



Application Note

Portwell, Inc.

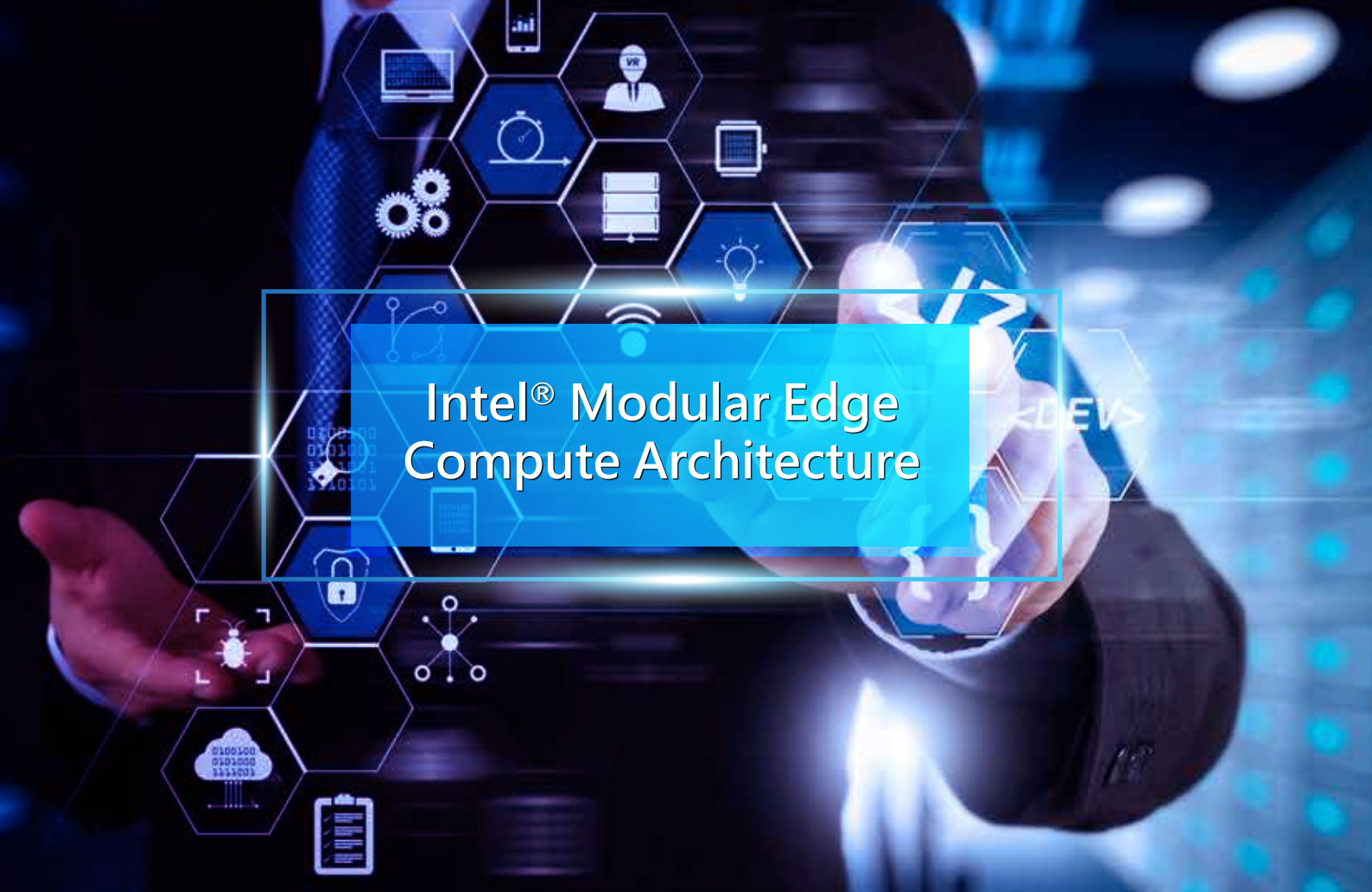
IWOS Series, Intelligent Workload Orchestrator System
Based on Intel® Xeon® E-2278GE and Core™ i7-9700E/
i5-9500E/ i3-9300E



Situation

Nowadays, Smart Retail is a trend in retail industrial market and transforms traditional consumption into digital and intelligent mode. Many applications for it such as digital signage, video wall and kiosk usually generate a large amount of data. These data need to be transferred, exchanged, stored, classified, and analyzed, etc. As a result, the large volume of data often overwhelms legacy networks, data centers, and even cloud computing infrastructure and furthermore affects operational efficiency. Portwell IWOS (Intelligent Workload Orchestrator System) based on Intel® Modular Edge Compute Architecture (Intel® MEC Arch) is installed at the edge to address this demand and provides the flexibility and power to deal with multiple workloads in a centralized system. It's the key to achieve smart retail without incurring high network round trip cost and rapidly drive demand for localized data analytics, storage, and processing that can't be met by legacy cloud technologies.

intel
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IoT Industrial
Specialist



Intel® Modular Edge Compute Architecture

Solutions

Focusing on enabling workload consolidation in the edge devices such as retail, banking, education, hospitality, entertainment, IWOS can analyze, save, and process data instantly at the edge without huge cost of data transfer or cloud resource. Allowing different tasks to be performed in the same system, it's the best solution to help your business operation with more intelligent, flexibility, efficiency, and productivity.

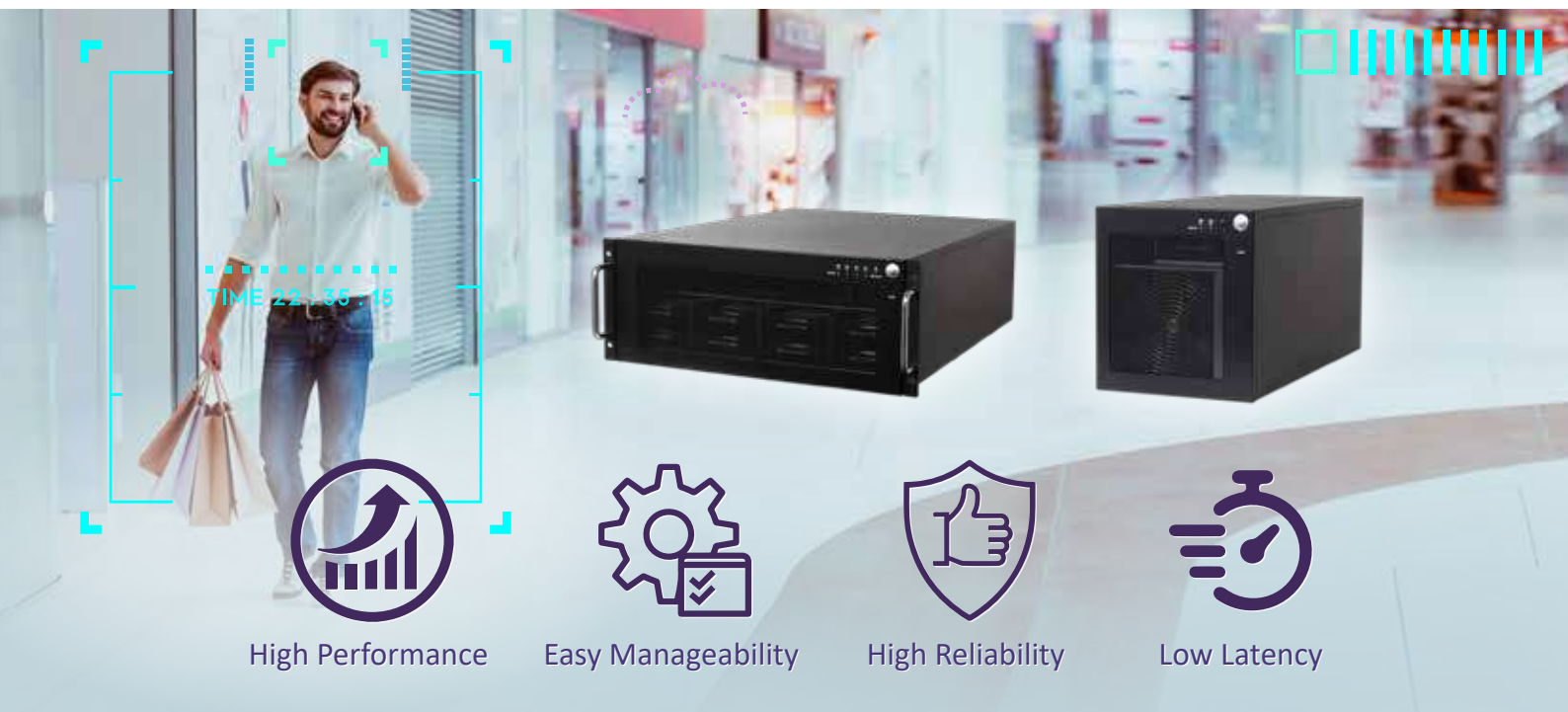
Embedded four or two modules based on Intel® Xeon E-2278GE processor in one 5U (two modules) or 4U (four modules) server system, IWOS shows up to quadruple graphics and processing performance, and low latency between modules, significantly improving the efficiency of your business. It's easier and more centralized to manage tasks and operations within the same system so that you can process different tasks simultaneously on it. IWOS built-in module also supports a variety of existing PCIe cards. Its expandability fulfills your current and future needs, for example, visual images, data analysis, etc., and brings growth potential to your business. Compared with traditional rack-mounted servers, IWOS's higher temperature stability can overcome the obstacles and limitations of the working environment, creating unlimited value in any industry. With advanced hardware design and multiple Intel technologies, IWOS helps improve the

performance of virtualization/containerization, enhancing Virtual Machine and Container operations. Also, it provides excellent security and management convenience for you. Last but not least, IWOS provides a highly availability and reliable environment. When one or even more nodes break down, IWOS can immediately failover, effectively avoiding outage or loss due to failure. The high security of it protects your data, so you don't have to worry about sensitive information being stolen, leaked, or even hacked. IWOS' excellent reliability and security provide you with greater stability and peace of mind in your business operations. With high operational performance, reliability, and security, IWOS saves you a lot of cost and resources, giving you management convenience and unlimited possibilities. No matter in what industry, Portwell IWOS is the perfect partner to accelerate and stabilize your business growth and breakthroughs!

IWOS Series

Intelligent Workload Orchestrator System

- Featuring Intel® Xeon® E-2278GE and Core™ i7-9700E/ i5-9500E/ i3-9300E processor
- Based on dual/quad-board Modular Edge Compute Architecture
- With Intel Technology support
- High expandability up to 2x/4x PCIe16 slots
- High availability (distributed) and high reliability (failover)



IWOS

Intelligent Workload Orchestrator

I W O S

About Portwell

Portwell, Inc., founded in 1993, has focused herself towards a high-technology scope that brings company value through the state-of-the-art. For the past years, continuous leading product development and revenue growth have made Portwell a major Mission-Critical Application Platform Provider in the world. The in-house design of industrial computers and application platforms by Portwell has also been targeted to meet our customer needs for flexibility. Portwell, Inc., an IoT Solutions Titanium Partner of the Intel® Partner Alliance, a community of communications and embedded developers and solution providers, designs and manufactures Communication Appliances along with a full range of Industrial Platform Service (Computer on Module, Embedded Computing, Industrial Computer), Communication Appliance Service (Software Defined Wide Area Network, ANS series, AnnA ANS Network Associate), Vertical Market Service (Advanced Network Solutions, Gaming, Medical, industrial Automation, Smart Transportation, Energy, Smart Manufacturing, Internet of Things(IoT), AI Solutions, Mobility & Barcoding Solutions, EMS/DMS), Panel Device Service (Panel PC, LEAD Series) . With streamline access to the latest Intel technology, we paved the way with the broadest array of building blocks, delivering cutting-edge solutions to meet and even exceed the demanding needs of the ever-changing telecommunication, medical electronics, industrial automation, defense and life automation markets. Committed to supplying customers with a one-stop shopping approach of full product selection, competence and sophisticated customer support, Portwell helps all our customers pave the royal road to success and stay ahead of competition.



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partner Titanium
IoT
Solutions

Portwell, Inc., an IoT Solutions Titanium Partner of the Intel® Partner Alliance, designs and manufactures a full range of IPC products (SBC, backplane, redundant power supply, rack mount & node chassis), embedded architecture solutions, DVR system platforms and communications appliances. We provide complete R&D and project management services to decrease customers' time to market, and reduce project risk and cost. Portwell is also an ISO 13485, ISO 9001 and ISO 14001 certified company that deploys quality assurance through product design, verification and manufacturing cycles.



Portwell, Inc. Headquarters

No. 242, Bo'AI St., Shu-Lin Dist,
New Taipei City 238, Taiwan
Tel: +886-2-7731-8888
Fax: +886-2-7731-9888
E-mail: info@portwell.com.tw
www.portwell.com.tw



www.portwell.com.tw

Americas

American Portwell (Fremont, CA)

44200 Christy St., Fremont, CA 94538, USA
Tel: +1-510-403-3399
Fax: +1-510-403-3184
E-mail: info@portwell.com
www.portwell.com

Japan

Portwell Japan, Inc. (Tokyo)

〒112-0011 4-27-10, Sengoku, Bunkyo-ku,
Tokyo, Japan
Tel: +81-3-6902-9225
Fax: +81-3-6902-9226
E-mail: info@portwell.co.jp
www.portwell.co.jp

Portwell Japan, Inc. (Osaka)

〒532-0004 Ste.501 Nippo Shin-osaka Dai-2
Bldg. 1-8-33 Nishi-Miyahara, Yodogawa-ku
Osaka Japan
Tel: +81-6-4807-7721
Fax: +81-6-4807-7720
E-mail: info@portwell.co.jp
www.portwell.co.jp

Europe

European Portwell

Schillingweg 3, 2153 PL
Nieuw Venne, The Netherlands
Tel: +31-252-620790
E-mail: info@portwell.eu
www.portwell.eu

KIOSK Embedded Systems GmbH

Am Technologiepark 8-10,
D-82229 Seefeld
Tel: +49-8152-3962-500
E-mail: info@portwell.de
www.portwell.de

Portwell UK Ltd.

Office TH2
Trident House, Trident Park Basil
Hill Road, Didcot, OX11 7HJ, UK
Tel: +44(0)1235-750-760
Fax: +44(0)1235-750-761
E-mail: info@portwell.eu
www.portwell.eu

China

Shanghai Portwell

(201612), Room 1303-1, Building 33, No.258,
Xinhuan Highway, Songjiang District,
Shanghai
Tel: +86-21-5771-2505
Fax: +86-21-5772-2965
E-mail: info@portwell.com.cn
www.portwell.com.cn

Korea

Portwell Korea, Inc.

O-Biz Tower 1901, No.126,
Beolmal-ro, Dongan-gu, Anyang-si,
Gyeonggi-do, Korea, 431-060
Tel: +82-31-450-3043
Fax: +82-31-450-3044
E-mail: info@portwell.co.kr
www.portwell.co.kr

India

Portwell India Technology

2nd Floor, 5M-665, 5th Main Road, OMBR
Layout, Banaswadi, Bangalore -560043, India
Tel: +91-80-4168-4255
E-mail: enquiry@portwell.in
www.portwell.in