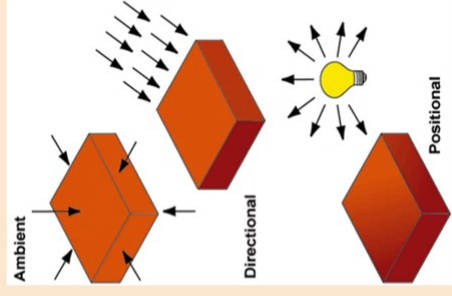


ESMT 晶豪科技

Ultra-Low-Power Tiny Package

Ambient Light Sensor Proximity Sensor

ELM2712



晶豪科技 (ESMT) 針對光感測 (Ambient Light Sensor) 及近距離感測 (Proximity Sensor) 應用推出嶄新一代的產品 ELM2712 三合一系列，可以配合 LED 及 VCSEL 兩種光源需求，ELM2712 系列可滿足客戶偵測光源不同波段的需求，亦可偵測判斷物體近距離之動作。

ELM2712 以極其微小的 2mm x 1mm 模組集成了 IR VCSEL 和驅動器，結合了光感測及近距離感測的功能。近距離感測功能透過光電二極管檢測反射的紅外能量來提供物體檢測（例如，移動設備屏幕到用戶耳朵），近距離感測另具有寬範圍偏移調整功能，可補償傳感器上不需要的紅外能量反射。

光感測與 IR 光電二極管具有提供轉換成 24 bit 的專用數據。ELM2712 整體架構可更準確測量環境光，從而使設備能夠計算照度，以控制顯示器光度。ELM2712 可適用於任何顯示裝置（手機，平板，手錶，筆記型電腦），TWS 無線藍芽耳機，智能燈具，智能家居系列及多種應用。

Elite Semiconductor Microelectronics Technology Inc. (ESMT) unveils a new generation of product ELM2712, a three-in-one product of light sensing (Ambient Light Sensor) and proximity sensing (Proximity Sensor), which can be used together with LED or VCSEL light sources. The ELM2712 series can meet the needs of customers to detect the different wavelength bands of light sources, and can also detect and judge the movement of objects at close range.

ELM2712 integrates an IR VCSEL and driver into an extremely tiny 2mm x 1mm module, combining the functions of light sensing and proximity sensing. Proximity sensing provides object detection by detecting reflected infrared energy through a photodiode (e.g. the movement of a mobile device to the user's ear). In addition, proximity sensing has a wide range offset adjustment to compensate for infrared energy on the sensor reflection. Light sensing and IR photodiodes provide 24 bits of dedicated data. The frame provides a more accurate measurement of ambient light, allowing the device to calculate illuminance to control display brightness. ELM2712 can be applied to any display device (e.g. mobile phone, tablet, notebook computer, smart watch), TWS wireless Bluetooth headset, smart lamps, smart home appliances and various applications.



若需要更進一步介紹及協助，請洽業務窗口

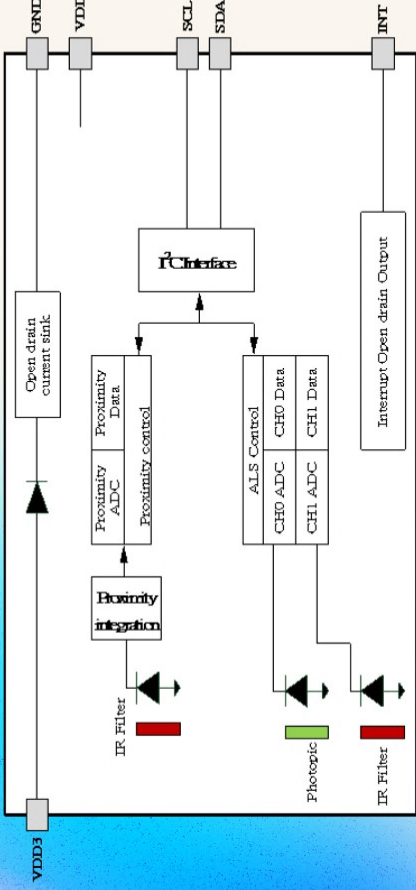
For more information or further assistance, please contact sales window

Wallace_Chang@ESMT.com.tw

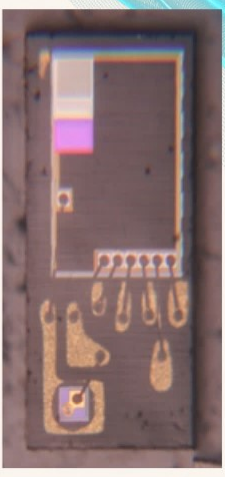
HJTing1@ESMT.com.tw

ESMT 晶豪科技

Ambient Light Sensor Proximity Sensor



ELM2712



晶豪科技(ESMT)针对光感测(AMBIENT LIGHT SENSOR)及近距离感测(PROXIMITY SENSOR)应用推出全新一代的产品ELM2712三合一系列，可以配合LED及VSCSEL两种光源需求，ELM2712系列可满足客户侦测光源不同波段的需求，亦可侦测判断物体近距离之动作。

ELM2712 以极其微小的 2MM X 1MM 模块集成了 IR VCSEL 和驱动器，结合了光感测及近距离感测的功能。近距离感测功能通过光电二极管检测反射的红外能量来提供物体检测（例如，移动设备到用户耳朵），近距离感测另具有宽范围偏移调整功能，可补偿传感器上不需要的红外能量反射。光感测与 IR 光电二极管具有提供转换成 24 BIT 的专用数据。ELM2712 整体架构可更准确测量环境光，从而使设备能够计算照度，以控制显示器亮度。ELM2712 可适用于任何显示设备(手机，平板，笔记本电脑，手表)，TWS 无线蓝牙耳机，智能灯具，智能家居系列及多种应用。

Features

- Tiny 2mm x 1mm x 0.5mm module
- Integrated 940nm IR VCSEL
- Crosstalk and ambient light cancellation
- Wide configuration range
- 2 channels (photopic ASL + IR)
- Offset emitter / detector package design

Benefit

- Low-Noise Signal Processing
- High-Accuracy A/D Converter
- Low-Power Consumption
- Systematic Integration Tech
- Tinst-Package Assembly

Applications

- Smart Phone
- Smart watch
- Notebook
- Tablet

- TWS
- Smart Lamps
- Smart Home Appliances
- IOT

A separated ALS (Ambient Light Sensor) or PS (Proximity Sensor) is available for reference.

若需要更進一步介紹及協助，請洽業務窗口

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Wallace_Chang@ESMT.com.tw

HJTing1@ESMT.com.tw