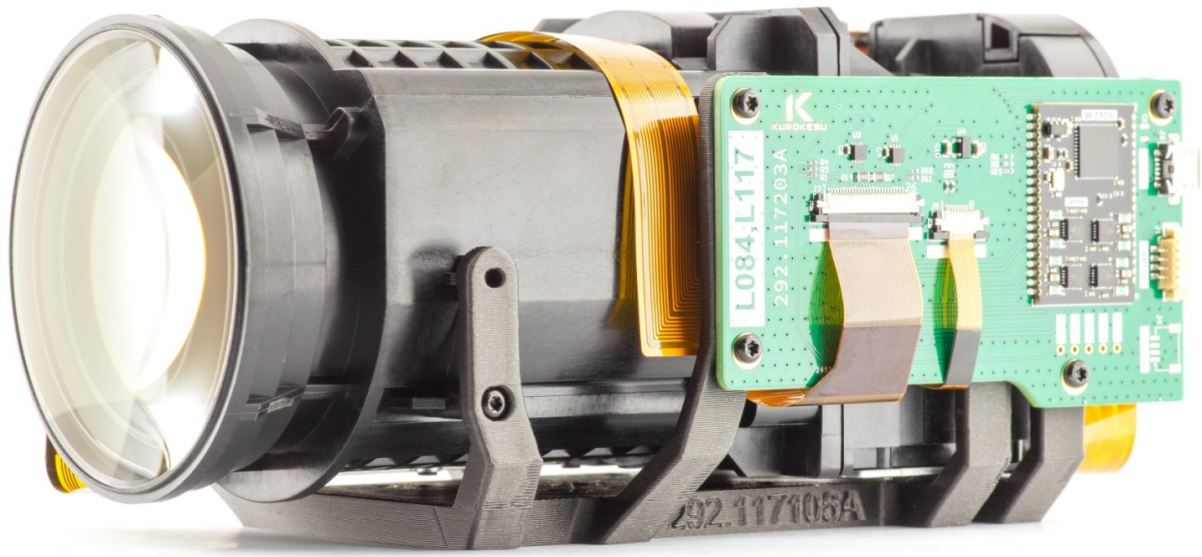
L117-DEVKIT

Brief

L117 is 6.5-212mm focal length (32x) motorized zoom lens is designed for 1/1.8" image sensors, has zoom/focus/iris functions, designed for 8M sensors.



Specifications

Optics

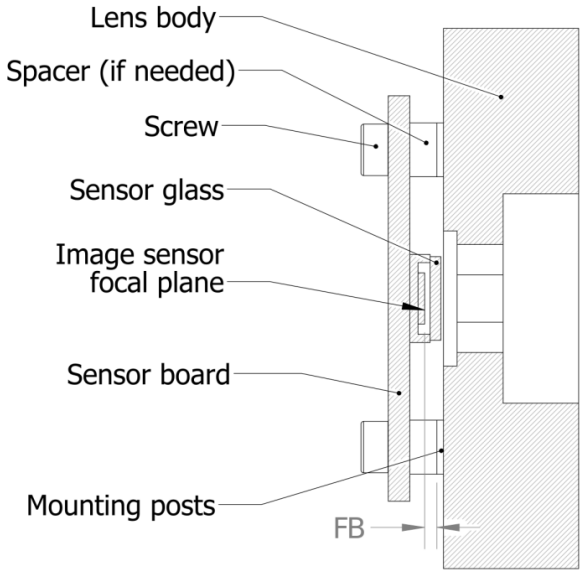
Image sensor	1/1.8" Effective image area > 9.3mm
Focal distance	6.5 ~ 212mm / ±5%
Aperture	f/1.4 ~ f/4.9
Focus range	• WIDE: 0.5m - infinity • TELE: 2.0m - infinity
Field of view (D=8.26mm)	• WIDE: 70.7° • TELE: 2.3°

Distortion	• WIDE: -2.6% • TELE: 1.0%
Recommended image sensor	IMX334
Bare lens weight	437g

Mechanics

Flange back (**FB**, see diagram below)	+0.93 (in glass t=0.3 IRCF)
Lens zoom structure	The stepper motor is directly connected to the screw
Lens focusing structure	The stepper motor is directly connected to the screw
Lens size	• Length: 146mm • Width: 73mm • Height: 67mm • Front end diameter: 43mm

In order to accommodate different image sensors, the focal distance is set back by flange back (FB) distance. The actual distance for a specific sensor has to be calculated and spacers used. If the image plane is not set correctly, focus irregularities in the projected picture are expected.



Motor specifications

Screw pitch	0.4mm
Spiral rotation direction	Right
Rated voltage	5.0 VDC

Coil resistance	• Zoom1: 20Ω ± 10% / phase (T=25°C) • Zoom2: 20Ω ± 10% / phase (T=25°C) • Focus: 55Ω ± 10% / phase (T=25°C) • Iris: 35Ω ± 10% / phase (T=25°C)
Phase count	2
Step angle	• Zoom1, Zoom2, Focus: 18° / step • Iris: 0.6° / step
Operating temperature range	-30°C ~ +70°C

Position alignment sensor PI

Model number	• Zoom1, Zoom2, Focus: RPI-222 ROHM • Iris: GP1S196HCZ0F SHARP

Iris

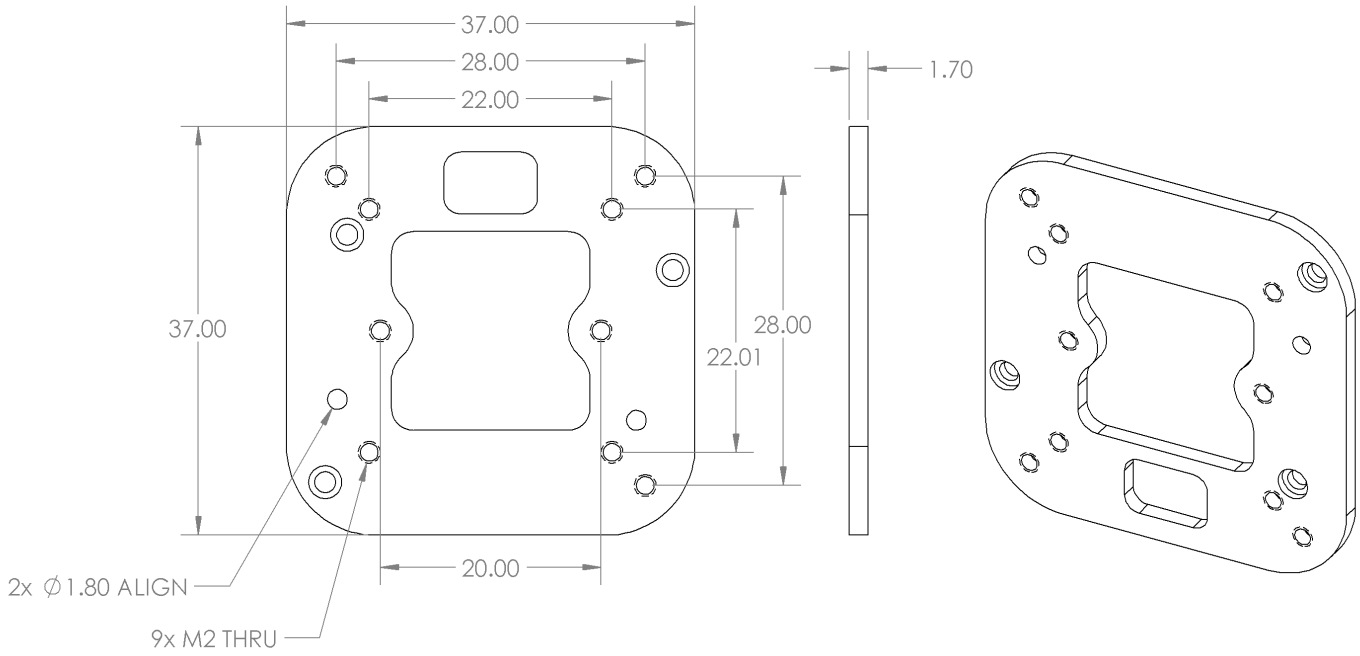
Blade count	10
Drive mode	Stepper motor

IR switch

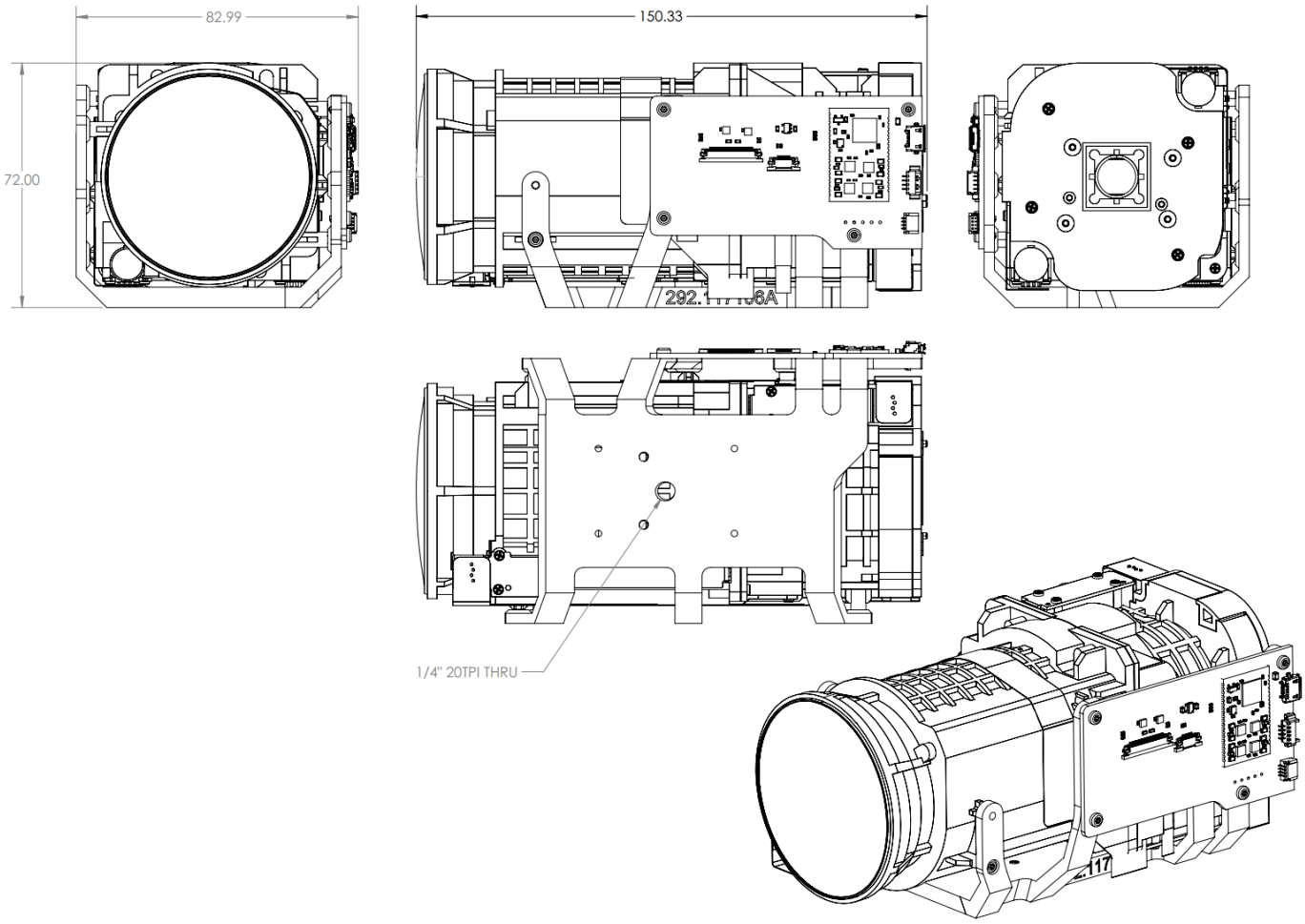
Coil resistance	22.5 ± 10% (T=20°C)
Operation voltage	4.5 ~ 5.0V
Current consumption	144 ~ 200mA
Filter thickness	0.3mm
Filter count	2
Switching time	200 ~ 500ms
Filters	• Open air • 380 ~ 650nm (T_{AVG} >90%) • BP780 (400~750nm T_{AVG} >1%, 780~1100nm T_{AVG} >90%)

Camera adapter plates

292.84104B adapter plate was designed for IMX290 and IMX477 based cameras. L084 and L117 lenses can be mated with board level C1_PRO, C2, and IMX477_LEGACY camera boards.



Dimensions



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