



**LEOPARD**  
IMAGING

# LI-ST-VG5761-MONO-DMS-T



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## INTRODUCTION

The LI-ST-VG5761-MONO-DMS-T is equipped with STMicroelectronics 2.3 megapixel high-dynamic global shutter image sensor VG5761 which features high MTF. This camera outputs 8-bit / 10-bit / 12-bit / 14-bit / 16-bit RAW data.

## SPECIFICATIONS

Sensor	STMicroelectronics 2.3MP HDR Global Shutter Image Sensor VG5761
Optical Format	1/2.5"
Resolution	1944 (H) x 1204 (V)
Pixel Size	3.2 x 3.2 $\mu\text{m}$
Output Format	8-bit / 10-bit / 12-bit / 14-bit / 16-bit RAW data
Color / Mono	Monochrome
Shutter	Global shutter
Frame Rate	60 fps @ 1944 x 1204
Dynamic Range	96 dB
Serializer	Maxim MAX9295A/B
Power Supply Range	9 ~ 19 VDC
FPGA	Included for VCSEL and sensor control
ISP	Not included
VCSEL	Included
FAKRA Connector	FAKRA Z TYPE
Power Consumption	$\leq 113 \text{ mA @ 12 VDC}$ (Camera module + 2 LEDs)
Operating Temp	-25°C ~ +85°C
Storage Temp	-25°C ~ +85°C
Weight	TBD
Part#	LI-ST-VG5761-MONO-DMS-T

## APPLICATIONS

- DMS Application
- Autonomous Driving
- IR Application

## LENS SPECIFICATIONS

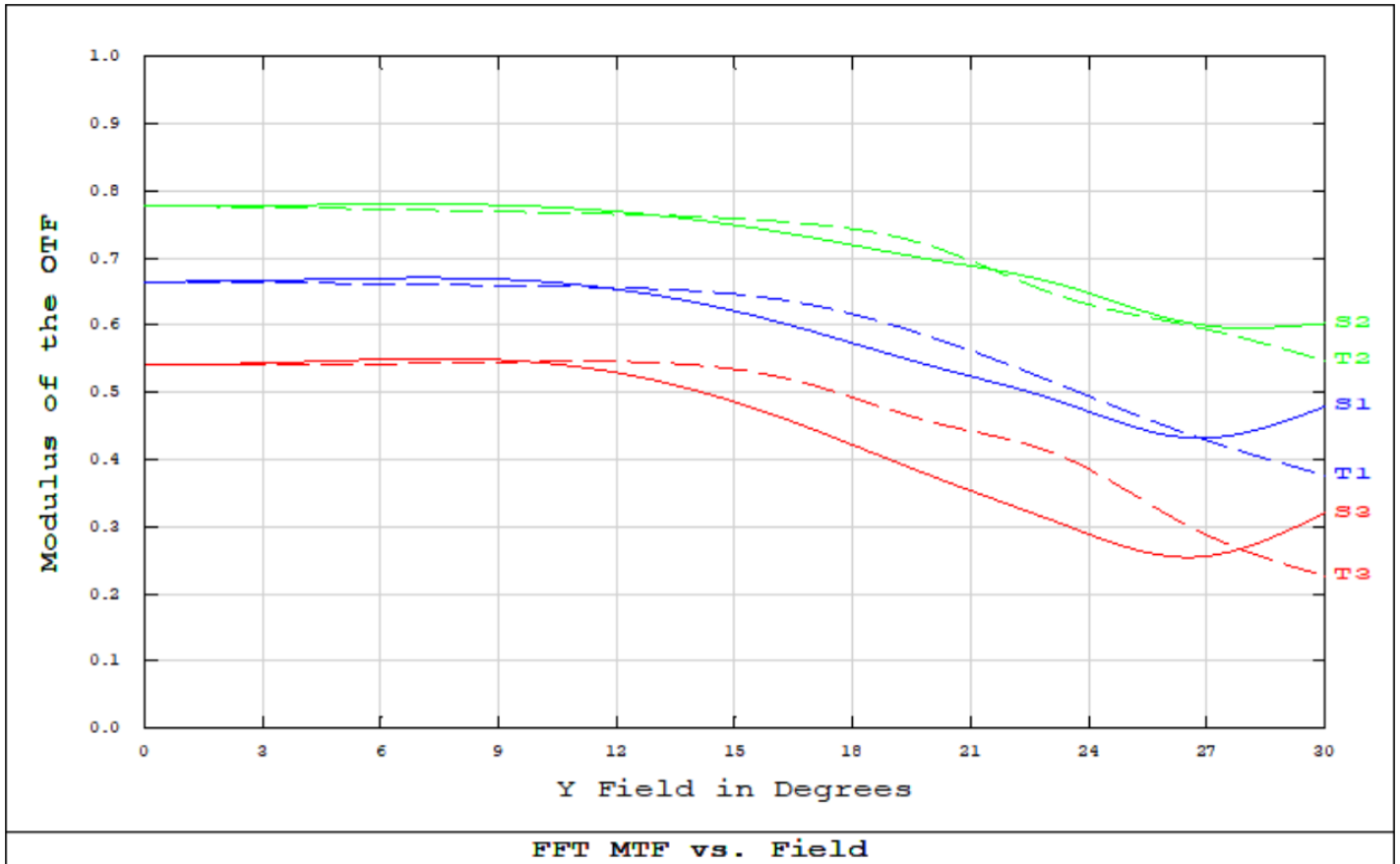
Focal Length	7.9 mm
Aperture, F/#	2.0
Field of View (FOV)	45° horizontal
IR Filter	940 nm IR filter
Lens Mount	M12 x 0.5

## VCSEL SPECIFICATIONS

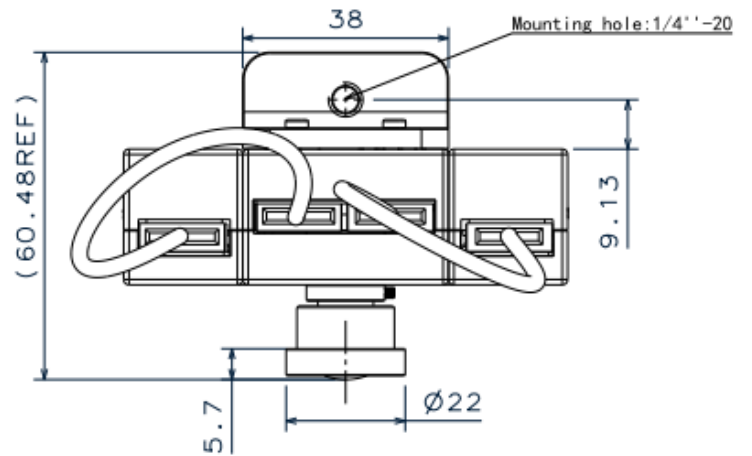
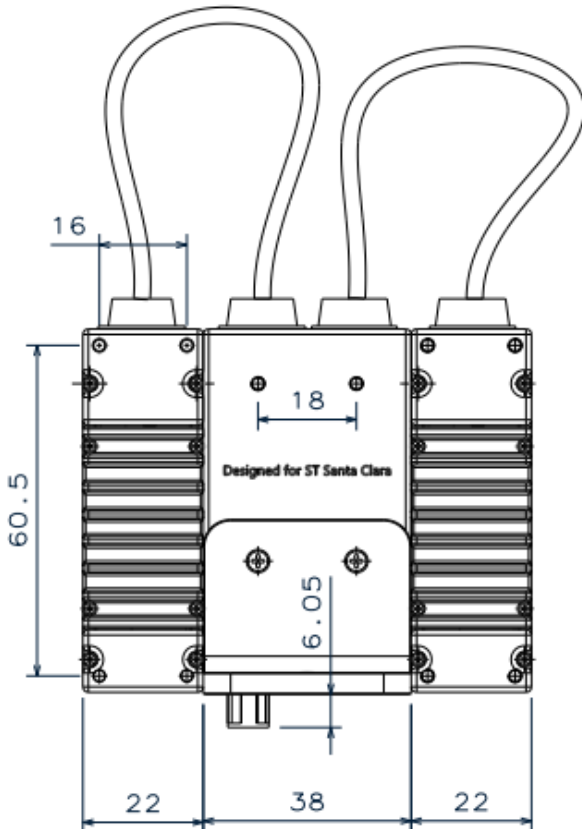
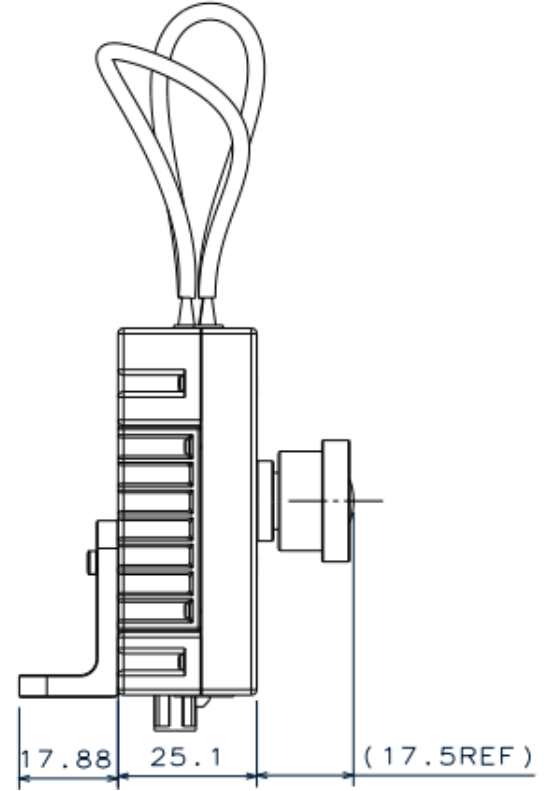
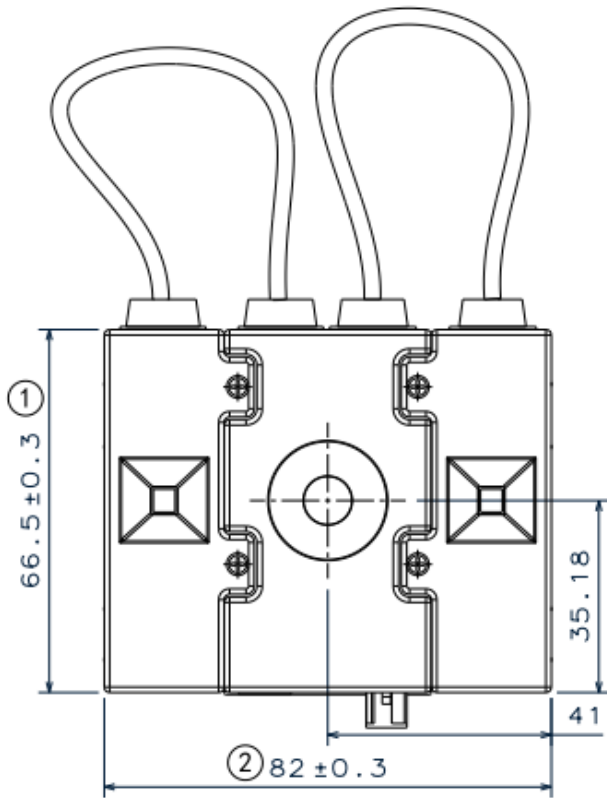
Wavelength	940 nm
Field of Illumination (FOI)	60° horizontal 45° vertical
Optical Power	6 W
QTY on Camera	2



# LENS MTF (MODULUS OF THE OTF)



# DIMENSIONS

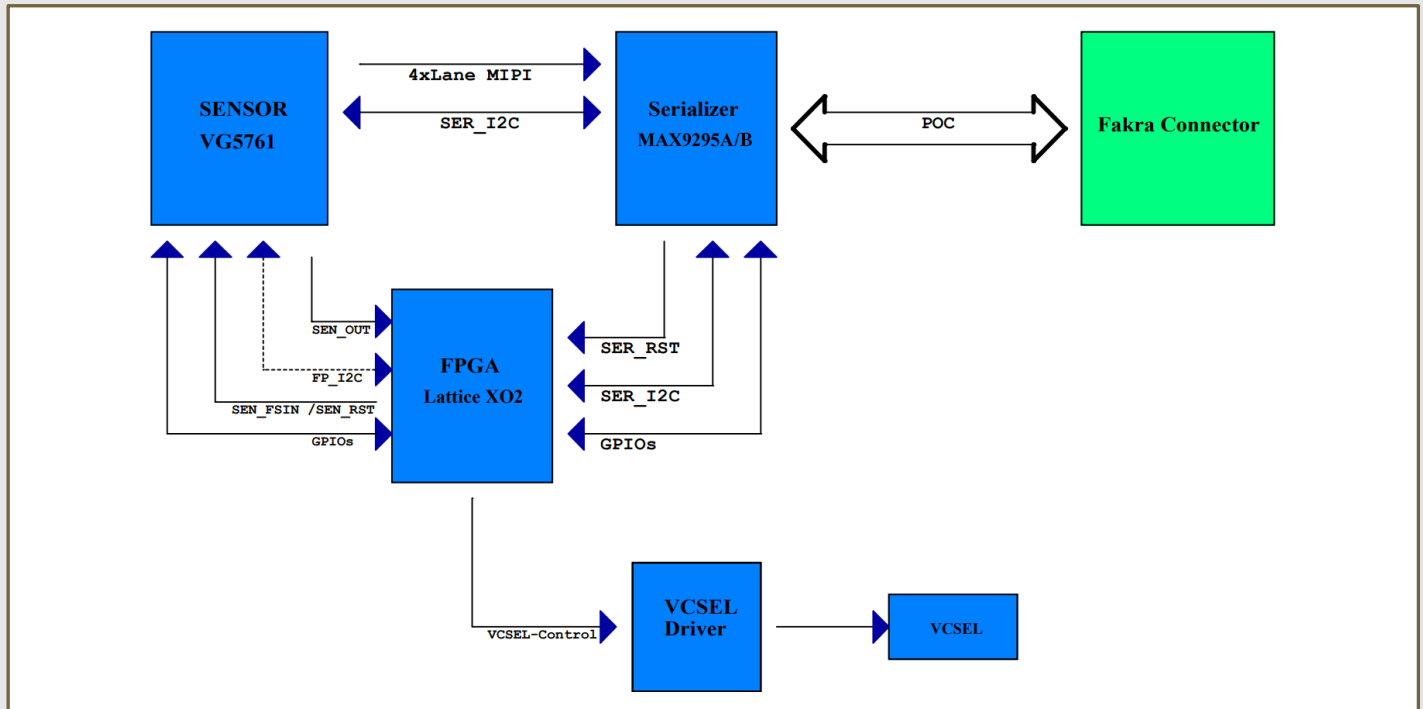


**NOTE:**

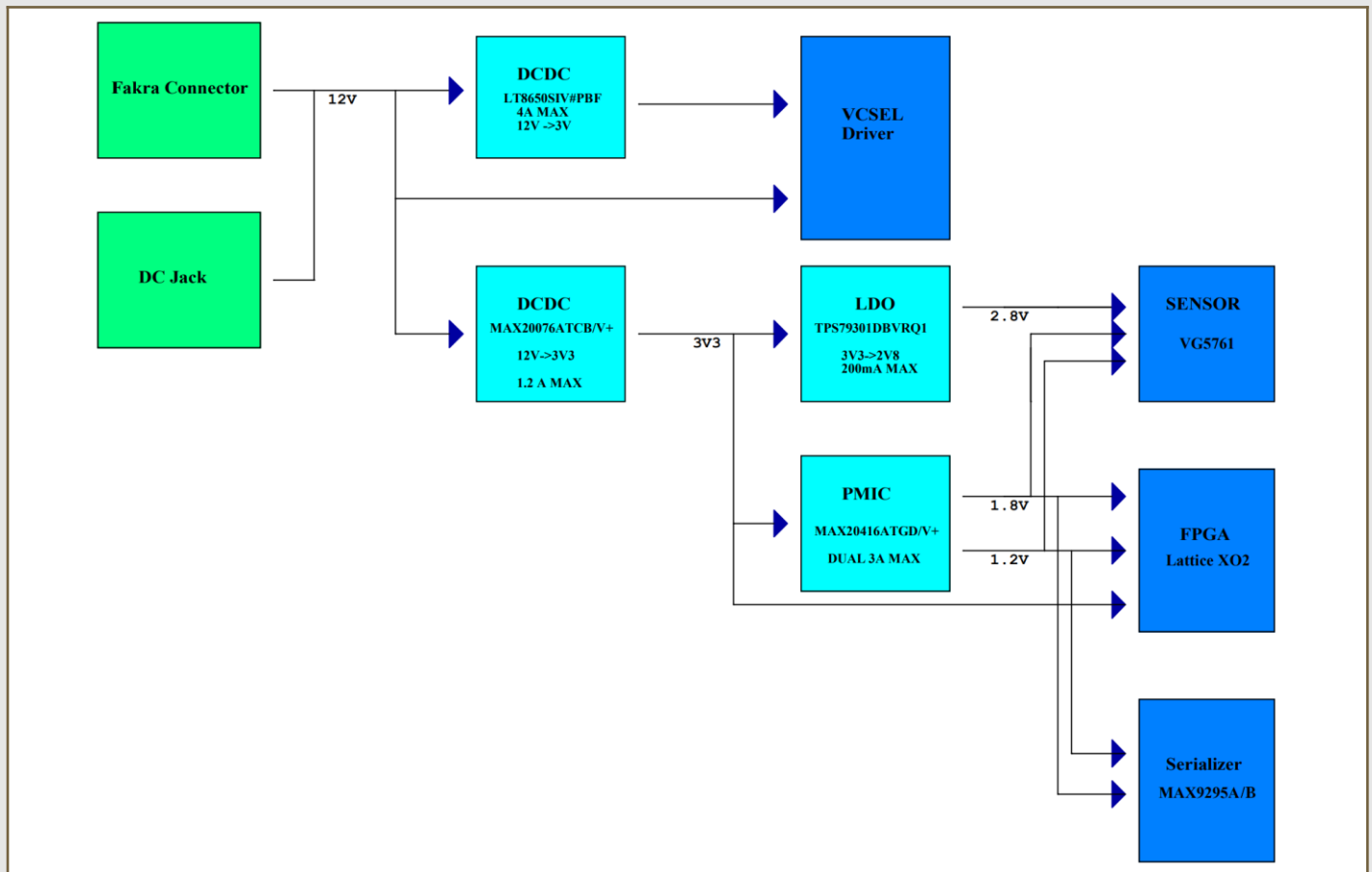
- ⊗ marked are important sizes.
- Tolerances for others unmarked are ± 0.3 mm.

Unit: mm

## SYSTEM BLOCK DIAGRAM



## POWER BLOCK DIAGRAM



## USB3.0 CAMERA KIT

LI-GMSL2-USB-BOX



Front View



Side View

LI-ST-VG5761-MONO-DMS-T can connect to LI-GMSL2-USB-BOX as a USB 3.0 camera.

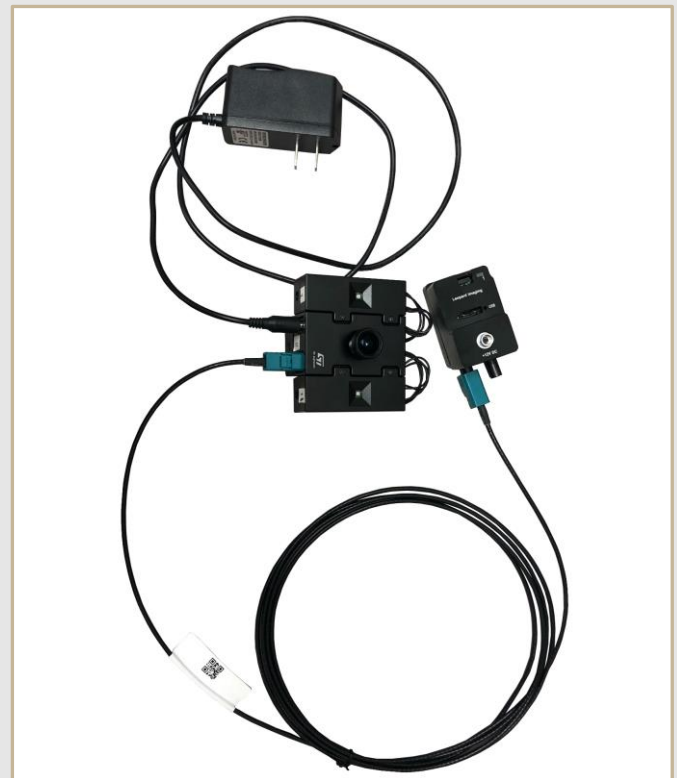
Part#: **LI-USB30-ST-VG5761-MONO-DMS-T**

### SPECIFICATIONS

- USB 3.0 Super Speed support
- RAW output
- UVC compliant
- Allows customization
- 12 VDC power supply for camera
- Weight: TBD
- Single Coax Cable transmits up to 12 meters PoC (Power over Cable)
- Resolution: 1944 x 1204 @ 60 fps
- Compatible with Windows, Linux OS and other OS which have UVC drivers

### BOM

#	Items	QTY
1	LI-ST-VG5761-MONO-DMS-T	1
2	LI-GMSL2-USB-BOX	1
3	3-Meter Fakra Cable	1
4	12 VDC Power Supply	2
5	USB3.0 Cable	1



### SDK SUPPORTED

- Camera Tool Source Code in C#
- Capture & Display

## ● REVISION HISTORY

Revision	Description	Release Date
1.0	First release.	13 Aug 2021
1.1	Changed Part# from ST-VG5761-REV-A-BOX to LI-ST-VG5761-MONO-DMS and added Rev No. (Rev A.)	16 Nov 2021
1.2	Changed Part# from LI-ST-VG5761-MONO-DMS to LI-ST-VG5761-MONO-DMS-T.	25 Nov 2021
1.3	Updated power consumption, frame rate and resolution.	31 Aug 2021

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