7th Generation processing POWER

Step up to 7th Generation processors and super-fast performance with Howard's new Q27 desktop computer. Not only does it deliver faster CPU performance than any of its predecessors, but it also enables premium 4K content, allowing you to see new colors with Wide Color Gamut and experience eye-popping visuals. The Q27's business-efficient chipset gives business owners the power to create high-performance systems without the typical costs of ownership that often come with workstations. It also introduces Optane™ memory with intelligent software that provides performance improvements and accelerates system responsiveness, so apps launch faster and backups are finished in a flash! The Q27 comes packed with USB 3.0 and 2.0 ports, allowing for a whole range of USB devices to be used at once. Whether you use it for business or pleasure, Howard's Q27 is designed to do what you need to do and take you where you want to go.
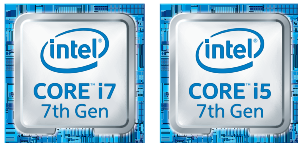
Howard Technology Solutions recommends genuine Microsoft® Windows® 10 Professional

The Howard Advantage!

With every Howard product purchase, you receive the following for **FREE**!

✓ Phone and web tech support for the LIFE of your system

✓ 100% US-based, English-speaking customer support 24/7/365

✓ Phone hold times < 1 minute

*Experience the **Howard difference**.*

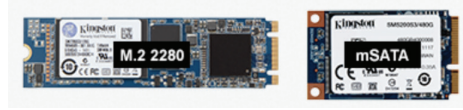| Feature	Description
Processor Families	Supports 7th and 6th Generation Intel® Core™ i7, i5, and Core™ i3 processors, and Intel® Pentium and Celeron processors
Storage	M.2 Socket 3 with M Key design, type 2242/2260/2280/22110 storage devices
5X Protection III	Advanced hardware safeguards for all-round protection
Efficient Management	ASUS commercial BIOS kit for easy customization of DMI, BIOS values and boot logos, plus Intel® ME driver and OEM Activation (OA) tools.
Reliability	Stress-tested 24/7 for 168 hours and anti-moisture coated for prolonged system lifespan

CORE™ i7 7th Gen

CORE™ i5 7th Gen

CORE™ i3 7th Gen

Intel, the Intel logo, Intel inside, Core i7, i5 & i3 are trademarks of Intel Corporation in the US and other countries.

Q27 Ports

HOWARD™

Feature	Specifications
Chipset	Intel® Q270
Supported Operating System	Windows® 10, 8.1 (64-bit), and 7 (32/64-bit)
Supported Processor Families	Intel® for 7th/6th Generation Core™ i7/Core™ i5/ Core™ i3/Pentium®/Celeron® processors Supports Intel 14 nm CPU
System Memory	Up to 64GB of DDR4 (4 Slots, DIMM)
Video	Integrated graphics processor Intel® HD graphics support
Audio	Realtek® ALC887 8-channel high-definition
Network	Intel® I219LM, 1 x Gigabit LAN
Internal Ports	1 x MONO out header *3 2 x USB 3.0 connectors; supports additional 4 1 x USB 2.0 connector; supports additional 2 1 x M.2 Socket 3 with M key, type 2242/2260/2280 storage devices support (SATA & PCIE 3.0 x 4) 1 x M.2 Socket 3 with M Key, type 2242/2260/2280 storage devices support (PCIE mode only) 1 x LPT header; 2 x COM port connectors 6 x SATA 6Gb/s connectors 1 x CPU fan (1x4-pin) 2 x chassis fan (2 x 4-pin) 1 x 24-pin EATX & 1 x 8-pin ATX 12V power connector 1 x Front panel audio connector (AAFP) 1 x Internal speaker connector; 1 x system panel 1 x Chassis intrusion connector 1 x LPC debug header; 1 x PCIe 3.0/2.0 x16 2 x PCIe 3.0/2.0 x1; 1 x PCI
External Ports (Rear Panel)	1 x PS/2 keyboard (purple); 1 x PS/2 mouse (green) 1 x DVI-D; 1 x D-Sub; 1 x DisplayPort; 1x HDMI

Q: Is an M.2 SSD the same as an mSATA SSD?

A: No, they are different; M.2 supports both SATA and PCIe storage interface options, while mSATA is SATA only. Physically, they look different and cannot be plugged into the same system connectors. The picture below shows an M.2 SSD and an mSATA SSD (Both connectors and card sizes are different):

Q: Why are there different lengths for M.2 SSDs?

A: Two reasons:
1. The different lengths enable different SSD drive capacities; the longer the drive, the more NAND Flash chips can be mounted on it, in addition to a controller and possibly a DRAM memory chip. The 2230 & 2242 lengths support 1-3 NAND Flash chips while the 2280 & 22110 support up to 8, which can enable a 1TB SSD in the largest M.2 form factors.
2. Socket space in the system board can limit the M.2 size: Some notebooks can support an M.2 for caching purposes, but have a small space that will accommodate only a 2242 M.2 SSD.

Q: Whom should I contact for support?

A: Call Howard for world-class support and service if there are any questions about the desktop.
Customer support is available:
Online at http://www.howardcomputers.com/support,
By phone at 1.888.323.3151,
Via email at tech@howardcomputers.com, or
Conventional mail at Howard Technology Solutions,
36 Howard Drive, Ellisville, Mississippi 39437.

Chassis Specifications (Cases subject to change due to configuration and/or availability.)

AKB	Dimensions: 19.30 (H) x 7.5 (W) x 16.7 (D) (inches); 3.5" Drive Bays: Internal=5, External=2; 5.25" Drive Bays: Internal=0, External=3 Front Panel: USB=2, Audio=1 Line Out /1 Mic; PSU: 300W (110 to 240W AC), Upgradable? to 1200W
MKB	Dimensions: 14.25"(H) x 7"(W) x 17.2"(D); 3.5" Drive Bays: Internal=2, External=2; 5.25" Drive Bays: External=2 Front Panel: USB=2, Audio=1 Line Out /1 Mic; PSU: 300W (110 to 240W AC)
MKB Whitebox	Dimensions: 14.6" (H) x 7.1" (W) x 14.3" (D); 3.5" Drive Bays: Internal=1, External=2; 5.25" Drive Bays: External=2 Front Panel: USB=2, Audio= 1 Line out /1 mic; PSU: 300W (110 to 240W AC)
LPKB	Dimensions: 3.8" (H) x 13" (W) x 16.00" (D); 3.5" Drive Bays: Internal=2, External=1; 5.25" Drive Bays: External=1 Front Panel: USB=4, Audio=1 Line out /1 mic; PSU: 300W (110 to 240W AC)

Experience the Howard advantage

Product Upgrades

Enhance your purchase with any or all of the following products or services. And feel free to contact us toll free at 888-912-3151 to discuss any questions or your specific needs!

- Dual monitors
- Wireless keyboard and mouse
- On-site service

Warranty & Support

- Howard Technology Solutions' standard warranties apply.
- **FREE** customer and technical support to purchaser via telephone or web for the life of the system.
- Expedite your troubleshooting process by participating in our Howard Technical Partnership Program (HTPP) which certifies your staff to perform basic hardware service and support. Contact us today for more information.