

Howard Technology Product Overview

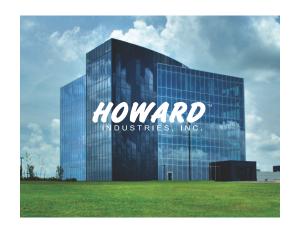
Sophisticated, high-performance systems



About Us

Experience the Howard Advantage

The Howard Advantage starts with being an actual manufacturer by trade and not simply an integrator of parts. Howard Industries, our parent company, was founded in 1968 by Billy Howard, Sr. Over the past four decades, this company has grown to become the nation's leading manufacturer of distribution transformers, with nearly nine-million transformers in service throughout the United States and abroad.



Howard's firmly established position as a leader of industry served as the springboard for a new division, which began production of computer technology in 1998, Howard Technology Solutions (HTS).

Howard (HTS) designs and manufactures its own enterprise mobility solutions. In addition, strategic partnerships with other industry leaders enable us to offer a rich portfolio of over 300,000 name brand products. We have dedicated representatives for each of the products we have listed, who are equipped with the knowledge and expertise to answer questions and assist in the buying process. From purchase and delivery to installation, management, and servicing by industry-certified technicians, Howard is with you every step of the way.

We provide government agencies and schools with innovative and affordable technology. We help medical facilities maximize productivity and improve patient care, and we support first-responders in emergency situations by facilitating communication among diverse systems and organizations. From single components for individual consumers to large-scale solutions for commercial businesses, we supply superior technology.







Transportation



Lighting



Store



Education



Medical



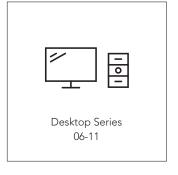
Enterprise



Technology

Solutions Legend

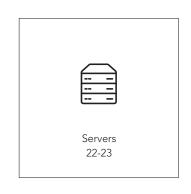












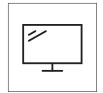




4K HD Display

Four times as many pixels as the 1080p Full HD for a high end workstation or personal use





AIO Solutions: the Howard Curve (Q370N1)

Get the All-in-One that's easy on the eye, both aesthetically and ergonomically—the Howard Curve. This 32-inch, full WQHD system offers sophisticated styling as well as ergonomic benefits in the curvature of its design. This design provides a wider field of view with less distortion for a more natural viewing experience.



•The Curve is one of the only AIOs on the market with a liquid cooled temperature-regulated system; it stays cooler longer, extending the life of your computer.

A fully immersive experience with 4K-crisp imaging that breathes life into everything you do, so presentations are more powerful and gaming is more realistic.



Chipset: Intel® Q370

Processors: Intel® for 8th Generation Core™ i7, i5, and i3 **Operating System:** Microsoft® Windows® 10, All versions

Memory: 4 x DIMM, max 64GB, DDR4
Display: 32" Full HD anti-glare (2560x1440)
Graphics Card: Dependent upon GPU selected

Network: Intel® dual-band wireless - AC 9560 2x2 + Bluetooth 4.2 **Audio:** Realtek® High-definition audio with twin built-in speakers

Industry or Use Cases:







Business

Medical

Government





Personal



Desktop Solutions: the IQK Series

Small can do it all—if—it's Howard's new IQ-K mini desktop computer. From focusing on work to playing games and streaming movies, the IQ-K is customizable and powerful enough to handle all your computing needs with ease, yet small enough to fit in the palm of your hand. Howard's IQ-K is super-fast and produces incredible visuals that breathe life into every single image.





Ethernet Jack



Only 4" wide

Imagine a powerful desktop that small. It's the IQ-K.

Chipset: Intel® SOC chipset

Processor: Dual-core 7th Generation Intel® Operating System: Microsoft® Windows® 10

Memory: Up to 32GB of DDR4-2133 (2 Slots, SODIMM) **Graphics Card:** Intel® Kaby Lake HD 620 integrated graphics Network: Intel® I219V, 1 x Gigabit LAN controller, Intel wireless-AC 8265 soldered-down, IEEE 802.11ac 2x2 + Bluetooth Chassis Technical Specifications: Dimensions $4.53 \times 1.38 \times 4.37$

(inches), Weight 2.5lbs, PSU 19V, 65W power brick

Industry or Use Cases:



Business





Medical

Government





Education

Signage

Personal



Desktop Solutions: the Howard RD

In the world of computers, minis are in! And just so you know, what makes a mini small doesn't make it less powerful. Consider Howard's new RD Mini. Powered by 6th and 7th generation Intel processors, this full-featured mini delivers the same reliability and high-speed performance as larger, more costly computers and manages demanding applications just as efficiently.



Upgrade to the howard DR to get an additional (5) USB 2.0 back ports



The standard Howard RD back ports: (1) Display, (1) HDMI, (2) LAN (RJ45) ports, (4) USB 3.0 (blue), (2) audio jacks, (1) DC power connector

Available in twelve standard colors to choose from



Processor: Dual-core 7th Generation Intel®

Operating System: Microsoft Windows® 10 Pro 64-bit Memory: Up to 32GB of DDR4 (2 Slots, DIMM)

Network: Realtek® RTL8111H, (1) Gigabit LAN, Intel® I219V, 1 x Gigabit LAN

Hard Drive: M.2 or 2.5" storage

Internal Ports: (3) USB 2.0, support for additional 5 USB 2.0, (1) M.2 Socket 1 /E key, type 2230 Wi-Fi support, (1) M.2 Socket 3 with M key, type

2242/ 2260 storage devices support, (SATA & PCIE)

External Ports: (1) Display, (1) HDMI, (2) LAN (RJ45) ports, (4) USB 3.0

(blue), (2) audio jacks, (1) DC power connector

Industry or Use Cases:







Business

Medical

Government





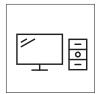
Education

Digital Signage

Personal







Desktop Solutions: the WX390

Blaze through work processes like never before with one of the most powerful, scalable workstations Howard has ever offered, the WX390. Powered by the latest Intel® Xeon® processors, it's designed to take on heavy workloads day after day, to work seamlessly with the data-intensive software applications used by professionals—video editors, architects, product designers, medical and research professionals, engineers and financial analysts. Whether your workforce is crunching complex calculations or manipulating sophisticated graphics, the WX390 delivers the speed and high performance you need to complete the task at hand.

lightning fast

Cutting-edge responsiveness allows applications to load faster and run more smoothly, and you can run more of them simultaneously, so you get more done in less time!





- Industry-leading cooling options: Comprehensive controls for fans and water pumps, via Fan Xpert 4 software or the acclaimed ASUS UEFI.
- M.2 heatsink: Ultra-efficient heatsink reduces M.2 SSD temperatures by up to 20°C for unthrottled SSD storage speeds and enhanced reliability.
- Aura Sync: Controllable onboard RGB lighting that's easily synced with an ever-growing portfolio of Aura-capable hardware.

Chipset: Intel® X299

Processor: Intel® Socket 2066 Core™ X-series processors **Operating System:** Microsoft Windows® 10, 64-bit

Memory: Intel® Core™ X-series Processors: 6-Core—8 x DIMM,

Max. 128GB, DDR4 4-Core—4 x DIMM, Max. 64GB, DDR4

Network: Intel® I219V, 1 x Gigabit LAN Controller

Chassis Technical Specifications: Dimensions 19.30 (H) \times 7.5 (W) \times

16.7 (D) (inches)

Drive Bays: 3.5" (5) Internal (2) External

5.25" (3) External

Industry or Use Cases:







Business

Medical

Government



Gaming



Video Editing

personalize the way you play

Custom built for even the most intense gamer







E-Sports Solutions

If you're keeping up with future trends in education, you know about eSPORTs. From high school eSPORT competitions to official college eSPORT teams and millions of dollars in scholarships, educators are tapping into the immense potential of eSPORTs as a way to motivate students academically and encourage creative expression. Research shows students who compete in high school activities do better in school. This includes higher grades, higher achievement test scores, and greater expectations of education beyond high school. So, who says learning can't be fun and games?



HAVOC GKX Gaming Laptop

Featuring Nvidia RTX graphics, the GKX is designed for gaming on the go—mobility without sacrificing the power and speed you need! It's also equipped with the thinnest RGB mechanical keyboard on the market, so you don't want to miss this opportunity.

Processor: IIntel i7-9750H

OS: Microsoft® Windows® 10

Memory: RAM up to 32GB 3200Mhz

Hard Drive: 128GB ssd – 2TB ssd

Graphics: Geforce RTX 2060/2070



HAVOC Thresher AIO Gaming PC

The most powerful AIO to date, Havoc's new all-in-one, the Thresher, has everything a full-size desktop has, and more. This liquid cooled AIO, with full-size graphics card, gives you mega-power in a smaller footprint. A 4k QHD 32" curved display is standard to make sure you don't miss even the smallest details.

Processor: Intel Core Series i3 – i9 8th & 9th generation processors

OS: Microsoft® Windows® 10

Memory: RAM up to 64GB 2666Mhz to 3600Mhz

Hard Drive: 128GB ssd – 2TB ssd

Graphics: GeForce RTX series/RTX Super series



HAVOC Nemesis Gaming PC

Powered by the latest innovations in computer technology, Nemesis delivers all the power and speed you need to unlock your full potential. Don't just be good—be the best!

Processor: Intel Core Series i3 – i9 8th & 9th generation processors

OS: Microsoft® Windows® 10

Memory: RGB RAM up to 64GB 2666Mhz to 3600Mhz

Hard Drive: 128GB ssd – 12TB ssd

Graphics: GeForce RTX series/RTX Super series

dominate your game

The GKX has an extremely thin form factor—just .86 inches—that makes it the thinnest laptop with a mechanical keyboard in the industry





E-Sports Solutions: The GKX

Blast your way through to parts unknown with the GKX, Howard's VR-ready gaming laptop. Powered by Intel's 8th generation six-core processors, the GKX is ultra fast, super powerful, and innately responsive. Featuring Nvidia 1060 graphics, the GKX is designed to catapult you into virtual worlds that are so realistic you'll swear you're there! And this system looks good, too!



The GKX features a premium full size, NKRO (N-Key Rollover) perkey, RGB backlit gaming keyboard with Anti-ghosting, 10-key numeric keypad, removable key caps, and a customizable RGB light bar.



This beautiful system also features an impressive thermal design that ensures it stays as cool as it looks.

Processor: Intel $^{\tiny{\$}}$ 9th Generation Core $^{\tiny{\mathsf{TM}}}$ i7

Operating System: All versions of Microsoft Windows® 10 **Memory:** Up to 32GB of DDR4 (2 Slots, SO-DIMMs)

Display: Available in 15.6" or 17.3" Full HD anti-glare (1920X1080)

Graphics Card: Nvidia® GeForce RTX 2060 GB GDDR6 **Network Card:** 10/100/1000 Ethernet Intel dual-band wirelessAC

8265 2x2 + Bluetooth 4.2

Keyboard: Mechanical lightswitch, per key RGB keyboard

Hard Drive: M.2 or 2.5" storage **External Ports:** Up to 2 drives

Industry or Use Cases: Business Medical Government Company of the Cases: Business Medical Government Fersonal



Kiosk Solutions

Kiosks minimize staffing requirements, reduce operating and transaction costs while increasing sales/revenue, foot traffic and efficiency; manage peak traffic flow, add off-hours convenience, and enhance the overall consumer experience, which, in turn, increases customer loyalty.

Howard offers a variety of kiosk models, from indoor tabletop and freestanding to outdoor and through-the-wall; all customized to suit your facility's interactive needs.



Kiosks have many applications in a wide variety of industries, including:







Check-In



Security



















Available in twelve standard colors to choose from. If you have a custom color and finish in mind, just let us know; we can match it.



Howard Acrylic Health Shields Protective Shield & Airborne Disease Prevention Solution



DURABLE 1/4 ACRYLIC



Ideal for:

- Offices
- Retail
- Stores
- Banks
- Schools
- Hotels
- Restaurants
- **Public Facilities**

OVER 70 CONFIGURATIONS WITH VARIOUS MOUNTING OPTIONS AVAILABLE





Mobile Solutions: the N1X

The N1X is powered by 8th Generation Intel® i-Core processors for serious, high-speed performance and optimized to meet the demands of high-powered applications. It has DDR4 memory for improved data integrity and a reengineered cooling system for greener, low-cost computing; white LED backlit keyboard with numeric keypad, precision touchpad, and M.2 and 2.5" storage options—high-end features without a high-end price tag! Ultra-fast, feature-rich, and super-secure, the N1X is not your average laptop!



The N1X is optimized to meet the demands of high-powered applications.

Processor: 14" 8th Intel® Core i7 15.6" 10th Intel® Core i7 and i5 **Operating System:** Microsoft® Windows® 10, All versions **Memory:** Up to 32GB of DDR4 (2 Slots, SO-DIMMs)

Graphics Card: Intel HD Graphics

Network Card: 10/100/1000 Ethernet Intel dual-band wireless AC

8265 2x2 + Bluetooth 5.0 **Hard Drive:** M.2 or 2.5" storage **Number of Hard Drives:** up to 2 drives

Industry or Use Cases:







Business

Medical

Government





Personal

beyond tough

The Shield is tough enough to withstand the rough-and-tumble of fieldwork, drops of up to 4 feet, and harsh weather conditions.





Mobile Solutions: the Shield

For jobs that take you out of your comfort zone and into challenging work environments, you need Howard's rugged tablet solution, The Shield. This lightweight, mobile computer is certified to military (MIL-STD-810G and IP65) standards for protection against the potentially damaging effects of extreme temperatures, drops, dust, water, shock, and vibration. Rugged, reliable, and ready to roll—The Shield, from Howard.



Processor: Intel® m3-7430

Operating System: Microsoft® Windows® 10, All versions

Memory: Up to 8 GBs of LPDDR3 (integrated) Dispaly: 15.6" Full HD anti-glare (1920X1080) Battery: 6500mHh/7.4V 1000mAh/7.4V (Dual battery)

Graphics Card: Intel HD Graphics

Network Card: WIFI 802.11(a/b/g/n), BT 4.2 Support RJ45

Sensors: Electronic compass, G sensor, gyroscope

IP Rating: IP65

Industry or Use Cases:







Business

Medical

Government







Personal

Video Conferencing





Server Solutions

Reinforce network security, reduce downtime, and increase overall productivity with server solutions from Howard. Not only can they process data faster and more efficiently, but they also provide a scalable architecture that accommodates future expansion.





Product: SE3-114v5 Server
Chipset: Intel® C236 Express PCH
Operating System: Windows Server® 2019

Memory: Up to 4 DIMM Slots of ECC DDR4 2133 (supported memory capacity subject to change)

Network: Intel[®] i210AT Controllers

Internal Ports: SATA 3=8; PCI 3.0 x 8=2; M.2 PCIe 3.0 x2=1; DOM=2

External Ports: USB 2.0=2 and USB 3.0=2, LAN=2, VGA=1, Serial=2, Management NIC=1



Large Workload



Product: SP280 Server **Chipset:** Intel® C622

Operating System: Windows® Server 2019

Memory: Up to 2TB of ECC DDR4 (16 Slots)

Network: Dual 10GBase-T with Intel® X722 + X557

Internal Ports: (10) SATA 3, (4) PCIe \times 8 Gen 3, (1) PCIe \times 4 Gen 2 Low profile External Ports: (2) Serial, (6) USB 3.0, (2) LAN, 1 GbE, (1) Video, VGA





Product: SP480 Server **Chipset:** Intel® C622

Operating System: Windows® Server 2019

Memory: Up to 2TB of ECC DDR4 (16 Slots)

Network: Dual 10GBase-T with Intel® X722 + X557

Internal Ports: (10) SATA 3, (16) PCI-E 3.0 Gen 3=4, (8) PCI-E 3.0 Gen 3=2

External Ports: (2) Serial, (2) USB 3.0, (4) USB 2.0, (2) LAN, 1GbE, (1) Video, VGA





Product: SE3-418v6 Server
Chipset: Intel® C236 Express PCH
Operating System: Windows Server® 2019
Memory: Up to 4 DIMM Slots of ECC DDR4 2400
Network: Integrated Intel® i210-AT Dual Port GbE NIC

Internal Ports: (8) SATA 3, (1) PCI 3.0×8 (in x16), (1) PCI 3.0×8 , (1) PCI 3.0×4 (in x 8)

External Ports: (2) Serial, (5) USB 3.0, (6) USB 2.0, (2) LAN, 1GbE, (1) Video, VGA, (1) Management NIC



Small Workload

- Budget-friendly
- First time server buyers
- Small businesses of up to
 75 employees
- Ideal for basic web, storage, email, and e-commerce applications



Medium Workload

- Great choice for businesses of 75-400 employees
- Perfect for processorintense applications, database, email, and messaging, domain controllers, and web servers



Large Workload

- Affordable and innovative powerhouses for companies with 400-1000 employees
- Excellent for any server role or heavy workloads





Warranty & Support

Howard Technology Solutions strives to make customer service and support a top priority for all of our customers. Our customer service team is composed of 100% US-based technology experts. We also have a professional services team to give you additional support and assistance with technical training and networking. All of these services combined with our phenomenal products are designed to make your relationship with Howard a success.

Howard Computer Systems Standard Limited Warranty

What are the terms of the Limited Warranty?

Every time you purchase a Howard Technology Solutions branded product in the U.S. you receive a Limited Warranty that provides you with a comprehensive service and support program for the term of the warranty. To determine the warranty type and duration that is included with your purchase, see your packing slip or order confirmation. Alternately, you may email your questions or description of the problem to Technical Support Center at: tech@howardcomputers.com

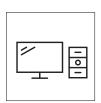
Note: Warranty service may be fulfilled by shipping user replaceable parts, such as the keyboard, mouse, cables, monitors, speakers, or similar devices directly to you.

The product you have purchased is warranted by Howard Technology Solutions to be free of defects in materials and workmanship under normal use for the duration of the terms as stated in the Limited Warranty. The warranty begins the day we ship your Howard Technology Solutions branded product. As an added convenience, Howard Technology Solutions keeps track of this date for you. Your product's Limited Warranty is non-transferable and will not be honored if the ownership of the product changes. For the duration of the Limited Warranty, Howard Technology Solutions will repair or replace defective parts with new or serviceable parts, which meet or exceed the performance of new parts.

How do I get technical support?

With Howard Technology Solutions, you receive FREE telephone technical support 24/7, 365 days a year for as long as you own your Howard Technology Solutions product. Our friendly, US-based team of experts will answer your questions about the product, hardware setup, or installation and with telephone hold times typically less than 1 minute. To expedite our service to you, please gather the following information before calling our Technical Support Center at (888) 323-3151:

- Product serial number(s) on the side or bottom of machine
- Add-on boards of hardware installed on the product
- Third-party software installed on the product
- Operating system type and revision level
- Content of any error messages
- Explanation of the problem and/or detailed, specific questions





For the full Howard branded warranty statement, please visit: http://hcintranet/order/core/support/warranties.cfm
To submit a service request for your Howard product, please fill out the form at: http://hcintranet/order/core/support/index.cfm





Howard Technical Partnership Program (HTTP)

Howard Technology Solutions strives to make customer service and support a top priority for all of our customers. We provide a customer service team composed of 100% US-based technology experts. We also have a professional services team to give you additional support and assistance with technical training and networking. All of these services combined with our phenomenal products are designed to make your relationship with Howard a success.

Howard Technical Partnership Program

Howard Technology Solutions realizes that many organizations handle basic hardware service and support in one of two ways: they either make a significant investment in establishing and maintaining a group of local service providers, or they use their own internal support staff. For this reason, we have developed the Howard Technical Partnership Program (HTPP) so we can satisfy either option by facilitating timely, cost-effective, quality service in conjunction with our high standards for customer satisfaction.

Managed by our 100% US-based support engineers and technicians, HTPP is an integral part of our strategy to establish direct, personal relationships with our customers to ensure we meet all of their organizations' needs. Participation is easy; simply complete an HTPP application online at www.howardcomputers.com/support/about_htpp.cfm.

Program Highlights

- No subscription fee or certification requirements
- Labor reimbursement for authorized repairs
- Expedited service and/or replacement part ordering
- Free consultation to determine your optimal parts inventory with on-site parts inventory available to qualifying organizations
- You NEVER pay for defective parts and shipping is FREE as long as the warranty claim is valid!
- Receive frequent updates highlighting our new technologies; system improvements; and information on the latest Howard desktops, notebooks, servers, and much more.

Program Details

By participating in (HTPP) you will enjoy the benefits listed below:

No annual subscription fee. We do not charge any fee for participating in HTPP.

No certification requirements. We do not require you to have or maintain any type of professional certifications such as COMPTIA A+, COMPTIA Network, or Microsoft® certifications. However, we do encourage you to obtain certifications as appropriate and do weight these certifications when reviewing your application.

Labor reimbursement. Receive labor reimbursement for qualified repairs performed on Howard branded systems during the onsite warranty maintenance period. The labor reimbursement is for touch-labor on a per-incident basis regardless of the number of components or subassemblies replaced. The reimbursement amount is dependent upon geographic location and negotiated prior to execution of the Howard Technology Solutions Warranty Service Agreement.

Expedited spare parts ordering. You may order spare parts via email or the web directly from the factory without any requirement to call us. As an HTPP member, we are assured your organization has the skilled, technical staff to properly troubleshoot and diagnose system problems and issues. Your technical staff is only required to provide exact error message and accurate diagnostic steps in determining the actual problem of the faulty hardware.

Recommended spare parts list. We will provide a recommended spare parts list to assist your organization in maintaining the correct number and types of spare parts. This will help you keep spare parts costs to an absolute minimum. And because we maintain an exhaustive history of all ordered parts, we can provide you with a very precise spare parts inventory recommendation.

On-site consignment spare parts inventory. For qualifying organizations, we will enable you to maintain a spare and a replacement part(s) inventory on-site so that you can restock your inventory with the replacement part(s).

Centralized inventory of spare parts. Howard Technology Solutions maintains an abundant inventory of spare and replacement parts at our manufacturing facility to ensure that when you need a spare part, it is readily available.

For additional information please contact our Technical Support Department at (888) 323-3151 or (601) 399-5774 (fax).



Web: www.howard.com Live chat available M-F, 8-5 CST

Customer & Technical Support:

Toll Free: 1.888.323.3151 24/7 (excluding US holidays)

General Information:

Toll Free: 1.888.912.3151















