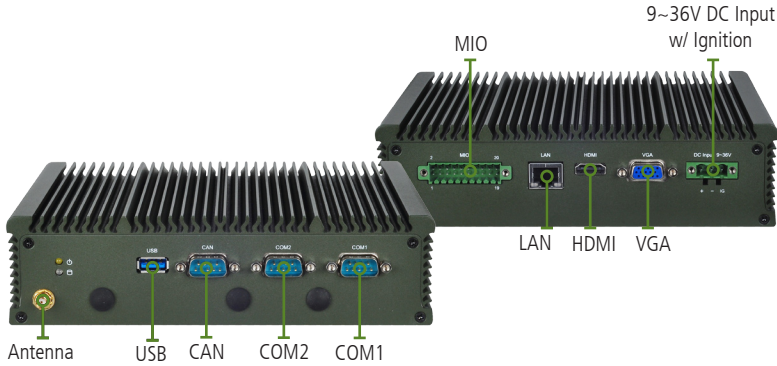


# LVC-2000

## Fanless Vehicle PC with Intel® Atom™ E3845 Processor



### Overview

LVC-2000 is a fanless in-vehicle computer with MIL-STD-810G certified shock and vibration resistance. Built with onboard Intel® Atom™ processor E3845 (codenamed “Bay Trail”), the in-vehicle computer is a value time-to-market solution with enhanced performance and low power consumption. LVC-2000 also features multiple I/O connectivity including optional CAN bus, LAN port, GPS/G-sensor, COM ports, multiple Digital I/Os, and mini PCI Express sockets, making it perfect for vehicle monitoring, in-car infotainment and fleet management.

### Features

#### Fanless design and Aluminum Enclosure

The fanless design reduces mechanical failures and the aluminum enclosure provides rugged protection from external damages.

#### Onboard Quad-core Bay Trail SoC

The new Intel® Atom™ 22 nm microarchitecture SoC CPU (codenamed “Bay Trail”) offers double the performance and five times the energy efficiency of the Atom™ previous generations.

#### Vehicle Power Ignition Management

Detects the ignition on/off and configures delay time with flexible setting via our software utility.

#### The MIO Connector

The MIO features multiple digital I/Os, including 2 x DI (Digital Input from MCU) for connection with sensors to detect the surrounding. Once an event-occurrence is defined, LVC-2000 will be turned on automatically by the connected sensor.

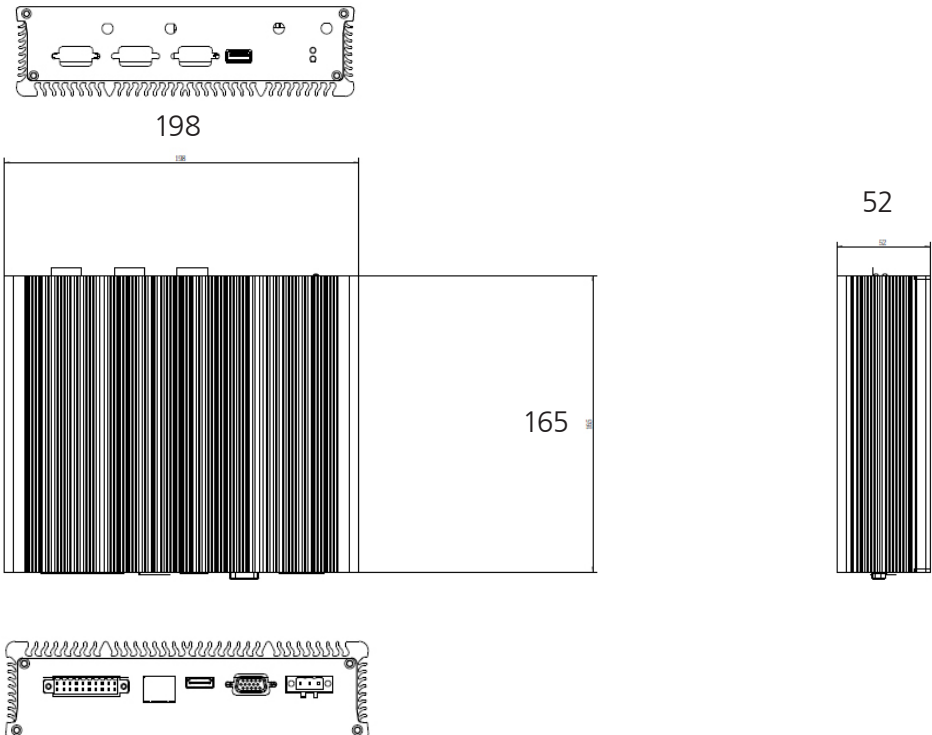
## Wide Operating Temperature Workability

LVC-2000 is capable of working under wide temperature from -20 to 60°C when equipped with industrial storage devices like SSDs.

## Designed for MIL-STD-810G with Extreme Vibration Resistance

LVC-2000 is in compliance with MIL-STD-810G vibration and shock standards.

## Dimensions: 198 x 52 x 165 mm



# Preliminary Specifications

<b>Dimensions (WxHxD)</b>		198 x 52 x 165 mm	
<b>Processor</b>		Intel Atom E3845 1.91 GHz processor	
<b>Chipset</b>		N/A	
<b>System Memory</b>	Technology	DDR3L SO-DIMM x1	
	Max. Capacity	Up to 4GB	
<b>Storage</b>	SATA/mSATA	SATA 2.0 x1 for internal 2.5" HDD x1, mSATA x1	
<b>Ethernet Controller</b>		Intel i210-IT x1	
<b>Graphic Controller</b>		Intel integrated GMA3650 graphic engine	
<b>Audio Controller</b>		Realtek ALC886 HD codec	
<b>IO</b>	LAN	GbE RJ45 x1	
	Display	DB15 x1 for VGA, HDMI x1	
	CAN Bus	Optional 1x CAN Bus supports J1939 & J1708	
	Serial I/O	DB9 Male x2 support RS-232/485 with RI/5V/12V	
	GPS/G-sensor	Ublox NEO-7N / ADXL 345	
	Digital I/O	4x DI 12V level 4x DO 12V level 2x DI (from MCU) 3.3V Level, 1x relay (2A, 12V/24V) 12VDC power output	
	USB 3.0	Type A x1, reserved 2 x USB 2.0 pin headerpin header	
	Power Input	3-pin terminal block (+, -, ignition)	
	Expansion	1x Full-size Mini-PCIe socket, 1x half-size Mini-PCIe socket	
	Others	External: 3x SMA antenna hole Internal: 1x SIM card reader	
	<b>Power Input</b>	DC Input: 9~36V for +12V-level and +24V-level car battery Ignition Control: Supports ignition on/off and delay power-on/off system, time frame by software setting	
	<b>AC Adapter</b>		Ordering option
<b>Hardware Monitor</b>		Fintek F81865 integrated watchdog timer 1~255 level	
<b>OS Support</b>		Windows 7/7 Embedded; Windows 8 Embedded, Linux kernel 2.6.X or later	
<b>Certifications</b>		CE, FCC Class A, E13, RoHS	
<b>Compliance</b>		Temperature: MIL-STD-810G, Method 500.5, 501.5, 502.5, 503.5 Vibration: MIL-STD-810G, Method 514.6, 516.6 Shock: MIL-STD-810G, Method 516.6	
<b>Operating Temperature Range</b>	Extended	With selected industrial components -20~60°C / -4~140°F	
	Standard	With commercial components -5~45°C / 23~113°F	

## Ordering Information

**LVC-2000**

Intel® Atom™ Quad Core E3845 in-vehicle computer, DDR3L x1, Mini-PCIe x2 plus one SIM card reader, Intel GbE x1, USB x1, Optional CAN Bus, COM x2, 12V TTL DIO, +9~36Vdc power input with ignition