Shenzhen Jinshikang Technology Co.,Ltd

Address: 2nd Floor, Building H, Zhixuanhan Industrial Park, Yuanling, Shiyan Street, Baoan District, Shenzhen

Acknowledgement

APPROVAL SHEET

Customer Name: _____ CUSTOMER

name of a part： USB output camera module PART NAME

Specification: JSK-FA077-V1.0 (Q1)
SPECIFICATION

version number： Version 1
VERSION

date： 2024-06-20
DATE ：

Shenzhen Jinshikang Technology Co., Ltd.			Customer		
ShenZhen jinshikang Photoelectronice Co.,Ltd.					
APPROVAL			APPROVAL		
Draft(DESIGNER)	Review (CHECKER)	Ratify (APPROVER)	Draft(DESIGNER)	Examine and verify (CHECCKER)	Ratify (APPROVER)
Chen Hao					

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1. General Description

High-quality color imaging at 1080P resolution and video capability can now be seamlessly integrated into next-generation low-power, low-noise products and modules. The JSK-FA077-V1.0 camera module features high-speed USB 2.0 interface for image data output. With advanced high-performance packaging technology (patented), it achieves high reliability and optimized size. The module also offers wide dynamic range through high sensitivity and low noise. This product supports output of various image formats, including 1080P,720P, VGA, CIF, and QVGA.

2. Feature

•Compliance with USB specifications

•USB 2 and 1.1 compliant

•USB Video V1.1 Compliance (UVC)

•USB high-speed, full-speed auto-switch

•Supports output in 1080P,720P, VGA, QVGA, CIF, QVGA, and QCIF formats

•Auto Exposure (Exposure)

•Starlight Night Vision

•automatic flicker correction

•Color Correction

•γ check

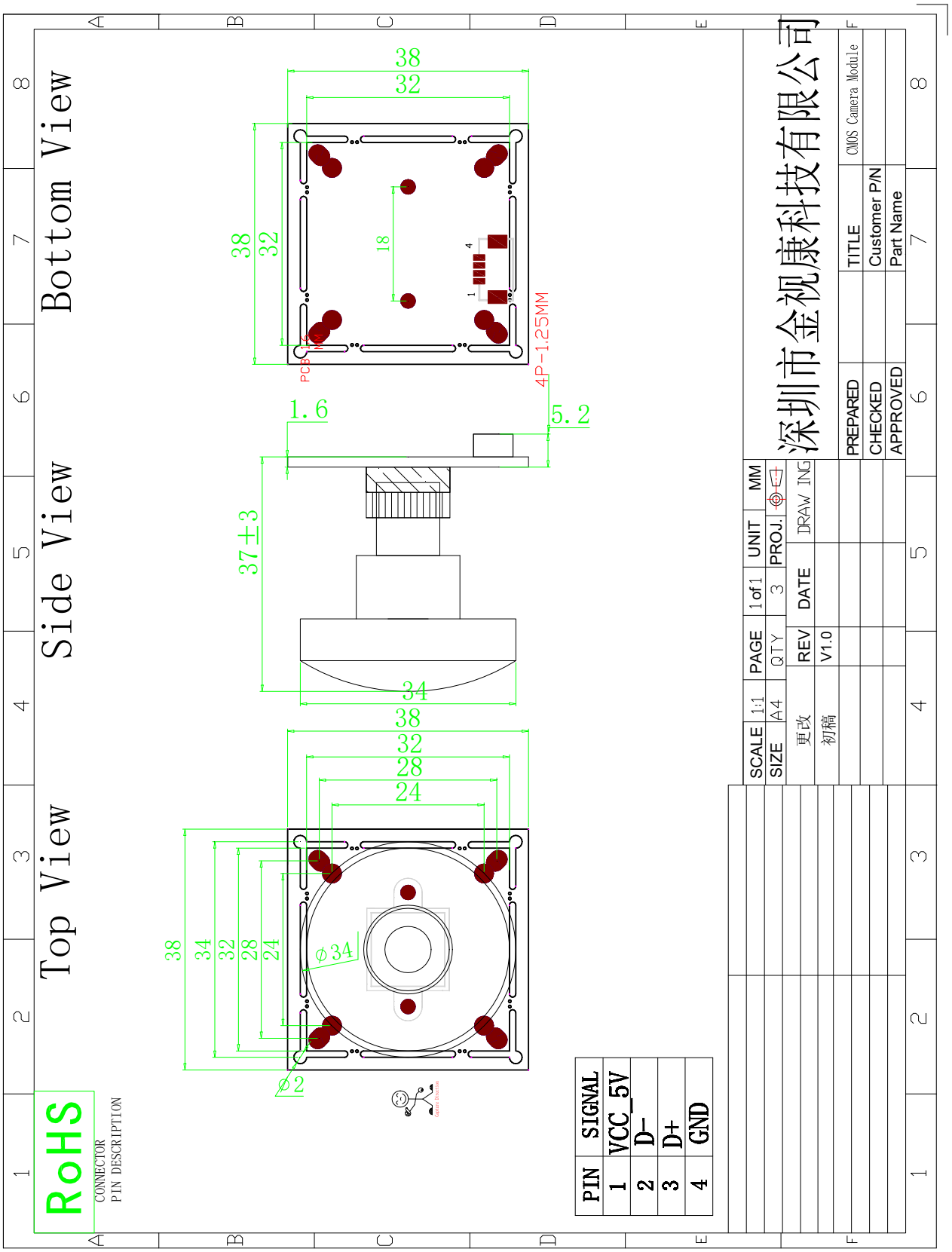
•dark compensation

•Automatic Edge Enhancement

3. Key Specifications

Parameter		Specifications
Optical size		1/1.8-inch COMS sensor
Sensor resolution		1920 (H) x 1080 (V)
Pixel size		4.0um*4.0um
Colour filter		RGB Bayer pattem
Shutter type		Electronic rolling shutter
Maximum frame rate		30fps@1080P
Angle of view		D185° H185° V185°
Iris diaphragm		F2.0
AEC / Gain / White Balance		Voluntarily
Focal length		2 Mi
Joggle		USB 2.0
Source DC		DC 5V ± 5%
Size (mm)		38mm x 38rnm x37±3mm
Working temperature		-10℃ — +65°C
Operating system requirements		Windows XP, Windows Vista, Windows 7, Android, etc.
Focal distance		1.85mm
Power dissipation	Await the opportune moment	200mA minus 5mA
	Operate	200mA, 10mA @ 1920x1080 / 30fps

4.机械制图


Bottom View
Side View
Top View
38
32
18
4P-1.25MM
1.6
5.2
37±3
34
28
24
φ34
φ2
RoHS
CONNECTOR
PIN DESCRIPTION
PIN SIGNAL
1 VCC_5V
2 D-
3 D+
4 GND
深圳市金视康科技有限公司
TITLE
CMOS Camera Module
Customer P/N
Part Name
PREPARED
CHECKED
APPROVED
SCALE 1:1
SIZE A4
PAGE
QTY 3
1of1
UNIT MM
PROJ.
DRAW ING
REV V1.0
DATE
更改
初稿

5. Reliability Trial

No	Items	Test Condition
1	High temperature (High temperature. Storage test)	65°C±2°C, 72 hrs
2	Low temperature (Low temperature. Storage test)	-20°C ± 2°C, 72 hours
3	HTHT (Storage test under high temperature and high humidity)	60°C ± 2°C, 90% RH, 120 hours
4	TCT (temperature cycling test)	-10°C ±3°C (30 min) to 65°C ±3°C (30 min), 100 cycles
5	Vibration test	Sinusoidal vibration, frequency 10-2000 Hz Maximum acceleration: 1.5mm, 2G X, Y, Z Time: 20 minutes per item (45 hours)
6	Fall-down test	Free fall from a height of 100 cm Surface: concrete or steel Decreased: 3 times

6. Image Specification

Test item	Test environment		Test objective	Standard
	Pigment Temperature	Light		Pass
Resolution Testing (MTF)	D65	Indeterminate	Test pattern	≧40%
Centrality				
Horn				≧30%
Distortion	D65	Indeterminate	Test pattern	≦3%
Gray Test	D65	Indeterminate	Test pattern	
Vi (i = 1)				≧5
△Yi (i= 2 ~ 6)				≧10
Shadow	D50+/-270	Indeterminate	Imaging chip	≦30%
Image testing	D50+/-270	Indeterminate	Imaging chip	
Dead pixel				0
Affected pixels				24
Particle (group)				0
Minor defect				0
Line defect				0
Dark mode white pixels		30+/-10	Dark field	0
Line Defects in Dark Mode		30+/-10	Dark field	0