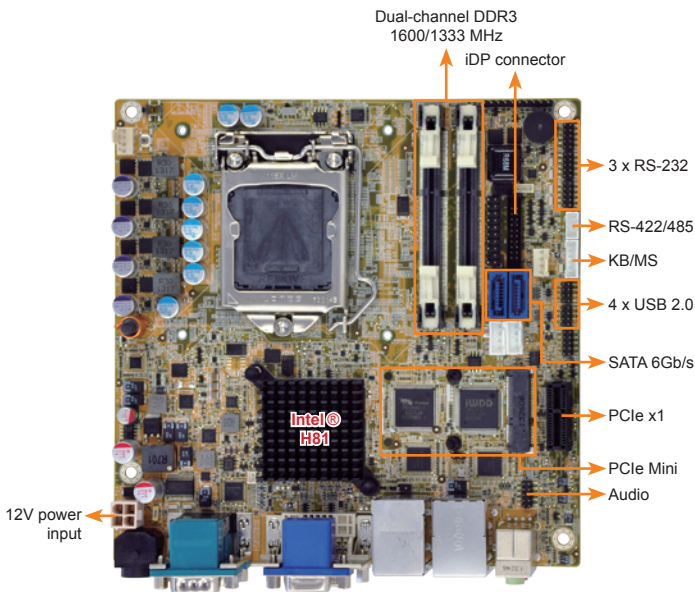


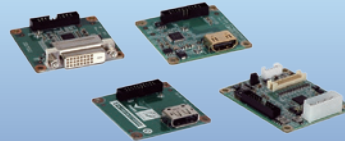
# KINO-DH810

Mini-ITX SBC with LGA1150 4th generation Intel® Core™ i7/i5/i3, Pentium® or Celeron® CPU, DDR3, DVI-D, VGA, iDP, dual Intel® PCIe GbE, USB 3.0, SATA 6Gb/s, HD Audio and RoHS



## iDP (IEI Internal DisplayPort)

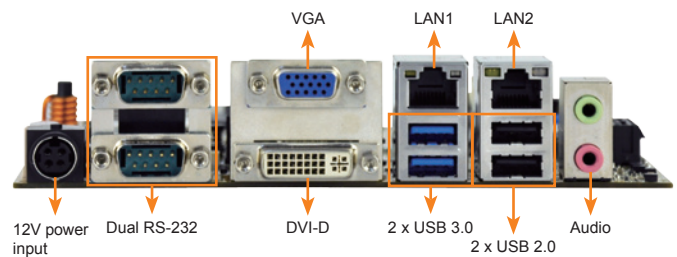
The iDP connector is provided on the IEI 8-series products. Through the IEI iDP converter cards, the iDP connector can support different display specifications, such as VGA, HDMI, DVI-D and LVDS.



iDP converter cards with brackets

### Easy Installation on the Chassis

Model	Output	External Power
DP-VGA-R10	VGA	No
DP-HDMI-R10	HDMI	No
DP-DVI-R10	DVI	No
DP-LVDS-R10	LVDS	Yes
DP-DP-R10	DP	No



## Specifications

- ◆ CPU  
4th generation LGA1150 Intel® Core™ i7/i5/i3, Pentium® or Celeron® processor supported
- ◆ Chipset  
Intel® H81
- ◆ Memory  
Two 204-pin 1600/1333 MHz dual-channel DDR3 & DDR3L SDRAM unbuffered DIMMs support up to 16 GB
- ◆ BIOS  
UEFI BIOS
- ◆ Ethernet  
Dual LAN: Intel® I211-AT PCIe controller
- ◆ Graphics Engine  
Intel® HD Graphics Gen 7.5 supports DX11.1 and OpenCL 1.2, OpenGL 3.2 Full MPEG2, VC1, AVC Decode
- ◆ Display Output  
1 x VGA (up to 1920x1200@60 Hz)  
1 x DVI-D (up to 2560x1600@60 Hz)  
1 x iDP interface for HDMI, LVDS, VGA, DVI, DP (up to 3840x2160@60 Hz)
- ◆ Audio  
Realtek ALC662 HD Audio codec  
2 x Audio jacks (line-out, mic-in) on rear IO  
1 x Front audio (2x5-pin)
- ◆ External I/O Interface  
2 x RS-232  
2 x USB 2.0  
2 x USB 3.0
- ◆ Internal I/O Interface  
1 x KB/MS (1x6 pin) 2 x SATA 6Gb/s  
1 x RS-422/485 (1x4 pin, P=2.0) 4 x USB 2.0 (2x4 pin, P=2.0)  
3 x RS-232 (2x5 pin, P=2.54)
- ◆ Front Panel  
1 x Front panel (1x10 pin, power LED, HDD LED, speaker, power button, reset button)
- ◆ LAN LED: 2 x LAN LED (1x2 pin)
- ◆ SMBus: 1 x SMBus (1x4 pin)
- ◆ TPM: 1 x TPM (2x10 pin)
- ◆ Expansion  
1 x PCIe x1 slot  
1 x Full-size PCIe Mini card slot (support mSATA)
- ◆ Watchdog Timer  
Software programmable, support 1~255 sec. system reset
- ◆ Digital I/O: 8-bit digital I/O (2x5 pin)
- ◆ Fan Connector  
1 x CPU smart fan (1x4 pin)  
1 x System smart fan (1x4 pin)
- ◆ Power Supply  
12V only DC input  
1 x External DC jack (4-pin DIN)  
1 x Internal power connector (2x2 pin)  
Support AT/ATX mode
- ◆ Power Consumption  
+12V@6.03A  
(Intel® Core™ i7-4770K 3.90 GHz CPU with two 1333 MHz 4 GB DDR3 memory)
- ◆ Operating Temperature: -20°C ~ 60°C
- ◆ Storage Temperature: -30°C ~ 70°C
- ◆ Operating Humidity: 5% ~ 95%, non-condensing
- ◆ Dimensions: 170mm x 170mm
- ◆ Weight: GW: 900g / NW: 450g



## Features

- 4th generation LGA1150 Intel® Core™ i7/i5/i3, Pentium® or Celeron® processor supported
- DDR3 1066/1333/1600 MHz dual-channel SDRAM
- 3D micro-architecture enhancement supports DX11.1, OCL 1.2 and OGL3.2
- Rich media acceleration for hardware decode and encode acceleration
- High-speed I/O interface for USB 3.0, SATA 6Gb/s and mSATA
- IEI Jumper-less function

## Packing List

1 x KINO-DH810 single board computer	1 x One Key Recovery CD
1 x I/O shielding	1 x QIG
2 x SATA with power output cable	1 x Utility CD

## Ordering Information

Part No.	Description
KINO-DH810-R10	Mini-ITX SBC with LGA1150 Intel® Core™ i7/i5/i3, Celeron® CPU, DDR3, DVI-D, VGA, DP, dual Intel® PCIe GbE, USB 3.0, SATA 6Gb/s, HD Audio and RoHS
KINO-DH810-ECO-R10	Mini-ITX SBC with LGA1150 Intel® Core™ i7/i5/i3, Pentium® or Celeron® CPU, DDR3, DVI-D, VGA, iDP, dual Intel® PCIe GbE, USB 3.0, SATA 6Gb/s, HD Audio, ECO packing and RoHS (10 pce/pack)
32000-023800-RS	PS/2 KB/MS cable, 135mm, P=2.0
32001-008600-200-RS	Dual-port USB cable, 210mm, P=2.0
32205-002700-200-RS	RS-232/422/485 cable, 200mm, P=2.0
32205-003800-300-RS	RS-422/485 cable, 200mm, P=2.0
CF-1156A-RS-R11	High-performance LGA1155/LGA1156 cooler kit, 1U chassis compatible, 73W
CF-1156C-RS	LGA1155/LGA1156 cooler kit, 1U chassis compatible, 45W
CF-1156D-RS	LGA1155/LGA1156 cooler kit, 1U chassis compatible, 65W
CF-1156E-R11	High-performance LGA1155/LGA1156 cooler kit, 95W
TPM-IN01-R20	20-pin Infineon TPM module, software management tool, firmware v3.17