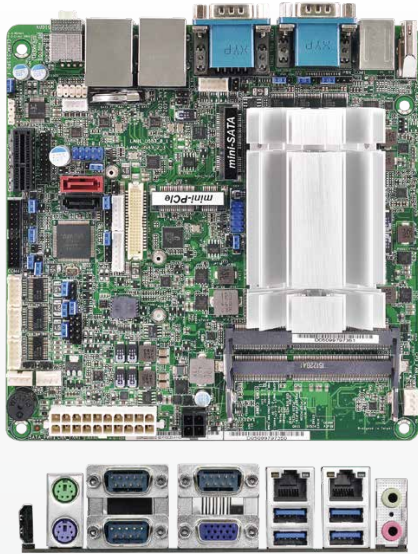




# IMB-154B

Mini-ITX Motherboard

## Spotlight Features

- Intel® Braswell SoC Processor N3160
- Supports Dual Channel DDR3L SO-DIMM 1333/1600, up to 8GB
- 1 x HDMI, 1 x D-Sub, 1 x Dual Channel 24-bit LVDS/eDP
- 4 x USB 3.0, 4 x USB 2.0, 2 x SATA3, 6 x COM
- 1 x Mini-PCle, 1 x PCIe x1, 1 x mSATA (shared)
- 2 x Realtek LAN
- 1 x TPM Header
- +12V or +19V~+24V DC-In (4-pin ATX PWR Con/ ATX)

## Specifications

### Processor System

|            |                                                           |
|------------|-----------------------------------------------------------|
| Dimensions | Mini-ITX (6.7-in x 6.7-in)                                |
| CPU        | Intel® Braswell SoC Processor<br>N3160, QC, 1.60 GHz, 6 W |
| Chipset    | SOC                                                       |

### Expansion Slot

|           |                                            |
|-----------|--------------------------------------------|
| PCIe      | 1 x PCIe x1                                |
| Mini-PCle | 1 x full/half size with PCIe x1 and USB2.0 |
| M.2       | N/A                                        |
| mSATA     | 1 x full size with SATA3 and USB2.0        |

### Memory

|            |                                 |
|------------|---------------------------------|
| Technology | Dual Channel DDR3L 1333/1600MHz |
| Max        | 8GB                             |
| Socket     | 2 x SO-DIMM                     |

### Graphics

|               |                                                |
|---------------|------------------------------------------------|
| Controller    | Intel® Gen8 Intel Graphics DX 11*, OGL3.2      |
| VGA           | Supports max resolution up to 1920 x 1200      |
| LVDS          | Supports max resolution up to 1920 x 1200@60Hz |
| eDP           | N/A                                            |
| HDMI          | Supports max resolution up to 1920 x 1200      |
| DVI           | N/A                                            |
| DisplayPort   | N/A                                            |
| Multi Display | Triple Display                                 |

### Ethernet

|                   |                                                        |
|-------------------|--------------------------------------------------------|
| Controller/ Speed | 2 x Realtek RTL8111G/RTL8111H-CG with 10/100/1000 Mbps |
|-------------------|--------------------------------------------------------|

### Rear I/O

|             |                             |
|-------------|-----------------------------|
| VGA         | 1                           |
| DVI         | N/A                         |
| HDMI        | 1                           |
| DisplayPort | N/A                         |
| Ethernet    | 2                           |
| USB         | 4 x USB 3.0                 |
| Audio Jack  | 2 (Mic-in, Line-out)        |
| Serial      | 3 x COM (RS-232/RS-422/485) |
| PS/2        | 2 (1 x keyboard, 1 x mouse) |

### Internal Connector

|                     |                                            |
|---------------------|--------------------------------------------|
| USB                 | 4 x USB 2.0                                |
| LVDS                | 1                                          |
| eDP                 | N/A                                        |
| VGA                 | N/A                                        |
| Serial              | 3 x COM (RS-232)                           |
| SATA                | 2 x SATA3                                  |
| Parallel            | 1 (Co-lay with 8in/8out DIO)               |
| GPIO                | 8 x GPI + 8 x GPO (shared with LPT header) |
| SATA PWR Output Con | 1                                          |
| Speaker Header      | 1                                          |
| TPM                 | 1 x Header                                 |

### Watchdog Timer

|          |                                   |
|----------|-----------------------------------|
| Output   | From Super I/O to drag RESETCON#  |
| Interval | 256 segments, 0,1,2,...255sec/min |

### Power Requirements

|           |                                                                                                                      |
|-----------|----------------------------------------------------------------------------------------------------------------------|
| Input PWR | 12V or 19~24V DC in (4-pin ATX PWR Con) / ATX                                                                        |
| Power On  | AT/ATX Supported<br>AT : Directly PWR on as Power input ready<br>ATX: Press Button to PWR on after Power input ready |

### Environment

|                       |              |
|-----------------------|--------------|
| Operating Temperature | 0°C ~ 60°C   |
| Storage Temperature   | -40°C ~ 85°C |

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