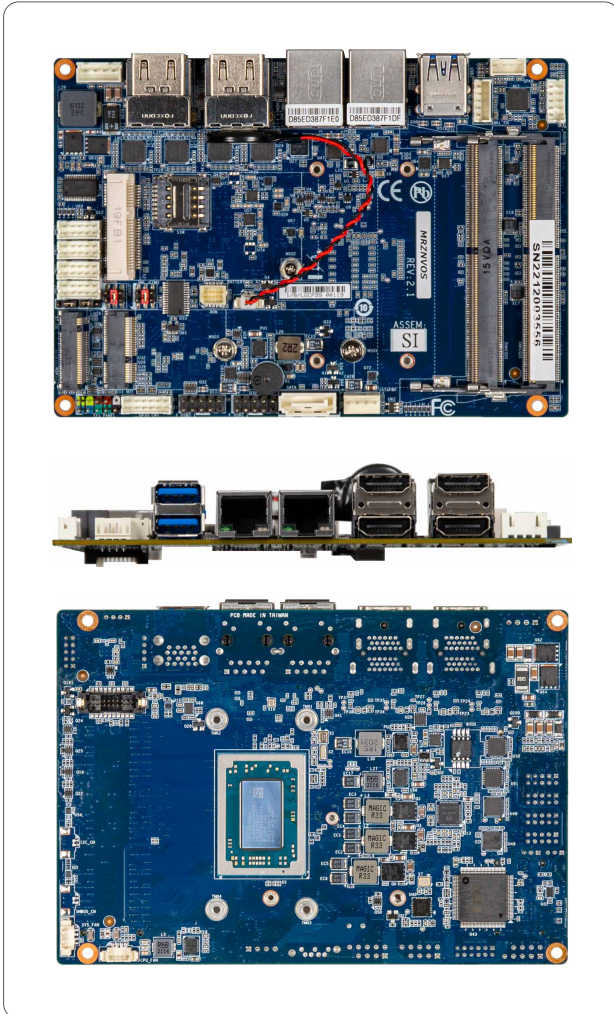


## QBIP-1605B (MRZNVOS)

3.5" SubCompact Embedded Motherboard with AMD Ryzen™ V1605B Embedded Processor, Dual Channel DDR4 memory, 4 x COM, 1 x SATA 6Gb/s, 6 x USB



### Specifications

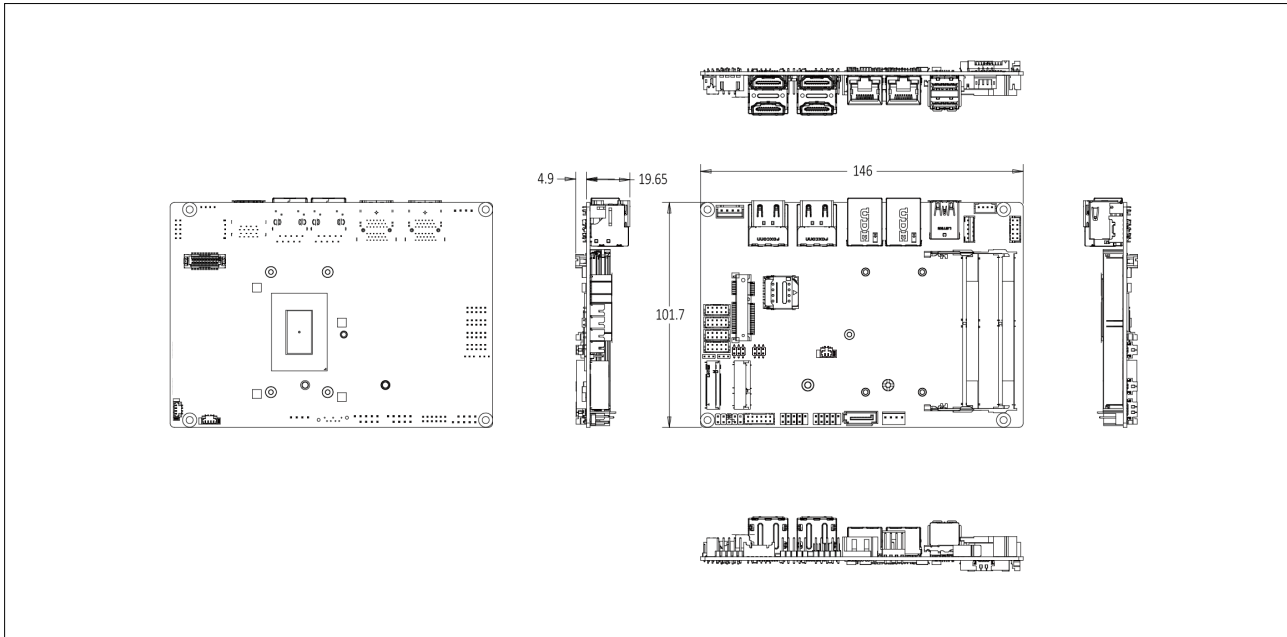
Form Factor	3.5" SBC 146W x 101.7D mm
CPU	AMD Ryzen™ V1605B Embedded Processor 14nm, 4 cores, 8 threads, 2.0 GHz, up to 3.6 GHz TDP 25W 2MB of shared L2 plus 4MB of shared L3 total
Socket	1 x FP5 type 1 BGA
Memory	2 x DDR4 SO-DIMM sockets, Max. Capacity 32 GB Support Dual channel DDR4 2400/2133 MHz memory modules
Ethernet	2 x GbE LAN Ports (Realtek® RTL8111HS)
Video	Integrated Graphics Processor - AMD Radeon™ Vega 8 Graphics: 4 x HDMI 2.0 ports, supporting a maximum resolution of 4096x2160 @60Hz 1 x eDP port, supporting a maximum resolution of 3840x2160 @60Hz (Share from HDMI)  (4 independent display outputs)

### Features

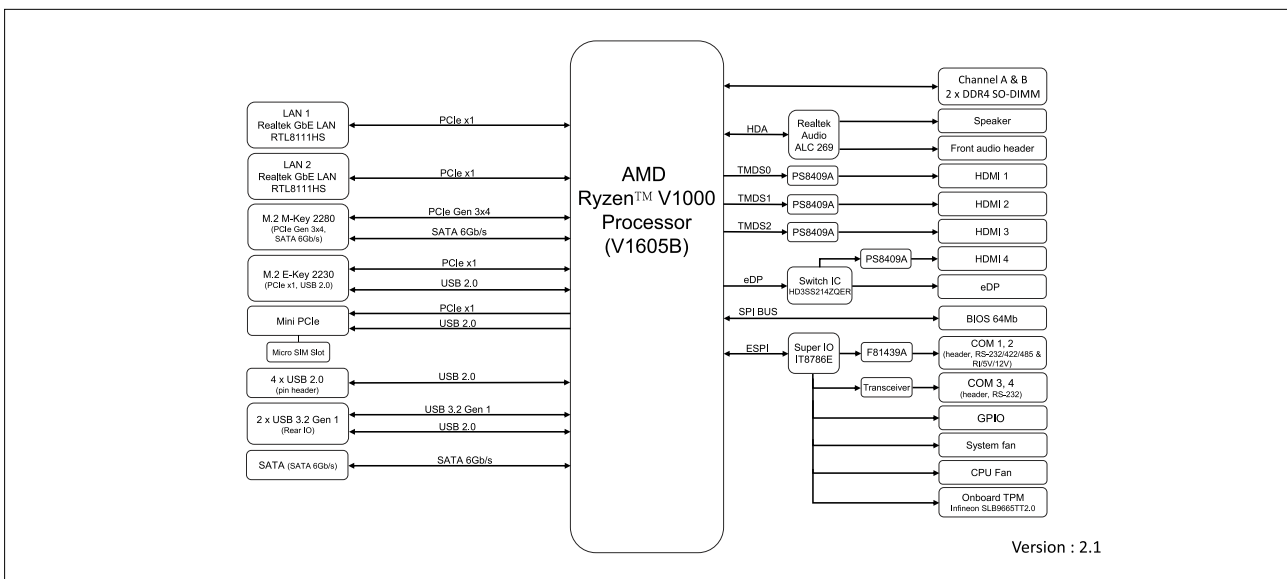
- 3.5" SBC
- AMD Ryzen™ V1605B Embedded Processor
- Dual Channel DDR4, 2 x SO-DIMMs
- 2 x GbE LAN Ports
- 1 x SATA 6Gb/s Port
- M.2 with SATA 6Gb/s or PCIe x4
- 4 x HDMI 2.0, eDP ports for multiple display
- 2 x COM Ports (RS-232/422/485 & RI/5V/12V)
- 2 x COM Ports (RS-232)

Audio	Realtek® Audio Codec
Storage	1 x SATA 6Gb/s
Expansion Slots	1 x 2280 M.2 M-Key (PCIe x4, SATA 6Gb/s) 1 x 2230 M.2 E-Key 1 x Full-size Mini PCIe with SIM slot (PCIe x1 + USB2.0) -- support 3G module
Internal I/O	1 x 4-pin box power connector (DC in +9V~36VDC) 1 x SATA Power header 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 4 x USB 2.0 headers 2 x COM headers (RS-232) 2 x COM headers (RS-232/422/485 & RI/5V/12V) 1 x Backlight Control header 1 x AT/ATX mode select jumper 1 x eDP/HDMI jumper 1 x GPIO (8-bits) & SMBus header 1 x Buzzer
Rear I/O	4 x HDMI 2 x RJ45 LAN Ports 2 x USB 3.2 Gen 1
TPM	Onboard TPM 2.0 security chip INFINEON SLB9665TT.2.0
OS Compatibility	Windows 10 (x64)
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	Carton size: 465 x 351 x 217 (mm) Packing Capacity: 10pcs  Single Box size: 221 x 178 x 65 (mm)  Including: SATA power Cable x 1 (P/N: 25CF4-160000-S9R)
Order Information	9MRZNVOSMR-SI (Box Packing)

GIGAIPC reserves the right to modify or change technical data without prior notice.



## Block Diagram



## Optional Kit

Part No.	Description	Quantity
25ST1-113104-A7R	Fanless Heatsink	1
12SF2-01A073-00R	Fansink	1
25ST5-QP1600-A8R	Heat spreader	1

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