

Features



Optimized weight
Optimize controller weight reduction to control overall machine weight and extend the robot's operational duration.



Electromagnetic interference
Prevent electromagnetic interference from internal components such as motors affecting the controller, ensuring stable operation of the equipment in complex electromagnetic environments.



Wireless communication
Through spread-spectrum technology, optimal antenna placement, and the integration of hardware-level signal filtering modules, stable wireless communication is ensured.



Communication Latency
High-speed communication interface, maintaining stable communication with the cerebellum controller to ensure low latency.

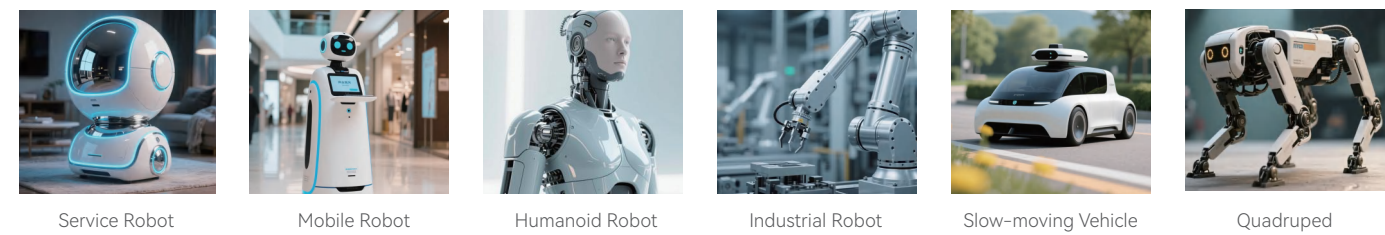


Reinforcement for vibration resistance
Aviation connectors + automotive connectors + automotive BTB interfaces, providing reliable signal connections in high-vibration environments.

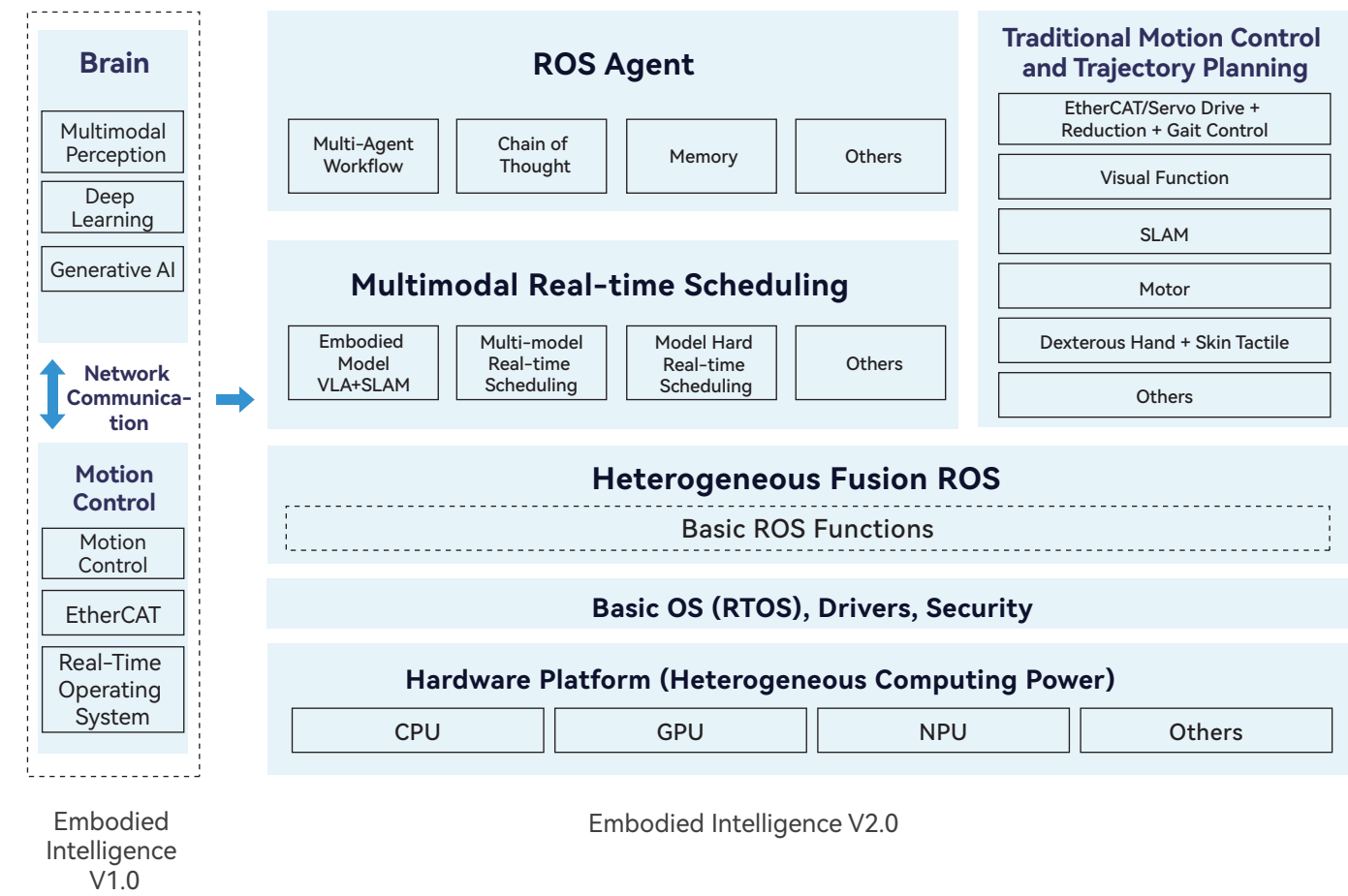


Total power consumption
Ultra-low power consumption,ensuring prolonged operation of embodied devices.

Application



Architecture



Being Smart, Being Intelligent



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Intelliengine

JWIPC Robotics Controller

EII-2000 Series
(RK3588+AI accelerator card)

EII-5700 Series
(Intel Ultra)

EII-6100 Series
(Jetson Orin NX)

EII-6300 Series
(Jetson Thor)

JWIPC Technology Co.,Ltd

IntelliEngine EII-2000 Series



EII-2000

Rockchip RK3588J
RK Gongga1/
AzureBlade K-series/LIQING™
LQ50 etc.

3x USB 3.0 Type-A
1x USB 3.0 Type-C(OTG)

2 x RJ45 GbE
1 x HDMI2.0
Reinforced Ethernet
port (optional)

DC 9~36V in
Wide-range power supply with
overvoltage and overcurrent
protection

Expansion
Support WIFI/Bluetooth
4G/5G module/SSD

130(W)*125(L)*60(H)mm
Motherboard + Module + Heat
Sink Assembly Dimensions

Clock synchronisation
Built-in RTC clock chip



EII-2000E

Rockchip RK3588J
RK Gongga1/
AzureBlade K-series/LIQING™
LQ50 etc.

8xGMSL2
Support up to 8 GMSL2 cameras
4xDMIC, 2xAMP
1x3.5 Combo Jack

3x USB 3.0 Type-A
1x USB 3.0 Type-C (OTG)

1xGNSS
Independent 6-Axis
MotionTracking™ IMU

6 x RJ45 GbE
1 x HDMI2.0
Reinforced Ethernet port
(optional)

8x DI Optocoupler isolation
8x DO Optocoupler isolation

2 x CAN FD
2x RS-485、 2x RS-232

DC 9~36V in
Wide-range power supply with
overvoltage and overcurrent
protection

**Expansion support
WIFI/Bluetooth**
4G/5Gmodule/SSD

130(W)*125(L)*70(H)mm
Motherboard + Module + Heat
Sink Assembly Dimensions

Clock synchronisation
Built-in RTC clock chip

IntelliEngine EII-6100 Series



EII-6100

34/67/117/157TOPS
Jetson Orin Nano Super
(4G/8G), Jetson Orin Nx Super
(8G/16G)module

3xUSB 3.0
1xUSB 3.0 TYPE-C
3xUSB A,
TYPE-C support OTG function

2xRJ45 GbE
Support EtherCAT

1xHDMI
HDMI 2.1

2xCAN
support CAN FD

DC9~36V in
Wide-range power supply with
overvoltage and overcurrent
protection

Other I/O
2xRS232,
5xRS485

Expansion
Support WIFI/Bluetooth,
4G/5Gmodule

Clock synchronisation
Built-in RTC clock chip

130(W)*125(L)*50(H)mm
Motherboard + Module + Heat
Sink Assembly Dimensions



EII-6101

34/67/117/157TOPS
Jetson Orin Nano Super(4G/8G),
Jetson Orin Nx Super
(8G/16G) module

3xUSB 3.0
1xUSB 3.0 TYPE-C
3xUSB A,
TYPE-C support OTG function

2xAviation connector GbE
Reinforced Ethernet port,
support EtherCAT

1xHDMI
HDMI2.1

2xCAN
support CAN FD

DC9~36V in
Wide-range power supply with
overvoltage and overcurrent
protection

Other I/O
2xRS232,
5xRS485

Expansion
Support WIFI/Bluetooth,
4G/5Gmodule

Clock synchronisation
Built-in RTC clock chip

130(W)*125(L)*50(H)mm
Motherboard + Module + Heat
Sink Assembly Dimensions

IntelliEngine EII-6300 Series



EII-6300

2070 TFLOPS
Blackwell Architecture
Fifth-Generation Tensor Core
Featuring MIG technology,
10 TPCs

4xUSB 3.2
1xUSB 3.2 TYPE-C
4xUSB A, Reinforcement Design
TYPE-C support OTG function

1xRJ45 GbE
2xRJ45 2.5G/5G/10G可选
Support EtherCAT

2xHDMI
HDMI 2.1

DC 9~36V in
Wide-range power supply
with overvoltage and
overcurrent protection

Expansion
Support WIFI/Bluetooth
4G/5Gmodule

Clock Synchronisation
Built-in RTC clock chip

130(W)*125(L)*70(H)mm
Motherboard + Module + Heat
Sink Assembly Dimensions



EII-6301

2070 TFLOPS
Blackwell Architecture
Fifth-Generation Tensor Core
Featuring MIG technology,
10 TPCs

4xUSB 3.2
1xUSB 3.2 TYPE-C
4xUSB A, Reinforcement Design
TYPE-C support OTG function

1xAviation connector GbE
2xAviation connector 2.5G/5G/10G optional
Reinforced Ethernet port,
support EtherCAT

2xHDMI
HDMI 2.1

DC 9~36V in
Wide-range power supply
with overvoltage and
overcurrent protection

Expansion
Support WIFI/Bluetooth
4G/5Gmodule

Clock synchronisation
Built-in RTC clock chip

130(W)*125(L)*70(H)mm
Motherboard + Module + Heat
Sink Assembly Dimensions

IntelliEngine EII-5700 Series



EII-5700

97 TOPS
Intel Ultra Arrow Lake Series

Expansion
support WIFI/Bluetooth
4G/5Gmodule//SSD MXM slot

6x USB 3.0 Type-C
Two for display

Other IO
2x RS232, 4x RS485
8x GPIO

4 x RJ45 GbE
2 x CAN FD
Support EtherCAT, Reinforced
Ethernet port (optional)

1xGNSS
Independent 6-Axis
MotionTracking™
IMU

DC 12~36V in
Wide-range power supply
with overvoltage and
overcurrent protection

Clock synchronisation
Built-in RTC clock chip

130(W)*125(L)*70(H)mm
Motherboard + Module + Heat
Sink Assembly Dimensions



EII-5700E

97TOPS
Intel Ultra Arrow Lake Series

Expansion
supportWIFI/Bluetooth
4G/5Gmodule//SSD MXM slot

6x USB 3.0 Type-C
Two for display

Other IO
2x RS232, 4x RS485
8x GPIO

4 x RJ45 GbE
2 x CAN FD
Support EtherCAT,
Reinforced Ethernet port
(optional)

1xGNSS
Independent 6-Axis
MotionTracking™
IMU

DC 12~36V in
Wide-range power supply
with overvoltage and
overcurrent protection

Clock synchronisation
Built-in RTC clock chip
4xDMIC, 2xAMP
1x3.5 Combo Jack

130(W)*125(L)*70(H)mm
Motherboard + Module + Heat
Sink Assembly Dimensions

Clock synchronisation
Built-in RTC clock chip



EII-6100E

34/67/117/157TOPS
Jetson Orin Nano
Super (4G/8G),J
etson Orin Nx Super
(8G/16G) module

3xUSB 3.0
1xUSB 3.0 TYPE-C
3xUSB A
TYPE-C support OTG function

6xRJ45 GbE
Support EtherCAT

1xHDMI
HDMI 2.1

8xGMSL2
Support up to 8 GMSL2
cameras

1xGNSS
RTK+DR (intergrated IMU)

Other I/O
4xDMIC,2xAMP,
1x3.5 Combo Jack,
2xRS232,9xRS485,24bit GPIO
(8bit with Optocoupler isolation)

DC9~36V in
Wide-range power supply with
overvoltage and overcurrent
protection

Clock synchronisation
PPS input,
Built-in RTC clock chip

130(W)*125(L)*70(H)mm
Motherboard + Module + Heat
Sink Assembly Dimensions



EII-6101E

34/67/117/157TOPS
Jetson Orin Nano
Super (4G/8G),
Jetson Orin Nx Super
(8G/16G) module

3xUSB 3.0
1xUSB 3.0 TYPE-C
3xUSB A
TYPE-C support OTG function

6xAviation connector GbE
Reinforced Ethernet port,
support EtherCAT

1xHDMI
HDMI 2.1

2xCAN
supportCAN FD

1xGNSS
RTK+DR (intergrated IMU)

Other I/O
4xDMIC, 2xAMP,
1x3.5 Combo Jack,
2xRS232,2xRS485,32bit GPIO
(8bit with Optocoupler isolation)

Expansion
Support WIFI/Bluetooth,
4G/5Gmodule

Clock synchronisation
Built-in RTC clock chip

130(W)*125(L)*70(H)mm
Motherboard + Module + Heat
Sink Assembly Dimensions



EII-6300E

2070 TFLOPS
Blackwell Architecture
Fifth-Generation Tensor Core
Featuring MIG technology,
10 TPCs

4xUSB 3.2
1xUSB 3.2 TYPE-C
4xUSB A, Reinforcement Design
TYPE-CsupportOTGfunction

5xRJ45 GbE
2xRJ45 2.5G/5G/10G optional
Support EtherCAT

2xHDMI
HDMI 2.1

8xGMSL2
Support up to 8
GMSL2 cameras

1xGNSS
RTK+DR (intergrated IMU)

4xCAN
Support CAN FD

DC 9~36V in
Wide-range power supply with
overvoltage and overcurrent
protection

Other I/O
4xDMIC, 2xAMP
1x3.5 Combo Jack
1xRS232,2xRS485,32bit GPIO
(16bit with Optocoupler isolation)

Expansion
Support WIFI/Bluetooth
4G/5Gmodule

Clock synchronisation
Built-in RTC clock chip

130(W)*125(L)*85(H)mm
Motherboard + Module + Heat
Sink Assembly Dimensions



EII-6301E

2070 TFLOPS
Blackwell Architecture
Fifth-Generation Tensor Core
Featuring MIG technology,
10 TPCs

4xUSB 3.2
1xUSB 3.2 TYPE-C
4xUSB A, Reinforcement Design
TYPE-CsupportOTGfunction

5xAviation connector GbE
2xAviation connector 2.5G/5G/10G optional
Reinforced Ethernet port,
support EtherCAT

2xHDMI
HDMI 2.1

8xGMSL2
Support up to 8 GMSL2 cameras

1xGNSS
RTK+DR (intergrated IMU)

4xCAN
support CAN FD

DC9~36V in
Wide-range power supply with
overvoltage and overcurrent
protection

Other I/O
4xDMIC, 2xAMP1x3.5 Combo Jack,
1xRS232, 2xRS485,32bit GPIO
(16bit with Optocoupler isolation)

Expansion
Support WIFI/Bluetooth
4G/5Gmodule

Clock synchronisation
Built-in RTC clock chip

130(W)*125(L)*85(H)mm
Motherboard + Module + Heat
Sink Assembly Dimensions