

AA5620 Sensor Module

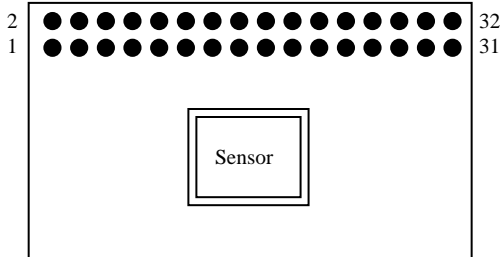
General Description

This is a series of digital sensor module using various OmniVision's Mega-Pixel CMOS image sensor.

The digital video port provides 10bit RGB signals. All camera functions, such as exposure, gamma, gain, white balance, color matrix, windowing, are programmable through SCCB interface.

Features:

- 5.17Meg CMOS image sensor, OV5620
- sensor array 2592x1944 pixels
- lens format: 1/2.5"
- Small size : 41 x 34 mm
- Built-in Len (Optional)
- 10Bit RGB raw data output
- Progressive Scan
- Serial Camera Control Bus interface
- Single 3.3V operation
- Low power consumption (<120mW)



PCB Layout (Top view)

Lens Information

Focal length	8.2mm
F No	2.8
Distortion	<0.51%
Focus	2M to infinity
FOV	60 deg diagonal
IR cut filter	650nm

Pin Description

1~8	D2-D9	Digital output Bus.
9	PWDN	Power down mode
10	RST_B	Reset, active low
11	SIOD	Serial data
12	NC	
13	SIOC	Serial clock input
14	HIS	Horizontal window reference output
15	AGND	Analog Ground
16	VIS	Vertical Sync output
17	AGND	Analog Ground
18	PCLK	Pixel clock output
19	XCLK	External clock input
20	M3V3	Power Supply 3.3VDC
21	AGND	Analog Ground
22	S3V3	Power Supply 3.3VDC
23~24	NC	
25~26	D0-D1	Digital output bus
27-28	NC	
29	FREX	Frame exposure control 1
30	EXPST	Frame exposure control 2
31~32	GND	Common ground

Module Specification

Dimension	41x34mm
Header Pin	16pin x 2 row
Pin pitch	2.54mm
Total height from pcb	14mm

Note:

1. Please refer to the data sheet of OV sensor for detail specification and features.
2. Pin 29/30 is NC for standard configuration, if they are required, add 0ohm resistors to R3/R4 to enable.

