



999.00 EUR  
incl. 19% VAT, plus [shipping](#)

- Intel® Braswell Celeron® Processor N3160 1.6G Quad Core
- Support DDR3L 1600MHz Dual Channel,
- 2 \* SO-DIMMs, Max. up to 8GB
- Support VGA, DVI-D, LVDS 3 Independent Display
- Realtek RTL8111G PCIe GbE, 2 \* RJ45 ports
- Support 2 \* Serial ATAPI (6Gb/s)
- 1 \* External COM ( RS232/422/485 ),
- 5 \* Internal COM ( RS232 )
- COM ports with 5V/12V power selectable
- 4 \* External USB3.0 & 3 \* Internal USB1.1/2.0
- 1 \* PCIe x1 slot, 1 \* Full size mPCIe
- 1 \* M.2 ( SATA interface only, M key-2242/2260/2280 )
- 1 \* SIM Card Holder
- 1 \* Internal 4 Channel Audio ( Line Out & MIC )
- Lockable DC input over/under voltage protection
- 3 \* 4pin FAN type auto detection
- Thin Mini-ITX Form Factor (170mm x 170mm)

#### Product Specifications

##### Form Factor

|            |                               |
|------------|-------------------------------|
| Dimensions | - Thin Mini-ITX (170 x 170mm) |
|------------|-------------------------------|

|                         |                                                                                   |                   |                                                     |
|-------------------------|-----------------------------------------------------------------------------------|-------------------|-----------------------------------------------------|
| Processor System        |                                                                                   |                   |                                                     |
| CPU                     | - Intel® Braswell Celeron® Processor N3160, TDP : 6W (N3150 before December 2016) |                   |                                                     |
| Core Number             | - Quad Core                                                                       |                   |                                                     |
| Speed                   | - Processor Base Frequency : 1.6GHz, Burst Frequency : 2.08GHz                    |                   |                                                     |
| L2 Cache                | - 2MB                                                                             |                   |                                                     |
| Chipset                 | - SoC                                                                             |                   |                                                     |
| BIOS                    | - AMI 64Mb Flash ROM                                                              |                   |                                                     |
| Expansion Slot          |                                                                                   |                   |                                                     |
| PCI                     | - 0                                                                               |                   |                                                     |
| PCIe                    | - 1 ( x1 slot )                                                                   |                   |                                                     |
| Memory                  |                                                                                   |                   |                                                     |
| Technology              | - Dual Channel DDR3L 1600 MHz SDRAM                                               |                   |                                                     |
| Max.                    | - 8GB                                                                             |                   |                                                     |
| Socket                  | - 2 * SO-DIMM                                                                     |                   |                                                     |
| Graphics                |                                                                                   |                   |                                                     |
| Controller / VRAM       | - Intel® HD Graphics / Shared system memory                                       |                   |                                                     |
| VGA                     | - Yes ( Max. Resolution : 1920X1200@60Hz )                                        |                   |                                                     |
| DVI-D                   | - Yes ( DVI-D, Max. Resolution : 1920X1200@60Hz )                                 |                   |                                                     |
| HDMI                    | - No                                                                              |                   |                                                     |
| DisplayPort             | - No                                                                              |                   |                                                     |
| eDP                     | - No                                                                              |                   |                                                     |
| LVDS                    | - Yes ( 24-bits Dual Channel, Max. Resolution : 1920X1080@60Hz )                  |                   |                                                     |
| MultiDisplay            | - Yes ( 3 Independent Display )                                                   |                   |                                                     |
| Ethernet                |                                                                                   |                   |                                                     |
| Interface               | - 10/100/1000 Mbps                                                                |                   |                                                     |
| Controller              | - PCIe GbE LAN : Realtek RTL8111G                                                 |                   |                                                     |
| Connector               | - 2 * RJ 45                                                                       |                   |                                                     |
| Audio                   |                                                                                   |                   |                                                     |
| CODEC                   | - HD Audio : Realtek ALC662VD                                                     |                   |                                                     |
| Channel                 | - 4 Channel                                                                       |                   |                                                     |
| SATA                    |                                                                                   |                   |                                                     |
| Max. Data Transfer Rate | - 2 * SATAIII (6.0Gb/s)                                                           |                   |                                                     |
| RAID Support            | - No                                                                              |                   |                                                     |
| Rear I/O                |                                                                                   |                   |                                                     |
| VGA                     | - 0                                                                               | SPDIF Output      | - 0                                                 |
| DVI-D                   | - 1                                                                               | Serial            | - 1 ( RS232/422/485 with 5V/12V selectable header ) |
| HDMI                    | - 0                                                                               |                   |                                                     |
| DisplayPort             | - 0                                                                               | Parallel          | - 0                                                 |
| Ethernet                | - 2                                                                               | eSATA             | - 0                                                 |
| USB                     | - 4 ( USB 3.0 )                                                                   | PS2               | - 0                                                 |
| Audio                   | - 0                                                                               | DC-Input          | - 1 ( 12V Lockable DC-In PWR Jack )                 |
| Internal Connector      |                                                                                   |                   |                                                     |
| USB                     | - 3 ( USB1.1/2.0 )                                                                | SIM Card Holder   | - 1                                                 |
| PS/2                    | - 1                                                                               | CFast Card Socket | - 0                                                 |
| LVDS /                  | - 1 ( 24 bits Dual Channel ) /                                                    | CF Card Socket    | - 0                                                 |
| Inverter                | 1                                                                                 | CIR               | - 0                                                 |
| VGA                     | - 1                                                                               | GPIO 8-bit        | - 1 ( 4in/4 out )                                   |
| Serial                  | - 5                                                                               | Chassis intrusion | - 1                                                 |
|                         | ( RS-232 with 5V/12V selectable header )                                          | Audio Header      | - 1 ( Line Out & MIC )                              |
| Parallel                | - 0                                                                               | SPDIF             | - 0                                                 |
| SATA                    | - 2 ( SATAIII 6.0Gb/s )                                                           | HDMI-SPDIF        | - 0                                                 |
| mPCIe                   | - 1 ( Full size )                                                                 | SMBUS/ I2C        | - 1 ( I2C )                                         |

|                |                                                     |                        |                |
|----------------|-----------------------------------------------------|------------------------|----------------|
|                |                                                     | AT mode jumper         | - 1            |
| mSATA          | - 0                                                 | Jetway Daughter        | - 0            |
| M.2            | - 1 ( SATA interface only,                          | Audio Amplifier Header | - 1 ( 3W Amp ) |
|                | M key-2242/2260/2280, shared with SATA2 )           |                        |                |
| Other          |                                                     |                        |                |
| Power          | - 12V Lockable DC-In PWR Jack, Supports AT/ATX Mode |                        |                |
| Watchdog Timer | - Programmable 1 ~ 255 sec/min                      |                        |                |
| Certifications | - CE, FCC, RoHS, REACH                              |                        |                |
| Temperature    | - Operating : 0 ~ 60 , Storage : -20 ~ 85           |                        |                |