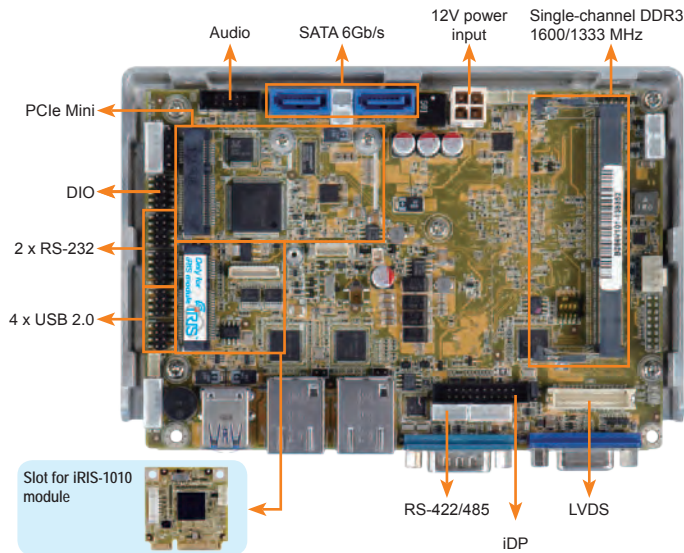


WAFER-KBN-i1

3.5" SBC supports AMD® Embedded G-Series SoC with VGA/LVDS/iDP, Dual GbE, PCIe Mini, USB 3.0, SATA 6Gb/s, iRIS-1010, HD Audio and RoHS



Specifications

- SoC
 - AMD® Embedded G-Series 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
 - One 204-pin 1600/1333 MHz dual-channel DDR3 & DDR3L SDRAM SO-DIMM slot supports up to 8 GB
- Graphics Engine
 - GPU frequency 500 MHz (Radeon™ HD 8330E) for GX-415GA
 - GPU frequency 300 MHz (Radeon™ HD 8310E) for GX-210HA
 - GPU frequency 600 MHz (Radeon™ HD 8400E) for GX-420CA
 - GPU frequency 450 MHz (Radeon™ HD 8280E) for GX-217GA
 - Support DX11.1, OpenGL 4.1 and OpenCL 1.2
 - UVD4.2 decode for H.264, MPEG2/4, VC1, MVC
 - VCE 2.0 encode for H.264, VCE
- Display Output
 - VGA (up to 2048x1536@60Hz)
 - 18/24-bit dual-channel LVDS by CH7511B DP to LVDS converter (up to 1920x1200@60Hz)
 - iDP interface for HDMI, LVDS, VGA, DVI, DP (up to 2560x1600@60 Hz)
- Ethernet
 - LAN1: Intel® I210-AT PCIe controller with NCSI support
 - LAN2: Intel® I211-AT PCIe controller
- Super IO: Fintek F81866
- External I/O Interface
 - 1 x RS-232
 - 2 x USB 3.0
- Internal I/O Interface
 - 1 x KB/MS (1x6 pin)
 - 2 x SATA 3Gb/s with 5V SATA power connector
 - 1 x RS-422/485 (1x4 pin, P=2.0)
 - 4 x USB 2.0 (2x4 pin, P=2.0)
 - 2 x RS-232 (2x5 pin, P=2.0)
- iRIS Remote Management Module: 1 x iRIS-1010 slot
- SMBus: 1 x SMBus (1x4 pin)
- I²C: 1 x I²C (1x4 pin)
- Audio
 - Realtek AL892 HD Audio codec
 - 1 x S/PDIF by 4-pin (1x4) header for digital audio
 - 1 x Analog 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: 2 x LAN LED (1x2 pin)
- Expansion: 1 x Full-size PCIe Mini card slot (supports mSATA co-lay SATA port 2)
- Digital I/O: 1 x 8-bit digital I/O (2x5 pin)
- Fan Connector: 1 x 4-pin system fan connector
- Watchdog Timer: Software programmable, support 1~255 sec. system reset
- Power Supply
 - 12V only DC input
 - 1 x Internal power connector (2x2 pin)
 - Support AT/ATX mode
- Power Consumption
 - 12V@2.12A (AMD GX-415GA 1.5GHz CPU with one 4 GB 1333 MHz DDR3 memory)
- Operating Temperature: 0°C ~ 60°C
- Storage Temperature: -10°C ~ 70°C
- Operating Humidity: 5% ~ 95%, non-condensing
- Dimensions: 146mm x 102mm
- Weight: GW:600g/ NW:250g

Multimedia Features

Unified Video Decoder 4.2

H.264, MPEG-2, VC-1, MPEG4 (DivX), and WMV



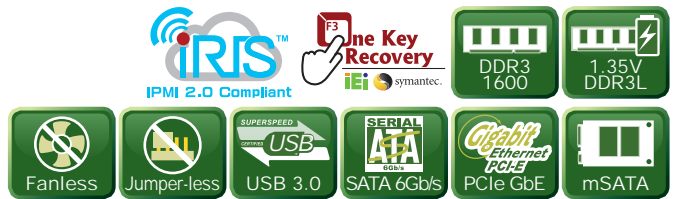
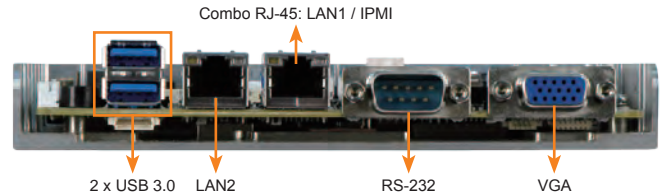
Outstanding graphics performance and power saving through integrated advanced graphics and hardware

Video Compression Engine 2.0

Video conferencing, wireless display, H.264, SVC



Fast HD transcoding, low latency encoding conclusions, power efficient video conferencing



Features

- 3.5" form factor with AMD® Embedded G-Series SoC
- 12V only single voltage design with AT/ATX mode
- 18/24-bit dual-channel LVDS for high resolution panel
- Dual independent display by VGA, LVDS and iDP
- Support IPMI 2.0 with iRIS-1010 module
- Support full-size PCIe Mini card slot for mSATA, wireless card and DOM
- IEI One Key Recovery solution allows you to create rapid OS backup and recovery

Packing List

1 x WAFER-KBN-210H single board computer with Enclosure Heatsink	
1 x Audio cable	
1 x Power cable	1 x One Key Recovery CD
1 x RS-232 cable	1 x QIG
2 x SATA with 5V output cable kit	1 x Utility CD

Ordering Information

Part No.	Description
WAFER-KBN-i1-4151-R10	3.5" SBC supports AMD 28nm quad-core GX-415GA 1.5GHz (15W) on-board SoC with VGA/LVDS, Dual GbE, PCIe Mini, USB 3.0, SATA 6Gb/s, iRIS-1010, HD Audio and RoHS
WAFER-KBN-i1-2101-R10	3.5" SBC supports AMD 28nm dual-core GX-210HA 1.0GHz (9W) on-board SoC with VGA/LVDS, Dual GbE, PCIe Mini, USB 3.0, SATA 6Gb/s, iRIS-1010, HD Audio and RoHS
iRIS-1010-R10	IPMI 2.0 adapter card with AST1010 BMC chip (W/O KVM over IP function) for PCIe Mini socket interface
32000-023800-RS	PS/2 KB/MS cable
32000-070301-RS	Dual-port USB cable, 210mm, P=2.0
32205-003800-300-RS	RS-422/485 cable, 200mm, P=2.0
DP-DP-R10	DisplayPort to DisplayPort converter board (for IEI iDP connector)
DP-DVI-R10	DisplayPort to DVI-D converter board (for IEI iDP connector)
DP-HDMI-R10	DisplayPort to HDMI converter board (for IEI iDP connector)
DP-LVDS-R10	DisplayPort to LVDS converter board (for IEI iDP connector)
DP-VGA-R10	DisplayPort to VGA converter board (for IEI iDP connector)

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