

ECN-680A-H61

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



Features

- ◆ 2nd Generation Intel® Core™ i7/i5/i3 Celeron® and Pentium® 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 fanless design supports -20°C to 60°C
- ◆ Easy to install SATA hard drive
- ◆ USB 3.0 for high super speed data transfer
- ◆ TPM V1.2 hardware security function supported



Specifications

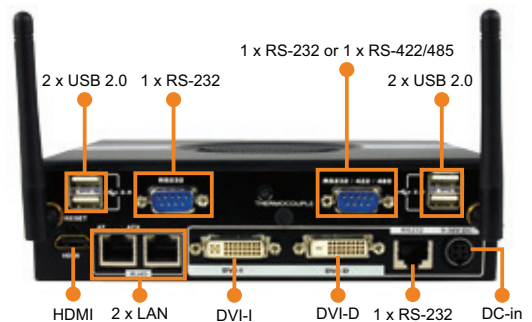
Model Name	ECN-680A-H61	
Chassis	Color	Black
	Dimensions	222 (W) x 163 (H) x 54.5 (D) mm
	Chassis Construction	SECC + Plastic
Motherboard	CPU	2nd Generation Intel® Core™ i7/i5/i3 Celeron® and Pentium® desktop processor
	Chipset	Intel® H61 (Co-lay Q67 chipset by MOQ limitation)
	Ethernet	Intel® 82579 PHY Ethernet (supports Intel® AMT 7.0 with Q67 chipset) Intel® 82583V Ethernet controller
	Memory	1 x 204-pin 1066/1333 MHz dual-channel DDR3 SDRAM DIMM slot (system max. 8GB)
	Storage	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 (COM2: Default RS-232, RS422/485 optional)
	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
	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
	Storage Temperature	-30°C ~ 65°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

Fully Integrated I/O

• Front View



• Rear View



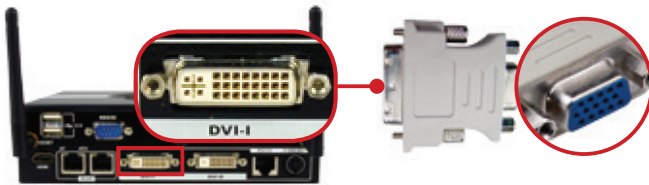
Easily accessible HDD disk driver

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



Dual DVI display and full HD display by HDMI

- The ECN-680A has DVI-I, DVI-D and HDMI display interfaces which supports dual display and high resolution with audio output for signage applications.
- DVI-I and DVI-D support resolutions up to 1920x1080@60Hz, HDMI 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

Packing List

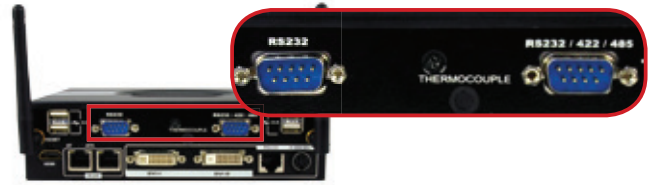
Item	P/N	Q'ty	Description
Utility CD		1	Drivers and user manual
One Key Recovery CD		1	
Power adapter	63040-010090-020-RS	1	FSP090-D2BA1; 90 ~ 264VAC input; 90W; 19VDC output; Din 4-pin
Power cord	32702-000401-100-RS	1	1500 mm, European Standard
Power cord convert cable	32000-089400-RS	1	Convert normal 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	
Thermal pad	34100-000197-RS	1	
RS-422/485 Cable	32205-004200-100-RS	1	

Ordering Information

Part No.	Description
ECN-680A-H61-R10	Embedded system, 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-R10	Embedded system, 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
CPU Selection	CPU-DT-i7-2600S 2nd Generation Intel® Core™ i7 Processor [Desktop], LGA1155, dual-core 3.4GHz, 65W, Intel® AMT
	CPU-DT-i5-2390T 2nd Generation Intel® Core™ i5 Processor [Desktop], LGA1155, dual-core 2.7GHz, 35W, Intel® AMT
	CPU-DT-i3-2100T 2nd Generation Intel® Core™ i3 Processor [Desktop], LGA1155, dual-core 2.5GHz, 35W
	CPU-DT-P-G630T Intel® Pentium® Desktop Processor, LGA1155, dual-core 2.3GHz, 35W
	CPU-DT-C-G530T Intel® Celeron® Desktop Processor, LGA1155, dual-core 2.0GHz, 35W
Memory Selection	DDR3-SO-1333-2GB SO-DIMM DDR3 1333 MHz 2GB
	DDR3-SO-1333-4GB SO-DIMM DDR3 1333 MHz 4GB

Customized RS-232/422/485

The ECN-680A has one RJ-45 and two DB-9 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.



Dimensions (Unit: mm)

