



## QBIP-1605A

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

### Key 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, eDP ports for multiple display
- Realtek ALC269 audio codec
- 2 x RS232/422/485/5V/12V/RI COM port
- 2 x RS232 COM ports

### Application

- Retail
- Digital Signage
- Video Wall
- Menu Board

## SPECIFICATION

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

<b>FORM FACTOR</b>	3.5" SBC 146W x 101.7D(mm)
<b>CPU</b>	AMD® RYZEN™ V1605B Embedded Processor up to 3.6GHz TDP 25W 2MB of shared L2 plus 4MB of shared L3 total
<b>SOCKET</b>	1 x FP5 type 1 BGA
<b>MEMORY</b>	2 x DDR4 SO-DIMM sockets, Max. Capacity 32 GB Dual channel memory architecture Support for DDR4 2400 MHz memory modules
<b>ETHERNET</b>	2 x Realtek RTL8111H (10/100/1000 Mbit)
<b>VIDEO</b>	Integrated Graphics Processor - AMD Radeon™ Vega 8 Graphics 4 x HDMI port, supporting a maximum resolution of 4096x2160 @ 60Hz 1 x eDP port, supporting a maximum resolution of 3840x2160 @ 60Hz (Share from HDIMI)
<b>AUDIO</b>	Realtek ALC269 High Definition Audio
<b>STORAGE</b>	1 x SATA 6Gb/s port
<b>EXPANSION SLOTS</b>	1 x M.2 slot: - M-key - SATA 6Gb/s/PCIeX4 - Supports NGFF-2280 cards 1 x Mini-PCIe slot 1 x M.2 slot: - E-key - Supports NGFF-2230 (WiFi/BT) - Full card size - Support PCIe X1+USB2.0 -- support 3G module
<b>INTERNAL I/O</b>	1 x 4 pin box header (DC in) 1 x SATA 6Gb/s connectors 1 x CPU fan header 1 x Fan header 1 x Front panel header 1 x Front panel audio header 1 x 2W Speaker out header

	<ul style="list-style-type: none"> <li>1 x SATA Power header</li> <li>4 x USB 2.0/1.1 headers</li> <li>1 x GPIO (8 bits) &amp; SMBUS header</li> <li>2 x COM headers (RS232)</li> <li>2 x COM headers (RS422/485/232, RI/5V/12V)</li> <li>1 x Backlight control header</li> <li>1 x AT/ATX mode select jumper</li> <li>1 x 3G/4G Sim Slot</li> <li>1 x eDP/HDMI Jumper</li> <li>1 x eDP connector</li> <li>1 x Buzzer</li> </ul>
<b>REAR I/O</b>	<ul style="list-style-type: none"> <li>4 x HDMI</li> <li>2 x RJ45</li> <li>2 x USB3.0</li> </ul>
<b>TPM</b>	SECURITY TPM SLB9665TT20
<b>OS COMPATIBILITY</b>	Windows 10 (x64)
<b>PSU CONNECTORS</b>	1 x 4-pin Box header power connector (9~36V Full Range)
<b>OPERATING PROPERTIES</b>	<ul style="list-style-type: none"> <li>Operating temperature: 0°C to 60°C</li> <li>Operating humidity: 0-90% (non-condensing)</li> <li>Non-operating temperature: -40°C to +85°C</li> <li>Non-operating humidity: 0%-95% (non-condensing)</li> </ul>
<b>PACKAGING CONTENT</b>	<ul style="list-style-type: none"> <li>Box Packing Capacity: 20pcs</li> <li>Carton size: 379 x 245 x 197(mm)</li> <li>Content:</li> <li>SATA Power cable x 1 (25CRI-200B02-K1R)</li> </ul>
<b>ORDER INFORMATION</b>	Motherboard : 9MRZNVMSMR-SI
<b>OPTIONAL KIT</b>	<ul style="list-style-type: none"> <li>Fanless HS P/N:25ST1-113104-A7R</li> <li>Fan HS P/N: 12SF2-01A073-00R</li> <li>Heat spreader P/N: 25ST5-QP1600-A8R</li> </ul>