

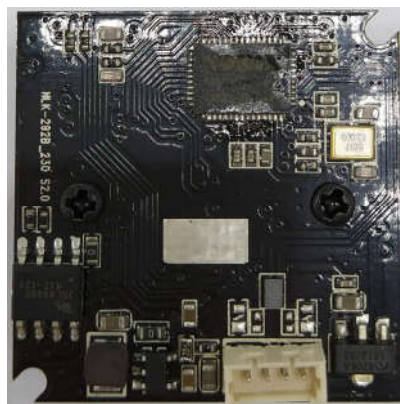


SPECIFICATION

This is the 2mega pixels camera module(NLK_2MP06 A0) with sensor on-board,lens module and USB2.0 video/image process controller. It is designed for the webcam application with the low power consumption.

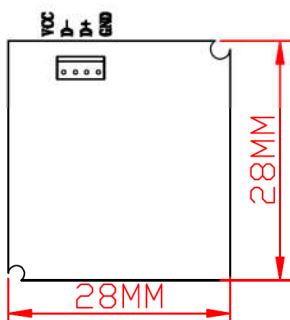
The AR0230 image sensor is a low voltage, high performance, 1/2.7-inch 2 megapixel CMOS image sensor that provides the full functionality of a single chip 2megapixel (1920*1080)camera using APTINA in a small footprint package. It provides full-frame, sub-sampled, windowed or arbitrarily scaled 12-bit images in various formats via the control of the Serial Camera Control Bus(SCCB) interface.

1. Model: 2mega Camera module(Model: NLK_2MP06 A0)

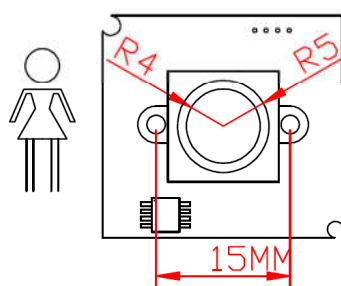


2. Size drawing:

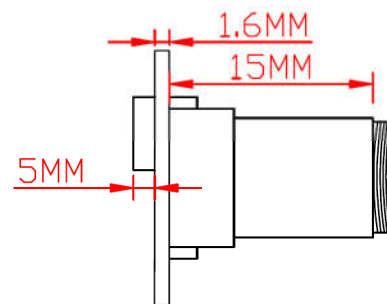
BOTTOM VIEW



TOP VIEW



SIDE VIEW





3. Application area:

- 1) ATM machines.
- 2) Fingerprint identification Equipment.
- 3) Bar-code scanner and other equipment need USB interface for cameras.

4. Features

- USB specification compliance
 - USB 2.0 & 1.1 compliance
 - USB video V1.1 compliance (UVC)
 - USB audio V1.0 compliance
 - USB high speed, full speed auto switching
- Supports 1080P ,720P, XGA SVGA,VGA output formats.
- Auto Exposure (AE). Auto White Balance (AWB)
- Auto Flicker Correction. Color Correction.
- Gamma Correction.
- Dark Level Compensation.
- Auto Edge enhancement.
- Software controlled connection to USB bus for re-enumeration.
- Adjustable and dynamic frame rate control on USB transaction.
- Automatic frame rate adjustment when exposure in low light environment.
- Selective suspend to minimize power consumption.

5. Key Specification

Parameter	SPEC.	
Optical size Sensor	1/2.7 inch COMS sensor	
Sensor Resolution	1920(H) x 1080 (V),1080P	
Unit pixel size	3*3um	
Color filter	RGB Bayer patten	
Shutter type	Electronic Rolling Shutter	
Signal System	YUV422 / MJPG/H.264	
Max.capture frame rate	30fps@full resolution,	
Max. video frame rate	30fps@VGA,720p,1080P	
View Angle/Focal Length	90° /3.6	
F Number	2.0	
AEC / AGC/ White Balance	Auto	
Focus Distance	with fixed lens 50CM-∞	
Interface	USB 2.0	
Power	USB Bus Power	
Dimensions (mm) (L x W x H)	28mm x 28mm x21.6 +/-0.2mm	
SNR Max	41dB	
Max Dynamic range	105dB	
Operating Temperature	0°C to +60°C	
Operating System Request	Windows XP/ Windows 7/ Windows 8(UVC), Linux(>V2.6),Androld>4.0 or above with UVC	
Max pixel rate	28Mp/s	
ADC accuracy	12-bit	
USB 2.0 PHY	On Chip PHY	
Power Consumption	Standby	4mA
	Operating	100Ma-220mA
Lens FIELD OF VIEW(D)	3007B	100°



	3047B	80°
	8134J	140°