

AA9653 Sensor Module

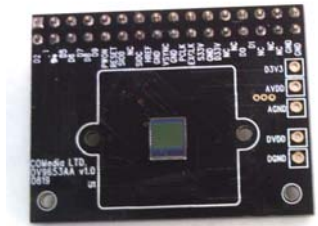
General Description

This is a series of digital sensor module using various OmniVision' CMOS image sensor.

The digital video port provides full-frame, sub-sampled or windowed 8/10bit images in a wide range of formats, control thru the serial camera control bus.

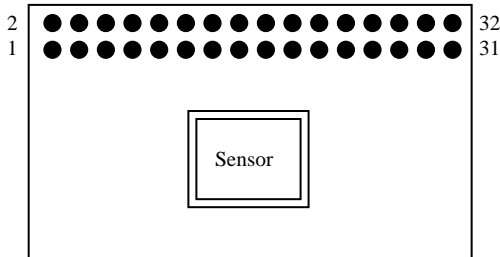
Features:

- Mega pixel CMOS image sensor, OV9653
- Sensor array 1300x1028pixels
- lens format: 1/4"
- support SXGA,VGA,QVGA,CIF,QCIF
- VGA 30fps, QVGA 60fps, QCIF 120fps
- Raw RGB, GRB422, YUV422 format
- Small size : 41 x 31 mm
- Built-in Len (Optional)
- Progressive Scan
- Serial Camera Control Bus interface
- Single 3.3V operation
- Low power consumption (<120mW)



Pin Description

1~8	D2-D9	Digital output Bus.
9	PWDN	Power down mode, active high
10	RST	Reset, active high
11	SIOD	Serial data
12	NC	
13	SIOC	Serial clock input
14	HREF	Horizontal window reference output
15	AGND	Analog Ground
16	VSYN	Vertical Sync output
17	AGND	Analog Ground
18	PCLK	Pixel clock output
19	EXCLK	External clock input
20	VCC	Power Supply 3.3VDC
21	AGND	Analog Ground
22	VCC	Power Supply 3.3VDC
23~24	NC	
25~26	D0-D1	Digital output bus
27-30	NC	
31~32	GND	Common ground



PCB Layout (Top view)

Lens Information

Focal length	6.5mm
F No	3.2
Distortion	<3%
Focus	2M to infinity
FOV	41 deg diagonal
IR cut filter	650nm

Module Specification

Dimension	41x31mm
Header Pin	16pin x 2 row
Pin pitch	2.54mm
Total height from pcb	13mm

Note: Please refer to the data sheet of OV sensor for detail specification and features.