ICPSprogress

Rev.A 2023/11/24

Kenji Kaneko

Main progress (2023/11/17-2023/11/24) and future plans

1. Mobile base (no manipulator)

1-1. Last reportedRevA04Continued development of

1-2.ZEDminiMobilization of [Robotis XH540-V150-RConsideration of a plan using

2. Future plans

2-1. Selecting a computer to be mounted on the mobile base (Rafa(currently inquiring)

ZEDminiComparison of mobilization (plan)

Kaneko plan

Sustainable RoboticsMade:SPU-01c

(https://www.sustainable-robotics.com/products_panunit.html (borrowed from)

・power supply:
DC 9〜30V or ACadapter
→ ExistingDC24VWith power supply

・PCCommunication with:RS232C
→ USB-Connect with serial conversion cable

* 1
・Moo Max load: Estimated210gx35mmis within the acceptable range
→ (60g+44g)x65mmis also acceptable

・design: integrated
→ Easy to design, neat finish

・remarks: With timing input function

Rafaproposal

SincecamMade60kg

(https://www.sincecam.com/products/sincecam-60kg-waterproof-high-speed-brushless-servos-hv-digital-high-torque-steering-servo-all-metal-oblique-gear-aluminum-case-suitable-1-8-1-10-rc-road-crawler180-black (borrowed from)

DC 6〜8.4V
→ newDCRequires power

Nothing
→ Separate controller required

not clear
→ If necessary, use both

Separate actuator/controller/power supply etc.
→ Increased design/maintenance burden

Waterproof function available

Kaneko's second plan

RobotisMadeXH540

([https://e-shop.robotis.co.jp /product.php?id=268](https://e-shop.robotis.co.jp/product.php?id=268) (borrowed from)

DC 24V
→ ExistingDC24VWith power supply ◯

RS485
→ USB-Serial conversion cable◯

not clear
→ If necessary, use both◯?

integrated
→ Easy to design and quick finish◯ Chestnut

66,440yen/unit + others

Z

comparison
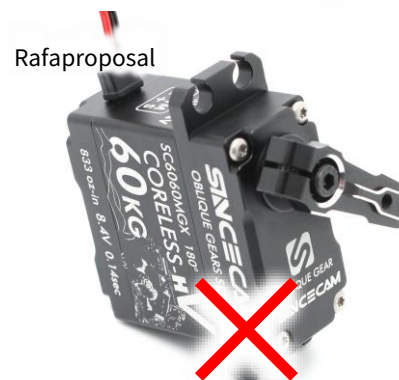
Kaneko's personal opinion (judgment)

Kaneko plan	Rafaproposal	Kaneko's second plan

Sustain   **SPU-01c**
(https://w — — — t.html(borrowed from)

· power supply:

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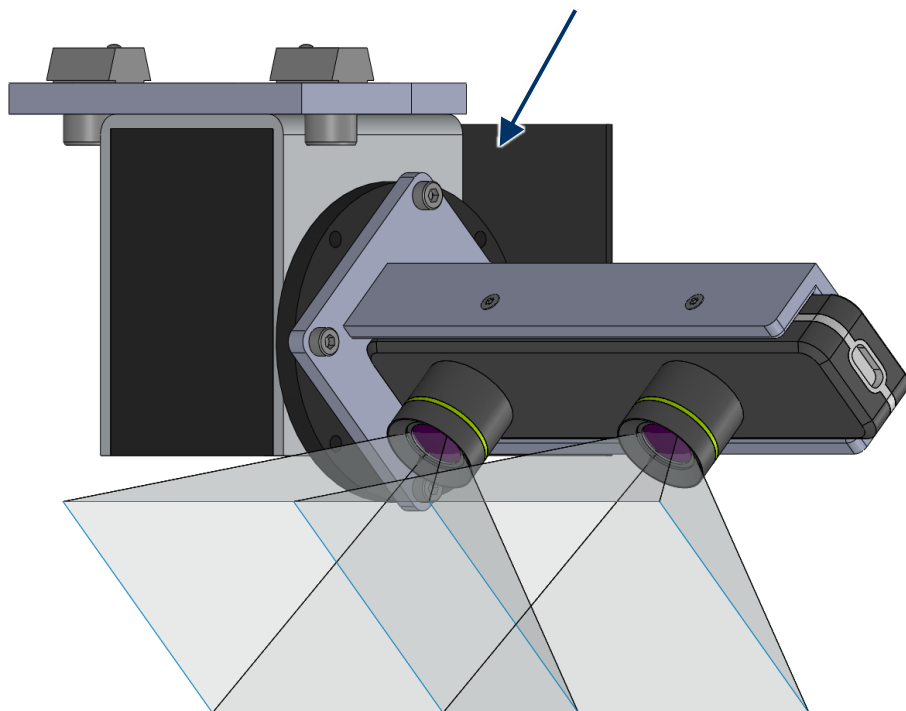→ If necessary, use both ◯?

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66,440yen/unit + others

ZEDminiMobilization (draft)   2 types of designs

Sustainable RoboticsMade:SPU-01c

RobotisMade:XH540-V150-R