

LI-OV2685-MIPI-FF SPECIFICATION

**Rev 1.1
Leopard Imaging Inc.**

Contents

Version History	3
Key Information	4
Pin Assignment	5
Mechanical Diagram	6



Version History

Version	Description	Release Date
1.0	First Release.	10. Nov. 2015
1.1	Deleted info quoted from sensor spec.	20. May. 2022



LI-OV2685-MIPI-FF SPECIFICATION

Key Information

Module Part#		LI-OV2685-MIPI-FF
Module Size		100 (L) x 6.5 (W) x 4.9 (H) mm
Sensor Type		OV2685
Array Size		1616 (H) x 1216 (V)
Power Supply	Core	1.7 ~ 1.9V
	Analog	2.6 ~ 3.0V
	I/O	1.7 ~ 3.0V
Lens		1/5"
Focus (F.NO)		2.8
View Angle		65°
Focal Length		2.66 mm
Object Distance		60 cm ~ Infinity
Sensitivity		7 ke ⁻ / Lux-sec
Pixel Size		1.75 x 1.75μm
IR Filter		650 nm IR cut filter
Sensor Temperature Range	Operating	-30°C to +85°C
	Stable Image	0°C to +50°C
Output Formats		10-bit RGB RAW, 8-bit YUV
Support Image Sizes		UXGA (1600 x 1200); 1600 HD+ (1600 x 900); SXGA (1280 x 960); 720P (1280 x 720); and more
Dynamic Range		66 dB @ 8x gain
Max S/N Ratio		36 dB
IC Package		53-pin CSP5
Power Requirement	Active	259 mW
	XSHUTDOWN	< 1 μA
Scan Mode		Progressive
Shutter		Rolling shutter
Dark Current		6.5 e ⁻ /sec @ 50°C junction temp
Package Dimensions		4454 x 4014 μm
Interface		MIPI



Pin Assignment

No.	Name	Pin Type	Description
1	SDA	I/O	SCCB data
2	SCL	Input	SCCB input clock
3	DOVDD1.8V / 2.8V	Power	Power for I/O circuit
4	MCP	Output	MIPI clock positive output
5	MCN	Output	MIPI clock negative output
6	GND	Ground	
7	MDP1	Output	MIPI data positive output
8	MDN1	Output	MIPI data negative output
9	GND	Ground	
10	MDP2	Output	MIPI data positive output
11	MDN2	Output	MIPI data negative output
12	GND	Ground	
13	MDP3 (NC)	Output	MIPI data positive output
14	MDN3 (NC)	Output	MIPI data negative output
15	GND	Ground	
16	MDP4 (NC)	Output	MIPI data positive output
17	MDN4 (NC)	Output	MIPI data negative output
18	DVDD1.8V	Power	Power for digital core
19	XCLK	Input	System input clock
20	PWDN (NC)	Input	Power down (active high with internal pull- down resistor)
21	RESET	Input	Reset (active low with internal pull-up resistor)
22	AVDD2.8	Power	Analog power
23	NC		
24	GND	Ground	



