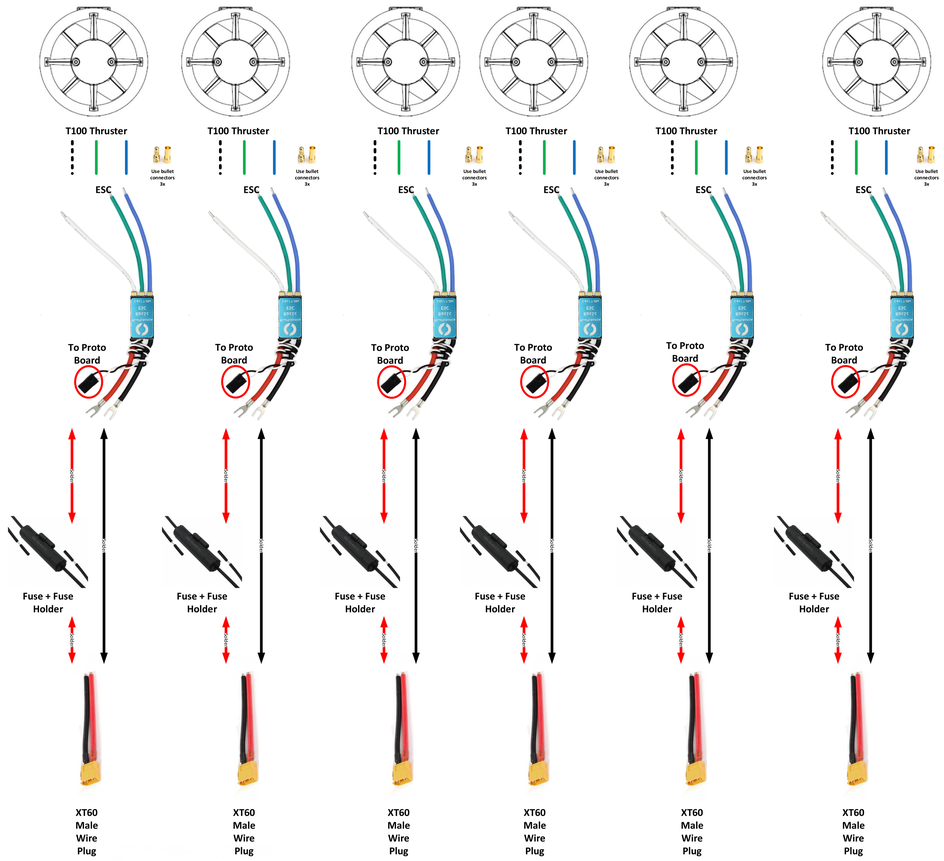
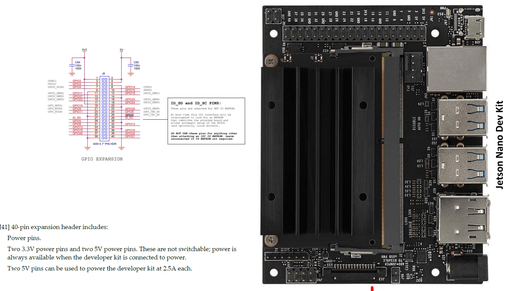
AquaDrone Electrical Block Diagram V2





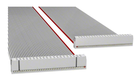
- [J41] 40-pin expansion header includes:
  - Power pins.
    Two 3.3V power pins and two 5V power pins. These are not switchable; power is always available when the developer kit is connected to power.
    Two 5V pins can be used to power the developer kit at 2.5A each.

ZED Mini 5V / 380mA

UGREEN USB External Stereo Sound Adapter 96 Khz

H2a Hydrophone 3.5mm TRS audio cable

Jetson Is powered by the 2 5V pins on the 40 Piin header (each can draw 2.5A)



H3AAH-4006G

Solenoid Valve DC 12V 4.5W, Normally Closed

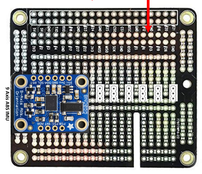
Solenoid Valve DC 12V 4.5W, Normally Closed

929836-02-20-RK

2x GPIO

Solenoid Valve Circuit

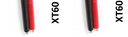
V7812-1000 DC DC (16-32V in -> 12V 1A Out)



FRONT

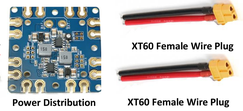
Depth Sensor 3.3V

High Torque Servo 20KG Full Metal Gear Waterproof Servo 5V



XT60 Female Wire Plug

XT60 Female Wire Plug



Power Distribution Board

XT60 Female Wire Plug

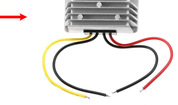
XT60 Female Wire Plug

XT60 Female Wire Plug

XT60 Female Wire Plug

XT60 Female Wire Plug

XT60 Male Wire Plug



DROK DC-DC Buck Converter 12V/ 24V to 5V 5A/25W

DC-DC 9-20V to 24V Step Up Power Supply (240W)

Solder to BAT+ and BAT- Thru Hole use 10AWG wires

12V 100A Heavy Duty Split Charge ON/OFF Relay

XT90 Parallel Adapter 2 male inputs 1 female output

XT90 Male Wire Plug

14.8V 8000mAh 4S1P 30C8000mAh 4S1P 30C

Digital Battery Capacity Checker

14.8V 8000mAh 4S1P 30C8000mAh 4S1P 30C

Digital Battery Capacity Checker

Estop Button use NC (dpst) contacts