

# **LI-OG02B10-MIPI-125H SPECIFICATION**

**Rev 1.1  
Leopard Imaging Inc.**

## **Contents**

<b>Version History</b> .....	3
<b>Key Information</b> .....	4
<b>Pin Assignment</b> .....	5
<b>Mechanical Diagram</b> .....	6

# LI-OG02B10-MIPI-125H SPECIFICATION

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## Version History

Version	Description	Release Date
1.0	First Release.	20. Nov. 2019
1.1	Deleted info quoted from sensor spec.	19. May. 2022

# LI-OG02B10-MIPI-125H SPECIFICATION

## Key Information

Module Part#		LI-OG02B10-MIPI-125H
Module Size		39.8 (L) x 13.6 (W) x 17.9 (H) mm
Sensor Type		OG02B10 Color sensor
Array Size		1600 (H) x 1300 (V)
Power Supply	Core	1.2V (nominal)
	Analog	2.8V (nominal)
	I/O	1.8V (nominal)
Lens		1/2.9"
F/No		2.5
Focal Length		2.2 mm
View Angle		125° (H)
TV Distortion		< -20%
Object Distance		TBD
Sensitivity		114Ke <sup>-</sup> / (μ W.cm <sup>-2</sup> .sec) @ 850 nm 54Ke <sup>-</sup> / (μ W.cm <sup>-2</sup> .sec) @ 940 nm
Pixel Size		3 x 3 μm
IR Filter		650 nm IR cut filter
Temperature Range	Operating	-30°C to +85°C
Output Formats		10-bit RAW
Maximum Image Transfer Rate		1600 x 1300 @ 60 fps
Dynamic Range		68 dB
Lens Chief Ray Angle		15° linear
Input Clock Frequency		6 ~ 27 MHz
Power Requirement	Active	190 mW
	XSHUTDOWN	< 25 uW
Max S/N Ratio		37.4 dB
Shutter		Global shutter
Dark Current		TBD
Image Area		4857.696 x 3955.896 μm
Package Dimensions		7219 x 6157 μm

## LI-OG02B10-MIPI-125H SPECIFICATION

### Pin Assignment

No.	Name	Pin type	Description
1	SDA	I/O	SCCB data
2	SCL	Input	SCCB input clock
3	DOVDD1.8V	Power	Power for I/O circuit
4	MCP	Output	MIPI clock positive output
5	MCN	Output	MIPI clock negative output
6	DGND	Ground	
7	MDP0	Output	MIPI data positive output
8	MDN0	Output	MIPI data negative output
9	DGND	Ground	
10	MDP1	Output	MIPI data positive output
11	MDN1	Output	MIPI data negative output
12	DGND	Ground	
13	PWM	I/O	PWM output
14	ATEST	reference	Analog test
15	AGND	Ground	
16	FSIN	I/O	Frame sync input
17	SID	Input	Chip ID selection
18	DVDD1.2V	Power	Power for digital circuit
19	XCLK	Input	System input clock
20	STROBE	I/O	Strobe output
21	XSHUTDOWN	Input	Reset and power down (active low)
22	AVDD2.8	Power	Analog power
23	ULPM	Output	ULPM open-drain output
24	DGND	Ground	

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## Mechanical Diagram

