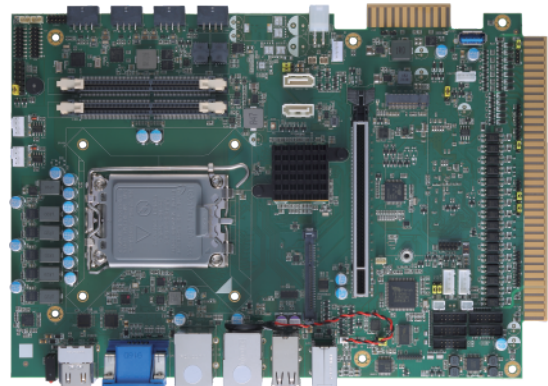# GMB851

JAMMA-Type Gaming Control Board with
12th/13th/14th Gen Intel® Core™ Processor

Features

- Intel® 12th/13th/14th gen Core™ processor
- 2x sockets of DDR4 SODIMM 260 pins
- PCIe x16 expansion
- 2x SATADOM,1x CFast, 1x M.2 (PCIe Gen3 x4)
- Optional support TPM2.0 & secure BIOS
- 1x VGA, 2x HDMI, 1x DP++
- 72-pins JAMMA interface
- Optional support 4ch LED strip, up to 4000pcs LED chips
- 6W+6W Audio amplified output

Specification

CPU	JAMMA-type gaming system with Intel® 12th/13th/14th gen Core™ processor, TDP 65W
Chipset	Support H610, Q670
Memory	2x DDR4-3200, 260-pin SO-DIMM Max up to 64GB
Graphic	1x VGA. D-Sub15 connector 2x HDMI 1x DP++ DirectX 12.1 compliant, OpenGL ES 3.1, OpenGL 4.6, OpenCL™ 1.2
Security	AMI BIOS Secure BIOS & storage integrity, by request
	TPM 2.0 on board (option)
Storage	2x SATA DOM, support pin-7 power 1x vertical CFast socket (option) 1x M.2 M-key (PCIe Gen3 x4) NVMe supported
Expansion	1x PCIe x16 slot
USB	USB 3.2 - 2x external type-A connector - 1x Internal vertical Type-A connector
	USB 2.0 - 2x external type-A connector - 4x external type-A connector (Q670)/2x external type-A connector (H610)
COM Port	6x COM port by pin header and golden finger - 1x Full COM DB9 connector (COM1) support RS232/422/485 - 1x Full COM DB9 connector (COM2) support RS232/TTL - 2x Full COM DB9 connector (COM3, COM4) support RS232/ccTalk by pin header - 2x simple COM by pin header or JAMMA 72-pin golden finger
Audio	5.1-ch audio output by jack connector 6W + 6W (R/L) class-D amplified output by JAMMA 72-pin
LAN	2x ethernet GbE by RJ45 connector

Gaming I/0	Intrusion type - 2x by internal pin header - 7x by JAMMA 72-pin
	SRAM / MRAM(battery-less backup) - 2x bank supported with battery backup, support up to 8MB, 16MB by request - Default 2MB by single bank
	DI/DO - 27x bits isolated digital input - 27x bits high current output. 0.5A/30V
	Tachometer - 2x fan speed detection
	Event log - Up to 200 event logs
	EEPROM - Default 1KB
	Low battery warning for SRAM and intrusion - 2x low battery detection
	LED strip control (option) - 4ch LED strip support - Support up to 4000 LED
Indicator	Power, HDD, Low Bat
OS	Windows Linux
Power	DC+12V / DC+5V Power failure detection
EMC	CE/FCC Class A Air: -/+ 8kv criteria B, Contact : -/+4kv criteria B
Environment	Operation temperature : 0°C ~ +60°C Storage temperature : -20°C ~ +80°C Humidity : 10%RH ~ 95%RH relative humidity (non-condensing)
Dimension	275.4mm(W) x 192.5mm(D)

* All specifications and photos are subject to change without notice.   For more information please contact: gaming@axiomtek.com.tw   No. 3130-1401801

gaming.axiomtek.com

Ordering Information

GMB851-Q670	12th/13th/14th Generation Intel® Core™ Mini-ITX board with Q670 PCH, DP++, 2 x HDMI, 1 x VGA, 2 x GbE, 6 x COM, 9 x USB, 12V DC-in
GMB851-H610	12th/13th/14th Generation Intel® Core™ Mini-ITX board with H610 PCH, DP++, 2 x HDMI, 1 x VGA, 2 x GbE, 6 x COM, 7 x USB, 12V DC-in

Optional Accessories

713000001500	LGA1700 cooler kit, 1U chassis compatible, 65W
713000001600	LGA1700 cooler kit, 1U chassis compatible, 35W
594Q3002810E	USB3.0 cable 90D 9P AM/9P AF 20cm