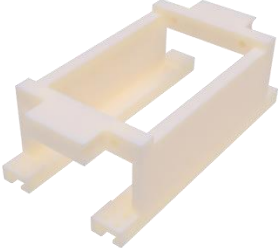
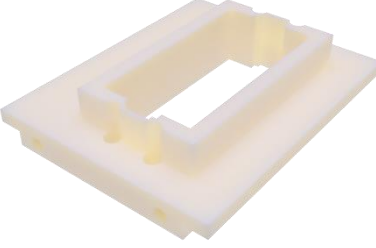
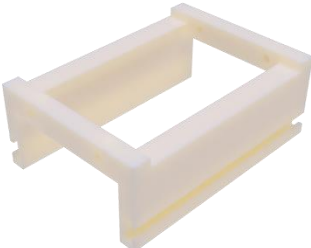
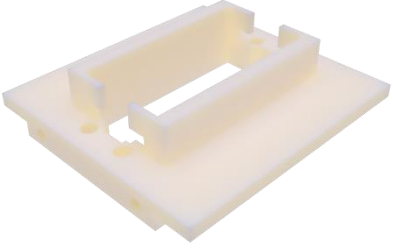
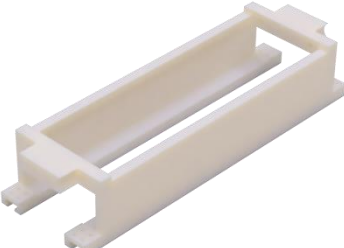
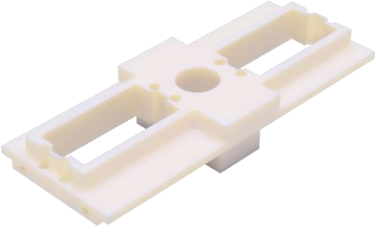
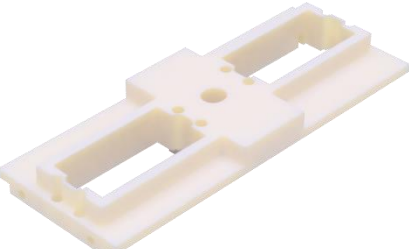























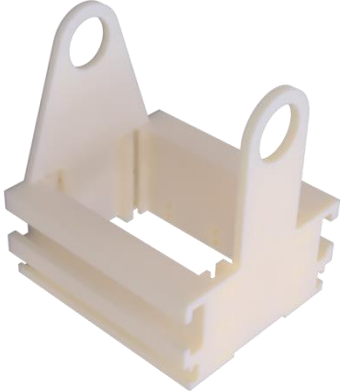
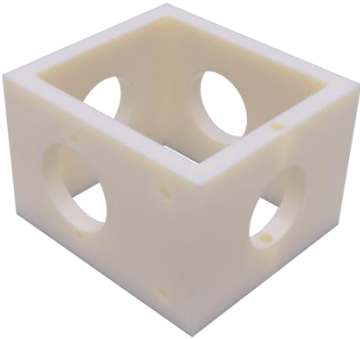







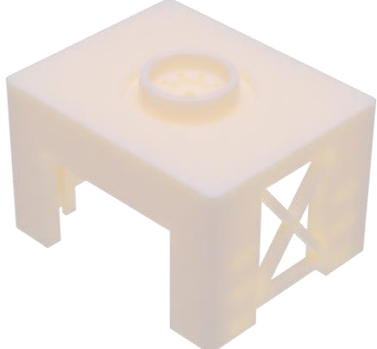




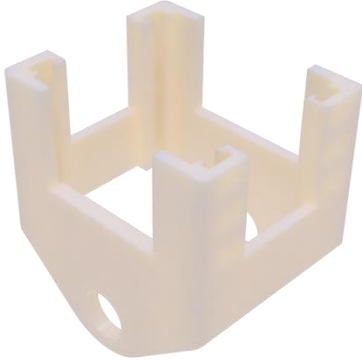
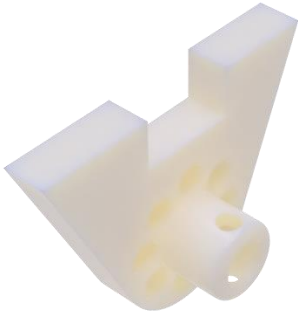





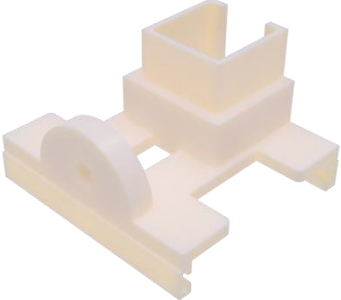
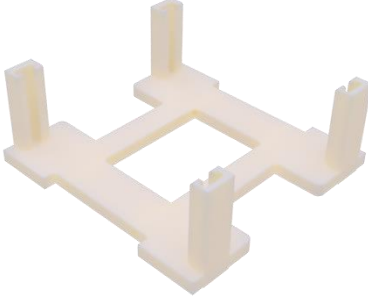



Bill of materials


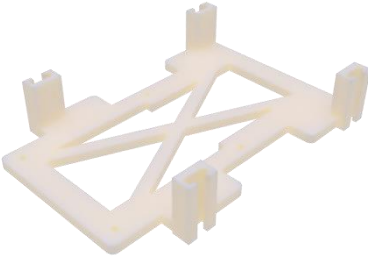
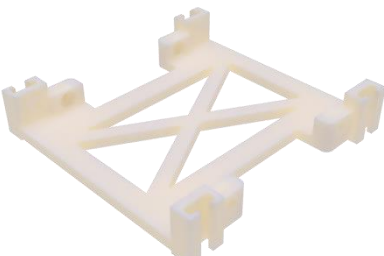
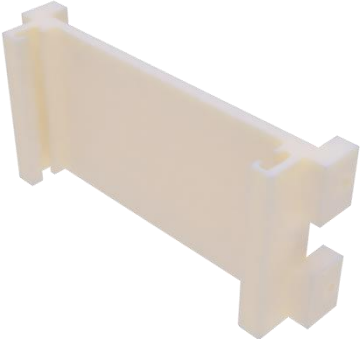



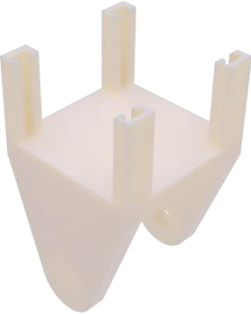
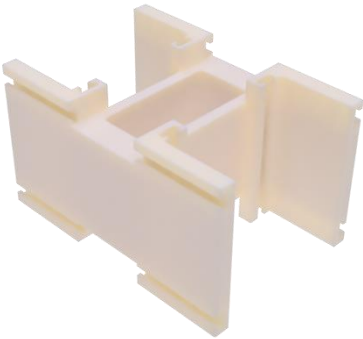

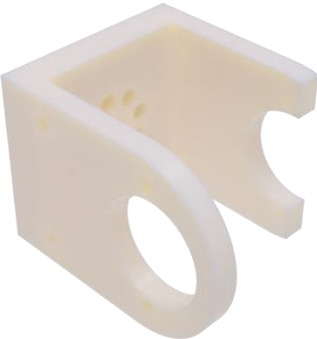
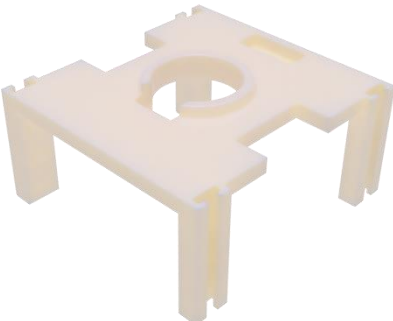
		
4x Single servo module part 1	4x Single servo module part 2	2x Single servo module type 2 part 1
		
2x Single servo module type 2 part 2	2x Dual servo module part 1	2x Left dual servo module part 2
		
2x Right dual servo module part 2	8x Servo gear type 2	2x Servo gear type 1
		
2x Servo module transmission gear	2x Transmission gear holder	2x Joint gear type 2










		
2x Joint gear type 2	4x Joint pin	4x Joint spacer
		
4x Joint holder	4x Narrow Joint bracket	4x Wide Joint bracket
		
8x 140mm rail	8x 160mm rail	2x 250mm rail

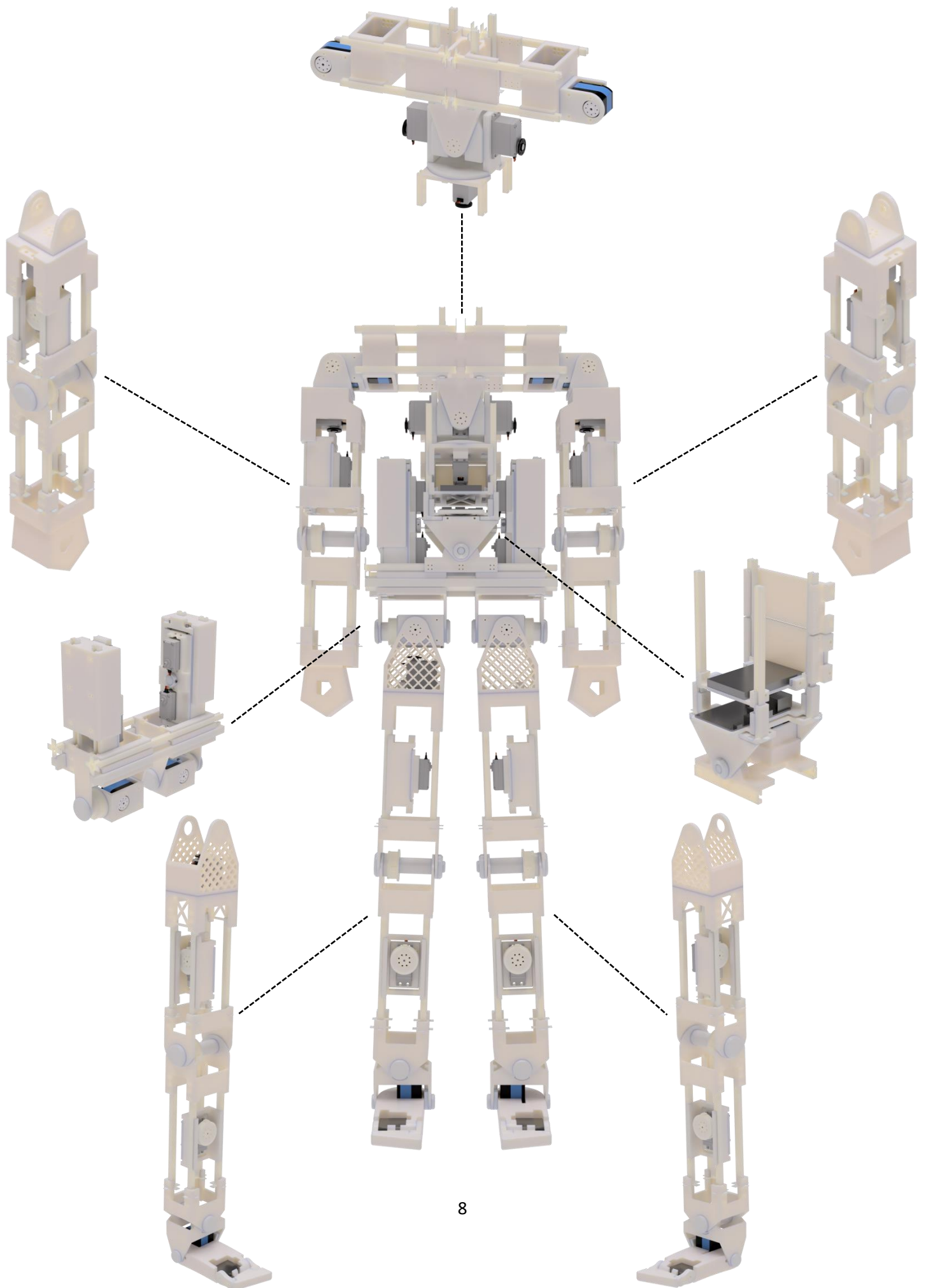
		
4x 182.5mm rail	4x 150mm rail	4x 145mm rail
		
8x 132.5mm rail	8x 112.5mm rail	8x 115mm rail
		
2x pelvis rail	1x Left pelvis gear	1x Right pelvis gear

		
2x Pelvis bracket part 1	2x Pelvis bracket part 2	2x Outer pelvis pin
		
2x Outer pin holder	2x Middle pelvis pin	2x Rear pelvis pin
		
2x Rear pin holder	1x Left pelvis attachment point	1x Right pelvis attachment point
		
2x Rotation component	1x Left ankle bracket part 1	1x Right ankle bracket part 1

		
2x Ankle bracket part 2	2x Left ankle bracket part 3	2x Left ankle bracket part 4
		
2x Ankle gear	2x Ankle pin holder	2x Ankle pin
		
2x Ankle spacer	1x Abdominal base	1x Waist part 1
		
1x Waist part 2	1x Waist part 3	1x Waist pin

		
1x Waist holder	1x Raspberry Pi mount	Horizontal mount
		
Vertical mount	Vertical mount	2x Arm attachment point
		
2x Arm rotation component	1x Chest base	1x Chest piece
		
2x Shoulder part 1	2x Shoulder part 2	1x Upper body base

		
1x Left vertical rotation component	1x Right vertical rotation component	1x Horizontal rotation plate part 1
		
2x Horizontal rotation plate part 2	18x Turnigy S901D	9x Robostar SRS-3216HTG
	No specific image	
1x Raspberry Pi 3 Model B+	2x 8.4V LiPo battery	1x 400-point breadboard
No specific image		
1x Powerbank	Male-Male, Female-Male jumper wires	



Bill of materials by component

Upper torso

- 1x Upper body base
- 1x Horizontal rotation plate part 1
- 2x Horizontal rotation plate part 2
- 1x Left vertical rotation component
- 1x Right vertical rotation component
- 1x Chest base
- 1x Chest piece
- 4x 145mm rail
- 8x 132.5mm rail
- 2x Shoulder part 1
- 2x Shoulder part 2

Right arm

- 4x 112.5mm rail
- 4x 115mm rail
- 1x Arm attachment point
- 1x Arm rotation component
- 1x Hand
- 1x Joint gear type 2
- 1x Joint pin holder
- 1x Joint pin
- 1x Joint spacer
- 1x Narrow joint bracket
- 1x Wide joint bracket
- 1x Single servo module part 1
- 1x Single servo module part 2
- 1x Servo gear type 2

Left arm

- 4x 112.5mm rail
- 4x 115mm rail
- 1x Arm attachment point
- 1x Arm rotation component
- 1x Hand
- 1x Joint gear type 1
- 1x Joint pin holder
- 1x Joint pin
- 1x Joint spacer
- 1x Narrow joint bracket
- 1x Wide joint bracket
- 1x Single servo module part 1

- 1x Single servo module part 2
- 1x Servo gear type 2

Pelvis

- 2x Dual servo module part 1
- 1x Left dual servo module part 2
- 1x Right dual servo module part 2
- 2x Servo gear type 2
- 2x Servo gear type 1
- 2x Servo module transmission gear
- 2x Transmission gear holder
- 2x Servo module stiffener
- 4x 182.5mm rail
- 2x 250mm rail
- 2x pelvis rail
- 2x Pelvis bracket part 1
- 2x Pelvis bracket part 2
- 2x Rear pelvis pin
- 2x Rear pin holder
- 2x Middle pelvis pin
- 2x Middle pin holder
- 2x Outer pelvis pin
- 2x Outer pin holder
- Left pelvis gear
- Right pelvis gear

Abdomen

- 1x Abdominal base
- 4x 150mm rail
- 1x Waist part 1
- 1x Waist part 2
- 1x Waist part 3
- 1x Waist pin holder
- 1x Waist pin
- 1x Raspberry Pi mount
- 3x combination of Vertical and Horizontal mounts
- Vertical mount part 2 (quantity as required)

Right leg

- 1x Right pelvis attachment bracket
- 1x Rotation component
- 4x 160mm rail
- 4x 140mm rail
- 1x Single servo module part 1

- 1x Single servo module part 2
- 1x Single servo module type 2 part 1
- 1x Single servo module type 2 part 2
- 1x Single servo module type 2 part 1
- 1x Single servo module type 2 part 2
- 2x Servo gear type 2
- 1x Wide joint bracket
- 1x Narrow joint bracket
- 1x Joint gear type 2
- 1x Joint pin
- 1x Joint spacer
- 1x Joint pin holder
- 1x Right ankle bracket part 1
- 1x Ankle bracket part 2
- 1x Ankle bracket part 3
- 1x Ankle bracket part 4
- 1x Ankle gear
- 1x Ankle pin
- 1x Ankle pin holder
- 1x Ankle spacer

Right Foot

- 1x Right foot part 1
- 1x Right foot part 2
- 1x Right foot part 3
- 1x Right foot part 4
- 1x Foot pin

Left leg

- 1x Left pelvis attachment bracket
- 1x Rotation component
- 4x 160mm rail
- 4x 140mm rail
- 1x Single servo module part 1
- 1x Single servo module part 2
- 1x Single servo module type 2 part 1
- 1x Single servo module type 2 part 2
- 1x Single servo module type 2 part 1
- 1x Single servo module type 2 part 2
- 2x Servo gear type 2
- 1x Wide joint bracket
- 1x Narrow joint bracket
- 1x Joint gear type 1
- 1x Joint pin

- 1x Joint spacer
- 1x Joint pin holder
- 1x Left ankle bracket part 1
- 1x Ankle bracket part 2
- 1x Ankle bracket part 3
- 1x Ankle bracket part 4
- 1x Ankle gear
- 1x Ankle pin
- 1x Ankle pin holder
- 1x Ankle spacer

Left Foot

- 1x Left foot part 1
- 1x Left foot part 2
- 1x Left foot part 3
- 1x Left foot part 4
- 1x Foot pin

Electronics

- 18x Turnigy S901D
- 9x Robostar SRS-3216HTG
- 2x Corona DS-239HV
- 1x Raspberry Pi 3 Model B+
- 2x 8.4V LiPo battery
- 1x 400-point breadboard
- 1x Powerbank
- Male-Male, Female-Male jumper wires

Image sources

RoboStar SRS-3216HTG: <https://cdn-global-hk.hobbyking.com/media/catalog/product/cache/1/image/660x415/17f82f742ffe127f42dca9de82fb58b1/legacy/catalog/64644.jpg>

Raspberry Pi 3 Model B+: <https://www.raspberrypi.org/app/uploads/2018/03/770A5842-462x322.jpg>

400-point breadboard:

https://www.robotshop.com/media/catalog/product/cache/image/900x900/9df78eab33525d08d6e5fb8d27136e95/4/0/400-tie-point-solderless-interlocking-breadboard_2.jpg

Jumper wires: <https://www.digibay.in/image/cache/data/se/274-a-solderless-breadboard-prototyping-jumper-wires-male-to-male-600x600.jpg>