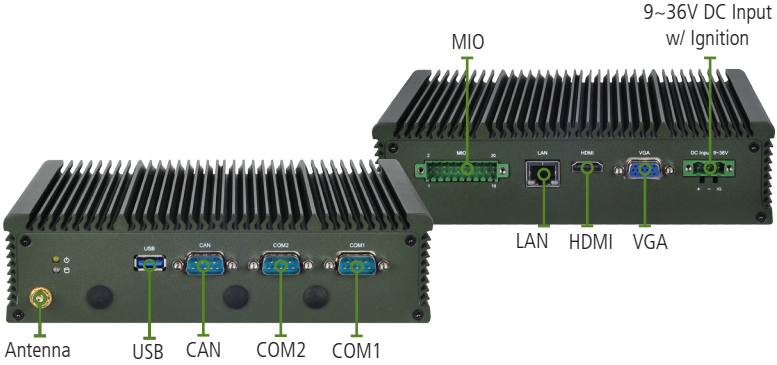
LVC-2000

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.

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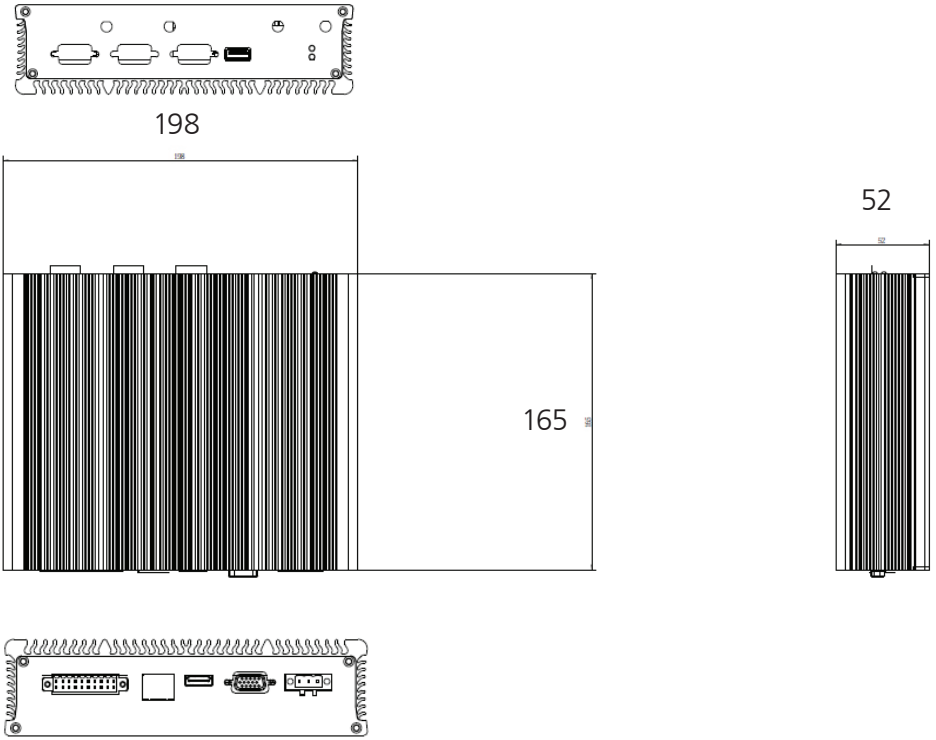
Wide Operating Temperature Workability

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

Dimensions (WxHxD)		198 x 52 x 165 mm
Processor		Intel Atom E3845 1.91 GHz processor
Chipset		N/A
System Memory	Technology	DDR3L SO-DIMM x1
	Max. Capacity	Up to 8GB
Storage	SATA/mSATA	SATA 2.0 x1 for internal 2.5" HDD x1, mSATA x1
Ethernet Controller		Intel i210-IT x1
Graphic Controller		Intel integrated GMA3650 graphic engine
Audio Controller		Realtek ALC886 HD codec
IO	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, RS232 by default
	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 headers
	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
Power Input		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
AC Adapter		Ordering option
Hardware Monitor		Fintek F81865 integrated watchdog timer 1~255 level
OS Support		WES7 (WS7E) /W7 Pro SP1 / WE8 STD /WIN 10 IOT/ WIN 10 IOT Retail and TC, Linux kernel 2.6.X or later
Certifications		CE, FCC Class A, E13, RoHS, SAE J1455
Compliance		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
Operating Temperature Range	Extended	With selected industrial components -20~60°C/-4~140°F
	Standard	With commercial components -5~45°C / 23~113°F

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Ordering Information

LVC-2000-A1	Intel® Atom™ Quad Core E3845 in-vehicle computer, DDR3L x1, Mini-PCIe x2 plus one SIM card reader, Intel GbE x1, USB x1, CAN Bus for J1939/J1708 x1, COM x2, 12V TTL DIO, +9~36Vdc power input with ignition
LVC-2000-B1	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

V1.0.3