

# AHOKU Group

歡迎蒞臨  
(Welcome to)

歐格電子工業股份有限公司

AHOKU Electronic Company

法人說明會

Investor Conference



*Date: Nov. 29, 2019*

# 簡報大綱 Agenda



公司簡介 Company Profile

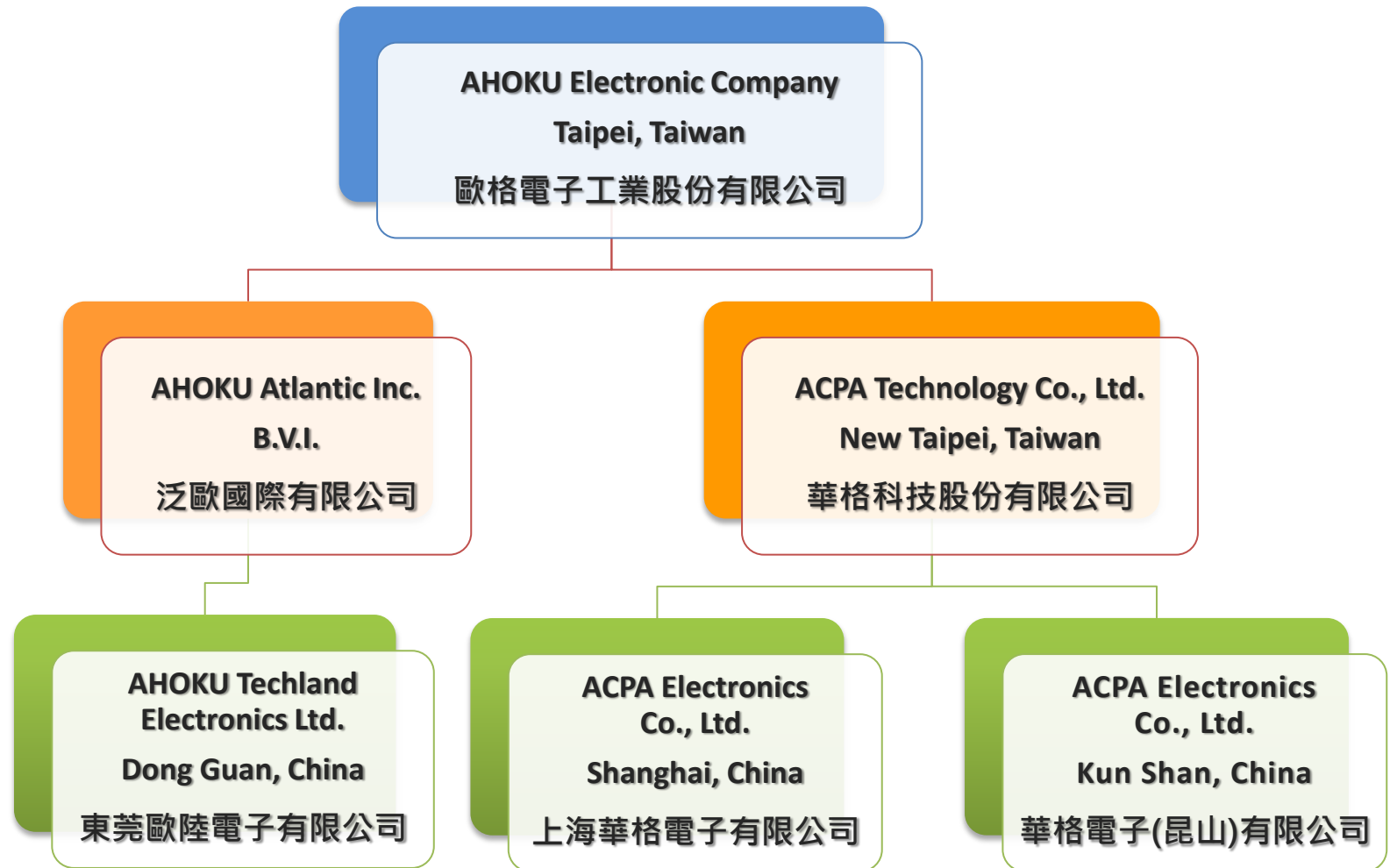
財務報告 Financial Results

產品銷售 Products Marketing

研發佈局 R&D Roadmap

意見交流 Q&A

## 集團組織 Group Organization





AHOKU Group	歐格電子 AHOKU Electronic	東莞歐陸 AHOKU Techland
公司設立 Established	Aug. 1, 1983	Jul. 15, 1997
營運據點 Location	Taipei, Taiwan	Dong Guan, China
集團定位 Position	Head Office R&D Center Sales Center	Manufacturing Center Engineering Center
資本額 Capital	NT\$ 1,020,000 Thousand	HK\$ 50,000 Thousand
上市日期 IPO	TWSE in Jan. 23, 2002	-----
工廠認證 Certification	-----	ISO 9001
主要產品 Core Products	Power Devices: Surge Protectors, Smart Home Kit, PDU (Rack Mount Power), Travel Adapter/Converter/USB Charger Digital Video Devices: Advertisement Screen, Touch Display of Arcade Games	

## 生產基地 Production Base



Office Building and Factory Area of AHOKU Techland

## 生產基地 Production Base



Factory Area of AHOKU Techland

## 生產基地 Production Base



Semi-automatic Production Machines of AHOKU Techland

## 公司治理與企業社會責任 Corporate Governance and Social Responsibility

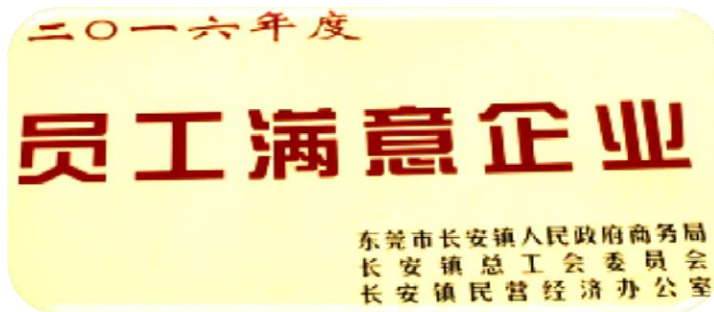
### 電信聯盟企業社會責任論壇 JAC CSR Forum



### 贊助公益活動/提供獎助學金 Sponsor Public Welfare Activity/Student Scholarship



### 幸福員工企業獎 Happy Employee Enterprise Award







ACPA Group	華格科技 ACPA Technology	上海華格 ACPA Shanghai	昆山華格 ACPA Kun Shan
公司設立 Established	Nov. 26, 2001	Nov. 8, 2001	Nov. 7, 2006
營運據點 Location	New Taipei, Taiwan	Shanghai, China	Kun Shan, China
集團定位 Position	Head Office Sales Center Customer Service	Sales Office Customer Service	Manufacturing Center R&D Center Engineering Center
資本額 Capital	NT\$ 231,312 Thousand	US\$ 320 Thousand	US\$ 2,100 Thousand
工廠認證 Certification	-----	-----	ISO 9001 ; ISO 14001
主要產品 Core Products	Electronic Circuit Components: Gas Discharge Tube (GDT), Metal Oxide Varistor (MOV), Polymeric Positive Temperature Coefficient (PPTC), Transient Voltage Suppressors (TVS), ESD Protection, Zener Diode, Schottky Barrier Rectifier, Transistor		

## 華格核心能力

## Core Strengths of ACPA



- 過電壓及過電流保護元件專業製造廠，掌握陶瓷材料、高分子材料、氣體材料、矽材料等多樣關鍵性技術  
Over-voltage and over-current protection components of world-class manufacturer, master ceramic, polymer, gas plasma and silicon key technologies
- 通過國際標準認證的產品與實驗室，產線高度自動化  
Products and Lab. certified by reputed safety certification organizations, and highly automated production lines
- 保護/半導體元件規格齊全，滿足客戶One Stop Shopping 需求，提供全面、專業之線路保護解決方案  
Complete specifications to meet customer's need – One Stop Shopping, provide comprehensive, professional power protection solutions

生產基地  
Production Base



Factory Area of ACPA Kun Shan

## 生產基地 Production Base



Production Lines of **Protection Components** at ACPA Kun Shan  
Specifications and production quantities of **Gas Discharge Tube** rank second in this industry

## 生產基地 Production Base



Production Lines of [Semiconductor Components](#) at ACPA Kun Shan  
Semiconductor Components officially entered mass production and shipment

## 生產基地 Production Base



Overall QC & QA Inspection at ACPA Kun Shan  
Impulse Current Test Lab. ([IEC 61643-311](#) / [UL 1449](#)) at ACPA Kun Shan

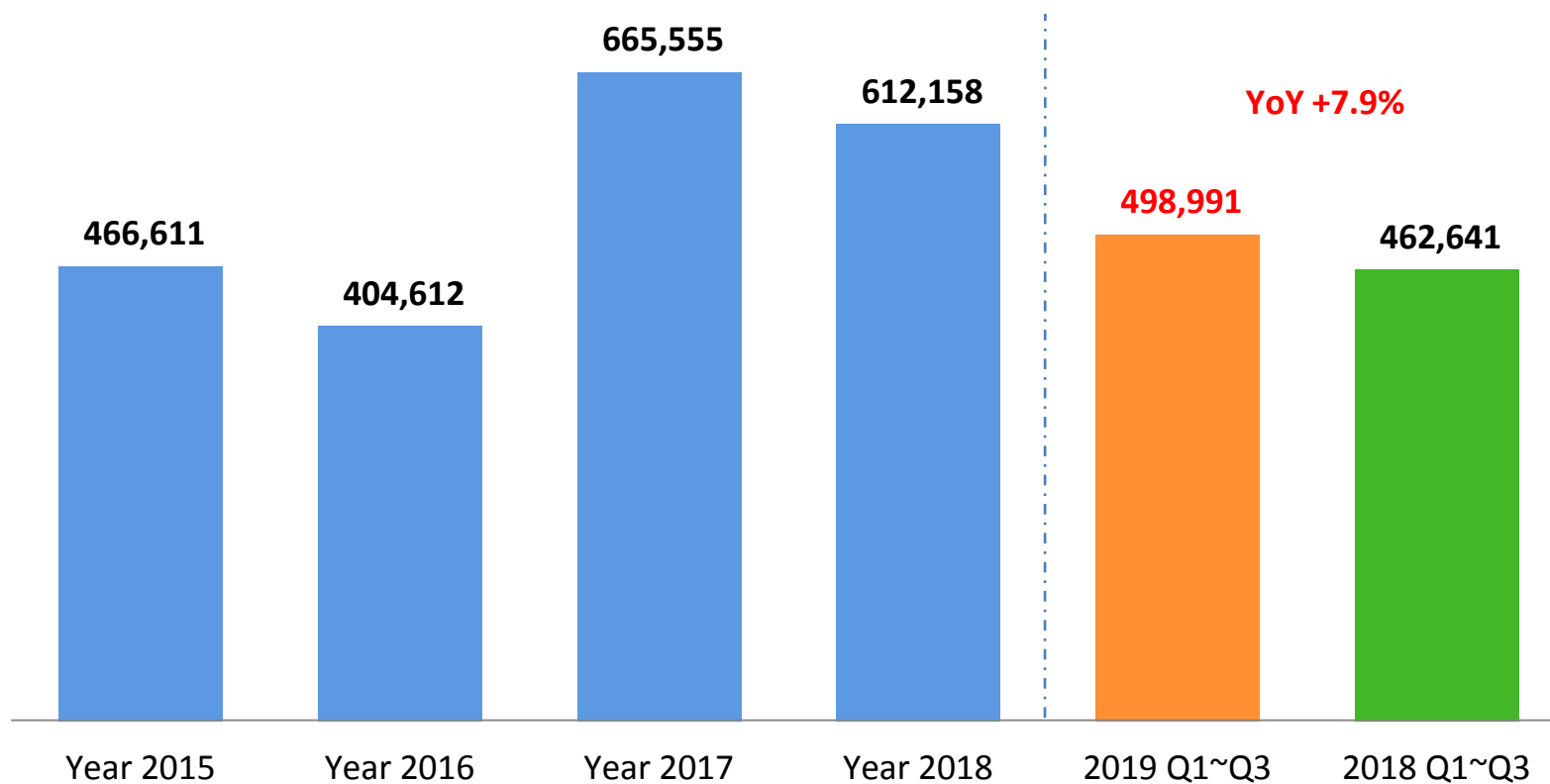
# 財務報告

## Financial Results



## 合併營業收入 Net Revenue

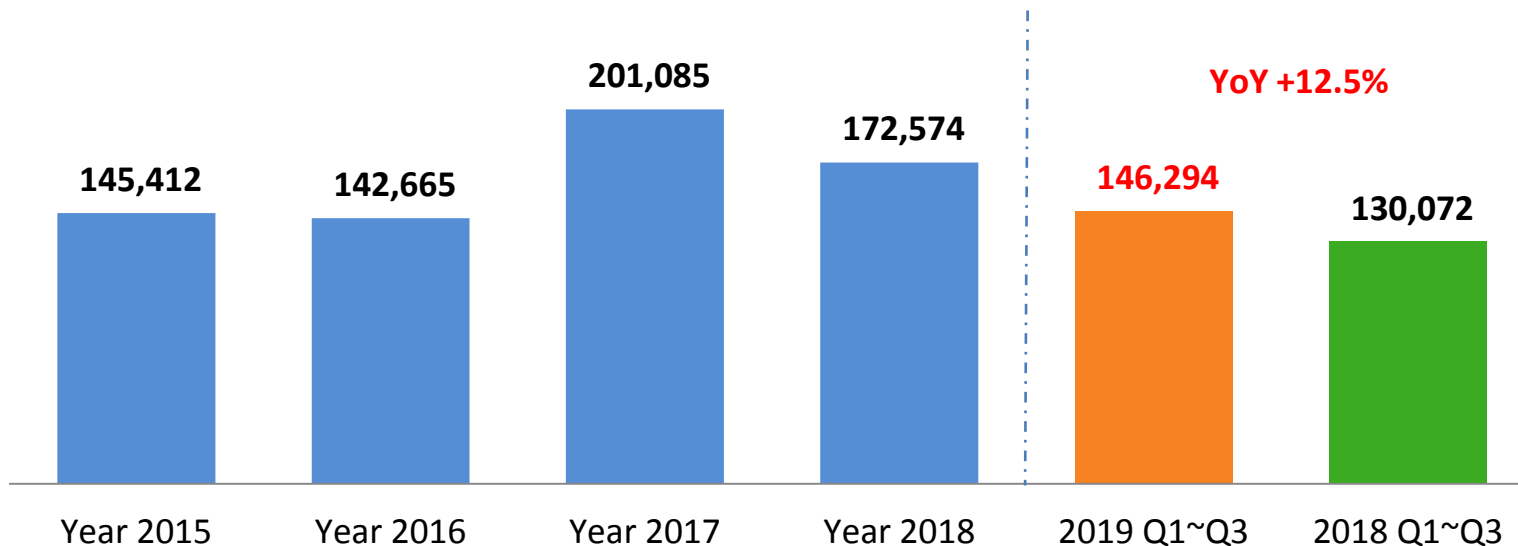
單位：新台幣仟元  
Unit in NT\$ thousand



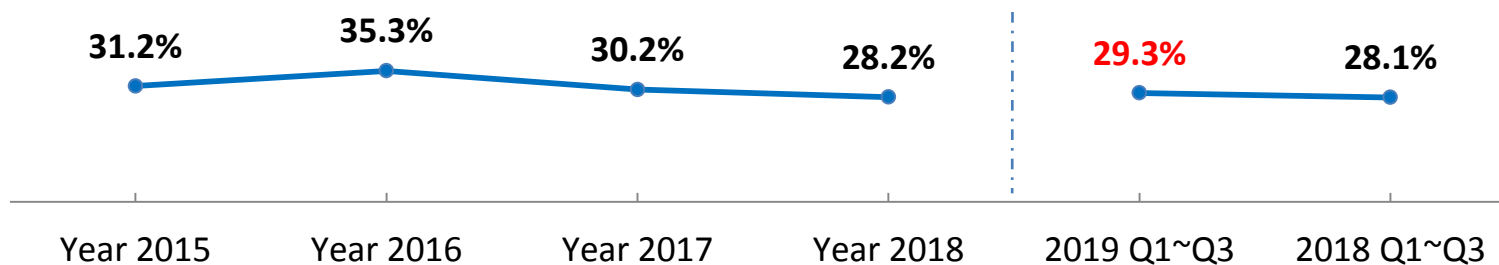


## 營業毛利 Gross Profit

單位：新台幣仟元  
Unit in NT\$ thousand

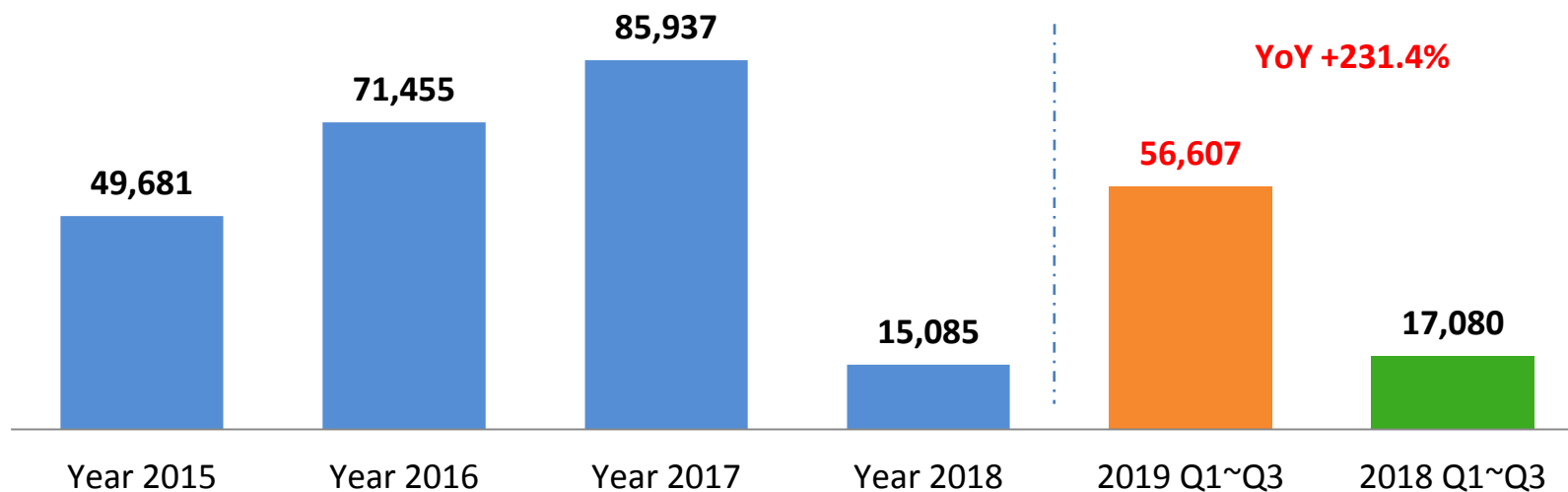


## 營業毛利率 Gross Profit Margin(%)

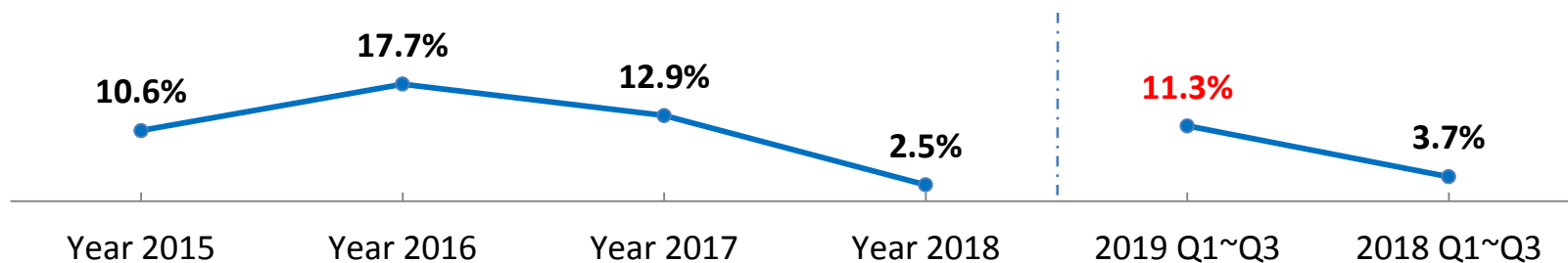


## 稅前淨利 Pre-Tax Income

單位：新台幣仟元  
Unit in NT\$ thousand

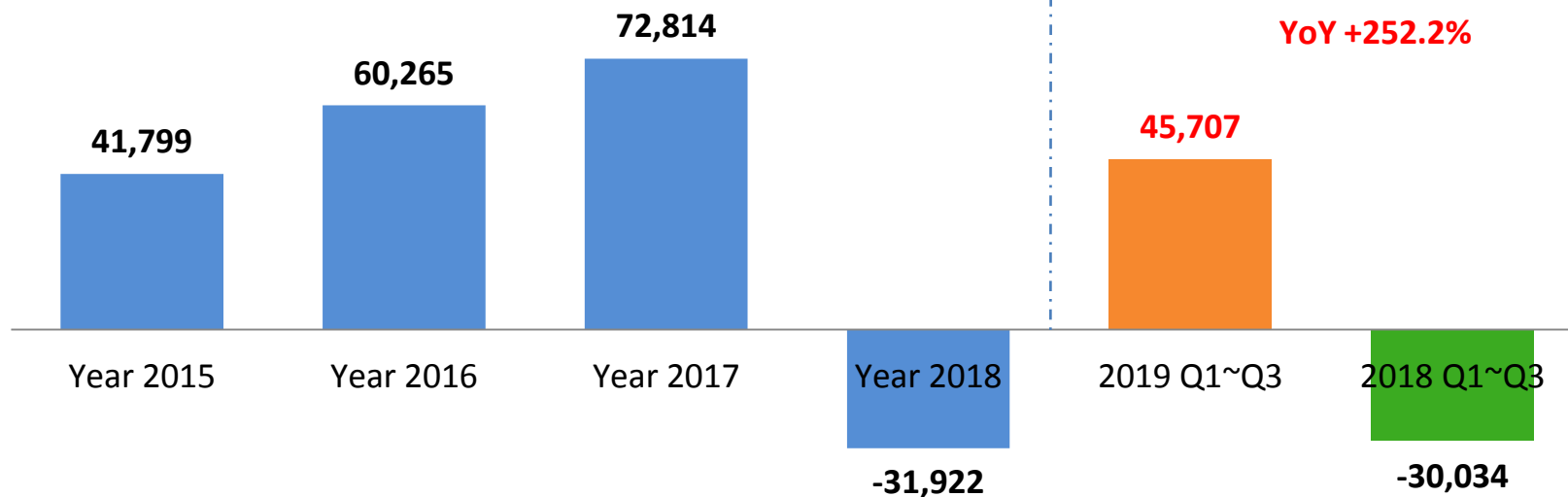


## 稅前淨利率 Pre-Tax Income Margin(%)

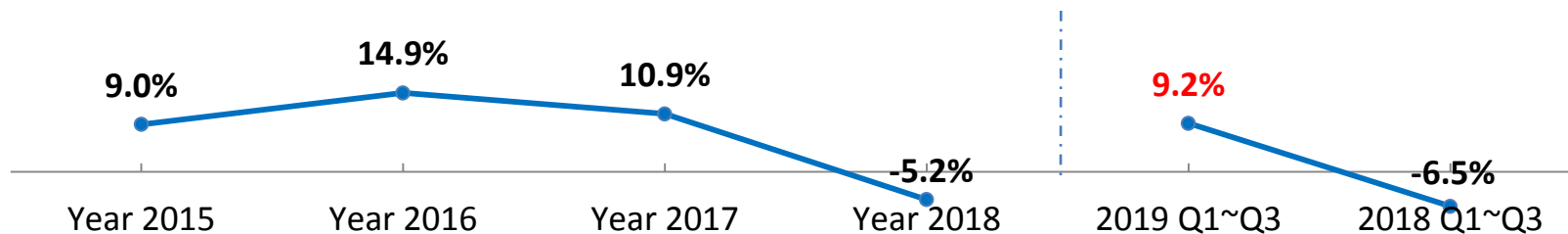


## 稅後淨利 Net Income

單位：新台幣仟元  
Unit in NT\$ thousand



## 稅後淨利率 Net Income Margin(%)



註：因2018年營所稅率由17%調整為20%，補提遞延所得稅費用增加NT\$43,742仟元。

Note: the corporate income tax rate was adjusted from 17% to 20% effective in 2018, so deferred tax expense to be recognized in loss is NT\$ 43,742 thousand.

## 合併資產負債表 Consolidated Balance Sheet

單位：新台幣仟元 Unit in NT\$ thousand	2015.12.31		2016.12.31		2017.12.31		2018.12.31		2019.09.30	
現金及有價金融商品投資 Cash & Marketable Securities	918,864	55%	885,488	54%	838,319	45%	771,238	42%	778,257	41%
應收帳款 Accounts Receivable	78,833	4%	68,586	4%	194,288	10%	168,040	9%	200,384	10%
存貨 Inventories	95,727	6%	86,913	6%	121,618	7%	144,754	8%	168,227	9%
不動產、廠房及設備 Property, Plant and Equipment	212,789	13%	196,800	12%	321,678	17%	306,646	17%	296,278	15%
其他資產 Other Assets	368,786	22%	388,217	24%	396,592	21%	439,096	24%	478,964	25%
<b>資產總計 Total Assets</b>	<b>1,674,999</b>	<b>100%</b>	<b>1,626,004</b>	<b>100%</b>	<b>1,872,495</b>	<b>100%</b>	<b>1,829,774</b>	<b>100%</b>	<b>1,922,110</b>	<b>100%</b>
流動負債 Current Liabilities	93,349	5%	85,877	5%	183,236	10%	152,856	8%	161,887	8%
非流動負債 Non-Current Liabilities	244,589	15%	244,843	15%	265,455	14%	311,736	17%	320,105	17%
<b>負債總計 Total Liabilities</b>	<b>337,938</b>	<b>20%</b>	<b>330,720</b>	<b>20%</b>	<b>448,691</b>	<b>24%</b>	<b>464,592</b>	<b>25%</b>	<b>481,992</b>	<b>25%</b>
<b>權益總計 Total Equity</b>	<b>1,337,061</b>	<b>80%</b>	<b>1,295,284</b>	<b>80%</b>	<b>1,423,804</b>	<b>76%</b>	<b>1,365,182</b>	<b>75%</b>	<b>1,440,118</b>	<b>75%</b>

## 財務指標 Financial Indicators

	2015.12.31	2016.12.31	2017.12.31	2018.12.31	2019.09.30
負債比率 Debt Ratio(%)	20.2%	20.3%	24.0%	25.4%	25.1%
流動比率 Current Ratio(%)	1,437.3%	1,533.5%	823.1%	968.5%	978.8%
速動比率 Quick Ratio(%)	1,323.7%	1,420.6%	745.6%	865.2%	865.1%
資產報酬率 Return On Asset(%)	2.5%	3.7%	4.3%	-1.5%	3.3%
權益報酬率 Return On Equity(%)	3.1%	4.6%	5.8%	-2.3%	4.9%
每股淨值 Equity Per Share (NT\$)	12.76	12.20	12.49	11.97	12.73

The WORLD-CLASS

Professional Supplier Of Electronic Products

AHOKU



產品銷售

Products Marketing

MARKETING

NEW  
PRODUCT

NEW  
PRODUCT

## 主要產品

### Core Products



#### 電源裝置

##### Power Devices

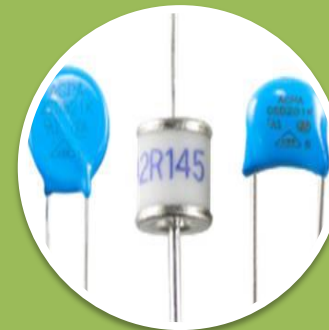
- Surge Protectors
- Smart Home Kit
- PDU (Rack Mount Power)
- Travel Adapter/Converter
- USB Charger



#### 數位影像產品

##### Digital Video Devices

- Advertisement Screen
- Touch Display of Arcade Games



#### 電子電路元件

##### Electronic Circuit Components

- Protection Components
- Semiconductor Components



## Surge Protectors



Foldable  
Power Strip



Single plug  
Surge Protectors



Patented US  
Shutter Design



Patented UFO



## 19" Rack PDU 電源分配器

### 0U-VERTICAL POWER DISTRIBUTION UNIT



Available Model: US 15 / 20A  
Outlet Number Available: 18/24/30

### 1U-19" POWER DISTRIBUTION UNIT

#### Plastic Housing



#### Metal Housing



Front



Rear



## PDU (Rack Mount Power)



## Smart Home Kit

### 智慧家庭監控設備

### Smart Home Monitoring Kit

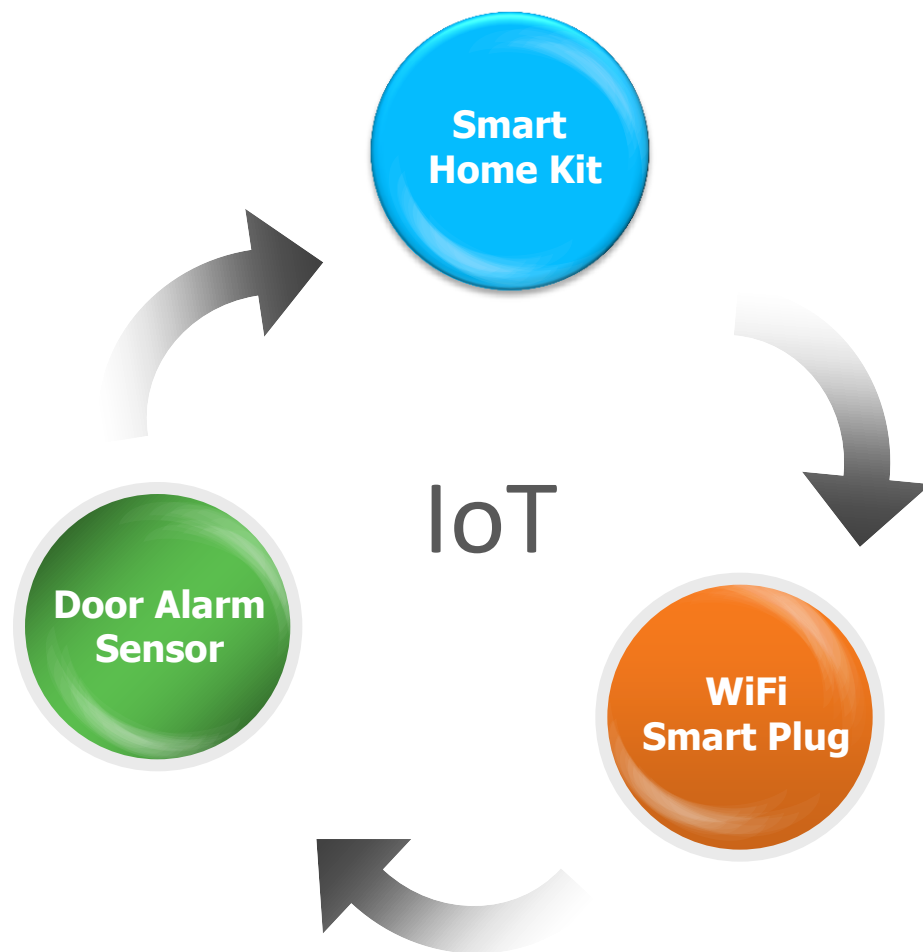
智能居家監控組  
Smart Home Kit



無線智慧插座  
WiFi Smart Plug



門鈴感應器  
Door Alarm Sensor



## 萬國旅行轉換器 Travel Adapter



### Travel Series



USA/China



Europe



Australia/New Zealand



United Kingdom

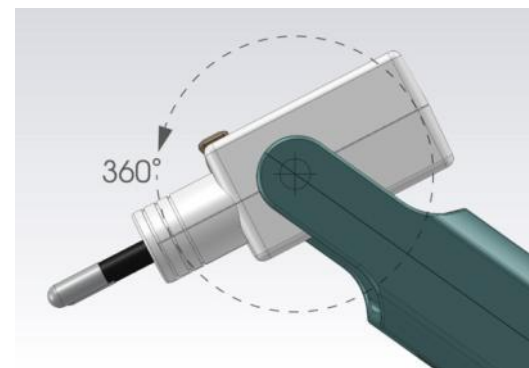
### Type C PD Travel Adapter USB-C PD旅行快充轉換器



- 30W  
USB PD
- QC  
3.0
- 2-USB
- 6A  
AC Rating
- Fuse
- safety  
shutter

18W/30W/45W  
USB-C PD/QC3.0  
快速充電，可支援  
最新行動充電設備  
並同時使用5~6款  
行動裝置。

### 360° SLIM 3-Outlet Travel Adapter 360° 超薄3孔旋轉旅行轉換器



## 萬國旅行變壓器 Travel Converter



- 三合一多功能整合:  
變壓器+轉換器+USB充電器
- 結合科技與時尚，旅行出差必備之  
全球通用插頭變壓轉換器
- 台灣設計、國際專利保護
- 適用全球190多個國家
- 符合電器安全規範測試

### Travel Series

#### 變壓器模式 Converter Mode:

電壓轉換 220V 轉 110V  
適用吹風機、捲髮器等電熱式產品



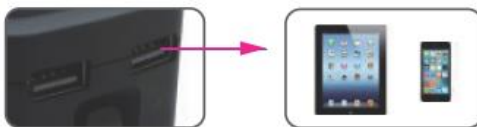
#### 轉換器模式 Adapter Mode:

適用寬電壓100V-240V 電器之旅行插  
頭轉換，應用手提電腦、數位相機等



#### 充電器模式 PD & USB Charger:

Type C PD & USB輸出，同時使用兩個  
行動裝置，提供18W PD/QC快速充電



EU

AU

UK

US



25W/1875W雙瓦旅行自動變壓器  
專利自動切換及USB-C PD快速充電



## Digital Video Devices

電子遊戲機台觸控顯示器  
Touch Display of Arcade Games



數位廣告機  
Advertisement Screen



Electronic Circuit  
Components

## 華格-保護元件

## ACPA –Protection Components



- 氣體放電管  
Gas Discharge Tube (GDT)
- 壓敏電阻  
Metal Oxide Varistor (MOV)
- 高分子正溫度係數熱敏電阻  
Polymeric Positive Temperature Coefficient (PPTC)

## Electronic Circuit Components

### 華格-半導體元件

### ACPA - Semiconductor Components



- 瞬態電壓抑制二極體  
Transient Voltage Suppressors (TVS)
- 靜電保護器  
ESD Protector
- 穩壓二極體  
Zener Diode
- 肖特基整流二極體  
Schottky Barrier Rectifier
- 電晶體  
Transistor

### 保護/半導體元件應用：

通訊設備、通訊基地台、電源、消費電子、安全防護、智慧家居、汽車電子、  
再生能源、照明、醫療等。

### Protection/Semiconductor Components Applications:

Telecom Equipment、Telecom Base Station、Power Supply、Consumer Electronics、  
Security System、Smart Home、Automotive Electronics、Renewable Energy、  
Lighting、Medical Care etc.

## Market Channels

### B2B 銷售通路與平台

#### 1. 電源裝置

零售

批發

電子商城

網路

航空免稅

#### 2. 數位影像產品

系統商

遊戲機台商

#### 3. 電子電路元件

製造商

代理商

通路商





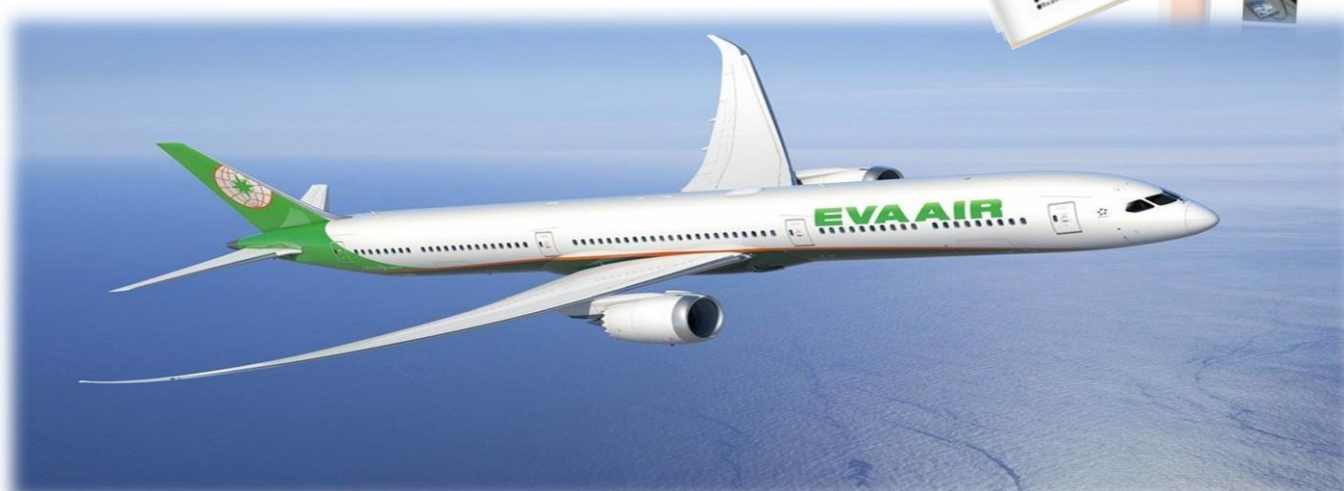
## Travel Series

航空公司機上免稅購物

Inflight duty-free shopping

銷售市場遍及全球主要航空公司

Sales market throughout the world's major airlines



## Travel Series



國際機場免稅店 上海、深圳、北京、香港、日本、新加坡、泰國等

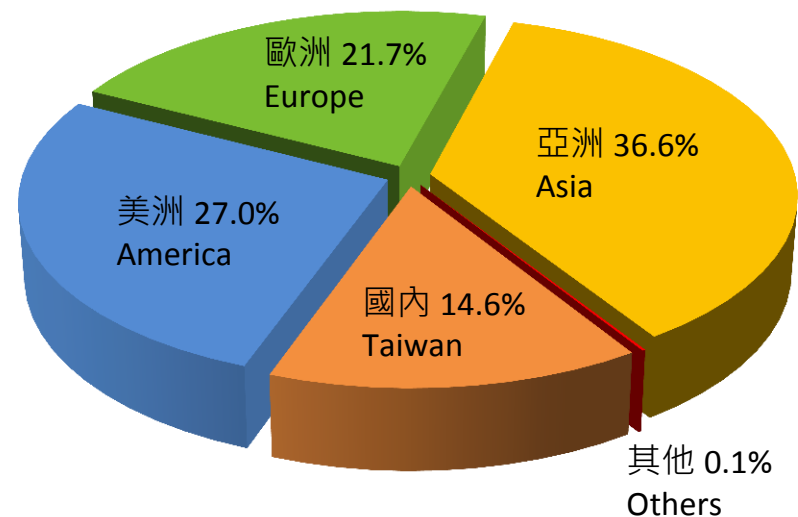
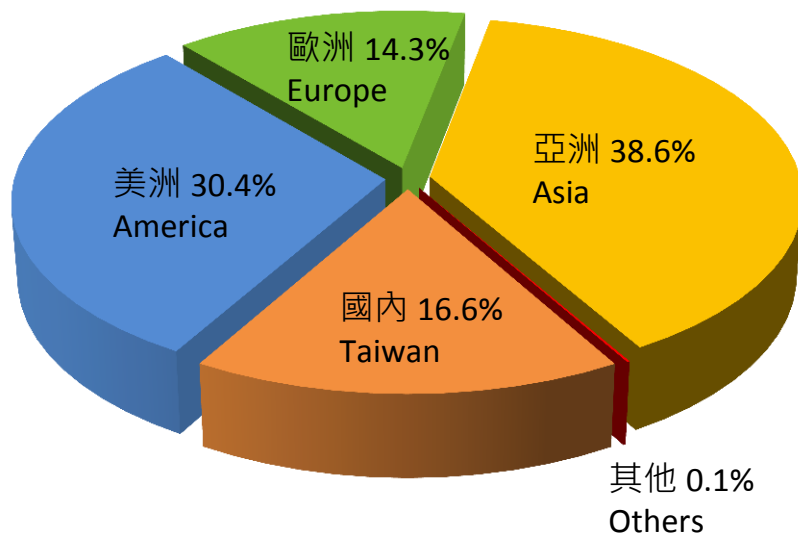
Duty Free Shops of international airport in Shanghai 、 Beijing 、 Hong Kong 、 Japan 、 Singapore 、 Thailand etc.



## 區域營收分析 Revenue by Regions

2019 Q1~Q3

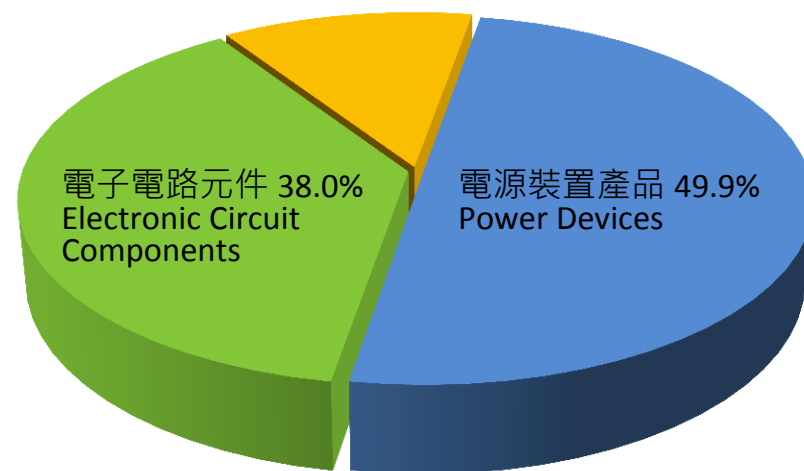
Year 2018



## 產品營收分析 Revenue by Products

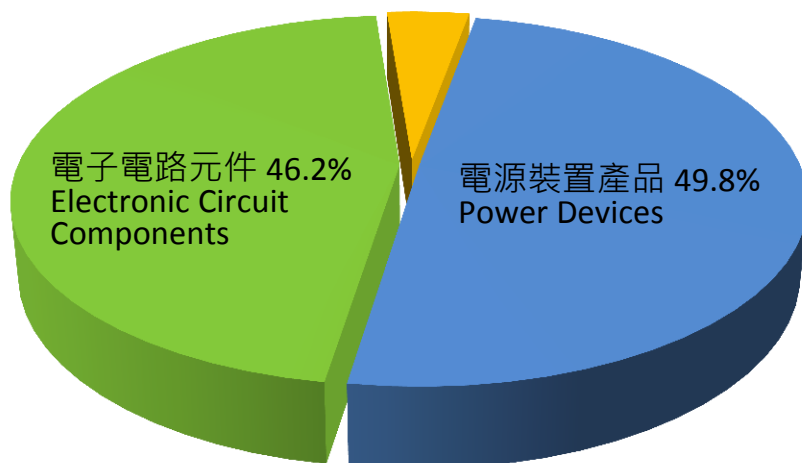
### 2019 Q1~Q3

數位影像產品 12.1%  
Digital Video Devices



### Year 2018

數位影像產品 4.0%  
Digital Video Devices



## 展覽會 Exhibition

### 國際電子展覽會 International Exhibition



Consumer  
Technology  
Association®

LAS VEGAS

JANUARY 08 - 11, 2019



**GITEX**  
TECHNOLOGY  
WEEK



HKTC  
**Hong Kong Electronics Fair**  
(Spring Edition)  
香港春季電子產品展  
13-16/4/2018  
Hong Kong Convention and Exhibition Centre  
香港會議展覽中心

## 展覽會 Exhibition



# 研發佈局

## R&D Roadmap



## 研發能力 R&D Capabilities

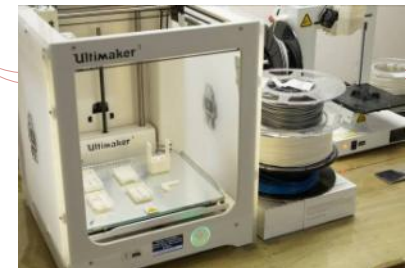


研發團隊具備以下人才  
以及六大核心技術：

R&D team possesses six  
core technologies:

- ME機構設計與專利技術  
Mechanical design and  
patented technology
- EE自主電路設計技術  
Electronic circuit design
- ID產品美學設計  
ID aesthetics design
- FW韌體驅動技術  
Firmware drive technology
- APP軟體開發應用技術  
APP development technology
- IoT智能系統整合技術  
IoT integration technology

我們能夠獨立及相互整合，因應各種開發需求，提供最佳設計服務及解決方案  
Extensive R&D capabilities, providing the best design services and solutions





## 成果獎項 Awards and Achievements



reddot award  
honourable mention



product design award



台灣精品  
TAIWAN EXCELLENCE



DiD Award  
(东莞杯) 国际工业设计大赛  
DiD Award (Dongguan Cup)  
International Industrial Design Competition



COMPUTEX TAIPEI  
BEST CHOICE



DONGGUAN CUP  
INTERNATIONAL  
INDUSTRIAL DESIGN AWARDS



## 專利證書 Patents

企業成長關鍵在於創新，專利就是創新的具體表現

Business growth lies in innovation, patents are the specific performance of innovation



## 安規實驗室 Safety Lab.

### TUV Witness Test Lab.



### TUV Certificate



全面性安規測試項目 Comprehensive safety test

USB /Type C/PD充電性能測試 USB/Type C/PD charging performance test

禁用有害物質檢測 Hazardous substance inspection

## 產品佈局 Products Roadmap

持續深耕核心Surge Protectors產品開發  
Continuously devoting to development of  
core surge protectors



## 產品佈局 Products Roadmap

擴大技術領先，維持全球旅用轉接器/充電器龍頭地位  
Expanding technology leadership to keep global leading position in Travel Adapter/Charger

擴展新產品深度與寬度

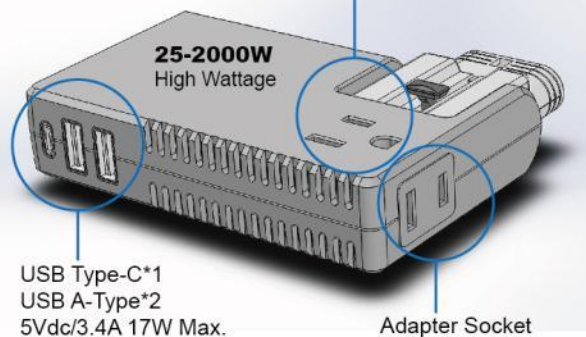
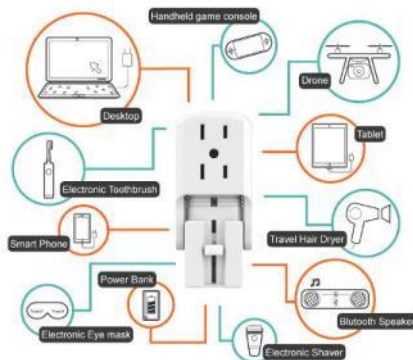
加強專利  
產品研發

創新設計  
領先市場



EEC-302

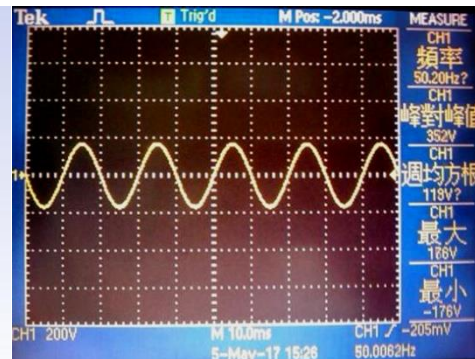
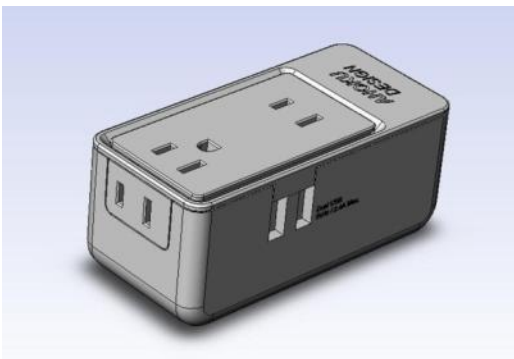
220-110Vac Converter Socket



## 產品佈局 Products Roadmap

領先同業關鍵技術，開發「電壓調節虛擬波形電路」以及「雙瓦自動切換」旅用變壓器，榮獲美國/大陸發明專利

Leading technology research, developing "Power Voltage Converter / Adapter combo", obtaining US, China invention patents



利用虛擬正弦波及雙瓦自動切換專利，  
可讓內部架構空間更小，創造更多的想法與功能

## 成功掌握開發電子遊戲機台觸控顯示器關鍵技術

Successfully master the key technologies for Touch Display of Arcade Games



## 電子遊戲機台觸控顯示器正式進入歐洲博弈市場

Touch Display of Arcade Games officially entered into the European gaming market

## 產品佈局

## Products Roadmap

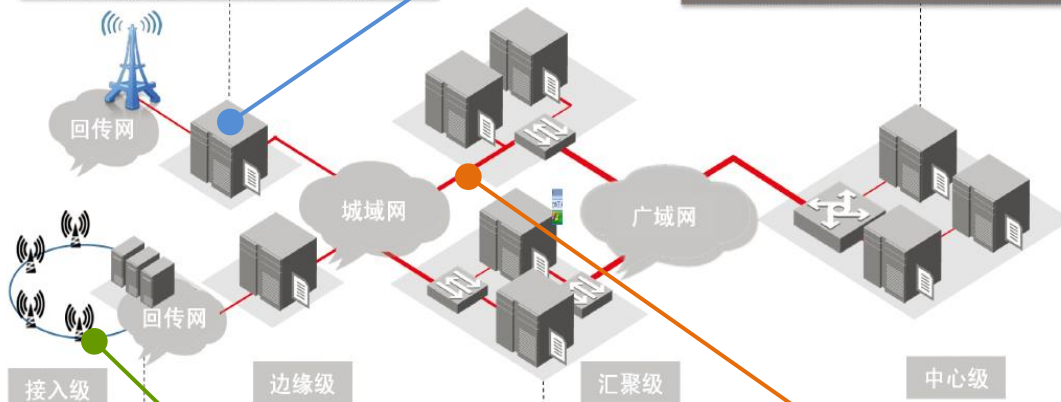
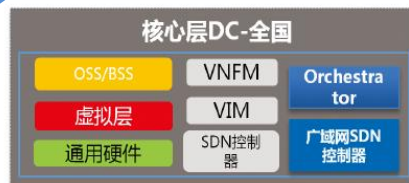


## 保護元件-5G 市場佈局

Protection components-future deployment of 5G market

## 產品佈局

Products Roadmap



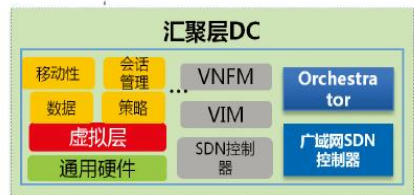
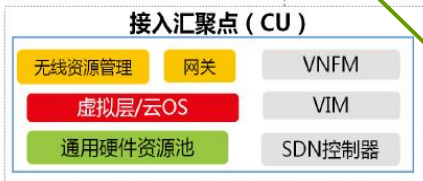
SPD防雷模組  
SPD lightning protection module



多間隙高能GDT  
Multi-gap high voltage GDT



高频GDT  
High frequency GDT





# 意見交流

## Q&A

