

LEC-2220

Intel i7/i5/Celeron socket CPU support, DDR3 SO-DIMM x2, w/ 6 COMs, DVI-I / DVI-D Display, Dual Intel GbE, DIO (4 in 4 Out), Audio, +9~30V DC input support, one or two PCI / PCIe Expansion

Features

- Powered by Intel Core i7/i5/ Celeron with DDR3 memory
- Excellent graphic performance with support of MPEG4, WMV9, VC-1, and AVC hardware decoding.
- Can display multiple full HD & Flash videos .
- Support DDR3 SO-DIMM memory up to 8GB.
- Choice of system expansion options offered among different models: LEC-2220P (One Slot expansion for PCI or PCIe) ; LEC-2220P2 (Two Slots expansion for two PCIs)
- Mini-PCIe with SIM card reader for 3G , Wi-Fi or Bluetooth.
- Dual display interfaces: DVI-I & DVI-D.
- Onboard 2 Intel Gigabit Ethernet ports.
- 4 USB ports, 6 COM ports, 4 IN 4 Out DIO.
- Innovative design of a remote power on/off switch via terminal block connector which allows user to control power on/off from a desired distance.
- SATA connector with support of SATA DOM with 5V power
- Wide range of voltage input from 9 to 30V.



- Intelligent cooling: fan turn on when the system reaches dedicated setting temperature that improve the product reliability and overall MTBF.
- Equipped with terminal block connector which is reliable for connecting industrial equipments.
- Operating Temperature Range from -20 to 55 °C.
- Mounting options include standalone, VESA mount or wall mount.



Highlights

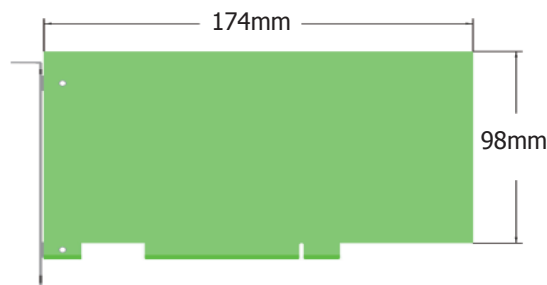
PCI or PCIe Expansion

Using a PCIe or PCI riser card, users have choice of either PCI or PCI Express 1x expansion:

1x PCI or PCIe can be supported by the LEC-2220p model

2x PCI slots can be supported by the LEC-2220P2 model

Both of PCI or PCIe support the Max. Dimension as following and the Max. Power Consumption reserved for expansion is 25W total.



Specifications

Dimension (WxHxD)		277x(67/89)x194mm 10.91"x(2.64/3.50)"x7.64"
Processor		Intel i7/i5/Celeron
Chipset		HM55
System	Technology	DDR3 SO-DIMM x2
Memory	Max. Capacity	Up to 8GB
Storage	IDE	N/A
	SATA	2.5" HDD/SSD drive bay x1,SATA-DOMx1
Ethernet Controller		Intel 82574L x 2
Graphic Controller		Intel® GMA HD Graphics Engine
Audio Controller		ALC 888S
IO	LAN	GbE RJ45 x2
	Display	DVI-I x1
		DVI-D x1
	Video Grabber	No
	Audio	Phone Jack x2 for Mic-in and Line-out
	Serial I/O	Totally 6: DB9 x2 for RS232/422/485 x1 and RS232 x1, 10-pin Terminal Block for RS232 x3 and RS232/422/485 x1
	GPS	No
	Digital I/O	DB9 Female x1 for DI x4 & DO x4 (5V TTL)
	USB 2.0	Type A x4; Internal x2
	Power Input	Terminal Block 2-pin
		Mini-PClex1 with SIM Card Reader
	Expansion	LEC-2220P: PCI x1 or PCIe x1 LEC-2220P2: PCI x2
Power Input		+9~30Vdc, ATX Mode
AC Adapter		75W +19V @ 3.95A
Hardware Monitor		Fintek F81865 integrated Watchdog Timer 1~255 level
OS Support		Linux , XPE/WES2009, XP PRO FES WS7E, WS7P, WIN 7 PRO-E

Certification CE, FCC Class A

Operating Temperature Range with Industrial Components:

(Industrial Memory, CF, HDD, SSD....)
-20~55°C/14~131°F

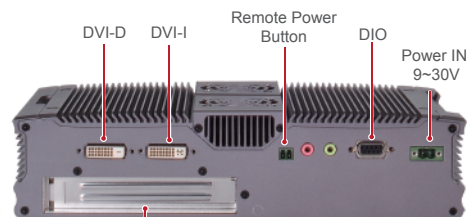
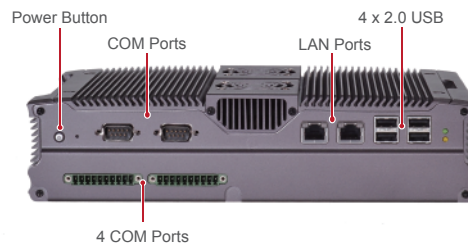
Operating Temperature Range with Commercial Components:

-5~45°C/23~113°F

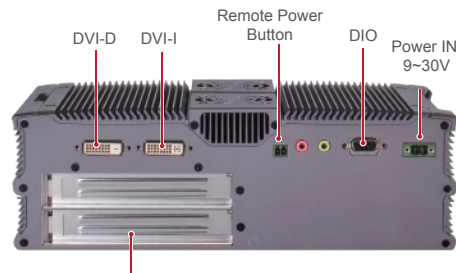
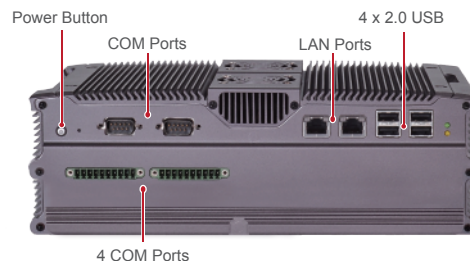
High/Low Extended Operating Temperature Tested:

No Damage after 72-hours full-loading operating @ 70°C
Bootable after 24-hours @ -40°C

Versatile I/O Ports

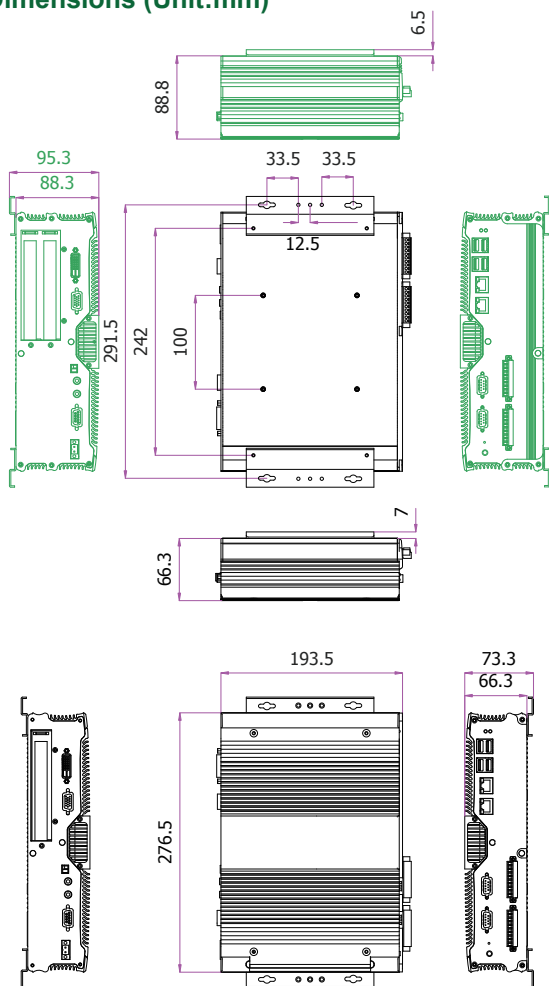


LEC-2220P : One Slot Expansion (PCI or PCIe)



LEC-2220P2 : Two PCI Expansion

● Dimensions (Unit:mm)



● LEC-2220P Riser Options - PCI or PCIe Riser Card

Item	Description
LEK-PA1	Optional Riser for LEC-2220 to support PCI expansion
LEK-EA1	Optional Riser for LEC-2220 to support PCIe expansion

● Ordering information

Model	Description
LEC-2220P	Intel i7/i5/Celeron socket CPU support, DDR3 SO-DIMM x2, w/ 6 COMs, DVI-I / DVI-D Display, Dual Intel GbE, DIO (4 in 4 Out), Audio, +9~30V DC input support, one PCI or PCIe Expansion
LEC-2220P2	Intel i7/i5/Celeron socket CPU support, DDR3 SO-DIMM x2, w/ 6 COMs, DVI-I / DVI-D Display, Dual Intel GbE, DIO (4 in 4 Out), Audio, +9~30V DC input support, two PCI Expansions

● Major standard accessories list:

Item	Part Number	Description
SATA Cable	080W1N2201001	SATA Cable w/Power
Terminal Block	04AW2010O101	Terminal Block-10 Pin (2pcs)
Terminal Block	04AW20023Z101	2-Pin for Power SW (1pcs)
Wall Mount	SE9ESA8740100	Refer to page 145
AC Adapter	0P0W075190001	75W, 19V/3.95A, Terminal Block

● Optional accessories - Power Cord

For details, refer to page 34

● Intel Long Term Support Embedded CPU Options:

CPU	Description
Intel i7 620M	Intel® Core™ i7-620M Processor
011WSC2661I01	(4M Cache, 2.66 GHz)
Intel i5 520M	Intel® Core™ i5-520M Processor
011WSC2401I01	(3M Cache, 2.40 GHz)
Celeron P4500	Intel® Celeron® Processor P4500
011WSC1861I01	(2M Cache, 1.86 GHz)

● Optional accessories - 3G, Wi-Fi, Video Module

For details, refer to page 153~156

Item	Part Number	Description
3G Module	0TAWMC8790Z01	Sierra MC8790
3G Module	0TAW0EM770Z01	HuaWei EM770W (** MOQ 200)
Wi-Fi Module	0TAWQ802XKZ02	802.11 b/g/n Mini-PCIe card