

## YDS-G2K-OV8856 V1.1

8MP OmniVision OV8856 MIPI Interface Fixed Focus Camera Module



Front View



**Back View** 

#### **Specifications**

Camera Module No.	YDS-G2K-OV8856 V1.1
Resolution	8MP
Image Sensor	OV8856
Sensor Type	1/4"
Pixel Size	1.12 um x 1.12 um
EFL	2.93 mm
F.NO	2.00
Pixel	3264 x 2448
View Angle	75.0°(DFOV) 62.8°(HFOV) 49.3°(VFOV)
Lens Dimensions	6.50 x 6.50 x 4.62 mm
Module Size	14.05 x 7.80 mm
Module Type	Fixed Focus
Interface	MIPI
Auto Focus VCM Driver IC	None
Lens Model	YDS-LENS-9570A3
Lens Type	650nm IR Cut
Operating Temperature	-30°C to +85°C
Mating Connector	FH26W-25S-0.3SHW(60)

www.YDSCAM.com sales@ydscam.com Phone (WeChat, QQ): (+86) 177 2732 6718



## YDS-G2K-OV8856 V1.1

8MP OmniVision OV8856 MIPI Interface Fixed Focus Camera Module





Top View

Side View



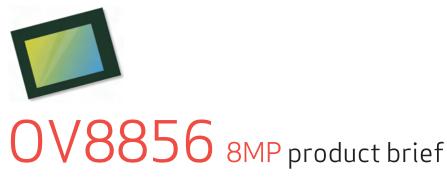


**Bottom View** 

Mating Connector

www.YDSCAM.com sales@ydscam.com Phone (WeChat, QQ): (+86) 177 2732 6718

					6	<u>ა</u>											Π	)																		
	(Ex	Imp	- PUS	Pixel:	Image	<b> </b> ,	Pα		25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	6	8	7	9	ъ	4	ယ	2	1	P/NO.		]
	tern	orta	_'			Se	Parameters:		MCLK	MCN	MCP	DGND	MDNO	MDPO	DGND	MDN1	MDP1	DGND	MDN2	MDP2	DGND	MDN3	MDP3	DGND	RESET	SDA	SCL	DOVI	AF_V	DVDL	PWDN	AVDE	A_GND			
₽	۹ م	nt v	Tvnp:	1.12	Sensor:	nso	ete														Ŭ		00	)	H			DOVDD 1.8V	AF_VDD_2.8V	DVDD_1.2V	Ι	AVDD 2.8V	1	PIN define	RoHS	∣⊳
	owei	/olto	1/4	<u> </u>		л С	S S																					V	8V					fine	လ	
	, , ns,	Jge	ŧ-	1.12um×1.12um	3V0	peo																														4
	(External power supply);	Desc		Э	0V8856	ific																														
		ript				Sensor specification:												1	,		-	^	~	^												
		Important Voltage Description: DVDD1.2V				10								_	ŀ	-			<u>4.</u>	05	) <u>+</u>	0.	20	)												
		DVDI												3	. ]	<u>()</u> :	<u>+ ()</u>	- 2	20		ſ	ς ι	50	) <u>+</u> (	0	10										
ω		D1.21											_			/ ∟ ₩1	24								0.	Ľ										в
			Π	-	<u>.</u>		2		1	TOP VIEW					J K	X	XK	$\uparrow$		×,	Ţ		T					<u> </u>								
		5	Foral lenath:	TV distortion:	F/N0.:	FOV:	1			$I\Lambda$				0 <u>+</u> 0 8	) K	X	X		ļ	双面电磁膜			((		)_`	Ţ <b>Ņ</b>		) +				140 20	2448			
			PUC	stor	<b>:</b> 2.0	75°	Lens			EW				+  C	> K	X	X			が、数		Ŕ		Y		1	-	$\sim$		L	1929	) Е	]			
			1+1- -	tion:	0	•								Ē	> K	X	X	ſ			-1						d	$\overline{\mathbf{O}}$								
		ļ	9				specification:						-		<u> </u>	_×_	Ň	, ,																		
			7 93mm	<1.0%			ific												Ħ																	
							atic											ווי	白色丝印线																	
n							- -												殺	I.UD	>	7	5.	00	)()	0										C
							I																$\left\langle \right\rangle$		$\sum$	<u></u>				_						
										S												╢		¥⁄					_							
		<u> </u>						-		SIDE											, F						1	- 1								
	. וופרי	- - - -		)esig						VIEW				=												_				+						
	רוופראפת מא	р Ч		Designed By						EW				FPC+PI(字部)补强	C	>		3	$\bigcirc$	和片神	$\bigcirc$	•					-		ω 0	+  -						
	y	ת <		By										+PI(	$20\pm0.03$	)	「「ころ気は光波		5	小温使	20	)							$\sum_{i+1}$	0 Z +	د					
		Anuly Ynn		$\overline{\mathbf{x}}$				<u>-</u>		NOTE:				(串小)		>	メ 上 ズ	ギ   日 日 日	12+0.03	地市	$\overset{)}{\bigcirc}$	,					 <	+	$\mathbf{O}$	+  -	>			_	_	
		<		Kevin				ן פ	ŗ					补强	C	>		בן ע	$\bigcirc$	る	$\overline{O}$	)					-	$\frac{1}{0}$	0		5			V1.0	Vers	IJ
		мпл		_				1. The device	-						100					钢片补强接地电阻小于3欧姆	0	I													5	-
	<u>_</u>			Mode									I	I						-+++1														PD		-
	Third Angle			Model Name				slave	-				+	1				3																		
$\vdash$				me:				ם מכ	_	BOʻi					AILA IIA					1	-{					$\square$								First	! Inf	$\mid$
	Scale: 1:1		-					address:0x6c	-	BOTTEM VIEW							MMM			U	ן ר													t Vei	Information	
	Sheet:	Mat		G21				):SS	<b>,</b>	V				32			W W W	_		$\overline{C}$	>													Version	tion	ш
	et: 1 of 1	Material:	-	G2K-0V8856 V1.1				)x6c	`	IEW								5		1	-	///	///	////	111	Ŕ	6.									
				88											ĺ	) [ ••••	20										6.×6×T0.3单面泡棉									
	Version:			б С													•										.0.3庫							20.19		
	n: 1/0			<1.1																							面泡棉							2016-12-20	Date	
					0	L ງ		<u> </u>									n	<u>כ</u>												,	-			Ö	5	]
																		-																		







a lead-free package

## High Performance PureCel<sup>®</sup> Sensor Brings 8-Megapixel Selfies to Mainstream Smartphones

OmniVision's OV8856 is a new 1/4-inch 8-megapixel PureCel sensor designed for front- and rear-facing camera applications in mainstream mobile devices. Built on advanced 1.12-micron pixel architecture, the extremely compact OV8856 offers industry-leading image quality and improved performance when compared with previous-generation 8-megapixel image sensors.

The 1/4-inch OV8856 leverages OmniVision's PureCel pixel architecture to capture full-resolution 8-megapixel images and video at 30 frames per second (fps), and 1080p high-definition (HD) video at 60 fps. The power-efficient OV8856 sensor also supports interlaced high dynamic range (iHDR) for clear images and video in high- and low-light conditions. Using a highspeed four-lane MIPI interface, the OV8856 can output full-resolution, 8-megapixel 30 fps video over two MIPI lanes without requiring any data compression.

The OV8856 is one of the smallest 8-megapixel sensors on the market, and is approximately 15 percent smaller than OmniVision's previous-generation OV8858 image sensor. The OV8856 can fit into a 6.5 mm x 6.5 mm fixed-focus module with a z-height of approximately 4 mm.

Find out more at www.ovt.com.





#### Applications

- Cellular Phones
- PC Multimedia

#### Tablets

### **Product Features**

- 1.12 µm x 1.12 µm pixel
- optical size of 1/4"
- 32.9° CRA for <5 mm Z-height
- programmable controls for: - frame rate - mirror and flip - cropping windowing
- supports images sizes:
   8MP (4:3, 3264x2448)
   8MP (16:9, 3264x1836) - EIS 1080p (2112x1188) - 1080p (1920x1080)
  - EIS 720p (1408x792), and more

- 8MP at 30 fps (720 Mbps/4-lane or 1.44 Gbps/2-lane)
- two on-chip phase lock loops (PLLs)
- two-wire serial bus control (SCCB)
- 8k bits of embedded one-time programmable (OTP) memory
- image quality control:
  defect pixel correction
  - automatic black level calibration lens shading correction alternate row HDR
- suitable for module size of 8.5 x 8.5 x -4 mm

- OV08856-GA4A
- (color, chip probing, 200 µm backgrinding, reconstructed wafer with good die)

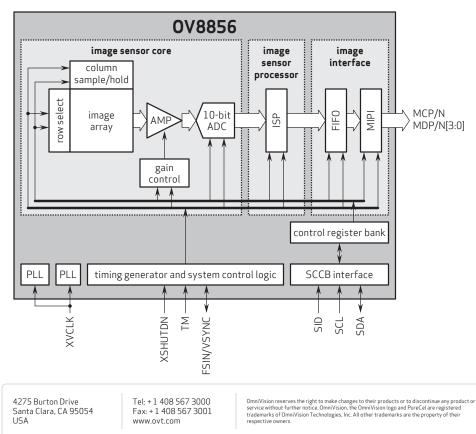
### **Product Specifications**

- active array size: 3264 x 2448
- power supply:
  core: 1.14 1.26V (1.2V nominal)
  analog: 2.6 3.0V (2.8V nominal)
  I/O: 1.7 1.9V (1.8V)
- power requirements:
  active: 150 mW
  standby: 0.8 µW

  - XSHUTDN: 1 µW
- temperature range:
  operating: -30°C to +85°C junction temperature - stable image: 0°C to +60°C junction
  - temperature
- output interfaces: up to 4-lane MIPI serial output
- output formats: 10-bit RGB RAW
- lens chief ray angle: 32.9° non-linear
- lens size: 1/4"

- input clock frequency: 6 27 MHz
- max S/N ratio: 36.5 dB
- dynamic range: 70 dB @ 8x gain
- maximum image transfer rate:
   3264 x 2448: 30 fps - 3264 x 1836: 30 fps -2112 x 1188 60 fps - 1920 x 1080: 60 fps
  - -1408 x 792: 90 fps
- sensitivity: 480 mV/lux-sec
- scan mode: progressive
- pixel size: 1.12 μm x 1.12 μm
- dark current: 12 e<sup>-</sup>/sec @ 60°C junction temperature
- image area: 3678.336 μm x 2767.68 μm
- die dimensions: - COB: 4806 μm x 3969 μm - RW: 4856 μm x 4019 μm

### Functional Block Diagram



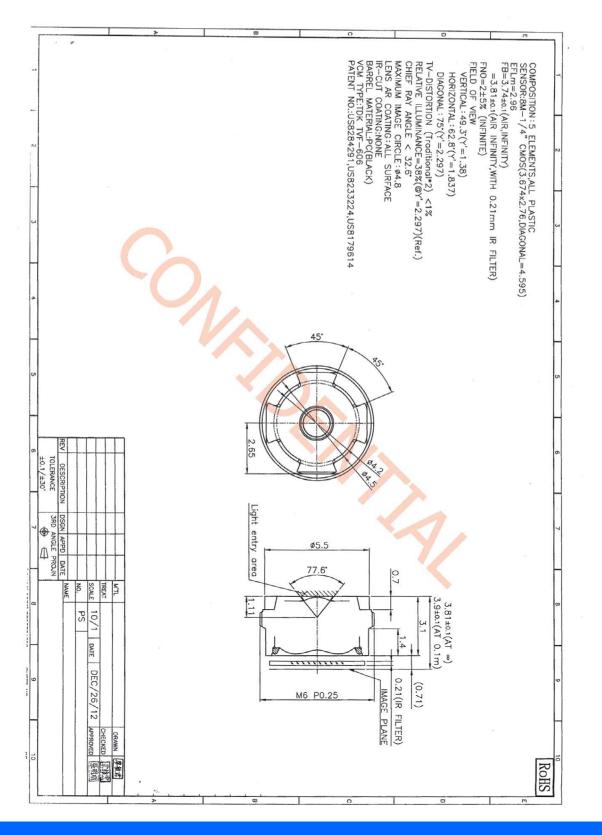




your best camera partner

## YDS-LENS-9570A3

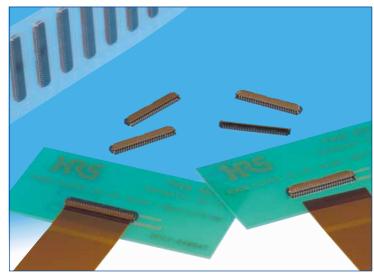
DS

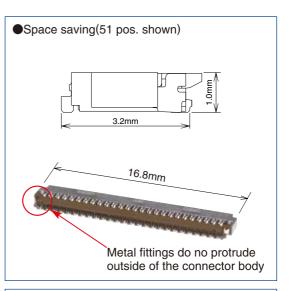


www.YDSCAM.com sales@ydscam.com Phone (WeChat, QQ): (+86) 177 2732 6718

## 0.3 mm Pitch, 1.0 mm Height FPC Connector

FH26 Series





#### Features

#### 1. Low-profile 0.3 mm pitch FPC connector

Ultra-thin design, 1.0 mm height, 3.2 mm width all add up to a compact, space saving form factor. \*30% reduction in PCB footprint \*40% reduction in weight (Compared to our 0.3 mm pitch FH23 Series 51 position connector.)

#### 2. Easy PCB Mounting

The leads are double sided and have a 0.6 mm mounting lead pitch to simplify mounting.

#### 3. Fully molded structure aids PCB layout

The bottom of this connector is enclosed by a fully molded structure that protects the contacts and removes any restrictions from PCB patterning and design.

#### 4. Rotating one-touch ZIF mechanism

The one-touch rotating ZIF mechanism is easier to operate and works with a light force, and a clear tactile click is delivered upon the successful completion of the mating process

#### 5. Easy FPC insertion

The metal FPC insertion guides helps to make this the FPC insertion process easier.

#### 6. FPC. Accepts standard 0.2 mm thick FPC

This connector accepts standard 0.2 mm thick FPC. (The proper FPC stiffener thickness will prevent FPC deformation and ease insertion and mating.)

#### 7. Supports automatic pick-n-place mounting

Offered in tape and reel packaging that is compatible with automatic machine mounting. (5,000 pieces per reel)

#### 8. Halogen-free

If you need a Halogen free connector, please use the FH26W type. All materials and substances used to produce the FH26W Series product complies with Halogen-free standards. \* Defined according to IEC61249-2-21 Br: 900ppm max, Cl: 900ppm max, Br+Cl: 1,500ppm max.

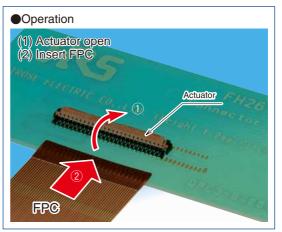
#### 9. Multiple packing options

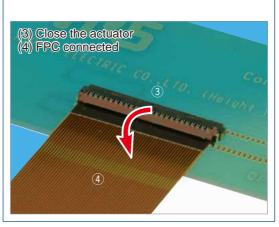
The standard packaging is 5,000 pieces per reel, but it is also offered in a 500 piece reel. (The outer diameter of the reel will be  $\phi$ 180 mm in this case.)

Can be mounted over conductive traces.



No exposed contacts on the bottom of the connector





### Specifications

Rating      Current rating Voltage rating      0.2A DC 30V AC      Operating temperature range Operating humidity range      -55 °C to +85°C (Note 1 Relative humidity 90% r (No condensation)	
---	--

Recommended FPC : T

Thickness: =  $0.2\pm0.03$ mm gold plated

Item	Specification	Conditions		
1. Insulation resistance	50 M ohms min.	100 V DC		
2. Withstanding voltage	No flashover or insulation breakdown.	90 V AC /one minute		
3. Contact resistance	100 m ohms max. * Including FPC conductor resistance	1 mA		
4. Durability (Insertion/ withdrawal)	Contact resistance: 100 m ohms max. No damage, cracks, or parts dislocation.	10 cycles		
5. Vibration	No electrical discontinuity of $1\mu$ s or more. Contact resistance: 100 m ohms max. No damage, cracks, or parts dislocation.	Frequency: 10 to 55 Hz, single amplitude of 0.75 mm, 10 cycles, 3 directions.		
6. Shock	No electrical discontinuity of $1\mu$ s. min. Contact resistance: 100 m ohms max. No damage, cracks, or parts dislocation.	Acceleration of 981 m/s <sup>2</sup> , 6 ms duration, sine half-wave waveform, 3 cycles in each of the 3 axis		
7. Humidity (Steady state)	Contact resistance: 100 m ohms max. Insulation resistance: 50 M ohms min. No affect on appearance or performance.	96 hours at temperature of $40\pm2^\circ$ C and humidity of 90% to 95%.		
8. Temperature cycle	Contact resistance: 100 m ohms max. Insulation resistance: 50 M ohms min. No damage, cracks, or parts looseness.	Temperature: $-55 \ ^\circ C \rightarrow +15 \ ^\circ C \ +35 \ ^\circ C \rightarrow +85 \ ^\circ C \rightarrow +15 \ ^\circ C \ +35 \ ^\circ C \rightarrow +15 \ ^\circ C \rightarrow +15 \ ^\circ C \ +35 \ ^\circ C \rightarrow +15 \ ^\circ C \rightarrow +15$		
9. Resistance to soldering heat	No deformation of components affecting performance.	Reflow: At the recommended temperature profile Manual soldering: $350^{\circ}$ +/-10°C for 5±1 seconds		

Note 1: Includes temperature rise caused by current flow.

Note 2: The term "storage" refers to products stored for long period of time prior to mounting and use. Operating Temperature Range and Humidity range covers non- conducting condition of installed connectors in storage, shipment or during transportation.

#### Materials

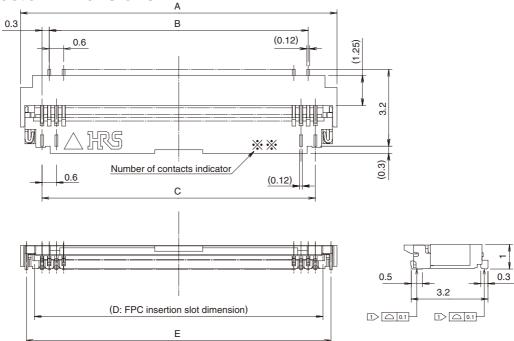
Part	Material	Finish	Remarks
	LCP	Color: Black	UL94V-0
Insulator	DA	FH26 series: Deep brown	0L94V-0
	PA	FH26W series: Light brown	UL94HB
Contacts	Dhaanbar branna	Gold plating	
Metalfittings	Phosphor bronze	Pure tin reflow plating	

### **Ordering information**

# $\frac{\mathsf{FH}}{\bullet} \ \frac{26}{\$} \ \frac{\mathsf{W}}{\bullet} \ - \ \frac{51\mathsf{S}}{\bullet} \ - \ \frac{0.3}{\bullet} \ \frac{\mathsf{SHW}}{\bullet} \ \frac{(05)}{$\bullet$}$

Series name: FH	6 Termination type SHW: SMT horizontal staggered mounting type
Series No.: 26	Specifications
8 Blank: Standard	(10)Gold plating with nickel barrier, 5,000 pieces / reel
W: Satisfies halogen-free requirements (Flame retardance UL94HB).	(99)Gold plating with nickel barrier, 500 pieces / reel
4 Number of positions: 13 to 71	
G Contact pitch: 0.3mm	





Notes 1 The coplanarity of each terminal lead within specified dimension is 0.1 mm Max.

- 2 Packaged on tape and reel only. Check packaging specification.
- 3 Slight variations in color of the plastic compounds do not affect form, fit or function of the connector.
- 4 After reflow, the terminal plating may change color, however this does not represent a quality issue.

						All dime	ensions: mm
Part Number	CL No.	Number of Contacts	А	В	С	D	E
FH26-13S-0.3SHW(**)	580-0209-3-**	13	5.4	3.0	3.6	4.23	4.9
FH26-15S-0.3SHW(**)	580-0218-4-**	15	6.0	3.6	4.2	4.83	5.5
FH26-17S-0.3SHW(**)	580-0217-1-**	17	6.6	4.2	4.8	5.43	6.1
FH26-21S-0.3SHW(**)	580-0207-8-**	21	7.8	5.4	6.0	6.63	7.3
FH26-23S-0.3SHW(**)	580-0203-7-**	23	8.4	6.0	6.6	7.23	7.9
FH26-25S-0.3SHW(**)	580-0208-0-**	25	9.0	6.6	7.2	7.83	8.5
FH26-27S-0.3SHW(**)	580-0204-0-**	27	9.6	7.2	7.8	8.43	9.1
FH26-29S-0.3SHW(**)	580-0216-9-**	29	10.2	7.8	8.4	9.03	9.7
FH26-31S-0.3SHW(**)	580-0214-3-**	31	10.8	8.4	9.0	9.63	10.3
FH26-33S-0.3SHW(**)	580-0210-2-**	33	11.4	9.0	9.6	10.23	10.9
FH26-35S-0.3SHW(**)	580-0205-2-**	35	12.0	9.6	10.2	10.83	11.5
FH26-37S-0.3SHW(**)	580-0224-7-**	37	12.6	10.2	10.8	11.43	12.1
FH26-39S-0.3SHW(**)	580-0201-1-**	39	13.2	10.8	11.4	12.03	12.7
FH26-41S-0.3SHW(**)	580-0206-5-**	41	13.8	11.4	12.0	12.63	13.3
FH26-45S-0.3SHW(**)	580-0211-5-**	45	15.0	12.6	13.2	13.83	14.5
FH26-51S-0.3SHW(**)	580-0200-9-**	51	16.8	14.4	15.0	15.63	16.3
FH26-55S-0.3SHW(**)	580-0221-9-**	55	18.0	15.6	16.2	16.83	17.5
FH26-57S-0.3SHW(**)	580-0212-8-**	57	18.6	16.2	16.8	17.43	18.1
FH26-61S-0.3SHW(**)	580-0213-0-**	61	19.8	17.4	18.0	18.63	19.3
FH26-71S-0.3SHW(**)	580-0202-4-**	71	22.8	20.4	21.0	21.63	22.3
Part Number	CL No.	Number of Contacts	А	В	С	D	E
FH26W-13S-0.3SHW(**)	580-2401-1-**	13	5.4	3	3.6	4.23	4.9
FH26W-15S-0.3SHW(**)	580-2402-4-**	15	6.0	3.6	4.2	4.83	5.5
FH26W-17S-0.3SHW(**)	580-2403-7-**	17	6.6	4.2	4.8	5.43	6.1
FH26W-19S-0.3SHW(**)	580-2437-9-**	19	7.2	4.8	5.4	6.03	6.7
FH26W-21S-0.3SHW(**)	580-2404-0-**	21	7.8	5.4	6.0	6.63	7.3
FH26W-23S-0.3SHW(**)	580-2405-2-**	23	8.4	6.0	6.6	7.23	7.9
FH26W-25S-0.3SHW(**)	580-2406-5-**	25	9.0	6.6	7.2	7.83	8.5
FH26W-27S-0.3SHW(**)	580-2400-9-**	27	9.6	7.2	7.8	8.43	9.1
FH26W-29S-0.3SHW(**)	580-2407-8-**	29	10.2	7.8	8.4	9.03	9.7
FH26W-31S-0.3SHW(**)	580-2408-0-**	31	10.8	8.4	9.0	9.63	10.3
FH26W-33S-0.3SHW(**)	580-2409-3-**	33	11.4	9.0	9.6	10.23	10.9
FH26W-35S-0.3SHW(**)	580-2410-2-**	35	12.0	9.6	10.2	10.83	11.5
FH26W-37S-0.3SHW(**)				1	10.0	11.43	12.1
FH26W-39S-0.3SHW(**)	580-2411-5-**	37	12.6	10.2	10.8	11.45	14.1
1112000 0000 0001 0000 00000 0000000000	580-2411-5-** 580-2412-8-**	37 39	12.6 13.2	10.2	10.8	12.03	12.7
FH26W-41S-0.3SHW(**)		-		-			
	580-2412-8-**	39	13.2	10.8	11.4	12.03	12.7
FH26W-41S-0.3SHW(**)	580-2412-8- <b>*</b> * 580-2413-0- <b>*</b> *	39 41	13.2 13.8	10.8 11.4	11.4 12.0	12.03 12.63	12.7 13.3
FH26W-41S-0.3SHW(**) FH26W-45S-0.3SHW(**)	580-2412-8-** 580-2413-0-** 580-2414-3-**	39 41 45	13.2 13.8 15.0	10.8 11.4 12.6	11.4 12.0 13.2	12.03 12.63 13.83	12.7 13.3 14.5
FH26W-41S-0.3SHW(**) FH26W-45S-0.3SHW(**) FH26W-51S-0.3SHW(**)	580-2412-8-** 580-2413-0-** 580-2414-3-** 580-2414-3-**	39 41 45 51	13.2 13.8 15.0 16.8	10.8 11.4 12.6 14.4	11.4 12.0 13.2 15.0	12.03 12.63 13.83 15.63	12.7 13.3 14.5 16.3

Note1 : Embossed tape reel packaging(5,000pieces/reel, 500pieces/reel). Order by number of reels.



#### **Camera Module Pinout Definition Reference Chart**

OmniVision Sony Samsung On-Semi Ap	tina Himax GalaxyCore PixArt SmartSens Sensors
Pin Signal	Description
DGND GND	ground for digital circuit
AGND	ground for analog circuit
PCLK DCK	DVP PCLK output
XCLR PWDN XSHUTDOWN STANDBY	power down active high with internal pull-down resistor
MCLK XVCLK XCLK INCK	system input clock
RESET RST	reset active low with internal pull-up resistor
NC NULL	no connect
SDA SIO_D SIOD	SCCB data
SCL SIO_C SIOC	SCCB input clock
VSYNC XVS FSYNC	DVP VSYNC output
HREF XHS	DVP HREF output
DOVDD	power for I/O circuit
AFVDD	power for VCM circuit
AVDD	power for analog circuit
DVDD	power for digital circuit
STROBE FSTROBE	strobe output
FSIN	synchronize the VSYNC signal from the other sensor
SID	SCCB last bit ID input
ILPWM	mechanical shutter output indicator
FREX	frame exposure / mechanical shutter
GPIO	general purpose inputs
SLASEL	I2C slave address select
AFEN	CEN chip enable active high on VCM driver IC
MIPI Interface	
MDN0 DN0 MD0N DATA_N DM01N	MIPI 1st data lane negative output
MDP0 DP0 MD0P DATA P DM01P	MIPI 1st data lane positive output
MDN1 DN1 MD1N DATA2 N DMO2N	MIPI 2nd data lane negative output
MDP1 DP1 MD1P DATA2 P DM02P	MIPI 2nd data lane positive output
MDN2 DN2 MD2N DATA3 N DMO3N	MIPI 3rd data lane negative output
MDP2 DP2 MD2P DATA3 P DMO3P	MIPI 3rd data lane positive output
MDN3 DN3 MD3N DATA4 N DMO4N	MIPI 4th data lane negative output
MDP3 DP3 MD3P DATA4_P DMO4P	MIPI 4th data lane positive output
MCN CLKN CLK_N DCKN	MIPI clock negative output
MCP CLKP MCP CLK_P DCKN	MIPI clock positive output
DVP Parallel Interface	
D0 D00 Y0	DV/P data output port 0
D1 D01 Y1	DVP data output port 0
D1 D01 Y1 D2 D02 Y2	DVP data output port 1 DVP data output port 2
D3 D03 Y3	
	DVP data output port 3
D4 D04 Y4 D5 D05 Y5	DVP data output port 4
	DVP data output port 5
D6 D06 Y6	DVP data output port 6
D7 D07 Y7	DVP data output port 7
D8 D08 Y8	DVP data output port 8
D9 D09 Y9	DVP data output port 9
D10 D010 Y10	DVP data output port 10
D11 D011 Y11	DVP data output port 11

www.YDSCAM.com sales@ydscam.com Phone (WeChat, QQ): (+86) 177 2732 6718

#### **Cameras Applications**

8

#### your best camera partner



www.YDSCAM.com sales@ydscam.com Phone (WeChat, QQ): (+86) 177 2732 6718



#### **Camera Reliability Test**

	Reliability Inspect	ion Item	Testing Mathed	A coorton oo Critorio	
Category		Item	Testing Method	Acceptance Criteria	
	Storage	High 60°C 96 Hours	Temperature Chamber	No Abnormal Situation	
	Temperature	Low -20°C 96 Hours	Temperature Chamber	No Abnormal Situation	
	Operation	High 60°C 24 Hours	Temperature Chamber	No Abnormal Situation	
Environmental	Temperature	Low -20°C 24 Hours	Temperature Chamber	No Abnormal Situation	
Environmentai	Humidity	60°C 80% 24 Hours	Temperature Chamber	No Abnormal Situation	
	Thermal Shock	High 60°C 0.5 Hours Low -20°C 0.5 Hours Cycling in 24 Hours	Temperature Chamber	No Abnormal Situation	
	Drop Test	Without Package 60cm	10 Times on Wood Floor	Electrically Functional	
	(Free Falling)	With Package 60cm	10 Times on Wood Floor	Electrically Functional	
		50Hz X-Axis 2mm 30min	Vibration Table	Electrically Functional	
Physical	Vibration Test	50Hz Y-Axis 2mm 30min	Vibration Table	Electrically Functional	
Filysical		50Hz Z-Axis 2mm 30min	Vibration Table	Electrically Functional	
	Cable Tensile Strength Test	Loading Weight 4 kg 60 Seconds Cycling in 24 Hours	Tensile Testing Machine	Electrically Functional	
		Contact Discharge 2 KV	ESD Testing Machine	Electrically Functional	
	ESD Test	Air Discharge 4 KV	ESD Testing Machine	Electrically Functional	
Electrical	Aging Test	On/Off 30 Seconds Cycling in 24 Hours	Power Switch	Electrically Functional	
	USB Connector	On/Off 250 Times	Plug and Unplug	Electrically Functional	



www.YDSCAM.com sales@ydscam.com Phone (WeChat, QQ): (+86) 177 2732 6718

#### **Camera Inspection Standard**

your best camera partner

	Inspectior	n Item	Inspection Method	Standard of Inspection			
Category		Item	пересноп менной				
		Color	The Naked Eye	Major Difference is Not Allowed.			
	FPC/ PCB	Be Torn/Chopped	The Naked Eye	Copper Crack Exposure is Not Allowed.			
		Marking	The Naked Eye	Clear, Recognizable (Within 30cm Distance)			
		Scratches	The Naked Eye	The Inside Crack Exposure is Not Allowed			
	Holder	Gap	The Naked Eye	Meet the Height Standard			
Appearance	HOIDEI	Screw	The Naked Eye	Make Sure Screws Are Presented (If Any)			
		Damage	The Naked Eye	The Inside Crack Exposure is Not Allowed			
		Scratch	The Naked Eye	No Effect On Resolution Standard			
	Long	Contamination	The Naked Eye	No Effect On Resolution Standard			
	Lens	Oil Film	The Naked Eye	No Effect On Resolution Standard			
		Cover Tape	The Naked Eye	No Issue On Appearance.			
		No Communication	Test Board	Not Allowed			
		Bright Pixel	Black Board	Not Allowed In the Image Center			
		Dark Pixel	White board	Not Allowed In the Image Center			
		Blurry	The Naked Eye	Not Allowed			
		No Image	The Naked Eye	Not Allowed			
		Vertical Line	The Naked Eye	Not Allowed			
		Horizontal Line	The Naked Eye	Not Allowed			
Function	Image	Light Leakage	The Naked Eye	Not Allowed			
		Blinking Image	The Naked Eye	Not Allowed			
		Bruise	Inspection Jig	Not Allowed			
		Resolution	Chart	Follows Outgoing Inspection Chart Standard			
		Color	The Naked Eye	No Issue			
		Noise	The Naked Eye	Not Allowed			
		Corner Dark	The Naked Eye	Less Than 100px By 100px			
		Color Resolution	The Naked Eye	No Issue			
		Height	The Naked Eye	Follows Approval Data Sheet			
Dimen	sion	Width	The Naked Eye	Follows Approval Data Sheet			
Dimen	131011	Length	The Naked Eye	Follows Approval Data Sheet			
		Overall	The Naked Eye	Follows Approval Data Sheet			

www.YDSCAM.com sales@ydscam.com Phone (WeChat, QQ): (+86) 177 2732 6718

your best camera partner

## **YDSCAM Package Solutions**

YDS Camera Module



Tray with Grid and Space

Complete with Lens Protection Film



Place Cameras on the Tray





www.YDSCAM.com sales@ydscam.com Phone (WeChat, QQ): (+86) 177 2732 6718

your best camera partner

### **YDSCAM Package Solutions**

Full Tray of Cameras

DS



Place Tray into Anti-Static Bag

Cover Tray with Lid



Vacuum the Anti-Static Bag



www.YDSCAM.com sales@ydscam.com Phone (WeChat, QQ): (+86) 177 2732 6718

your best camera partner

## **YDSCAM Package Solutions**

#### Sealed Vacuum Anti-Static Bag with Labels

1. Model and Description 2. Quantity 3. Manufacturing Date Code 4. Caution



www.YDSCAM.com sales@ydscam.com Phone (WeChat, QQ): (+86) 177 2732 6718



## **YDSCAM Package Solutions**

Place Foam Sheets Between Tray Bags



Place Foam Sheets and Trays into Box



Seal the Carbon Box



Foam Sheets are Larger Than Trays



Foam Sheets are Tightly Fitting in Box



Label the Carbon Shipping Box



www.YDSCAM.com sales@ydscam.com Phone (WeChat, QQ): (+86) 177 2732 6718



your best camera partner

## **YDSCAM Package Solutions**

USB Camera Module







Place Camera Sample into Anti-Static Bag

Place USB Cameras into Tray







Seal the Tray with Anti-Static Bag



Label the Carbon Shipping Box



www.YDSCAM.com sales@ydscam.com Phone (WeChat, QQ): (+86) 177 2732 6718

All rights reserved @ YingDeShun Co. Ltd. Specifications subject to change without notice.

Complete with Lens Protection Film



## **YDSCAM Package Solutions**

Place Camera Sample into Anti-Static Bag





Label the Sample Bags

### Place Connectors into Anti-Static Bag



Place Connectors into Reel



Place Samples into the Carbon Box





Place Connectors into the Carbon Box



www.YDSCAM.com sales@ydscam.com Phone (WeChat, QQ): (+86) 177 2732 6718

# YDS

#### **Company YDSCAM**

YingDeShun Co. Ltd. (YDS) was established in 2017, a next-generation technology driven manufacturer specialized in research, design, and produce of audio and video products. YDS is occupying 20,000 square feet automated plants with 100 employees of annual throughput 30,000,000 units cameras.

YDS provides OEM, ODM design, contract manufacturing, and builds the camera products. You may provide the requirements to us, even with a hand draft, our sales and engineering work together to meet your needs. We consider ourselves your last-term partner in developing practical and innovative solutions.

Our team covers everything from initial concept development to mass produced product. YDS specializes in customized camera design, raw material, electronic engineering, firmware/software development, product testing, and packing design. Our experienced strategic supply systems offer a robust and dependable manufacturing capacity for orders of various sizes.



#### **Limited Warranty**

YDS provides the following limited warranty if you purchased the Product(s) directly from YDS company or from YDS's website <u>www.YDSCAM.com</u>. Product(s) purchased from other sellers or sources are not covered by this Limited Warranty. YDS guarantees that the Product(s) will be free from defects in materials and workmanship under normal use for a period of one (1) year from the date you receive the product ("Warranty Period").

For all Product(s) that contain or develop material defects in materials or workmanship during the Warranty Period, YDS will, at its sole option, either: (i) repair the Product(s); (ii) replace the Product(s) with a new or refurbished Product(s) (replacement Product(s) being of identical model or functional equivalent); or (iii) provide you a refund of the price you paid for the Product(s).

This Limited Warranty of YDS is solely limited to repair and/or replacement on the terms set forth above. YDS is not reliable or responsible for any subsequential events.



your best camera partner

#### **YDS Strength**

Y

**Powerful Factory** 



#### **Professional Service**



#### **Promised Delivery**



www.YDSCAM.com sales@ydscam.com Phone (WeChat, QQ): (+86) 177 2732 6718