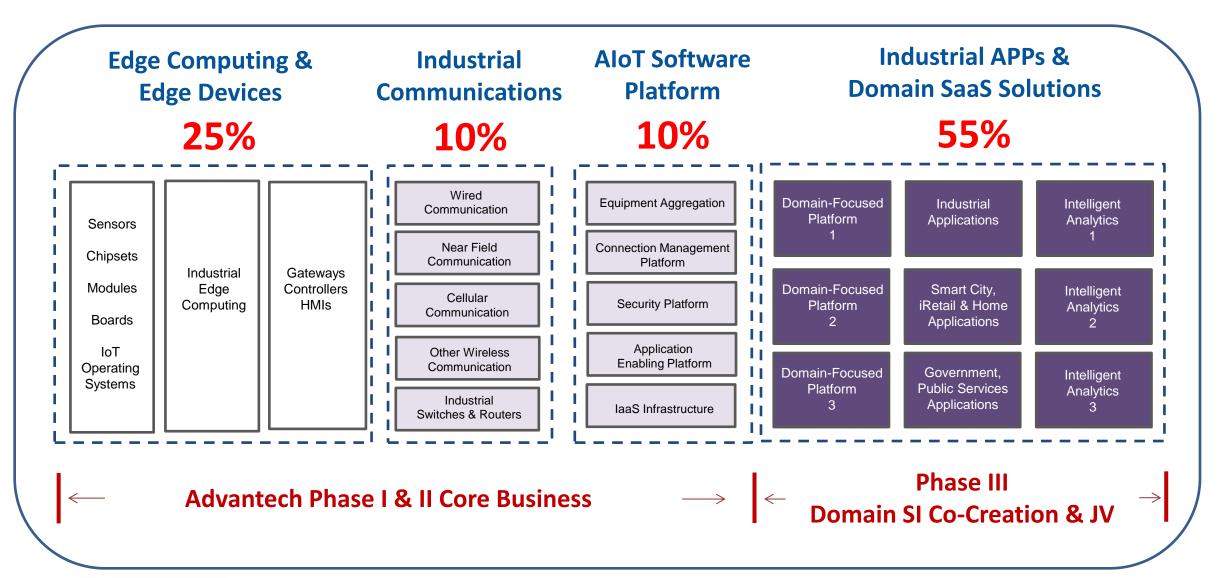


Co-Creating the Future of the IoT World

Enabling Digital Transformation of Industry Domains



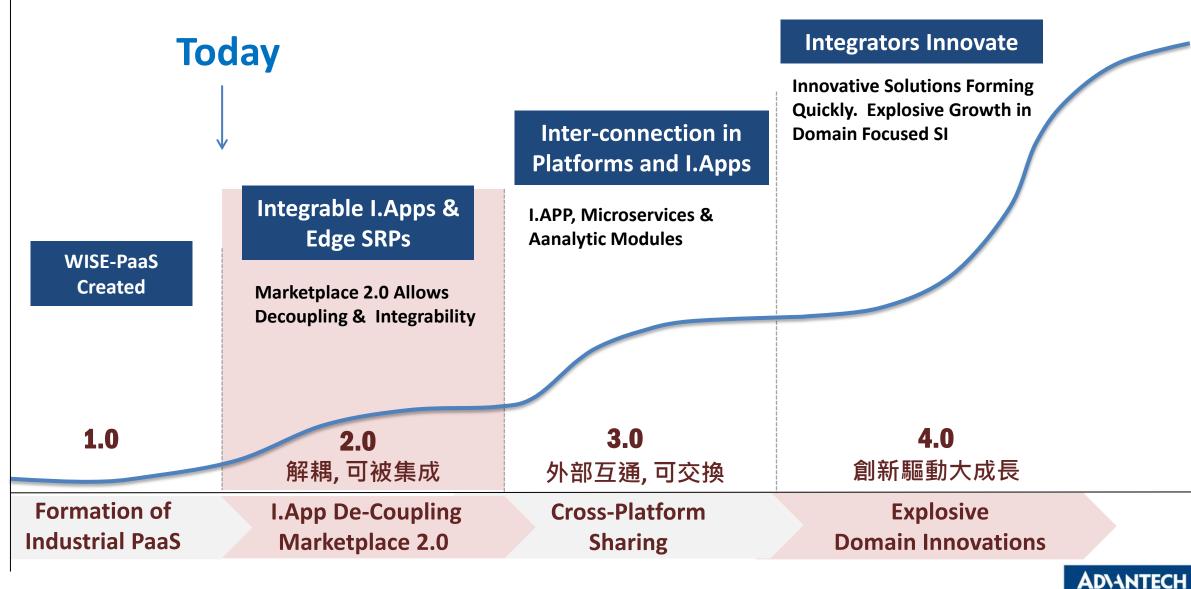
AloT Industry Value Chain and Market Size







Industrial IoT Platform Evolution Path From 1.0 to 4.0



The Key Concept of Software De-Coupling







Feature Phone Vs

Smart Phone with Apps

Construction Machine Vs

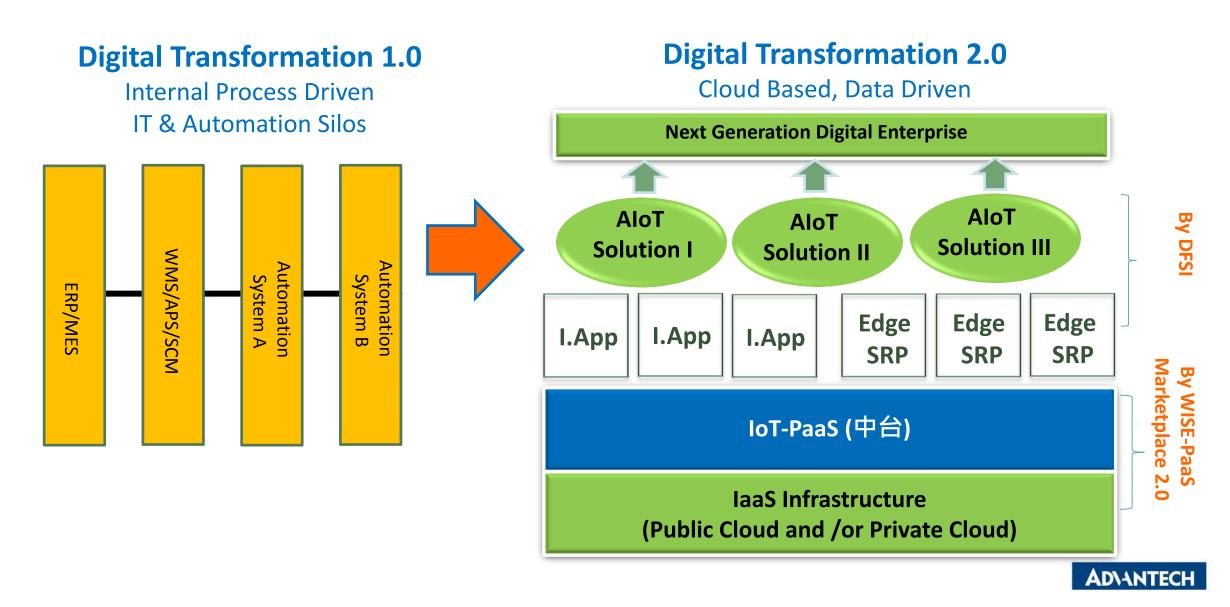
Machine with SaaS

Automation Equipment Vs

De-Coupled Industry AIoT Solutions with I.Apps



Cloud Based, Data Driven Digital Transformation, From 1.0 to 2.0

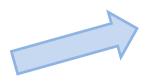


WISE-PaaS New Slogan and New Concept

Marketplace 2.0:

- De-Coupled & Integrable I.Apps
- Open for Eco-Partner Co-Creation
- Domain Categorized Solution Sharing











WISE-PaaS Marketplace 2.0 Landing Page





6 1969 2013 Advantach Co., Ltd. | Privacy Policy

Popular App Categories

Explore Apps by categories

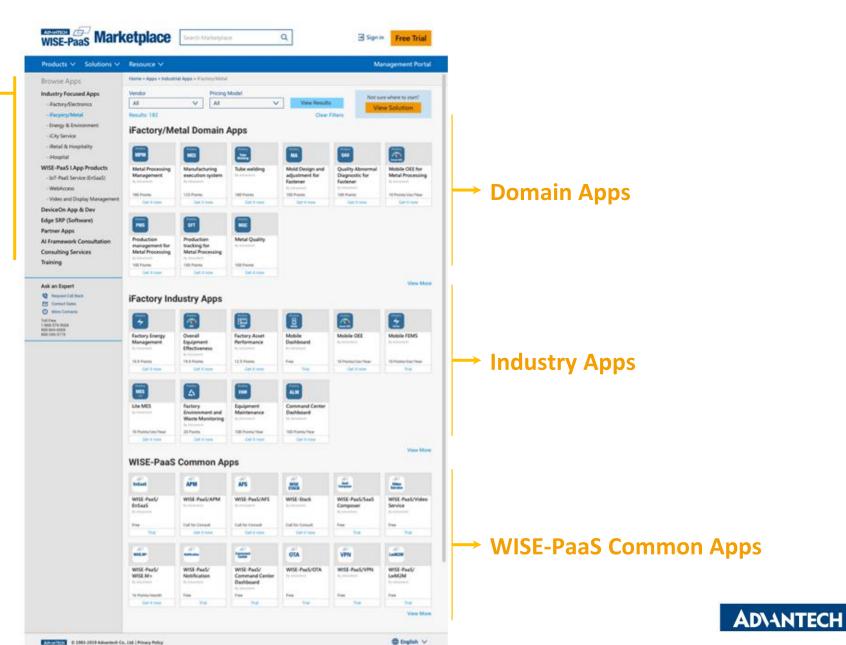
- **IoT-PaaS Services**
- Partner Apps
- Edge.SRP
- Video and Display Management
- Al Framework Consultation
- **Consulting Services**
- Security
- Training



WISE-PaaS Marketplace 2.0: Industrial Apps (I.Apps)

Sort by Categories

- Industry Focused Apps
- WISE-PaaS I.App Product
- DeviceOn App & Dev
- Edge.SRP
- Partner Apps
- Al Framework
 Consultation
- Consulting Services
- Training



I.Apps Portfolio on WISE-PaaS Marketplace 2.0

iCity Services E&E **iHospital iFactory** iRetail

Domain-**Focused**

行業專用

Apps



SPC

MES



QAD

Quality Abnormal Diagnostic for

Andon



FM

\$ PCM





SFT

PMS



Forming defect and failure predictive module



|جه|

Coagulation Sedimentation Process Dosing Control

 \triangle

喠

Influent Water Pump



Energy & Consumption Analysis by Category







 \blacksquare

Smart Display

Customer

Queuing Engine

iCity

Air Quality



SSM

Signage Sensor

Visitor

ISM

Interactive Sensor

Mamagemen







SOM

Store Operation

Management

Customer Profile



RFM

Refrigerator

SHM

Store Heatmap

Dashboard







OPM

Operations

Managemen



















iHospital

(ER)

Hospital Queuing

Inpatient BI

Industry Apps

產業通用



iFactory





4 Mobile

£

OTA

WISE-PaaS/OT/



ALM

 Φ

EnSaaS

4.0

WISE-PaaS/

SCADA

Edge.SRP

Android DM

I FDC

Fault detection

Mold



EQM

rFJ

EnSaaS

DataService

Data Service

£

WISE.M+

WISE-PaaS/

WISE.M+

Edge.SRP

Cell

ME-Cell



CNC

£

WISE

STACK

Service

WISE-PaaS/

Video Service

Edge.SRP

Line

ME



 Φ

WISE-PaaS/APM

Edge.SRP

Edge.SRP/

Intelligent NVR





MBR

Equipment Predictive Membrane Bioreactor













APM.CCM















Air Quality

Common Apps

中台









Command Center

Edge.SRP









WISE-PaaS/

Notification

Edge.SRP

Edge.SRP/

SignageCMS

B

SaaS





r#J

£

Android

Android DM

Edge.SRP

Edge.SRP/

People Counting



 \Box

AFS

WISE-PaaS/AFS

Edge.SRP

Edge.SRP/

Facial Recognition



CMS Management

 \Box

POA

ΔFS

WISE-PaaS/

Device0n

OTA

DeviceOn/

Mobile Dashboard WISE-PaaS/Signage





 \Box

AOI

ΔES

WISE-PaaS/

DeviceOr

E2I

DeviceOn/





IAdeaCare



Intelli-Signage







Personal OEM

OpenR8

Professional Edition



Tiandi hexing













VNC Connect



邊緣功能模組



ΑI

Navi

WISE-PaaS/VPN





























FaceView FaceView

DeviceOn/ Device Management

DeviceOr



Device0n

Device0n

DeviceOn/ Data Management Connectivity Service

arm MBED

mbed Device

Connector



Device0n



Device0n













WebAccess

iFactory/Industry 4.0 Digital Transformation with Data Driven Refactoring











Machine Maker Domain Solutions

Auto Parts Domain Solutions **Metal Processing Domain Solutions**

PCB **Domain Solutions**

Electronics Domain Solutions

iFactory I.APP's

















WISE-PaaS



WISE-PaaS/SaaS Composer

IoT Hub

Azure

WISE-PaaS/APM

Database & Storage Services

WISE-PaaS/AFS

Operation Multitenancy

Metering

Azure IoT, AWS GG, Ali Tencent, Baidu, Huawei,

Data Platform

Compute Resource Management

CLOUD FOUNDRY (kubernetes













iFactory Edge.SRP's



WISE-PaaS/EnSaaS



Edge Gateway

Public Cloud

WISE-PaaS/ EdgeLink WebAccess/CNC



Edge Controller



AOI **VisionNavi**



Data Acquisition Module



Factory IT Systems

3rd Party PaaS

Bosch, Ericsson, CHT













Edge Equipment





















WISE-PaaS/ DeviceOn

Empowers Edge Intelligence



Device Management

- Device Monitoring and Diagnostics
- Device Control & Updating



Data Management

- Data Acquisition and Storage
- Secure Data Access



Connectivity Service

- Device Connectivity
- Plug-n-Play Peripherals







OTA

- Software & Firmware Updates
- Advantech BIOS Updates



Rule Engine

- Distributed Rule Monitoring
- Flexible Trigger and Action



Data Security

- McAfee Threat Protection
- Acronis Backup Recovery

DeviceOn.App

DeviceOn

OTA

OTA

- Software, firmware & configuration updates
- Advantech BIOS updates

DeviceOn

FaceView

FaceView

- Facial recognition
- People counting
- Behavior detection

DeviceOn

E2I

E2I

- Protocol conversion
- Edge intelligence
- Real-time virtualization

DeviceOn

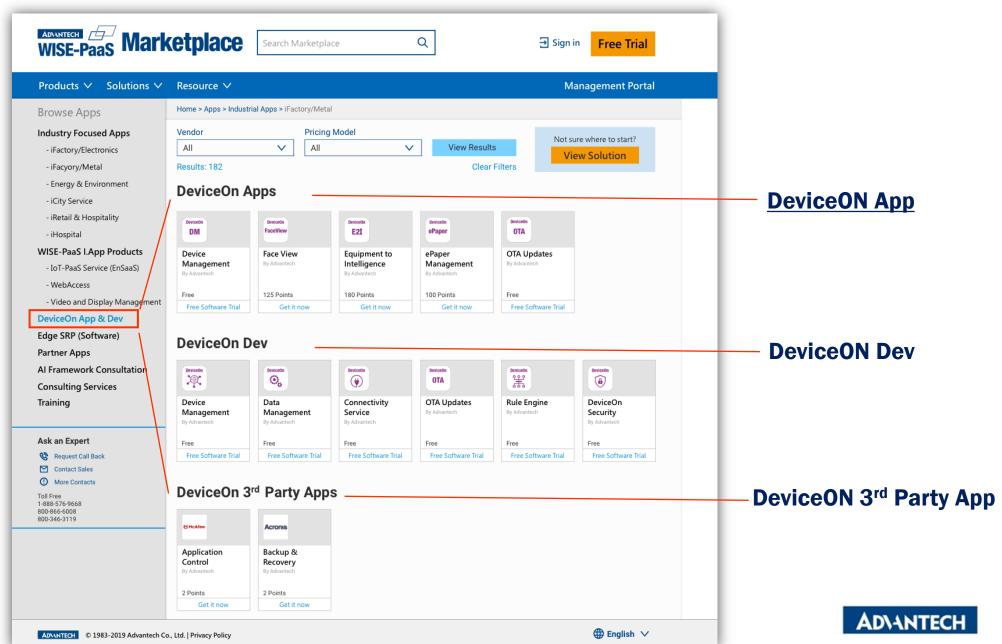
ePaper

ePaper Manager

- EPD device auto-discover
- Fast transmission
- Device association

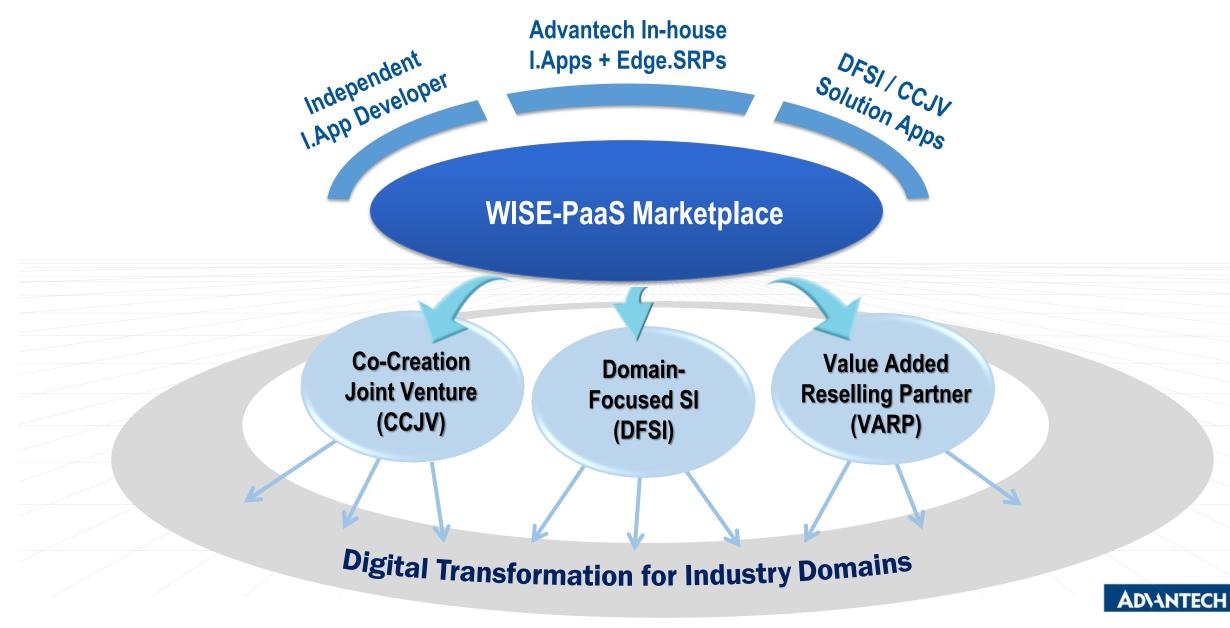


WISE-PaaS Marketplace 2.0 - DeviceOn Dev. & Apps

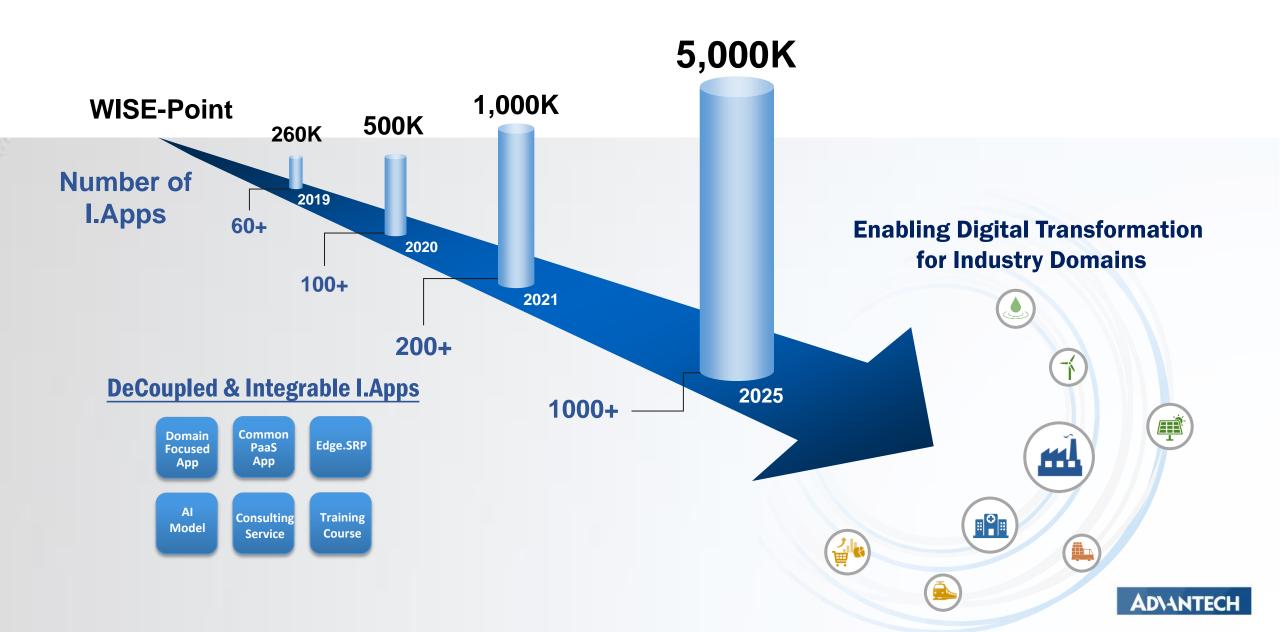


DeviceON App & Dev 選項

Eco-system Co-Creation with WISE-PaaS Marketplace



Vision of WISE-Point Growth



Biz Model of WISE-PaaS by The Next 5 Years



Co-Creation
Joint Venture
Empowerment
Program

Co-Creating the Future of the IoT World



One for All, All for One

I.App's & Edge SRP's

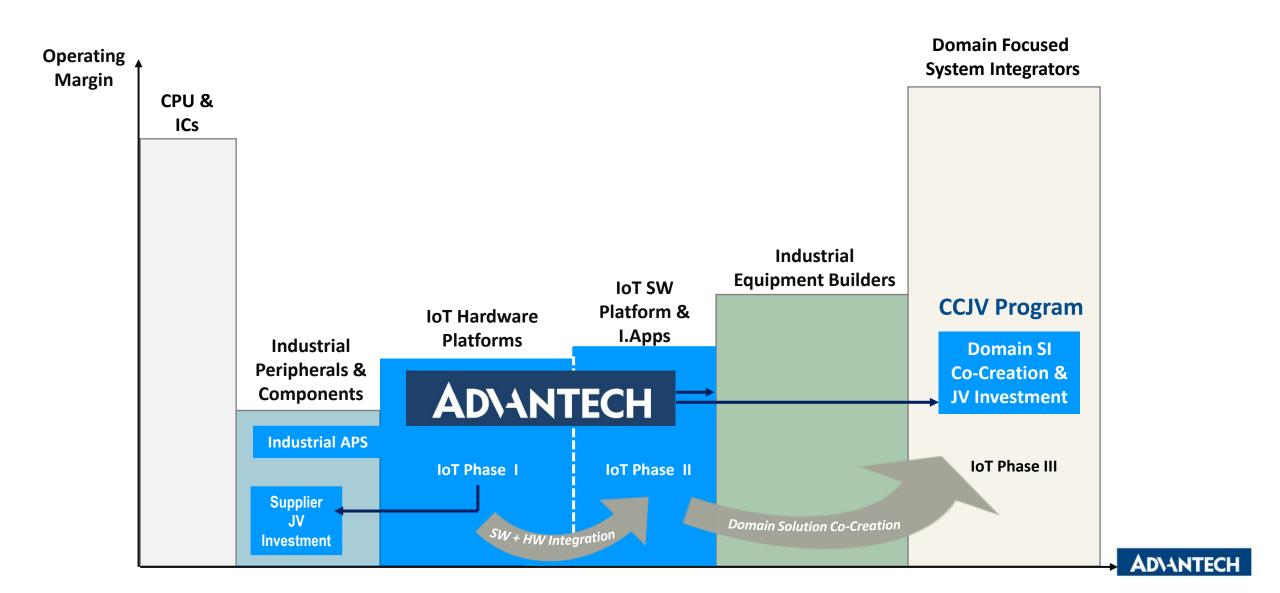
In-House & Partners

1000+

WISE-PaaS VIP Members



Future Profit Zone Strategies for Advantech in the Industrial AloT Value Chain



Paving the Way for IIoT Business Opportunities







> 50B connected **loT devices**, or things, generating 80 zettabytes (ZB) of data in 2025.

Al in manufacturing market estimated to be valued at \$ 17.2 billion by 2025, at CAGR of 49.5%.

5G will contribute \$2Tr+ to the global economy between 2019-2035, 35% will go to the manufacturing and utilities sector.



Empowering AI Services with Edge-to-Cloud Solutions

Model **Development &**



Inference Engine Remote Deployment

Al Inference & Training Servers



SKY-6100 1U 5 GPU Cards Inference Server



SKY-6400 4U 4 GPU Cards Hybrid **Training Server**



SKY-6200 2U 4 GPU Cards Hybrid **Training Server**



SKY-6420 **4U 10 GPU Cards Heavy Training Server**

WISE-PaaS/AFS

Al Framework Service

Unified AI Platform

Public, Private, **Hybrid Clouds**

Edge Intelligence Enabling

Model Management

MIC-770 + MIC-75G20**Compact System Support** up to 1 GPU Card



AIR-300 Server Grade Computing, Up to 1 GPU Card



MIC-770 **Compact Fanless** System



USM-VI Video Al Edge

Edge AI Solutions

AIR-101

Edge AI Inference Systems



Low Power. **Quad Displays**



MIC-710IVA 8-port AI NVR



12-28VDC **DIN Rail Mounting**

MIC-720AI

Syetem



Ruggedized Design, **High Performance**

AIR-200





ML & DL Frameworks and Libraries



























Silicon Partners







Al Accelerators



VEGA-4000 Xilinx Ultrascale+



VEGA-4001 2x Xilinx Ultrascale+



VEGA-550 4x Xilinx UltraScale+



VEGA-320 M.2, 1 Intel Myriad X VPU



VEGA-330 miniPCle. 2 Intel Myriad X VPUs



VEGA-340 PClex4, 8 Intel Myriad X VPUs



Embedded IoT Wireless Connectivity Solutions













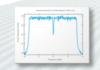








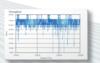




RF Certification



Software Integration



System Performance Tuning

Wireless Design -in Services



















Industry-Grade WiFi-5 Module















New M.2 3052 Sub-6G Module







IoT Solution

Embedded Wireless Module

Edge Computing and Intelligence Solutions







AloT Solutions & Marketplace

Multi-Cloud Interoperability & Application Services





Recognition

Recognition

Edge.SRP

DeviceOn.App

3rd Party App

Edge.SRP Signage CMS















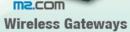














Embedded Computers



Edge Intelligence Servers



Digital Signage Players



Al Inference Systems































Display/ Signage

Camera

Allied Industrial Modular - Linux & Android Services

AIM-Linux & AIM-Android

App Add-Ons & SDKs

Launcher

- Quick Boot
- Boot Logo
- Status Bar
- Navigation Bar

Protocol

- CANopen
- J1708 • J1939
- MODBUS
- 1-Wire

Diagnostic

- RF Diagnostic
- Connection Diagnostic
- System Diagnostic

Management

- SNMP
- Multi-Screen Control
- Resource Mgmt
- Applications Mamt

Security

- Secure Boot
- License Management
- Lock Device
- Secure On-device Data

Distribution

- Yocto
- Realtime
- Debian
- Ubuntu

DevelopSDK

- Qt
- Python Java

• HTML5

Maintenance

- OTA
- Remote Desktop
- App Management

Control

- Device Control
- System Control
- Extension Port Access
- Extension Modules Access

Edge Al

- HD PMQ
- Pre-trained Models
- Edge Al APP

Unified **Embedded Platforms**

Unified Core

Industrial I/O **Drivers**

Performance Optimization

Peripheral Integration



- Efficient Resource Allocation
- · Unified Core Structure
- · Easy Migration



- Accelerated Development
- · High Efficient Library
- Comprehensive Documentation



- Reliable Foundation
- · LTS Kernel Selected
- · Planned Roadmap and Validation







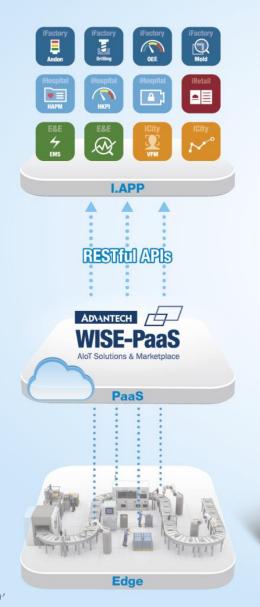




Rockchip ቆ Texas Instruments



WISE-STACK - the Edge Intelligence Private Cloud





Privacy

Micro-

services

Hardware

Resource

Management

Continuous Operation

Istio K

Bigstack

Container kubernetes

Software Defined

Infrastructure

WISE-STACK

- Multi-tenancy Support
- Easy expansion

WISE-STACK-200

- Enable IoT Solution
- Cost Effective



- Operation Management
- 2D Dashboard
- Equipment & Device Management

WISE-STACK-300

CPU-based All with 3D Visualization

- Operation Management
- 3D Dashboard
- Equipment & Device Management
- CPU-Based AI Framework Service

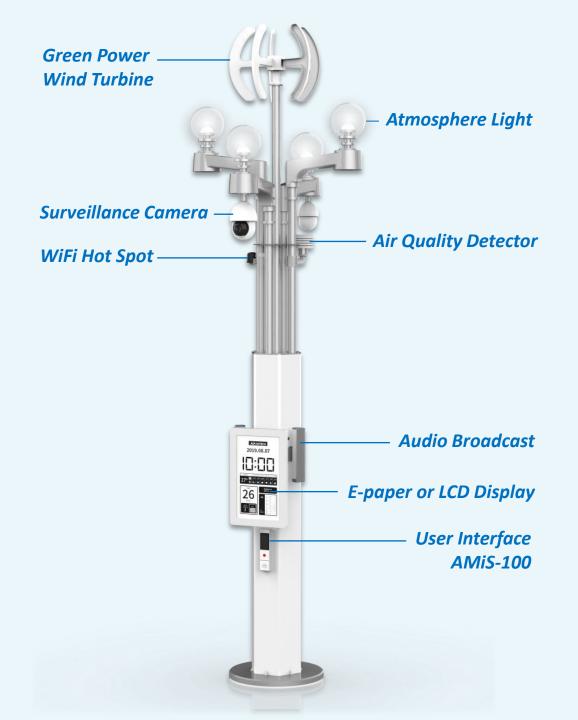
WISE-STACK-600

CPU Resource Management

- Operation Management
- 3D Dashboard
- Equipment & Device Management
- CPU-Based AI Framework Service
- Al Framework Service with CPU Resource Management



V. 1205, 19'



URI-700

iStation for Smart Campus

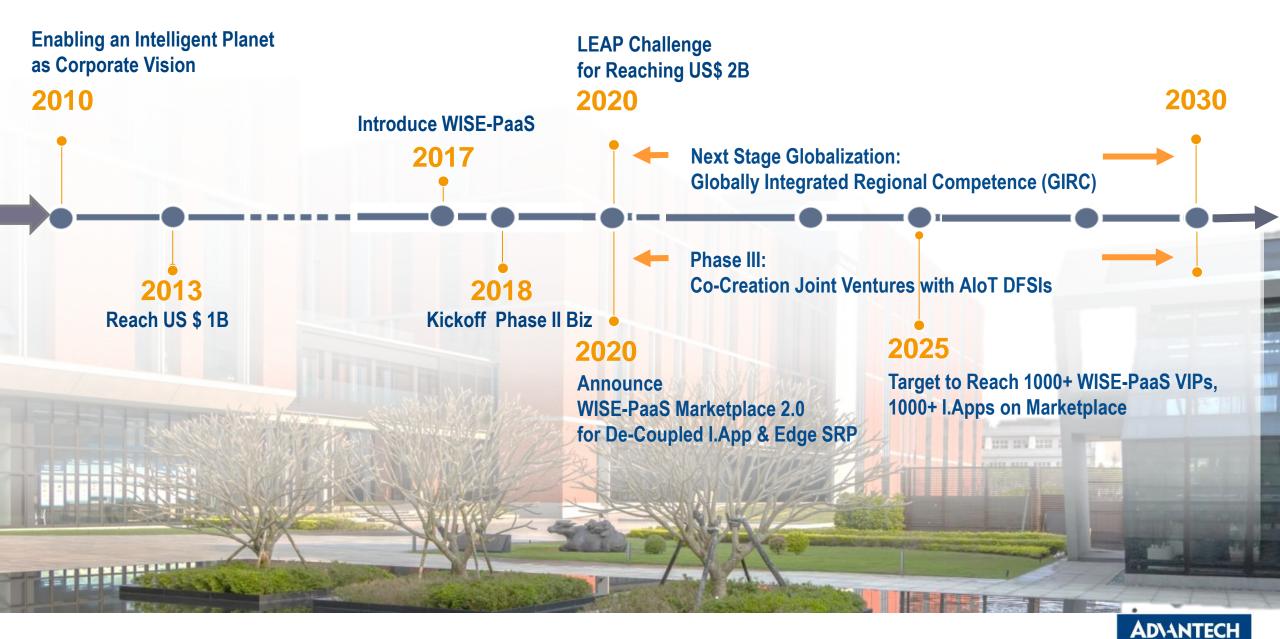
智慧園區多功能基站



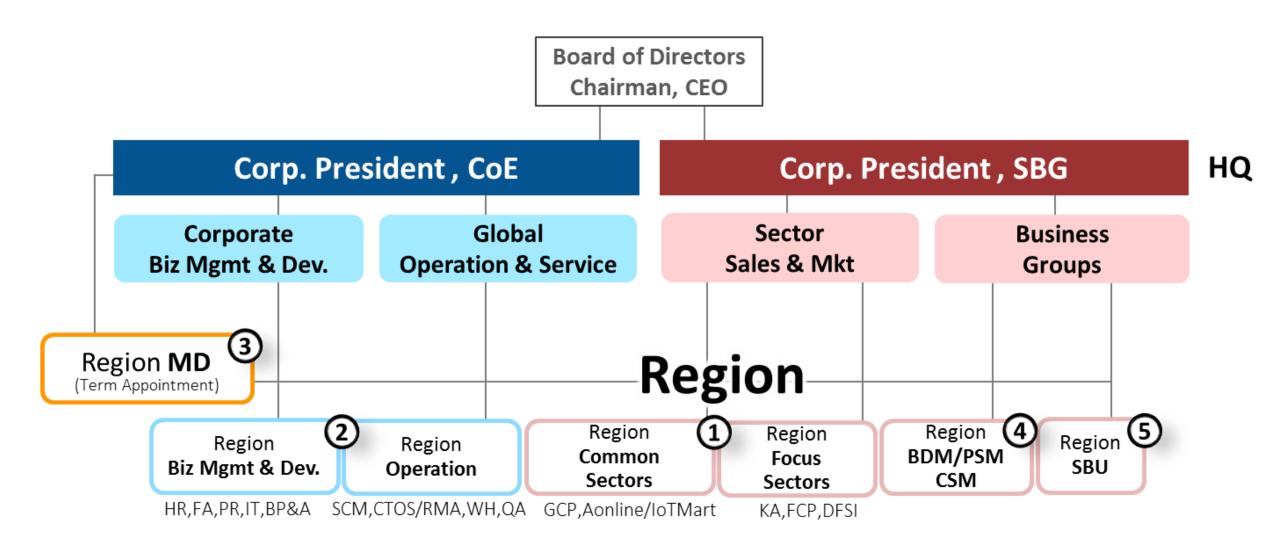
Modular Design



Advantech's Key Milestones Across Two Decades (2010-2030)



Advantech GIRC Organization





US\$21B @ 2020

L.E.A.P. Challenge

15% Year on Year Growth





Co-Creating the Future of the IoT World

