3H2
CPU	Onboard DM&P Vortex86DX3 1GHz,dual core
Chipset	-
Memory	Onboard DDR3 512MB SDRAM
Video Interface	1 x VGA (DB15)
E-IDE(44pin) / IDE(40pin)	-
SATA	1
CF	1
Expansion Slot	1 x PC/104, 1 x ISA golden finger
Ethernet	1 x RJ45 10/100 Mbps LAN
USB	4 x USB 2.0 (4 x pin header)
GPIO	16-bit Digital I/O
Serial Port	COM1 RS-232 (1 x DB9), COM2 RS-232/422/485 (Pin header)
Parallel Port	-
Audio	-
WatchDog Timer	1 ~ 255 seconds
Hardware Monitor	YES
Page	59

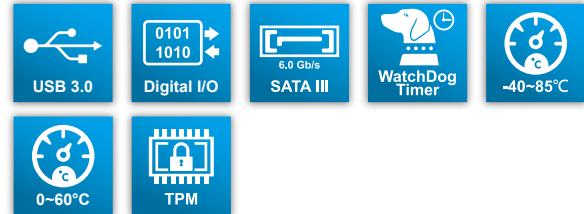
ACM-TGLUE0

Intel Core i COM Express Type 10 Module



Features

- 11th Generation Intel® Core™ Processor Family (formerly Tiger Lake UP3)
- Onboard LPDDR4x Memory 16 GB
- 2.5 Gigabit Ethernet x 1
- eDP x 1 , DDI x 1
- High Definition Audio Interface
- SATA3.0 x 2 , onboard PCIe SSD 64GB
- USB 2.0 x 8, USB 3.2/2.0 x 2 (up to USB 3.2 Gen 2 support)
- 4 x PCI-Express x 1
- COM Express Type 10, Mini Size, 85 mm x 55 mm



Mechanical & Environment

Dimension	84 mm x 55 mm (3.31" x 2.17") COM Express type 10
Weight	TBD
Operating Temp.	0~60oC (32~140oF)
Storage Temp	-20~70oC (-4~158oF)
Relative Humidity	0 to 90%, non-condensing
Safety	CE, FCC compliant

Packing List

- 1 x ACM-TGLUE0
- 1 x CD Title
- 1 x Quick Guide
- CPU cooler.84*55*18 mm.Black.
- Heat Spreader.84x55x11mm.Black.

Ordering Information

ACM-TGLUE0-A0	Intel 11 th core i7-1185GRE(40°C~85°C)
ACM-TGLUE0-A1	Intel 11 th core i7-1187G7E (0°C ~ 60°C)
ACM-TGLUE0-A2	Intel 11 th core i5-1145G7E (0°C ~ 60°C)
ACM-TGLUE0-A3	Intel 11 th core i3-1115G4E (0°C ~ 60°C)

CPU Support

CPU	Core/Thread	Base Frequency/Turbo	TOP	Graphic	In-band ECC	Operating Temp
i7-1185G7E	4/8	1.8GHz/4.4GHz	15W (UP to 28W)	Intel®Iris® Xe Graphics	No	Commercial Temp
i5-1145G7E	4/8	1.5GHz/4.1GHz		Intel®Iris® Xe Graphics	No	Commercial Temp
i3-1115G7E	2/4	2.2GHz/3.9GHz		Intel®UHD Graphics	No	Commercial Temp
i7-1185G7E	4/8	1.8GHz/4.4GHz		Intel®Iris® Xe Graphics	Yes	Embedded/Industrial Extended Temp.
i5-1145G7E	4/8	1.5GHz/4.1GHz		Intel®Iris® Xe Graphics	Yes	Embedded/Industrial Extended Temp.
i3-1115G7E	2/4	2.2GHz/3.9GHz		Intel®UHD Graphics	Yes	Embedded/Industrial Extended Temp.
Celeron 6305E	2/2	1.8GHz/...	15W	Intel®UHD Graphics	No	Commercial Temp

Optional Accessories

- COMe Type 6/10. Carrier Board. ATX. GbE. 8USB, 2COM. 4SATA. PCIe. AT/ATX. Rev. A1.1

Specification

System

CPU	Intel® 11 th Core™ I Processor
Chipset	SoC
Memory	Onboard LPDDR4 4266 memory 16GB In-band ECC supported by SoC
BIOS	AMI
WatchDog Timer	Software programmable 0~255 sec

Video(Support by Carrier Board)

Graphic Controller	Intel® Irix XE Graphic Intel® UHD Graphics for 11th Gen processor
Video Interface	1 x eDP 1 x DDI port

Storage (Support by Carrier Board)

SATA	2 x SATA III with 6Gb/s
Storage	Onboard PCIe NVMe SSD 64GB

I/O (Support by Carrier Board)

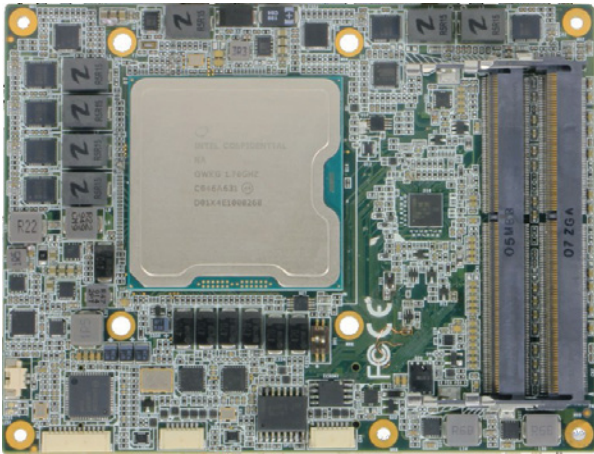
Ethernet Chip	1 x Intel I225LM GbE Lan, supports PXE Boot
Expansion Interface	4 x PCI-e 3.0 Lanes • 4 x PCI-e 3.0 x1
Serial Interface	2 x COM port Interface (TX/RX only)
USB	2 x USB 3.2 Gen2, 8 x USB 2.0
GPIO	8-bit Digital I/O
Audio Codec	High Definition Audio interface

Software

OS Support	Windows 10 / Linux
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ACM-ICLDE7

Intel ICE LAKE D COM Express Basic Type 7 Module



Features

- Intel® SoC XEON™ D LCC series, max TDP 70W
- DDR4 socket x4
- Gigabit Ethernet x 1, 10 GbE x4
- No Display, No Audio
- SATA x 2, USB3.0/2.0 x4
- PEG[x16], 1x PCIe[x8] + 4x PCIe[x2]
- GPIO x8, SMBus, I2C, LPC
- COM Express Basic size, Type 7, 125mmx95mm



Specification

System

CPU	Xeon® D, LLC, up to 10c/20t CPU TDP up to 70W
Chipset	Intel xeon D SoC
Memory	4 x DDR4 SODIMM(Support ECC function) up to 128GB Default configuration: 4 x 32GB
BIOS	AMI
WatchDog Timer	Software programmable 0~255 sec

Storage (Support by Carrier Board)

SATA	• 2 x SATA III with 6Gb/s
------	---------------------------

I/O (Support by Carrier Board)

Ethernet Chip	1 x Intel I210AT GbE Lan, supports PXE Boot
Expansion Interface	24 x PCI-e 3.0 Lanes • 1 x PCI-e 3.0 x16 (or 2 x PCI-e x 8) • 1 x PCI-e 3.0 x 8 4 x PCI-e 3.0 x2 Lanes
Serial Interface	2 x COM port Interface (TX/RX only)
USB	4 x USB 3.2 Gen1 , 4 x USB 2.0
GPIO	8-bit Digital I/O
Audio Codec	Intel HD Audio Channel

Software

OS Support	• Linux Kernel 4.9 & above
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Mechanical & Environment

Dimension	125 mm x 95 mm (4.92" x 3.74") COM Express Basic
Weight	TBD
Operating Temp.	0~60oC (32~140oF)
Storage Temp	-20~80oC (-4~176oF)
Relative Humidity	0 to 90%, non-condensing
Safety	CE, FCC compliant

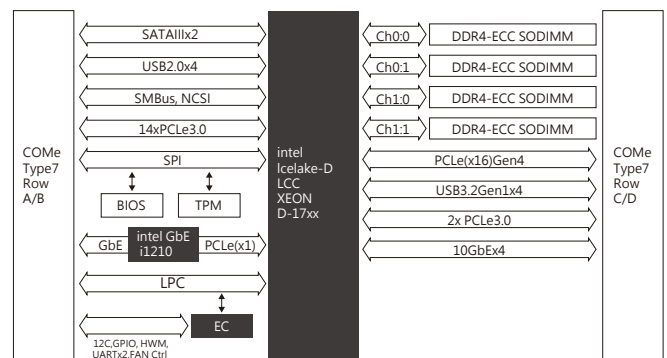
Packing List

- 1 x ACM-ICLDB7
- 1 x CD Title
- 1 x Quick Guide

Ordering Information

ACM-ICLDE7	Intel Xeon D, COM Express Basic Type 7 Module
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Block Diagram

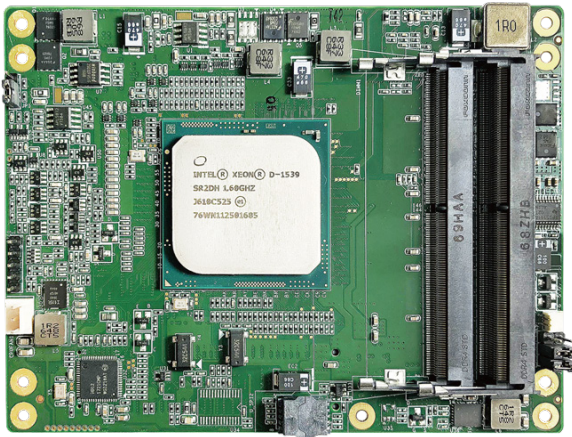


Embedded CPU Chart

ICELAKE-D LCC Sku	CPU Cores	Tcase Temp	TDP	Embedded sku
D-17xxER	10c	0°C~80°C	67W	Yes
D-17xxTR	8c	0°C~80°C	59W	Yes
D-17xxTER	4c	-40°C~80°C	50W	Yes

ACM-XD15B7

Intel Xeon D COM Express Basic Type 7 Module



Features

- Newest platform and highest performance
COM Express Basic Type 7
- The Intel Xeon D Processor
- Xeon® D1548 2.0/2.6GHz 12MB(8 core)
- Support Two DDR4 ECC SODIMM , up to 32GB
- 32 PCI-e Lanes
- 2 x 10 GbE KR & NC-SI



Specification

System

CPU	Xeon® D1548 (8 Core, 2.0/2.6GHz, 12MB cache, TDP 45W)
Chipset	Integrated in SoC processor
Memory	2 x 2400 DDR4 SODIMM(Support ECC function) up to 32GB Default configuration: 2 x 8GB
BIOS	AMI
WatchDog Timer	Software programmable 1~255 sec

Storage (Support by Carrier Board)

SATA	• 2 x SATA III with 6Gb/s
------	---------------------------

I/O (Support by Carrier Board)

Ethernet Chip	1 x Intel I210AT GbE Lan, supports PXE Boot 2 x 10 GbE with KR interface & NC-SI
Expansion Interface	24 x PCI-e 3.0 Lanes • 1 x PCI-e 3.0 x16 (or 2 x PCI-e x 8) • 1 x PCI-e 3.0 x 8 7 x PCI-e 2.0 Lanes • 6 x PCI-e 2.0 x1(AB connector) • 1 x PCI-e 2.0 x1(CD connector)
Serial Interface	2 x COM port Interface (TX/RX only)
USB	4 x USB 3.0, 8 x USB 2.0
GPIO	8-bit Digital I/O, 4-bit DI and 4-bit DO
Audio Codec	Intel HD Audio Channel

Software

OS Support	• Linux Kernel 4.9 & above
------------	----------------------------

Mechanical & Environment

Dimension	125 mm x 95 mm (4.92" x 3.74") COM Express Basic
Weight	TBD
Operating Temp.	0~60°C (32~140°F)
Storage Temp.	-20~80°C (-4~176°F)
Relative Humidity	0 to 90%, non-condensing
Safety	CE, FCC compliant

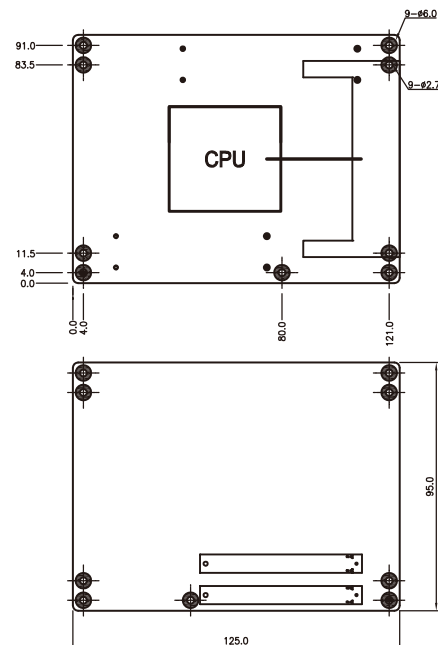
Packing List

- 1 x ACM-XD15B7
- 1 x CD Title
- 1 x Quick Guide

Ordering Information

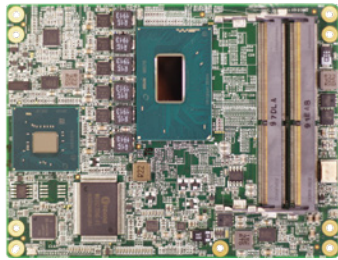
ACM-XD15B7	Intel Xeon D 1548 , COM Express Basic Type 7 Module
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Dimension



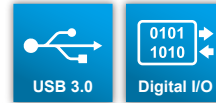
ACM-XE21B6

Intel Core i7 COM Express Basic Type 6 Module



Features

- Newest platform and highest performance COM Express Basic Type 6
- The Intel CM246 Chipset
- Intel® Core™ i7- 9850HE Processor, 9M Cache, 2.7GHz / , 4.4GHz
- Support Two DDR4 SODIMM , up to 64GB
- 24 PCI-e Lanes
- 1x GbE



Specification

System

CPU	Intel® Core™ i7-9850HE Processor (9M Core, 2.7GHz, 4.4GHz)
Chipset	Intel CM246
Memory	2 x 2666 DDR4 SODIMM up to 64GB, Default configuration: 32GB (2 x 16GB) : ACM-XE21B6 64GB (2 x 32GB) : ACM-XE21B6 64G
BIOS	AMI
WatchDog Timer	Software programmable 0~255 sec

Video(Support by Carrier Board)

Graphic Controller	Intel® UHD Graphics 630
Video Interface	1 x Analogic RGB Display Output,supports max resolution 2048 x 1536@75Hz 3 x DDI Port Output,supports max resolution up to 4096x2304@60Hz

Storage (Support by Carrier Board)

SATA	• 4 x SATA III with 6Gb/s
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I/O (Support by Carrier Board)

Ethernet Chip	1 x Intel I210AT GbE Lan, supports PXE Boot
Expansion Interface	16 x PCI-e 3.0 Lanes • 1 x PCI-e 3.0 x16 (or 2 x PCI-e x 8)Select by Bios setting 8 x PCI-e 2.0 Lanes • 6 x PCI-e 2.0 x1(AB connector) • 2 x PCI-e 2.0 x1(CD connector)
Serial Interface	2 x COM port Interface (TX/RX only)
USB	4 x USB 3.1, 8 x USB 2.0
GPIO	8-bit Digital I/O, 4-bit DI and 4-bit DO
Audio Codec	Intel High Definition Audio

Software

OS Support	• Linux Kernel 4.14 & above
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Mechanical & Environment

Dimension	125 mm x 95 mm (4.92" x 3.74") COM Express Basic
Weight	TBD
Operating Temp.	0~60°C (32~140°F)

Storage Temp.	-20~80°C (-4~176°F)
Relative Humidity	0 to 90%, non-condensing
Safety	CE, FCC compliant

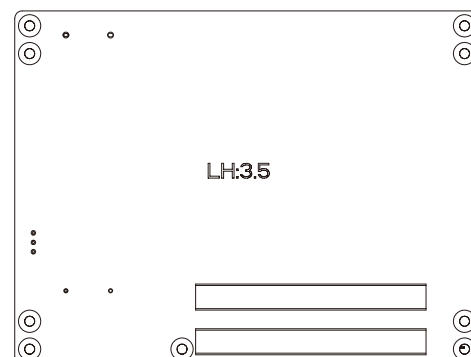
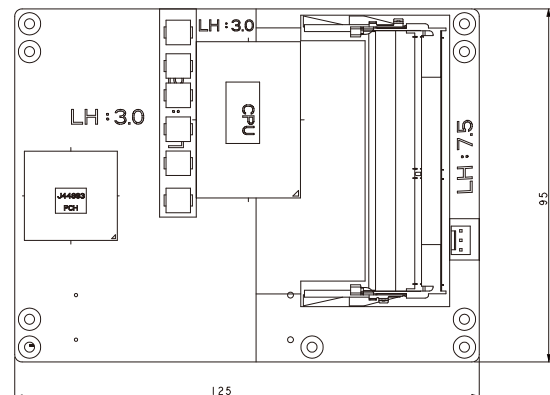
Packing List

- 1 x ACM-XE21B6
- 1 x CD Title
- 1 x Quick Guide

Ordering Information

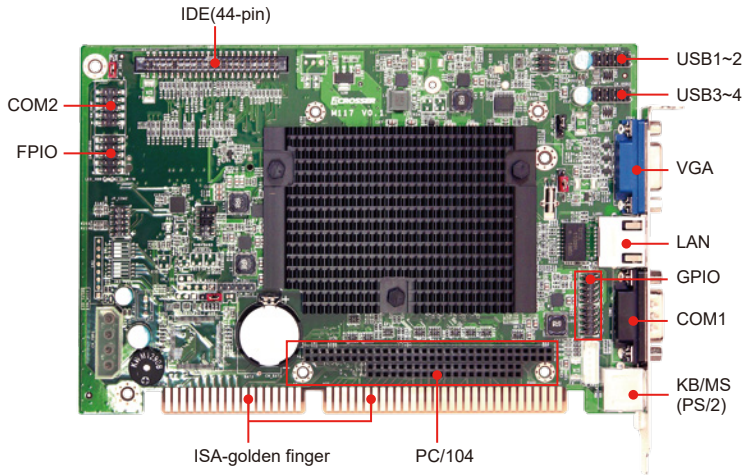
ACM-XE21B6	Intel core i7 9850HE , COM Express Basic Type 6 Module with 32GB DDR4 Memory
ACM-XE21B6 64G	Intel core i7 9850HE , COM Express Basic Type 6 Module with 64GB DDR4 Memory

Dimension



AMB-VDX3H2

Fanless ISA Bus DM&P Vortex86DX3 Dual core 1GHz SBC



Features

- Fanless Design
- Onboard DM&P Vortex86DX3 1GHz dual core
- Onboard 512GB DDR3 SDRAM
- IDE, CF,msata(Reserved)
- PC/104 & ISA Interface
- 2 x COM, 4 x USB 2.0, VGA, 1 xRJ45 10/100 Mbps LAN



Specification

System

CPU	Onboard DM&P Vortex86DX3 1GHz,dual core
Memory	Onboard DDR3 512MB SDRAM
BIOS	AMI
WatchDog Timer	Software programmable 0~255 sec.(0=disable)

Video

Graphic Controller	Integrated
Video Memory	shared with main memory(16/32MB)
Video Interface	1 x VGA (DB15)

Storage

IDE	1 x IDE (44-pin)
SATA	1 x msata(Reserved)
CF	1 x CF Card

I/O

Ethernet	1 x RJ45 10/100 Mbps LAN
Expansion Slot	1 x PC/104,1 x ISA golden finger
Serial Port	<ul style="list-style-type: none"> • COM1 RS-232 (1 x DB9) • COM2 RS-232/422/485 (Pin header)
USB	4 x USB 2.0 (4 x pin header)
GPIO	16-bit Digital I/O
SRAM	512K (Reserved)
Keyboard/Mouse	<ul style="list-style-type: none"> • 1 x PS/2 • 1 x JST
FPIO	1 x FPIO

Power Requirement

Power Input	AT:5V + 12V input
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Software

OS Support	Windows XP, Windows Embedded CE 6.0, Windows 7 (32 bits),DOS
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Mechanical & Environment

Dimension	185mm x 122mm (7.29" x 4.81")
Operating Temp.	0~60°C (32~140°F)
Storage Temp.	-20~80°C (-4~176°F)
Relative Humidity	0 to 90% @40°C, non-condensing
Safety	CE, FCC compliant

Packing List

- 1 x AMB-VDX3H2
- 1 x Quick user guide

Ordering Information

AMB-VDX3H2A	1 x AMB-VDX3H2A (1GHz CPU/512MB Memory, 1 x RS232/ 1 x RS232/RS422/RS485) CF+IDE 1 x Quick User Guide
AMB-VDX3H2A1	1 x AMB-VDX3H2A1 (1GHz CPU/512MB Memory, 1 x RS232/ 1 x RS232/RS422/RS485) CF+mSata 1 x Quick User Guide 1 x Utility CD
accessory	ACC-VDX3H2: 1 x 44-pin IDE cable 1 x DB9 cable w/bracket 1 x 2 port USB cable w/bracket 1 x KB/MS Y-cable



To Make Your
Embedded
Idea a Reality



Acrosser Headquarters

241新北市三重區重新路5段609巷4號3樓之8
Rm. 8, 3F., No. 4, Ln. 609, Sec. 5, Chongxin Rd.,
Sanchong Dist., New Taipei City 241402, Taiwan
TEL: +886-2-29999000
FAX: +886-2-29992887

Acrosser Taichung Office

41475台中市烏日區僑仁街8號10樓~2 (10B)
10F.-2(10B), No. 8, Ciaoren St., Wuri Dist.,
Taichung City 41475, Taiwan
TEL: +886-4-23370715
FAX: +886-4-23373422

Acrosser USA Inc.

324 W. Blueridge Avenue,
Orange CA 92865
TEL: (714)728-6964

Acrosser China Subsidiary

深圳市欣扬通电子有限公司
深圳市福田区泰然八路安华工业区6号楼7层706室(邮编:518040)
Room 706, floor 7, building 6, Anhua Industrial Zone, Tairan 8th Road,
Futian District, Shenzhen, China(Postal:518040)
TEL: +86-755-83542210
FAX: +86-755-83700087