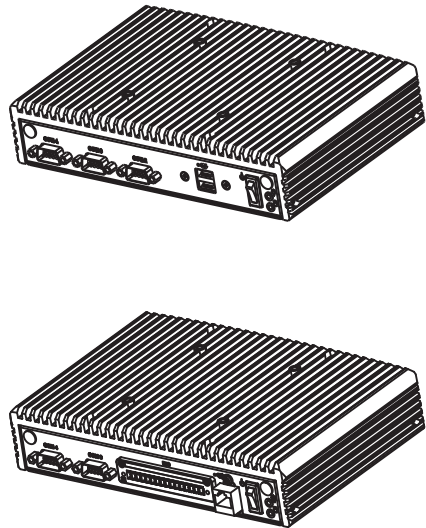


# BS-E099

## Quick Reference Guide



Ver. Q1

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## Packing Checklist

If you discover any item below damaged or lost, please contact your vendor immediately.

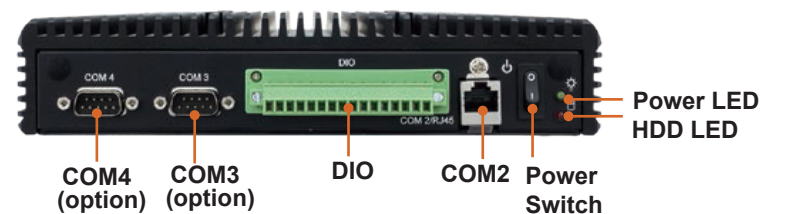
- BS-E099 x1
- This Quick Reference Guide x1
- Driver/ Manual DVD x1
- Mini Jumper (2.0 mm) x2

## Specifications

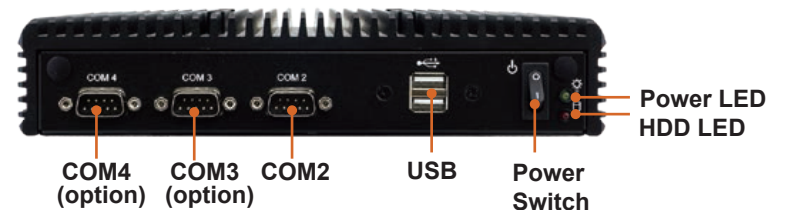
| System                |   |
|-----------------------|---|
| CPU                   | Intel® Kabylake U Series<br>Intel® Core™ i5-7300U<br>Intel® Core™ i3-7100U<br>Intel® Pentium® 4415U   |
| Memory Support        | 1 x DDR4 SO-DIMM sockets (up to 16GB)   |
| Power Supply          | 4-pin ATX Power Input Connector (12V /19V / 24V)  |
| Expansion Slots       | 1 x full-sized mSATA slot<br>1 x full-sized mPCIe<br>1 x SATAIII (6.0Gb/s)  |
| SATA                  | 1 x SATAIII (6.0Gb/s)   |
| Dimensions (WxHxD)    | 218 x 45 x 148mm  |
| Weight                | Approx. 2kg   |
| Operating System      | Windows 10 64bit / Ubuntu 16.04 64bit   |
| Certifications        | FCC/CE  |
| I/O Ports             |   |
| Display               | 1 x DP (rear I/O) / 1 x HDMI (rear I/O)   |
| USB                   | <b>For Core-i5 / i3 SKU:</b><br>2 x USB 2.0 (front I/O, option)<br>2 x USB 3.0 (rear I/O), 4 x USB 2.0 (rear I/O)<br><b>For Pentium SKU:</b><br>2 x USB 3.0 (rear I/O), 4 x USB 2.0 (rear I/O)  |
| Serial Ports          | COM1 for RS-232<br>COM2 for RS-232/422/485 selectable under BIOS(default: RS-232)<br>COM3 /COM4 for RS-232, option  |
| LAN                   | 2 x GbE LANs  |
| DIO Port              | 1 x DIO ( 8 in / 8 out), signal/power: 5V, option   |
| Audio                 | 3.5mm phone jack Line Out   |
| Expansion Slots       | <b>For Core-i5 / i3 SKU:</b><br>1 x full-sized mSATA slot (with USB signals)<br>1 x full-sized mPCIe slot (with SATA / USB signals)<br><b>For Pentium SKU:</b><br>1 x full-sized mSATA slot (with SATA signals only)<br>1 x full-sized mPCIe slot (with PCIe / USB signals) |
| I <sup>2</sup> C Port | 1 x 4-pin I <sup>2</sup> C port, option   |
| Environment           |   |
| Operating Temp.       | 0°C ~ 60°C (32°F~140°F)   |
| Storage Temp.         | -40°C ~ 80°C (-40°F~185°F)  |
| Humidity              | 20% ~ 95%   |

## System View

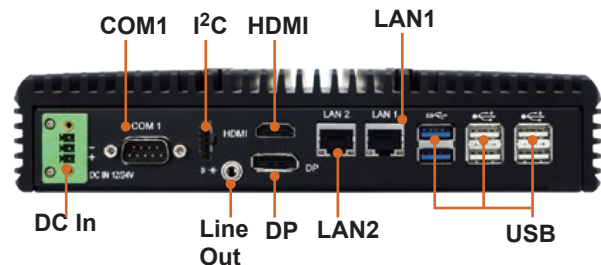
### Front View (Type 1)



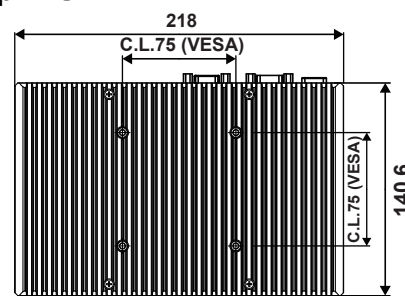
### Front View (Type 2)



### Rear View



### Top View



### Side View

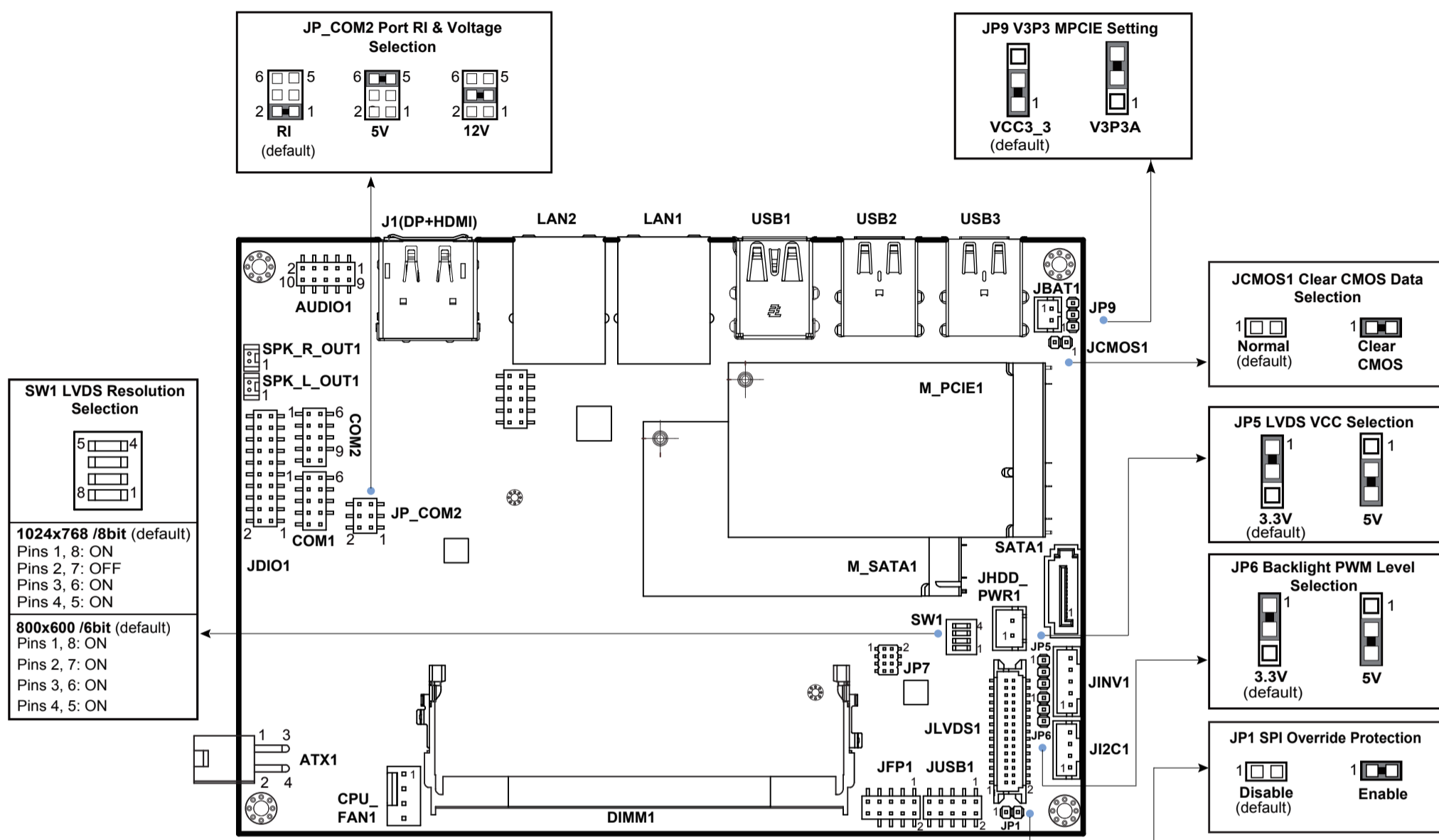


Unit: mm

# BS-E099

Fanless Embedded PC with Intel® Kabylake-U Series SoC

## Jumper Setting



**CAUTION!** Danger of explosion may occur if the battery is replaced incorrectly. Replace batteries only with the same or equivalent type recommended by the manufacturer. Dispose the used batteries according to the manufacturer's instructions.

## Safety Precaution

The following messages are safety reminders on how to protect your system from damages, and thus help you extend the life cycle of the system.

### 1. Check the Line Voltage

- The operating voltage for the power supply should cover the range of 12V / 19V / 24V DC; otherwise, the system may be damaged.

### 2. Environmental Conditions

- Place your BS-E099 on a sturdy, level surface. Be sure to allow enough room on each side to have easy access.
- Avoid moving the system rapidly from a hot place to a cold place or vice versa because condensation may come from inside of the system.
- Place BS-E099 against strong vibrations, which may cause hard disk failure.

### 3. Handling

- Do not turn the system upside down. This may cause the hard drive to mal-function.

- Do not allow foreign objects to fall into this product.
- If water or other liquid spills into this product, unplug the power cord immediately.

### 4. Good Care

- When the outside of the case is stained, remove the stain with neutral washing agent with a dry cloth.
- If dust has been accumulated on the outside, remove it by using a special made vacuum cleaner for computer.

### CAUTION!

Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions.

### WARNING!

Some internal parts of the system may have high electrical voltage. Therefore we strongly recommend qualified engineers open and disassemble the system.