



# MAIXSENSE A010 DEVELOPMENT BOARD FOR PACKAGE DIMENSION CALCULATION AND AHAMOVE DRIVER APP INTEGRATION

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## OBJECTIVE

Build a small, low-cost tool that measures a parcel's length/width/height in seconds and instantly syncs it to the Ahamove Driver App—so drivers can pack smarter and finish routes faster.

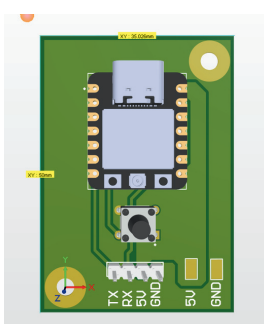
## BACKGROUND & MOTIVATION

Ever tried packing a suitcase without knowing how big your items are? That's how many delivery routes work today, drivers get the weight, but not the size. The result: empty gaps in vans, extra trips, and more time on the road. Our solution is a simple, portable device that measures a parcel's length, width, and height right at pickup.

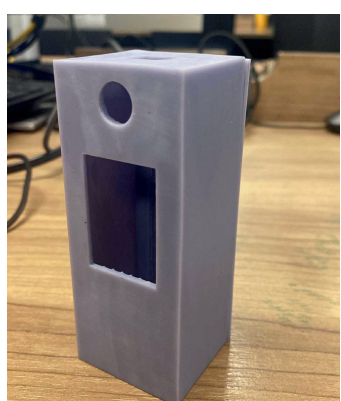


## METHODOLOGY

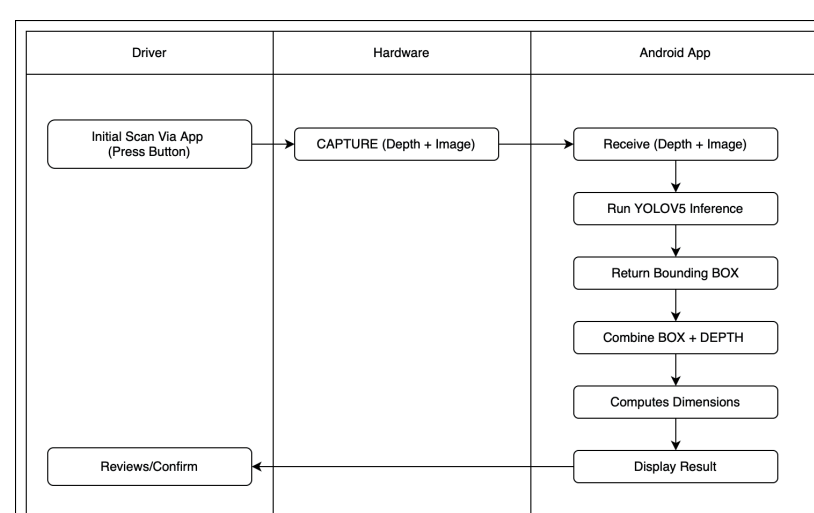
### PCB Design



### CAD Design

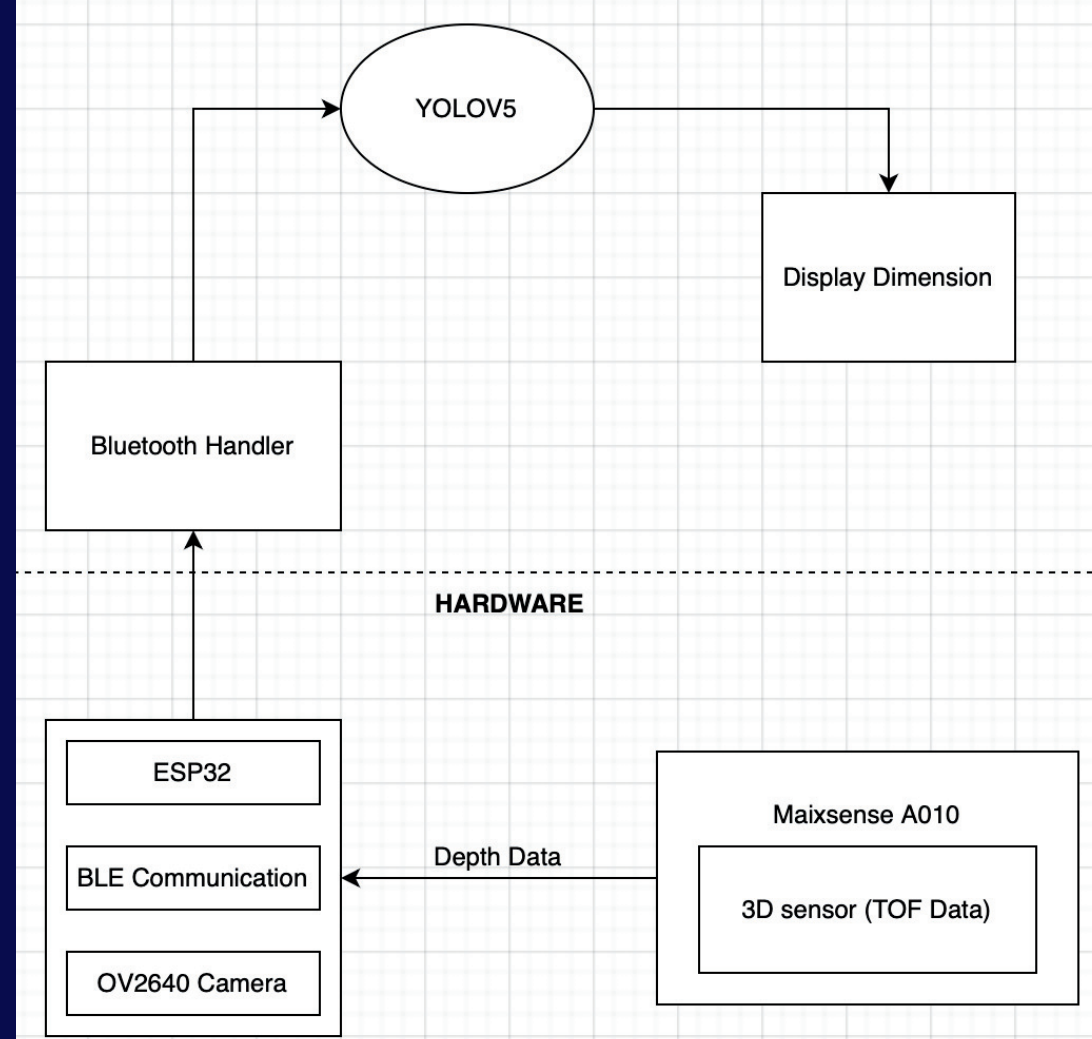


### User Interaction



### ANDROID APP

### System Architecture



## FINDING & CONCLUSION

- End-to-end flow works in real pick-ups (camera → BLE → on-device AI → overlay → order auto-fill).
- Results are consistent with manual checks on common parcels; Bluetooth stays stable with quick recovery.
- Drivers report faster handovers and fewer disputes.
- Portable, low-cost, app-integrated—ready for pilot rollout

## EXPERIMENTS & RESULT

**Experiment:** Prototype + app measured a box with camera+depth.

**Result:** Detected box, overlaid depth, showed size (~28×31×0.3 cm); end-to-end BLE pipeline works.

