- Founded in 1987 in Silicon Valley, Polywell Computers is a trusted manufacturer of SFF industrial-grade and embedded computers for diverse applications. Understanding the demand for smaller, more energy-efficient PCs, we focus on designing and producing mini-PCs with industrial-grade components.

- Polywell has established itself as a leader in the PC market, with a strong presence in the U.S., Europe, Latin America, and Asia. Our systems consistently receive acclaim in leading IT media for their excellence.

- **Specialized Focus**

At Polywell, we focus on the niche of industrial and embedded compact PCs, catering to the evolving needs of various industries.

- **Future of Computing**

As the demand for extreme durability decreases, the need for small, efficient, and powerful computers rises. We lead in small form factor PCs, offering solutions capable of tackling virtually any task in any setting.

- **Invitation to Innovation**

Join us in shaping the future of computing—where power meets compact design.

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- We use industrial-grade components in our systems to ensure they can withstand the rigors of continuous operation, 24/7, all year round.

- This reliability is crucial for customers who need uninterrupted performance in mission-critical environments, where any downtime could result in significant operational or financial losses.

- By choosing our systems, customers invest in the durability and dependability necessary for long-term success.

- Unlike many manufacturers, we openly share the Mean Time Between Failure (MTBF) for our systems, which is an impressive 100,000 hours.

- This level of durability aligns with the standards of industrial-grade systems, translating **to over 11 years** of continuous, reliable operation.

- This transparency and longevity provide customers with confidence in the lasting performance of our products.

$$\text{MTBF Formula} = \frac{\Sigma \ (TOT)}{F}$$

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- Our mini-PCs are engineered with environmental parameters (such as temperature and mechanical resistance) that meet stringent industrial standards.

- Many of our models can operate in extended temperature ranges from -20°C to +60°C and are available with various IP ratings for protection against dust and moisture.

- This is another key advantage of using industrial-grade components, ensuring our systems perform reliably in the most demanding conditions.
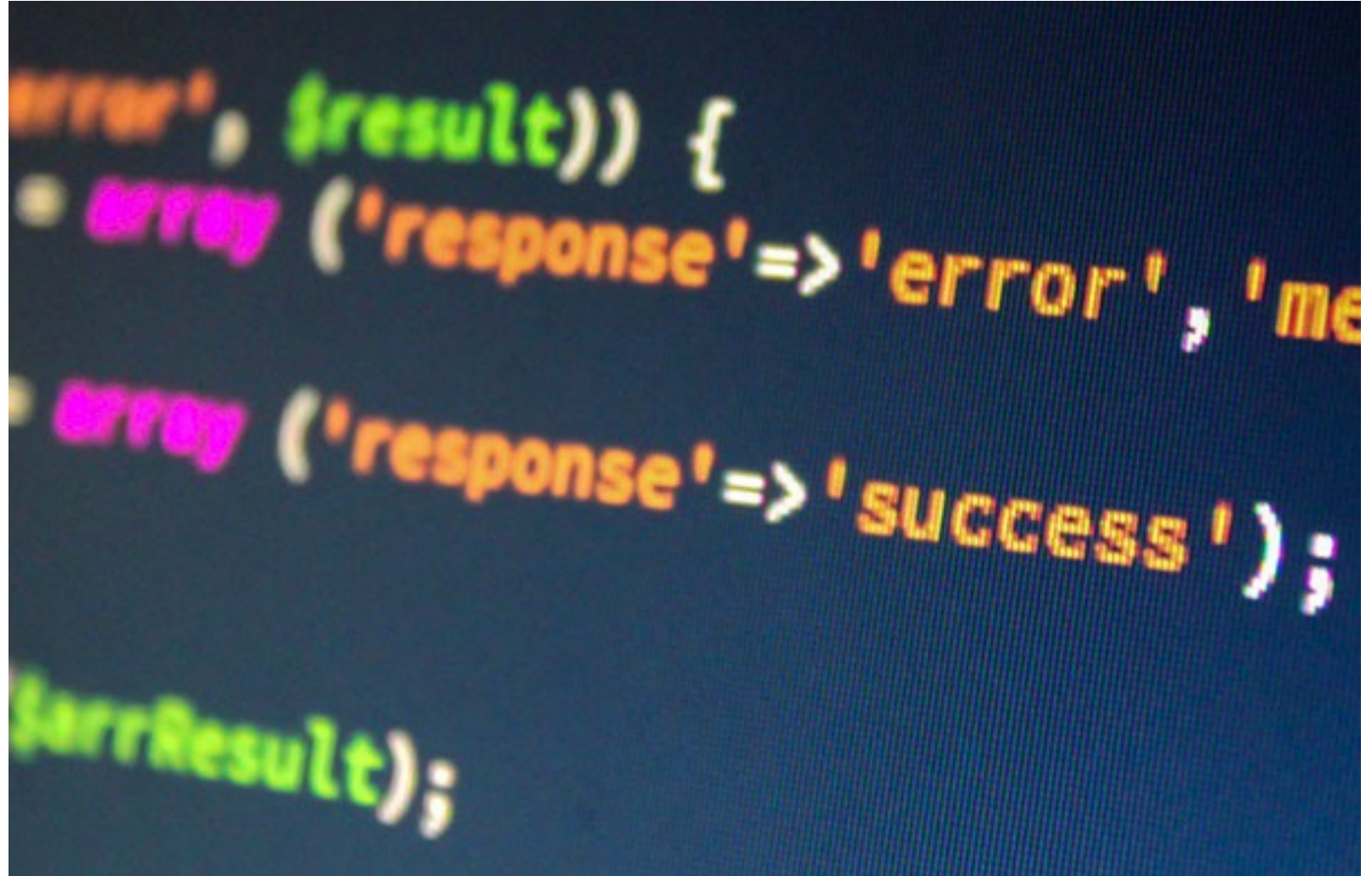
POLYWELL
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- We provide competitive pricing without compromising on quality.

- Our customers enjoy the significant advantage of acquiring industrial-grade systems at the cost of commercial-grade ones.

- This unique market offering allows businesses to benefit from the durability and performance of industrial-grade technology while staying within budget.

- It's a value proposition that sets us apart from the competition and delivers exceptional return on investment for our customers.

- As an established hardware manufacturer, we boast a team of skilled and experienced BIOS engineers and firmware developers who can handle virtually any aspect of device programming.

- We offer the capability to customize firmware, develop device drivers, optimize OS kernels, and provide long-term, reliable hardware support.

- This expertise ensures that your systems are finely tuned to your specific requirements and maintain peak performance throughout their lifecycle.

- Our R&D capabilities ensure that our products are on the cutting edge of technology.

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- With decades of experience, we have honed our expertise in the design and manufacture of industrial-grade embedded and mini-PCs.

- Our long history in the industry has allowed us to develop unparalleled proficiency in creating reliable, high-performance SFF systems that meet the demanding needs of our customers.

- We focus on our job and therefore we are very good at it.

Industrial automation, IoT	**Digital Signage**	**Network appliance**	**Video surveillance**	**Media Players and Set-Top-Boxes**
Thin client, office PC	**Edge AI**	**Kiosks**	**Vending machines, ATM**	**POS**

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Polywell Mini PCs for IoT and industry

Polywell Computers: Key Features for Industrial Automation and IoT

- **Extensive I/O Port Range:**
  Supports RS232, RS485, GPIO, and more for versatile connectivity in diverse industrial applications.

- **24/7 Reliability:**
  Engineered for continuous operation, ensuring dependable performance in critical systems.

- **Operating System Flexibility:**
  Compatible with Windows IoT and Linux, providing the adaptability needed for various industrial and IoT environments.

- **Unattended Operation:**
  Designed for remote management, reducing the need for constant on-site supervision.

- **Rugged Durability:**
  Built to withstand harsh environmental conditions, from extreme temperatures to high humidity.

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Polywell Computers mini
PCs for Digital Signage

Polywell Computers: Key Features for Digital Signage

- **Multiple Monitor Support:**
Enables dynamic, multi-screen display setups, perfect for engaging digital signage solutions.

- **24/7 Reliability:**
Designed for continuous operation, ensuring uninterrupted content delivery.

- **Operating System Flexibility:**
Compatible with Windows IoT, Android, and Linux, offering versatile options for various digital signage needs.

- **Fanless Design:**
Select models feature fanless operation, providing silent performance and increased durability.

- **Long-Term Durability:**
Engineered for longevity, ensuring consistent performance over extended periods.

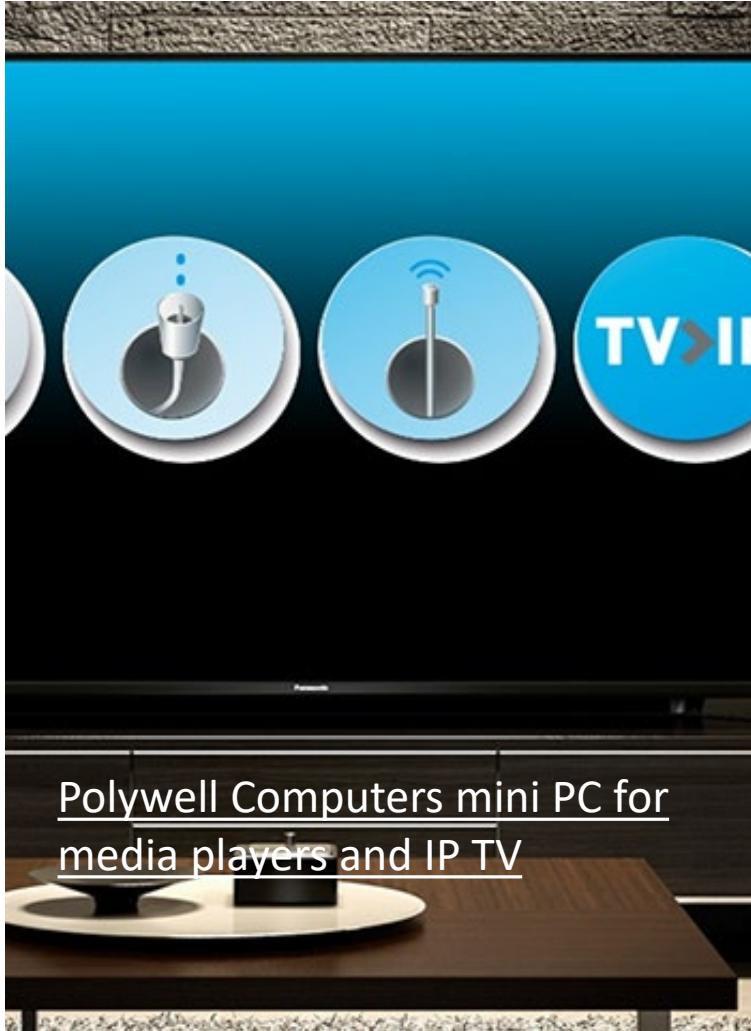**Polywell Computers: Key Features for Network Appliances**

- **Multiple NICs (Network Interface Cards):**
  Equipped with multiple NICs, our SFF PCs are ready to meet the demands that off-the-shelf routers often can't.

- **Reliability & Fault Tolerance:**
  Designed for critical network operations, ensuring consistent and dependable performance.

- **Operating System Compatibility:**
  Fully compatible with major network appliance operating systems, including VyOS, providing flexibility and adaptability.

- **24/7 Operation:**
  Built to handle round-the-clock workloads, perfect for continuous network management.

- **Compact Form Factor:**
  Space-saving design ideal for network environments where every inch counts.

Polywell Computers Mini PCs as network appliances

Polywell Mini PCs for video surveillance

Polywell Computers: Key Features for Video Surveillance

- **24/7 Reliability:**
  Engineered for continuous, round-the-clock operation, ensuring consistent surveillance coverage.

- **Operating System Compatibility:**
  Supports Windows IoT, providing flexibility for various surveillance software.

- **Multiple Monitor Support:**
  Ideal for multi-screen setups, enabling comprehensive monitoring of multiple camera feeds.

- **Unattended Operation:**
  Designed for reliable performance with minimal supervision, perfect for remote monitoring.

- **Rugged Durability:**
  Built to withstand harsh environmental conditions, ensuring dependable operation in challenging environments.

- **PoE Generation:**
  Select models support Power over Ethernet (PoE), eliminating the need for separate electrical wiring and simplifying installation.

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Polywell Computers mini PC for media players and IP TV

Polywell Computers: Key Features for Media Players

- **8K Resolution Support:**
  Delivers stunning visual clarity, making it ideal for high-definition media playback.

- **Multiple Monitor Support:**
  Capable of driving multiple screens, perfect for expansive and immersive media experiences.

- **24/7 Reliability:**
  Built for continuous operation, ensuring uninterrupted media playback around the clock.

- **High-Quality Audio Subsystem:**
  Provides superior sound quality, enhancing the overall media experience.

Polywell Computers mini PCs as thin and terminal clients

Polywell Computers: Key Features for Thin Clients and Office PCs

- **24/7 Reliability:**
  Engineered for continuous operation, ensuring dependable performance in office and thin client environments.

- **Operating System Flexibility:**
  Compatible with 3 platforms—Windows (IoT), Android, and Linux—offering versatility across various setups.

- **VDI Protocol Support:**
  Fully supports RDP and VDI protocols, making it an ideal solution for thin client applications.

- **Compact Form Factor:**
  Space-saving design, perfect for modern office environments where desk space is at a premium.

- **Low Power Consumption:**
  Designed for energy efficiency, reducing operational costs while maintaining high performance.

Polywell Mini PCs for Edge computing-artificial intelligence

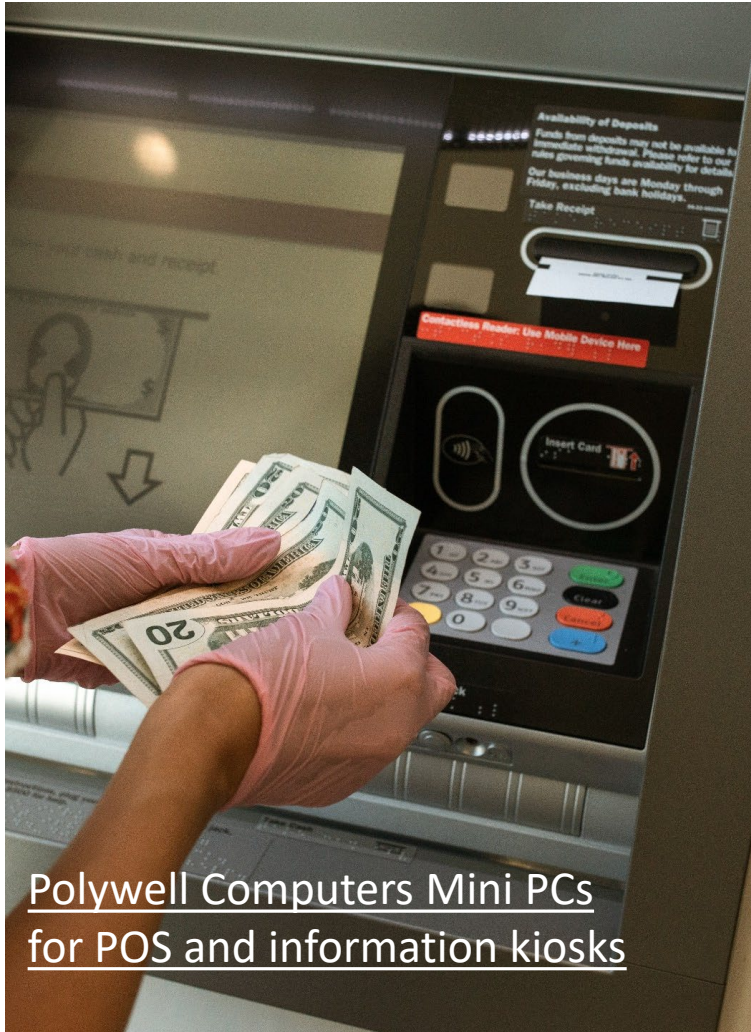**Polywell Computers: Key Features for Edge AI**

- **Advanced AI Computing:**
  Equipped with the latest Nvidia Cuda, Intel OpenVino, and Intel ARC GPU platforms, delivering robust AI processing at the edge.

- **Support for Intel Core Ultra CPUs:**
  Our newest PCs feature Intel Core Ultra processors, providing powerful and efficient performance for AI applications.

- **Nvidia and Intel ARC GPUs:**
  Compact systems designed to handle complex AI tasks with Nvidia RTX4060 and Intel ARC GPUs, offering flexibility in hardware choices.

- **Operating System Compatibility:**
  Supports multiple platforms, ensuring adaptability across various AI deployment environments.

- **Immediate Processing Power:**
  Ideal for applications requiring real-time data analysis and decision-making at the edge.

- **Energy-Efficient Designs:**
  Combines high performance with efficiency, making it perfect for resource-constrained environments.

Polywell Computers Mini PCs
for POS and information kiosks

Polywell Computers: Key Features for Kiosks

- **24/7 Reliability:**
  Engineered for continuous, round-the-clock operation, ensuring consistent kiosk functionality.

- **Operating System Flexibility:**
  Supports Windows IoT and Linux, offering versatile deployment options for various kiosk applications.

- **Unattended Operation:**
  Designed for reliable performance with minimal supervision, ideal for self-service kiosks.

- **Compact and Fanless Design:**
  Ensures quiet, efficient operation in space-constrained environments, perfect for kiosks.

- **Durable and Robust:**
  Built to withstand harsh environmental conditions, providing reliable service in diverse locations.

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Polywell Computers Mini PCs
for POS and information kiosks

Polywell Computers: Key Features for Vending Machines and ATMs

- **24/7 Reliability:**
  Designed for continuous, round-the-clock operation, ensuring dependable performance in critical applications.

- **Operating System Flexibility:**
  Supports Windows IoT, enabling seamless integration into a variety of vending machines and ATMs.

- **Unattended Operation:**
  Engineered for reliable, autonomous performance, perfect for unattended machines.

- **Versatile I/O Ports:**
  Offers a wide variety of I/O ports, including legacy interfaces like VGA and DVI, crucial for modernizing existing machines.

- **Ideal for Modernization:**
  Our PCs are perfect for upgrading existing machines, ensuring compatibility with both new and legacy systems.

- **Built for Harsh Conditions:**
  Robust design to withstand harsh environmental conditions, providing consistent performance in diverse settings.

Polywell Computers Mini PCs
for POS and information kiosks

Polywell Computers: Key Features for POS Systems

- **Comprehensive I/O Options:**
  Equipped with a wide range of I/O ports, including RS232, RS485, and specialized USB ports, essential for POS connectivity.

- **24/7 Reliability:**
  Designed for continuous, round-the-clock operation, ensuring dependable performance in retail environments.

- **Operating System Flexibility:**
  Supports Windows IoT and Linux, offering versatile options for POS system integration.

- **Extended Interface Support:**
  Capable of supporting extended or proprietary interface standards, crucial for diverse POS setups.

- **Unattended Operation:**
  Ensures reliable, autonomous performance, ideal for busy retail environments with minimal supervision.

- **Built for Harsh Conditions:**
  Durable design to withstand challenging environmental conditions, providing consistent service in various retail settings.

Multimonitor	Multi NIC	Fanless	With SIM slots	OPS and SDM
Powered by PoE	With COM ports	With expansion slots	x86 powered	ARM powered

Multimonitor Design Features:

- Multiple video outputs (up to 10)

- Support for various modern interfaces: HDMI (latest specs), DP (latest specs), miniDP, Type-C, LVDS

- Legacy outputs available: VGA, DVI

- HDMI-IN ports on select models

Handy for the Following Applications:

- Digital Signage (including video walls)

- Video Surveillance

- Media Player

- Vending Machine, ATM

Polywell Computers mini PC with multiple video ports

Multi NIC Design Features:

- Multiple NICs (up to 10)

- Speeds up to 2.5 Gbps

- Both SFP+ and copper NICs available

- PoE generation available

Handy for the Following Applications:

- Network Appliance

- Firewall

- UTM (Unified Threat Management)

- IDS (Intrusion Detection System)

- IPS (Intrusion Prevention System)

Polywell Computers mini PC with multiple network ports

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Fanless Design Features:

- Passive cooling via heat sink

- Silent operation

- Dust and debris resistance

- Energy efficiency

- Reliability and durability

- Shock and vibration resistance

Handy for the Following Applications:

- Industrial Automation and IoT

- Kiosks

- Digital Signage

- Vending Machines

- POS (Point of Sale)

[Polywell Computers fanless mini PCs](https://eu.polywell.com)

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With SIM Slots Design Features:

- SIM slots

- Modems for 5G and 4G networks

Handy for the Following Applications:

- Industrial Automation and IoT

- Kiosks

- Digital Signage

- Vending Machines

- POS (Point of Sale)

- Video Surveillance

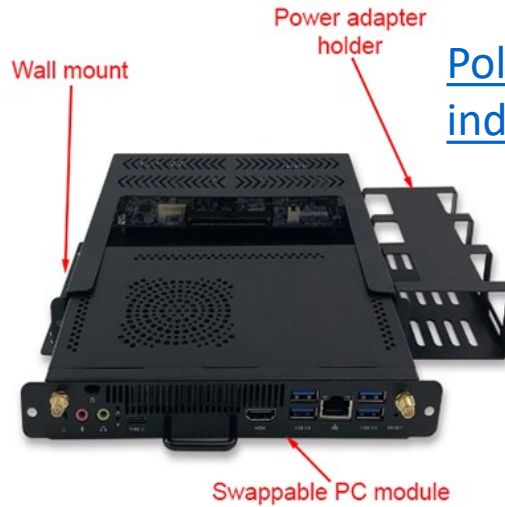- Edge AI

SIM - eu.polywell.com

OPS and SDM Design Features:

- Intel OPS specification
- Intel SDM specification
- Compact size
- JAE connector
- SWAP PC design for endpoint high availability

Handy for the Following Applications:

- Digital Signage (including hospitality and education)
- Media Player
- Set-Top Box

Polywell Computers has released an industrial mini SwapPC

Polywell Computers mini PCs in OPS and SDM form factors

PoE Design Features:

- Capable of being powered by PoE

- No electric wires needed

- Cost-effective

- Security of use and deployment

- Energy efficiency

Handy for the Following Applications:

- Digital Signage

- Video Surveillance

- Industrial Automation and IoT

- Kiosks

- POS (Point of Sale)

- Thin client, office PC

Polywell Computers mini PCs powered by PoE

With COM Ports Design Features:

- RS232, RS422, RS485

- Up to 6 COM ports

- Compatibility with legacy devices alongside modern serial interfaces

- GPIO support on select models

Handy for the Following Applications:

- Video Surveillance

- Industrial Automation and IoT

- Kiosks

- POS (Point of Sale)

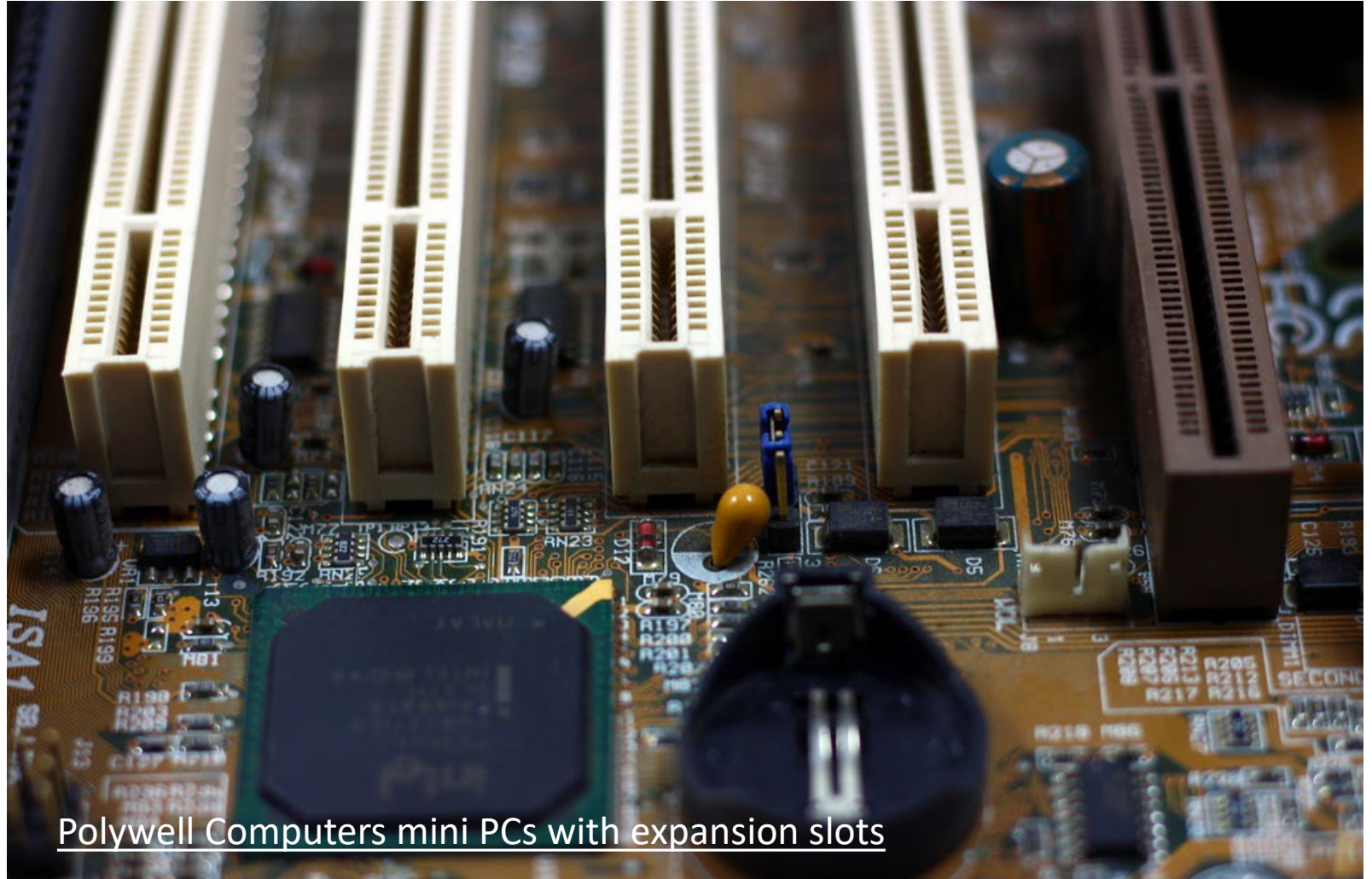- Digital Signage

- Vending Machines

- ATM

Polywell Computer mini PC with serial (COM) ports

With Expansion Slots Design Features:

- Full-size PCIe slots available on select models, in addition to M.2 slots for SSDs and Wi-Fi

- Enables the unique feature of add-on cards in SFF PCs

- Supports add-ons cards such as video boards, high-performance NICs, data acquisition, and GPUs

Handy for the Following Applications:

- Industrial Automation and IoT

- Kiosks

- POS (Point of Sale)

- Vending Machines

- ATM

Polywell Computers mini PCs with expansion slots

x86 Powered Design Features:

- Polywell Computers offers models powered by Intel CPUs

- Polywell offers models powered by AMD CPUs

- Ensures compatibility with major operating systems

Handy for the Following Applications:

- Everywhere

Polywell Computers mini PCs running Windows or Linux

ARM Powered Design Features:

- Polywell Computers is one of the few manufacturers offering the third hardware platform - ARM

- ARM hardware platform is a rapidly growing segment of PCs

- ARM-powered PCs provide significant cost savings

- Supports Android and Linux OS on this architecture

Handy for the Following Applications:

- Digital Signage

- Kiosk

- Media Player

- Set-Top Box

- Vending Machine

- Industrial Automation and IoT

Polywell Computers mini PC running Android OS

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Servers

Workstations

Notebooks and All-in-Ones

Storage

Polywell Computers servers

Polywell Computers: Servers

- **High-Performance Rack Systems:** Available in 1U, 2U, 4U, and 5U form factors

- **Powered by Latest Processors:** Built on Intel Xeon and AMD EPYC CPUs

- **Two Key Product Groups:**

  - **General Purpose Servers:** Ideal for file, cloud, virtual, computing, and database servers

  - **GPU Servers:** Optimized for high-performance computing (HPC), AI, and deep machine learning

- **Platform Compatibility:** Supports Windows Server, Linux-based server OSs; VMware and Hyper-V virtualization platforms

- **Redundant power supplies** are being used

Polywell Computers: Workstations

- **Cutting-Edge Performance:** Powered by the latest Intel Xeon-W and AMD Ryzen Threadripper Pro CPUs

- **Advanced Memory and Expansion:** Equipped with 8-Channel DDR5 memory and PCIe 5.0 x16 slots for graphics, NVMe, or network adapters

- **High Graphics Capacity:** Capable of accommodating up to 7 graphics cards or 2 Nvidia RTX4090 GPUs

- **Ideal for:** HPC and AI computing, 3D rendering, non-linear video editing

Polywell Computers workstations

Polywell Computers Notebooks and All-in-Ones

Polywell Computers: Notebooks and All-in-Ones

- **Versatile Product Line:** Includes notebooks and All-in-Ones for various applications

- **Target Niches:** Office computing, education, and healthcare

- **Customizable All-in-Ones:** Chassis designed to accommodate various PCs from our general product line

- **Additional Offerings:** Tablets available as well, including rugged models for demanding environments

[Polywell Computers storage systems](#)

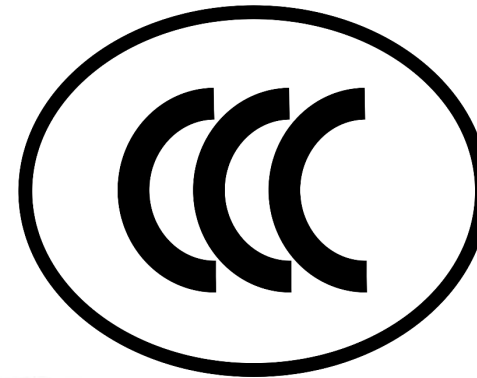**Polywell Computers: Storage**

- Polywell Computers offers four lines of storage systems, tailored to meet various needs:

  - **Polystor**: High-performance systems, scaling up to petabytes and up to 1 TB RAM.

  - **SUMA**: Enterprise-class storage, designed for robust, mission-critical applications.

  - **Netdisk**: Mid-size class storage, ideal for growing businesses.

  - **Ministor**: Entry-level storage, perfect for small-scale deployments.

- These storage lines support DAS, NAS, and SAN architectures, utilizing high-capacity and high-performance NVMe SSDs, SATA, and SAS hard drives. They offer various RAID levels and include redundant power supplies for enhanced reliability.

Polywell Computers has always prioritized regulatory compliance, ensuring our products meet the highest standards globally. This commitment has allowed us to expand into markets across all continents.

- **FCC (Federal Communications Commission)**: Ensures electromagnetic compatibility in the United States.

- **CE (Conformité Européenne)**: Confirms compliance with European safety, health, and environmental protection standards.

- **UL (Underwriters Laboratories)**: Guarantees product safety standards for electrical devices in North America.

- **CCC (China Compulsory Certification)**: Confirms product quality and safety compliance in China.

- **RoHS (Restriction of Hazardous Substances)**: Restricts the use of specific hazardous materials in electrical and electronic products across the European Union.

These are just a few of the many certifications we hold, covering virtually the entire globe.

Technology partners

Partner name	Brief description	Country
AMD	CPU manufacturer	USA
ARM	CPU manufacturer	UK
Intel	CPU manufacturer	USA
Micron	SSD and Memory manufacturer	USA
Microsoft	OS manufacturer	USA
Novisign	Digital Signage CMS manufacturer	Israel
Nvidia	GPU manufacturer	USA
Quectel	LTE modem manufacturer	China
Radix Technologies	MDM manufacturer	Israel
Samsung	SSD and Memory manufacturer	South Korea
Stratodesk	Thin client OS and management system manufacturer	USA
Telemetry TV	Digital Signage CMS manufacturer	USA
VyOS	Network device OS manufacturer	USA

At Polywell Computers, our customers are at the heart of everything we do. We pride ourselves on our ability to listen to customer needs and develop tailored solutions that meet their specific requirements.

- **Customized Solutions**: We offer extensive customization options to ensure our products meet your unique requirements.

- **2-Year Warranty**: We stand behind our products, offering a comprehensive 2-year warranty on all our PCs.

- **Free Test-Drive**: To ensure complete satisfaction, we provide a free test-drive of any model before committing to large-scale purchases.

- **Global Manufacturing Presence**: With factories in the US, China, and Vietnam, we can efficiently ship products globally, ensuring fast and cost-effective delivery from the most convenient location for our customers.

- **Dedicated Support**: Our dedicated technical support team is available to assist with any issues, ensuring a smooth experience from start to finish.

A significant portion of our business is dedicated to OEM services, where we bring decades of experience and expertise to the table. We excel at delivering tailored solutions that meet the specific needs of our clients.

1. **OEM/ODM Service**: We specialize in SMT, DIP, and assembly based on customer designs, covering everything from prototype development to mass production and warranty repair.

2. **Whitebox Computer Production**: Ideal for small to mid-size resellers, system integrators, and local OEM customers looking to sell under their own brand. We offer turnkey white box solutions.

Our product range primarily focuses on small form factor embedded and fanless PCs. We also provide extensive R&D services for designing motherboards, peripherals, and chassis, ensuring ODM products are tailored to your unique specifications.

Additional Services:

- Linux Software Development Subcontract Service

- Custom Chassis Design & Manufacturing

- Private Label Service (starting from 100+ units)

- System Imaging, Content Loading, and Custom Configuration

- Worldwide Compliance Certifications

- Last-Mile Manufacturing, Short Lead Time Service, and Dropship Service

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At Polywell Computers, We Innovate for You

- At Polywell Computers, our commitment extends beyond words. We are dedicated to pioneering innovations that push the boundaries of technology. Our relentless pursuit of quality and excellence ensures that every product we design not only meets but exceeds the highest standards of reliability and performance.
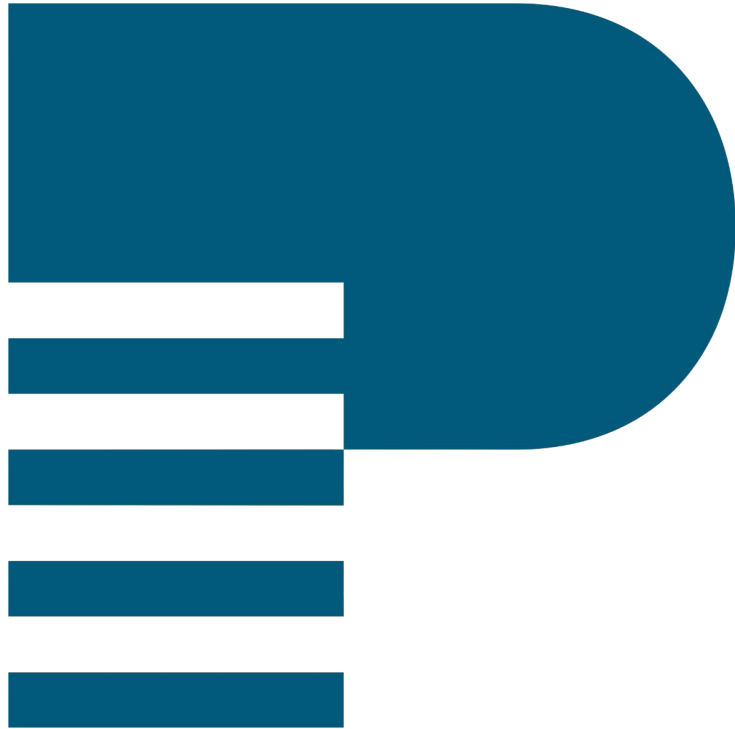
Elevate Your Business with Polywell

- In today's fast-paced world, staying ahead means leveraging the latest technology. Polywell Computers provides more than just technology; we offer customized, cutting-edge solutions tailored to address the unique challenges and needs of your business. Partnering with us means choosing a future where your business's potential is fully realized.

Let's Build the Future Together

- Join us on this exciting journey. Together, we can explore endless possibilities and create groundbreaking solutions that propel your business forward. Let's collaborate to harness the power of advanced computing and turn visionary ideas into reality.

Partner with Polywell Computers—where innovation meets excellence, and together, we build tomorrow.

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THANK YOU
FOR YOUR ATTENTION

**Representative office
in EMEA and Central Asia:**

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WEB site:	**https://eu.polywell.com (multilingual)**
	https://www.polywell.com (US)