

PE7310

Vehicle Computer



Rugged Intel Core 2 Duo General Purpose Computer

The PE7310 General Processor is a fully sealed, conduction-cooled computer designed for on-the-move applications. The PE7310 is powered by an Intel® Core™ 2 Duo processor and offers an optional PCIe x16 graphics controller for computationally applications. The MIL-STD-1275 power supply supports input voltages from 12 Vdc to 36 Vdc. Spare PMC and PCIe mezzanine sites make the PE7310 a versatile system with significant growth potential.

Features:

- Upgradeable Intel® Core™ 2 Duo CPU processor
- Designed for full operation over extended temperature range (-46°C to +60°C)
- Optional PCI-Express x16 Graphics Controller
- Optional MIL-STD-1553 and CANBus interfaces
- 4 x NTSC/RS-170 video inputs, 1 x RS-170/PAL Output
- VGA output, optional VGA input

Technical Information

UD: GPU7-1 PN: 363439

Processor Unit

CPU	Upgradeable Intel® Core™ 2 Duo, 1.5 GHz
Memory	2 GB (Optional 4 GB)
Video Controller	Chipset internal Graphics Controller Optional High Performance PCI-E x16 Graphics with 512 MB dedicated memory
Hard Disk	Removable Solid State SATA, (64 GB or larger) Optional Internal Compact Flash Site
Serial Ports	3 x RS-232, 1 x RS-422
Audio	Audio Out: HD Audio (2 ch) Microphone or Line Input
PCMCIA	Compatible with Type I or Type II
USB	2 x USB 2.0 Ports (UHCI and EHCI) (option for 4 x USB2.0)
Ethernet	2 x 10/100/1000 Base T
CANBus	ISO 11898-compliant CAN interface allows data transfer rates up to 1 Mbit/s (Option for second CANBus interface)
1553 (Optional)	Single channel dual redundant MIL-STD-1553 interface
Wireless (Optional)	802.11 a/b/g/n
OS Support	Microsoft Windows, Linux
Power Supply	MIL-STD-1275A/B 6 V Initial Surge, 16 V cranking Reverse polarity protection

Physical Characteristics

Size	11.25" w x 10.0" h x 2.72" d
Weight	<12.0 lbs max
Connectors	Sealed MIL-C-38999
Bezel Keys & Indicators	Configurable

Environmental Conditions

Operating Temperature	-46°C to +71°C
Storage Temperature	-46°C to +85°C
Vibration	MIL-STD-810F Method 514.5, Procedure Composite tracked (isolation) and Wheeled Vehicle (no isolation)

Shock	MIL-STD-810F Operational: Method 516.5, Procedure 1 (40 g, 7.5 ms) (15 g, 75 ms) Severe: MIL-STD-810F Method 516.4, Procedure 1 (30 g, 18 ms) Bench Handling: method 516.5, Procedure VI Crash Hazard: method 516.5, Procedure V (40 g, 6 msec 1/2 sine)
Water Tightness	50 PSIG. Immersion
Altitude	MIL-STD-810F Method 500.4, Procedure 1 (-200 to 15000 ft)
Humidity	MIL-STD-810F Method 507.4 (3% to 100% condensing)
Sand Dust	MIL-STD-810F, method 510 (20 mph for 30 min)
Explosive Atmosphere	MIL-STD-810F, Method 511.4, Procedure 1
Salt Fog	MIL STD-810F, Method 509.4 (35°C 48hrs)
EMI/EMC	MIL-STD-461E

Video

Video Inputs	4 NTSC/RS-170 video inputs, optional VGA video input
Video Outputs	VGA output with resolutions up to 2048 x 1536 @ 75 Hz, RS-170/PAL video output
Video Capture (Optional)	Digitize and compress (MPEG4/ MJPEG) up to 4 simultaneous RS-170 feeds for storage or network distribution

The unit described represents a typical configuration of this family of products. Specifications may be configurable for specific customer requirements. For specifics on interfaces, bezel buttons, casings, connectors, and other configurations, please contact your GD Canada representative.



GENERAL DYNAMICS
Canada

For technical and pricing information please contact:

Vetronic Systems • Computer and Display Products • Smart Displays • computers.displays@gdcanada.com • www.gdcanada.com/gpc