LI-OV7251M-FF-80
SPECIFICATION

Rev 1.1
Leopard Imaging Inc.

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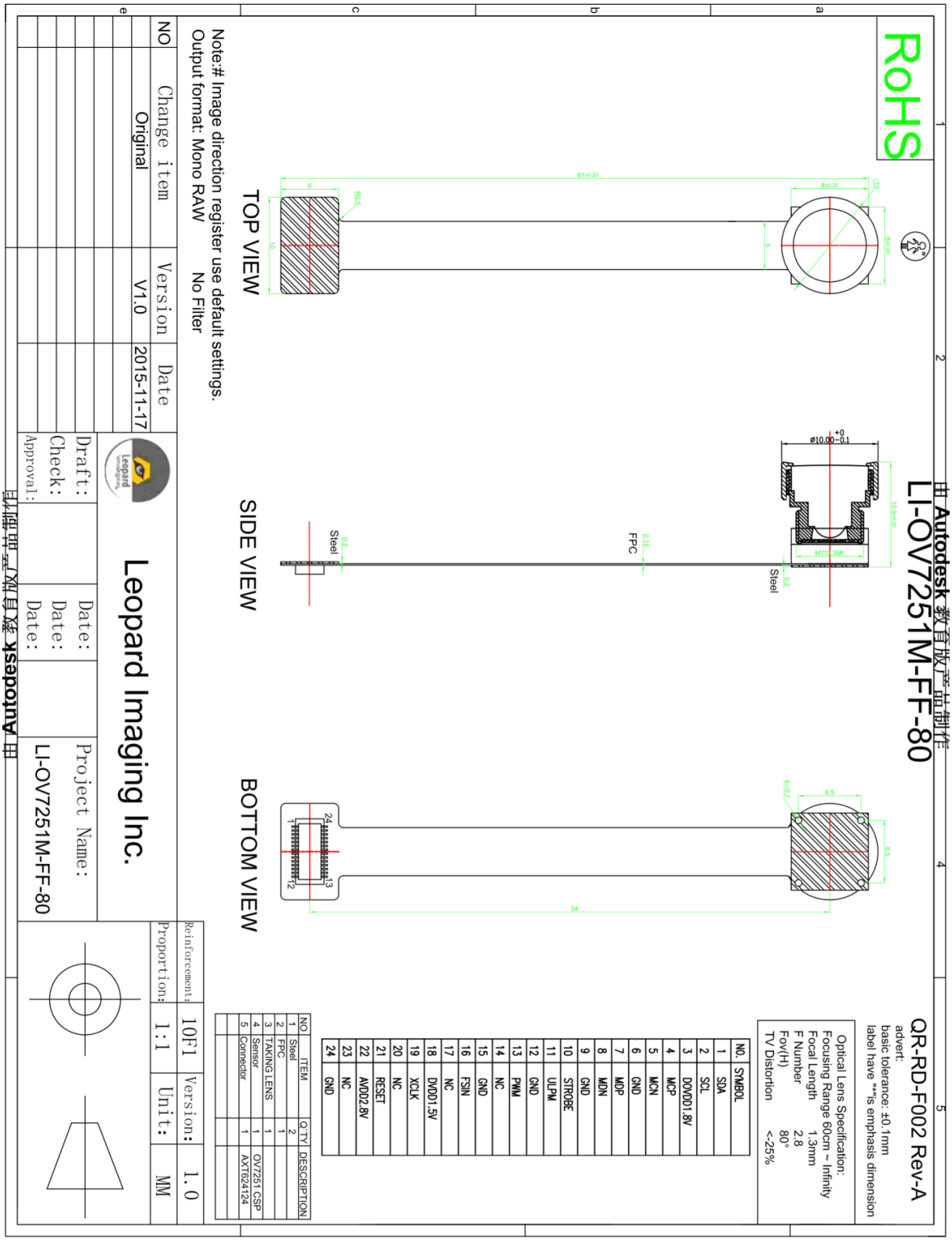
Version History

Version	Description	Release Date
1.0	First Release.	4. JAN. 2016
1.1	Deleted info quoted from sensor spec.	20. May. 2022

Key Information

Module Part#		LI-OV7251M-FF-80
Module Size		61 (L) x 8 (W) x 10.9 (H) mm
Sensor Type		OV7251
Array Size		640 (H) x 480 (V)
Power Supply	Core	1.5V
	Analog	2.8V
	I/O	1.8V
Lens Size		1/7.5"
Focus (F.NO)		2.8
FOV (H)		80°
Focal Length		1.3 mm
Focusing Range		60 cm to Infinity
TV Distortion		< -25 %
Sensitivity		7190 mV / (uW.cm^{-2}.sec) @ 850 nm; 2800 mV / Lux-sec @ 530 nm
Pixel Size		3 x 3 µm
IR Cut Filter		No filter
Sensor Temperature Range	Operating	-30°C to +70°C
	Stable Image	0°C to +50°C
Output Formats		10-bit RAW or BW
Maximum Image Transfer Rate		640 x 480 @ 100 fps
Dynamic Range		69.6 dB @ 8x gain
Max S/N Ratio		39 dB
Scan Mode		Progressive
Power Requirement	Active	117 mW @ 100 fps, VGA output
	Standby	15 µA for AVDD, 40 µA DOVDD without input clock, 700 µA for DOVDD with input clock
	XSHUTDOWN	5 µA for AVDD, 5µA for DOVDD
Interface		MIPI
Color / Mono		Monochrome

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	GND	Ground	
7	MDP	Output	MIPI data positive output
8	MDN	Output	MIPI data negative output
9	GND	Ground	
10	STROBE	I/O	Strobe output
11	ULPM	Output	ULPM open-drain output
12	GND	Ground	
13	PWM	I/O	PWM output
14	NC		
15	GND	Ground	
16	FSIN	I/O	FSIN input
17	NC		
18	DVDD1.5V	Power	Power for digital core
19	XCLK	Input	System input clock
20	NC		
21	RESET	Input	Reset (active low with internal pull-up resistor)
22	AVDD2.8V	Power	Analog power
23	NC		
24	GND	Ground	

Mechanical Diagram