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## **CAMERA MODULE**

產品規格書  
**PRODUCTION SPECIFICATION**

**Model No: SV6150D27-S1-4TA**

**Fangtec Corporation**



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Fangtec Corporation 佳又盛股份有限公司

## Revision History

Date	Rev.	Contents
2023/12/6	V1.0	First release



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## 1. General Description

The SV6150D27-S1-4TA is an USB Video Class (UVC) and USB Audio Class (UAC) compliant camera module with video and audio feature, designed for portable notebook PC image applications. It is made up of the following components, CMOS sensor, lens, holder, backend, PCB, image processing circuit connector and digital array microphone, to come out a digital video and audio device. It shall be a reliable device which is embedded in notebook PC to transfer video data and audio data through USB interface to notebook PC.

Featuring a novel approach to removing mechanical, stationary and non-stationary noise, SV6150D27-S1-4TA preserves voice naturalness for greater speech intelligibility even when the speaker is farther away or not optimally aligned with the microphones-providing unmatched freedom of movement for end-users.

## 2. Features

- Compliant USB 2.0 and USB Video Class & USB Audio Class
- Support still image capture and video streaming
- Support Snapshot button
- Automatic image control
  - ◆ Automatic Exposure Control (AEC)
  - ◆ Automatic White Balance (AWB)
  - ◆ Automatic Gain Control (AGC)
- Support for still image resolution: 2592 (H) x 1944 (V)
- LED indicator
- Audio input : 2x Digital Microphone
- Input Voltage: 5V

## 3. Applications

Notebook PC  
LCD PC  
LCD Monitor  
Industrial PC

## 4. Key Specification

Module Specification			
CMOS sensor Active Pixels	2592(H) x 1944(V)		
Dimension (mm)	65.0mm x 9.0mm x 7.25mm (含板下零件)		
Power Supply	5V		
Color Filter Array	RGB Bayer Pattern		
Image/Video Format	YUY2, MJPG		
Output Interface	USB2.0 (480Mbit/sec)		
Operating Temperature	0°C to +55°C		
Compatibility	USB Video Class		
LED indicator	Blue		
Power Consumption			
	Min	Type	Max
Input Supply Voltage	4.75V	5.0V DC	5.25V
Un-configured Current	-	40 mA	-
Operating Current	-	-	240 mA

DSP Specification	
Type	USB 2.0 web camera controller
Support Sensor	Most popular CMOS sensors
Compatibility	USB 2.0 Video Class Compliant, Microsoft WHQL Certified
Sensor Specification	
Optical format	1/4-inch QSXGA CMOS Image Sensor
Pixel size	1.4um x 1.4um
Maximum Image	2592(H)x1944(V)
Lens Specification	
Element	4P+ IR
F Number	2.2±5%
Field of view	D75° H63° V49°
Focus Range	60cm

5.

## 5. Max Frame Rates (fps): MJPEG

SVGA	VGA	WXGA	Full HD
640×360	640×480	1280×720	1920×1080
30	30	30	30
2M	QSXGA		
1600×1200	2592×1944		
15	30		

## 6. Digital MIC Specification

Item	Test Conditions	Min	Standard	Max	Unit
Sensitivity	f=1kHz, Pin=1Pa	-27	-26	-25	dBFS
Current Consumption	Output open circuit			0.75	mA
S/N Ratio	f=1kHz, Pin=1Pa	57			dB
Power Supply Rejection	Test signal on VDD=217Hz, 100mVPP		-90		dB
Acoustic Overload Point	10% THD @1 kHz		120		dB SPL
THD	94Db SPL @1KHz			0.2	%

※ ( Test Conditions : 23±2°C, 55±20% R.H.VDD=2.0V.fclock=2.4MHz )



## 7. Pin Description

Pin Description			
Pin Number	Name	Pin Type	Function Description
1	VCC	Power	USB Power Supply 5.0V
2	D-	Data Pin	USB Data Transmission
3	D+	Data Pin	USB Data Transmission
4	GND	GND	System Ground
5	NC		

## 8. Outline Specification

