

D-Robotics

RDK Stereo Camera Module



V1.1

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D-ROBOTICS HOLDING LIMITED

D-Robotics RDK Stereo Camera Module



BRIEF

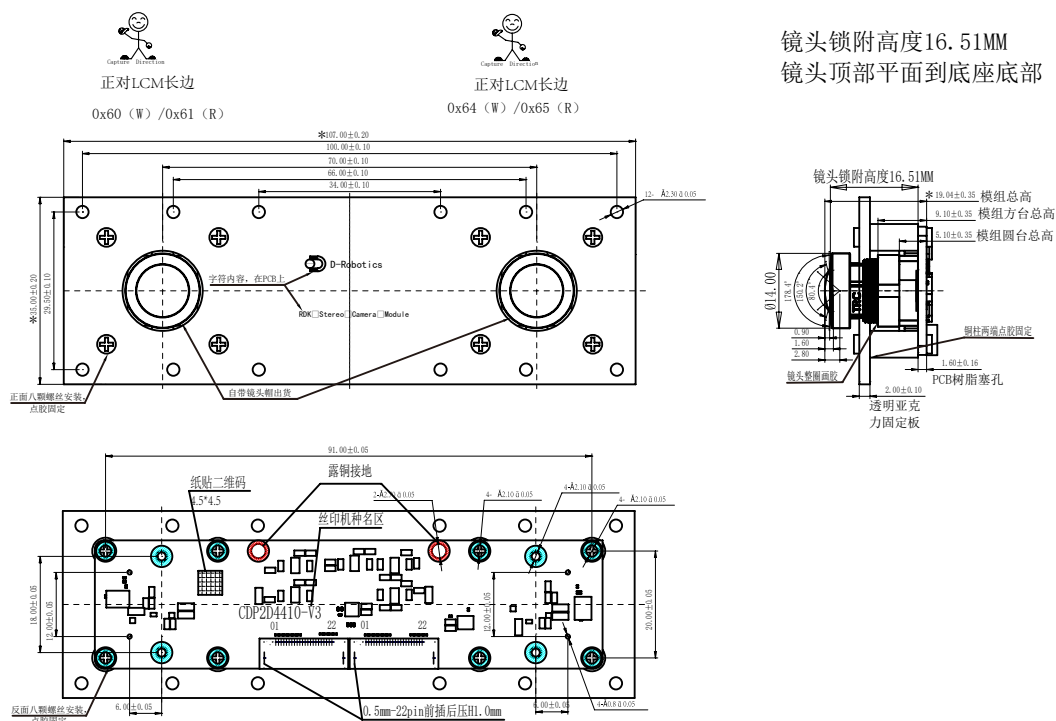
The RDK Stereo Camera is a stereo depth camera module custom-designed for the RDK X5 platform. It integrates two 2-megapixel color image sensors and delivers synchronized video output via dual 22-pin MIPI CSI interfaces. The module supports hardware-level stereo synchronization and offers ultra-wide field of view (up to 178° diagonal), making it ideal for robotic vision, obstacle avoidance, and 3D mapping applications. With the provided BPU-accelerated stereo depth algorithm, the system enables efficient edge-side inference, significantly reducing CPU load and enhancing overall system performance.

SPECIFICATIONS

Image Sensor	SmartSens SC230AI, 1/2.8" CMOS, Rolling Shutter
Resolution	2 Megapixels (1920 × 1080)
Lens Structure	2G + 4P + 1IR
Focal Length	2.28mm ±5%
Aperture	F2.2 ±5%
Field of View (FOV)	178° diagonal / 150° horizontal / 80° vertical
Distortion	< -30%
Chief Ray Angle (CRA)	13°
Interface	Dual 22-pin MIPI CSI
Communication Protocol	I ² C
Memory	Onboard EEPROM
Synchronization	Supports hardware-level stereo sync

SPECIFICATIONS

Dimension



For detailed specifications, please visit : <https://developer.d-robotics.cc/en>

SAFETY INSTRUCTIONS

To Avoid Malfunction Or Damage:

- This product is intended for use exclusively with the RDK X5.
- Do not expose the device to water or moisture during operation. Avoid placing it on conductive surfaces.
- Damage caused by connecting incompatible devices is not covered under warranty or support.



<https://developer.d-robotics.cc>