

# Autonomous Driving Controller

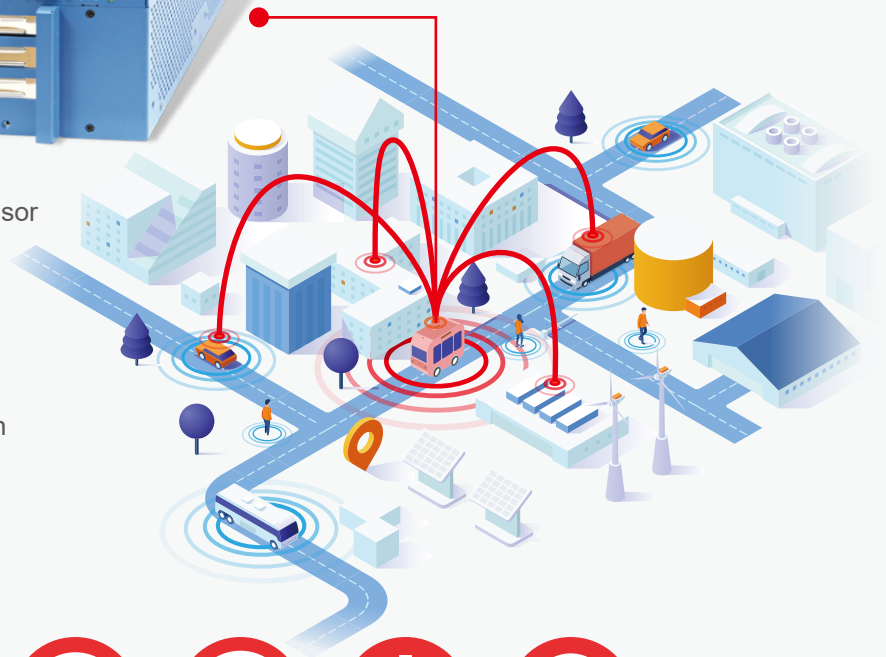
AI & Edge Computing Embedded Systems For Autonomous Car

## AAD-W480A

### NVIDIA RTX GPU



- 10th Gen Intel® Core™ Xeon/i9/i7 Processor
- Support 2 x 3200 DDR4
- Triple display port
- Support RTX GPU Card
- Support 2 GigaLAN, 6 USB 3.2 Gen2
- Support 1 PCIe x16, 1 PCIe x4 expansion
- CAN Bus Provide
- 2.5" SATA III Storage Bay x2
- 9-55V dc Power Input



Server/workstation  
Performance



CAN Bus



Wide temp



Delay Time  
on/off



ANTI  
VIBRATION



Power  
Management



Wireless

# AAAD-W480A

10th Gen Intel® Core™ Xeon/i9/i7 Processor (Comet Lake)  
AI@Edge Autonomous in-vehicle Server Computer With  
2PCIe, Support One Graphic Card



## Features

- Workstation-grade Platform : 10-core 10th Gen Intel® Xeon®/Core™ i9/i7/i5/i3 Processor (CML-S) running with Intel® W480E chipset supports max 80W TDP CPU
- Support 2 DDR4 3200 SODIMM, up to 64GB (Non-ECC)
- Support 2 GigaLAN, 6 USB 3.2 Gen2
- Support 1 PCIe x16, 1 PCIe x4 expansion slots
- Could Sports one NVIDIA RTX 30 series graphics cards (Max.320W)
- CAN Bus Provide
- Two Front Easy Access 2.5" SATA III Storage Bay
- 9-55Vdc Power Input w/in-vehicle Power Ignition Control, up to 500W Power Input



## 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 55V, DC-in
Power Interface	3-pin Terminal Block : V+, IGN, V- With Power Ignition Control

## Mechanical & Environment

Dimension	TBD
Weight	TBD
Mounting	Wallmount
Operating Temperature	35W TDP CPU : -30°C to 70°C 65W TDP CPU : -30°C to 50°C 80W TDP CPU : -30°C to 40°C with system fan When Install Graphics Card: -20°C to 45°C with system fan
Storage Temp	-40°C to 85°C (-40°F to 185°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.

\*If customer want to install CPU TDP up to 80W or high level GPU card, we will suggest to choose system sku with system fan version to get better thermal solution and system performance.

## Specification

### System

CPU	Intel® 10th Gen. Xeon®/Core™ i9/i7 Processor, support max 80W TDP CPU, socket type, LGA1200
Chipset	Intel® W480E
Memory	2 x 260 PIN DDR4-3200 SODIMM supports up to 64GB (Up to 32GB per socket)

### Video

Graphic Controller	Intel® UHD Graphics 630
Interface	1 VGA, 1 DVI-D, 1 HDMI1.4b

### Storage

SATA	2 SATA III (6Gbps) support S/W RAID 0, 1
M.2	1 M.2 Key M Socket (2280) NVMe SSD (Internal)
Storage Device	2 Front-access 2.5" SSD/HDD Tray

### I/O

LAN	LAN 1 : RJ45 Type Intel® I210IT GigE LAN LAN 2 : RJ45 Type Intel® I210IT GigE LAN
Serial	4 DB9 Type RS-232/RS422/485
USB	6 Type A USB 3.2 Gen2
DIO	4DI,4DO, DB15 Type connector
Audio	1 Mic-in, 1 Line-out
CAN BUS	1 DB9 CANBus
LED	Power, HDD, Status
Button	1 Power Press Button
Antenna Hole	7 Antenna Holes

### Expansion

Mini PCIe	2 x Full Size Mini PCIe Slots
M.2	1 x M.2 B Key(3042)
SIM Slot	1 SIM Slot (Internal)
PCIe Slot	1 PCIe[x16] Slot, 1 PCIe[x4] Slot

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