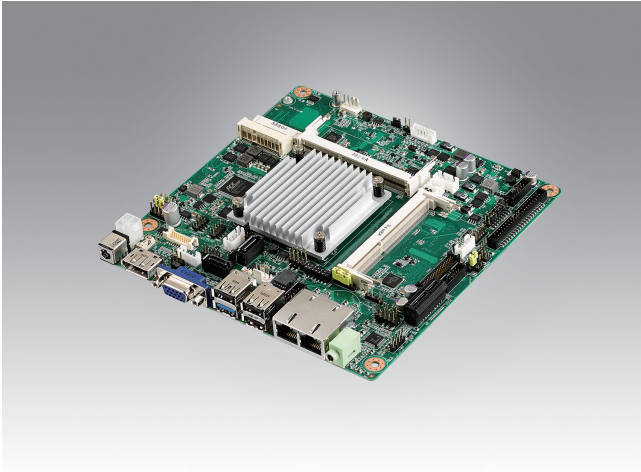


# AIMB-215 B2

Intel® Celeron® Quad Core J1900/N2930/  
N2807 Mini-ITX with CRT/LVDS/DP++,  
6 COM, and Dual LAN



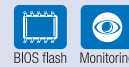
## Features

- Supports Intel Celeron Quad Core J1900/N2930/N2807 processor
- Two 204-pin SO-DIMM up to 8 GB DDR3L 1333 MHz SDRAM
- Supports VGA/DP1.2 /24-bit dual channel LVDS
- Supports 1 PCIe x1, 6 COM, 7 USB 2.0, and 1 USB 3.0
- Lower total cost of ownership with DC12V support and onboard TPM1.2(option)
- Supports WISE-DeviceOn and Embedded Software APIs

### Software APIs:



### Utilities:

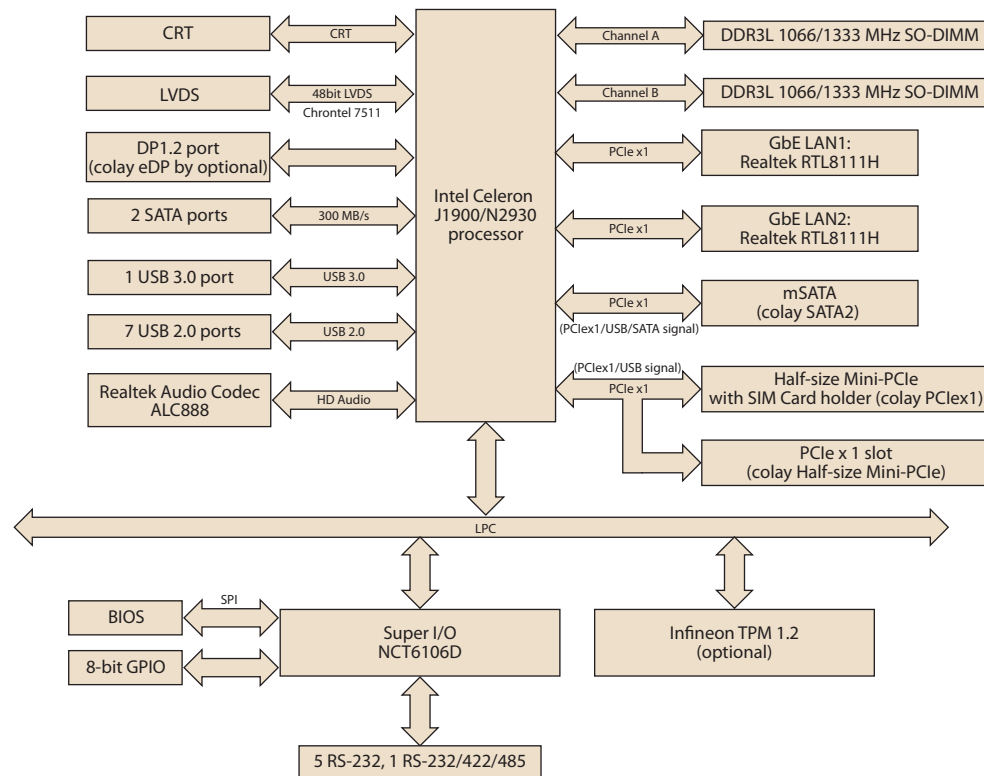


WISE-DeviceOn CE FC RoHS

## Specifications

|                          |                           |  |                      |                            |
|--------------------------|---------------------------|--|----------------------|----------------------------|
| Processor System         | CPU (22nm)                | Intel J1900  | Intel N2930          | Intel N2807                |
|                          | Max. Speed                | 2.0 GHz (Quad core)  | 1.83 GHz (Quad core) | 1.58 GHz (Dual core)       |
|                          | L2 Cache                  | 2 MB   | 2 MB                 | 1 MB                       |
|                          | BIOS                      | AMI 16 Mbit SPI  | AMI 16 Mbit SPI      | AMI 16 Mbit SPI            |
| Expansion Slot           | PCI                       | -  |                      |                            |
|                          | Mini-PCIe                 | 1 x H/S mini-PCIe with SIM card holder (colay PCIe1)   |                      |                            |
|                          | PCIe                      | PCI Express x1 (Gen2), colay H/S MiniPCIe  |                      |                            |
| Memory                   | Technology                | Dual channel DDR3L 1066/1333 MHz SDRAM   |                      |                            |
|                          | Max. Capacity             | 8 GB/4 GB per SO-DIMM  |                      |                            |
|                          | Socket                    | 2 x 204-pin SO-DIMM (Non-ECC)  |                      |                            |
| Graphics                 | Controller                | Intel Gen 7 Graphics Engines and media encode/decode engine; GPU Frequency: 688 MHz for J1900; 313 MHz for N2930             |                      |                            |
|                          | VRAM                      | Shared system memory up to 224 MB SDRAM  |                      |                            |
|                          | VGA                       | Supports up to 2560 x 1600   |                      |                            |
|                          | LVDS                      | Supports dual channel 48-bit up to 1920 x 1200   |                      |                            |
|                          | Display Port 1.2          | 1, Supports DP++, resolution up to 2560 x 1600 colay eDP port (optional)   |                      |                            |
|                          | Dual Display              | VGA+DP1.2, VGA+LVDS, LVDS+DP1.2, VGA+eDP (optional), LVDS+eDP (optional), Supports extended mode and clone mode              |                      |                            |
| Ethernet                 | Interface                 | 10/100/1000 Mbps   |                      |                            |
|                          | Controller                | GbE LAN1: Realtek RTL8111H<br>GbE LAN2: Realtek RTL8111H   |                      |                            |
| SATA                     | Connector                 | RJ-45 x 2  |                      |                            |
|                          | Max Data Transfer Rate    | 300 MB/s   |                      |                            |
| Rear I/O                 | Channel                   | 2, SATA 2 colay mSATA (optional); SATA 1 support SATA-DOM device   |                      |                            |
|                          | CRT                       | 1  |                      |                            |
|                          | DP1.2                     | 1  |                      |                            |
|                          | Ethernet                  | 2  |                      |                            |
|                          | USB                       | 4 (3 x USB 2.0/1 x USB 3.0)  |                      |                            |
|                          | Audio                     | 1 (Mic-in or Line out)   |                      |                            |
|                          | DC jack                   | 1 (2.5 mm)   |                      |                            |
| Internal Connector       | LVDS & Inverter           | 1/1  |                      |                            |
|                          | eDP                       | 1 (option)   |                      |                            |
|                          | USB                       | 4 (USB 2.0 compliant)  |                      |                            |
|                          | Serial                    | 6 (5 x RS-232, 1 x RS-232/422/485; COM 3 support RS-232/422/485 auto flow control; COM 6 support 5V/12V by jumper selection) |                      |                            |
|                          | IDE                       | None   |                      |                            |
|                          | SATA                      | 2  |                      |                            |
|                          | SATA PWR Connector        | 2  |                      |                            |
|                          | Parallel                  | None   |                      |                            |
|                          | GPIO                      | 8-bit  |                      |                            |
| PS/2 KB & MS             | 1                         |  |                      |                            |
| Watchdog Timer           | Output                    | System reset   |                      |                            |
|                          | Interval                  | Programmable 1 ~ 255 (second or minute)  |                      |                            |
| Power                    | Power Type                | Single voltage 12V DC input; 1 x External DC jack; 1 x Internal 4-pin (2x2) power connector; Supports AT/ATX mode            |                      |                            |
|                          | Typical Power Consumption | Win Idle 10.17 W (Intel Celeron J1900 2.0 GHz / DDR3L 1600 MHz 4GB x 2)  |                      |                            |
| Environment              | Operating                 |  |                      | Non-Operating              |
|                          | Temperature               | 0 ~ 60° C (32 ~ 140° F) with 0.7m/s air flow   |                      | -40 ~ 85° C (-40 ~ 185° F) |
| Physical Characteristics | Dimensions                | 170 mm x 170 mm (6.69" x 6.69")  |                      |                            |

## Block Diagram



## Ordering Information

| Part Number     | CPU   | Memory | DP++/eDP | CRT | LVDS | GbE LAN | COM | SATA II | USB3.0/2.0 | MiniPCle | TPM | AMP      | PClex1 | Thermal Solution | Operating Temp. |
|-----------------|-------|--------|----------|-----|------|---------|-----|---------|------------|----------|-----|----------|--------|------------------|-----------------|
| AIMB-215D-S6B2  | J1900 | 2      | 1 / (1)  | 1   | 1    | 2       | 6   | 2       | 1/7        | 1 x H/S  | (1) | (2 x 6W) | 1      | Passive          | 0 - 60° C       |
| AIMB-215N-S6B2  | N2930 | 2      | 1 / (1)  | 1   | 1    | 2       | 6   | 2       | 1/7        | 1 x H/S  | (1) | (2 x 6W) | 1      | Passive          | 0 - 60° C       |
| AIMB-215U-S6B2  | N2807 | 1      | 1 / (1)  | 1   | 0    | 1       | 2   | 1       | 1/3        | 0        | (1) | (2 x 6W) | 1      | Passive          | 0 - 60° C       |
| AIMB-215L-S6B2  | J1900 | 2      | 1 / (1)  | 1   | 0    | 1       | 2   | 1       | 1/3        | 0        | (1) | (2 x 6W) | 1      | Passive          | 0 - 60° C       |
| AIMB-215DZ-S6B2 | J1900 | 2      | 1 / (1)  | 1   | 1    | 2       | 6   | 2       | 1/7        | 1 x H/S  | (1) | (2 x 6W) | 1      | Passive          | -20 - 70° C     |

Note: Passive = fanless

\* ( ) BOM options available on MP version

## Packing List

| Part Number    | Description                          | Quantity |
|----------------|--------------------------------------|----------|
| 1700003194     | SATA HDD cable                       | 1        |
| 1700018785     | SATA power cable                     | 1        |
| 1700008876     | 1-to-4 serial ports cable kit, 35 cm | 1        |
| 1700100250     | 1-to-1 serial port cable, 25 cm      | 2        |
| 19Z0000569T000 | I/O port bracket                     | 1        |
| 2006021531     | Startup manual                       | 1        |
| 1960064228N001 | Fanless heatsink                     | 1        |

## Optional Chassis

| Part Number     | Description                               |
|-----------------|---|
| AIMB-B2000-00YE | Mini-ITX chassis with optional DC Adaptor |

## I/O View



## Optional Accessories

| Part Number      | Description                                |
|------------------|--|
| 96PSA-A60W12V1-4 | Adaptor AC100-240V 60W +12V/5A             |
| 96PSA-A84W12V1-4 | Adaptor AC100-240V 84W, 12V/7A             |
| 1703060191       | KBMS cable 1*6P-2.5/DIN-6P(F)*2, 25 cm     |
| 1700023474-01    | A Cable USB-A 4P(F)*2/2*5P-2.0 34.5CM F/10 |

## Optional LVDS module

| Part Number      | Description                                       |
|------------------|---|
| AIMB-LVDS2-00A1E | AIMB LVDS module to support 2nd LVDS for AIMB-215 |

Note: Requires customized BIOS and AIMB-215 BOM change to support

## Embedded OS/API

| OS/API        | Part No.   | Description                                   |
|---------------|------------|---|
| WES8          | 2070013818 | img WES8 AIMB-215B1 x64 V6.5.2 10MUI          |
| WES7          | 2070013815 | img WES7E AIMB-215B1 x64 V5.6.8 Ent/Jp/TC/SC  |
| Win10 IoT Ent | 2070014093 | img Win10 IoT Ent AIMB-215D x32 V10.0.0 10MUI |
| Win10 IoT Ent | 2070014894 | img W10 16EL AIMB-215D B1 64bit 1609 Eng      |

# Tento produkt můžete zakoupit u společnosti AutoCont IPC a.s.



## AutoCont IPC a.s.

Váš dodavatel průmyslových počítačů, komponent a speciálních průmyslových IT systémů.

 Uhlířská 1064/3, 710 00 Ostrava, Česká republika

 obchod@autocont-ipc.cz

 +420 552 301 002

 [www.autocont-ipc.cz](http://www.autocont-ipc.cz)



### PRŮMYSLOVÉ POČÍTAČE

fanless embedded PC, do racku, ...



### POČÍTAČE S DISPLEJEM

panelové PC, terminály, do vozidel, ...



### AUTOMATIZACE A SBĚR DAT

převodníky, karty, moduly, switche, ...



### PERIFERIE A KOMPONENTY

monitory, klávesnice, desky, skříně, ...



### NOTEBOOKY A TABLETY

odolné, windows, android, IP65, ...



### INFORMAČNÍ KIOSKY

interiérové, venkovní, ...



### MEDICÍNSKÁ TECHNIKA

počítače, tablety, LCD, klávesnice, ...



### SOFTWAREVÁ ŘEŠENÍ

pro výrobu, zaměstnance, kiosky, ...



### PŘEJÍT DO E-SHOPU

[eshop.autocont-ipc.cz](http://eshop.autocont-ipc.cz)



### DOPRAVA ZDARMA

Doprava zdarma v ČR a SR při objednávce nad 10 000 Kč bez DPH nebo nad 400 EUR.



### PRODLOUŽENÁ ZÁRUKA

Záruka 2 roky na vyráběné počítače s možností jejího prodloužení až na 5 let.



### ODMĚNA ZA VĚRNOST

Pravidelní zákazníci u nás nakupují za nižší ceny. Výše slevy se odvíjí od realizovaného obrátu.



### SERVIS ON-SITE A IN-TIME

K projektovým dodávkám nabízíme rozšířenou podporu a servis s garancí výměny zařízení do 48 hodin.