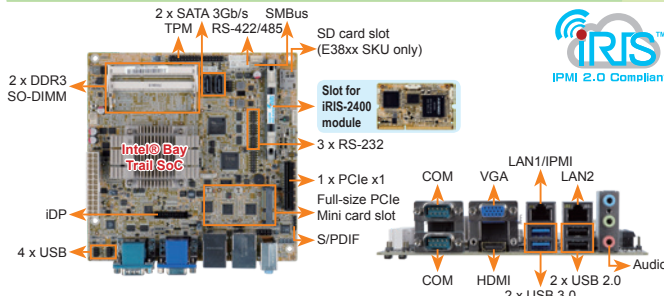


KINO-ABT-i2

Mini-ITX SBC supports 22nm Intel® Atom™ or Celeron® on-board SoC, VGA/HDMI/iDP, dual Intel® PCIe GbE, USB 3.0, SATA, HD Audio, iRIS-2400 and RoHS



Specifications

- SoC
 - Intel® Atom™ E3845 on-board SoC (1.91GHz, quad-core, 2MB cache, TDP=10W)
 - Intel® Atom™ E3827 on-board SoC (1.75GHz, dual-core, 1MB cache, TDP=8W)
 - Intel® Atom™ E3826 on-board SoC (1.46GHz, dual-core, 1MB cache, TDP=7W)
 - Intel® Atom™ E3825 on-board SoC (1.33GHz, dual-core, 1MB cache, TDP=6W)
 - Intel® Atom™ E3815 on-board SoC (1.46GHz, single-core, 512KB cache, TDP=5W)
- BIOS: UEFI BIOS
- Memory
 - Two 204-pin 1066/1333 MHz dual-channel unbuffered DDR3L SDRAM SO-DIMM support up to 8 GB (E3845, E3827, E3826)
 - One 204-pin 1066/1333 MHz dual-channel unbuffered DDR3L SDRAM SO-DIMM supports up to 8 GB (E3825, E3815)
- Graphics Engine: Intel® HD Graphics Gen 7 Engines with 4 execution units, supporting DX11.1, OpenGL 4.2 and OpenCL1.2
- Display Output
 - Dual Independent Display
 - 1 x VGA (up to 2560x1600@60Hz)
 - 1 x HDMI (up to 2560x1600@60Hz)
 - 1 x iDP interface for HDMI, LVDS, VGA, DVI, DP (up to 2560x1600@60Hz)
- Ethernet
 - LAN1: Intel® I210-AT PCIe controller with NCSI support (for iRIS solution)
 - LAN2: Intel® I211-AT PCIe controller
- SMBus: 1 x SMBus (1x4 pin)
- TPM: 1 x TPM (2x10 pin)
- LAN LED: 2 x LAN LED (1x2 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)
 - 1 x Micro SD card slot (E38xx sku only)
 - 1 x RS-422/485 (1x4 pin, P=2.0)
 - 2 x SATA 3Gb/s with 5V SATA power connector
 - 3 x RS-232 (2x5 pin, P=2.0)
 - 4 x USB 2.0 (2x4 pin, P=2.0)
- Audio
 - Realtek ALC662 HD Audio codec
 - 3 x Audio jacks (line-out, line-in, mic-in) on rear IO
 - 1 x Front audio (2x5 pin)
 - 1 x S/PDIF (1x5 pin)
- Front Panel: 1 x Front panel (2x7 pin, power LED, HDD LED, speaker, power button, reset button)
- Expansion
 - 1 x PCIe x4 slot (PCIe x1 signal)
 - 1 x Full-size PCIe Mini card slot (support mSATA, colay SATA2)
- iRIS Remote Management Module
 - 1 x iRIS-2400 slot
- Digital I/O: 8-bit digital I/O (2x5 pin)
- Chassis Intrusion Detection: 1 x Chassis intrusion connector (1x2 pin)
- Fan Connector
 - 1 x CPU smart fan (1x4 pin)
 - 1 x System smart fan (1x4 pin)
- Power Supply: ATX power supply
- Watchdog Timer: Software programmable, supports 1~255 sec. system reset
- Power Consumption: 5V@1.71A, 12V@0.08A, Vcore_12V@0.27A, 3.3V@0.34 (Intel® Celeron® J1900 CPU with two 4 GB 1333 MHz 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
- CE/FCC compliant

Packing List

1 x KINO-ABT-i2 single board computer	
1 x Dual-port USB cable	1 x IO shielding
1 x SATA cable	1 x QIG

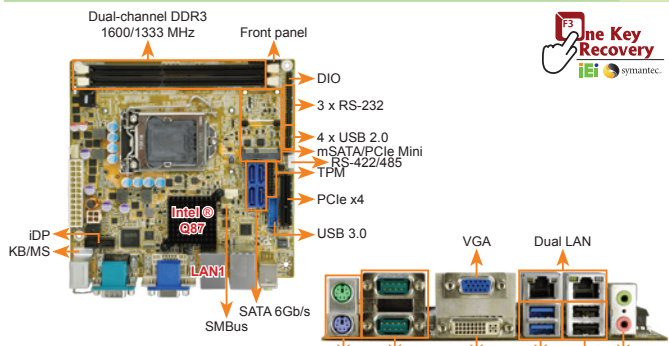
Ordering Information

Part No.	Description
KINO-ABT-i2-E38XX1-R10**	Mini-ITX SBC supports Intel® Atom™ processor E38XX, VGA/HDMI/iDP, dual Intel® PCIe GbE, SATA, USB 3.0, HD Audio, iRIS-2400 and RoHS
32006-000300-100-RS	PS/2 KB/MS Y-cable without bracket, 140mm/120mm
32200-000049-RS	RS-232 cable, 200mm, 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 24-bit dual-channel LVDS converter board (for IEI iDP connector)
DP-VGA-R10	DisplayPort to VGA converter board (for IEI iDP connector)
TPM-IN01-R20	20-pin Infineon TPM module, software management tool, firmware v3.17

**By order production, MOQ: 100

KINO-AQ870

Mini-ITX SBC with LGA1150 socket supports 4th Gen Intel® Core™ i7/i5/i3 processor, DVI-D/VGA/DP, dual Intel® PCIe GbE, USB 3.0, SATA 6Gb/s, HD Audio and RoHS



Features

- LGA1150 socket supports 4th Gen Intel® Core™ i7/i5/i3 processor
- DDR3 1066/1333/1600 MHz dual-channel SDRAM
- 3D micro-architecture enhancements for DX11.1, OCL 1.2 and OGL3.2
- Rich media acceleration for hardware decode and encode acceleration
- Intel® GbE LAN with Intel® AMT 9.0 support
- High speed I/O interface for USB 3.0, SATA 6Gb/s and mSATA
- IEI jumper-less function

Specifications

- CPU: LGA1150 socket supports 4th Gen Intel® Core™ i7/i5/i3 processor
- PCH: Intel® Q87
- Memory: Two 240-pin 1600/1333 MHz dual-channel DDR3 SDRAM unbuffered DIMMs support up to 16 GB
- BIOS: UEFI BIOS
- Ethernet
 - LAN1: Intel® I211 PCIe controller
 - LAN2: Intel® I217LM with Intel® AMT 9.0 support
- Graphics Engine
 - Support for DX11.1 and OpenGL3.2
 - Full MPEG2, VC1, AVC Decode
- Display Output
 - 1 x VGA (up to 1920x1200@60Hz)
 - 1 x DVI-D (up to 2560x1600@60Hz)
 - 1 x iDP interface for HDMI, LVDS, VGA, DVI, DP (up to 3840x2160@60Hz)
- Audio
 - Realtek ALC662 HD codec supports 5.1-channel
 - 2 x Audio jacks (line-out, mic-in) on rear IO
- LAN LED: 2 x LAN LED (1x2 pin)
- SMBus: 2 x SMBus (1x4 pin)
- TPM: 1 x TPM (2x10 pin)
- External I/O Interface
 - 1 x KB/MS
 - 2 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 RS-422/485 (1x4 pin, P=2.0)
 - 2 x USB 3.0 (2x10 pin, P=2.0)
 - 3 x RS-232 (2x5 pin, P=2.0)
 - 4 x SATA 6Gb/s (RAID 0/1/5/10 supported)
 - 4 x USB 2.0 (2x4 pin, P=2.0)
- Front Panel
 - 1 x Front panel (1x10 pin, power LED, HDD LED, speaker, power button, reset button)
- Expansion
 - 1 x PCIe x4 card slot
 - 1 x PCIe Mini card slot (supports mSATA, with SATA & USB 2.0 signal only)
- Watchdog Timer: Software programmable supports 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: ATX Power Supply
- Power Consumption
 - 3.3V@1.11A, 5V@3.01A, 12V@0.12A, Vcore@0.32A, 5VSB@0.15A (Intel® 2.60GHz CPU with two 1600 MHz 2 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
- CE/FCC compliant

Packing List

1 x KINO-AQ870 motherboard	
1 x I/O shielding	1 x Mini jumper pack
4 x SATA cable	1 x QIG

Ordering Information

Part No.	Description
KINO-AQ870-R10	Mini-ITX SBC with LGA1150 socket supports 4th Gen Intel® Core™ i7/i5/i3 processor, DVI-D/VGA/DP, dual Intel® PCIe GbE, USB 3.0, SATA 6Gb/s, HD Audio and RoHS
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-1150SA-R10	Special cooler kit for LGA1150, high-performance compatible, 95W
CF-1150SB-R11	Special cooler kit for LGA1150, high-performance compatible, 65W
CF-1150SC-R20	Special cooler kit for LGA1150, 1U chassis compatible, 65W
CF-1150SE-R11	Special cooler kit for LGA1150, 1U chassis compatible, 95W
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 24-bit dual-channel LVDS converter board (for IEI iDP connector)
DP-VGA-R10	DisplayPort to VGA converter board (for IEI iDP connector)
TPM-IN01-R20	20-pin Infineon TPM module, software management tool, firmware v3.17