

## 題目：奇美電子十年與未來發展

### 摘要

奇美電子於 1998 年成立於台南科學園區，在堅持自行研發不技轉的情況下，培養出優秀的技術人才，迅速累積的龐大的研發動能與經驗，改變了臺灣光電產業聚落型態，目前為世界 TFT-LCD 領導廠商。

從第一座三點五代廠開始到目前規劃中的八代廠，玻璃基板從小於一公尺到大於兩公尺，TFT-LCD 的生產技術不斷地向前推進。在基板變大的同時，設備尺寸也同步成長，而玻璃的搬運更成為挑戰；而為了提昇生產效率，更導入新的製程，如 ODF、laser cut、spin-less coating 等等，此皆為順利推動奇美電子大尺寸液晶面板量產的重要因素。

在產品的品質，包括 response time、contrast ratio、viewing angle、color 等性能的提昇，interface 的演進、更輕更薄的機構設計，TFT-LCD 在短短數年內的飛快進步更是有目共睹。奇美電子深耕 TFT LCD 領域基礎，並長期與國際技術交流，使創新研發動能一向領先佈局，從 1.5 吋到 57 吋，從中小尺寸、資訊產品、電視面板、醫療面板到航太面板，品質成果也備受肯定。

展望未來，除了持續更新 TFT-LCD 生產技術與產品性能，奇美也投入 AMOLED、3D display、flexible display、new light source 等新技術的開發，持續保持在顯示器業界的領導地位。

奇美電子持續努力加快將新技術導入產品的腳步，期許將研發動能發揮最大效益。

## CMO's past achievement and future development

### Abstract:

Ever since Chi Mei Optoelectronics (CMO)'s establishment in the Southern Taiwan Science Park in 1988, its perseverance in developing its own proprietary technology without external technology transfers has cumulated in the cultivation of outstanding technical engineering talent. CMO not only quickly built a strong foundation and accumulated broad research and development experiences, but also changed the dynamics of Taiwan's optoelectronics industry by shifting the focal point of TFT manufacturing from Northern Taiwan to Southern Taiwan. CMO is currently one of the leading TFT-LCD panelmakers in the world.

From its first Generation 3.5 fab to the Generation 8 fab currently under evaluation, with the motherglass substrate increasing from less than 1 meter to over 2 meters, TFT-LCD's production technology has continuously improved. The increase in the size of the motherglass substrate has not only resulted in the increase of the size of the equipment, but has also increased the difficulty in the moving of the substrate. In order to increase production efficiency, CMO has implemented new manufacturing processes, such as ODF, laser cut, and spinless coating. These processes have enabled CMO to successfully produce large-size panels.

TFT-LCD has been able to dramatically improve many of its product performance specifications, such as response time, contrast ratios, viewing angle, color, interface, and mechanical designs. CMO's long-term global technology exchanges have boosted its R&D efforts and ensured a leading position. With a full product line spanning from 1.5" to 57", and including small-medium size, IT, TV, medical and aerospace products, CMO's product quality has been applauded by customers and industry peers alike.

Looking forward, in addition to continuing to improve TFT-LCD manufacturing processes and product performance, CMO is also developing AMOLED, 3D displays, flexible displays, and new light sources. CMO will continue to position itself at the leading edge of the display industry.

CMO has been accelerating the application of new technology in its products to realize the full potential of the company's R&D capabilities