

# LVC-1000

Fanless Vehicle Computer with Intel Quark X1001



## ■ Features

- Compact form factor
- Intel Quark SoC X1001 400 MHz CPU
- Onboard DDR3 512MB memory
- 1 x 10/100Mbps RJ45 PoE port
- Vehicle ignition power management
- 2 x mini-PCIe sockets support Wi-Fi, 3G, 4G/LTE and GPS wireless connectivity
- Optional CAN bus port
- Designed for MIL-STD-810G with extreme vibration resistance

## ■ Specifications

### Processor

CPU	Intel® Quark SoC X1001 CPU with 400 MHz
Frequency	400 MHz
Core Number	1
BIOS	AMI SPI Flash BIOS
Chipset	N/A (SoC)

### Fanless

Yes

### Memory

Technology	DDR3 800 MHz
Max. Capacity	512 MB onboard, Max Up to 1 GB

### Graphic

Controller	N/A
VGA pin-header	N/A

### Ethernet

Controller	Support by Quark X1001
Speed	10/100 Mbps
Interface	1 x RJ45, 1 x RJ45 is optional
PoE	IEEE 802.3at standard PoE

### Storage

Type	Micro SD
Installation	Support up to 4GB Micro SD card

### I/O

Serial Port	1 x RS-232, DB9 male
USB	3 x USB 2.0 type A, 1 x USB 2.0 Micro USB device port
CAN	Optional 1x High Speed CAN (up to 1 Mbps ) and 1 Fault Tolerant CAN (up to 125 kbps); optional support J1939 / J1708
Serial I/O	1 x RS-232
Power-On/Reset Button	Internal reset button
LED	Power, HDD, PoE1 and PoE2

### Watchdog Timer

Watchdog timer 256 level time interval system reset, software programmable

### Power

Power Supply Voltage	DC 9~36V, GND and ignition switch with OCP and OVP
Connector	1x 3-pin terminal block for DC 9~36V, GND and ignition
Power Consumption	TBD
Power Adaptor	N/A

### Environment

Operating Temperature	-20~70°C
Storage Temperature	-40~85°C
Relative Humidity	5% ~ 95%, non-condensing

### Mechanical

Dimension (W x H x D)	162.8 x 41 x 133.8 mm
Construction	Heavy Steel
Weight	0.6 kg
Mounting	Wall mount

### Driver Support

Linux	Linux, Driver Support: Quark X1000 Software Stack
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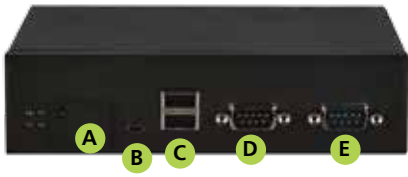
### Certification

EMC	CE/FCC Class A, E13, RoHS
Safety	None

### Compliance

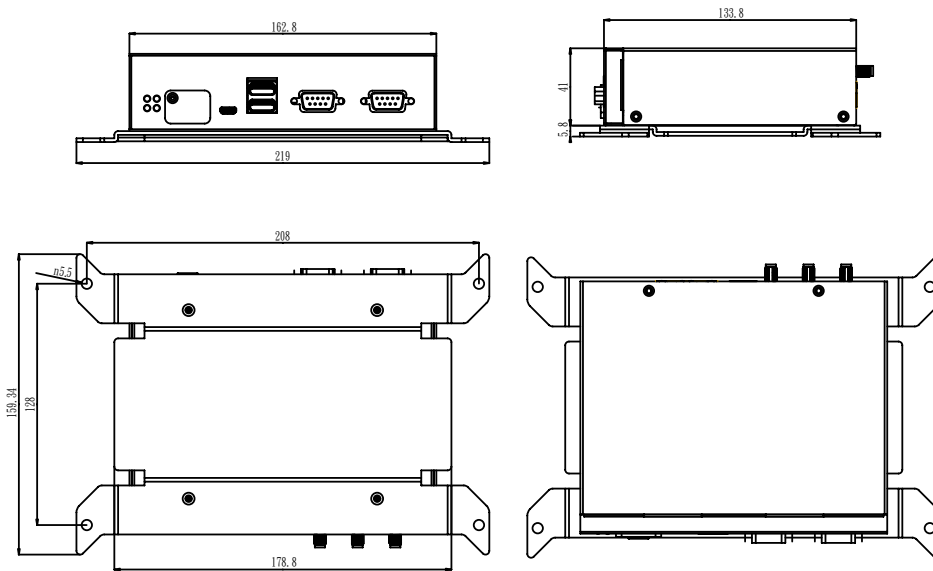
Vibration/Shock	Vibration: MIL-STD-810G, Method 514.6 Shock: MIL-STD-810G, Method 516.6
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## ■ Product I/O View



- |                    |                          |                         |
|--------------------|--------------------------|-------------------------|
| <b>A</b> Micro SD  | <b>D</b> Optional CAN    | <b>G</b> PoE port       |
| <b>B</b> Micro USB | <b>E</b> COM             | <b>H</b> Power Ignition |
| <b>C</b> USB       | <b>F</b> Audio/MIC ports | <b>I</b> Antenna        |

## ■ Dimensions 162.8 x 41 x 133.8 mm



## ■ Ordering Information

**LVC-1000**

Intel® Quark SoC X1001 400 MHz In-Vehicle Computer, onboard DDR3 512MB, Mini-PCIe x2, Intel PoE x1, USB 2.0 host x 3, USB 2.0 client x1, RS232 x1, Optional CAN Bus x1, DC Power input +9~36Vdc with Ignition

V.1-2015.3.10

**Lanner**

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