GM341-GHF

V1000

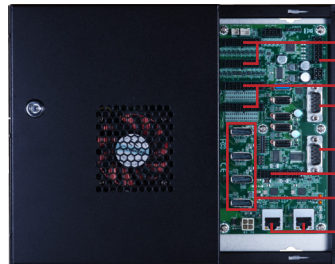▶ **Features**

- AMD® Ryzen™ Embedded V1000/R1000 processors
- High performance Radeon™ VEGA series graphics
- 4 DP++ 4K monitor support (V1000)
- Comprehensive gaming features
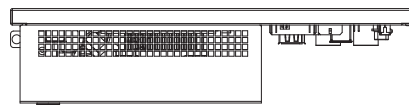- 5 COM, 6 USB, 2 LAN and M.2 support
- 12V DC single input

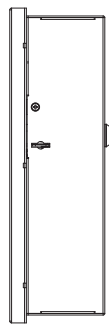| DP++	DDR4	USB 3.0	SATADOM	4K2K Display

▶ **Panel**

Top View

- 32 x output
- 5.1ch audio output
- 32 x input
- COM 1
- COM 2
- COM 3/4/5
- 4 x DP++
- 2 x LAN

▶ **Dimensions**

Front View
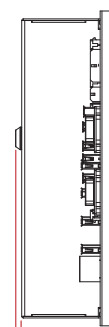
Left View

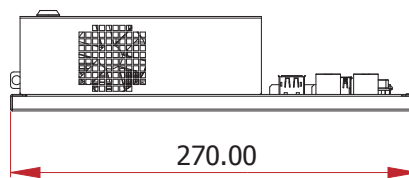**Top View**

Rear View

Right View

210.00

270.00

63.00

67.00

▶ Specifications

SYSTEM	**Processor**	AMD® Ryzen™ Embedded V1807, Quad Core, 2MB Cache, 11 CU, 3.35GHz (3.8GHz), 35-54W AMD® Ryzen™ Embedded V1756, Quad Core, 2MB Cache, 8 CU, 3.25GHz (3.6GHz), 35-54W AMD® Ryzen™ Embedded V1605, Quad Core, 2MB Cache, 8 CU, 2.0GHz (3.6GHz), 12-25W AMD® Ryzen™ Embedded V1202, Dual Core, 1MB Cache, 3 CU, 2.3GHz (3.2GHz), 12-25W AMD® Ryzen™ Embedded R1000 series
	Memory	Two 260-pin SODIMM up to 32GB · Dual Channel DDR4 3200MHz
	BIOS	AMI BIOS (supports hash and public key validation)
GRAPHICS	**Controller**	AMD® Radeon™ Vega Graphics
	Feature	OpenGL 4.5, DirectX 12, OpenCL 2.1 HW Decode: AVC/H.264, MPEG2, VC1/WMV9, JPEG/MJPEG, HEVC/H265, VP8, VP9 HW Encode: MPEG2, AVC/H264, JPEG, HEVC/H265, VP8, VP9
	Display	4 x DP++ · DP++: resolution up to 4096x2160 @ 60Hz
STORAGE	**Internal**	2 x SATADOM with 7-pin VCC Support
EXPANSION	**Interface**	1 x M.2 M Key (2280, PCIe x2, only support for V1000)
AUDIO	**Audio**	5.1 Channel Audio Output S/PDIF Digital Output Stereo 10W+10W Class D Audio AMP Output
ETHERNET	**Controller**	2 x Realtek Ethernet LAN Controller (10/100/1000Mbps)
LED	**Indicators**	1 x Power LED 1 x HDD LED
I/O	**Ethernet**	2 x GbE (RJ-45)
	Serial	1 x RS-232 1 x RS-232/422/485 1 x RS-232 (Tx, Rx)/ccTalk 2 x RS-232 (Tx, Rx)/SAS/BACTA
	USB	2 x USB 3.0 4 x USB 2.0
	Display	4 x DP++ (V1000) 3 x DP++ (R1000)
	Buttons	1 x Power Button 1 x Reset Button
WATCHDOG TIMER	**Output & Interval**	System Reset, Programmable via Software from 1 to 255 Seconds
SECURITY	**TPM**	TPM 1.2/2.0
GAMING	**Intrusion Detection**	8 x Intrusion Detections Operates With and Without AC Power Logs Date/Time of Last 64 Events 5 Years Data Retention during AC off
	NVRAM	Supports up to 16Mbyte Coin Battery Backup to Retain Data for 5 Years during AC off Supports Battery Voltage Monitoring & Warning
	DI/DO	32-bit Digital Input 32-bit OC output (29-bit x 500mA, support 8 meter with disconnect detection; 3-bit x 3A)
POWER	**Type**	12V
	Connector	4-pin Vertical Connector
OS SUPPORT		Windows 10 (64-bit) · Ubuntu 16.04LTS (64-bit)
MECHANISM	**Mounting**	Wall Mount
	Dimensions (W x H x D)	270mm x 63mm x 210mm
	Weight	TBD
ENVIRONMENT	**Operating Temperature**	0 to 45°C
	Storage Temperature	-20 to 85°C
	Relative Humidity	5 to 90% RH (non-condensing)
STANDARDS AND CERTIFICATIONS	**Shock**	Operation: IEC 60068-2-27 Test Ea: Shock test Half-sine, 3G @ 11ms, 18 Shock ±X, ±Y, ±Z (each axis 3 times) Non-Operation: IEC 60068-2-27 Test Ea: Shock test Half-sine, 5G @ 11ms, 18 Shock ±X, ±Y, ±Z (each axis 3 times)
	Vibration	Operation: IEC 60068-2-64 Test Fh: Vibration Board-Band Random Test Random, 1Grms @ 5~500 Hz, 30min. Non-Operation: IEC 60068-2-6 Test Fc: Vibration Sinusoidal Test Sweep sine, 3Grms @ 10~500Hz, 30min.