



# Qualcomm RB6 Robotics Development Kit User Guide

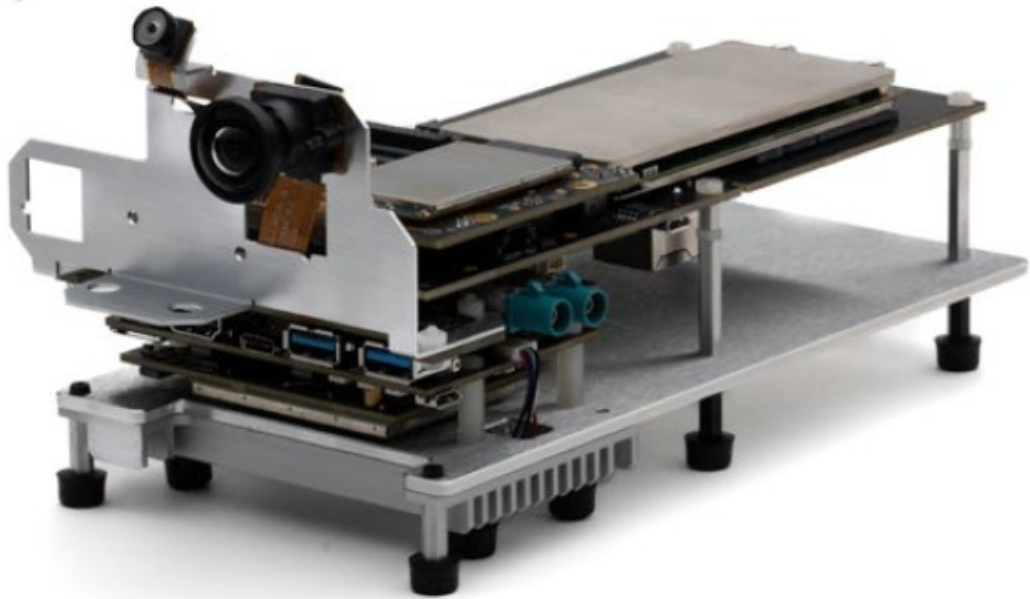
[Home](#) » [Qualcomm](#) » Qualcomm RB6 Robotics Development Kit User Guide

## Contents [ [hide](#) ]

- 1 [Qualcomm RB6 Robotics Development Kit](#)
- 2 [Component list](#)
- 3 [Qualcomm Robotics RB6 Mainboard](#)
- 4 [Vision Mezzanine board](#)
- 5 [Downloading and installing Qualcomm Robotics RB6 Development Kit Tools and Resources](#)
- 6 [Documents / Resources](#)
  - 6.1 [References](#)
- 7 [Related Posts](#)

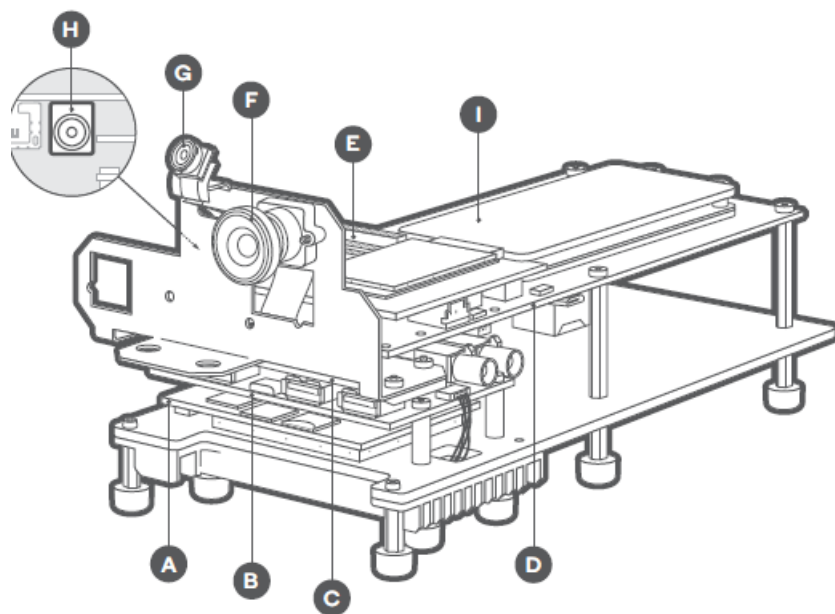


**Qualcomm RB6 Robotics Development Kit**



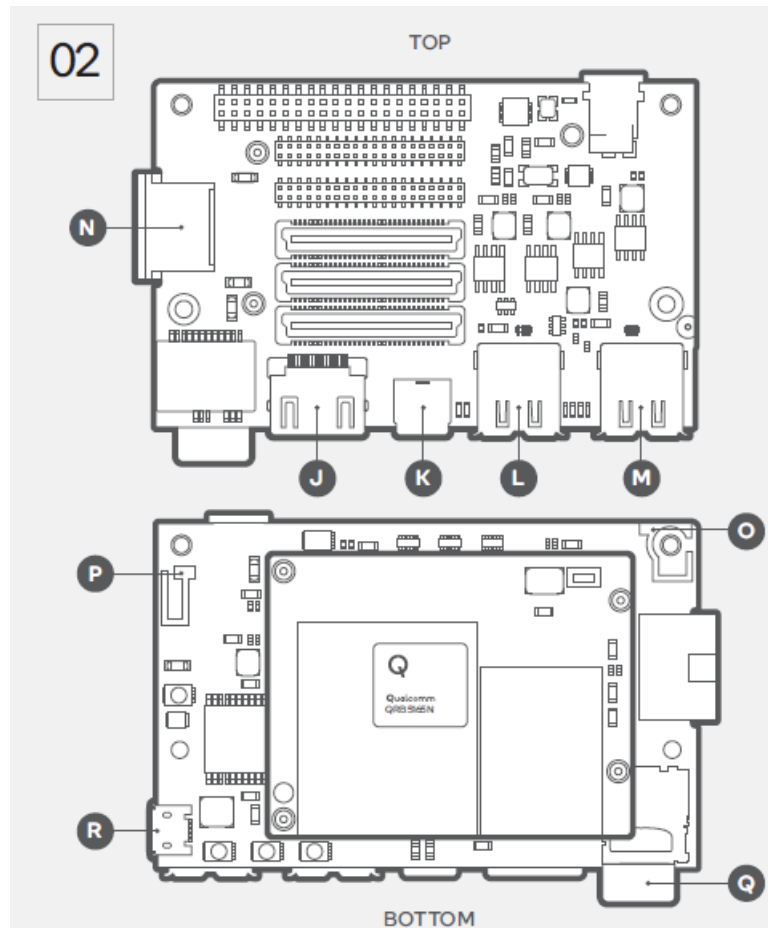
## Component list

- **Qualcomm Robotics RB6 Development Kit A:** QRB5165N SOM (system on module) board



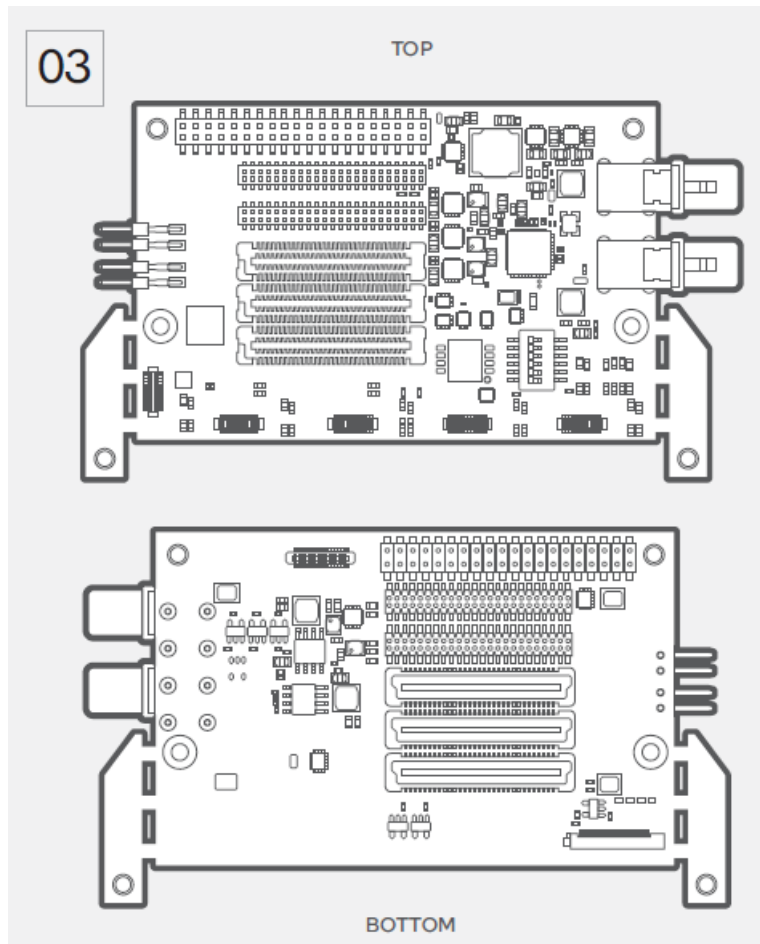
- **B:** Qualcomm Robotics RB6 mainboard
- **C:** Vision mezzanine board
- **D:** AI mezzanine board
- **E:** Mezzanine expansion connectors
- **F:** IMX577 main camera
- **G:** OV9282 tracking camera
- **H:** Power supply input (12V)
- **I:** AIC100 module

## Qualcomm Robotics RB6 Mainboard

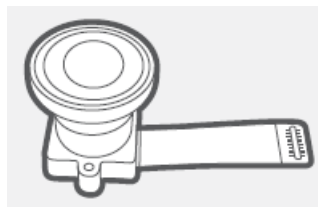


- J:** HDMI type A
- K:** USB type C
- L:** USB type A (host mode)
- M:** USB type A (host mode)
- N:** RJ45 Ethernet connector
- O:** 2.4/5GHz Wi-Fi/BT Antenna 0
- P:** 2.4/5GHz Wi-Fi/BT Antenna 1
- Q:** MicroSD card
- R:** Micro USB debug connector

## Vision Mezzanine board



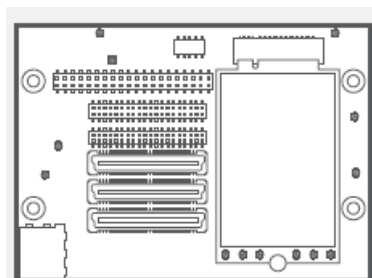
1. IMX577 main camera



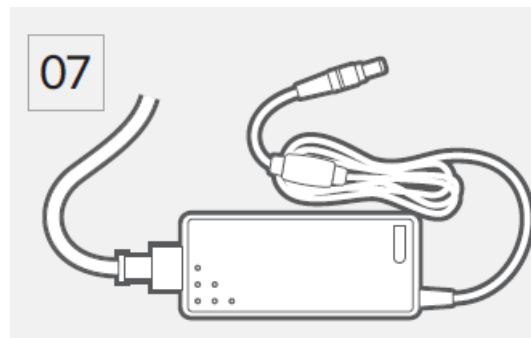
2. OV9282 tracking camera



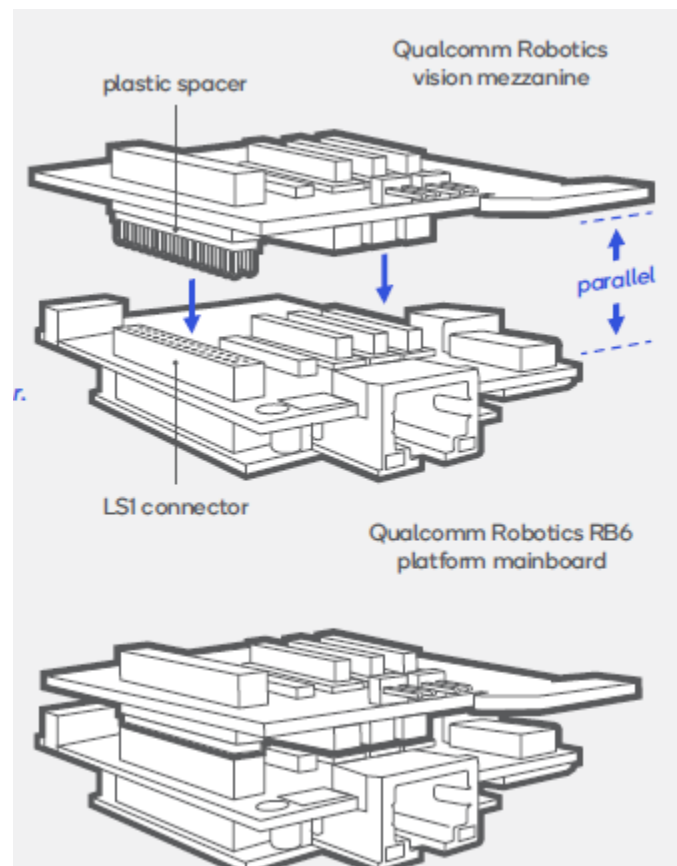
3. 5G mezzanine (optional accessory)



4. Power supply (12V)

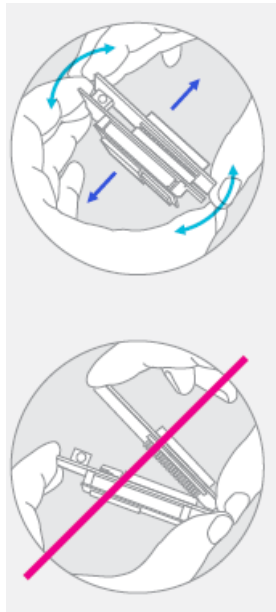


**Important! To CONNECT mezzanine board to Qualcomm Robotics RB6 carrier board:**



- Ensure the plastic spacer is present on the LS1 connector.
- Ensure all connectors are properly aligned and boards are parallel with each other Press down firmly to squeeze boards together (avoid pressing in the center of the SOM board).

**To REMOVE mezzanine board to Qualcomm Robotics RB6 carrier board:**



- Grasp both boards firmly and wiggle up and down to gradually loosen the connectors (note boards are very tight). Pull boards straight apart.
- Do not pry boards apart. This will result in damage to pins.

## Downloading and installing Qualcomm Robotics RB6 Development Kit Tools and Resources

### Product info

For resources to help you kickstart your robotics development, please visit:

<https://developer.qualcomm.com/qualcomm-robotics-rb6-kit>

### Community forums

<https://developer.qualcomm.com/forums/qdn-forums/hardware/robotics-rb6-dev-kit>

### Additional resources:

Robotics RB6 Development Kit Quick Start Guide Hardware Reference Guide Software Reference Manual  
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- [developer.qualcomm.com](https://developer.qualcomm.com)
- **Qualcomm Robotics RB6 Development Kit**
- **Advanced robotics platform featuring Qualcomm® QRB5165N processor with high-performance heterogeneous compute, artificial intelligence engine, computer vision, vault-like security, multimedia, and connectivity including Bluetooth®, Wi-Fi, and 4G/5G.**

## Documents / Resources



[Qualcomm RB6 Robotics Development Kit](#) [pdf] User Guide  
RB6 Robotics Development Kit, RB6, Robotics Development Kit, Development Kit

## References

- [🔗 Mobile Development - Qualcomm Developer Network](#)
- [🔗 Qualcomm Robotics RB6 Development Kit - Qualcomm Developer Network](#)
- [🔗 Qualcomm® Robotics RB6 Development Kit - Qualcomm Developer Network](#)