| Team name: | Hyperion (Brisbane Boys' Co |
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| #  | Component                     | Part name  |  |
| 1  | Custom made Omni-wheels       | Wheel Frame (ABS print filament, 9.3 grams)        |  |
| 2  |                               | Silicone-coated steel rollers (custom made)        |  |
| 3  |                               | Aluminium-6061 plates (mid and base plates) (935g) |  |
| 4  | Robot Frame (custom made)     | 3D printed components (PLA+ print filament, 186g)  |  |
| 5  | Trobot Frame (custom made)    | Various fasteners (nuts, screws, etc.)             |  |
| 6  |                               | Various aluminium standoffs (M3, 10mm to 50mm)     |  |
| 7  | Mirror System (custom made)   | Reflective mirror foil                             |  |
| 8  | Will of Cyclem (Gastern made) | Acrylic tube (65mm length, Ø55)                    |  |
| 9  | Camera                        | Open MV Cam H7 Plus                                |  |
| 10 | Battery                       | Turnigy 11.1V 1300mAh 3S 45-90C Lipo Pack          |  |
| 11 | Drive Motors                  | DCX19 9V Maxon Motor (second hand)                 |  |
| 12 | Microcontroller               | Teensy 4.1   |  |
| 13 | Assorted Wires                | 22 AWG Wire, jumper wires, FFC                     |  |
| 14 | Switches                      | Rocker Switch                                      |  |
| 15 | Bluetooth Module              | Bluetooth Module (HC-05)                           |  |
| 16 | Compass                       | 9-DOF Absolute Orientation IMU BNO055 AHRS         |  |
| 17 | Custom made Main PCB with     | Main PCB board                                     |  |
| 18 | Electrical Components         | All Electrical Components for Main PCB             |  |
| 19 | Custom made Light Sensor PCB  | Light Sensor PCB Board                             |  |
| 20 | with Electrical Components    | All Electrical Components for Light Sensor PCB     |  |
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| Author                           | Source                  | Quantity |
|----------------------------------|-------------------------|----------|
| Team Hyperion (Luke)             | 3D-Printer              | 8        |
| Team Hyperion (Luke)             | Self Made               | 152      |
| Team Hyperion (Matthew)          | CNC                     | 2        |
| Team Hyperion (Luke)             | 3D-Printer              | 2 2      |
| -                                | aliexpress.com          | 2        |
| -                                | aliexpress.com          | 48       |
| Team Hyperion (Matthew)          | Self Made               | 2        |
| Team Hyperion (Luke)             | Self Made               | 2        |
| OpenMV                           | Openmv.io               | 2        |
| HobbyKing                        | HobbyKing.com           | 4        |
| Maxon Group                      | maxongroup.com          | 8        |
| Sparkfun Electronics             | core-electronics.com.au | 2        |
| -                                | aliexpress.com          | 2        |
| -                                | aliexpress.com          | 6        |
| DSD TECH                         | core-electronics.com.au | 2        |
| Bosch Sensortec                  | aliexpress.com          | 2        |
| Team Hyperion (Matthew) / Jlcpcb | jlcpcb.com              | 2        |
| -                                | digikey.com             | 2        |
| Team Hyperion (Matthew) / Jlcpcb | jlcpcb.com              | 2        |
| -                                | digikey.com             | 2        |
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| Name of the       | Total Cost     |  |
|-------------------|----------------|--|
| Local Currency    | Local Currency |  |
| Australian Dollar |                |  |
| AUD               | \$ 1,780.96    |  |

| Unit cost (Lo | cal Currency) | Unit cost (US Dollars) | Total Cost (Local Currency) |
|---------------|---------------|------------------------|-----------------------------|
| \$            | 0.23          | \$0.15                 | \$ 1.84                     |
| \$            | 0.01          | \$0.01                 | \$ 1.52                     |
| \$            | 4.65          | \$3.07                 | \$ 9.30                     |
| \$            | 0.93          | \$0.61                 | \$ 1.86                     |
| \$            | 3.48          | \$2.30                 | \$ 6.96                     |
| \$            | 0.80          | \$0.53                 | \$ 38.40                    |
| \$            | 0.05          | \$0.03                 | \$ 0.10                     |
| \$            | 4.00          | \$2.64                 | \$ 8.00                     |
| \$            | 130.00        | \$85.80                | \$ 260.00                   |
| \$            | 17.98         | \$11.87                | \$ 71.92                    |
| \$            | 141.04        | \$93.09                | \$ 1,128.32                 |
| \$            | 59.95         | \$39.57                | \$ 119.90                   |
| \$            | 5.00          | \$3.30                 | \$ 10.00                    |
| \$            | 1.41          | \$0.93                 | \$ 8.46                     |
| \$            | 14.40         | \$9.50                 | \$ 28.80                    |
| \$            | 12.99         | \$8.57                 | \$ 25.98                    |
| \$            | 1.90          | \$1.25                 |                             |
| \$            | 18.00         | \$11.88                | \$ 36.00                    |
| \$            | 3.90          | \$2.57                 | \$ 7.80                     |
| \$            | 6.00          | \$3.96                 | \$ 12.00                    |
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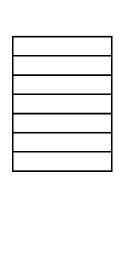
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| Team name: | Hyperion (Brisbane Boys' College) |
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|----|--------------------|-------------------------|--|
| #  | Name               | Software's Tool/Library |  |
|    | Visual Studio Code | Software Tool           | Used for developing the software on the ro |
|    | Platformio.io      | Software Tool           | Used as a compiler for the robot to upload |
|    | AdafruitBNO055     | Library                 | Used for reading the compass               |
|    | Adafruit Sensor    | Library                 | Used for reading the compass               |
|    | PID                | Library<br>             | Used for tuning movement and direction ba  |
|    | Timer              | Library                 | Used to create timer based on instances in |
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| Name of the       | Total Cost     | Total Cost (\$) |
|-------------------|----------------|-----------------|
| Local Currency    | Local Currency | U.S.A. Dollars  |
| Australian Dollar | \$0.00         | \$0.00          |

| Source                | Autor                          | Currency) | Dollars) |
|-----------------------|--------------------------------|-----------|----------|
| VSC Download          | Corporation                    |           | FREE     |
| Install Platformio    | Corporation<br>PlatformIO Labs | FREE      | FREE     |
| Team Polarity GitHub  | Adafruit                       | FREE      | FREE     |
| Team Polarity GitHub  | Adafruit                       |           | FREE     |
| Team Polarity GitHub  | Team Polarity BBC              | FREE      | FREE     |
| Team Alphatron GitHub | Junpeng Huang                  | FREE      | FREE     |
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