

PRODUCT SPECIFICATION

產品規格書

客 戶

Customer

產品名稱

Auto-focus 5.0M Camera Module With LED Flashlight

Product name .

威聚型號

UM-51AF

WEICHU Part No.

樣品數量

Sample Quantity

送樣日期

Sample Date

製表人

Tony

Prepared By

審核

Checked by



說明：一、謹致執事者：茲提供敝公司產品之有關詳細規格及圖面資料，敬請給予辦理測試認定手續。同時敬請送返一份附有貴公司簽認之測試認定後之樣品認定書。

We are sending you our specification and drawings for your approval. Please return to us one copy "For Approval " with your approved signatures.

承認欄

Customer Approval Stamp.

Date: / /

1. GENERAL DESCRIPTION

UM-51AF-V1.0

is an USB Video Class (UVC) compliant camera module designed for portable notebook PC image applications. It is a highly integrated system that provides a cost-effective and performance solution for video capture application. It shall be a reliable device that is embedded in notebook PC to transfer video data through USB interface to notebook PC. It provide Auto Focus and LED flashlight function.

2. Features

- Compliant USB Video Class
- Support snapshot button and still image capture
- Automatic image control:
 - ◆Automatic Exposure Control (AEC)
 - ◆Automatic White Balance (AWB)
 - ◆Automatic Gain Control (AGC)
- Support Auto Focus Control (AFC)
- Support for LED Flashlight
- Support for Still Image resolution: 2592x1944
- Platform Support: Windows XP, Vista, Win7 ,Win8

Hardware Specification

Module Specification			
CMOS sensor Active Pixels	2592(H) x 1944(V)		
Dimension (mm)	62.0mm x 9.0mm x 5.4mm		
Power Supply	+4.75V ~ +5.25V		
Color Filter Array	RGB Bayer Pattern		
Output Interface	USB2.0 (480Mbit/sec)		
Operating Temperature	0°C to +55°C		
Compatibility	USB Video Class		
Power Consumption			
	Min	Type	Max
Input Supply Voltage	-	5.0V DC	-
Un-configured Current	-	42 mA	-
Operating Current	176 mA	185 mA±5%	194 mA
Suspend Current	-	0.5 mA	-

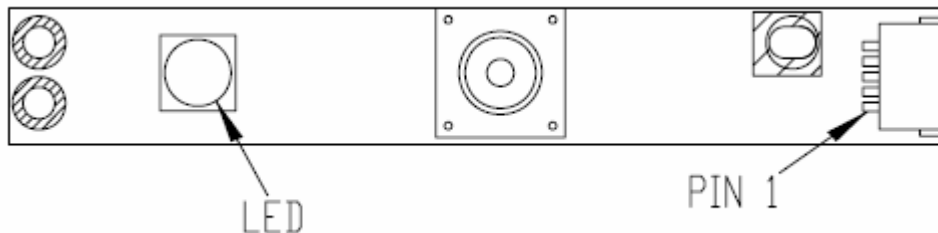
DSP Specification	
Type	Controller IC : EM23
Support Sensor	Most popular CMOS sensors
Compatibility	USB 2.0 Video Class Compliant, Microsoft WHQL Certified

Sensor Specification	
Optical format	CMOS 1/4 inch, OV5640
Pixel size	1.4um x 1.4um
Maximum Image	2592x1944

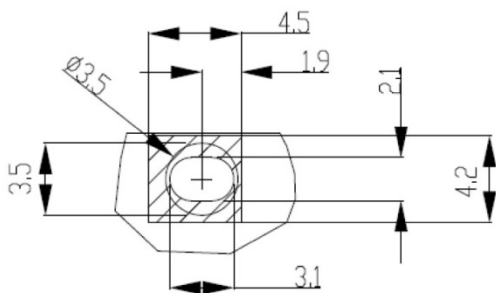
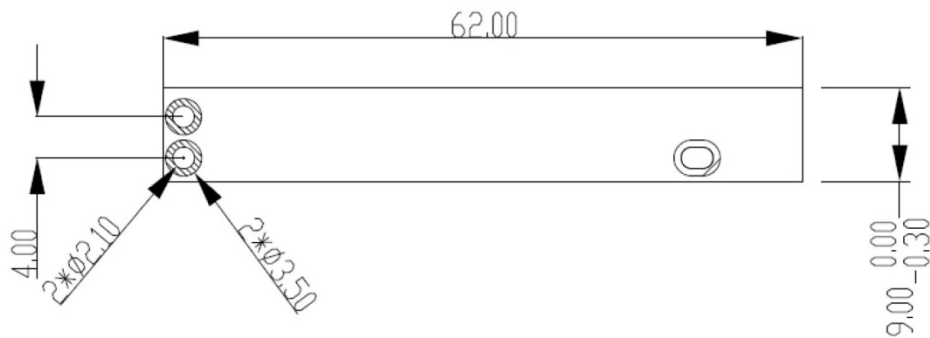
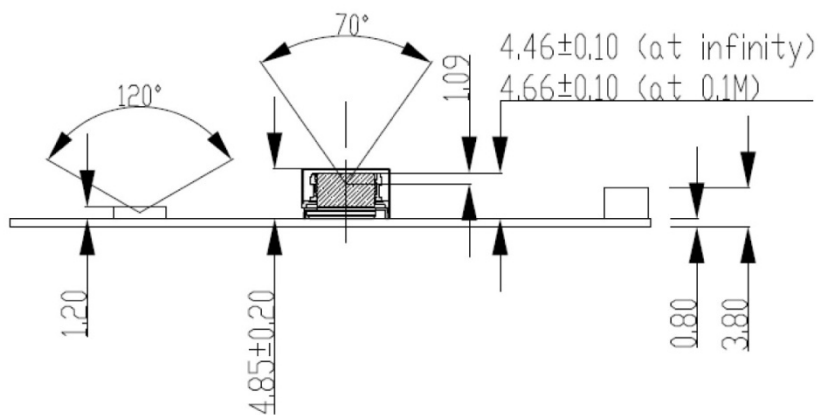
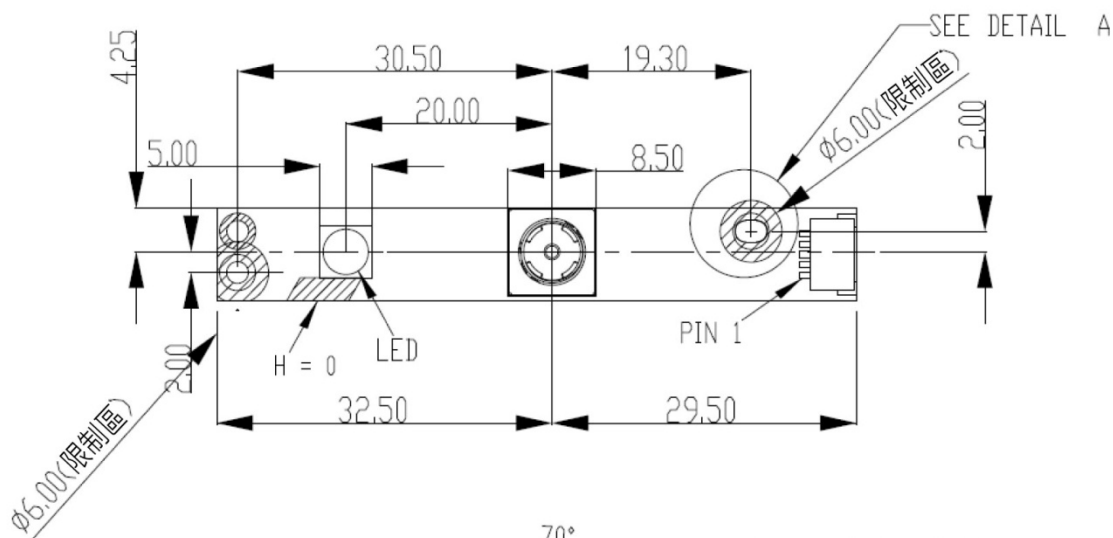
Lens Specification	
Element	4P+ IR
F Number	2.8±5%
Field of view(Diagonal)	70°
Focus Range	10 cm ~ ∞

LED Flashlight Specification	
Luminous Flux	37 lm
Efficiency	75 lm/W
View Angle $2\theta_{1/2}$	120°

Pin Description			
Pin Number	Name	Pin Type	Function Description
1	VCC	Power	USB Power Supply +5V
2	D-	Data Pin	USB Data Transmission
3	D+	Data Pin	USB Data Transmission
4	GND	GND	System Ground
5	SNAP	GPIO	Snap, Low active



Mechanical Drawing



DETAIL A
SCALE 2.000



禁制區
限高為0mm

No.	PIN Description
1	Vcc (5V)
2	D-
3	D+
4	GND
5	Snap

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Reliability Test

No	ITEM	Test
1	High Temp. storage	65±2℃, 72Hrs
2	Low Temp. storage	-20±2℃, 72Hrs
3	High Temp. & High Humidity	60±2℃, 90%RH, 120Hrs
4	Thermal Shock	1. Temp. : -10±3℃, +65±3℃ 2. Soak Time : 30min The cycles is repeated 100 times
5	ESD	HBM : 2.0KV MM : 150V
6	Vibration Test	Sinusoidal vibration, Frequency 10~2000Hz Max. Acceleration : 1.5mm, 2G X, Y, Z time : 20min/ each (45hrs)
7	Drop Test	150cm Height free fall Surface : concrete or steel Number of drop : 3 times
8	Vibration Test (packing)	Air Frequency 2~300Hz, Max. Acceleration : 1.48G Truck Frequency 1~200Hz, Max. Acceleration : 0.73G X, Y, Z time : 1 Hr/ each
9	Drop Test (packing)	1100cm Height free fall Surface : concrete or steel Number of drop : 10 times Number of drop : 10 times