

# CoreIPC

Q3100

Fanless Industrial Box PC Datasheet

Q3100 | Fanless Industrial Box PC | Multi-Platform Configurations

|              |                                                      |
|--------------|------------------------------------------------------|
| Document     | Datasheet                                            |
| Model        | Q3100                                                |
| Issue        | 1.0                                                  |
| Product Type | Fanless Industrial Box PC                            |
| Website      | <a href="http://www.CoreIPC.com">www.CoreIPC.com</a> |

This datasheet is prepared based on Q3100 User Manual Issue 1.0.

## 1. Product Overview

The Q3100 is a compact CoreIPC fanless industrial Box PC designed for embedded and industrial applications. It supports multiple Intel® Celeron®, Intel® Core™ and Intel® Processor platforms and provides configurable networking, display, USB, serial, wireless and storage options in a 165 x 127 x 47 mm fanless enclosure.

## 2. Key Features

- Fanless aluminum industrial Box PC design.
- Processor options include N2840, J1900, J4125, J6412, i5-4300U, i7-4600U, i3-5005U, i5-5300U, i7-5600U, N100 and i3-N305.
- Memory options: 4 GB / 8 GB / 16 GB; storage options: 64 GB / 128 GB / 256 GB / 512 GB / 1 TB SSD.
- Dual Gigabit LAN in the main specification; an alternative four-LAN configuration is shown in the source manual.
- 6 x USB ports.
- 2 x COM; optional 2 x RS485.
- Main specification: 1 x HDMI + 1 x VGA; an alternative source image shows HDMI + DisplayPort.
- Optional Wi-Fi / Bluetooth, 4G and GPS; Mini PCIe expansion.
- DC 12 V input; optional DC 9-36 V wide-voltage input.
- 165 x 127 x 47 mm; Desktop / VESA Mount; operating temperature -10°C to 65°C.

## 3. Technical Specifications

| Category              | Specification                                                                                          |
|-----------------------|--------------------------------------------------------------------------------------------------------|
| Processor Options     | N2840 / J1900 / J4125 / J6412 / i5-4300U / i7-4600U / i3-5005U / i5-5300U / i7-5600U / N100 / i3-N305. |
| Memory Options        | 4 GB / 8 GB / 16 GB.                                                                                   |
| Storage Options       | 64 GB / 128 GB / 256 GB / 512 GB / 1 TB SSD.                                                           |
| Display Interface     | Main specification: 1 x HDMI + 1 x VGA. Alternative source image: HDMI + DisplayPort.                  |
| Ethernet              | Dual Gigabit LAN in main specification; alternative 4-LAN configuration shown in source manual.        |
| USB                   | 6 x USB.                                                                                               |
| Serial Ports          | 2 x COM.                                                                                               |
| RS485                 | Optional 2 x RS485.                                                                                    |
| Wireless              | Optional Wi-Fi / Bluetooth.                                                                            |
| Cellular / GPS        | Optional 4G / GPS.                                                                                     |
| Expansion             | Mini PCIe.                                                                                             |
| Operating System      | Windows 7 / Windows 10 / Linux.                                                                        |
| Power Input           | DC 12 V.                                                                                               |
| Power Features        | Optional DC 9-36 V wide-voltage input.                                                                 |
| Cooling               | Fanless design.                                                                                        |
| Environment           | Operating: -10°C to 65°C; Storage: -20°C to 70°C; Humidity: 5%-95% RH, non-condensing.                 |
| Dimensions / Mounting | 165 x 127 x 47 mm; Desktop / VESA Mount.                                                               |

## 4. I/O Interface Summary

### 4.1 Front I/O

| Interface    | Description                               |
|--------------|-------------------------------------------|
| LAN          | Dual Gigabit LAN in main specification.   |
| USB          | 6 x USB total across the system.          |
| Display      | 1 x HDMI + 1 x VGA in main specification. |
| Power        | DC 12 V input.                            |
| Wide Voltage | Optional DC 9-36 V input.                 |

### 4.2 Rear I/O

| Interface / Option  | Description                                           |
|---------------------|-------------------------------------------------------|
| Serial              | 2 x COM.                                              |
| RS485               | Optional 2 x RS485.                                   |
| Wireless            | Optional Wi-Fi / Bluetooth.                           |
| Cellular / GPS      | Optional 4G / GPS.                                    |
| Alternative Variant | Source image shows 4 x Ethernet + HDMI + DisplayPort. |

## 5. Processor and Platform Options

Q3100 is available with multiple internal motherboard platforms. The source manual lists NUC19D, NUC42D, NUC62D, NUC54D and NUC32D system models with processor options from Intel® Celeron® N2840 through Intel® Processor i3-N305. Final I/O availability depends on the selected platform.

| System Model     | Processor                                                         |
|------------------|-------------------------------------------------------------------|
| NUC19D-N22-N2840 | Intel® Celeron® N2840                                             |
| NUC19D-N22-J1900 | Intel® Celeron® J1900                                             |
| NUC42D-N22-J4125 | Intel® Celeron® J4125                                             |
| NUC62D-N22-J6412 | Intel® Celeron® J6412                                             |
| NUC54D Family    | Intel® Core™ i5-4300U / i7-4600U / i3-5005U / i5-5300U / i7-5600U |
| NUC32D Family    | Intel® Processor N100 / i3-N305                                   |

## 6. Serial, Display and Expansion Configuration

| Function            | Description                                        |
|---------------------|----------------------------------------------------|
| COM                 | 2 x COM.                                           |
| RS485               | Optional 2 x RS485.                                |
| Display - Main Spec | 1 x HDMI + 1 x VGA.                                |
| Display - Variant   | HDMI + DisplayPort shown in four-LAN source image. |
| Expansion           | Mini PCIe.                                         |

## 7. Power, Cooling and Reliability Functions

| Item               | Description                                        |
|--------------------|----------------------------------------------------|
| Main Power         | DC 12 V.                                           |
| Wide Voltage       | Optional DC 9-36 V input.                          |
| Cooling            | Fanless design.                                    |
| Wireless Options   | Wi-Fi / Bluetooth, 4G and GPS optional.            |
| Operating System   | Windows 7 / Windows 10 / Linux.                    |
| Configuration Note | Exact I/O varies by internal motherboard/platform. |

## 8. Mechanical and Environmental Information

| Item                  | Description                          |
|-----------------------|--------------------------------------|
| Dimensions            | 165 x 127 x 47 mm.                   |
| Mounting              | Desktop / VESA Mount.                |
| Operating Temperature | -10°C to 65°C.                       |
| Storage Temperature   | -20°C to 70°C.                       |
| Operating Humidity    | 5%-95% RH, non-condensing.           |
| Chassis               | Fanless aluminum die-cast enclosure. |

## 9. Ordering Information

| Item          | Available Options                                                                                      |
|---------------|--------------------------------------------------------------------------------------------------------|
| Processor     | N2840 / J1900 / J4125 / J6412 / i5-4300U / i7-4600U / i3-5005U / i5-5300U / i7-5600U / N100 / i3-N305. |
| Memory        | 4 GB / 8 GB / 16 GB.                                                                                   |
| Storage       | 64 GB / 128 GB / 256 GB / 512 GB / 1 TB SSD.                                                           |
| Wireless      | Wi-Fi / Bluetooth / 4G / GPS options.                                                                  |
| Network / I/O | Dual Gigabit LAN main spec; 6 x USB; 2 x COM; optional 2 x RS485.                                      |
| Power         | DC 12 V; optional DC 9-36 V wide-voltage input.                                                        |

## 10. Compliance and Documentation Notes

- Certification and compliance information is not specified in the source manual. Contact CoreIPC for project-specific certification or compliance documentation.
- The main specification lists Dual Gigabit LAN and HDMI + VGA. The source manual also shows an alternative four-LAN chassis configuration with HDMI + DisplayPort. These should be treated as configuration variants.
- The source manual lists 2 x COM with optional 2 x RS485, Mini PCIe expansion, optional Wi-Fi / Bluetooth, optional 4G / GPS and optional DC 9-36 V wide-voltage input.

## 11. Contact Information

|            |                                                                 |
|------------|-----------------------------------------------------------------|
| Company    | CoreIPC                                                         |
| Sales Team | CoreIPC Sales Team                                              |
| Email      | sales@coreipc.com                                               |
| Website    | <a href="https://www.coreipc.com/">https://www.coreipc.com/</a> |

Disclaimer: This datasheet was compiled from Q3100 User Manual Issue 1.0. Processor platform, LAN count, display interfaces, serial mode, wireless modules and power options may vary by selected configuration. Please confirm the final configuration before order placement.