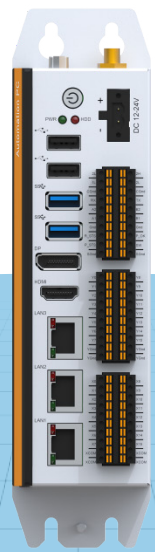
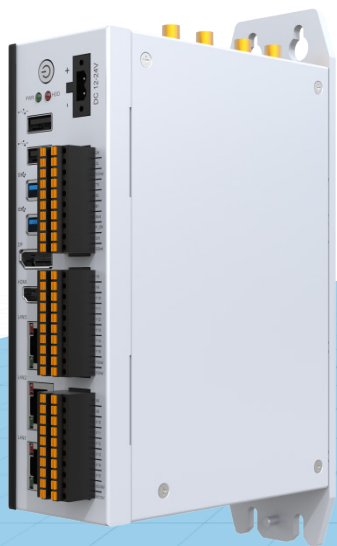


# Extremely Space-Saving And Compact

## Control Cabinet Automation PC NP-6118

**NEW**



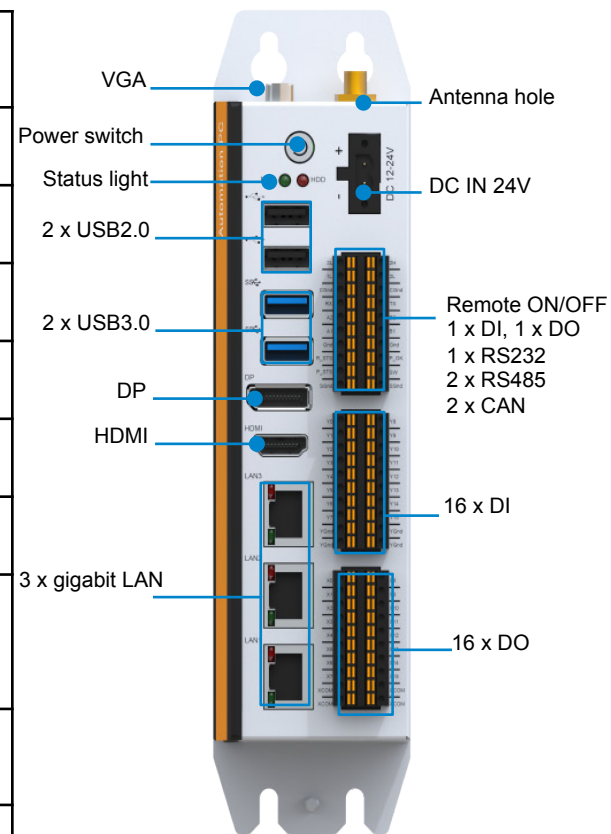
# NP-6118

Design For Your Automation



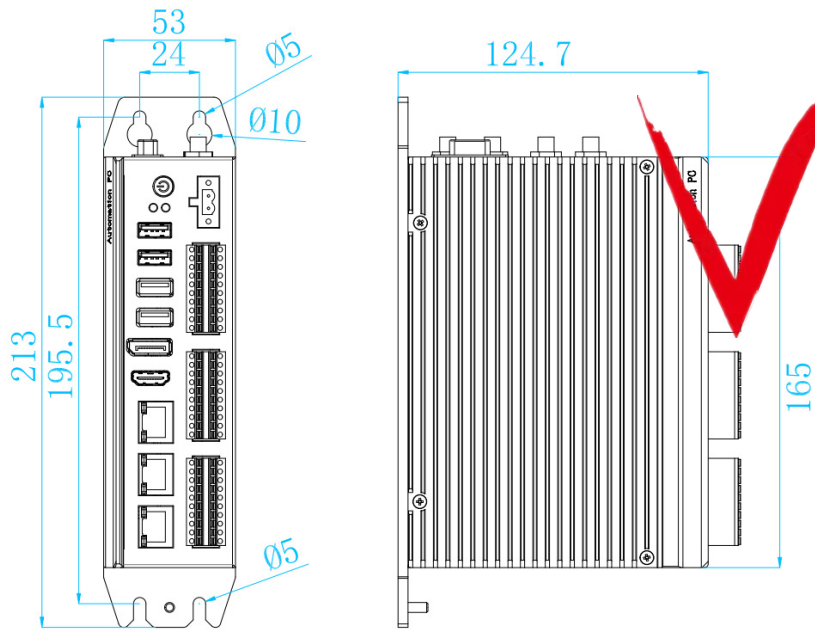
## Specification

CPU	Intel® Celeron J6412, 2.0~2.6GHz, Quad core/4Thread, 1.5MB L2 cache , TDP:10W
Memory	1 x SO-DIMM DDR4-2400MHz (up to 16GB)
Storage	1 x mini SATA SSD
USB	2 x USB3.0, 2 x USB2.0, internal onboard USB2.0 for dongle
COM	1 x RS232, 2 x RS485 (phoenix terminal interface)
LAN	3 x Intel gigabit (LAN1: Intel i211-AT, LAN2/LAN3: Intel i225-V)
Display	HDMI , DP (option VGA), support dual display
Expansion	1 x M.2 KEY-A(for Wifi) 1 x full size miniPCIe slot with SIM holder, for additional LAN or 3G/4G etc.
Power	DC24V ±10%, overcurrent, overvoltage and reverse polarity protection, built-in super capacitors.
OS	Windows 10, Windows 11, Ubuntu

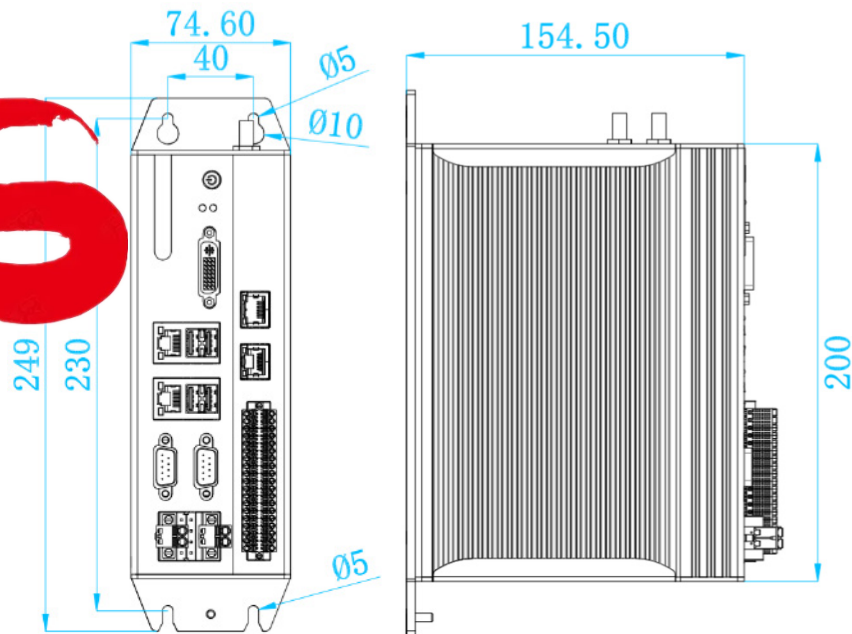


## More compact and space saving (Compare with NP-6111)

- NP-6118(165 x 124.7 x 53mm)



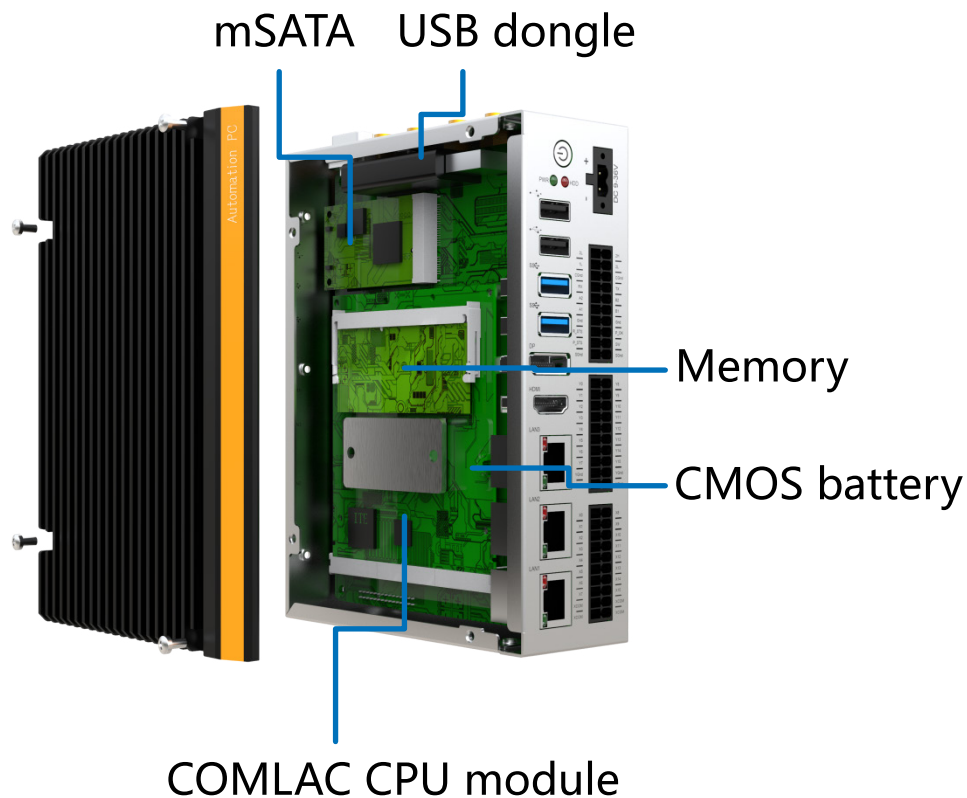
- NP-6111-JH2(200 x 154.5 x 74.6mm)



## Modular design

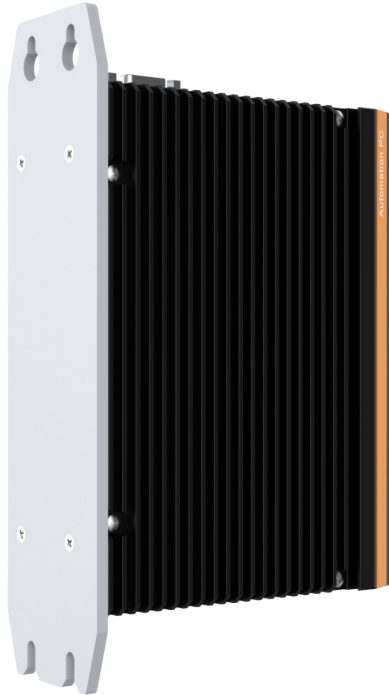
You can install the modules easily when unscrewing the cooling cover :

- ◆ COMLAC CPU module
- ◆ Memory
- ◆ mSATA SSD
- ◆ USB dongle
- ◆ CMOS battery

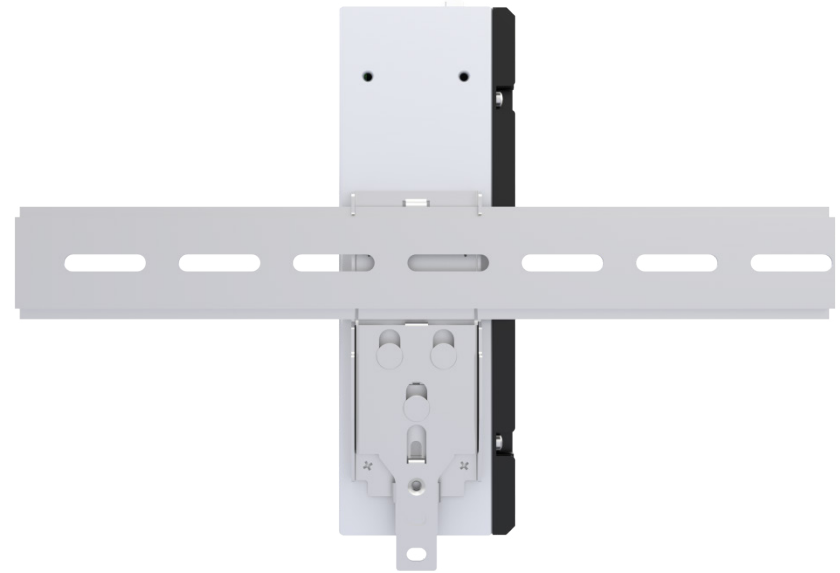


## Mounting option

- Wall mounted



- Din-rail mounted



## Perfect CPU Performance

### 10nm Lithography

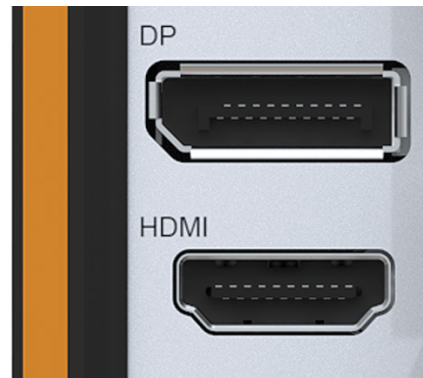
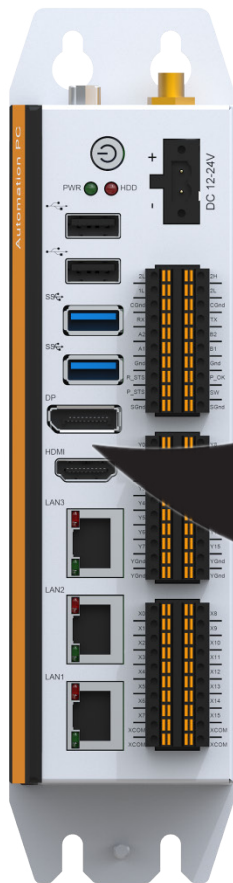
- ◆ Size 30% smaller
- ◆ Performance 27% higher
- ◆ Power consumption 40% lower

### Optimal price-performance ratio

	Intel Celeron J1900 @ 1.99GHz	Intel Core i5-6300U @ 2.40GHz	Intel Core i5-7300U @ 2.60GHz	Intel Celeron J6412 @ 2.00GHz	Intel Core i3-6100 @ 3.70GHz
Price	<a href="#">Search Online</a>	<a href="#">Search Online</a>	\$627 <sup>1</sup>	\$54 <sup>1</sup>	\$138.06 <a href="#">BUY NOW!</a>
Socket Type	FCBGA1170	FCBGA1356	FCBGA1356	FCBGA1493	LGA 1151
CPU Class	Desktop	Laptop	Laptop	Mobile/Embedded	Desktop
ClocksPEED	2.0 GHz	2.4 GHz	2.6 GHz	2.0 GHz	3.7 GHz
Turbo Speed	Up to 2.4 GHz	Up to 3.0 GHz	Up to 3.5 GHz	Up to 2.6 GHz	Not Supported
# of Physical Cores	4 (Threads: 4)	2 (Threads: 4)	2 (Threads: 4)	4 (Threads: 4)	2 (Threads: 4)
Max TDP	10W	15W	15W	10W	51W
Yearly Running Cost	\$1.83	\$2.74	\$2.74	\$1.83	\$9.31
First Seen on Chart	Q1 2014	Q2 2015	Q1 2017	Q2 2021	Q4 2015
# of Samples	674	2781	1184	7	3506
Single Thread Rating	650	1691	1965	1357	2223
CPU Mark	<b>1135</b>	<b>3258</b>	<b>3745</b>	<b>3891</b>	<b>4180</b>

## HD display ports

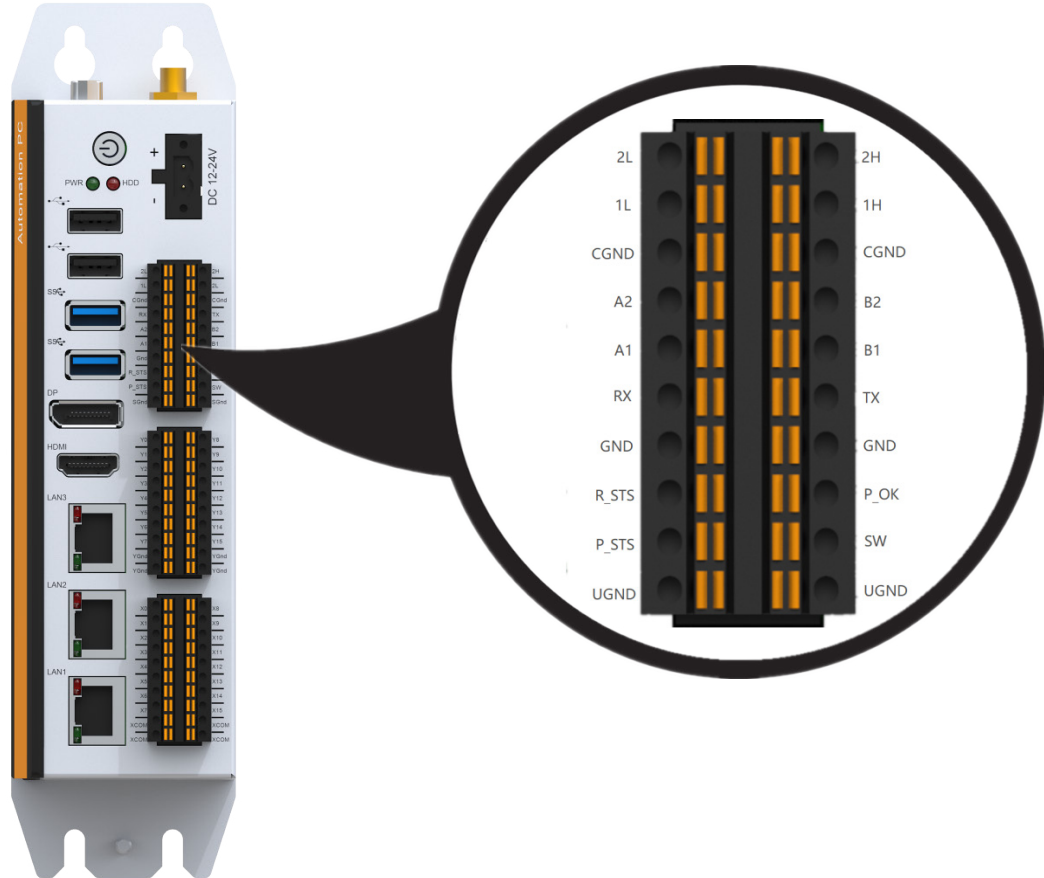
- DP
  - ◆ Support 4K HD display
- HDMI
  - ◆ Support 4K HD display
- Option VGA port





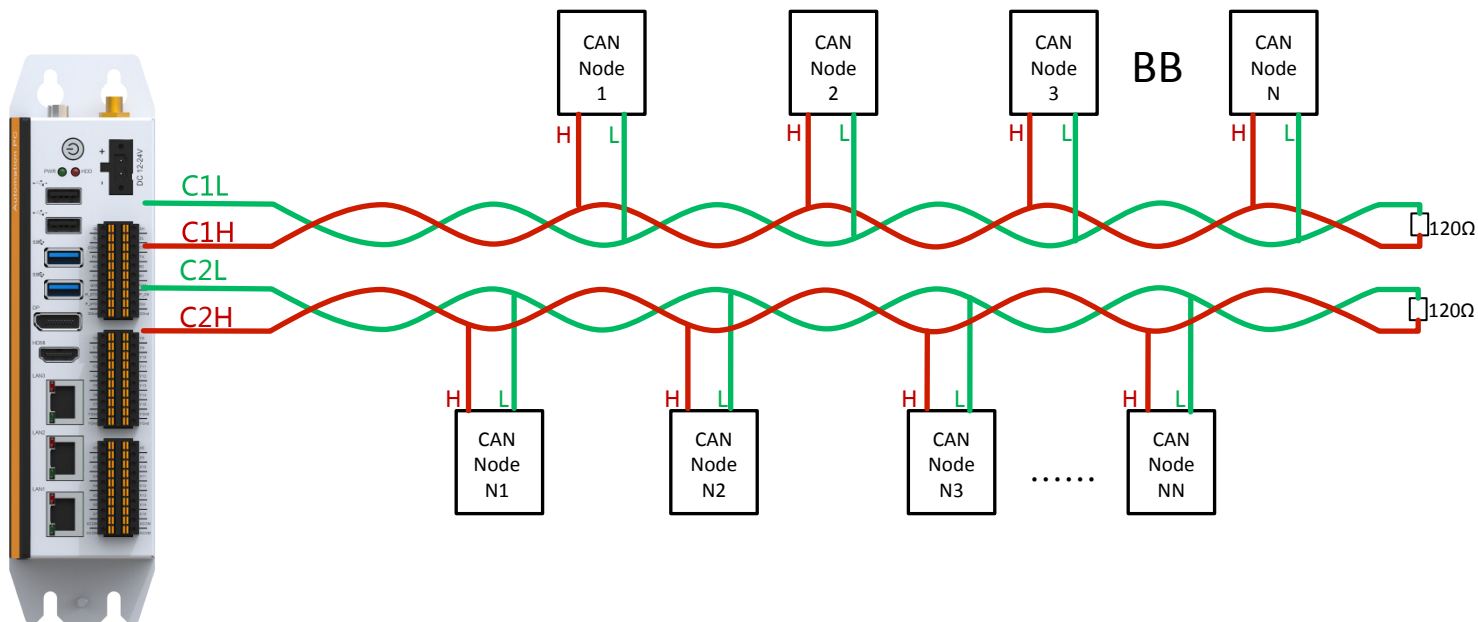
## Onboard IO -1

- 2 RS485
  - ◆ A1/B1
  - ◆ A2/B2
- 1 RS232
  - ◆ RX
  - ◆ TX
  - ◆ GND
- Option external UPS
  - ◆ R\_STS(working status signal, user accessible programmability)
  - ◆ P\_STS(Power on signal)
  - ◆ P\_OK(UPS power input testing signal, user accessible programmability)
  - ◆ SW(Remote power on/off signal)
  - ◆ UGND(UPS IO Signals GND)



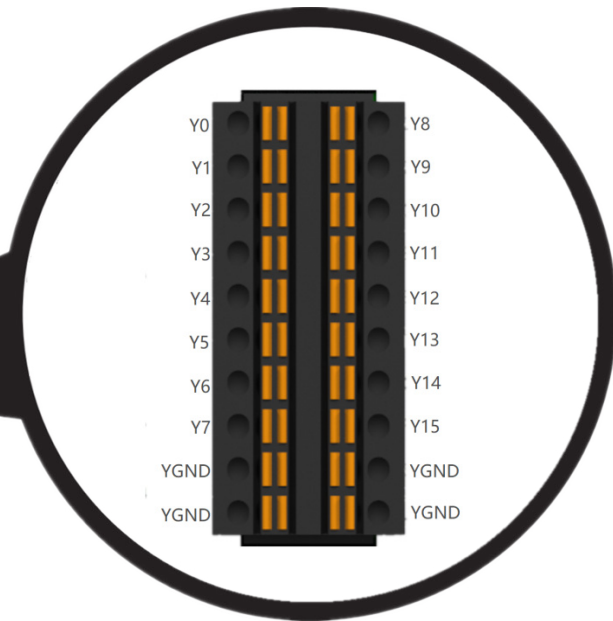
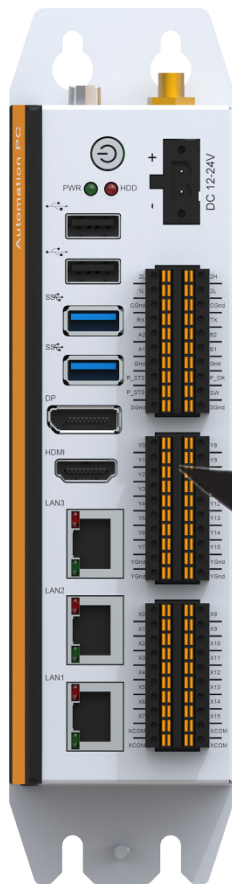
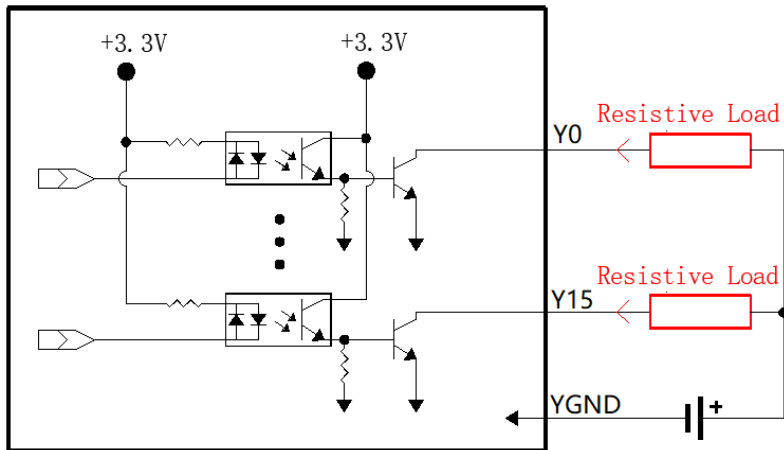
## Onboard IO -2

- 2-ch independent and isolation CAN2.0 A/B, offer Windows/Linux driver and library
  - C1H/C1L (120 UOSX internal terminating resistor)
  - C2H/C2L (120 UOSX internal terminating resistor)



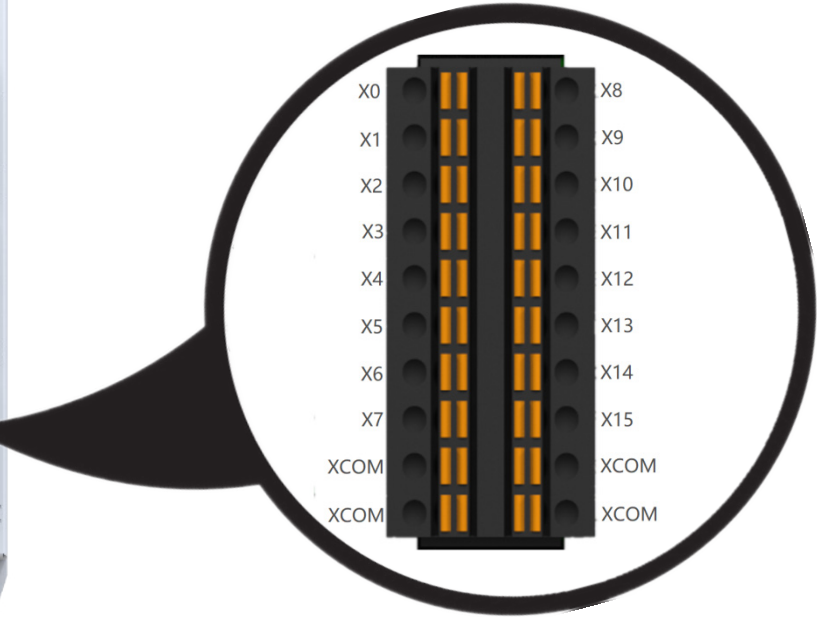
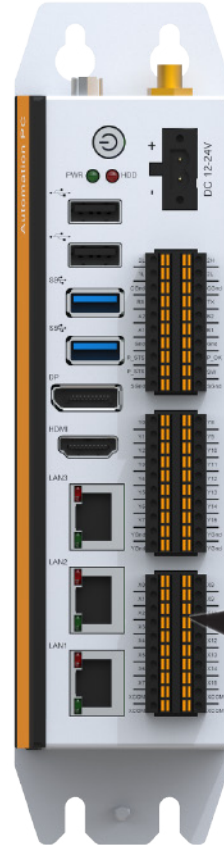
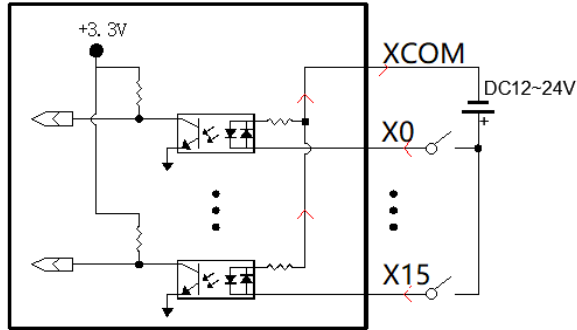
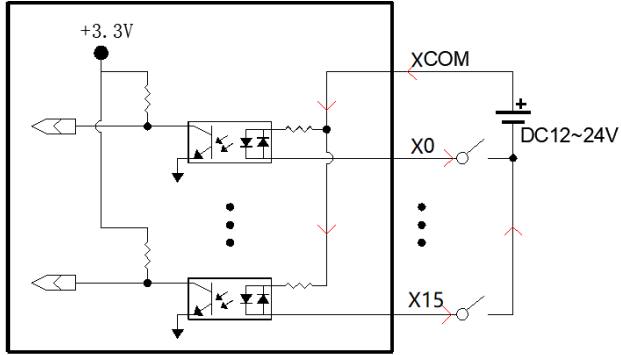
## 16-ch transistorized output

- With overcurrent protection



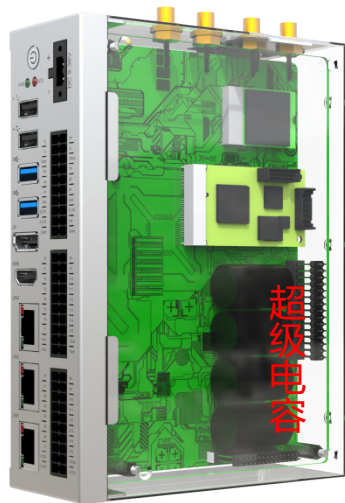
## 16-ch isolated digital input

- NPN connection

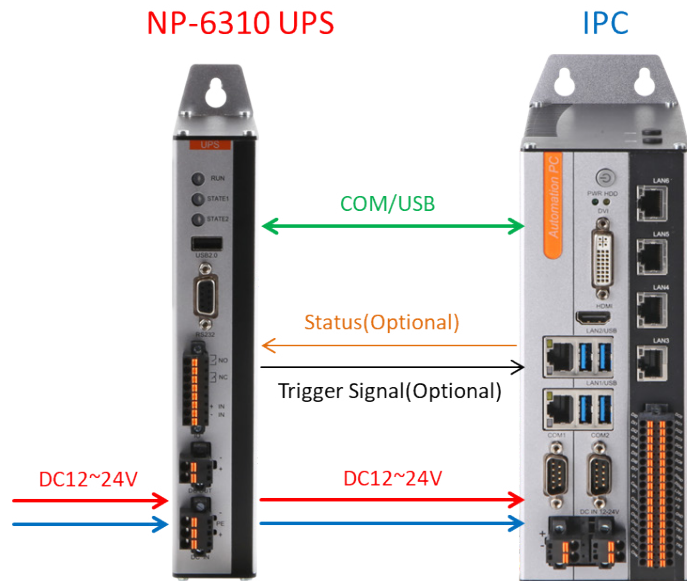


## Build-in super capacitor

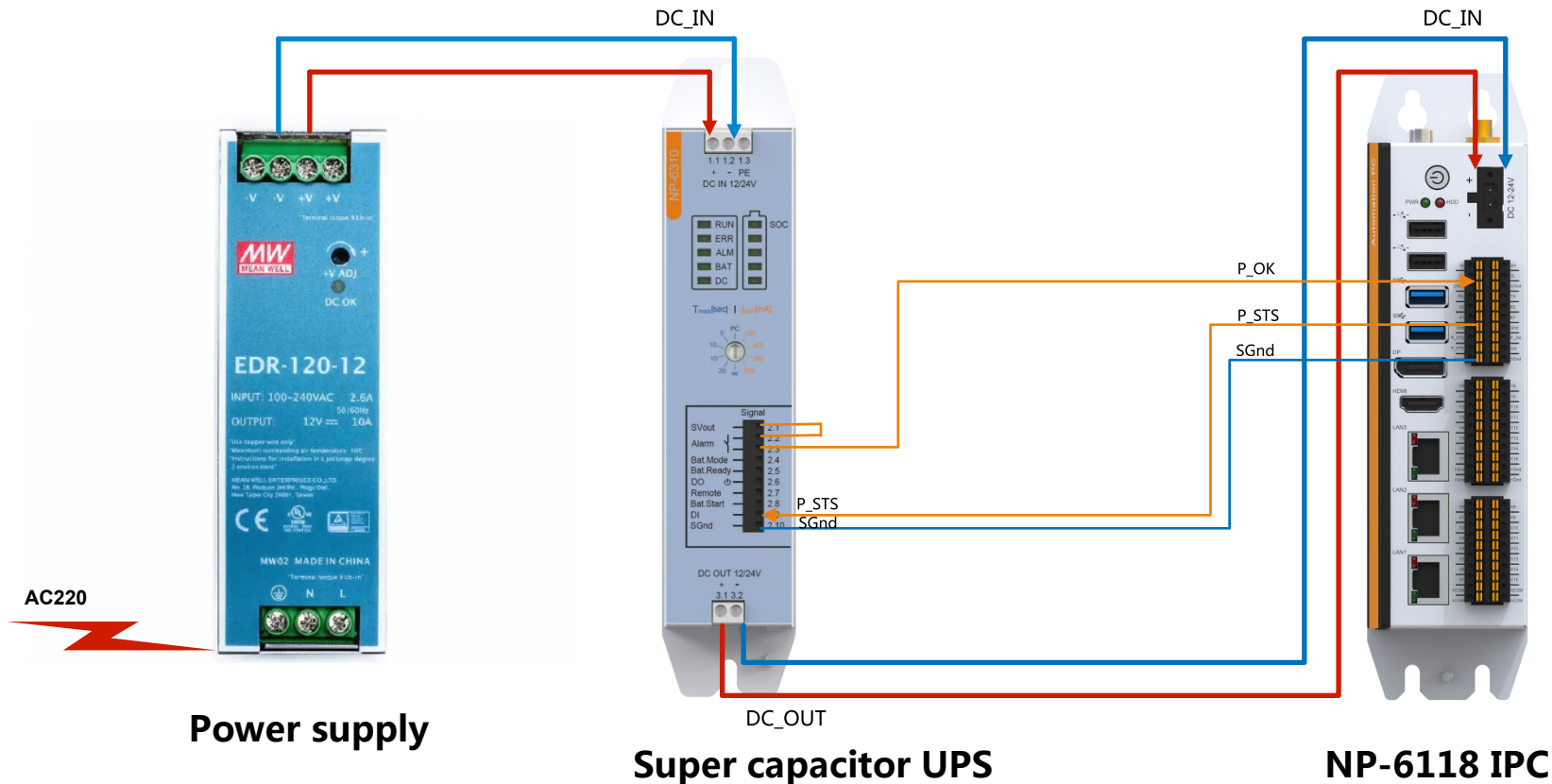
- ◆ IO signal can be triggered to save data when power
- ◆ As a filter when power fluctuations
- ◆ Space-saving



VS



## Reserved IO for additional UPS



## Flexible Scalability



### Module design

- Modular for difficult circuit design in order to reduce the risk to
- Base model and particular part, it is easy for upgrade and customization



### Additional function reserved

- Reserved minPCIE for additional LAN, 4G, blue tooth etc.
- Reserved M.2 KEY-A for Wifi



### Easy for customization

- Customized logo
- Customized Independent IO



# NP-6118

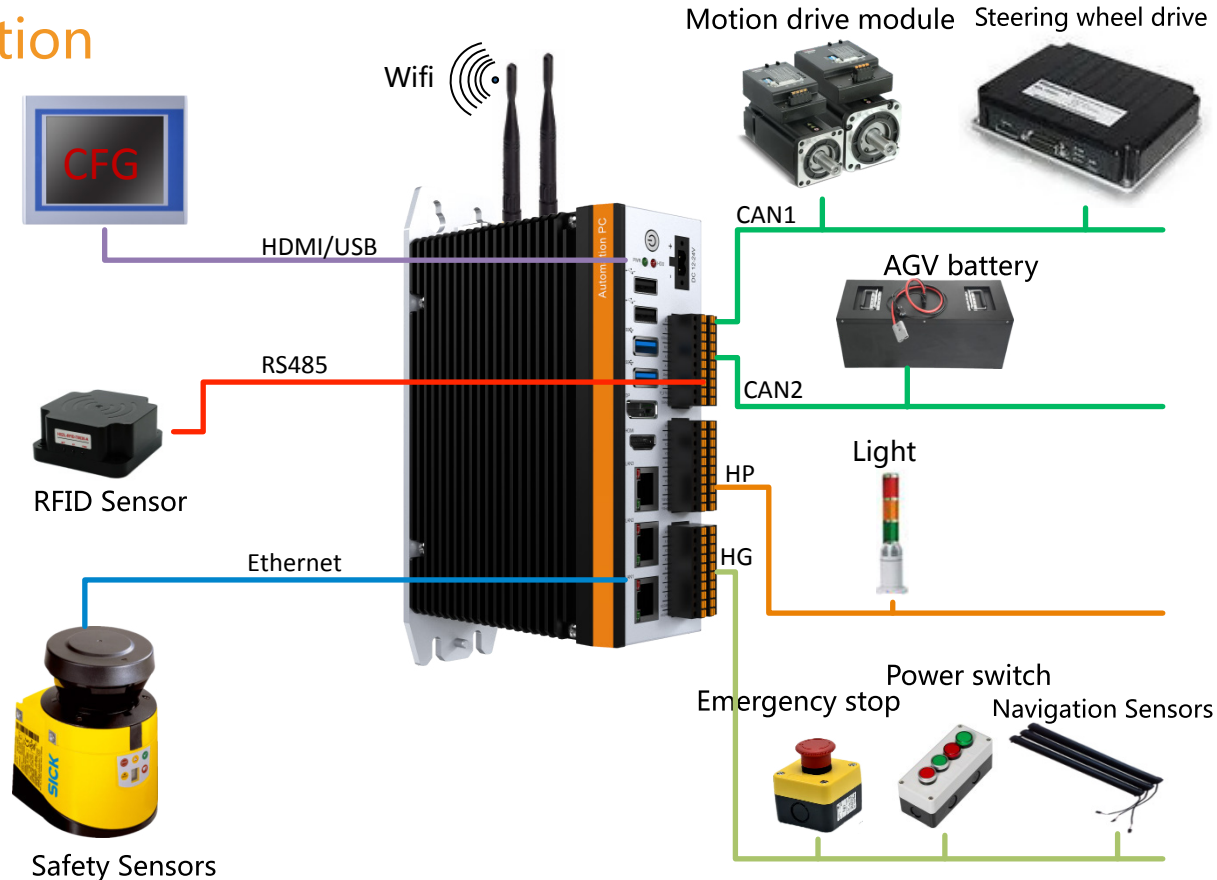
## Applications





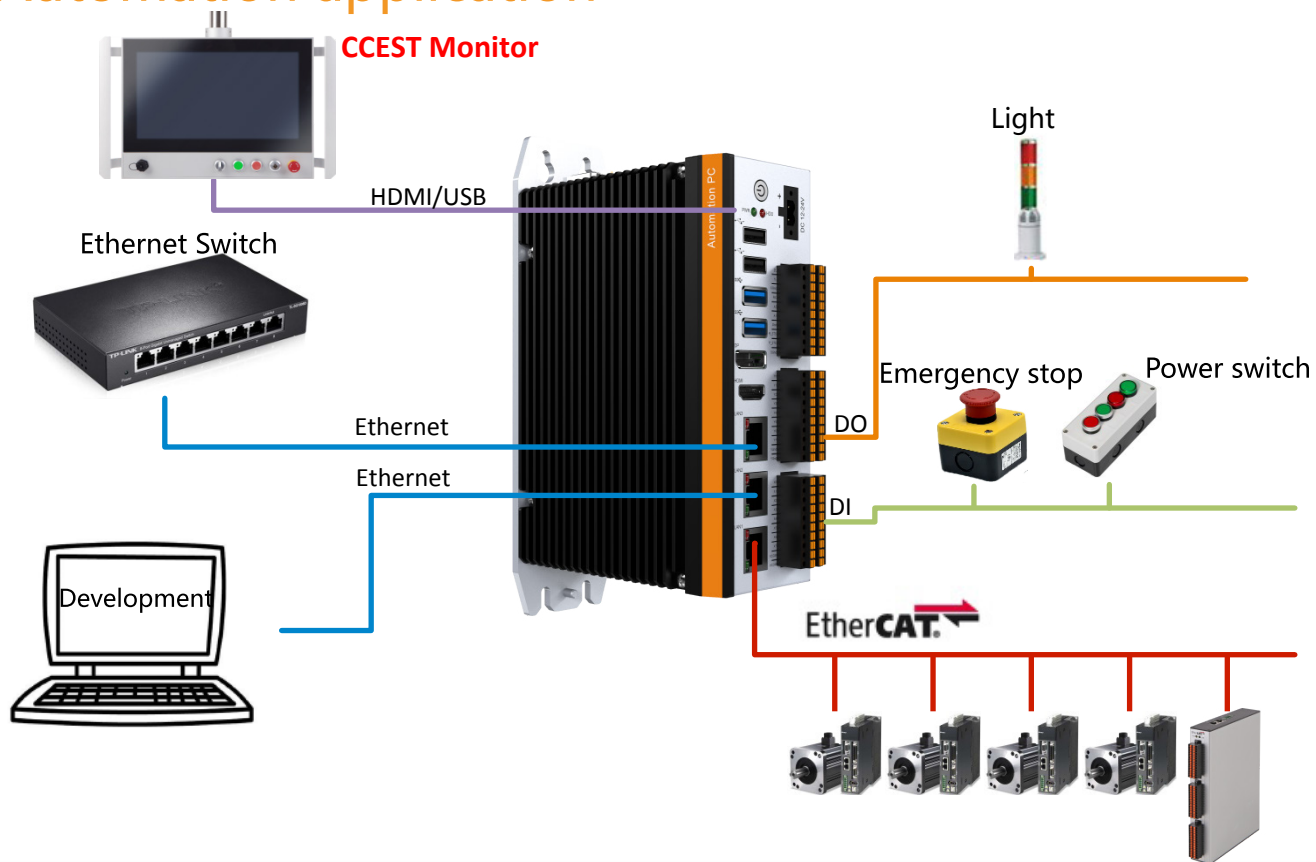
## AGV and ROBOT Application

- X86 high computing CPU: Elkhart Lake J6412
- 16-ch DI, 16-ch DO
- 2-ch independent CAN bus
- 3 Gigabit LAN ports
- 1 RS232
- 1 RS485
- M.2 key option Wifi
- Compact and space-saving
- Display and control all in one



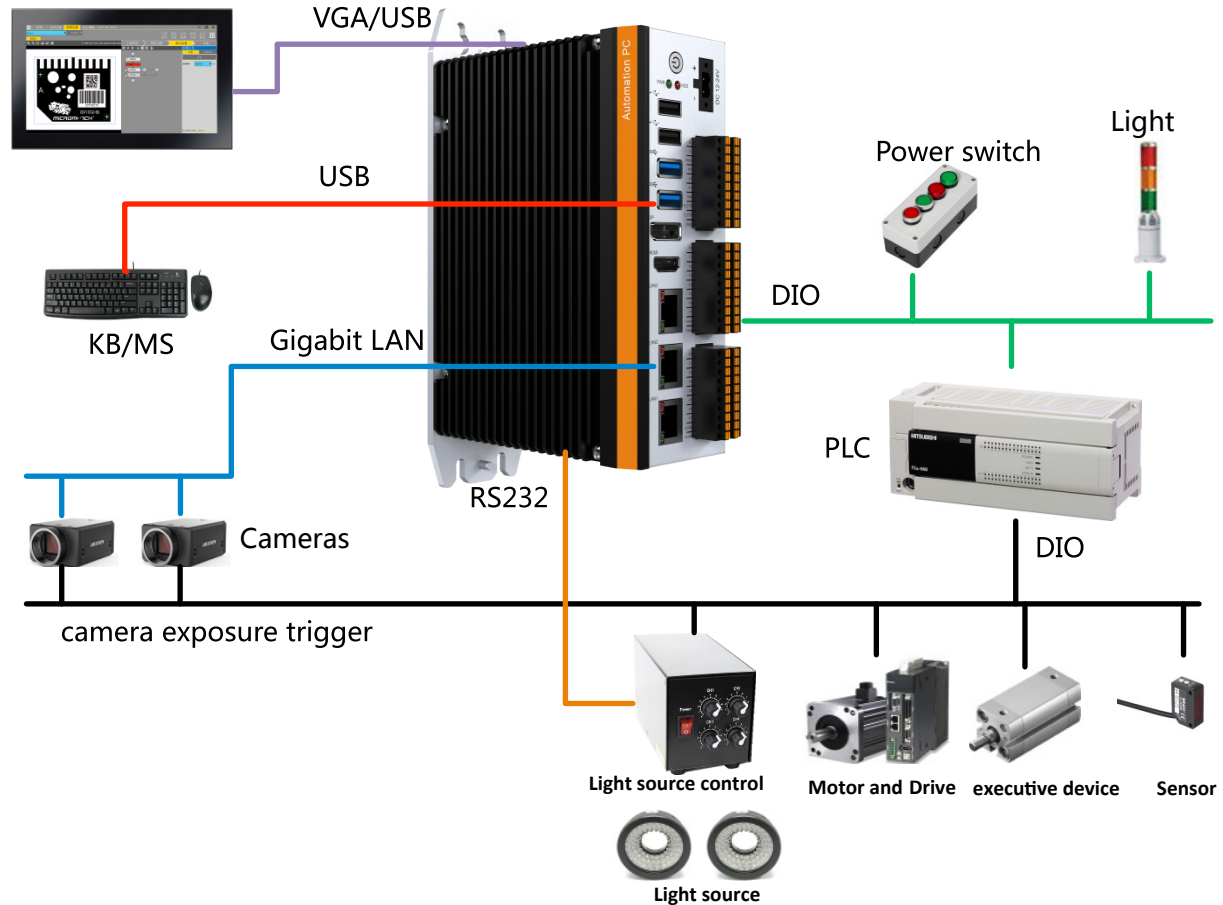
## Motion Control and Automation application

- X86 high computing CPUg  
Elkhart Lake J6412
- 16-ch DI, 16-ch DO
- 2-ch independent CAN bus
- 3 Gigabit LAN ports
- Buid-in super capacitor  
module for data protection  
when power lost
- BIOS real-time optimization
- Compact and space-saving
- Display and control all in one



## Machine Vision

- X86 high computing CPU: Elkhart Lake J6412
- 16-ch DI, 16-ch DO
- 3 Intel gigabit LAN ports
- 2 UBS3.0
- VGA port
- Internal USB dongle
- Compact and space-saving



# Thank You