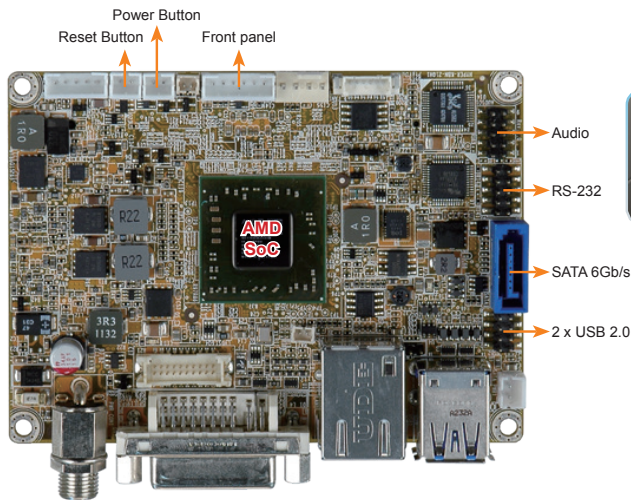
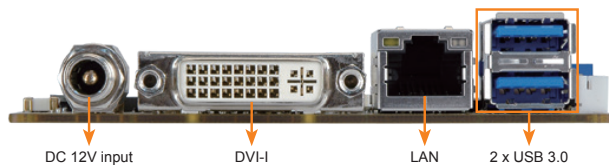


## Pico-ITX Board



### Flexible Application Small size form factor: Pico-ITX



### Specifications

- ◆ SoC
  - GX-415GA on-board SoC (1.5GHz, quad-core, 2MB cache, TDP=15W)
  - GX-210HA on-board SoC (1.0GHz, dual-core, 1MB cache, TDP=9W) (support fanless solution)
  - GX-420CA on-board SoC (2.0GHz, quad-core, 2MB cache, TDP=25W)
  - GX-217GA on-board SoC (1.65GHz, dual-core, 1MB cache, TDP=15W)
- ◆ BIOS
  - AMI UEFI BIOS
- ◆ Memory
  - One 204-pin 1600/1333 MHz dual-channel DDR3 & DDR3L SDRAM unbuffered DIMM supports up to 8 GB
- ◆ Graphics Engine
  - Support DX11.1, OpenGL 4.1 and OpenCL1.2
  - UV/D4.2 decode for H.264, MPEG2/4, VC1, MVC
  - VCE 2.0 encode for H.264, VCE
- ◆ Display Output
  - 1 x DVI-I (DVI-D up to 1920x1200@60Hz, VGA up to 2048x1536@60Hz)
  - 1 x 18-bit single-channel LVDS (up to 1600x900@60Hz)
- ◆ Ethernet
  - LAN: Realtek RTL8111E controllers with ASF2.0 supported
- ◆ External I/O Interface
  - 2 x USB 3.0
- ◆ Internal I/O Interface
  - 1 x RS-232 (2x5 pin, P=2.0)
  - 1 x SATA 6Gb/s with 5V SATA power connector
  - 2 x USB 2.0 (2x4 pin, P=2.0)
- ◆ Audio
  - Realtek AL662 HD Audio codec
  - 1 x Front audio (2x5 pin)
- ◆ Front Panel
  - 1 x Power LED & HDD LED (1x6 pin)
  - 1 x Power button (1x2 pin)
  - 1 x Reset button (1x2 pin)
- ◆ LAN LED
  - 1 x LAN LED (1x2 pin)
- ◆ Fan Connector
  - 1 x Smart fan connector (1x4 pin)
- ◆ Watchdog Timer
  - Software programmable, support 1~255 sec. system reset
- ◆ Power Supply
  - 12V only DC input
  - 1 x External DC power jack (ø5.5 mm)
  - Support AT/ATX mode
- ◆ Power Consumption
  - 12V@1.45A (AMD GX-415GA 1.5GHz CPU with one 2 GB 1333 MHz DDR3 memory)
- ◆ Operating Temperature
  - 0°C ~ 60°C
- ◆ Storage Temperature
  - 10°C ~ 70°C
- ◆ Operating Humidity
  - 5% ~ 95%, non-condensing
- ◆ Dimensions (LxW)
  - 100mm x 72mm
- ◆ Weight
  - GW: 600g/ NW: 250g
- ◆ CE/FCC compliant

### Features

- Pico-ITX form factor with AMD® Embedded G-Series SoC supports DDR3/DDR3L up to 1600 MHz memory
- 12V only single voltage design for AT/ATX power by DC power jack
- DVI-I and 18-bit single-channel LVDS support for dual display
- IEI One Key Recovery solution allows you to create rapid OS backup and recovery

### Packing List

1 x HYPHER-KBN single board computer
1 x Audio cable
1 x RS-232 cable
1 x SATA with 5V output cable kit
1 x Special heatsink
1 x One Key Recovery CD
1 x QIG
1 x Utility CD

### Ordering Information

Part No.	Description
HYPHER-KBN-4151-R10	Pico-ITX SBC with AMD 28nm quad-core GX-415GA 1.5GHz (15W) SoC processor, DDR3 DVI-I/LVDS, GbE, SATA 6Gb/s, USB 3.0, HD Audio and RoHS
HYPHER-KBN-2101-R10	Pico-ITX SBC with AMD 28nm dual-core GX-210HA 1.0GHz (9W) SoC processor, DDR3 DVI-I/LVDS, GbE, SATA 6Gb/s, USB 3.0, HD Audio and RoHS
32001-008600-200-RS	Dual-port USB cable, 210mm, P=2.0

Note: Models with other CPUs not listed in the table are requested by MOQ - 100 pcs/lot