



umec

環隆科技股份有限公司

Universal Microelectronics Co., Ltd.

(股票代號：2413)

法人說明會



2017年11月22日

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公司簡介



- **INITIAL OPERATION :**
 - » January 1984
- **EMPLOYEES :**
 - » Taiwan — 650
 - » China — 4000
 - » Vietnam — 1000
- **CAPITAL :**
 - » US\$ 43,209,000
- **INITIAL PUBLIC OFFERINGS:**
 - » October 1998
- **ANNUAL SALES:**
 - » US\$ 130,616,100 (2016)
- **PLANT FLOOR AREA :**
 - » 32,100 m² ---- Taiwan HQ and Factory
 - » 72,200 m² ---- Shenzhen Factory
 - » 9,200 m² ---- Longyan Factory
 - » 7,200 m² ---- Meizhou Factory
 - » 13,000 m² ---- Hanoi Factory



Headquarters
Taichung Taiwan



Taichung Factory



Shenzhen Factory



Meizhou Factory



Hanoi Factory



Longyan Factory

• CERTIFICATIONS

» Taiwan Factory

- ISO 9001
- ISO 14001
- ISO/TS 16949
- ISO 13485
- TL 9000
- UL / TUV
- SONY GP
- MFi Manufacturing

» China Factory

- ISO 9001
- ISO 14001
- ISO/TS 16949
- UL / TUV
- QC 080000
- SONY SPP
- OHSAS 18001
- MFi Manufacturing

» Vietnam Factory

- ISO 9001
- UL / TUV
- ISO 14001
- MFi Manufacturing



2

產品應用與發展





Magnetic Component

- * RF transformer
- * Telecommunications
- * Power Transformer
- * Inductor Products
- * Custom Design
- Transformers/Inductors



Power Supply

- * DC/DC Converters
- * AC Open Frame
- * Power Adapter
- * Hot-swappable
- Redundant Power
- Supply



Information & Communication

- DMS/ EMS
- * Marin & GPS Products
- * Automotive Electronics
- * GPS Tracker
- * Wearable Devices
- * BLE related Consumer
- Products



LCM Industrial Control Product

- * 3.5 inch ~ 19inch
- * COG, POG
- * Lamination, OCR
- * Film on Sensor Glass
- * LCM assembly



OPTICAL COMMUNICATION

- Ultra High Speed AOC
- (SiOB Technology) : HDMI, DVI, USB, USB3.0, SFP+, QSFP+
- * Passive Components:
- CWDM/ DWDM
- Fused Biconical Taper

RF Baluns/Transformers



SMD Transformer



Common Mode Choke



SMD Inductor



ISDN S/U-interface Transformers



Data Coupling Transformers



Common Mode Chock for ADSL/VDSL



Transformer for Power Applications



XDSL Transformers/POTS Inductors



Transformer & Inductor by Ringing Core Design



Inverter Transformer



Transformer



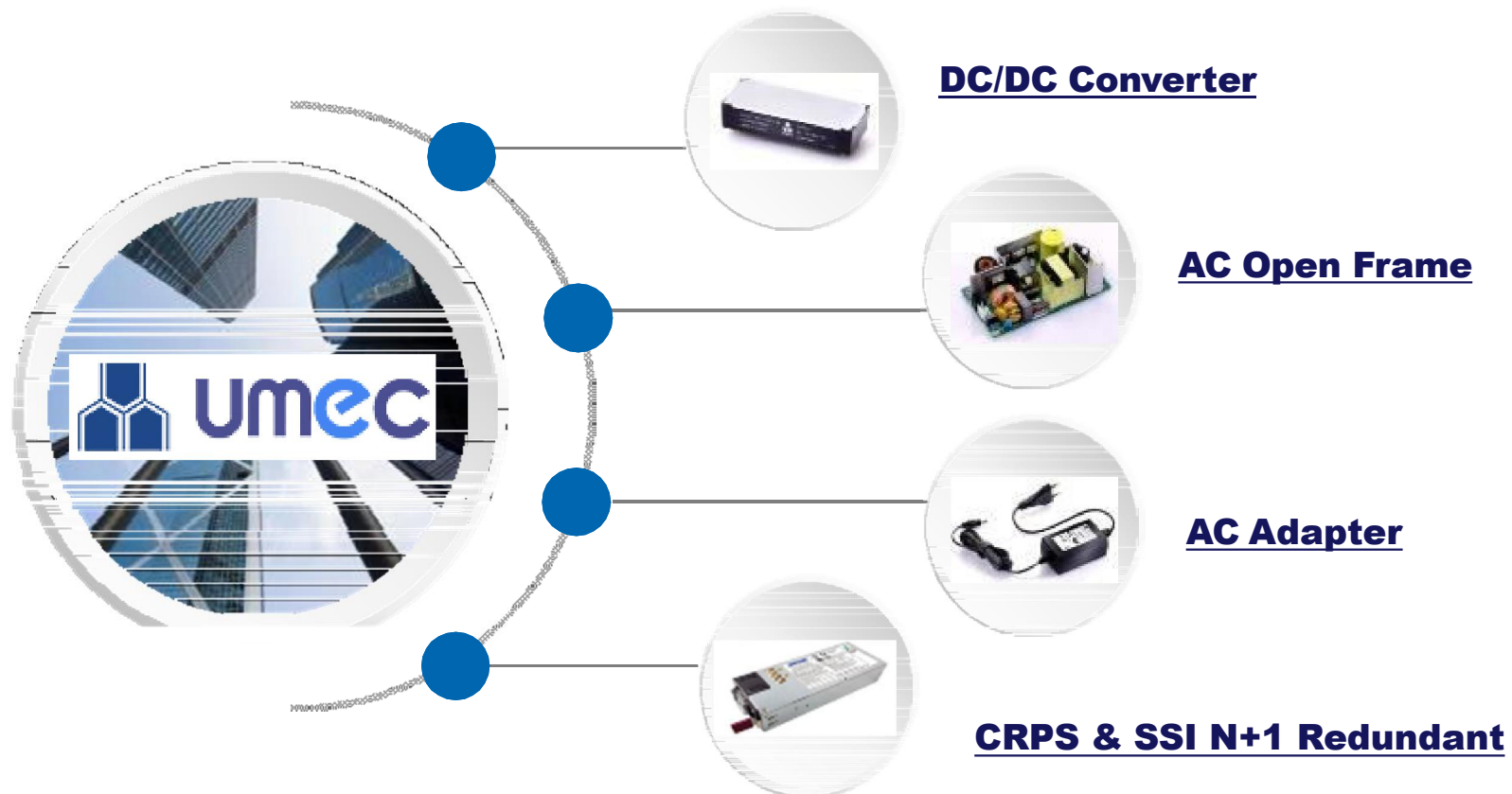
IC Manufacturer	Technical
ADI	HomePlug/VDSL2
Broadcom	ADSL/ADSL2+/VDSL2/ADSL2+/VDSL3/G.FAST HomePlug/VDSL/VDSL2
Broadcom(Gigle)	HomePlug
Ikanos(Globespan)	ADSL/ADSL2+/G.SHDSL/VDSL
Ikanos(Globespan,Conexant)	ADSL2+/G.SHDSL/VDSL/VDSL2
Lantiq	Power
Lantiq(Infineon)	ADSL/ADSL2+/MDSL/SDSL/VDSL/VDSL2
Level One	DDS
Marvell (DS2)	G.hn/HomePlug
MicroSemi (Zarlink, Legerity)	ADSL/ADSL2+/POTS
Mstar, Qualcomm(Atheros,Intellon), Silicon Labs	HomePlug
Realtek, Metanoia, Sckipio	G.FAST/VDSL2
Sigma Designs (CopperGate)	G.hn/HomePlug/HPNA3
Silicon Labs	VoIP (Power)
Texas Instruments, STM	ADSL
Teridian	Analog
Triductor, INTEL(Lantiq), Metanoia	VDSL2

- Total Capacity : 20kkpcs per month.
- Telecom Transformers/Inductors : 9kkpcs per month
(Ferrite EE5, EP7, EP10, EPX10, EP13, EPC13, RM4, RM5, RM6, TKH7---)
- LAN, ISDN, T1/E1, T3/E3 Transformers/Inductors : 3kkpcs/ per month
(Ferrite Ring core T2.5~T10 ----)
- Power Transformers/Inductors : 8kkpcs per month
(Ferrite EF16~EF32/11, EE40,-----)



UMEC Power Supply Business was started in 1984 from DC/DC converter. 直流電源轉換器

With global R&D Headquarter is established in Taichung, Taiwan, and Technology Design teams located in Taipei, Taiwan and Shenzhen, China, enable UMEC to work closely with customers for various products meeting specialized needs and market trend.



DC/DC Brick

Encapsulated 1/16, 1/8 Brick series are available from 50W to 250W.



For Telecom / Datacom & Industrial Control System



AC / DC Adapter

Wall Mount Adapters are available with power range from 6W to 120W.



For Datacom System



DC/DC Cu Case

Industrial DC/DC Module series are available from 15W to 60W.



For Telecom / Datacom & Industrial Control System



AC / DC Open Frame

I.T.E Power Supply are available with power range from 40W to 880W.



For Color Laser Printer, Multifunction Printer



DC/DC Multilayer Converter

Hi Density DC/DC Board Mount Modules are available 50W to 400W.



For Telecom / Datacom and Industrial Control System



Redundant(CRPS)

Redundant PoE Switch Application with range: 250W&550W available



For Networking System



DMS/ EMS電子製造服務

● Marine Products

- **GPS System**
- **Radar**
- **Fish Finder, Transducer**
- **Marine Chart Plotter**
- **Trolling Motor Control System**
- **Solid State Marine Radar**

● Automotive Products

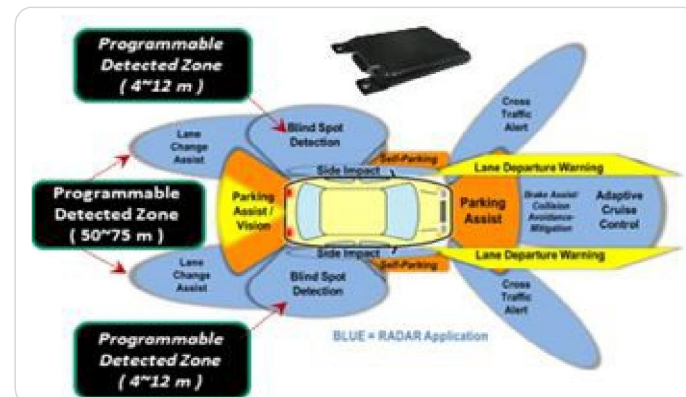
- Automotive 24GHz Radar
- Car Multimedia System
- Power Trunk Control Board
- GPS Tracker

● Consumer Products

- **Wearable Devices**
 - **BLE related Consumer Products**

- **Marine Radar**

- **Solid State Marine Radar**



Polarize on Glass



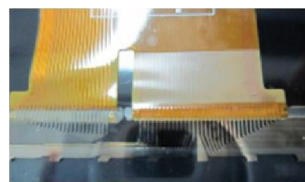
Film On Board



Chip On Glass



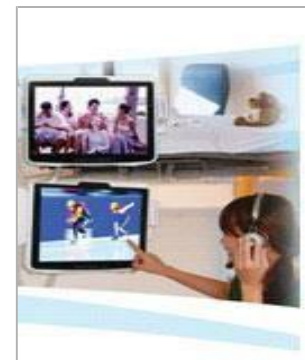
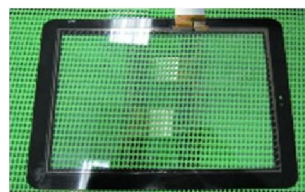
Film On Sensor Glass



FPC On Glass



Lamination(OCR)



主動光纜

Ultra High Speed AOC (SioB Technology) :
HDMI, DVI, USB, USB3.0, SFP+, QSFP+

- Current Capacity: 5,000pcs/month

Target Application:

- Medical Imaging Equipment
- Airplane On-board Video System
- TV Broadcast Station
- Conference Room Video System
- Traffic control
- Factory Automation Systems
- Digital Home Theatre
- LED signboards and panel information displays for Airports, Stadiums and Outdoor Advertising, Auditorium, and Kiosk.



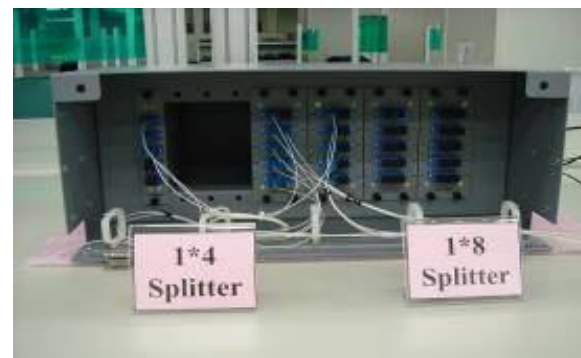
被動元件COMPONENTS

● Fused Biconical Taper (FBT)

- 1x2 Single Mode Fiber Couplers
- 1x2 Multimode Fiber Couplers
- 1x3/1x4 Single Fused Coupler
- 1310/1550, 980/1550, 1480/1550 WDMs
- Compact Size Products



10Ch LGX type



4RU Chassis for LGX type

● CWDM/DWDM

- 4 -10 Channels CWDM
- 100/200 GHz DWDM
- 980/1310/1480/1550 WDM
- 1310/1490/1550nm Filter WDM
- Hi isolation FWDM
- Compact-size CWDM (6.8mm)



Coupler/WDM



Filter WDM



8CH Compact CWDM
55 × 30 × 6.5mm



3

市場佈局



Your Solution Provider
Your Partner
UMEC



4

營運展望



環隆科技創立以來公司對產品的創新一直勇往直前，從不鬆懈。如雲端數據中心伺服器所使用的千瓦級的大電源供應器已被多家名廠所認證及採購。多種軌道車及電動車的電源轉換器及充電器等正在市場上順利推展。

●具電廠功能之太陽光電變流器開發計畫

本計畫預計以三相100KW之模組為基底，並可以模組化並聯的方式向上延伸至1MW，使產品更具擴充彈性以提供各種使用者系統的需求。



本公司研發多年的小型海用雷達技術已成功轉為汽車防撞雷達，並將未來的無人駕駛車的雷達導航作為本公司下一個研發目標。各類穿戴式娛樂/健康隨身用品之委託設計及代工生產，都有不錯進展及成績。

車用產品



巴士 影音多媒體系統



四合一雷達
(SRR-01)



鐵路車輛 電源供應

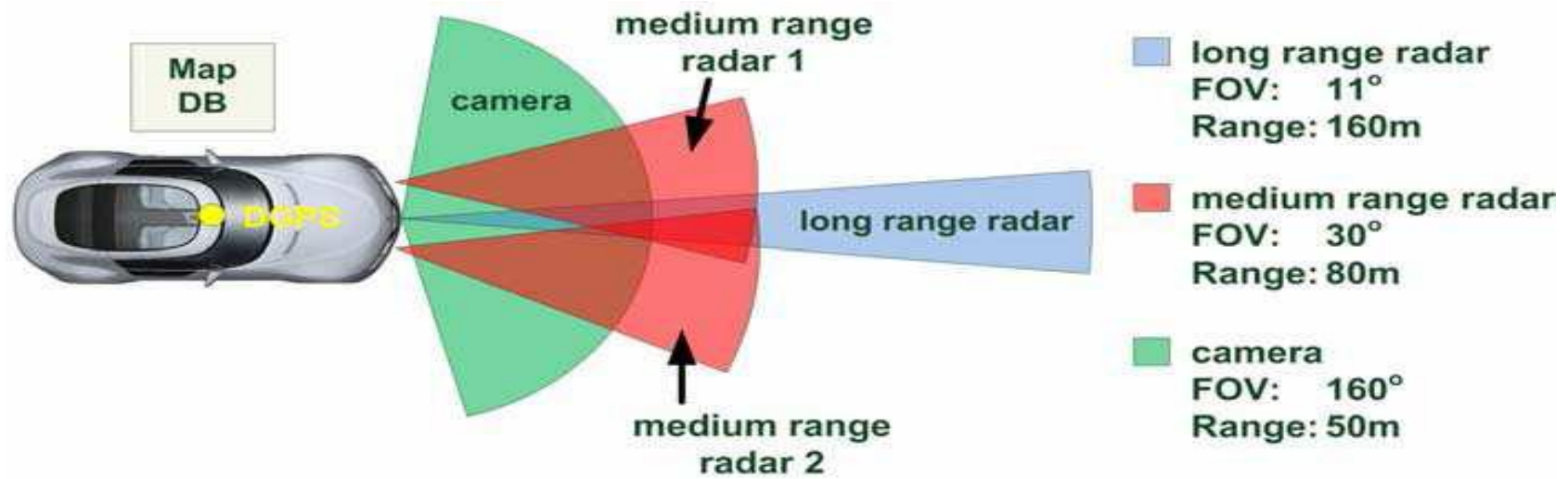


聲音, 影像, 導航 應用



變壓器

FCW 雷達示意圖



利用40G、100G光收發模組所製成的主動光纜(AOC)，目前大量使用於大型雲端數據中心。本公司的主動光纜(AOC)已被日本GE應用於醫療設備磁核共振機(MRI)，去年起更推薦給其他歐美的GE公司使用。

在綠能相關產業，如太陽能電廠併網所需的變流器。LED室內燈及路燈以及太陽能路燈等都是目前積極向市場進軍的新產品。另外，在太陽能廠的規劃設計，建設安裝工程及維修管理等也是我們準備提供的新服務。



Thanks for Your Attention!