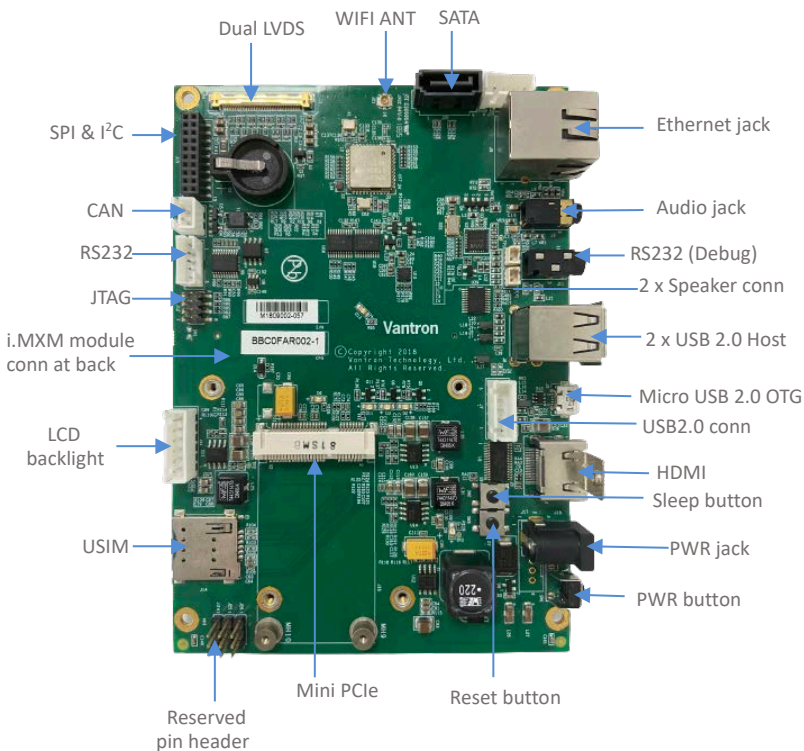# VT-SBCQ7-CB Carrier Board



## Product Brief Introduction

VT-SBCQ7-CB is a small carrier board designed to allow integration with industrial modules that feature standard Q-seven form factor to customize a single board computer for specific use. The carrier board provides on-board connectors to enable access to SATA, SPI, I2C, CAN, LVDS etc. and implements flexible expansion features for different application scenarios of industry 4.0 including industrial control, digital kiosks, intelligent medical systems, and digital media.

VT-SBCQ7-CB features high flexibility and high performance, and can work under extreme environments with extended temperatures ranging from -20℃ to +70℃, making it a reliable industrial IoT solution.

## Exterior and Features



| VT-SBCQ7-CB Carrier Board |
| --- |
| Easy to integrate |
| Multiple displays |
| Rich interfaces, flexible expansion |
| Extended temperature range supported |

## VT-SBCQ7-CB Carrier Board Datasheet

| VT-SBCQ7-CB Carrier Board | | |
|---|---|---|
| **Communication** | Ethernet | 1 x RJ45, 10/100/1000Mbps |
| | Wi-Fi & Bluetooth | Wi-Fi 802.11 a/b/g/n/ac + Bluetooth 4.2 |
| **Media** | Display | 1 x Dual LVDS, up to 165Mpix/s, with backlight control |
| | | 1 x HDMI 1.4 |
| | Audio | 1 x 3.5mm audio jack |
| | Speaker | 2 x Speaker connector |
| **I/Os** | Serial | 2 x RS232 connector (one for debugging) |
| | USB | 1 x USB2.0 Host connector |
| | | 2 x USB 2.0 Host |
| | | 1 x USB 2.0 OTG |
| | Storage | 1 x SATA |
| | USIM | 1 x USIM card slot |
| | Debug | 1 x JTAG |
| | RTC | Supported |
| **Expansion** | Bus | 1 x Mini PCIe |
| | | 1 x I$^2$C |
| | | 1 x SPI |
| | | 1 x CAN |
| **System Control** | Button | 1 x Power button |
| | | 1 x Reset button |
| | | 1 x Sleep button |
| **Power** | Input | 1 x Power jack (12V) |
| **Mechanical** | Dimensions | 146 x 100mm |
| | Cooling mode | Fanless |
| **Environment Condition** | Temperature | Operating: -20℃~+70℃ |
| | | (Optional: -40℃~+85℃) |
| | Humidity | Operating and storage: 10-85%RH (Non-condensing) |
| | Certificate | RoHS |

## Product Outlines
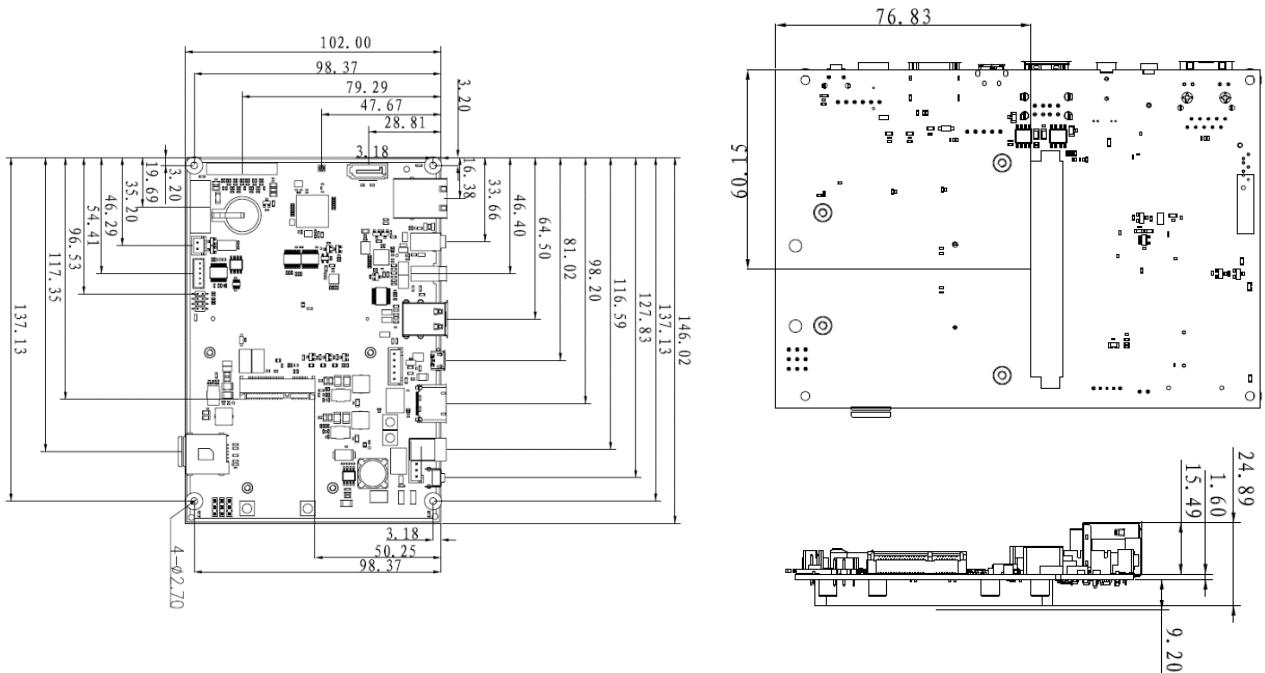


## Company Profile

Since 2002 established by two Silicon Valley entrepreneurs, Vantron Technology has been a pioneer in connected IoT devices and IoT platform solutions. Today, Vantron serves countless customers all over the world, some of them are Fortune 500 companies. Products lines cover edge intelligent hardware, IoT communication devices, industrial displays and BlueSphere cloud device management platform.

Vantron has 20 years of experience in R&D of embedded edge intelligent hardware like SOM board and motherboard, and provided users with various embedded solutions with ARM and X86 architecture. From Linux to Windows, from embedded to desktop level, from gateway to server. At the same time, we provide our users with system clipping, driver transplantation and other services.

Vantron IoT communication devices support multi-protocol connection of industrial equipment, edge computing of local data. Abundant wired and wireless connectivity make remote operations and maintenance possible. From electricity and transportation to smart retail, medical and warehousing, Vantron IoT communication device can be deployed anywhere in any business section. Vantron believes its IoT solution to help many companies finish their digital transformation, efficiency of manufacturing and productivities have been improved significantly.

Vantron industrial display systems, ARM and X86 series, are equipped with Rockchip, NXP, MediaTek, Intel and other high-performance processors. It supports various operating systems such as Windows, Linux, and Android. Diverse wireless communications keep your device online all the time. Multiple installation methods make it suitable for a variety of application scenarios. Features like waterproof, dustproof, shatter resistant guarantee the best performance in any environment.

Vantron BlueSphere device management platform, a software product, is playing a big role in Vantron overall IoT solution. Today, Vantron puts more focus on offering complete cost effective, leading-edge yet reliable solutions to help customers carry out their visions.