

# GE-901EI-F2 Series

6th/7th/8th/9th gen Intel® Xeon®/ CoRE™ i7/i5/i3 processor Expandable, Fanless, Embedded System



## Product Features

- ◆ Industry level Intel® Q170 chip can be equipped with Intel® Xeon®/ CoRE™ Desktop processor (6/7/8/9th Gen)
- ◆ Fanless design, supporting working temperatures of -20 °C ~60 °C
- ◆ 2\*DDR4 SO-DIMM, Maximum support 32GB, dual channel support
- ◆ VGA\HDMI\DP, Maximum support 4K 60Hz
- ◆ 1\*M.2 B-Keysupport 4G/3G, 1\*M.2 E-Keysupport WIFI
- ◆ 1\*PCIe expansion slot,Maximum support 125W graphics card (the length of the graphics card must be less than 230mm)
- ◆ 1\*M.2 M-Key storage interface, support SATA3.0 /NVMe
- ◆ 1\* 2.5" hard drive extraction box with a built-in 2.5" hard drive, support SATA3.0
- ◆ 1 \* 16 bit GPIO, 1 \* remote switch (sub board)
- ◆ 3\*intel high performance gigabit network port, supporting up to 9 network ports (sub boards)
- ◆ 4\*COM(COM2/3 RS-232/422/485), Maximum support 10COM
- ◆ 6\*USB 3.0, Maximum support 14USB
- ◆ Wide voltage power supply DC 9-48V, with short circuit, overvoltage and overcurrent protection

## Product specifications

System	CPU	Intel® 6th/7th/8th/9th Gen Core™ i7/i5/i3/Pentium/Celeron LGA1151 processor , Up to 8 cores and 16 threads,Support 65W and below CPUs
	65WCPU	Support 6/7/8/9 gen I3.I5.I7 CPU(i3-6100,i5-7400,i7-8700,i5-9400...)
	35WCPU	Support 6/7/8/9 gen I3.I5.I7 low power consumption CPU(i3-6100T,i5-6500T,i7-6700T,i7-7700T, i5-8500T , i7-8700T , I7-9700T...)
	Chipset	Intel® Q170 chipset
	System Memory	2*260-Pin SODIMM, DDR4 2666/2400MHz, Maximum support 32GB
	Extension Interface	1*USB2.0, Support for dongles 1*M.2 E-Key 2230, Support Gigabit WIFI modules 1* M.2 B-Key, Support PCIe/USB/External SIM card, support wireless functions such as 4G 1*PCIe X16, from CPU, gen3.0, support 1×16 or 2×8 or 1×8+2×4
	Display	Intel UHD Graphics, Supports DirectX11.1, OpenGL 5.0 and OpenCL 2.1 or PCIe X16 Maximum resolution of graphics card display interface DP 4096*2304@60Hz, HDMI Highest resolution 4096*2160@24Hz, VGA Highest resolution1900*1200@60Hz
	Audio Frequency	Realtek ALC662 High-definition audio, Audio out and MIC, Support 5.1 channels
	Ethernet	1*Intel I211AT PCIe GigE; 10/100/1000Mbps self-adaption 1*Intel I211AT PCIe GigE; 10/100/1000Mbps self-adaption 1*Intel I219LM PCIe GigE; Support iAMT12.0
	Storage	1*2.5" SATA3 Hard drive extraction box, supporting up to 6GB bit/second transmission speed 1*2.5" HDD , Support 5~9.5mm , built-in 1*M.2 M-Key Storage interface , support M.2 2242/2280 NVME PCIE standard SSD
	Expansion Sub Board	Optional USB 3.0/2.0, RJ45, 16 bit GPIO, remote switch and status indicator light, or serial port
	I/O	3*RJ45 Giga-LAN 6*USB3.0 TYPE A , Supports up to 5G bit/second transmission speed, with 4 * USB2.0 built-in pins 1 * LPT built-in pin, 1 * PS/2 built-in pin 2*RS232/422/485 Through BIOS settings, 2 * RS232, 2 * RS232 built-in pins 1*Audio-out and 1*MIC 1*VGA 1*DP 1*HDMI
	Pilot Lamp	1 * Power indicator light, 1 * Hard disk status indicator light
	Control Switch	1*Power SW , 1*Clear CMOS SW
	Power Requirements	DC IN 9-48V 4-pin Term. 5.08mm , With short-circuit, overvoltage and overcurrent protection Power dissipation: TBD
TCPM/TPM	Optional support TPM2.0	
Watchdog Timer	Programmable timeout interrupt or system reset, 1 to 255 seconds	

	Operating System	Windows* 10 Enterprise & IOT Enterprise ( 64 bit ) Ubuntu*、 SuSe*、 Redhat Enterprise* 1,2 Wind River* VxWorks* 7
Mechanism	Structure	Aluminum rectangular profile heat dissipation shell, SGCC box
	Color	Dark blue+ Gray
	Installation Method	Desktop installation
	Size	(L*W*H) : 248*235*148mm,Including hanging ears : 248*238*177mm
	Net Weight	5±0.2 ( unit : KG )
Environment	Working Temperature	-20~65°C, Wide temperature SSD, air flow -10~55°C, Room temperature HDD, air flow
	Storage temperature	-40°C~85°C
	Storage humidity	10~90%, non-condensing

Model	Configuration details
GE-901EI-F2	Quasi system Intel®6/7/8/9 gen LGA1151 CPU, Q170/C236, 3*LAN, 6USB3.1 , 4*COM, 1*M.2 E- Key, M.2 M-Key, 1*PCIe X16,1*VGA, 1*DP, 1*HDMI, Audio out, Mic, 2*2.5" SATA, 1*mSATA,DC 9-48V
GE-901EI-F2L	Quasi system Intel®6/7/8/9 gen LGA1151 CPU, Q170/C236, 7LAN, 6USB3.1 , 4*COM, 1*M.2 E- Key, M.2 M-Key, 1*PCIe X16,1*VGA, 1*DP, 1*HDMI, Audio out, Mic, 2*2.5" SATA, 1*mSATA,DC 9-48V
GE-901EI-F2C	Quasi system Intel®6/7/8/9 gen LGA1151 CPU, Q170/C236, 3AN,10USB3.1 , 8*COM, 1*M.2 E- Key, M.2 M-Key, 1*PCIe X16,1*VGA, 1*DP, 1*HDMI, Audio out, Mic, 2*2.5" SATA, 1*mSATA,DC 9-48V
GE-901EI-F2G	Quasi system Intel®6/7/8/9 gen LGA1151 CPU, Q170/C236, 3*LAN, 6USB3.1 , 4*COM, 1*M.2 E- Key, M.2 M-Key, 1*PCIe X16,1*VGA, 1*DP, 1*HDMI, Audio out, Mic, 2*2.5" SATA, 1*mSATA,GPIO-16,1*Remote switch,DC 9-48V
HKA12019063-XB	DC power adapter , DC19V/6.32A,120W
HKA220190A2-XA	DC power adapter , DC19V/11.5A ,220W