

規格書編號 Specifications number	Rev A
製作完成日 Creation day	2019/12/24

規格書 Specifications

製品名:
Product name : **AG190A00**

客戶料號:
Customer part no. :

承認欄 APPROVED

Approved	Approved	Approved	Approved

內容說明 Contents explanation

- 各項條款在充分理解後，煩請認證。
Please approve after understanding clause.
- 規格書尚未確認簽回前下單，將以此規格書為準。
It is considered that it was approved when there is an order before returning this specifications.

Supplier Approved		
ENG	QA	Director

CONFIDENTIAL

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DWG.	CHKD.	APPD.						

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1. 適用範圍 Scope and field of application

本規格書乃應用於攝像鏡頭模組。

These specifications apply to the GMSL camera module.

英文乃為中文的補助說明。記載內容若有疑義請以中文說明為準。

English is assumed the assistance of the Chinese sentence. If there are some doubts about these descriptions, Chinese descriptions have priority.

2. 基本規格 General specifications

Description	Specifications
Image sensor model	OV 10635
Optical format	1/2.7"
Active pixels	1280*720 (on MT2712 platform)
Pixel size	4.2 um* 4.2 um
Video format	YUYV
Frame rate	30 fps
SNR	39 dB
Dynamic range	115 dB
FOV (Horizontal)	188°
FOV (Vertical)	138°
FOV (Diagonal)	188°
Image circle	4.76mm
Lens TTL (Total track length)	14.81mm
CRA (Chief ray angle)	6°
Serializer	Maxim 96705
Connector	Fakra Z type
Input voltage	12V
Power consumption	0.96W
Operating temperature	-40°~85°
Storage temperature	-40°~105°
Dimension	27mm*27mm*30mm

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3. 標準評價條件 Standard conditions of evaluation

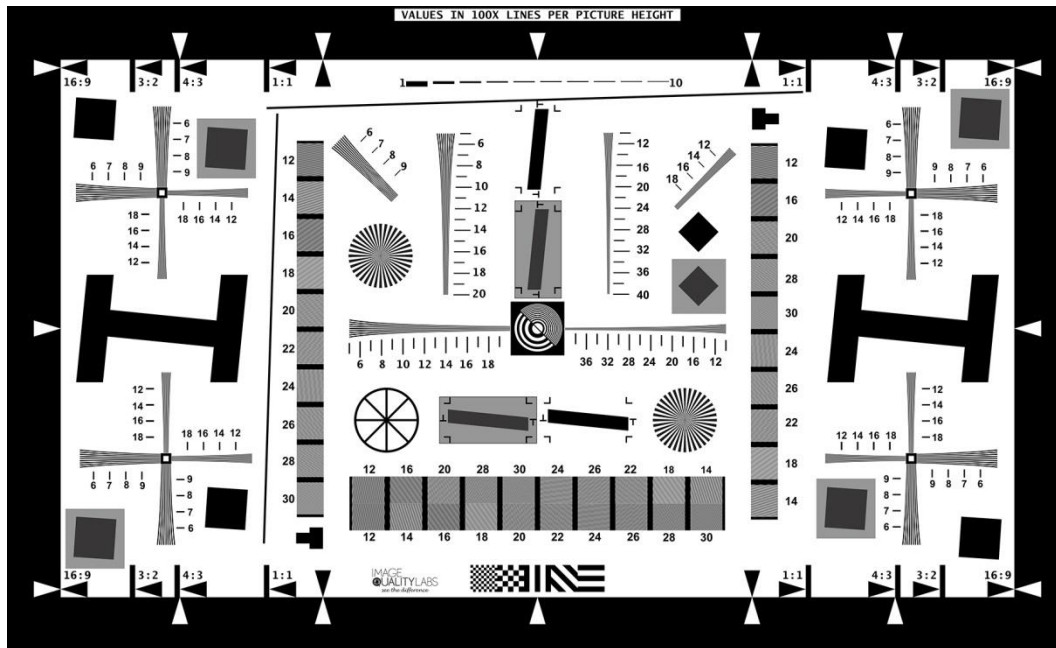
- (1) 評價姿勢 Test posture
 鏡頭光軸方向與重力方向垂直。
 Optical axis of lens is vertical with the direction of gravity.
- (2) 評價環境 Environment
 溫度 Temperature 25±5°C
 濕度 Humidity 40~70%RH

In case of no doubt, the following condition shall be accepted.

溫度 Temperature 25±10°C
 濕度 Humidity 65±25%RH

- (3) 試驗用裝置、迴路 Test equipment, circuit loop and layout
 測試基準須先行校正。
 The calibration of benchmark golden sample is required before proceeding test process.
 使用敝司標準儀器與治具
 Please use our standard instrument and fixture.

ISO 12233 Chart



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4 . 特性 Performance

No.	項目 Item	條件 Condition	規格 Specifications
1	MTF50P	1. 使用 ISO 12233 chart 測試 2. 環境亮度 100 Lux 以上 3. 測試圖表於螢幕顯示滿板	MTF 50P>400
2	Power consumption	1. 使用電源供應器測試 2. 於室溫25±5°C測試	<100mA

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5 . 信賴性試驗條件 Reliability test conditions

高低溫冷熱循環

一、測試設備/測試條件及數量

測試設備：

環境測試機

測試條件：

- (1) 溫度下降到-40 度持續 30 分鐘
- (2) 溫度升高到 85 度持續 30 分鐘
- (3) 重複上述循環 100 次

測試數量：

4 pcs

二、判斷標準

- (1) 完成上述測試後於室溫放置 2 小時
- (2) 檢查待測物外觀是否有異常
- (3) 檢查待測物電器特性, 確認消耗電流
- (4) 檢查待測物影像品質 MTF50P 數值

三、測試結果

Pass

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鹽霧試驗

一、測試設備/測試條件及數量

測試設備：

鹽霧測試機

測試條件：

- (1) 25 度 5%濃度鹽水潑灑 2 小時
- (2) 將溫度升高到 40 度, RH 95%, 放置 22 小時
- (3) 重複上述循環 5 次

測試數量：

2 pcs

二、判斷標準

- (1) 完成上述測試後於室溫放置 2 小時
- (2) 檢查待測物外觀是否有異常
- (3) 檢查待測物電器特性, 確認消耗電流
- (4) 檢查待測物影像品質 MTF50P 數值

三、測試結果

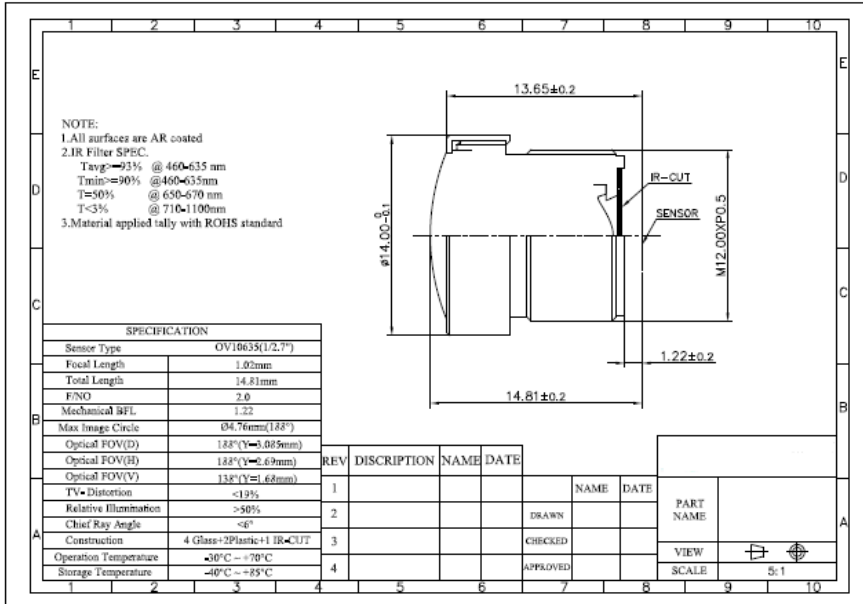
Pass

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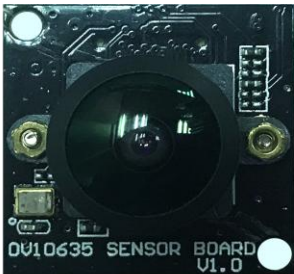
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6. 外觀尺寸圖 Dimensions

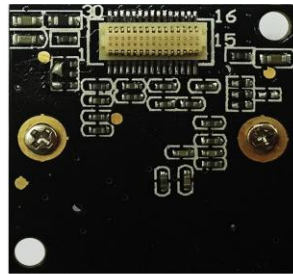
鏡頭尺寸規格



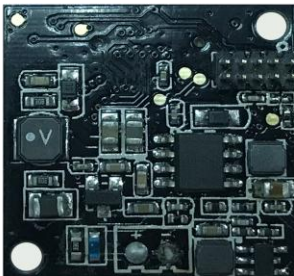
PCB尺寸24mm*24mm



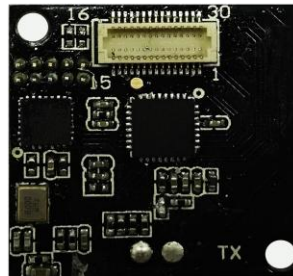
Sensor BD 正面



Sensor BD 反面



Power BD 正面



Power BD 反面

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攝像頭成品尺寸規格

- (1) 攝像頭尺寸27mm*27mm*30mm
- (2) 攝像頭延長線50cm.



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7. 品質基準 Quality standard

No.	項目 Item	條件 Condition	判断基準 Judgment
1	外觀檢查 External appearance inspection	目視 Visual inspection	無擦傷、刮痕、龜裂。 No critical bruises , cracks and scratches.
2	重要尺寸 Important dimensions		重要尺寸需進規格內。 Measurement points shall be within the dimensions' standard.

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8. 其他 Others

搬運注意事項 Precautions for handling

1. 避免以下的環境使用及保存
 高溫、高濕、有毒氣體環境及有機物揮發環境...等
 Avoid using and keeping under the following conditions.
 High temperature, high humidity, causticity gas atmosphere and organic gas atmosphere, etc.
2. 避免存放超過六個月
 經過長時間保存後，需進行重新檢測
 Avoid long-term preservation (more than 6 months).
 The cross-check shall be required after long-term preservation.

註記事項 Notes

1. When any problem occurs, please consult responsible parties for proposed solutions.
2. It is required to have documented agreements from both parties before conducting engineering changes in dimension, material, and performance spec.

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