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Datasheet

GIGAIPC

QBiP-8565A

3,5" Embedded Single-Board Computer with Intel® Whiskey Lake i7-8565U (optional i7-8665UE)

Processor, 2x Intel® GbE, 1x RS232/422/485, 3x RS232, 2x SATA, 4x USB 3.1

QBiP-8265A

3,5" Embedded Single-Board Computer with Intel® Whiskey Lake i5-8265U (optional i5-8365UE)

Processor, 2x Intel® GbE, 1x RS232/422/485, 3x RS232, 2x SATA, 4x USB 3.1

QBiP-8165A

3,5" Embedded Single-Board Computer with Intel® Whiskey Lake i3-8145U

Processor, 2x Intel® GbE, 1x RS232/422/485, 3x RS232, 2x SATA, 4x USB 3.1



Note: a separate manual / datasheet is available for each version

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QBIP-8565A

3.5" SubCompact Board with 8th Generation Intel® Core™ i7-8565U Processor, Dual Channel DDR4 memory, 4 x COM, 2 x SATA 6Gb/s, 4 x USB3.1 Gen2, 2 x USB2.0

Key Features

- 3.5" SBC
- Intel® Core™ i7-8565U Processor
- Dual Channel DDR4, 2 x SO-DIMMs
- 2 x GbE LAN ports
- 2 x SATA 6Gb/s ports
- Ultra-Fast M.2 with PCIe Gen3 x4 interface
- 2 x HDMI, LVDS ports for multiple display
- Realtek ALC269 audio codec
- 1 x RS-232/422/485 and 5V/12V/RI COM port
- 3 x RS-232 COM ports
- 4 x USB3.1 Gen 2

Application

- Factory Automation
- Smart Retail
- Industrial PC
- KIOSK
- Medicare
- Embedded & Industrial Applications
- Machine Vision & AI
- Transportation

SPECIFICATION

3.5 "SubCompact Board with 8th Generation Intel® Core™ i7-8565U Processor, Dual Channel DDR4 memory, 4 x COM, 2 x SATA 6 Gb/s, 4 x USB3.1 Gen2, 2 x USB2.0

FORM FACTOR	3.5" SBC 146W x 101.7D(mm)
CPU	Intel® Core™ i7-8565U Processor 14nm, 4 cores, 8 threads 1.8GHz, up to 4.6 GHz TDP 15W 8 MB SmartCache
SOCKET	1 x FCBGA1528
MEMORY	2 x DDR4 SO-DIMM sockets, Max. Capacity 32 GB Dual channel memory architecture Support for DDR4 2400 MHz memory modules
ETHERNET	2 x GbE LAN ports (Intel® i219V and Intel® i211AT)
VIDEO	Integrated Graphics Processor - Intel® UHD Graphics 620 2 x HDMI1.4 port, supporting a maximum resolution of 4096x2304@24Hz 1 x LVDS port, supporting a maximum resolution of 1920x1080@60Hz * Support up to 3 displays at the same time
AUDIO	Realtek ALC269 High Definition Audio
STORAGE	2 x SATA 6Gb/s ports
RAID	Intel® SATA RAID 0/1/5
EXPANSION SLOTS	1 x M.2 slot: - M-key - SATA 6Gb/s / PCIe X4 - Supports NGFF-2280 cards 1 x M.2 slot: - E-key - Supports NGFF-2230 (WiFi/BT) 1 x Mini PCIe slot: - Full card size - Support PCIe X1+USB2.0 - Support 3G/4G module
INTERNAL I/O	1 x 4-pin box header (DC in) 2 x SATA 6Gb/s connectors 1 x CPU fan header 1 x System fan header 1 x Front panel header 1 x Front panel audio header

	1 x 2W Speaker out header 2 x SATA Power headers 2 x USB 2.0/1.1 headers 1 x GPIO (8 bits) & SMBUS header 3 x COM headers (RS-232) 1 x Backlight control header 1 x AT/ATX mode select jumper 1 x 3G Sim Slot 1 x LVDS connector
REAR I/O	1 x COM Port (RS-232/422/485 and RI/5V/12V) 2 x HDMI 2 x RJ45 4 x USB3.1 Gen2
TPM	1 x TPM Header
OS COMPATIBILITY	Windows 10 (x64)
PSU CONNECTORS	1 x 4-pin Box header power connector (9~36V Full Range) (48V option)
OPERATING PROPERTIES	Operating temperature: 0°C to +60°C Operating humidity: 0-90% (non-condensing) Non-operating temperature: -40°C to +85°C Non-operating humidity: 0%-95% (non-condensing)
PACKING CONTENT	Box Packing Capacity: 20pcs Carton size: 379 x 245 x 197(mm) Content: SATA Power cable x 1 (25CRI-200B02-K1R)
ORDER INFORMATION	9MWHLUASMR-SI
OPTIONAL KIT	Fanless HS P/N: 25ST1-153108-A7R Fan HS P/N: 12SF2-01A073-00R Heat spreader P/N: 25ST5-8265A0-A8R



QBIP-8265A

3.5" SubCompact Board with 8th Generation Intel® Core™ i5-8265U Processor, Dual Channel DDR4 memory, 4 x COM , 2 x SATA 6Gb/s, 4 x USB3.1 Gen2, 2 x USB2.0

Key Features

- 3.5" SBC
- Intel® Core™ i5-8265U Processor
- Dual Channel DDR4, 2 x SO-DIMMs
- 2 x GbE LAN ports
- 2 x SATA 6Gb/s port
- Ultra-Fast M.2 with PCIe Gen3 x4 interface
- 2 x HDMI, LVDS ports for multiple display
- Realtek ALC269 audio codec
- 1 x RS-232/422/485 and 5V/12V/RI COM port
- 3 x RS-232 COM ports
- 4 x USB3.1 Gen 2

Application

- Factory Automation
- Smart Retail
- Industrial PC
- KIOSK
- Medicare
- Embedded & Industrial Applications
- IoT System
- Machine Vison & AI
- Transportation

SPECIFICATION

3.5" SubCompact Board with 8th Generation Intel® Core™ i5-8265U Processor, Dual Channel DDR4 memory, 4 x COM, 2 x SATA 6Gb / s, 4 x USB3.1 Gen2, 2 x USB2.0

FORM FACTOR	3.5" SBC 146W x 101.7D(mm)
CPU	Intel® Core™ i5-8265U Processor 14nm, 4 cores, 8 threads 1.6GHz, up to 4.6 GHz TDP 15W 8 MB SmartCache
SOCKET	1 x FCBGA1528
MEMORY	2 x DDR4 SO-DIMM sockets, Max. Capacity 32 GB Dual channel memory architecture Support for DDR4 2400 MHz memory modules
ETHERNET	2 x GbE LAN ports (Intel® i219V and Intel® i211AT)
VIDEO	Integrated Graphics Processor - Intel® UHD Graphics 610 2 x HDMI1.4 port, supporting a maximum resolution of 4096x2304@24Hz 1 x LVDS port, supporting a maximum resolution of 1920 x 1080@60Hz * Support up to 3 displays at the same time
AUDIO	Realtek ALC269 High Definition Audio
STORAGE	2 x SATA 6Gb/s ports
RAID	Intel® SATA RAID 0/1/5
EXPANSION SLOTS	1 x M.2 slot: - M-key - SATA 6Gb/s / PCIe X4 - Supports NGFF-2280 cards 1 x M.2 slot: - E-key - Supports NGFF-2230 (WiFi/BT) 1 x Mini PCIe slot - Full card size - Support PCIe X1+USB2.0 --support 3G/4G module
INTERNAL I/O	1 x 4-pin box header (DC in) 2 x SATA 6Gb/s connectors 1 x CPU fan header 1 x System fan header 1 x Front panel header 1 x Front panel audio header

	1 x 2W Speaker out header 2 x SATA Power headers 2 x USB 2.0/1.1 headers 1 x GPIO (8 bits) & SMBUS header 3 x COM headers (RS-232) 1 x Backlight control header 1 x AT/ATX mode select jumper 1 x 3G Sim Slot 1 x LVDS connector
REAR I/O	1 x COM Port (RS-232/422/485 and RI/5V/12V) 2 x HDMI 2 x RJ45 4 x USB3.1 Gen2
TPM	1 x TPM Header
OS COMPATIBILITY	Windows 10 (x64)
PSU CONNECTORS	1 x 4-pin Box header power connector (9~36V Full Range) (48V option)
OPERATING PROPERTIES	Operating temperature: 0°C to +60°C Operating humidity: 0-90% (non-condensing) Non-operating temperature: -40°C to +85°C Non-operating humidity: 0%-95% (non-condensing)
PACKING CONTENT	Box Packing Capacity: 20pcs Carton size:379 x 245 x 197(mm) Content: SATA Power cable x 1 (25CRI-200B02-K1R)
ORDER INFORMATION	9MWHLUASMR-SI
OPTIONAL KIT	Fanless HS P/N: 25ST1-153108-A7R Fan HS P/N: 12SF2-01A073-00R Heat spreader P/N: 25ST5-8265A0-A8R



QBIP-8145A

3.5" SubCompact Board with 8th Generation Intel® Core™ i3-8145UE Processor, Dual Channel DDR4 memory, 4 x COM, 2 x SATA 6Gb/s, 4 x USB3.1 Gen2 2 x USB2.0

Key Features

- 3.5" SBC
- Intel® Core™ i3-8145UE Processor
- Dual Channel DDR4, 2 x SO-DIMMs
- 2 x GbE LAN ports
- 2 x SATA 6Gb/s ports
- Ultra-Fast M.2 with PCIe Gen3 x4 interface
- 2 x HDMI, LVDS ports for multiple display
- Realtek ALC269 audio codec
- 1 x RS-232/422/485 and 5V/12V/RI COM port
- 3 x RS-232 COM ports
- 4 x USB3.1 Gen 2

Application

- Factory Automation
- Smart Retail
- Industrial PC
- KIOSK
- Medicare
- Embedded & Industrial Applications
- IoT System
- Machine Vison & AI

SPECIFICATION

3.5 " SubCompact Board with 8th Generation Intel® Core™ i3-8145UE Processor, Dual Channel DDR4 memory, 4 x COM, 2 x SATA 6Gb/s, 4 x USB3.1 Gen2, 2 x USB2.0

FORM FACTOR	3.5" SBC 146W x 101.7D(mm)
CPU	Intel® Core™ i3-8145UE Processor 14nm, 2 cores, 4 threads 1.8GHz, up to 3.9 GHz TDP 15W 4 MB SmartCache
SOCKET	1 x FCBGA1528
MEMORY	2 x DDR4 SO-DIMM sockets, Max. Capacity 32 GB Dual channel memory architecture Support for DDR4 2400 MHz memory modules
ETHERNET	2 x GbE LAN ports (Intel® i219V and Intel® i211AT)
VIDEO	Integrated Graphics Processor - Intel® UHD Graphics 620 2 x HDMI1.4 port, supporting a maximum resolution of 4096x2304@24Hz 1 x LVDS port, supporting a maximum resolution of 1920x1080@60Hz * Support up to 3 displays at the same time
AUDIO	Realtek ALC269 High Definition Audio
STORAGE	2 x SATA 6Gb/s ports
RAID	Intel® SATA RAID 0/1/5
EXPANSION SLOTS	1 x M.2 slot: - M-key - SATA 6Gb/s / PCIe X4 - Supports NGFF-2280 cards 1 x M.2 slot: - E-key - Supports NGFF-2230 (WiFi/BT) 1 x Mini PCIe slot: - Full card size - Support PCIe X1+USB2.0 --support 3G/4G module
INTERNAL I/O	1 x 4 pin box header (DC in) 2 x SATA 6Gb/s connectors 1 x CPU fan header 1 x System fan header 1 x Front panel header 1 x Front panel audio header 1 x 2W Speaker out header

	2 x SATA Power headers 2 x USB 2.0/1.1 headers 1 x GPIO (8 bits) & SMBUS header 3 x COM headers (RS-232) 1 x Backlight control header 1 x AT/ATX mode select jumper 1 x 3G Sim Slot. 1 x LVDS connector
REAR I/O	1 x COM Port (RS-232/422/485 and RI/5V/12V) 2 x HDMI 2 x RJ45 4 x USB3.1 Gen2
TPM	1 x TPM Header
OS COMPATIBILITY	Windows 10 (x64)
PSU CONNECTORS	1 x 4-pin Box header power connector (9~36V Full Range) (48V option)
OPERATING PROPERTIES	Operating temperature: 0°C to +60°C Operating humidity: 0-90% (non-condensing) Non-operating temperature: -40°C to +85°C Non-operating humidity: 0%-95% (non-condensing)
PACKING CONTENT	Box Packing Capacity: 20pcs Carton size: 379 x 245 x 197(mm) Content: SATA Power cable x 1 (25CRI-200B02-K1R)
ORDER INFORMATION	9MWHLUCSMR-SI
OPTIONAL KIT	Fanless HS P/N: 25ST1-153108-A7R Fan HS P/N: 12SF2-01A073-00R Heat spreader P/N: 25ST5-8265A0-A8R

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