



台灣光電暨化合物半導體產業協會  
Taiwan Optoelectronic Semiconductor Industry Association

會員手冊  
Member Handbook

台灣光電暨化合物半導體產業協會

Taiwan Optoelectronic Semiconductor Industry Association (TOSIA)

地址 : 新竹縣竹東鎮中興路4段195號78館205-9室  
Address : Rm. 205-9, Bldg 78., No.195, Sec. 4, Chung Hsing Rd., Chutung, Hsinchu, 310, Taiwan R.O.C.  
電話(TEL) : 03-5918301  
傳真(FAX) : 03-5833986  
信箱(E-mail) : [tosia@itri.org.tw](mailto:tosia@itri.org.tw)  
網址(Website) : <http://www.tosia.org.tw/>

2023

# 目錄 | Contents

台灣光電暨化合物半導體產業協會	TAIWAN OPTOELECTRONIC SEMICONDUCTOR INDUSTRY ASSOCIATION .....	02
一詮精密工業股份有限公司	I-CHIUN PRECISION INDUSTRY CO.,LTD .....	04
三得電子股份有限公司	Sander Electronics Headquarters .....	06
千才科技股份有限公司	Leverage Technology Inc.....	08
工業技術研究院 量測中心	Industrial Technology Research Institute CALIBRATION AND MEASUREMENT CAPABILITIES .....	10
工業技術研究院 電子與光電系統所	Industrial Technology Research Institute Electronic and optoelectronic system research laboratories...	12
今台電子股份有限公司	KINGBRIGHT ELECTRONICS CO.,LTD .....	14
台達電子工業股份有限公司	DELTA ELECTRONICS,INC.....	16
台灣凱瑞光學有限公司	Trioptics Taiwan .....	18
立碁電子工業股份有限公司	Ligitek Electronics Co.,Ltd.....	20
光鼎電子股份有限公司	PARA LIGHT ELECTRONICS CO.,LTD.....	22
光鋇科技股份有限公司	EPILEDS TECHNOLOGIES,INC. ....	24
光寶科技股份有限公司	LITEON TECHNOLOGY CORP .....	26
宏齊科技股份有限公司	HARVATEK CORPORATION .....	28
佰鴻工業股份有限公司	BRIGHT LED ELECTRONICS CORP.....	30
和欣光通股份有限公司	LRU TECHNOLOGY INC. ....	32
欣偉科技股份有限公司	SINGWAY Technology .....	34
長洛國際股份有限公司	CHAIN-LOGIC INTERNATIONAL CORP.....	36
香港商先進太平洋股份有限公司 台灣分公司	ASMPT Technology Limited Taiwan Branch .....	38
惠特科技股份有限公司	Fit Tech, CO., LTD .....	40
晶元光電股份有限公司	EPISTAR CORPORATION.....	42
華興電子工業股份有限公司	LEDTECH ELECTRONICS CORP.....	44
閱康科技股份有限公司	Materials Analysis Technology Inc.....	46
鼎元光電科技股份有限公司	TYNTEK CORP.....	48
億光電子工業股份有限公司	EVERLIGHT ELECTRONICS CO.,LTD .....	50
銻創顯示科技股份有限公司	PlayNitride Display Co., Ltd.....	52
德國感測器協會 (AMA)	AMA ASSOCIATION FOR SENSORS AND MEASUREMENT .....	54

# TOSIA 台灣光電暨化合物半導體產業協會

Taiwan Optoelectronic Semiconductor Industry Association

# TOSIA Taiwan Optoelectronic Semiconductor Industry Association

台灣光電暨化合物半導體產業協會

## 公司簡介

台灣光電暨化合物半導體產業協會 (簡稱 TOSIA) 成立於民國九十六年，以匯聚國內光電半導體產業發展共識，促成會員間之策略合作，促進產業繁榮進步為宗旨。這十幾年間台灣已在 LED 產業奠定全球前三大供應鏈的國際地位，近幾年產業逐漸轉型擴展到高频高壓應用領域。為帶動產業接軌化合物半導體全球市場趨勢，TOSIA 於 2021 年 2 月由「台灣光電半導體產業協會」更名為「台灣光電暨化合物半導體產業協會」，藉以宣示將凝聚產業共識提昇我國光電及化合物半導體技術水準，接軌化合物半導體全球市場的願景。



## 會員

TOSIA 會員包含國內光電、半導體、照明、感測領域，以及德國感測器協會，共計 25 家團體會員。在化合物半導體、人工智慧物聯網、智慧城市等議題驅動 LED 產業再度升級轉型，TOSIA 將持續結合國內產官學研力量，共同帶領會員為台灣光電及化合物半導體產業發展而努力。

## 亮點介紹

TOSIA 為增進台灣光電暨化合物半導體產業間交流以及促進學術研究朝實務應用化，創設「TOSIA AWARD」及「TOSIA 科技論文獎」，及發布「光電暨化合物半導體產業白皮書」，協助產業加速創新發展腳步、提供產業創新人才，並持續向政府提出具體建議與產業發展對策。

### 一、TOSIA AWARD

- 引領產業創新發展，透過公開表揚產業卓越人士、產品、技術，鼓舞產業創新活力之榮譽獎章
- 產業貢獻獎為表揚長期對國內外光電暨化合物半導體產業發展、開拓或推展有卓越貢獻之優秀人士
- 遴選傑出產品獎、創新技術獎，使該光電暨化合物半導體產業發展交流更為頻繁，提升國際競爭力

### 二、TOSIA 科技論文獎

- 促進產業學合作、研究實務應用、持續推展相關領域之研究投入及創新
- 與國家科學及技術委員會工程處光電工程學門共同合作
- 探討 LED 光電技術、微型 LED、半導體雷射、光電感測器及新興化合物半導體技術等項目之創新研究

### 三、光電暨化合物半導體產業白皮書

- 分析 LED 光電與 MicroLED 產業國際趨勢，向政府提出發展建言，協助打造產業永續經營環境
- 深入探討化合物半導體產業現況、應用市場與全球供應鏈
- 提供淨零碳排建言與對策，協助會員公司循序漸進落實碳排
- 以「光領台灣」為目標，帶領國內 LED 光電與化合物半導體產業站穩世界舞台



TOSIA AWARD 頒獎典禮合照



科技論文獎頒獎典禮合照



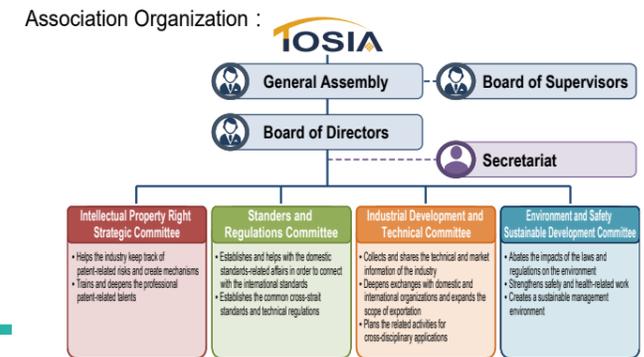
TOSIA 產業白皮書發布記者會合影

## 連絡資訊

- ◆ 公司官網：http://www.tosia.org.tw/
- ◆ Email：tosia@itri.org.tw
- ◆ 電話：+886-3-5918301；+886-3-5917466
- ◆ 傳真：+886-3-5833986

## Company Profile

Taiwan Optoelectronic Semiconductor Industry Association (TOSIA) was founded in March 2007 aims to agglomerate domestic consensus on the development of the optoelectronic and compound semiconductor industry, to promote strategic collaboration among its members, and to advance and bring prosperity to the industry. Meanwhile, it joins efforts with various major associations and industrial organizations, and the Industrial Technology Research Institute to develop an industrial development platform in order to provide effective technical and professional services, and to boost the overall competitive advantages of the optoelectronic and compound semiconductor industry in Taiwan.



## Member

TOSIA has 25 members, including Optoelectronics、Lighting and Sensor filed in Taiwan. Regarding to issues such as the compound semiconductor、AIoT and Smart City have driven the LED industry to upgrade and transform again, TOSIA will continue combining the efforts of the industry, government, academia and research institutes to help Taiwan optoelectronics and compound semiconductor industry move toward further diversified and limelight new milestone with smart innovation.

## Major Event

To enhance communication within Taiwan's optoelectronic and compound semiconductor industry and promote the practical application of academic research, TOSIA has established the "TOSIA Award" and the "TOSIA Technology Paper Award. The "Optoelectronic and Compound Semiconductor Industry White Paper" has also released, assisting the industry in accelerating the pace of innovative development, nurturing innovative talents, and consistently presenting concrete recommendations and strategies to the government for industrial advancement.

### I. TOSIA AWARD:

- Lead industry innovation and development by publicly recognizing outstanding individuals, products, and technologies, inspiring the vitality of industry innovation through honorary awards.
- The Industry Contribution Award recognizes outstanding individuals who have made long-term exceptional contributions to the domestic and international optoelectronics and compound semiconductor industries through development, exploration, or promotion.
- Selection of Outstanding Product Award and Innovative Technology Award promotes more frequent industry development and communication in the optoelectronics and compound semiconductor sector, enhancing international competitiveness.

### II. TOSIA Technology Paper Award:

- Promote collaboration between industry and academia, practical application of research, and continuous advancement of research investment and innovation in related fields.
- Collaborate with the National Science and Technology Committee's Engineering Department in the field of optoelectronic engineering.
- Explore innovative research projects in areas such as LED optoelectronic technology, micro-LEDs, semiconductor lasers, optoelectronic sensors, and emerging compound semiconductor technologies.

### III. Optoelectronics and Compound Semiconductor Industry White Paper:

- Analyze international trends in the LED optoelectronics and MicroLED industries, provide development recommendations to the government, and assist in creating a sustainable business environment for the industry.
- In-depth investigation into the current status of the compound semiconductor industry, application markets, and global supply chains.
- Provide recommendations and strategies for achieving net-zero carbon emissions, helping member companies gradually implement carbon reduction.
- It aims to lead Taiwan's LED optoelectronics and compound semiconductor industry to firmly establish its position on the world stage.

## Contact Information

- ◆ Comp. Web：http://www.tosia.org.tw/
- ◆ Email：tosia@itri.org.tw
- ◆ TEL：+886-3-5918301;+886-3-5917466
- ◆ FAX：+886-3-5833986



# 一詮精密工業股份有限公司

I-CHIUN PRECISION INDUSTRY CO., LTD



# I-CHIUN PRECISION INDUSTRY CO., LTD

一詮精密工業股份有限公司

## 公司簡介

一詮創立於 1977 年，主要產品有光電導線架、微電機、各式小型馬達及 3C 產業的主要部品。近年來，一詮為配合全球產業生產重心轉移到大陸的趨勢，以及就近服務客戶的需求，積極展開在大陸投資設廠的工作，目前已於深圳、昆山、江門設廠，建立了更迅捷完善的服務網。

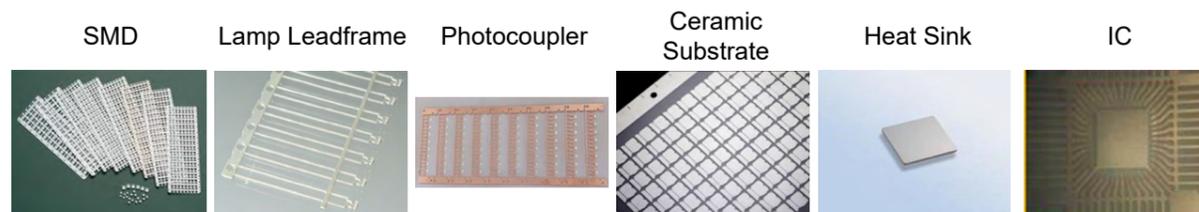
全球員工已達 3000 餘名，以世界性 3C 製造業，全球化前瞻性公司自許。目前一詮光電產業 LED 可見光及不可見光導線架的全球市佔率已經排名世界第一。為了挑戰精度與產能極限，不斷的投入研發，

培植技術能力，開創新產品。更為了開拓國際市場，積極培養人才，禮聘專業經理人建立具有國際觀的經營團隊，奠定永續經營的基礎。

一詮創立至今已經擁有核心智財權超過 50 項以上，分布於手機震動馬達、3C 關鍵部品以及 LED 光電產業導線架等。在無線通訊與電子產業日新月異的今天，企業經營不容絲毫懈怠，一詮集團秉持四十年來創業與立業的精神，繼續朝高科技的領域發展，引進最新技術挑戰未來，以期為客戶與公司創造雙贏的契機。

## 主要產品

主要產品



## 連絡資訊

- ◆ 台北營業處：陳志勇 協理
- ◆ 產品企劃：李廷璽 經理
- ◆ 總公司地址：24890 新北市新莊區五工五路 17 號
- ◆ 公司電話：+886-2-22990001
- ◆ 公司傳真：+886-2-22990089
- ◆ 聯絡信箱：webmaster@i-chiun.com.tw

## Company Profile

I-Chiun was established in 1977 as a manufacturer of optoelectronic lead frames, miniature electrical products, small motors and 3C products. In recent years, I-Chiun shifted its manufacturing base to China and invested in production plants in China to serve customers in the area. I-Chiun successively built plants in Shenzhen, Kunshan, Jiangmen and established a responsive and complete service network.

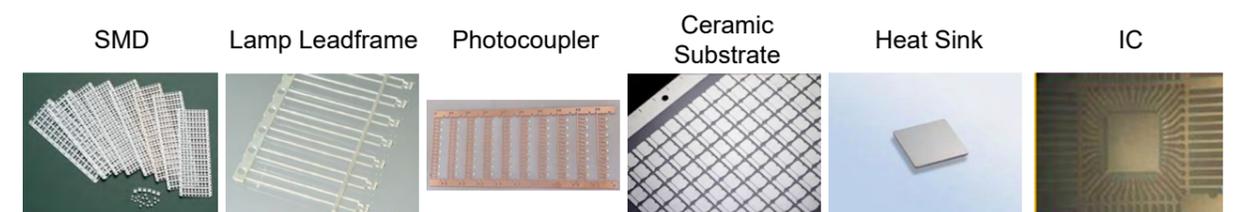
I-Chiun is a global company with over 3,000 employees worldwide that aims to become an advanced world-class 3C manufacturer. Currently, I-Chiun's optoelectronic LED and visible/invisible light lead frames have been ranked number one in terms of global market share. To improve precision and production capacity, I-Chiun has continuously invested in research and development, enhanced its technology and developed new products. As we enter

international markets, we work to cultivate top-quality human resources and recruit professional managers to form a team with an international point of view to build a foundation for sustainable development.

Since its establishment, I-Chiun has become the proud owner of over 50 items of intellectual property in the areas of mobile phone vibration motors, 3C key components, and LED optoelectronic lead frames. In this era when technology for wireless communication and electronics is advancing daily, the operation of our business does not allow us to rest on our laurels. I-Chiun upholds the spirit of sustainable development. In the 40 years since our establishment, I-Chiun has continued to advance in the field of high-technology. I-Chiun aims to assimilate the newest technology and challenge the future to create win-win opportunities for our clients and the company.

## Products

Main Products



## Contact Information

- ◆ Sales representative : Chih Yung Chen
- ◆ Product Supervisor : Ted Lee
- ◆ Company Address : No.17, Wugong 5th Rd, Xinzhuang Dist., New Taipei City 24890, Taiwan R.O.C
- ◆ Company TEL : +886-2-22990001
- ◆ Company FAX : +886-2-22990089
- ◆ Contact Us:mail : webmaster@i-chiun.com.tw



# 三得電子股份有限公司

Sander Electronics Co. Ltd



# Sander Electronics Co. Ltd

三得電子股份有限公司

## 公司簡介

三得電子股份有限公司創立於西元 1989 年，是創辦人黃茂雄先生累積三十餘年 LED 之專業製造經驗的成果。

三得電子本著「永續經營、基業長青」的理念，不斷地培育人才並引進自動化與最新科技的生產設備，在全體員工全心投入的研究、開發與創造之下，以服務導向的理念，與顧客秉持「共存」、「共榮」的夥伴相關，成就了目前的三得電子的經營成績；現今 LED 產品廣泛應用於科技與生活，三得電子以穩定現有市場與顧客為基礎，放眼全球市場，展現對技術實力的信心與擴大經營版圖的企圖心。

三得電子將持續提升 LED 的附加價值與實用性，不斷為客戶創造商機，是穩定中求成長的重要元素。我們將從 LED 原料之配方、各項工序，產品開發到成品一貫作業方式，秉持著「品質創造信譽；信譽創造品質」的信念，提供市場更多元化商品的需求，這不但是三得電子經營的理念與願景，亦是全體員工追求的願景與目標。

目前公司營運據點：

台灣 (台北、台南、宜蘭)、馬來西亞、日本辦公室、美國辦公室，公司的業務版圖將不斷的擴增當中。

## 主要商品 / 服務項目

1. 各式發光二極體 (LED) 包含交通用紅外線產品
2. 室內，戶外看板專用 LED 模組，看板
3. 特殊光源模組開發
4. 車用之 LED 設計
5. LED 照明產品開發設計
6. OEM、ODM 產品服務

## 連絡資訊

- ◆ 電話：02-28951361
- ◆ 傳真：02-28960980
- ◆ Email：jerry@sander.com
- ◆ 地址：112 台北市北投區立功街 153 號 3 樓

## Company Profile

Through the tireless efforts of the founder, Mr. Huang Maoxiong, since 1989, Sander Electronics Co Ltd has now more than 30 years of professional experience in LED manufacturing.

Based on the concept of "sustainable management and long-lasting business", Sander continues to cultivate talents and introduces automation and the latest technology production equipment.

Sander Electronics' business performance today is achieved under the dedicated research, development, and creation of all employees with a service-oriented concept, and also customers who adhere to the principles of "coexistence" and "common prosperity".

Nowadays, LED products are widely used in technology and life. Sander Electronics not only maintains stable relationships, with customers as foundation, but Sander Electronics is also

demonstrating confidence in its technological strength and ambition to expand its business scope in the global market.

Sander Electronics will continue to enhance the added value and practicality of LEDs in its operation and manufacturing methods: from LED raw materials, various processes, product development to finished products, upholding the belief of "quality creates credibility; credibility creates quality", to provide the market with more diversified product needs.

This is not only the business philosophy and vision of Sander Electronics, but also the vision and goal pursued by all its employees.

### Locations:

Taiwan (Taipei, Tainan, Yilan), Malaysia, Japanese office, American office, the company's business map will continue to expand.

## Main Products

LED module, VMS, Message boards, Price boards, LED components, LED solutions, LED lighting, LED bus sign LED signs, LED diodes, LED lights, LED display, LED headlight LED DRL, LED automotive lighting, Power supply, cluster.

## Contact Information

- ◆ TEL : 02-28951361
- ◆ Fax : 02-28960980
- ◆ Email : jerry@sander.com
- ◆ Address : 3rd Floor, No. 153, Ligong Street, Beitou District, Taipei City 112



# 千才科技股份有限公司

LIVERAGE TECHNOLOGY INC.



# LIVERAGE TECHNOLOGY INC.

千才科技股份有限公司

## 公司簡介

千才科技股份有限公司 (Liverage Technology Inc.) 配合國家策略性工業的發展，從事高科技光纖通訊主動元件及光電模組之專業設計以及製程及技術服務。Liverage 之研發策略為保持與世界潮流趨勢同步之最新產品技術的速度，並與被動元件 - 平面光路波導技術、光學微機電技術、新型半導體雷射及積體電路封裝製程技術等重要核心技術相互結合，延伸至產品全自動化量產技術，並導入全面品質保障流程，於短時間內提供國內光通訊廠商光電元件之專門設計服務，並及時開發完成原型機進入市場，供給國內相關廠商垂直整合及品質保障之專門設計以及專業技術服務之全面解決方案。

## 主要產品 / 服務

千才科技股份有限公司提供之生產光電模組系列產品及技術服務，主要商品或服務項目諸如：1. 半導體雷射光器件 155 Mbps ~ 2.5 Gbps TOSA 2. 光耦合器件 155 Mbps ~ 2.5 Gbps ROSA 3. 單纖三向光器件 Triplexer OSA 4. 1X9 SC 雙纖雙向光收發模組 1X9 SC 155 Mbps Optical Transceiver 5. 1X9 SC/FC 單纖雙向光收發模組 1X9 155 Mbps Bi-directional Transceiver Module 6. 小型化熱插拔雙纖雙向光收發模組 1.25 ~ 2.5 Gbps SFP LC Transceiver Module 7. 小型化雙纖雙向光收發模組 1.25 ~ 2.5 Gbps (2X10) SFF LC Transceiver Module 8. 乙太網路轉換器 1.25 Gbps /Gigabit Ethernet GBIC 9. CWDM 小型化熱插拔雙纖雙向光收發模組 1.25 ~ 2.5 Gbps CWDM SFP 10. CWDM 乙太網路轉換器 CWDM GBIC Transceiver Module 11. 被動式網路單纖雙向光收發模組 GEAPON - 1.25 Gbps ONU 12. 光電媒體轉換器 155 Mbps / 1.25 Gbps Media Converter (With Network Management)

## 亮點介紹

千才科技股份有限公司提供各種高質量的測量設備。包括 BER 測試儀、MPO 測試儀、光纖安裝工具、高速光收發功率計和光測試工具。並提供各種高質量的測量設備。包括 BER 測試儀、MPO 測試儀、光纖安裝工具、高速光收發功率計和光測試工具。

## 連絡資訊

- ◆ 聯絡人姓名 / 職稱：孫英正 / 協理
- ◆ 地址：新竹縣竹北市台元街 30 號 3 樓之 5
- ◆ Email：bruce@liverage.com.tw
- ◆ 電話：03-5525268
- ◆ 傳真：03-5525388

## Company Profile

Founded in 2003, Liverage Technology Inc. is a professional manufacturer of high-quality fiber optical components, transceivers and measurement equipment in the fiber optic communications industry. Liverage Technology Inc. is located in the Tai Yuen Hi-Tech Industrial Park in Zhubei, Hsinchu. It is very close to the Hsinchu Science Park and the Industrial Technology Research Institute. Our mission - Enjoy your life, is to bring the optical broad bandwidth with reasonable price into your life. With more than 30 years of experience, our team members pride ourselves on our innovation and dedication to the highest quality in the fiber optical industry.

## Main Product / Service

The core technologies of Liverage include optical packaging, customized manufacturing technologies and testing equipment manufacturing. Our advanced quality control methods utilize state-of-the-art processing techniques, laser welding, epoxy packaging, module design and testing system integration. Additionally, our trend-setting R&D group develops high-end products for several applications such as defense, aerospace, custom security, oil exploration, etc. The following introduces the benefits of cooperating with us. First, excellent manufacturing and quality control, passed the audit and approval of well-known companies in Japan, and secondly, the price of our products is competitive, with excellent manufacturing capabilities and logistical support. In addition, we have our own R&D team, and our products can time to market efficiently. Finally, our products have been approved by top tier companies.

## Featured Product

Liverage Technology Inc. provides various high-quality measurement equipment. Including BER Tester, MPO Tester, Optical Fiber Installation Tool, High-Speed Optical Transceiver Power Meter and optical testing tool. Liverage Technology Inc. provides various high-quality measurement equipment. Including BER Tester, MPO Tester, Optical Fiber Installation Tool, High-Speed Optical Transceiver Power Meter and optical testing tool.

## Contact Information

- ◆ Name : Bruce Sun
- ◆ Address : 3F-5, No. 30, Taiyuan Street, Chupei City, Hsinchu County 302, Taiwan
- ◆ Email : bruce@liverage.com.tw
- ◆ TEL : 03-5525268
- ◆ FAX : 03-5525388

# 工業技術研究院 量測中心

Industrial Technology Research Institute Calibration And Measurement Capabilities



# Industrial Technology Research Institute Calibration And Measurement Capabilities

工業技術研究院 量測中心

## 公司簡介

### 關於工研院量測中心

「精準好服務·標準好生活」是量測技術發展中心現階段的重點方向。經由經驗的累積，我們已建立與世界同步的標準技術能力，現階段更積極以此根基落實於產業，如最近投入的國際產業標準、影像顯示產業標準、平面顯示器檢測技術等，讓國內半導體業者在國際間更具領導優勢；在儀器產業發展上，目前則聚焦在自動化製造智慧檢測技術上，提供共通性技術互動平台，協助創造自有品牌與市場。

科技改進生活是我們更具意義的使命。量測中心的研發成果讓人民的生活、政府公權力、甚至環保醫療都得到準確的保障。「精」「準」是我們一路追求的目標，經過多年的深耕，量測中心在國際計量舞台上已有一席之地。展望未來，量測中心將結合產業，積極運用國際組織平台，推動國際產業標準以及兩岸標準合作，為產業提供專業即時的好服務，為人民提供品質保障的好生活。

## 主要產品 / 服務

1. 國家度量衡標準實驗室 (<https://www.nml.org.tw/>) 提供溯至國際單位 ( SI unit ) 之校正服務
2. THz 兆赫波材料分析量測技術
3. 光學·電性·可靠度檢測服務
4. 半導體設備合作開發
5. 無塵室汙染監控應用 /particle counter

## 連絡資訊

- ◆ 聯絡人姓名 / 職稱：梁瑋耘 / 經理
- ◆ 地址：新竹市光復路二段 321 號 7 館 310 室
- ◆ Email：monicaliang@itri.org.tw
- ◆ 電話：03-5732072
- ◆ 傳真：03-5733540

## Company Profile

### About CMS/ITRI

Precision for better service, Harmonization for quality life" is the goal we embrace now. Based on the capability of establishing national measurement standards, CMS is devoted to create timely international/industrial standards to shorten the traceability chain and enhance the competitiveness. In the research of precision inspection developing, we are focusing on the development of intelligent optical inspection technology for automatic fabrication. It is a platform to expedite the development of in-house brands and technology.

Measurement for improving life is an innovation-oriented mission. Recently, a series of measures have been introduced to ensure Government' s credibility, to safeguard living condition, and to promote health care in general publics. "Precision" and "Harmonization" are what we have been pursuing for years and the professional capability has been recognized worldwide. Through the global organization platform, we will continuously work with the industry, to promote the international industrial standards and facilitate the cross-strait collaboration of metrology activities. It is hoped, with the accumulated capability, to create value-added achievement to upgrade the quality of industry and our daily life.

## Main Product / Service

1. The National Measurement Laboratory (<https://www.nml.org.tw/en/>) provides calibration services traceable to SI units
2. THz material analysis and measurement technology
3. Optical characteristics, electrical, reliability testing services
4. Development of semiconductor equipment
5. Particle counter for clean room

## Contact Information

- ◆ Name：Wei-Yun Liang
- ◆ Address：Rm. 310, Bldg. 7, No. 321, Sec. 2, Guangfu Rd., East Dist., Hsinchu City 30011, Taiwan (R.O.C.)
- ◆ Email：monicaliang@itri.org.tw
- ◆ TEL：886-3-5732072
- ◆ FAX：886-3-5733540

# 工業技術研究院 電子與光電系統研究所

INDUSTRIAL TECHNOLOGY RESEARCH INSTITUTE ELECTRONIC AND OPTOELECTRONIC SYSTEM RESEARCH LABORATORIES



# Industrial Technology Research Institute ELECTRONIC AND OPTOELECTRONIC SYSTEM RESEARCH LABORATORIES

工業技術研究院 電子與光電系統研究所

## 公司簡介

電子與光電系統研究所半世紀以來透過技術研發、服務、移轉與成立衍生公司來推動台灣半導體、顯示及光電技術整體產業興起及蓬勃發展；因應市場快速變動環境，我們持續研發強化國家發展競爭力技術：AI 晶片、化合物半導體、數位 / 類比及混合訊號晶片設計、異質整合、量子電腦與智慧顯示互動系統等前瞻科技，成為全球智慧化整合方案提供者，引領台灣電子與光電產業再躍升！

## 主要產品 / 服務

### 電子與光電系統研究所 研發四大領域

 <b>半導體</b> 製造、封測	 <b>IC 設計</b> 晶片設計	 <b>光電</b> Micro LED AR/VR	 <b>顯示</b> 透明面板 軟性混合電子
---	--	---	--

## 亮點介紹



## 連絡資訊

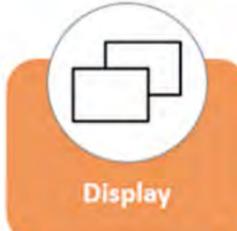
- ◆ 公司官網：<https://www.itri.org.tw/>
- ◆ 地址：310401 新竹縣竹東鎮中興路四段 195 號
- ◆ Email：[eosl\\_cs@itri.org.tw](mailto:eosl_cs@itri.org.tw)
- ◆ 電話：+886-3-5917050

## Company Profile

In the past 40 years, the Electronic and Optoelectronic System Research Laboratories undertakes the missions for the researches and developments of AI Chips, Compound Semiconductors, Digital/Analog and Mixed-Signal IC Design, Heterogeneous Integration, Quantum Computers and Transparent Display Interactive System technologies.

## Main Product/ Service

### Research & Development

 <b>Semiconductor</b> • Non-Volatile Memory • 8"/12" backend • Adv. packaging • Compound semiconductor	 <b>IC Design</b> • AI Chip IP • System software	 <b>Optoelectronic</b> • Micro LED • AR/VR	 <b>Display</b> • Transparent panel • Flexible hybrid electronics
---	---	---	--

## Featured Product



## Contact Information

- ◆ Comp. Web：<https://www.itri.org.tw/>
- ◆ Address：195, Sec. 4, Chung Hsing Rd., Chutung, Hsinchu, Taiwan 310401, R.O.C.
- ◆ Email：[eosl\\_cs@itri.org.tw](mailto:eosl_cs@itri.org.tw)
- ◆ TEL：+886-3-5917050





# 台達電子工業股份有限公司

DELTA ELECTRONICS INC.



# DELTA ELECTRONICS INC.

台達電子工業股份有限公司

## 公司簡介

台達由鄭崇華先生創立於 1971 年，為全球提供電源管理與散熱解決方案。面對日益嚴重的氣候變遷，台達長期關注環境議題，秉持「環保 節能 愛地球」的經營使命，持續開發創新節能產品及解決方案，不斷戮力提升產品的能源轉換效率，以減輕全球暖化對人類生存的衝擊。近年來，台達已逐步從關鍵零組件製造商邁入整體節能解決方案提供者，深耕「電源及零組件」、「自動化」與「基礎設施」三大業務範疇。



## About the Company

Delta, founded in 1971, is a global provider of power and thermal management solutions. Its mission statement, "To provide innovative, clean and energy-efficient solutions for a better tomorrow," focuses on addressing key environmental issues such as global climate change. As an energy-saving solutions provider with core competencies in power electronics and automation, Delta's business categories include Power Electronics, Automation, and Infrastructure.



## 照明解決方案

台達提供全方位的 LED 照明產品及系統整合服務，滿足客戶照明需求。

LED 產品包括：

工業照明：天井燈、天車燈、停車場燈

道路照明：路燈

商用照明：嵌燈、軌道燈、吸頂燈、平板燈

戶外照明：投光燈、矮柱燈、壁燈

漁業照明：集魚燈

服務內容包括：

照明設計解決方案

智慧路燈解決方案

物聯網照明解決方案

## Business Categories

Delta offers a full range of LED lighting products and system integration services to meet customers' lighting needs.

LED products include :

Industrial Lighting: High bay, Overhead crane, Linear

Street Lighting: Street light

Commercial lighting: Downlight, Track, Ceiling, Panel

Outdoor lighting: Flood, Bollard, Wall light

Fishing light: Saury light, Squid light

Services include:

Lighting design solutions

Smart street light solutions

BIC (Bluetooth Intelligent Control) solutions

## 連絡資訊

◆ [LS.Sales@deltaww.com](mailto:LS.Sales@deltaww.com)

## Contact Information

◆ [LS.Sales@deltaww.com](mailto:LS.Sales@deltaww.com)



# 台灣凱瑞光學有限公司

TRIOPTICS TAIWAN



# TRIOPTICS TAIWAN

台灣凱瑞光學有限公司

## 公司簡介

台灣凱瑞光學有限公司於 2013 年 7 月由德商 TRIOPTICS 公司與台灣宏惠光電股份有限公司 UNICE E O Service Inc. 共同合資成立公司。另在 2020 年 9 月 TRIOPTICS GmbH 與 JENOPTIK AG( 德國及美國股票上市公司) 成功完成合併交易：

TRIOPTICS 成為 JENOPTIK AG 集團的成員之一，並於 2021 年 12 月 100% 融入集團的 Light & Optics 事業部。

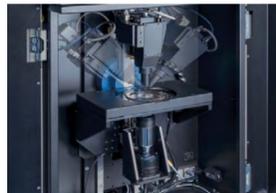
JENOPTIK 是一家全球運營的光學、光電子、光安全應用的高精密光學科技應用的技術集團。

台灣凱瑞光學多年在地深耕推展後，已成為台灣光學鏡頭測試領域最具專業性的光學檢測研發暨設備供應商。服務客戶業務範圍自研發設計、試產、量產等階段有效縮短產品製造時程，生產良率提昇，增加市場競爭優勢。於國防、太空衛星、科學研究單位相繼導入台灣凱瑞光學的最新製程監控與量測設備後，光學產品的質量已達國際競爭力。

台灣凱瑞光學有限公司同時努力擴展至半導體高精密光學應用領域，合作開發超高精密的光學核心技術曝光機之光學顯影鏡頭的生產，並切入元宇宙 AR/VR 晶圓級 Waveguide 量產自動化檢測設備，達到國內自有半導體設備的供應鏈，與最先進製程的晶圓代工國的目標。

## 主要產品 / 服務

Image Master® VR/AR



VR/AR 波導、鏡頭和投影儀及系統光學量測設備

Wafer-level & Semiconductor



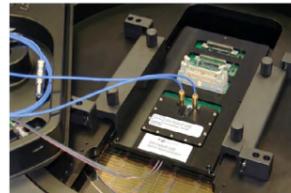
晶圓級及半導體量測系統

WaveMaster® Compact 2



單透鏡波前測量

UFO phrobe card



PIC 量測

## 亮點介紹



## 連絡資訊

- ❖ 姓名 / 職稱：姚志奎 / 業務經理
- ❖ 地址：桃園市中壢區中壢工業區安東路 5 號 4 樓之 2
- ❖ Email：ttservice@trioptics.tw
- ❖ 電話：(03)462-0405
- ❖ 傳真：(03)462-3909

## Company Profile

Trioptics Taiwan was established on July 2013 by joint venture of Trioptics German and Taiwan Unice EO Services. In addition, during September 2020, TRIOPTICS GmbH and JENOPTIK AG (listed companies in Germany and the United States) successfully completed the merger transaction: TRIOPTICS became a member of the JENOPTIK AG group and was 100% integrated into the group's Light & Optics division in December 2021. JENOPTIK is a globally operating technology group for high-precision optical technology applications in optics, optoelectronics, and optical safety applications. Our optical measurement and manufacturing systems speed up and improve the development, production and quality control of lenses, optical lens systems and camera modules around the world. With our broad knowledge base in optical metrology systems, comprehensive product range and international focus, we create lasting customer value and benefits.

## Main Product / Service

Image Master® VR/AR



waveguides, lenses and projectors as well as complete VR/AR measurement solution.

Wafer-level & Semiconductor



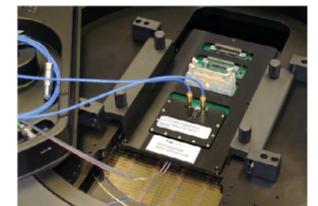
Wafer-level & Semiconductor

WaveMaster® Compact 2



Measurement in transmission for R&D

UFO phrobe card

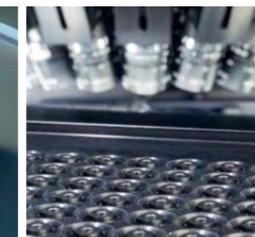
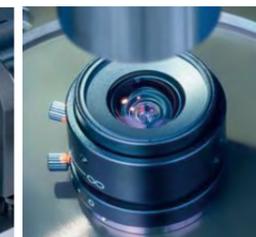


PIC measurement

## Featured Product



Alignment and testing of VR/AR lens and module



Instrument can be traceable to PTB



## Contact Information

- ❖ Name : Victor Yao/Sales Manager
- ❖ Address : 4F-2, No.5, Andong Rd., Chungli Dist., Taoyuan City, Taiwan
- ❖ Email : ttservice@trioptics.tw
- ❖ TEL : (03)462-0405
- ❖ FAX : (03)462-3909



# 立碁電子工業股份有限公司

Ligitek Electronics Co., Ltd.



# Ligitek Electronics Co., Ltd.

立碁電子工業股份有限公司

## 公司簡介

立碁電子集團是發源於以 LED 光電半導體專業生產製造為主體的營運企業，自 1989 年起正式成立，長期以來以穩健的作風，雄厚的研發實力發展綠能相關科技，為國際客戶帶來最優質、最全面的光電節能整合服務。



## 主要產品

### LED 與 LASER 封裝事業

❖ 產品與應用：電腦設備及其他資訊與網通廠商相關 LED 元件及模組需求、安控產業使用紅外線 LED 元件與模組、固化設備業使用紫外線 LED 元件與模組、VCSEL LASER 元件與模組設計、電視背光模組、車用儀表、LED 車燈、手機背光板、全彩 LED 資訊看板、月台警示燈、交通號誌及指示燈，領域包含航空、通訊、交通運輸、汽車電子、LED 顯示屏幕、商業及民用照明、城市建築亮化工程（廣告裝飾與各種燈飾應用）。



### LED 照明事業

❖ 產品與應用：LED MR16、LED AR111、LED T8 及 T9 燈管、LED 嵌燈、T-Bar、LED 路燈、LED 天井燈、LED 投射燈、光引擎及光源智慧型控制模組。



### 大眾交通及捷運系統應用

❖ 產品與應用：LED 月台警示燈、捷運、鐵路、車廂、隧道、公路等交通相關應用燈具。



## 連絡資訊

- ❖ 電話：886-2-77036000
- ❖ 傳真：886-2-77036286
- ❖ E-mail：ligitek@mail.ligitek.com

### 汽車、機車 LED 模組應用

❖ 產品與應用：機車儀錶板 LED 模組應用設計客製化生產、汽車相關 LED 照明產品開發、腳踏車前、後 LED 燈具模組合作開發。



### 影像照明紅外線模組產品與代工

❖ 產品與應用：監視器用紅外線照明模組、影像辨識 LED 或 LASER 照明模組、訊號偵測用紅外線模組。



### 紫外線模組產品

❖ 產品與應用：膠材固化設備、曝光顯影設備、殺菌設備業。



### 太陽能事業

❖ 產品與應用：高功率 Solar Module 太陽能電池組件與太陽能電池板。

❖ 在臺灣安裝工程實績：台灣電力公司、台灣中油公司、中華郵政公司、氣象局、消防局、國家風景區、農委會茶業改良場台東分場、嘉義大學、台北科技大學...等太陽能系統。



## Company Profile

Ligitek Electronics Group is the operating company with the mainstay originated in the LED optoelectronic semiconductor professional manufacturing. Established since 1989, for a long time with a prudent style, strong research and development capabilities, Ligitek Electronics

Group develops green energy-related technology to bring the highest-quality, most comprehensive photovoltaic energy saving integration services to international customers.



## Main Products

### LED and LASER packaging business

Product and application: LED components and modules needs related to computer equipment and other information and net connection vendors, infrared LED components and modules used by security control industry, curing equipment industry used UV LED components and modules design, TV backlight module, automotive instrumentation, LED vehicle lights, mobile phone backlight plate, full-color LED billboard, the platform warning lights, traffic signals and indication lights. The field contains the aviation, telecommunications, transportation, automotive electronics, LED display screen, commercial and civil lighting, urban construction illumination works (advertising decoration and various lighting applications).

### LED lighting business

Products and applications: LED MR16, LED AR111, LED T8 and T9 lamp, LED embedded light, T-Bar, LED street light, LED patio light, LED spot light, light engine and light source intelligent control module.

### Mass transit and MRT system applications

Products and applications: Traffic application related lighting like LED platform warning light, mass rapid transit, railway, cars, tunnels, highways and others.

### Automobile, motorcycle LED module applications

Products and Applications: Motorcycle dashboard LED module application design customized production, automotive LED lighting product development, bike front, rear LED lamps module development cooperation.

### Imaging lighting infrared module and OEM

Products and Applications: Monitor infrared lighting module, image recognition LED or LASER lighting module, infrared signal detection module.

### UV module

Products and applications: plastic curing equipment industry, exposure and development equipment, sterilization equipment industry.

### Photovoltaic Solar energy business

Obtained the United States California Energy Bureau certified as qualified solar module suppliers.

Product and application: High power solar module, solar cell components and solar panels. Installation works performance in Taiwan: Taiwan Power Company, CPC Corporation, Taiwan, Chunghwa Post Co., Ltd., Weather Bureau, Fire Department, National Scenic Area, the Council of Agriculture Tea Research and Extension Station, Taitung Station, Chiayi University, Taipei University of Technology ... and other solar systems.

## Contact Information

- ❖ TEL：886-2-77036000
- ❖ FAX：886-2-77036286
- ❖ E-mail：ligitek@mail.ligitek.com



# 光鼎電子股份有限公司

PARA LIGHT ELECTRONICS CO., LTD.



# PARA LIGHT ELECTRONICS CO., LTD.

光鼎電子股份有限公司

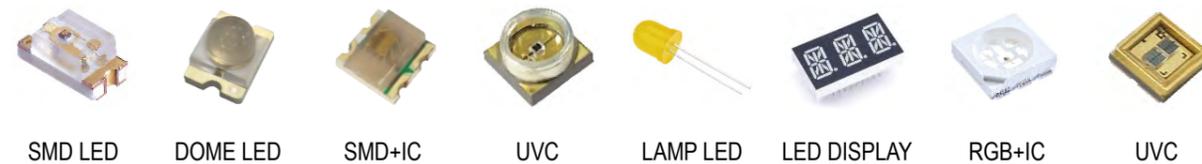
## 公司簡介

光鼎電子成立於 1987 年，以 LED 元件封裝製造起家，近年來亦將產品線推向 LED 光模組設計、車用 LED 模組 / 成品。光鼎的專業光學實驗室與設計中心，在客戶的設計階段，提供客戶專業的光學模擬實驗報告，協助客戶提升產品設計的效率與效果。經過幾年的努力，光鼎已成為數家國際大廠的關鍵

策略夥伴；2022 年光鼎再度跨領域，增加 IGBT 封裝產線，積極投入功率半導體的生產製造；光鼎電子 37 年來不斷的技术精進與創新，將繼續本著 [ 客戶優先 · 品質 · 創新 ] 的精神，以客戶需求為出發，提供更高品質的服務與產品。

## 主要產品

### LED 元件：廣泛應用在各領域



### LED 光模組設計：廣泛應用在各類消費性產品 (eg. 智慧音響, 電競 PC, 抽油煙機, EV Charger)



### IGBT：半導體開關，用於電機驅動系統，不斷電系統與 IH 爐與許多家電產品



### 車用 LED 模組 / 成品



## 連絡資訊

- ◆ 地址：23586 新北市中和區建康路 8 號 11 樓
- ◆ 電話：+886-2-2225-3733
- ◆ 傳真：+886-2-2225-4800
- ◆ Email：para@para.com.tw
- ◆ 網站：www.para.com.tw

## Company Profile

Founded in 1987, PARA LIGHT (TWSE:6226) started with LED component packaging and manufacturing. In last few years, PARA LIGHT expands the product lines to LED lighting module design, and automotive LED module/lamps.

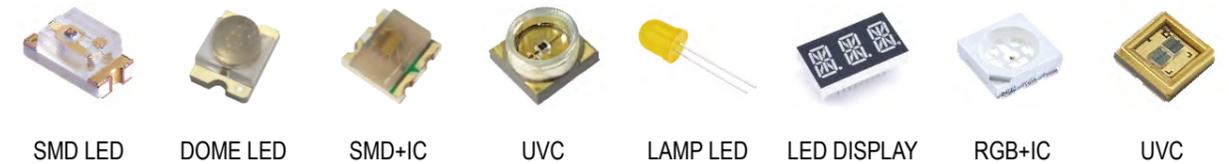
Our professional optical lab/lighting design center provides the professional optical simulation services to customers, which help customers greatly improve the efficiency and effectiveness during the product design stage. Customer first services makes PARA LIGHT the important strategic partner with many international

branding companies.

Started from 2022, PARA LIGHT dedicated to a brand new field, power semiconductor device-IGBT manufacturing. During the past 37 years, PARA LIGHT keeps improving the design ability, enhancing the production techniques and also pursuing the innovation. Adhering to the enterprise philosophy [Customer First, Quality, Innovation], PARA LIGHT will continue to provide higher quality services and products for customers' satisfaction.

## Products

### LED Components: Widely used in any fields that needs illumination



### LED Lighting Module: Widely apply on various commercial products.



### IGBT: used as switching devices for motor drive systems, uninterruptible power supplies (UPS), induction cooktop, and other applications.

### Automotive LED Module/Lamp



## Contact Information

- ◆ Add：11F, No 8, Jiankang Rd, Zhonghe Dist, New Taipei City, 23586, Taiwan
- ◆ Tel：+886-2-2225-3733
- ◆ Fax：+886-2-2225-4800
- ◆ Email：para@para.com.tw
- ◆ Website：www.para.com.tw



# 光鋁科技股份有限公司

EPILEDs Co., Ltd.



# EPILEDs Co., Ltd.

光鋁科技股份有限公司

## 公司簡介

光鋁科技成立於 2006 年 6 月，並獲南科管理局核准進駐台南科學工業園區並於 2017 年正式搬遷至樹谷園區，致力於藍、綠、紅、黃、不可見光、紫、深紫外光 LED 磊晶片及晶粒之研發、設計、製造與銷售。

光鋁不僅僅是全台唯一據有全光譜製程能力的 LED 製造商 (波段 :250-1600nm)，且自磊晶片至晶片生產皆於台灣當地生產製造。因應全球市場的多變性，光鋁針對客戶需求除了擁有客製晶片大小的能力之外，在 UVA/B、UVC(封裝)、IR Dual and Triple Junction chip 也是 LED 首屈一指的先驅，近年更致力於 SWIR、VCSEL、MINI&MICRO LED 晶片等特殊應用市場。

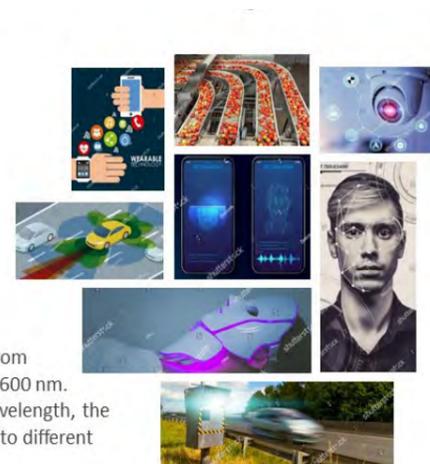
公司自成立以來，堅持『突破、創新、專業、負責』之經營理念，創造客戶、合作夥伴、社會大眾、投資者與光鋁之互利互惠的雙贏局面，以維持企業之永續發展。

- SINGLE Junction
  - ✓ 640-670nm
  - ✓ 700-800nm
  - ✓ 800-870nm
  - ✓ 870-1000nm
  - ✓ 1050-1600nm

- DUAL Junction
  - ✓ 800-870nm
  - ✓ 870-1000nm

- TRIPLE Junction
  - ✓ 780-850-940 nm

Our Infrared items from wavelength 640 to 1600 nm. Based on diverse wavelength, the products separate into different type. Furthermore, we also got dual junction version(800-1000nm) for higher intensity requirement.



### WEARABLE DEVICES

Watch, Glasses, AR, VR, Mobile Phone

GROW LIGHT  
Indoor/ Medical/ Edible Plants and Gardening

BIOMETRIC SYSTEM  
Facial/ Finger Print/ Iris etc.

AUTOMATIC RECOGNITION  
Speed-Measuring / Automatic License Plate Detection

CCTV  
Night Vision

## 產品介紹

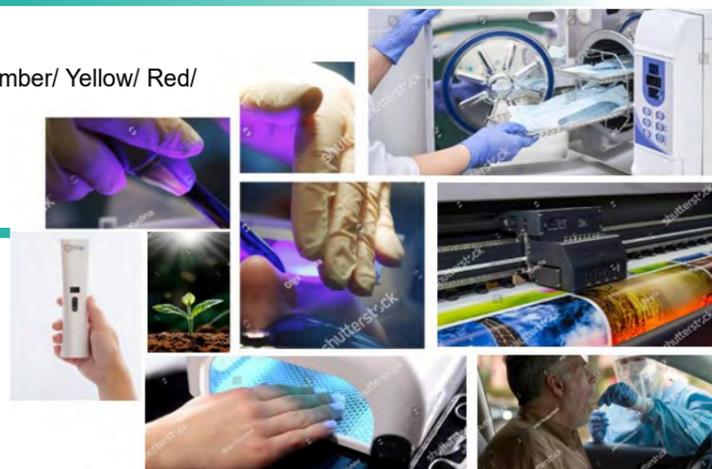
1. 晶粒結構：垂直 / 水平 / 覆晶
2. Dual and Triple Junction 晶粒
3. SWIR 晶粒
4. R+G+B Mini and Micro 晶粒

## 產品介紹

1. 250~1600 nm ( UVC/ UVB/ UVA/ Blue/ Cyan/Green/Amber/ Yellow/ Red/ IR/SWIR) 波段產品
2. R+G+B : Micro LED with COC1of COC package

## 連絡資訊

- ◆ <http://www.epileds.com.tw>
- ◆ 744092 樹谷園區 台南市新市區看西路七號
- ◆ [sales@epileds.com.tw](mailto:sales@epileds.com.tw)
- ◆ 06-5050101
- ◆ 06-5056533



## Company Profile

EPI LEDs Co., Ltd. was established on June 12th, 2006, approved by National Science Council and relocated at Tainan Tree Valley Park with new production line in 2017.

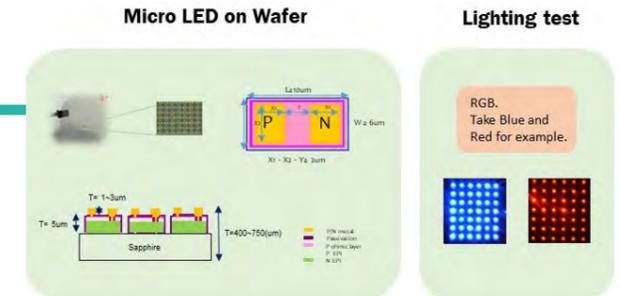
EPILEDs is an exclusively LED manufacturer with full range of wave length (from250-1600nm), and from Epi wafer to chip is made by ourselves in Taiwan. With a capability of customizing size and supporting UVA/B, UVC ( package), and IR dual and triple junction chips, EPILEDs also dedicates developing SWIR , VCSEL, MINI&MICRO LED to support potential market demand.



- UVB 310-330nm AlO.2GaN
  - Curing
  - Phototherapy
  - Medical Applications
- UVC 250-285nm AlO.4GaN
  - Sterilization
  - Air/water purification

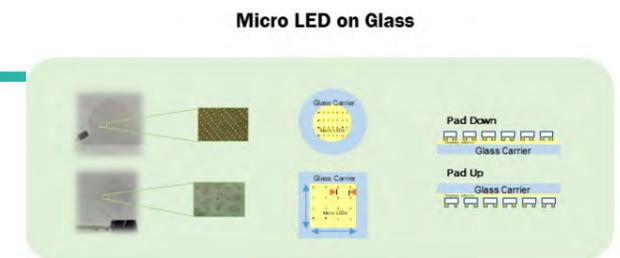
## Main Product/ Service

1. Chip Structure : Vertical / Lateral /Flip Chips
2. IR Dual and Triple Junction Chips
3. SWIR Chips
4. R+G+B Mini and Micro Chips



## Main Product/ Service

1. 250~1600 nm ( UVC/ UVB/ UVA/ Blue/ Cyan/Green/ Amber/ Yellow/ Red/ IR/SWIR) full spectrum products
2. R+G+B : Micro Led with COC1 or COC2 package



## Contact Information

- ◆ <http://www.epileds.com.tw> Name
- ◆ No.7, Kanxi Rd., Tree Vally Park, Xinshi Dist, Tainan City, Taiwan
- ◆ [sales@epileds.com.tw](mailto:sales@epileds.com.tw)
- ◆ +886-6-5050101
- ◆ +886-6-5056533

# LITEON® 光寶科技股份有限公司

LITE-ON TECHNOLOGY CORPORATION

# LITEON® LITE-ON TECHNOLOGY CORPORATION

光寶科技股份有限公司

## 公司簡介

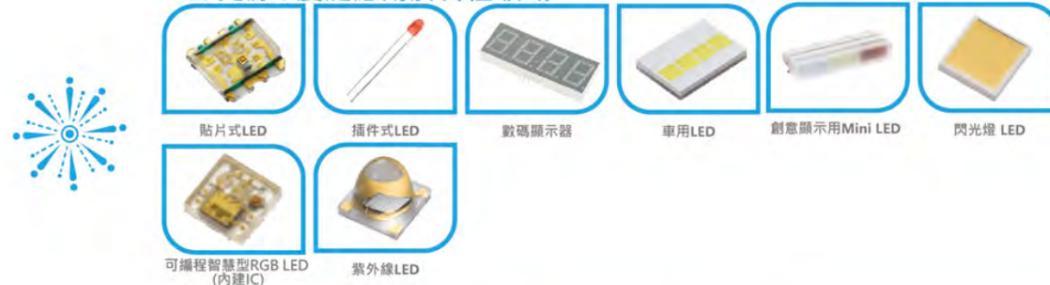
### Our Profession your Brilliant

光寶科技光電事業部 (OPS) 成立於 1975 年是全球領先的光電半導體供應商。在光電技術領域，光寶科技光電事業部具有世界領先的工程專業知識和業界最廣泛產品組合。產品包括光源到感測、低功率到高功率、LED 到雷射、標準品到客製化產品、可見光到紅外線和紫外線之產品設計製造。

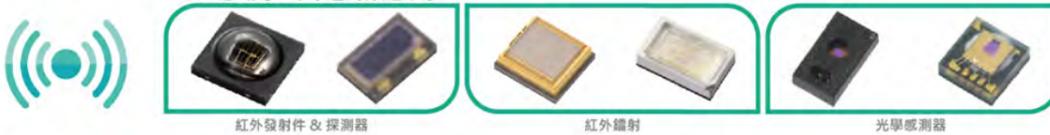
身為經驗豐富的專業光電半導體封裝設計製造供應商，光寶科技光電事業部致力於提供客戶全方位且高品質的光電產品解決方案。長久以來更致力於開發高性能、低污染的光源，協助實現更智慧、更安全、更環保的生活。

## 主要產品 / 服務

### 1. 光源：廣泛應用於各種領域



### 2. 感測：智慧新應用



### 3. 光耦：具備安全性和可靠，完美適合各項應用



## 連絡資訊

- ❖ 公司官網：<https://liteon.com/opto>
- ❖ 聯絡人姓名 / 職稱：賴怡玲 / 鄧麗菲
- ❖ 地址：新北市 242034 新莊區思源路 555 號 21 樓
- ❖ Email：OPS-opswebmaster@liteon.com
- ❖ 電話：+886-2-2222-6181
- ❖ 傳真：+886-2-2221-1948

## Company Profile

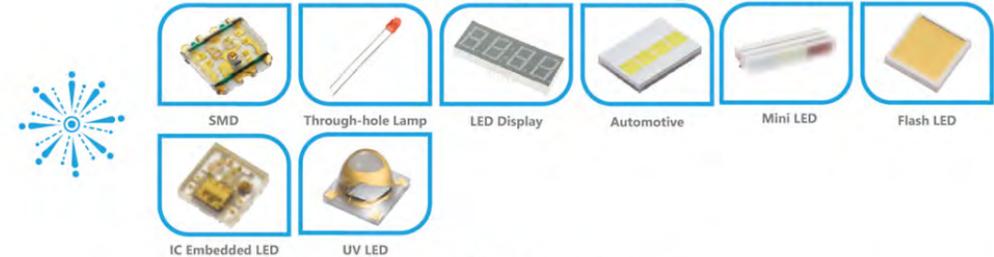
### Our Profession Your Brilliant

Founded in 1975, LITEON Optoelectronics Product Solution SBU (LITEON OPS) is a worldwide leading provider of optoelectronic semiconductors. Our leading role is backed by the broadest and most widely varying product offering in Optical technologies, ranging from illumination to sensing, from low power to high power, from commodity to custom-made, from LED to Laser, from visible lights to infrared & UV.

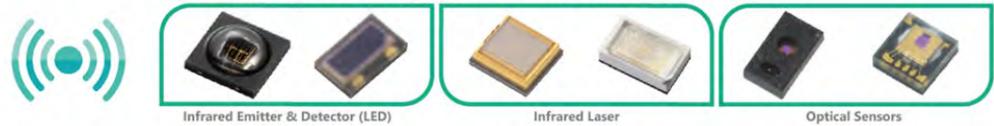
As an experienced supplier in professional packaging designing and manufacturing, LITEON OPS not only has been able to provide customers with high-quality optoelectronic component solutions, but also has been constantly pursuing high-performance and low-pollutant light sources that make lives Smarter, Safer and Greener.

## Main Product/ Service

### 1. Illumination : Supporting a broad range use cases



### 2. Sensing : Making applications smarter



### 3. Isolation : Safety & Reliability, perfect fit for all application



## Contact Information

- ❖ Comp. Web：<https://liteon.com/opto>
- ❖ Name：Vanessa Lai / Kay Teng
- ❖ Address：21F, NO.555, Siyuan Rd., Xinzhuang Dist., New Taipei City 242034, Taiwan (R.O.C)
- ❖ Email：ZOPS-opswebmaster@liteon.com
- ❖ TEL：+886-2-2222-6181
- ❖ FAX：+886-2-2221-1948

# HARVATEK 宏齊科技股份有限公司

HARVATEK CORPORATION



## 公司簡介

本公司創立於 1995 年，主要研究開發二極體封裝設計、製造、測試及產品進出口貿易業務，屬於 LED 下游封裝產業，在產業供應鏈中是關鍵性的策略夥伴，因應市場環境需求，追求企業永續經營。未來本公司計劃開發之新商品及服務仍以 SMD LED 之封裝技術為主軸，以現有產品之衍生品、改良品，甚或整合型產品為主。並以「成為全球 SMD LED 之技術領導廠商」及「成為“光”概念公司」自我期許。



## 產品介紹

以通訊工業、汽車工業、彩色顯示工業為研發主軸，並以自有技術為基礎，發展超高亮度、高功率之 LED 產品。



- 1. 家電 (掃地機器人 / 烘手機)** 紅外線發射 / 接收器應用在多種智能家電的感應上，透過紅外線感應，能讓家電更具智慧、更人性化。
- 2. 電競週邊 (電競鍵盤)** 電競鍵盤全面使用 IR/PT 感應的光軸鍵盤，按鍵行程短，壽命長。
- 3. 行動裝置 (手機 / 平板)** 紅外線距離感應、相機鏡頭的紅外線 / 雷射對焦等，為行動裝置帶來更精確、更高效的能力。
- 4. 穿戴式 (智慧手錶 / 手環)** 穿戴式的健康管控裝置，利用不同波段的光源搭配生物感測晶片，能每日監控健康狀況，提醒自己該注意或改善哪方面的健康。
- 5. 安防監控** 監控系統常用紅外光當作輔助照明，搭配光感 IC 來控制調整紅外光的啟用，達到省電節能的功效。
- 6. 光感應觸控螢幕** 利用成對 IR/PT 感應定位而達到觸控。光感應觸控螢幕可掛於對應尺寸的螢幕上，達到螢幕觸控效果。
- 7. 顯屏應用** LED 以微小、陣列化及高亮等特性，應用於各種不同場所之顯示面板 (戶外、商務表演、廣告等)，為生活帶來全新的感官體驗。
- 8. 照明** 現今的照明形式已有很多種，以不同需求客製化色溫、亮度等規格，並以低耗電高效能應用於各類室內及戶外照明，除明亮之外，還讓生活中多了各種不同種視覺感受。

## 連絡資訊

◆ 台灣總部  
30094 新竹市中華路五段 522 巷 18 號  
TEL : +886-3-5399889  
FAX : +886-3-5399227  
e-Mail : sales@harvatek.com



◆ 其他服務據點  
美洲 e-Mail : americas@haratek.com  
中國 e-Mail : ryan@harvatek.com  
歐洲 e-Mail : ryan@harvatek.com  
東南亞 e-Mail : sonia@harvatek.com

# HARVATEK HARVATEK CORPORATION

宏齊科技股份有限公司



## Company profile

Harvatek Corporation was founded in 1995 in Hsinchu, Taiwan. It became a publicly traded company on the Taiwanese Stock Exchange in 2003. Today, it is a leading manufacturer of semiconductor chips and LEDs with a wide spectrum of applications. The company designs, manufactures, tests, and exports these products to domestic and international OEM manufacturers, trade retailers, and design houses. With the highest quality products, unparalleled customer service, and perpetual emphasis on innovation, Harvatek has become one of the world's most preferred LED suppliers



## Main Products



- 1. Household Appliances (cleaning robots / hand-dryers)**  
Infrared emitters and receivers have multiple applications for smart home appliances. Through infrared sensing, household appliances can become smarter and make our lives simpler.
- 2. Gaming Accessories (Gaming Keyboards)**  
To enable gamers to press keys faster, gaming keyboards uses IR/PT optical switches. Optical switch keyboards have short actuation time and long lives, a recent trend for keyboards.
- 3. Mobile Devices (Mobile phones / tablets)**  
The functions and performance of mobile devices continue to improve. Infrared sensing products are widely used in applications such as proximity sensing and infrared/laser focusing of camera lenses to bring precision and efficient capabilities to mobile devices.
- 4. Wearable (smart watches / wristbands)**  
Busy working, people often neglect their health. Wearable health-control devices use light sources of different wavelengths with bio-sensing IC to monitor daily health status and alert people to pay attention or boost certain aspects of health.
- 5. Security Measures**  
The security systems often save energy through using infrared light as additional lighting. Light-sensing IC are used to control the usage of infrared light.
- 6. Optical Touchscreen**  
Touchscreen can be achieved through utilizing pairs of IR/PT positioning sensors. Optical touchscreens can be hung on top of screens that have corresponding sizes to generate the effect of touchscreens.
- 7. Display Application**  
LED is applied in display panel on different occasions (outdoors, business show, advertisement) due to its small, arrayed and high brightness and brings a brand new sense experience for life.
- 8. Illumination**  
There are many varieties of the nowadays lighting with different customized color temperature and brightness. Also, many lighting products of low power consumption and high efficiency are applied in indoors and outdoors lighting; besides brightness, they create different visual experience in life.

## Contact Information

◆ Taiwan HQ  
30094 No. 18, Lane 522, Sec. 5, Chung Hwa Road, Hsinchu City 30094, Taiwan  
TEL : +886-3-5399889  
FAX : +886-3-5399227  
e-Mail : sales@harvatek.com



◆ Global Sales Contact Window  
Harvatek Americas e-Mail : americas@haratek.com  
Harvatek China e-Mail : ryan@harvatek.com  
Harvatek Europe e-Mail : ryan@harvatek.com  
Harvatek Malaysia e-Mail : sonia@harvatek.com



# 佰鴻工業股份有限公司

BRIGHT LED ELECTRONICS CORP



# BRIGHT LED ELECTRONICS CORP

佰鴻工業股份有限公司

## 公司簡介

佰鴻工業股份有限公司由董事長廖宗仁先生創立於 1981 年 7 月。在董事長前瞻性的決策及全體同仁的辛勤耕耘下，公司的營運規模逐年成長擴大，客戶群遍及全球各地，在台灣、中國大陸、韓國、東南亞及美洲、歐洲等地都擁有眾多的長期合作客戶，產品被廣泛應用於 3C 產業、工業運用、照明市場、車用市場、航太、醫療、通訊等多個領域。佰鴻生產

基地最早建於台灣新北市工業區，有鑑於大陸廣大市場需求，1990 年在香港成立萬輝企業，作為統籌兩岸三地的轉運基地。同年轉投資中國大陸興建東莞高埗廠，並且於 2011 年轉型升級為東莞佰鴻電子有限公司。該廠現有土地面積 45,000 坪、廠房面積 54,000 坪，員工數千餘人。

## 主要產品

**元件類：**發光二極管 LED、Lamp、SMD、Chip、Infrared 紅外線模組、PLCC、Multi-digit display、PCBA、Motor assembly、sensor assembly、LED light bar assembly、UV LED、ALS sensor、馬達、光感測器、LED 支架、PCB、藍寶石

**照明類：**LED 冷凍 / 冷藏櫃燈條、LED 燈管、LED 路燈、LED 景觀燈、LED 天井燈、LED 投光燈、LED 隧道燈、LED 燈泡、LED 筒燈、COB LED 模組、LED 植物燈、LED 車燈...

## 產品特色

佰鴻運用集團內公司做上下游材料整合，量產最具經濟規模的 LED 產品，並取得相關 UL、CE、CNS、TS16949 及 AS9100 等認證，期望提供被消費者接受之高品質中低價位產品。

## 連絡資訊

- ◆ 電話：02-29591090
- ◆ 傳真：02-29547006
- ◆ Email：services@brtled.com
- ◆ 地址：22061 新北市板橋區和平路 19 號 3 樓

## Diversified Products 多元化產品



### Diversified Products



## Company Profile

BRIGHT LED ELECTRONICS CORP., aka BRTLED, was established by Mr. Sandy Liaw in July, 1981. Under Mr. Liaw's prescient leadership and by all employees' effort, the company has grown steadily and continuously over the past few decades. Nowadays, we have built up long-term relationships with customers all over the world including Taiwan, China, Korea, Southeast Asia, America and Europe. We collaborate and maintain these long-term partnerships, in the meanwhile, continue to seek out more possibilities and opportunities for improvement and perfection. Our products are popularly adapted in various fields including 3C, industry-wide, communication, lighting market, automotive market, aerospace, medical industry

and so on.

BRTLED's first production base was in the industry park of New Taipei City, Taiwan. By taking China's market demands and incentives into account, BRTLED established Mainbright in Hong Kong in 1990 as the transfer point between China and Taiwan. In the same year, Mainbright also reinvested and set up a factory in Dongguan, China. In 2011, the Dongguan factory transformed to Dongguan Bright LED Electronics Corp. under BRTLED group. Dongguan site's area of land is around 150,000 square meters and its area of facilities is around 180,000 square meters. Current total number of employees including direct and indirect is over 1500.

## Main Product

**LED components:** LAMP, SMD, CHIP, PLCC, INFRARED, PHOTO COUPLER, MUTI-DIGIT, UV LED, LED DISPLAY, PCBA: MOTOR ASSEMBLY, SENSOR-ASSEMBLY, LED LIGHT-BAR ASSEMBLY, LED LIGHT-BAR FOR FREEZER, ALS SENSOR, LED lead frame, PCB, Sapphire.....

**LED lighting:** LED indoor lighting、LED outdoor lighting、LED street Lamp, LED landscape light、LED high bay、LED flood light、LED tunnel light、LED ground light、LED bulb、LED tube、LED down light、COB LED module、LED Plant grow light.....

## Featured Product

Bright LED group utilizes its internal resources among all subsidiaries to form our own upper, middle and lower stream of supply chains and so produces various types of LED products competitively with

relevant international certifications such as UL, CE, CNS, TS16949, AS9100 and etc. We expect to provide reliable LED products with high quality but at competitive prices to customers.

## Contact Information

- ◆ Tel：02-29591090
- ◆ Fax：02-29547006
- ◆ Email：services@brtled.com
- ◆ Address：3F., No.19, Heping Rd., Banqiao Dist., New Taipei City, Taiwan, R.O.C. 22061

Lites R us

# 和欣光通科技股份有限公司

LRU Technology Inc.

Lites R us

# LRU Technology Inc.

和欣光通科技股份有限公司

## 公司簡介

董事長葉律松先生 1995 年設立和欣智能照明科技有限公司，為台商獨資企業，30 多年來燈飾設計、生產、和銷售一條龍的經驗，主要客戶為美國 The Home Depot, Lowe's... 等知名賣場通路等，並與世界諸多知名設計師和品牌合作，對於照明產業市場動態具專業洞察，對產品材質與技術不斷創新，以高品質及客製化服務受世界各知名品牌及消費者的喜愛。

響應政府推動的「五加二產業創新計劃」，2017 年獨資成立和欣光通科技股份公司，以低壓直流照明技術為核心願景，繼而發展直流儲能和智能控制系統，導入人因健康照明技術並搭配物聯網科技，創造安全、節能環保、健康舒適的環境，成為智慧健康光照明市場的領頭羊。

## 主要產品 / 服務

### 1. 人因健康照明\_生理光燈具：

透過『同色異譜人因照明』專利調光技術有效影響人體晝夜節律因子 (CAF, Circadian Action Factor)，在照明色溫不變的情況下，於不同時段調控燈光波長，影響生理褪黑激素的分泌，使生活作息更符合自然節奏，讓工作更有效率，使睡眠更加安穩。

較市售燈具有更大的 CAF 值調整範圍，並獲得臺灣、美國、歐洲、日本、中國專利，專利取得時間領先國際知名照明大廠。



高 CAF 值  
抑制褪黑激素  
使人保持覺醒，  
適合需集中精神  
的工作環境



低 CAF 值  
增加褪黑激素  
使人情緒舒緩，  
適合需要放鬆休  
憩的環境

### 2. 低壓直流 LED 照明系統：

效用：

- (1) 節能效果，相對傳統燈具耗能減少 85%、
- (2) 降低電線短路及火災機率、
- (3) 工作溫度低、
- (4) 高流明輸出，持久耐用、
- (5) 降低維護成本。

### 3. 智能控制系統：

- (1) ZigBee, Wi-Fi & Bluetooth 無線調控亮度與色溫
- (2) 參考日照變化設定節律照明
- (3) 依據不同環境設定情境照明

## 亮點介紹

因應節能減碳，和欣光通為低壓直流智慧照明產品製造商，鎖定健康智慧照明之應用領域發展，在透過整合低壓直流系統、儲能設備、人因健康照明技術、物聯網科技、以及智慧照明管理系統，創造照明產品的價值並提供安全、節能環保、健康舒適的生活。

## 連絡資訊

- ◆ 公司官網：lrutechnology.com
- ◆ 聯絡人姓名 / 職稱：葉好蕓 / 特助
- ◆ 地址：310 新竹縣竹東鎮中興路四段 195 號 52 館 402 室
- ◆ Email：wendy@lrutechnology.com
- ◆ 電話：(03) 591 0355 / 0961 331 499

## Company Profile

Mr. Mike Yeh established Lites R Us Co., Ltd., Taiwan-funded enterprise, in 1995 and has over 30 years of experience in lighting design, production, and sales. The main customers are The Home Depot, Lowe's... and other well-known stores in the United States. etc., and work with many famous designers and brands in the world. Mr. Yeh has professional insights into the lighting industry's market dynamics, continuously innovating product materials and techniques, and is welcomed by famous brands and consumers with high-quality and customized services.

LRU Technology Inc. was established in 2017 in response to the "5+2 Industrial Transformation Plan" promoted by the government. Low voltage DC lighting technology is the essential technology and core vision of LRU Technology Inc.

The company then develops DC energy storage and smart control systems, then introduces advanced technologies such as Human Centric Lighting, and IoT. LRU hopes to create a safe, energy-saving, environmentally friendly, healthy, and comfortable environment as it becomes a leader in the smart health-lighting market.

## Main Product/ Service

### 1. LRU Tech Human Centric Lighting:

The circadian light with patented metamerism technology is proved to be effective to the circadian action factor (CAF) of human. By adjusting the wavelength at the same light temperature, the circadian light affects the secretion of melatonin. The technology can be applied throughout the day and makes our life in line more with the human biological rhythm, increasing work efficiency and reinforcing sleep stability.



High CAF  
Suppress melatonin.  
Keep people awake as  
it is suitable for working  
environments that require  
concentration.



Low CAF  
Increase  
melatonin.  
Soothing emotions  
as it is suitable  
for relaxing  
environments.

Comparing with existing lamps in the market, LRU products make adjustable CAF values with a broader range. LRU also obtained patents in Taiwan, the US, China, Europe, and Japan, leading other distinguished international manufacturers.

### 2. Low voltage DC LED Lighting system:

- Benefits:
- (1) Low energy consumption, close to 85% energy savings compared to incandescent lighting.
  - (2) Lower rate of electrical short circuit and fire incidents.
  - (3) Low operating temperature.

- (4) High lumen output with better durability.
- (5) Reduce maintenance costs.

### 3. Smart control systems:

- (1) ZigBee, Wi-Fi & Bluetooth wireless technology with dimmer and color temperature control.
- (2) Circadian lighting design according to the changes in sunlight.
- (3) Ambient lighting design based on different environments.

## Featured Product

In response to energy saving and carbon reduction, LRU Technology Inc. manufactures low voltage DC lighting with smart control products and is committed to developing the application field of human-centric lighting and intelligent control technology.

The company creates additional lighting product value and provides a safe, energy-saving, environmentally friendly, healthy, and comfortable life by integrating low-voltage DC systems, energy storage equipment, Human-Centric lighting, IoT technology, and smart lighting management systems.

## Contact Information

- ◆ Comp. Web : lrutechnology.com
- ◆ Name : Wendy
- ◆ Address : R402, Buld.52, No.195, Sec.4, Zhongxing Rd, Zhudong Township, Hsinchu County, 310 Taiwan (R.O.C.)
- ◆ Email : wendy@lrutechnology.com
- ◆ TEL : +886 3 591 0355 / +886-961-331 499

### 公司簡介

欣偉科技創立於 2000 年，致力於電子事業廢棄物清除處理與光電半導體 PVD/CVD Parts.clean 的貴金屬（金、銀、鈀、鉑）回收、精煉、加工技術及將所回收的稀有貴金屬開發成工業用的原料；橫跨 PCB、光電、半導體三大產業，目前為台灣前三大貴金屬精煉廠。

欣偉積極創造廢棄物新生命，同時也為客戶的產品創造出新的價值與利潤，期許成為綠色科技產業未來發展的新指標！

### 主要產品 / 服務

- 事業廢棄物清除處理
- 貴金屬回收精練
- 事業廢水處理
- PVD/CVD 半導體零件清洗
- 無氟環保金屬剝除劑
- 貴金屬吸附設備回收
- 蒸濺鍍金屬材料
- 特用化學品



### 亮點介紹

- 有害事業廢棄物甲級清理許可證
- Alpe 材料供應鏈
- UL2809 再生料含量的環境聲明驗證
- BS8001 循環經濟供應鏈認證

### 連絡資訊

- ◆ 聯絡人姓名 / 職稱：李庭芳
- ◆ 地址：337 桃園市大園區工一路 13 號
- ◆ Email：alan@sing-way.com
- ◆ 電話：03-386-9300
- ◆ 傳真：03-386-9301

### Company Profile

SingWay Technology was founded in 2000, a company focus on the treatment of electronic industry waste and the recovery, refining, processing technology of precious metals (gold, silver, palladium, platinum) of optoelectronic semiconductor PVD/CVD Parts clean and the development of recovered rare precious metals It is a raw material for industrial use; It is related to PCB, optoelectronics and semiconductor, and is currently the top three precious metal refineries in Taiwan.

SingWay Technology creates new life for waste, and also new value and profit for customers' products, and becoming a market leader for the future development of green technology industry!

### Main Product/ Service

- Industrial waste Treatment
- Precious metal recovery and refining
- Industrial Wastewater Treatment
- PVD /CVD semiconductor parts cleaning
- Cyanide-free environmentally friendly metal stripper
- Recycling of precious metal equipment
- Vapor deposition materials
- Specialty Chemicals



### Identity Introduction

- Class A Permit for Hazardous Industrial Waste Treatment
- Apple qualified supplier
- UL2809 Environmental Claim Validation Procedure (ECVP) certification
- BS8001 Circular Economy Supply Chain Certification

### Contact Information

- ◆ Name : Mr. Alan Lee
- ◆ Address : 33759 No.13, Gong 1st Rd., Dayuan Dist., Taoyuan City 337, Taiwan (R.O.C.)
- ◆ Email : alan@sing-way.com
- ◆ TEL : 03-386-9300
- ◆ FAX : 03-386-9301



# 長洛國際股份有限公司

CHAIN-LOGIC INTERNATIONAL CORP



# CHAIN-LOGIC INTERNATIONAL CORP

長洛國際股份有限公司

## 公司簡介

長洛國際成立於 1994 年，為專業設備代理服務商。長洛國際總公司設立於新竹縣新埔鎮，服務據點分佈於新竹、台中、高雄，以提供客戶即時的業務和技術諮詢服務。

母公司 旺矽科技 (MPI Corporation) 產品跨越多領域產業，其中，探針卡居於業界領先地位。另外，三大類主力產品：化合物半導體及光電測試解決方案、高低溫測試系統、先進半導體測試解決方案由長洛國際專業代理。此外，長洛國際也同步代理歐、美、日、韓等製程及測試等相關設備及耗材。

長洛國際致力於協助客戶提升競爭力，在持續的挑戰中與客戶共同成長，代理的產品跨足半導體、液晶面板、LED、光通訊，光感測等高科技產業。

## 主要產品 / 服務

- 先進半導體測試解決方案
- 半導體測試用關鍵零組件製造及銷售
- 化合物半導體及光電元件測試解決方案、零配件銷售
- 高低溫測試系統
- 3D 量測方案
- 光學顯微鏡系列產品
- 其他客製平台等

## 亮點介紹

- 旺矽化合物半導體及光電元件測試方案
- 旺矽先進半導體測試工程探針台 ( 手動 / 半自動 / 全自動 )
- 旺矽高低溫測試方案：可移動式氣流溫度控制系統 (Thermal Air 產品系列)

## 連絡資訊

- ◆ 公司官網：<http://www.cli.com.tw/tw/>
- ◆ 聯絡人姓名 / 職稱：Ammy Chan / 部經理
- ◆ 地址：新竹縣新埔鎮文山路犁頭山段 988 號 2F
- ◆ Email：[sales@cli.com.tw](mailto:sales@cli.com.tw)
- ◆ 電話：03-552-7788
- ◆ 傳真：03-551-9899

## Company Profile

Chain Logic International Corp. (CLIC) was established in 1994 and is located in Hsinchu, Taiwan. CLIC is a subsidiary of MPI Corporation that has been publicly listed on TPEX since 2003. For more than 25 years, CLIC has been representing well-known equipment and consumable manufacturers from Europe, USA, Japan, and Korea and strives to offer excellent products and professional services for high-tech manufacturing industries such as Semiconductors, Display, LED, Optical Communications, and Optical Sensing. Our mission is to provide value as well as competitiveness to customers.

CLIC provides services that include but are not limited to Photonic device tests, IC package material, Advanced Semiconductor Test solutions, Thermal Tests, and Laser solutions. CLIC has built its maintenance and service centers in Taichung and Kaohsiung to provide fast response and localized service support. CLIC dedicates to technical innovations and commits to delivering solutions to our customers in the best possible way. With years of experience, we aim to provide tailor-made and precise turn-key test solutions to further increase the efficiency and quality of measuring tasks.

## Main Product/ Service

- Advanced Semiconductor Test:  
Engineering Probe System / RF and mmW Probes from 26 to 220 GHz / Micro Positioner
- Laser System
- LED /Mini LED/ Micro LED Assembly Process:  
Capillary/ CSP P-S-T Solution/ COB Solution/ Dispensing Product/ Molding Equipment
- III-V Compound Semiconductors:  
Wafer / Chip Prober / Die Sorter/ AOI System/ Photonics Tester
- Optical Test:  
Optical Product/ Thermal Air TA5000
- Thermal Test Applications:  
Temperature Forcing Air Stream Systems / Thermal Wafer Chucks
- Other Service: customized stage

## Featured Products

- Wafer probers for III-V Compound Semiconductors test
- Engineering manual, automated, and fully-automated probe systems
- Temperature forcing air stream systems

## Contact Information

- ◆ Comp. Web：<http://www.cli.com.tw/tw/>
- ◆ Name：Ammy Chan / Department Manager
- ◆ Address：No.988 Litoushan Sec., Wunshan Rd., Hsinpu, Hsinchu, Taiwan, R.O.C.
- ◆ Email：[sales@cli.com.tw](mailto:sales@cli.com.tw)
- ◆ TEL：+886-3-552-7788
- ◆ FAX：+886-3-551-9899





# 惠特科技股份有限公司

FITTECH CO., LTD.



# FITTECH CO., LTD.

惠特科技股份有限公司

## 公司簡介

惠特科技成立於 2004 年，為專業光電 / 半導體 / 雷射自動化設備研發與系統整合設備商。以 FitTech 自有品牌行銷全球，為目前全球 LED 測試與分選設備的最大供應商暨領導品牌，更以光電專業投入雷射二極體 (LD) 及其他化合物半導體測試設備、雷射微細加工設備及自動化等設備整合研發。惠特科技擁有完整的研發團隊，具備領先業界的研發能力，可高度滿足客戶需求。惠特堅持持續的創新，以優秀的整合能力與核心技術，提供客戶具競爭力的解決方案。

## 主要產品 / 服務



### LED / MiniLED / MicroLED 測試及分選解決方案

提供完整LED後段測試製程相關設備，包含全自動 LED / Flip chip 晶圓、晶粒測試及分選機、計數機、上下模機等設備。



### Laser Diode及其他化合物半導體測試解決方案

提供VCSEL/PD/DFB/EML等相關雷射二極體晶粒測試設備。可提供近遠場測試、高低溫測試、人眼安全測試、發散角測試等項目測試。



### 雷射微細加工解決方案

惠特成立雷射技術研發中心，致力發展應用於半導體、PCB等產業的雷射精密加工設備，提供如切割、鑽孔、劃線、刻印、清潔等應用。



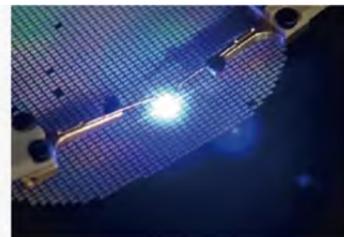
### LED / Laser Diode 測試及分選代工服務

惠特以自有研發生產之設備，建立代工廠，提供客戶LED/LD 測試及分選之代工服務。



### 自動化/智慧化解決方案

因應工業4.0趨勢，惠特投入智慧製造，開發自動化點測及分選系統、整合MES系統，提供業界唯一LED後段點測與分選製程整合解決方案。



## 連絡資訊

- ◆ 公司官網：[www.fittech.com.tw](http://www.fittech.com.tw)
- ◆ 聯絡人姓名 / 職稱：Tiffany / 行銷專員
- ◆ 地址：台中市西屯區工業區 35 路 3 號
- ◆ Email：[tiffany@fittech.com.tw](mailto:tiffany@fittech.com.tw)
- ◆ 電話：04-23502319
- ◆ 傳真：04-23504502

## Company Profile

Established in 2004, FitTech Co., Ltd. is a professional corporation of developing automatic equipment and system integration for the optoelectronic, semiconductor industry and laser processing field. FitTech marketed globally with our own brand "FitTech". We expand steadily in the optoelectronic field, and become the biggest supplier and leading brand of LED testing and sorting system. FitTech also committed to develop testing and sorting systems of laser diode, other compound semiconductor, and laser micromachining system. To fit customers' requirements, we have a superior R&D team with high integration capabilities, and with our after-sales team, we provide all-round solutions for customers.

## Main Product/ Service



### LED / MiniLED / MicroLED Test & Sort solutions

FitTech provides total testing solutions for LED/ Flip chip LED wafer or chip. Including auto probing and testing systems, sorting system, chip counter, detaching tape system, etc..



### Laser Diode & Other Compound Semiconductor Test solutions

FitTech provides testing solutions for VCSEL/PD/DFB/FP/EML. Including near/far field pattern test, high/low temp. test, eye safety measurement, divergence angle measurement, etc. test items.



### Laser Micromachining Solutions

FitTech ventured into the research and development of laser micromachining systems for semiconductor and PCB industry, such as drilling, cutting, marking, scribing, cleaning machine, etc.



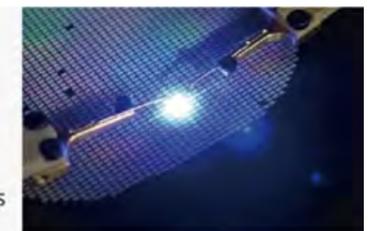
### LED / Laser Diode Test & Sort Service

FitTech builds OEM foundries, and provides customers LED/LD testing and sorting service by our own developed machines.



### Automation/Intelligence Solutions

FitTech invests in intelligent manufacturing, develops MES system, automation and smart factory solutions of LED testing and sorting.



## Contact Information

- ◆ Comp. Web：<https://www.fittech.com.tw/>
- ◆ Name：Tiffany
- ◆ Address：No.3, Gongyequ 35th Rd., Xitun Dist., Taichung City 407, Taiwan
- ◆ Email：[tiffany@fittech.com.tw](mailto:tiffany@fittech.com.tw)
- ◆ TEL：+886 4 2350 2319
- ◆ FAX：+886 4 2350 4502





# 華興電子工業股份有限公司

## LEDTECH ELECTRONICS CORP.

### 企業宗旨與經營理念

華興電子工業股份有限公司創立於西元 1977 年，以立足台灣、放眼世界的宏觀理念，貫徹全球化的運籌佈局，致力於專業分工以及資源整合，強化我們的核心技術與優勢能力，最重要的是發揮團隊合作精神，以追求華興公司永續經營與回饋社會的使命。四十多個年頭以來，華興秉持著「誠信」、「負責」、「精益求精」的座右銘，專業生產發光二極體指示燈與顯示器，四十年來不斷的培育人才，研發新產品，更新自動化生產設備，以滿足客戶的需求。

### 有關子公司華能光電

華能光電成立於西元 2007 年，為華興集團旗下的子公司，擁有業界數十年經驗之經營團隊和先進研發技術團隊組合而成的專業 LED 照明公司。我們擁有豐富的 LED 封裝及 LED 模組設計與組裝技術作後盾，故更了解如何運用 LED 的光特性去製造出符合客戶需求的產品，更致力開發節能環保，更高光效率及高光品質的光源與應用。

### 核心力量與競爭優勢

我們專業堅強的經營團隊成員們共累積超過 230 年以上的 LED 產業經驗，長期合作之銷售通路據點分佈全球超過 70 個國家，擁有穩定的供應鏈與策略合作夥伴，專精於 LED、電子、光學、導熱、材料、效率、結構技術之整合，具創新研發能力，提供高品質、高信賴的產品達到符合市場客戶的需求。

### 主要產品介紹

#### (一) LED 封裝



- LED Lamp
- SMD LED
- Based LED
- Flexible Light Strip
- LED Display
- LED Backlight
- Rigid Light Strip
- High Power LED

#### (二) LED 照明模組



利用 COB 照明模組 3W~200W，製成球泡燈、坎燈、泛光燈、天井燈、路燈等各式產品。

### (三) LED 照明應用產品

類別	燈管類	燈具類	射燈類	球泡類
產品	T5	坎燈	MR11	
	T8	泛光燈	MR16	E26
	T9	天井燈	GU10	E27
	T12	格柵燈	PAR30	
	(一般 / 低溫)	中東燈	PAR38	
		山型燈	AR11	
		工事		

### 產品特色與優勢

LED 與傳統產品相較之下無紫外光問題、使用壽命長、發光效率佳，符合環保需求，可確實達到節省碳之效益。我司產品皆經過長時間信賴度測試與壽命試驗，不僅低光衰，演色性更可高達 97%，燈具設計具有有效散熱。此外，最新產品使用 COB 技術之熱電分離設計，能有效降低熱阻，提升元件壽命，減少維修，在產品亮度、色溫 BIN 區集中上更是品質的保證，能取代單點 LED 光源，光形更易設計，解決照明產品重影，降低組裝成本問題。我們透過定制化的服務，讓產品更能夠契合消費者的需求。

### 認證與專利

目前華興已通過 ISO14001、ROHS Compliance 環境系統認證，QS-9000、ISO-9002、ISO-9001(2000)、TS-16949 品質認證、UL 安規認證與 CE 認證，為台灣少數獲得 CNS 認證與節能標章的廠商之一，並在 2010 年得到國家級高新技術企業之榮譽，截至 2012 年 4 月已於全球取得共 224 個專利。

### 成功案例

華興集團深耕市場，為低溫照明的領導者，佈局橫跨全球各大洲前三大冷凍、冷藏、冰櫃、冷飲自動販賣機之製造商。至今年 4 月於全球銷售超過 25,000,000 支 LED 燈管 / 燈條，在低溫照明、商業空間、交通運輸、特殊照明、一般空間照明等不同領域上皆有許多成功案例，如下：

- 低溫照明：冷凍倉儲、蛋糕展櫃、超市、便利商店。
- 商業照明：百貨專櫃、化妝品展櫃、超市、量販店、工廠、便利商店、餐廳、地下街商品店。
- 交通運輸：公車、列車、地鐵。
- 特殊照明：大樓外觀裝飾、有機農場、博物館、藝廊、美術館。
- 一般照明：超市、銀行、學校、辦公室、會議廳、體育館、地下停車場。

### 展望未來

隨著消費者對於節能環保、永續地球的意識提升，並配合各國政府政策的提倡與法規的訂立，未來全球將走向 LED 照明的新世紀。華興集團秉持初衷，掌握元件封裝應用技術與成本優勢，專注研發 LED 產品應用，並結合市場需求，盼提供更高品質、高效能、低成本之產品，為客戶創造更大的效益。選擇華興產品，將是你最明智的選擇！

### 華興子公司 華能光電 成功案例分享



低溫照明  
案例：台灣全家便利商店



商業空間照明  
案例：日本地下街商品店



交通運輸照明  
案例：義大利巴士



特殊照明  
案例：臺灣國立故宮博物院



一般空間照明  
案例：日本超市



# ENERGYLED CORPORATION

## 華能光電科技股份有限公司

### Company Profile

Established in 2007, Energyled Corporation, a subsidiary of a Taiwan public-listed company LEDTECH, with 46 years of LED packaging experience from LEDTECH, has dedicated in being a total LED lighting provider by supplying the LED lighting finished products based on the self-supplied LED lighting components.

### We specialize in



Flood Light



Gen IV High Bay Light



High Wattage Spot Light



Low Temperature Lighting

and many more...

We look forward with much interest to exploring LED lighting market with you.

### Contact Information

- ◆ Jasmine Ying
- ◆ TEL : 886 2 22186891 Ext.2733
- ◆ Email : export@ledtech.com.tw ; domestic@ledtech.com.tw



# 閎康科技股份有限公司

MATERIALS ANALYSIS TECHNOLOGY INC.



# MATERIALS ANALYSIS TECHNOLOGY INC.

閎康科技股份有限公司

## 公司簡介

閎康科技成立於 2002 年，為涵蓋電子、電機、材料分析實驗室為內涵的技術服務公司，提供半導體產業鏈上 IC 設計、製造、封裝、測試等各階段所需的分析服務，無論是設備型號、機台數皆遠優於各大學和研究機構，在世界上居於領先的地位。閎康放眼全球，跨足海外建立實驗室和業務辦事處，至今已全球共有十四處據點。

閎康科技完善的分析檢測系統如同人體的醫療體系，從理科檢查、內科診療、外科手術、到醫學中心的病理研究；對失效樣品，進行非破壞性檢測、電性分析、物性分析到材料分析，提供客戶醫療級的分析檢測服務。

閎康科技是台灣率先通過 ISO-9001、IECQ-17025、ISO-27001、TUV NORD Certification(Automotives)、ANSI/ESD S20.20 以及 ISO/IEC-

15408 等多項認證的獨立實驗室，並榮獲經濟部工業局頒發之工業精銳獎。本公司顯微尺寸量測結果為少數可回溯至美國國家標準研究院 (National Institute of Standards and Technology, NIST) 驗證的測量標準片，並通過國際大廠客戶現場稽核，提供客戶國際認證品質等級的精確分析數據。

隨著科技不斷推進，閎康發展領域持續加深加廣，因應 AI 人工智慧、機器學習、安全加密等大數據時代來臨，量子計算已成為全球科技產業熱門議題，其硬體核心在製作及分析的困難度極高，閎康提前布局不同量子結構所需的先進檢測技術，迎接量子時代的技術挑戰。凡有晶片製造的需求存在就是閎康服務的責任與價值，我們持續投資先進分析設備，強而有力的分析能量讓客戶在全球供應鏈中更具競爭力。

## 主要產品 / 服務

閎康以成為「高科技產業的最佳研發伙伴」為願景，持續以專業的分析服務提供高科技產業技術精進的品質對策，協助提升客戶產品在市場上的競爭力，以促進高科技產業的研究發展。

- 可靠度測試服務 (RA) :**  
針對不同產品階段提供元件可靠度、板階可靠度、系統可靠度，以及針對車用元件的可靠度服務。閎康可靠度實驗室為確保實驗品質與穩定性，均採用國際知名設備品牌，讓閎康客戶享有最穩定的測試機台與最佳測試環境。
- 非破壞性分析 :**  
包含「光學顯微鏡 (OM)」、「3D 光學顯微鏡 (3D OM)」、「2D X-ray」、「3D X-ray」、「超音波掃描顯微鏡 (SAT)」、「白光干涉儀 (OP)」以及「時域反射儀 (TDR)」等，透過不破壞樣品的手法，觀察半導體封裝或 PCB 內的缺陷定位。
- 電性故障分析 (EFA) :**  
閎康提供「InGaAs」、「OBIRCH」、「Thermal EMMI」、「C-AFM」、「AFM/SEM-based Nano-probing」、「EBIC/EBAC」、「EBIRCH」等完整電性故障分析服務，協助客戶驗證及量測半導體電子元件的參數與特性，如電壓-電流、電容-電壓特性曲線、電阻、電容、電感值量測或訊號波形等，藉此了解元件的失效行為以推測可能的故障機制，並決定後續的分析動作。
- FIB 線路修補 :**  
閎康科技具備多套單粒子束聚焦式離子束 (Single Beam FIB, SB-FIB) 顯微鏡提供 IC 線路修補服務，我們一天 24 小時、一星期七天的運作，提供客戶最即時服務，保證 24 小時之內完成客戶的委託案件是閎康給客戶的承諾。

- 樣品製備處理 :**  
各項樣品製備處理服務，包含「TEM 試片製備」、「化學蝕刻去封膠」、「雷射蝕刻去封膠」、「乾式蝕刻及研磨去層次」、「離子研磨」、「IC 封裝打線服務」、「Rework Station」以及「雷射植球」等服務。
- 材料分析 (MA) :**  
閎康科技同時擁有多部 Hitachi S-8020、S-4800 等一系列超高解像能的場發射型電子顯微鏡 (FE-SEM)，可搭配精準的樣品製備，如 CP (ion milling) 或燻熟的 delayer 方式，對樣品表面及橫截面做微區放大觀察及元件尺寸量測。穿透式電子顯微鏡 (TEM) 則用於觀察樣品的精細結構，影像解析度可達奈米級的原子解像力。閎康另有「FIB」、「DB P-FIB」、「EBSD」、「EELS」等重要材料分析工具，可為客戶提供奈米等級精確定位與觀察分析。
- 表面分析 (SA) :**  
閎康提供表面分析服務包含「二次離子質譜儀 (SIMS)」、「展阻分析儀 (SRP)」、「掃描式電容顯微鏡 (SCM)」、「X 光光電子能譜儀 (XPS)」、「歐傑電子能譜分析儀 (FE-AES)」、「原子力顯微鏡 (AFM)」、「薄膜厚度輪廓測量儀 (α-step)」、「光學膜厚測量儀 (Thin Film Analyzer)」、「傅立葉轉換紅外光譜儀 (FTIR)」等。
- 物理化學特性分析 (CA) :**  
化學分析中三大主要質譜技術 (ICP-MS / GC-MS / LC-MS)，閎康皆可提供分析服務，可對樣品進行定性或定量測定，提供包括其物理或機械性質、成份組成、外觀尺寸、粒子分布型態、聚集或團聚程度、溶解及分散狀況、表面電性及表面化學等資訊。
- 整合性分析 :**  
包含「競爭產品分析」、「專利分析鑑定」、「第三者鑑定報告」及訓練課程等。

## 亮點介紹

隨著半導體及材料產業的快速發展，閎康科技除了提供專業完整的分析服務外，更於 2021 年以科技部「基礎研究核心設施服務中心」為合作平台，啟動與臺灣大學、臺灣師範大學、清華大學、陽明交通大學、中央大學、中興大學、成功大學、中山大學等八校的產學合作計畫，每年投入新台幣 2,000 萬元，補助 20 件以開發高科技產品和製造、封裝、測試與系統等主題，並運用先進分析檢測技術的研究計畫，支持學術單位在創新元件、材料及創新構想的先期研究及開發。並特別於公司網站的技術文章專區開設「科技新航路 | 合作專欄」，每月邀請產學研界的教授及專家專文撰寫介紹目前最熱門、最先進的科技研究發展內容，攜手客戶及早掌握下一世代的關鍵產業技術。

## 連絡資訊

- 公司官網：<https://www.ma-tek.com>
- 聯絡人姓名 / 職稱：陳家淳 / 管理師
- 地址：300094 新竹市科學工業園區力行一路 1 號 1A3

- Email：[marketing@ma-tek.com](mailto:marketing@ma-tek.com)
- 電話：03-611-6678 #3843
- 傳真：03-563-0777

## Company Profile

Founded in 2002, Materials Analysis Technology Inc. (MA-tek) is a world-class technical service company covering electronics, electrical machinery, and material analytical labs. As an indispensable working partner, MA-tek provides QRA related technical services in many industrial parks to match customer needs in the supply chain of the electronic industry. MA-tek has set up 12 labs, situated throughout the world, to provide prompt and convenient service to our customers.

Employing medical services to combat human diseases, MA-tek possesses similar functional systems such as scanning acoustic tomography (SAT), X-Ray topography, electron microscopes, and hot emission microscopes for fault isolation. We are able to support yield enhancement in product engineering and wafer processing with powerful EFA and PFA tools. With the aids of the same logical diagnostic, analysis, consultancy, and FIB circuit editing, MA-tek has been well regarded as an analysis research center for new design products, in-process wafers, and field return products.

MA-tek was approved by the Industrial Bureau of the Ministry of Economic Affairs to provide R&D services and intellectual property rights services at the beginning of the establishment in 2002. MA-tek was certified by ISO-9001 management certification, IECQ-17025 laboratory certification, ISO-27001, ISO/IEC-15408 CC EAL6 in Information Security and also passed the on-site audits by international customers. Our microscopic size measurement results can be traced back to the National Institute of Standards and Technology (NIST) to verify the measurement standards, which can provide customers with international-level high-quality analysis services.

With the continuous advancement of science and technology, MA-tek's future development areas continue to deepen and expand, ranging from 5G development and AI to data center construction and other frontend trends, all of which are opportunities for MA-tek to elaborate its strengths. Wherever there is a demand for chip manufacturing, it is the responsibility and value of MA-tek's service. We continue to invest in advanced analysis equipment to provide customers with strong and powerful support to make customers more competitive in the global supply chain.

## Main Product/ Service

With the vision of becoming "The Best R&D Partner in the High-tech Industry", MA-tek continues to provide quality countermeasures for high-tech industry technological advancement with professional analysis services. The scope of MA-tek's services covers the rapid debugging and physical verification in the electronic product design phase, as well as the precise positioning of the fault areas of the micro and nano products, structure observation, material composition and other static and dynamic test analyses; ranging from manufacturing process development, manufacturing process integration, to basic academic research, quality control, patent litigation, failure analysis, competitive product structure analysis or customer returns related issues, these are all within the scope of services.

**Reliability Testing Services (RA) :**  
MA-tek provides component level reliability, board level reliability, system level reliability, and reliability services for automotive. In order to ensure the quality and stability of experiments, MA-tek's reliability laboratory uses internationally renowned equipment brands, so that MA-tek customers will have the most stable testing machines and the best test environments.

**Non-destructive Analysis :**  
The non-destructive analysis provided by MA-tek includes "Optical Microscopy (OM)", "3D Optical Microscopy (3D OM)", "2D X-ray", "3D X-ray", "Scanning Acoustic Tomography (SAT)", "Optical Profilers (OP)", and "Time Domain Reflectometry (TDR)".

**Electrical Failure Analysis (EFA) :**  
MA-tek provides comprehensive electrical failure analysis services such as "InGaAs", "OBIRCH", "Thermal EMMI", "C-AFM", "AFM/SEM-based Nano-probing", "EBIC/EBAC", "EBIRCH", etc. MA-tek also provides probe measurement services for hard needles and soft needles for the chip level (mainly for electrical measurement and verification after circuit repair). To operate in coordination with the setup of the probe station and needle base, which can tap six needles at the same time, there is a laser cutting system equipped on the probe station which can be used for positioning.

**FIB Circuit Repair :**  
MA-tek has a total of 15 Single Beam FIB (SB-FIB) microscopes that can provide IC circuit repair services. We operate 24 hours a day, 7 days a week to provide the customers with the most immediate services and to guarantee the completion of customers' commissioned cases within 24 hours. This is MA-tek's commitment to customers.

**Sample Preparation :**  
MA-tek provides various sample preparation services, including "TEM Sample Preparation", "Chemical Decap", "Laser Decap", "Delayer & Parallel Lapping" and "IC Packaging & Bonding".

**Materials Analysis (MA) :**  
The Electron Microscope (TEM) is the fastest and most effective method for observing the fine structure of surfaces. MA-tek also has a series of ultra-high resolution devices such as the Hitachi S-8020 and S-4800 Field Emission-SEM (FE-SEM), which can be paired with precise sample preparation, such as CP (ion milling) or a highly skilled delayer method, to perform micro-area magnification observation and component size measurement on the sample surface and cross-section; the magnification can reach hundreds of thousands of times. The additional Energy Dispersive Spectrometry of X-ray (EDS) can perform qualitative and semi-quantitative analysis of micro-zone materials, which is of great help to the analysis of material composition or foreign body composition.

**Surface Analysis (SA) :**  
MA-tek provides various Surface Analysis services, including "Secondary Ion Mass Spectrometry (SIMS)", "Spreading Resistance Probe (SRP)", "Scanning Capacitance Microscope (SCM)", "X-ray Photoelectron Spectroscopy (XPS)", "Field-emission Auger Electron Microscope (FE-AES)", "Atomic Force Microscope (AFM)", "Thin Film Analyzer (α-step)", "Optical Thin Film Analyzer", and "Fourier Transform Infrared Spectroscopy (FTIR)", etc.

**Physicochemical Characteristics Analysis (CA) :**  
Mass Spectrographic Analysis is an important technology to identify the structure of substances, the mass spectrometry shows the signal intensity of elements with different masses in the sample to identify unknown compounds. MA-tek can provide analysis services for the three major mass spectrometry techniques in chemical analysis (ICP-MS/GC-MS/LC-MS).

**Integrated Analysis :**  
The Integrated Analysis services provided by MA-tek include "Failure Analysis Process", "Integrated Project Service" and "Competitive Product Analysis".

## Highlights

Considering the rapid development of the semiconductor and materials industries, MA-tek has decided that, in addition to providing comprehensive and professional analysis services, we had launched the "New Technology Channel | Collaboration Column" on our official website, where we invite professors and experts from the industry, academic and research circles to share and discuss various topics of interest, striving to continuously bring the most advanced scientific and technological research and development content to all of our customers and partners thereby.

## Contact Information

- Address：1A3, 1F, No.1, Li-Hsin Rd. I, Hsinchu Sciencebased Industrial Park, Hsinchu City, Taiwan 30078, R.O.C.
- Email：[marketing@ma-tek.com](mailto:marketing@ma-tek.com)
- TEL：+886-3-611-6678
- FAX：+886-3-563-0777

# Tyntek 鼎元光電科技股份有限公司

TYNTEK CORPORATION

Tyntek

# TYNTEK CORPORATION

鼎元光電科技股份有限公司

## 公司簡介

鼎元光電科技股份有限公司為 LED、Silicon Device 及光通訊元件專業製造商，秉持品質、創新、服務、環保的經營理念，並提供最優質的服務，客戶遍及中國、日本、韓國、歐洲和美國。

## 主要產品

### 化合物半導體元件

#### 1. Visible LED Chip

Gap / Gap	Red, Green
GaAsP / Gap	Yellow, Orange Red
AlGaAs / GaAs	SH, DH, DDH high brightness Red
AlGaInP / GaAs	As Type Yellow, Green, Orange, Red
AlGaInP / Si	Wafer Bond Red, Yellow

#### 2. Infrared LED Chip

GaAs / GaAs	940nm Infrared LED
AlGaAs / GaAs	940nm Infrared LED
AlGaAs / AlGaAs	700 ~ 900nm Infrared LED
AlGaAs / Si	Wafer Bond 730 ~ 940nm Infrared LED

#### 3. Opto Fiber Communication Device Chip

LnGaAs/InP	1300nm LED and Photo diode
AlGaAs/GaAs	850nm Photo diode and VCSEL

#### 4. OEM and ODM service in compound semiconductor devices.

### 矽半導體元件

#### 1. Photo-Transistor Chip

Photo-coupler
Photo-interrupter
Photo-Switch
Ambient Sensor

#### 2. Photo-Diode Chip

Standard Type for Remote controller
Data Communication
Smoke Sensor
Optical Encoder
Ambient Sensor

#### 3. Zener-Diode /TVS Chip

ESD Protection
Surge Protection
Voltage Regulation

#### 4. OEM and ODM service in Bi-polar silicon devices.

## 亮點介紹

本公司完成 VCSEL 面射型雷射二極體及 DUV 感測元件開發，產品線更加完整，為使產品更具前瞻性與市場性，近年來全力投入光通訊感測元件及汽車用、醫療、精密控制之感測元件研發工作，已獲相當成果，同時更積極投入相關產品應用領域開發，由於光電市場成長快速，各類產品應用範圍持續擴大，市場需求更加暢旺公司為因應市場需求，將持續開發下列產品：A. 高密度半導體被動元件 B. 6

”晶圓及高感度感測 PD C. 6”晶圓及高精度功率元件 D. 高功率 AlGaInP 發光二極體 E. 高速光通訊用檢光二極體 F. 多波段檢光元件 G. 深紫外光感測元件 H. 靜電保護元件之矽基板 I. 覆晶式稽納二極體 J. 光敏二極體積體元件 (PDIC) K. 低容瞬態電壓抑制製元件 (TVS) L. 高速光通訊用雷射二極體 M. 面射型雷射二極體 (VCSEL) N. 新世代半導體材料元件

## 連絡資訊

- ❖ 公司官網：<https://www.tyntek.com.tw/index.php>
- ❖ 聯絡人姓名 / 職稱：柯素裕 / 管理師
- ❖ 地址：350 竹南科學園區科中路 15 號 Email Susan\_ko@serv.tyntek.com.tw
- ❖ 電話：+886-37-582997
- ❖ 傳真：+886-37-582908

## Featured Product

Tyntek is the LED, Silicon Device, and Opto Fiber Communication Device professional manufacturer. Based on our quality, innovation, service and environmental protection management belief, we provide the superior service. Also, Tyntek's customers are all over the global including China, Japan, Korea, Europe, and U.S.A.

## Products & Service

### Compound Semiconductor Devices

#### 1. Visible LED Chip

Gap / Gap	Red, Green
GaAsP / Gap	Yellow, Orange Red
AlGaAs / GaAs	SH, DH, DDH high brightness Red
AlGaInP / GaAs	As Type Yellow, Green, Orange, Red
AlGaInP / Si	Wafer Bond Red, Yellow

#### 2. Infrared LED Chip

GaAs/GaAs	940nm Infrared LED
AlGaAs/GaAs	940nm Infrared LED
AlGaAs/AlGaAs	700 ~ 900nm Infrared LED
AlGaAs/Si	Wafer Bond 730 ~ 940nm Infrared LED

#### 3. Opto Fiber Communication Device Chip

InGaAs/InP	1300nm LED and Photo diode
AlGaAs/GaAs	850nm Photo diode and VCSEL

#### 4. OEM and ODM service in compound semiconductor devices.

### Silicon Semiconductor Devices

#### 1. Photo-Transistor Chip

Photo-coupler
Photo-interrupter
Photo-Switch
Ambient Sensor

#### 2. Photo-Diode Chip

Standard Type for Remote Controller
Data Communication
Smoke Sensor
Optical Encoder
Ambient Sensor

#### 3. Zener-Diode /TVS Chip

ESD Protection
Surge Protection
Voltage Regulation

#### 4. OEM and ODM service In Bi-polar silicon devices.

## Products & Service

### After the Company has

completed the development and mass production of VCSEL surface emitting laser diodes and deep ultraviolet (DUV) components, our production lines have become more complete. To develop products with forward looking nature and greater marketability, in recent years, the Company's full dedication to the research and development of optical communication sensors and sensors for the fields of automobile, medical care, and precision control has come to fruition. In addition, the Company is also active in the investment of relevant product application fields. With the rapid growth of the optoelectronic market, the application scope of various products continues to expand, and the market demand is increasing. To satisfy the market demand, the Company will continue to focus on the development of the following products:

A. High density semiconductor passive components

- B. 6" wafer and high-sensitivity sensing PD
- C. 6" wafer and high precision and power components
- D. High power AlGaInP light emitting diodes
- E. High speed communication photodiodes
- F. Multiband photo detectors
- G. DUV sensors
- H. Silicon substrates with electrostatic protection components
- I. Flip-chip Zener diodes
- J. Photo diode integrated circuit (PDIC)
- K. Low-capacitance transient voltage suppressors (TVS)
- L. High speed optical communication laser diodes
- M. Vertical cavity surface emitting laser (VCSEL) diodes
- N. New generation semiconductor material components

## Contact Information

- ❖ Comp. Web : <https://www.tyntek.com.tw/index.php>
- ❖ Name : Susan ko
- ❖ Address : No.15,Kejung Rd., Chunan Science Park,Chunan, Miaoil County 350,Taiwan(R.O.C.)
- ❖ Email : Susan\_ko@serv.tyntek.com.tw
- ❖ TEL : +886-37-582997
- ❖ FAX : +886-37-582908

# EVERLIGHT 億光電子工業股份有限公司

EVERLIGHT ELECTRONICS CO.,LTD.

# EVERLIGHT EVERLIGHT ELECTRONICS CO.,LTD.

億光電子工業股份有限公司

## 公司簡介

億光電子創立於 1983 年，以超過四十年以上於 LED 產業的深厚實力，整合專業研發、業務及市場團隊，以客戶需求為導向，就其各種不同的應用提供完整全方位的解決方案，產品線包括 High Power LEDs, SMD LEDs, Lamps, Lighting Components, LED Lighting Modules, Digital Displays, Opto-couplers and Infrared Components 等。客戶可以依照本身應用產品的需求，在億光選擇到最適合的封裝產品，使用適合的 LED 才可以達到應用產品最佳的效率與品質表現。億光多年來以「同心協力、勇往直前、奮戰不懈」的精神為理念，已在全球 LED 市場佔有率位居前 5 大的成績，億光將繼續開發更多元應用的 LED 產品，提供客戶各種無可挑剔的產品方案，共創雙贏的未來！

## 主要產品 / 服務

- 產品：車用 / 不可見光 / 可見光 / 背光 / 照明
- 服務：億光近 40 年來整合專業研發、業務及市場團隊，專注提供全球客戶 LED 全方位解決方案，在世界 LED 產業中佔有重要一席之地。
- 秉持「同心協力、勇往直前、奮鬥不懈」的精神，持續以提供高品質、高競爭力的產品及服務，億光團隊支持客戶一同走過數十載產業更迭挑戰，共創雙贏的未來！

## 亮點介紹

- **客戶至上**
  - √ 客戶滿意度優於同業
  - √ 客戶關懷
  - √ 客戶服務
- **一站購足**
  - √ 全產品線
  - √ 彈性交期
  - √ 穩定供貨
- **公司治理**
  - √ 誠信正直
  - √ 恪遵原則
  - √ 品牌悠久
- **專注研發**
  - √ 新產品開發週期短
  - √ 送樣快速
  - √ 回饋即時

## 連絡資訊

- ◆ 公司官網：<https://www.everlight.com/>
- ◆ 地址：新北市樹林區中華路 6-8 號
- ◆ Email：[marketing@everlight.com](mailto:marketing@everlight.com)
- ◆ 電話：+886 2 2685 6688
- ◆ 傳真：+886 2 2685 6699

**EVERLIGHT 2023 One Source for Every Needs**

億光為世界級光電產業領導者，以超過四十年以上於 LED 產業的深厚實力，整合專業研發、業務及市場團隊，以客戶需求為導向，就其各種不同的應用提供完整全方位的解決方案，包括 High Power LEDs, SMD LEDs, Lamps, Lighting Components, LED Lighting Modules, Digital Displays, Opto-couplers and Infrared Components 等。客戶可以依照本身應用產品的需求，在億光選擇到最適合的封裝產品，億光將繼續開發更多元應用的 LED 產品，提供客戶各種無可挑剔的產品方案，共創雙贏的未來！

COB Backlight Signage LED Digital Display LED Flash LED Automotive LED Lamp LED Infrared LED Optical Sensors Photo Coupler

Light, Small and Thin Highly Competitive Cost and Performance

228 lm/w 5630X

EL071L Headlamp 3535

3.3V and 5V CMOS compatibility / High CMR > 10,000 V/us EVERLIGHT Automotive LED Lights offer Safe Driving

新北市樹林區中華路6-8號

## About Us

EVERLIGHT Electronics Co., Ltd. was founded in 1983 in Taipei, Taiwan led by Chairman Robert Yeh. EVERLIGHT has over 40 years of R&D experience for reliable capability. With immediate service and an excellent brand reputation, EVERLIGHT has taken top five worldwide in the competitive LED market. Our products are manufactured and packed in-house to guarantee maximum quality and service. EVERLIGHT provides a diverse product portfolio consisting of High Power LEDs, SMD LEDs, Lamps, Lighting Components, LED Lighting Modules, Digital Displays, Opto-couplers and Infrared Components for various applications. Today, EVERLIGHT is a global company with over 6,400 employees based in China, Hong Kong, Japan, Korea, Singapore, Malaysia, India, Germany and U.S.A.

## Main Product/ Service

Product:Automotive/Opto-electronic/Lighting Component/Visible/Thin Film Transistor Backlight  
Service: teams to provide global customers with all-round LED solutions steadfastly. Today, EVERLIGHT plays a significant role in the global LED industry. Over the last 40 years, EVERLIGHT has integrated professional R&D, sales and marketing role in the global LED industry.

Upholding the spirit of "strive, onward and never let up", the EVERLIGHT team has been offering high-quality and high-competitive products and services to our customers to support them through changes and challenges of the industry over the decades. And we will continue to do so to head toward a win-win future.

## Identity Introduction

- **Customer Upmost**
  - √ Has a better customer satisfaction level comparing with other industry players
  - √ Customer care
  - √ Customer services
- **Corporate Governance**
  - √ Honesty and integrity
  - √ Abide by rules
  - √ A brand with long history
- **One-stop Purchasing**
  - √ A complete product portfolio
  - √ Flexible delivery
  - √ Stable supply
- **Focus on R&D**
  - √ Short product development cycle
  - √ Fast sample delivery
  - √ Immediate feedback

## Contact Information

- ◆ Comp. Web：<https://www.everlight.com/>
- ◆ Address：No. 6-8, Zhonghua Rd., Shulin Dist., New Taipei City 23860, Taiwan, R.O.C.
- ◆ Email：[marketing@everlight.com](mailto:marketing@everlight.com)
- ◆ TEL：+886 2 2685 6688
- ◆ FAX：+886 2 2685 6699

**EVERLIGHT 2023 One Source for Every Needs**

With diversified comprehensive portfolios, EVERLIGHT is able to offer a total solutions in order to fulfil all demands at one stop purchasing experience. In the meantime, all EVERLIGHT products are RoHS Compliant, contributing to a sustainable and environmental-friendly lifestyle around the world.  
[www.everlight.com](http://www.everlight.com)

COB Backlight Signage LED Digital Display LED Flash LED Automotive LED Lamp LED Infrared LED Optical Sensors Photo Coupler

Light, Small and Thin Highly Competitive Cost and Performance

228 lm/w 5630X

EL071L Headlamp 3535

3.3V and 5V CMOS compatibility / High CMR > 10,000 V/us EVERLIGHT Automotive LED Lights offer Safe Driving

No. 6-8, Zhonghua Rd., Shulin Dist., New Taipei City 23860, Taiwan, R.O.C.



# 鏢創科技股份有限公司

PLAYNITRIDE INC.



# PLAYNITRIDE INC.

鏢創科技股份有限公司

## 公司簡介

PlayNitride Inc. 於 2014 年成立，立志要「改變世界」，透過創新的研發技術和多元的商業模式，為氮化物產業帶來新的視角，致力於提供客戶最大的價值，並成為領先公司。

目前，PlayNitride Inc. 與多家全球頂尖的台灣、韓國、日本的顯示器製造商和知名品牌系統商建立了深度合作關係。展望未來，從晶片到系統，甚至是新興的顯示應用科技如 AR/VR、穿戴式裝置、手機及車載應用等，PlayNitride Inc. 將在 "MicroLED Display Ecosystem" 中擔任上下游整合的角色，並專注於開發關鍵技術，提供多樣化的 MicroLED 顯示器產品或解決方案，與合作夥伴一起打造 MicroLED 顯示應用的新世界。

並且 PlayNitride Inc. 在 2022 年榮獲美國顯示器展的最佳顯示技術獎，也在該年於台灣股市交易所上市，成為台灣創新板的第一家上市公司。不僅積極推動產業聯盟，參與未來自動車的關鍵技術開發，還與台灣的面板產業共同成立國家隊，加速面板業進入次世代 MicroLED 的開發與生產，並與整個面板產業鏈一同成長，立足台灣，放眼全球。

## 主要產品 / 服務

鏢創擁有 PixeLED 的 MicroLED 製造技術以及 SMAR-Tech 的 MicroLED 缺陷修補技術，讓 MicroLED 除了可使用在傳統顯示器的優化提升外，更可提供許多創新的顯示科技應用，被視為終極顯示技術。

依據應用需求的不同，目前主要分為三大解決方案：

1. PixeLED Display – MicroLED 使用低溫多晶矽面板：主要以主動顯示技術 (Active Matrix) 為主，基板為玻璃材質或 PI 軟板材質，可做出透明、可撓曲的 MicroLED 顯示面板。主要使用於車用或是各類消費性電子產品。
2. PixeLED Matrix – MicroLED 使用印刷電路板：使用鏢創獨家的 PixeLED Matrix 技術，將 MicroLED 晶片以 4x4 像素為單位進行封裝，結合成熟的表面黏著技術 (SMT) 製程打件於印刷電路板 (PCB) 上，製成 5 吋的顯示模組。主要使用於大型看板或是電視螢幕之產品。
3. μ-PixeLED – MicroLED 使用 CMOS 基板：將 MicroLED 晶片微小化至 5μm 以下尺寸，以極高的排列密度，做出小於 0.5 吋具有超高亮度與解析度的微型顯示器，作為 AR 應用之強光源顯示器。

除了上述之產品技術差異外，鏢創顯示科技會按客戶需求提出不同的解決方案，與各關鍵廠商攜手為客戶量身打造合作方式。

## 亮點介紹

MicroLED 有著節能省電、高亮度、高解析度、可撓曲或透明、反應無延遲且可靠度穩定等特色。在未來的各項發展趨勢上成為重要的元件。

像是 MicroLED 本身即具備環保概念，在特性上相較傳統 LCD 僅有 10% 的耗電量，且鏢創推出的解決方案之一即是透由拼接的方式，客製化製作大型顯示看板，並能在顯示器損壞時以模組為單位更換，不製造廢棄家電的浪費，極具環境友善的特色。

正對元宇宙的趨勢，MicroLED 本身的超高解析度、超高亮度與輕薄的特性正是 AR 眼鏡的影像來源，在元宇宙的七大核心要素中成為硬體的元件之一，參與整個供應鏈。

零碳排的世界趨勢中，電動車的發展成為各國施政綱要，在自動駕駛的未來，車內的影音娛樂或是安全警示將更加仰賴顯示器的輔助，讓顯示器無所不在。而車內顯示器對於可靠度的要求、以及形狀的可撓曲性，甚至是透明度的要求，都指向 MicroLED 顯示器的特性，因而獲得強烈的關注。在未來的世界上，MicroLED 顯示器將全程參與。

## 連絡資訊

- ◆ 公司官網：www.playnitride.com
- ◆ 聯絡人姓名 / 職稱：劉應蒼 / 行銷總監
- ◆ 地址：苗栗縣竹南鎮科中路 13 號
- ◆ Email：inquiry@playnitride.com
- ◆ 電話：037-586610

## Company Profile

PlayNitride Inc. was formally established in 2014, gathered a group of companions aim to "Change the world" and bring through the innovative R&D and diverse business models, PlayNitride has become a leading company in the field of MicroLED technology, enabling our customers to shape the future.

At present, PlayNitride is a reliable partner of many global top companies, including Taiwan/Korean/Japanese display manufacturers and well-known brand system vendors.

## Main Product/ Service

With the PixeLED MicroLED manufacturing technology and SMAR-Tech (Selective Mass Addressable Repair Technology), PlayNitride owns the core technology of MicroLED, which can upgrade the user experience from traditional LCD displays and also provide more creative display applications. Thus, MicroLED is believed to be the ultimate display technology.

According to different applications, here PlayNitride provides three solutions:

1. PixeLED Display – MicroLED on TFT (Thin-Film Transistor): Driving by Active Matrix technology and taking glasses or PI (Polyimide) materials as backplanes, MicroLED display can be transparent or flexible which is applied to the automotive or consumer electronics products.
2. PixeLED Matrix – MicroLED on PCB (Printed Circuit Board):

Looking toward the future, PlayNitride will dedicate ourselves to integrate "MicroLED Display Ecosystem" from wafer to system, and further to new emerging applications with extensive experience in the MicroLED display.

PlayNitride also provides a broad range of products and services including research and development in the field of compound semiconductors and in the field of microscale semiconductors for our customers.

With the exclusive PixeLED Matrix technology, PlayNitride seals MicroLED chips into a "4x4 pixels" unit matrix and utilizes the mature SMT (Surface-Mount-Technology) process to mount the matrix onto the PCB to produce a 5-inch display module which can tile to any aspect ratio or size by customization, which is applied to the large signage board or any screen products.

3. μ-PixeLED – MicroLED on CMOS (Complementary Metal-Oxide-Semiconductor): Scaling down the MicroLED chip size to under 5μm to produce an ultra-high-resolution display which can also perform ultra-high brightness as the micro size MicroLED display, which is applied to the resource of AR glasses.

Besides, PlayNitride can also provide customized solutions with key suppliers to fulfill different inquiries from customers.

## Identity Introduction

For MicroLED itself, there is so many advantages, such as low power consumption, high brightness, high resolution, transparent, flexible, fast response time, and excellent reliability. Which is born to be a key component of further display development.

MicroLED technology is eco-friendly, compared with traditional LCD, the power consumption is 10% only. PixeLED Matrix technology from PlayNitride can provide tiling screen by customization, and the tiling feature allows the module of signage to be replaced when it is damaged, without creating waste of full display replacement, which is extremely environment friendly.

Facing the trend of Metaverse, MicroLED displays in μ-PixeLED technology can perform ultra-high resolution, extremely high brightness, and thin size. It is perfect as the image source of AR glasses.

On the way of "Net Zero Emissions" world, the development of the electric car is a necessary policy all over the world. In the future, the media entertainment system and security support will count on displays all around the car. MicroLED display can fulfill the high reliability requirement of automotive and be flexible or transparent, which is in the spotlight of the automotive industry.

In the further, MicroLED Display will be anywhere.

## Contact Information

- ◆ Comp. Web：www.playnitride.com
- ◆ Name：Falcon Liu / Marketing Director
- ◆ Address：No. 13, Kezhong Rd., Zhunan Township, Miaoli County 350401, Taiwan (R.O.C.)
- ◆ Email：inquiry@playnitride.com
- ◆ TEL：+886-37-586610



# AMA Association for Sensors and Measurement

AMA Association for Sensors and Measurement



# AMA Association for Sensors and Measurement

AMA Association for Sensors and Measurement

## Company Profile

AMA is the first contact for sensor and measuring technology and provides a comprehensive overview of sensors, measuring, and testing technology in its detailed industry directory. The Association cultivates an innovation dialog at the leading trade fair SENSOR+TEST, at community stands of major fairs worldwide, and at the Sensor and Measurement Science International (SMSI). AMA also offers technology seminars and theme days focusing on topics in the area of sensor and measuring technology.

## Services

The AMA Association is an industry association and thus allocates the broad spectrum of sensor and measuring fields to specialized committees and study groups. Technical developments, trends in the sensor and measuring industry, questions on standardization, or the support of marketing activities: the AMA always links up and networks its members.

AMA have 450 members in the following area :

- I. Sensors
  - S.01 Sensors and sensing elements by measured parameter
  - S.02 Sensors and sensing elements by measurement principle
  - S.03 Sensor components and accessories
  - S.04 Equipment for the production of sensors and actuators
  
- II. Measurement Technology
  - M.01 Telemetry system and components
  - M.02 Modeling and simulation, HiL
  - M.03 Measuring equipment
  - M.04 Measuring equipment with integrated sensor
  - M.05 Measurement modules, measurement data acquisition systems
  - M.06 Software
  - M.07 Measurement components and accessories
  - M.08 Image processing
  - M.09 Testing equipment
  
- III. Services
  - D.01 Research and Development, R&D, and knowledge transfer
  - D.02 Contract manufacture, production
  - D.03 Calibration and Testing
  - D.04 General contracting services



### AMA Innovation Award

AMA Innovation Award for outstanding research and development work.



### Trade Fairs

Besides the SENSOR+TEST, AMA offers participation at the AMA Centers at other fairs in Germany and abroad.



### Seminars

Seminars for vocational qualification in high-technology areas.



### AMA Conferences

International networking platforms for sensor and measuring technology

## Contact Information

- ❖ Address : Sophie-Charlotten-Str. 15 14059 Berlin/Germany
- ❖ Tel. : +49 (0) 30 2219 0362 -0
- ❖ Fax : +49 (0) 30 2219 0362 -40
- ❖ Email : [info@ama-sensorik.de](mailto:info@ama-sensorik.de)
- ❖ Website : <https://www.ama-sensorik.de/en/>

# 會員 Member

Taiwan Optoelectronic Semiconductor Industry Association



SANDER88

Liverage®  
Enjoy your life



Kingbright



TRIOPTICS  
See the Difference. **LIGITEK**

PARA  
ight



LITEON® **HARVATEK**



Lites R us

欣偉科技 singway



ASMPPT  
enabling the digital world



EPISTAR

Ledtech

**MAtek** **Tyntek** EVERLIGHT

PLAYNITRIDE

AMA  
Association for Sensors + Measurement  
Linking Innovators