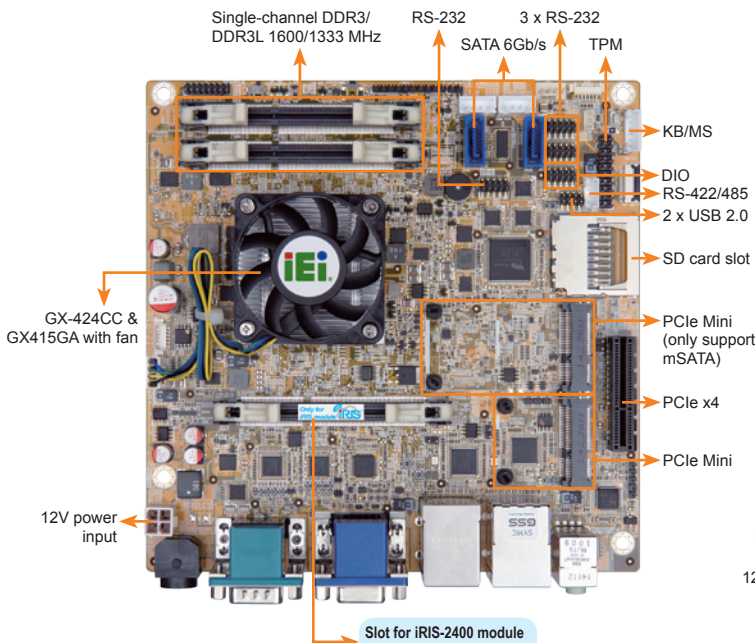


# KINO-SE-i2 KINO-KBN-i2

Mini-ITX SBC with AMD® Embedded G-Series SoC with VGA/  
Dual HDMI, dual GbE, dual PCIe Mini, USB 3.0, SATA 6 GB/s,  
audio, iRIS-2400 and RoHS



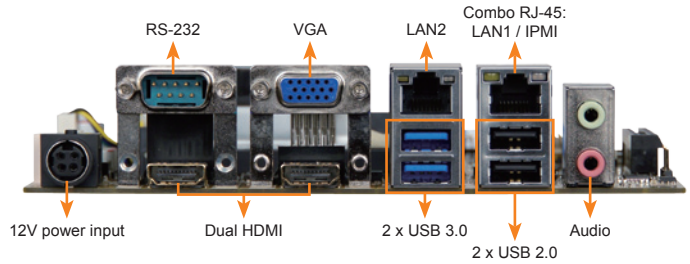
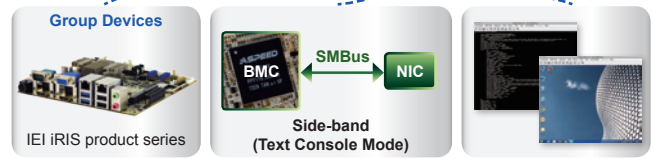
## Specifications

- ◆ SoC
  - » AMD® Embedded G-Series "Steppe Eagle" SoC
    - GX-424CC on-board Soc (2.4GHz, quad-core, 2MB cache, TDP=25W)
    - GX-412HC on-board Soc (1.2GHz, quad-core, 2MB cache, TDP=7W)
    - GX-212JC on-board Soc (1.2GHz, dual-core, 1MB cache, TDP=6W)
    - GX-411GA on-board Soc (1.0GHz, quad-core, 2MB cache, TDP=15W)
    - GX-209HA on-board Soc (1.0GHz, dual-core, 1MB cache, TDP=9W)
  - » AMD® Embedded G-Series "eKabini" 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)
    - 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
  - Two 204-pin 1600/1333 MHz dual-channel DDR3 & DDR3L SDRAM unbuffered SO-DIMM slots support up to 8 GB
- ◆ Graphics Engine
  - Support DX11.1, OpenGL 4.1 and OpenCL1.2
  - UVD4.2 decode for H.264, MPEG2/4, VC1, MVC
  - VCE 2.0 encode for H.264, VCE
- ◆ Display Output
  - Dual independent display
  - 2 x HDMI (up to 3840x2160@60Hz)
  - 1 x VGA (up to 2048x1536@60Hz)
- ◆ Ethernet
  - LAN1: Intel® I210-AT PCIe controller with NCSI support
  - LAN2: Intel® I211-AT PCIe controller
- ◆ External I/O Interface
  - 1 x RS-232
  - 2 x USB 2.0
  - 2 x USB 3.0
- ◆ Internal I/O Interface
  - 1 x KB/MS (1x6 pin) 1 x mSATA (colay SATA port2)
  - 1 x SD card slot 1 x RS-422/485 (1x4 pin, P=2.0)
  - 2 x USB 2.0 (2x4 pin, P=2.0) 3 x RS-232 (2x5 pin, P=2.54)
  - 2 x SATA 6Gb/s with SATA power connector
- ◆ iRIS Remote Management Module: 1 x iRIS-2400 slot
- ◆ SMBus: 1 x SMBus (1x4 pin)
- ◆ TPM: 1 x TPM (2x10 pin)
- ◆ Audio: Realtek AL892 HD Audio codec
  - 2 x Audio jacks (line-out, mic-in) on rear IO
  - 1 x S/PDIF (1x4 pin)
- ◆ Front Panel
  - 1 x Front panel (2x7 pin, power LED, HDD LED, speaker, power button, reset button)
  - LAN LED: 2 x LAN LED (1x2 pin)
- ◆ Expansion
  - 1 x PCIe x4 slot 1 x Half-size PCIe Mini card slot
- ◆ Digital I/O: 8-bit digital I/O (2x5 pin)
- ◆ Fan Connector : 1 x System smart fan (1x4 pin)
- ◆ Watchdog Timer: Software programmable, support 1~255 sec. system reset
- ◆ Power Supply
  - 12V only DC input 1 x Internal power connector (2x2 pin)
  - 1 x External DC jack (4-pin DIN) Support AT/ATX mode
- ◆ Power Consumption
  - 12V@2.7A (AMD GX-424CC 2.4GHz CPU with 1600 MHz 8 GB DDR3 memory)
- ◆ Operating Temperature: -0°C ~ 60°C
- ◆ Storage Temperature: -30°C ~ 70°C
- ◆ Operating Humidity: 5% ~ 95%, non-condensing
- ◆ Dimensions: 170mm x 170mm
- ◆ Weight: GW: 600g/ NW: 250g

## Remote Management Solution

### Support iRIS-2400 module

- » Out-of-band control
- » Remote KVM function support
- » User friendly web-UI based



## Features

- Mini-ITX form factor with AMD® Embedded G-Series SoC
- 12V only single voltage design for AT/ATX power
- Dual independent display by VGA, dual HDMI
- Supporting dual PCIe Mini card slot with mSATA, wireless card, DOM capabilities
- Support IPMI 2.0 through iRIS module
- IEI One Key Recovery solution allows you to create rapid OS backup and recovery

## Packing List

1 x KINO-SE-i2 single board computer with CPU cooler
1 x I/O shielding
1 x SATA with power output cable kit
1 x One Key Recovery CD
1 x QIG
1 x Utility CD

## Ordering Information

Part No.	Description
KINO-SE-i2-4241-R10	Mini-ITX SBC with 28nm AMD® GX-424CC on-board SoC (quad-core, 2.4GHz, 25W) with VGA/Dual HDMI, dual GbE, dual PCIe Mini, USB 3.0, SATA 6 GB/s, iRIS-2400, audio and RoHS
KINO-KBN-i2-4151-R10	Mini-ITX SBC with 28nm AMD® GX-415GA on-board SoC (quad-core, 1.5GHz, 15W) with VGA/Dual HDMI, dual GbE, dual PCIe Mini, USB 3.0, SATA 6 GB/s, iRIS-2400, audio and RoHS
KINO-KBN-i2-2101-R10	Mini-ITX SBC with 28nm AMD® GX-210HA on-board SoC (quad-core, 1.0GHz, 9W) with VGA/Dual HDMI, dual GbE, dual PCIe Mini, USB 3.0, SATA 6 GB/s, iRIS-2400, audio and RoHS
iRIS-2400-R10	IPMI 2.0 adapter card with AST2400 BMC chip for DDR3 SO-DIMM socket interface
19800-010900-200-RS	RS-232 cable with bracket, 230mm, P=2.54
32205-003800-300-RS	RS-422/485 cable, 200mm, P=2.0
CB-USB02A-RS	Dual-port USB 2.0 cable with bracket, 300mm, P=2.0
TPM-IN01-R20	20-pin Infineon TPM module, software management tool, firmware v3.17

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