Cloud IoT
Investing To Win

James Yang, Vice President, Cloud IoT Business Group
Digital Transformation
A Virtualized and Software Defined Future

软件定义虚拟网络
AI - 人工智能
Convergence Of IT, OT, CT and IoT
Partnering For Digital Transformation

数字转型合作 伙伴互利共赢

Silicon Suppliers
- Module, Board
- Technology
- White Box System

Software Developers
- Virtualization
- Interop. Validation
- Certifications

System Integrators
- Integration
- Deployment
- Services
Advantech White Boxes
研华白牌策略
Co-Marketing, Co-Selling, Co-Creation

uCPE, SD-WAN, vBNG, vFW, vRouter, vEPC, vSecGW, vCGNAT, vCMTS
Scalability from S to XL – Advantech uCPE Range

FWA-T011
Intel® Celeron® Processor or Pentium® Processor N Series
Slim CPE for cloud-based deployments

FWA-1012VC
Intel Atom® C3000 Processor
Versatile platform for wide-scale deployments

FWA-3050
Intel® Xeon® D-2100 Processor
Fully configurable to fit any enterprise deployment

FWA-5070
Intel® Xeon® Scalable Processor
Throughput and connectivity capabilities to fit even the most demanding deployments

CAPEX & OPEX Savings
- Optimized design with efficient power & cooling

Flexible WAN Connectivity
- Choice of hybrid LTE, WiFi, xDSL & SFP+ configurations

Advanced Security
- Significant enhancements over pure IT solutions

Reduced Deployment Risk
- Proven NFV ecosystem interoperability

Maximum Scalability
- Scale from small businesses to headquarters
Accelerate Deployable Solutions with ISS for NFVi

- 20” depth 2RU
- NEBS / Carrier grade
- 28 Cores & 200G / 1RU
- 4x PCIe x16 FH/FL

- 27.5” depth 2RU
- High storage density
- 28 Cores & 200G IO / 1RU
- 4x PCIe x16 FH/FL

- 29.5” depth 1RU
- High compute density
- 56 Cores & 400G / 1RU
- 4x PCIe x16 FH/¾L

Common Software Architecture Available Now!

**Dual Intel® Xeon® Scalable Processors Gen 2 with Intel® C62x Platform Controller Hub**

**Balanced IO with 200Gbps per socket through PCIe x16 slots**
Who Chooses Advantech for Networking?
More & More Applications...
Advantech WISE-STACK Private Cloud Solution

研华WISE-PaaS 私有云解决方案

- Privacy
- Continuous Operation
- Multi-tenancy Support
- Easy Expansion
- Enable IoT Solution
- Cost Effective

WISE-STACK-200
On-premises Data Platform
- Operation Management
- 2D Dashboard
- Equipment & Device Management

WISE-STACK-300
CPU-based AI with 3D Visualization
- Operation Management
- 3D Dashboard
- Equipment & Device Management
- CPU-Based AI Framework Service

WISE-STACK-600
GPU Resource Management
- Operation Management
- 3D Dashboard
- Equipment & Device Management
- CPU-Based AI Framework Service
- AI Framework Service with GPU Resource Management
SKY-8000 Servers for Private 5G Small Cell Mobile Networks

SKY-8000 私有5G移动专网服务器

Application Fields
- Industry 4.0 - Smart manufacturing
- Mining Industry
- Smart City
- Oil & Gas
- Intelligent Healthcare
- Transportation & Logistics

- Real-time Tracking
- Robotic Vehicles
- Edge Sensors
- Machine Automation
- IoT Gateway
- Industrial AR
- AI
- Video Surveillance
- Digital Signage
- Data Analytics
- Private Comms

IoT Gateways, Devices & Sensors

Small Cell

Fully Integrated Edge Intelligence Cloud

Enterprise Network

WISE-PaaS

Solution Partners
- Advantech
- Intel
- Lions
- Red Hat
- Amazon Web Services
- VMware

WISE-STACK 300

SKY-8000 Series

HIGH PERFORMING
Dedicated bandwidth & improved QoS

MISSION CRITICAL
Ultra-reliable low latency

SECURE
Privately managed, cellular access

COST EFFECTIVE
Lighter infrastructure

Advantech
Cloud-IoT VEGA Video Products
研华VEGA超高清视频解决方案

VEGA Family Accelerate IP based Content Workflow

VEGA 3000 SERIES VIDEO-OVER-IP

VEGA 3300 SERIES ULTRA-HD ENCODE

VEGA 4000 SERIES VIDEO INTELLIGENCE

VEGA 6000 SERIES ALL-IN-ONE

VEGA 7000 SERIES ULTRA DENSITY

VEGA 8000 SERIES OPTIMUM SOLUTION
Real Time Cloud Transcoding

● VEGA-3318 4K H264/H265 PCIe Accelerator
● 512 Full HD Video Streams per Intel Xeon + 4 * VEGA-3318
● 64 Watts per VEGA-3318
● cf. S/W Transcoder → 32 Full HD per Intel Xeon Server

VEGA-3318s
Transcoding Farm

H.264
H.265
RTP
RTMP

Intel Xeon Server

H.264
H.265
RTP
RTMP

CDN

480P/2Mbps

720P/2Mbps

1080P/3Mbps

Live Gaming
VEGA-4001 The Best FPGA Machine Learning

**Demonstrated on Mipsology booth at SuperComputing 2018 show**
Partnering For Digital Transformation

Cloud IoT

Networking Solution
- 5G, NFVi
- uCPE / SD-WAN
- Network Security

Edge Cloud Solution
- Storage Solution
- Edge Computing
- Private Cloud Solution

Video Solution
- Medical Video
- Video Data Center
- IP Video, Broadcasting
A BIG THANK YOU!!!

Co-Creating the Future of the IoT World