BILL OF MATERIALS

Part No. Legend	
10-XXXX	Modules
20-XXXX	Acrylic
30-XXXX	Electronics
40-XXXX	3D Print
50-XXXX	Waterproofing
60-XXXX	Fasteners
70-XXXX	Others

Project Name:	Open-Source Underwater ROV
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Part No.	1	2	3	Component Name	Qty	Description
10-0001	•			Core Module	1	
20-0006		•		Core Tube	1	
30-0018		•		Electronics and Rack	1	
30-0022			•	Raspberry Pi 3 B+	1	
30-0023			•	Arduino UNO R3	1	
30-0024			•	Arduino 9-Axis Motion Shield	1	
40-0031			•	Electronics Rack	1	
50-0056		•		Core Endcap (Male)	2	
20-0008			•	Flange (3mm)	1	
20-0010			•	Acrylic Spacer (OD74 x 3mm)	1	
20-0011			•	Acrylic Spacer (OD74 x 3mm, w/ rack mounting holes)	1	
20-0013			•	Acrylic Spacer (OD66.4 x 3mm)	2	
20-0014			•	Acrylic Rod (OD8 x 15mm)	1	
50-0059			•	O-Ring (OD75 x 5mm)	1	
50-0060			•	O-Ring (OD68 x 3.1mm)	1	
50-0061			•	Waterproof Cable Connector (8-pin, male)	1	Cut short
50-0062		•		Waterproof Cable Connector (8-pin, female)	1	Cut short
10-0002	•			Motor Module	2	
20-0007		•		Motor Tube	1	
40-0032		•		Spur Gear (ID20)	1	
70-0075		•		Shaft (L78 mm)	1	
70-0076		•		Shaft (L64 mm)	1	
40-0033		•		Pulley	2	
30-0019		•		Servo and Housing	1	
30-0025			•	HS5646-WP Servo	1	
40-0034			•	Servo Housing Base	1	
40-0035			•	Shaft Hub Base	1	
40-0036			•	Shaft Hub	1	
40-0037			•	Spur Gear (ID6.2)	1	
60-0072			•	ISO 4762 M4 x 10	6	
60-0074			•	ISO 4032 M4	6	
50-0057		•		Motor Endcap (Female)	1	
20-0009			•	Flange (5mm)	1	
20-0010			•	Acrylic Spacer (OD74 x 3mm)	2	
20-0013			•	Acrylic Spacer (OD66.4 x 3mm)	2	
20-0015			•	Acrylic Rod (OD8 x 18mm)	1	
50-0059			•	O-Ring (OD75 x 5mm)	1	
50-0062			•	Waterproof Cable Connector (8-pin, female)	1	Cut short
50-0058		•		Motor Endcap (Male)	1	
20-0008			•	Flange (3mm)	1	
20-0010			•	Acrylic Spacer (OD74 x 3mm)	1	
20-0012			•	Acrylic Spacer (OD74 x 3mm, w/ servo mounting holes)	1	
20-0013			•	Acrylic Spacer (OD66.4 x 3mm)	2	
20-0014			•	Acrylic Rod (OD8 x 15mm)	1	
50-0059			•	O-Ring (OD75 x 5mm)	1	
40-0038		•		U-Joint Cross	2	
40-0039		•		Female Cable Connector Housing	2	
50-0063		•		Waterproof Cable Connector (3-pin, female)	2	
30-0020		•		Motor Arm	2	
30-0026			•	A2212-1000KV Brushless DC Motor	1	
30-0027			•	XRotor Micro 30A ESC	1	
70-0077			•	Propeller	1	
40-0040			•	Motor Arm Housing (Top)	1	
40-0041			•	Motor Arm Housing (Bottom)	1	
40-0042			•	Motor Arm Lock	2	
50-0064			•	Waterproof Cable Connector (3-pin, male)	1	
60-0066			•	ISO 4762 M3 x 8	4	Self-Tapping; substitutable with normal thread
60-0068			•	ISO 4762 M3 x 18	4	Self-Tapping; substitutable with normal thread
40-0043		•		U-Joint Housing Top	1	
40-0044		•		U-Joint Housing Bottom	1	
40-0045		•		U-Joint Housing Lock	2	
60-0065		•		ISO 4762 M3 x 6	16	Self-Tapping; substitutable with normal thread
60-0066		•		ISO 4762 M3 x 8	6	Self-Tapping; substitutable with normal thread
60-0067		•		ISO 4762 M3 x 16	8	Self-Tapping; substitutable with normal thread
60-0071		•		ISO 4762 M3 x 30 - 10N	8	Self-Tapping; substitutable with normal thread
10-0003	•			Timing Belt Module	2	
40-0046		•		Timing Belt Cover A	2	
40-0047		•		Timing Belt Cover B	2	
70-0078		•		Timing Belt GT2, 6mm x 550mm	1	
40-0048		•		Timing Belt Clamp (Female)	1	
40-0049		•		Timing Belt Clamp (Male)	1	
60-0065		•		ISO 4762 M3 x 6	14	Self-Tapping; substitutable with normal thread
60-0066		•		ISO 4762 M3 x 8	4	Self-Tapping; substitutable with normal thread
60-0070		•		ISO 4762 M3 x 30	1	
60-0073		•		ISO 4032 M3	1	
10-0004	•			Peripheral Module	2	
30-0021		•		Waterproofed Camera	1	
30-0028			•	Sony IMX322 CMOS USB Camera	1	
40-0050			•	Camera Housing	1	
20-0016			•	Camera Acrylic Cover	1	
40-0051		•		Peripheral Module Housing	1	
20-0017		•		Acrylic Spacer for Peripheral Module	7	
60-0069		•		ISO 4762 M3 x 20	4	
10-0005	•			Remote Control	1	

30-0029		•		Push Button	2
30-0030		•		Joystick	1
30-0023		•		Arduino UNO R3	1
30-0024		•		Arduino 9-Axis Motion Shield	1
40-0052		•		Handle (Left)	1
40-0053		•		Handle (Right)	1
40-0054		•		Base	1
40-0055		•		Bottom Lid	1