

ECN-680A-H61

Embedded System with 2nd Gen Intel® Core™ i7/i5/i3 Desktop Processors



Features

- ◆ 2nd Generation Intel® Core™ i7/i5/i3 Pentium® and Celeron® desktop processor supported
- ◆ Intel® HD graphics supports H.264/AVC-MPEG2/VC1, DirectX 10.1 and OpenGL 3.0
- ◆ One 204-pin DDR3 SO-DIMM slot (system max. 8GB)
- ◆ Dual DVI display output supported
- ◆ Optional 2.4GHz 802.11 b/g/n 2T2R MIMO Wi-Fi for high speed wireless transmission
- ◆ Wide DC power input range 9 ~ 36V
- ◆ Extended temperature design supports -20°C to 60°C with air flow condition
- ◆ USB 3.0 for super high speed data transfer
- ◆ TPM V1.2 hardware security function supported



Specifications

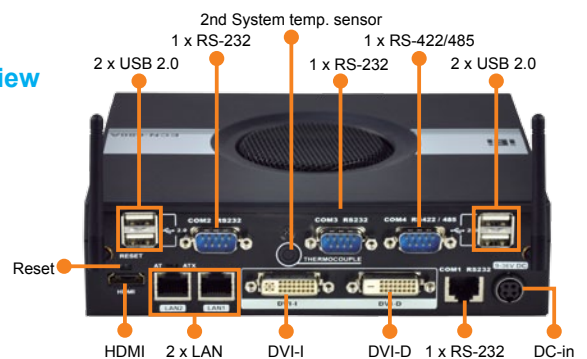
Model Name	ECN-680A-H61	
Chassis	Color	Black
	Dimensions	222 (W) x 163 (H) x 54.5 (D) mm
	Chassis Construction	SECC + Plastic
Motherboard	CPU	2nd Generation Intel® Core™ i7/i5/i3 Pentium® and Celeron® desktop processor
	Chipset	Intel® H61 (Co-lay Q67 chipset production by MOQ limitation)
	Ethernet	Intel® 82579 PHY Ethernet (supports Intel® AMT 7.0 with Q67 chipset) Intel® 82583V Ethernet controller
	Memory	1 x 204-pin 1066/1333 MHz DDR3 SDRAM DIMM slot (system max. 8GB)
Storage	SATA	1 x 2.5" SATA HDD bay
System Function	USB	4 x USB 2.0 on rear 2 x USB 3.0 on front
	Ethernet	2 x RJ-45 Gigabit LAN
	RS-232	3 x RS-232 COM port 2 by DB9 port , 1 by RJ-45 port)
	RS-422/485	1 x RS-422/485
	Display	1 x HDMI 1 x DVI-D 1 x DVI-I
	Resolution	Up to 1920 x 1080 @ 60Hz (DVI-I and DVI-D), 1920 x 1200 @ 60Hz (HDMI)
	Audio	1 x Mic-in, 1 x Line-out, 1 x Line-in on front
	Internal Expansions	1 x PCIe Mini slot (reserved for Wi-Fi)
	Switch	Reset switch AT/ATX switch
	TPM	TPM-IN01-R11
	Watchdog Timer	Software programmable support 1~255 sec. system reset
Power	Power Supply	9V ~ 36V DC input
	Power Consumption	19W@3.6A (Intel® Core™ i7-2600S CPU with 1333MHz 4GB DDR3 memory)
Reliability	Mounting	Desktop, Wall mount
	Operating Temperature	-20°C ~ 60°C with air flow (SSD)
	Storage Temperature	-30°C ~ 80°C
	Operating Humidity	5% ~ 95%, non-condensing
	Operating Shock	Half-sine wave shock 3G, 11ms, 3 shocks per axis
	Operating Vibration	Meet MIL-STD-810F 514.5C-2 (with SSD)
	Weight (Net/Gross)	1.8 Kg/3.0 Kg
	Safety & EMC	CE/FCC

Fully Integrated I/O

• Front View



• Rear View



Easily accessible HDD disk driver

The hard disk drive can be easily accessed by removing screws from the HDD bracket.



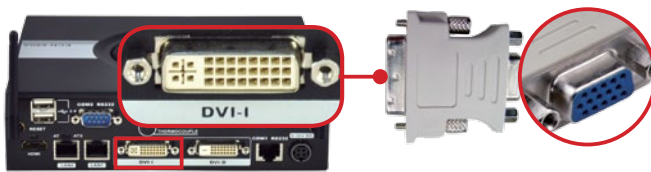
Customized RS-232/422/485

The ECN-680A has one RS-422/485 and two RS-232 for COM Ports. The flexibility of the two COM ports allow the user choose two RS-232 or one RS-232 and one RS-422/485 according to applications.



Dual DVI display and full HD display

- The ECN-680A has DVI-I, DVI-D display interfaces which supports dual display and high resolution with audio output for signage applications.
- DVI-I and DVI-D support resolutions up to 1920x1200@60Hz

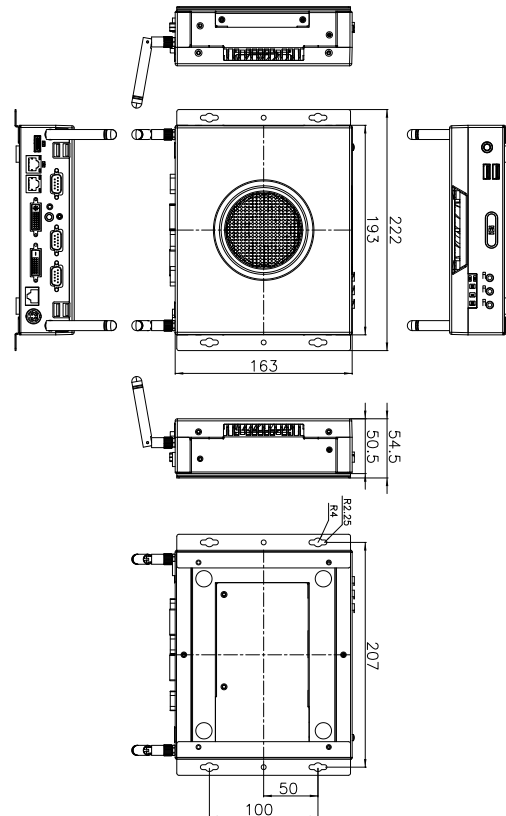


DVI interfaces



Classify	Single	Convert VGA	Transfer Speed	Max resolution refresh rate
DVI-I single link	Digital/Analog	Yes	165Mbps	1920x1080, 60hz/ 1600x1200, 60hz
DVI-I dual link	Digital/Analog	Yes	330Mbps	2560x1600, 60Hz/ 1920x1080, 120Hz
DVI-D single link	Digital	No	165Mbps	1920x1080, 60hz/ 1600x1200, 60hz
DVI-I dual link	Digital	No	330Mbps	2560x1600, 60Hz/ 1920x1080, 120Hz

Dimensions (Unit: mm)



Packing List

Item	P/N	Q'ty	Description
Utility CD		1	Drivers and user manual
One Key Recovery CD	7B000-000724-RS	1	
Power adapter	63040-010090-020-RS	1	FSP090-D2BA1; 90 ~ 264VAC input; 90W; 19VDC output; Din 4-pin
Power cord	32702-000401-100-RS	1	1500 mm, European Standard
Power cord convert cable	32000-089400-RS	1	Convert normal type cord to triangle type cord cable
Wi-Fi antenna (for Wi-Fi module only)	32505-000900-100-RS	2	External antenna
Mounting brackets	41020-0343C2-00-RS	2	Wall mount kit
Mounting bracket screws	44015-030041-RS	8	Mounting brackets screw/HDD securing screw
RJ-45 to DB-9 COM port cable	32005-000200-200-RS	1	Round cable; RS-232/422/485; RS-232 cable; 2;300mm; 26AWG; (A)D-SUB 9P male; (B)RJ-45 8P8C+SHELL; RoHS
Thermal pad	34100-000197-RS	1	Thermal pad; 27.5*27.5*1.0mm; Silicone;K=6; Color: Reddish gray; RoHS
RS-422/485 Cable	32205-004200-100-RS	1	Flat cable; RS-232/422/485;RS-422/485 Cable;2;100mm;28AWG; (A)DU PONT 2*4P P=2.0 Female, IDIOT-PROOF; (B)D-SUB 9P, RoHS

Ordering Information

Part No.	Description
ECN-680A-H61-I5-R10	Embedded system, Core™ i5 Dual Core 2xxxT CPU (Above 2.7GHz), TDP 35W, Pre-installed 2GB DDR3 RAM*1, dual DVI display multimedia box, Dual GbE LAN, HDMI, USB 2.0, USB 3.0, SATA 3Gb/s, TPM, 9~28VDC Input, 90W adapter, black , R10
ECN-680AW-H61-I5-R10	Embedded system, Core™ i5 Dual Core 2xxxT CPU (Above 2.7GHz), TDP 35W, Pre-installed 2GB DDR3 RAM*1, dual DVI display multimedia box, Dual GbE LAN, build-in 802.11b/g/n wireless, HDMI, USB 2.0, USB 3.0, SATA 3Gb/s, TPM, 9~28VDC Input, 90W adapter, black, R10
ECN-680A-H61-I3-R10	Embedded system, Core™ i3 Dual Core 2xxxT CPU (Above 2.5GHz), TDP 35W, Pre-installed 2GB DDR3 RAM*1, dual DVI display multimedia box, Dual GbE LAN, HDMI, USB 2.0, USB 3.0, SATA 3Gb/s, TPM, 9~28VDC Input, 90W adapter, black, R10
ECN-680AW-H61-I3-R10	Embedded system, Core™ i3 Dual Core 2xxxT CPU (Above 2.5GHz), TDP 35W, Pre-installed 2GB DDR3 RAM*1, dual DVI display multimedia box, Dual GbE LAN, build-in 802.11b/g/n wireless, HDMI, USB 2.0, USB 3.0, SATA 3Gb/s, TPM, 9~28VDC Input, 90W adapter, black, R10
ECN-680A-H61-P-R10	Embedded system, Pentium® Dual Core G6xxT CPU (Above 2.2GHz), TDP 35W, Pre-installed 2GB DDR3 RAM*1, dual DVI display multimedia box, Dual GbE LAN, HDMI, USB 2.0, USB 3.0, SATA 3Gb/s, TPM, 9~28VDC Input, 90W adapter, black, R10
ECN-680AW-H61-P-R10	Embedded system, Pentium® Dual Core G6xxT CPU (Above 2.2GHz), TDP 35W, Pre-installed 2GB DDR3 RAM*1, dual DVI display multimedia box, Dual GbE LAN, build-in 802.11b/g/n wireless, HDMI, USB 2.0, USB 3.0, SATA 3Gb/s, TPM, 9~28VDC Input, 90W adapter, black, R10