

CoreIPC

Q5100

Fanless Industrial Box PC Datasheet

Fanless Design | Dual Gigabit LAN | Configurable I/O

Document	Datasheet
Model	Q5100
Issue	1.0
Product Type	Fanless Industrial Box PC
Website	www.CoreIPC.com

This datasheet is prepared based on Q5100 User Manual Issue 1.0.

1. Product Overview

The Q5100 is a CoreIPC fanless industrial Box PC based on EPC-series motherboards. It supports Intel Celeron J1900 and selected Intel Core processors. The aluminum die-cast enclosure measures 270 × 188 × 43.5 mm. I/O and power options vary by the selected system model.

2. Key Features

- Fanless aluminum die-cast industrial Box PC design.
- Processor choices: J1900, i3-3217U, i5-3317U, i5-4300U, i3-5005U and i5-5300U.
- Memory options: 4 GB / 8 GB; SSD options: 64 GB / 128 GB / 256 GB / 512 GB / 1 TB.
- 2 × Gigabit LAN with Realtek RTL8111F; Wake-on-LAN and PXE.
- 4 × USB ports, configurable to 8 × USB.
- 2 × RS232 by default; configurable RS485; selected configuration supports 6 COM / 2 RS485.
- 1 × HDMI + 1 × VGA and 1 × combined audio interface.
- Optional Wi-Fi / Bluetooth, 4G / GPS, GPIO and Mini-PCle expansion.
- DC 12 V input; optional DC 9–36 V wide-voltage input.
- 270 × 188 × 43.5 mm; desktop / embedded mounting; operating temperature –10°C to 65°C.

3. Technical Specifications

Category	Specification
Processor Options	J1900 / i3-3217U / i5-3317U / i5-4300U / i3-5005U / i5-5300U.
Memory Options	4 GB / 8 GB.
Storage Options	64 GB / 128 GB / 256 GB / 512 GB / 1 TB SSD.
Display Interface	1 × HDMI + 1 × VGA.
Ethernet	2 × Gigabit LAN, Realtek RTL8111F; Wake-on-LAN / PXE.
USB	4 × USB; configurable to 8 × USB.
Serial Ports	2 × RS232 by default; selected build supports 6 × COM.
RS485	1 × RS232 + 1 × RS485 configurable; selected build supports 2 × RS485.
Wireless	Optional Wi-Fi / Bluetooth via Mini-PCle.
Cellular / GPS	Optional 4G / GPS via Mini-PCle.
Expansion	Mini-PCle; GPIO optional.
Operating System	Windows 7 / Windows 10 / Linux.
Power Input	DC 12 V jack (5.5 mm OD / 2.5 mm ID).
Power Features	Optional 3-pin Phoenix terminal with DC 9–36 V wide-voltage module.
Cooling	Fanless passive cooling.
Environment	Operating: –10°C to 65°C; 5%–95% RH, non-condensing.
Dimensions / Mounting	270 × 188 × 43.5 mm; desktop / embedded mount.

4. I/O Interface Summary

4.1 Front I/O

Interface	Description
LAN	2 × Gigabit LAN.
USB	4 × USB on standard build; up to 8 × USB overall.
Display	HDMI; VGA is listed in system specifications.
Power	DC 12 V input jack.
Audio	1 × combined audio interface.

4.2 Rear I/O

Interface / Option	Description
Serial	2 × RS232 default; 6-COM rear variant available.
RS485	1 × RS485 configurable; selected 6-COM variant has 2 × RS485.
USB	Additional USB ports depend on configuration.
Wireless	Optional Wi-Fi / Bluetooth and 4G / GPS.
GPIO / Wide Voltage	Optional GPIO and DC 9–36 V input module.

5. Processor and Platform Options

Q5100 supports multiple EPC-series motherboards. The ordering table lists six system models. USB, COM, RS485, GPIO and wide-voltage input depend on the selected platform and I/O build.

System Model	Processor
EPC19D-L22-J1900	Intel Celeron J1900
EPC37U-L22-3217U	Intel Core i3-3217U
EPC37U-L22-3317U	Intel Core i5-3317U
EPC54U-L22-4300U	Intel Core i5-4300U
EPC54U-L22-5005U	Intel Core i3-5005U
EPC54U-L26-5300U	Intel Core i5-5300U

6. Serial, Display and Expansion Configuration

Function	Description
COM	2 × RS232 standard.
RS485	1 × RS232 + 1 × RS485 configurable.
6-COM Variant	EPC54U-L26-5300U: 6 COM / 2 RS485.
Display	1 × HDMI + 1 × VGA.
Expansion	Mini-PCIe; optional GPIO.

7. Power, Cooling and Reliability Functions

Item	Description
Main Power	DC 12 V via 5.5 / 2.5 mm jack.
Wide Voltage	Optional DC 9–36 V module with 3-pin terminal.
Cooling	Fanless passive design.
Power-on	Switch startup; power-on after AC recovery.
Watchdog	Hardware reset, 256 levels (0–255 seconds).
Power Adapter	AC-DC 12 V / 4 A, 48 W supplied as standard.

8. Mechanical and Environmental Information

Item	Description
Dimensions	270 × 188 × 43.5 mm.
Mounting	Desktop / embedded mount.
Operating Temperature	–10°C to 65°C.
Storage Temperature	Confirm limit for selected configuration.
Operating Humidity	5%–95% RH, non-condensing.
Chassis	Fanless aluminum die-cast enclosure.

9. Ordering Information

Item	Available Options
Processor	J1900 / i3-3217U / i5-3317U / i5-4300U / i3-5005U / i5-5300U.
Memory	4 GB / 8 GB.
Storage	64 GB / 128 GB / 256 GB / 512 GB / 1 TB SSD.
Wireless	Wi-Fi / Bluetooth / 4G / GPS optional.
Network / I/O	2 × Gigabit LAN; 4 or 8 USB; 2 COM standard; selected 6-COM build.
Power	DC 12 V standard; optional DC 9–36 V module.

10. Compliance and Documentation Notes

- Certification and compliance information is not specified in the Q5100 user manual. Confirm project requirements with CoreIPC.
- I/O is configuration-dependent. The EPC54U-L26-5300U is listed with 6 COM / 2 RS485; confirm the selected rear I/O and USB count before ordering.
- The manual gives two different storage temperature limits: –20°C to 70°C in the configuration table and –10°C to 60°C in the safety section. Confirm the applicable limit for the ordered configuration.

11. Contact Information

Company	CoreIPC
Sales Team	CoreIPC Sales Team
Email	Contact via website
Website	https://www.coreipc.com/

Specifications are based on Q5100 User Manual Issue 1.0. Product configuration and availability should be confirmed before order placement.