

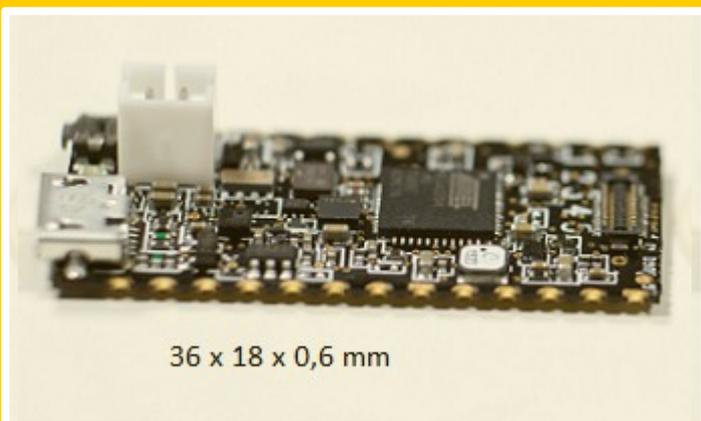
Aistin Owl Brain Controller Host Boards (CPU2X2)

CPU2X2 Aistin Host boards are the core of your IoT innovations. CPU2X2 operate using the most known Atmel processor in the world, the Atmega32U4. When combined with different Aistin Add-on Boards, possibilities for applications are limitless.

Programming is easy with Arduino IDE and C language. Users have also possibility to use ready made iProtoXi Aistin firmware and server solution that makes it possible to control and read sensors over the Internet with any modern browser. In this case no programming is needed.

Whether you preferred a fully equipped IoT platform with an integrated Wifi and lots of embedded sensors, or a stripped version with smart power control and possibility to choose how to expand, we have the right solution for you.

Technical Overview



36 x 18 x 0,6 mm

- Atmega32u4 Processor
- 16 MHz Clock Speed
- 2 MBit EEPROM
- Aistin Bus24 Host Connectors*
- Embedded Sensors and Wifi
- 3 x Programmable LED
- Real Time Clock
- Charge and Power Control
- Micro USB and Battery Connector
- Smart Switch

CPU252-212

Technical Details

All CPU2X2 Aistin Host Boards are based on Atmega32u4 processor with 16 MHz clock speed. They're equipped with micro USB connector, multi operational switch, and programmable red, green, and blue LEDs. Version specific differences are described in the table below.

	CPU252	CPU242	CPU232	CPU222	CPU212
Aistin Bus24 Host Connector*	2X	2X	3X	3X	3X
Embedded Wifi (HF-LPT200)	X	X	.	.	.
2 MB EEPROM	X	X	.	.	.
Battery Connector	X	X	X	X	.
Charge and Power Control	X	X	X	X	.
Real Time Clock	X	X	X	X	.
Smart Switch	X	X	X	X	.
3-axis Accelerometer (LIS2DH12)	X	.	X	.	.
Humidity & Temperature Sensor (HTS221)	X	.	X	.	.
Barometer (LPS25H)	X	.	X	.	.

All CPU2X2 units are equipped with several Aistin Bus24 Host Connectors based on the Aistin Bus24 Intelligent Open Interface Standard. Up to three Aistin Add-on Boards of your choice can be mounted to these Host devices.

CPU252 and CPU232 have integrated sensors for motion, humidity, temperature and air pressure. The accelerometer has $\pm 2g/\pm 4g/\pm 8g/\pm 16g$ selectable full scales and output data rates from 1 Hz to 5.3 kHz. Humidity sensor has a 0 to 100% RH range and the range of temperature sensor is from -40 to 120 °C. Barometer has a 260 to 1260 hPa absolute pressure range.

CPU252 and CPU242 come with an integrated Wifi and a 256 kB memory.

CPU212 is the most robust version of all CPU2X2's and is the smallest in size. You can get more functionality to it by mounting the Aistin Add-on Board of your choice.

Aistin Bus24 Signal Chart

