

# 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. 8 GB)
- ◆ Dual DVI display output supported
- ◆ Optional 2.4 GHz 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

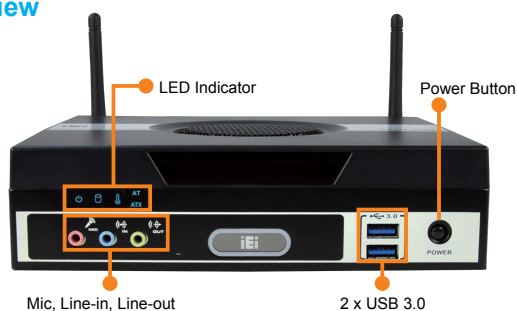


## Specifications

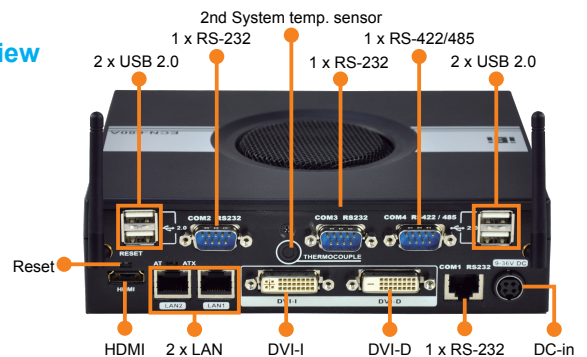
Model Name	ECN-680A-H61	
Chassis	Color	Black
	Dimensions (WxDxH) (mm)	222 x 163 x 54.5
	System Fan	1 mm x 80 mm
	Chassis Construction	Aluminum alloys
Motherboard	Processor CPU	Intel® Core™ i5-2xxT (above 2.7 GHz) Intel® Core™ i3-2xxT (above 2.5 GHz) Intel® Pentium® G6xxT (above 2.2 GHz)
	Chipset	Intel® H61
	System Memory	1 x 204-pin DDR3 SO-DIMM support up to 1066/1333 MHz Pre-installed 2 GB (system max: 8 GB)
Storage	Hard Drive	1 x 2.5" SATA HDD bay
	mSATA	Optional
I/O Interfaces	USB 3.0	2
	USB 2.0	4
	Ethernet	2 x RJ-45 1 x PCIe GbE by Intel® 82579, 1 x PCIe GbE by Intel® 82583V
	RS-232	2 x DB-9, 1 x RJ-45
	RS-422/485	1 x DB-9
	Display	1 x HDMI, 1 x DVI-D, 1 x DVI-I
	Resolution	HDMI: Up to 1920 x 1200@60Hz, DVI-D/DVI-I: Up to 1920 x 1080@60Hz
	Audio	1 x Line-out, 1 x Mic-in
	Wireless	1 x 802.11b/g/n (optional)
	Expansions	PCIe Mini
Power	Power Input	DC Jack: 9 V~36 V DC
	Power Consumption	19 V@3.6 A (Intel® Core™ i7-2600S with 1333MHz 4 GB DDR3 memory)
Reliability	Mounting	Wall mount
	Operating	-20°C ~60°C with air flow (SSD), 5% ~ 95%, non-condensing
	Operating Shock	Half-sine wave shock 3G, 11ms, 3 shocks per axis
	Operating Vibration	MIL-STD-810F 514.5C-1 with SATA HDD MIL-STD-810F 514.5C-2 with CompactFlash@SSD
	Weight (Net/Gross)	1.8 kg/3.0 kg
	Safety & EMC	CE/FCC
OS	Supported OS	Microsoft® Windows® Embedded Standard 7 E, Microsoft® Windows® XP Embedded, Linux

## Fully Integrated I/O

### • Front View



### • Rear View



### Easily accessible hard disk drive

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



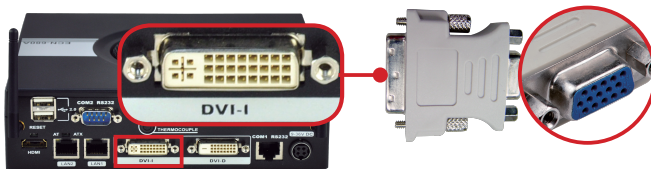
### Customized RS-232/422/485

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 to 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

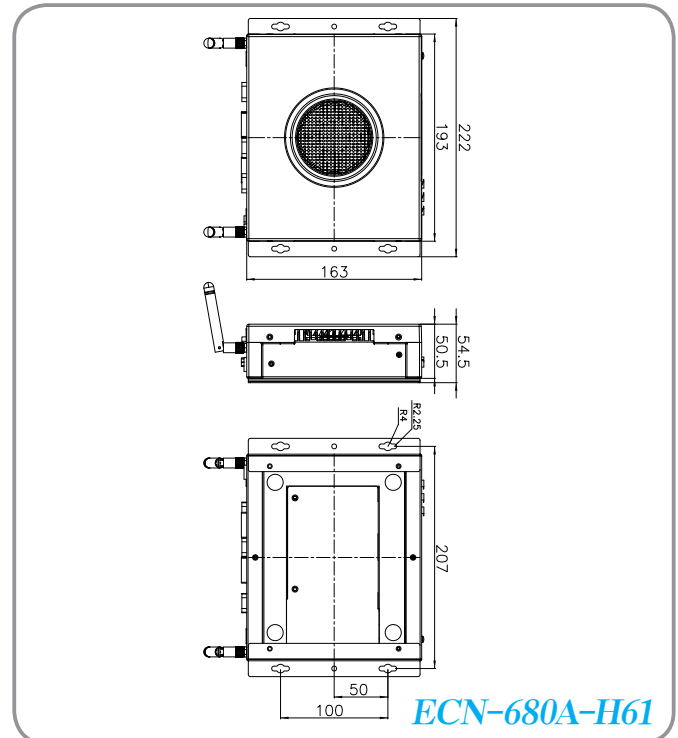


### DVI interfaces



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

### Dimensions (Unit: mm)



### Packing list

Item	Part No.	Quantity	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 V~264 V AC input, 90W, 19 V DC output, ErP, 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, 27.5x27.5x1.0mm, 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 2xxT CPU (Above 2.7 GHz), TDP 35W, Pre-installed 2 GB DDR3 RAM*1, dual DVI display multimedia box, Dual GbE LAN, HDMI, TPM, 9 V~28 V DC Input, 90W adapter, black, R10
ECN-680AW-H61-I5-R10	Embedded system, Core™ i5 Dual Core 2xxT CPU (Above 2.7 GHz), TDP 35W, Pre-installed 2 GB DDR3 RAM*1, dual DVI display multimedia box, Dual GbE LAN, build-in TELECOM Certified 802.11b/g/n wireless, HDMI, TPM, 9 V~28 V DC Input, 90W adapter, black, R10
ECN-680A-H61-I3-R10	Embedded system, Core™ i3 Dual Core 2xxT CPU (Above 2.5 GHz), TDP 35W, Pre-installed 2 GB DDR3 RAM*1, dual DVI display multimedia box, Dual GbE LAN, HDMI, TPM, 9 V~28 V DC Input, 90W adapter, black, R10
ECN-680AW-H61-I3-R10	Embedded system, Core™ i3 Dual Core 2xxT CPU (Above 2.5 GHz), TDP 35W, Pre-installed 2 GB DDR3 RAM*1, dual DVI display multimedia box, Dual GbE LAN, build-in TELECOM Certified 802.11b/g/n wireless, HDMI, TPM, 9 V~28 V DC Input, 90W adapter, black, R10
ECN-680A-H61-P-R10	Embedded system, Pentium® Dual Core G6xxT CPU (Above 2.2 GHz), TDP 35W, Pre-installed 2 GB DDR3 RAM*1, dual DVI display multimedia box, Dual GbE LAN, HDMI, TPM, 9 V~28 V DC Input, 90W adapter, black, R10
ECN-680AW-H61-P-R10	Embedded system, Pentium® Dual Core G6xxT CPU (Above 2.2 GHz), TDP 35W, Pre-installed 2 GB DDR3 RAM*1, dual DVI display multimedia box, Dual GbE LAN, build-in TELECOM Certified 802.11b/g/n wireless, HDMI, TPM, 9 V~28 V DC Input, 90W adapter, black, R10