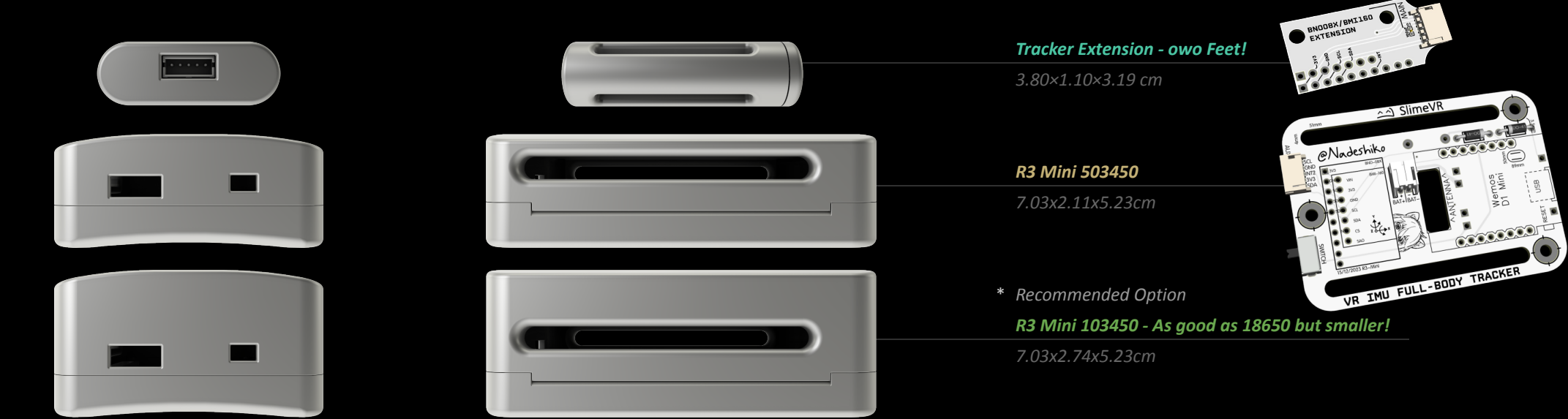


@Nadeshiko SlimeVR's with BNO085 IMU (10+2) - Make a copy of this sheet if you would like to adjust quantity to your needs.							
ID	Name	Footprint	Qty	£ x1	Shipping	Total	Link
1	Breakout PCB 10pcs + Tracker Extension PCB 5pcs	JLPCB fab quote	1	5.50	2.57	8.07	jlcpcb.com
2	WeMos D1 Mini	WEMOS D1 MINI (Mini Micro)	10	1.45		14.50	aliexpress.com
3	SlimeVR BNO085 IMU	BNO085-IMUMODULE-R22	12	9.00	4.00	112.00	shop.slimevr.dev
4	TP4056 USB charging board 10PCS	10Pcs TP4056-18650-TYPE-C	1	1.44		1.44	aliexpress.com
5	SK12D07VG4/5/6mm Slide Switch	20Pcs - SK12D07VG in 4/5/6mm	1	0.88		0.88	aliexpress.com
6	1N5817 diodes	100Pcs - 1N5817	1	1.36		1.36	aliexpress.com
7	180K ohm resistors	100pcs - 180K	1	0.72		0.72	aliexpress.com
8	Case 3D Printed - 8111X Resin, Global Standard Shipping	JLPCB 3D fab - R3 103450 Models	10	2.67		26.70	jlc3dp.com
9	Extension Case 3D Printed - 8111X Resin, Global Standard Ship	JLPCB 3D fab - Tracker Extension	2	0.80		1.60	jlc3dp.com
10	Straps - 2x Ankle 30cm, 2x Thigh 60cm, 2x Waist/Chest 120cm	5 meters of 50mm Elastic Non-Slip	1	7.86		7.86	aliexpress.com
11	50mm Plastic Buckle	10Pcs 50mm Plastic Buckles	1	2.19		2.19	aliexpress.com
12	51mm Tri Loops for Buckle Locking	20Pcs 51mm Tri Glide Adjust Buckle	2	1.37		2.74	aliexpress.com
13	Straps - Feet 25mm Hook Loop	25mm Hook Loop + Buckles	1	1.20		1.20	aliexpress.com
14	103450 LiPo 3.7V with 2-Pin PH 2mm	10Pcs	1	24.60		24.60	aliexpress.com
15	ZH 1.5mm 1 x 5pin Connector & Cable Kit	5Pcs - ZH1.5mm 5 Pin - 15cm or 20cm	1	1.13		1.13	aliexpress.com
16	JST PH 2mm 2-Pin Connector Plug	20Pcs	1	1.55		1.55	aliexpress.com
17	Polyimide Tape for battery Insulation (Optional)	15mm x 30m	1	1.29		1.29	aliexpress.com
18	100nf Capacitor for Extension Tracker PCB	0.1uf/100nf 0602	1	0.77		0.77	aliexpress.com
19	Pin Headers for IMU Module (Optional/Use D1 Mini's Extras)	2.54mm Pin Header Breakable	1	0.40		0.40	aliexpress.com
20	Ali Express Combined Shipping + Discounts (12/2023)	Shipping	1	-9.67	1.99	-7.68	
				~	£/GBP	8.56	203.32
				~	£/GBP	8.56	175.02
				3DCased BNO085s			
				Caseless BNO085s			

@Nadeshiko SlimeVR's with BMI-160 IMU (10+2) - Make a copy of this sheet if you would like to adjust quantity to your needs.							
ID	Name	Footprint	Qty	£ x1	Shipping	Total	Link
1	Breakout PCB 10Pcs + Tracker Extension PCB 5pcs	Elecrow fab quote	1	1.57	6.27	7.84	elecrow.com
2	WeMos D1 Mini	WEMOS D1 MINI (Mini Micro)	12	1.45		17.40	aliexpress.com
3	BMI-160 IMU	GY-BMI160 Module	12	1.01		12.12	aliexpress.com
4	TP4056 USB charging board 10PCS	10x TP4056-18650-TYPE-C	1	1.44		1.44	aliexpress.com
5	SK12D07VG4/5/6mm Slide Switch	20Pcs - SK12D07VG in 4/5/6mm	1	0.88		0.88	aliexpress.com
6	1N5817 diodes	100Pcs - 1N5817	1	1.36		1.36	aliexpress.com
7	180K ohm resistors	100pcs - 180K	1	0.72		0.72	aliexpress.com
8	Case 3D Printed - 8111X Resin, Global Standard Shipping	JLPCB 3D fab - R3 503450 Models	10	2.43		24.30	jlc3dp.com
9	Extension Case 3D Printed - 8111X Resin, Global Standard Ship	JLPCB 3D fab - Tracker Extension	2	0.80		1.60	jlc3dp.com
10	Straps - 2x Ankle 30cm, 2x Thigh 60cm, 2x Waist/Chest 120cm	5 meters of 50mm Elastic Non-Slip	1	7.86		7.86	aliexpress.com
11	50mm Plastic Buckle	10Pcs 50mm Plastic Buckles	1	2.19		2.19	aliexpress.com
12	51mm Tri Loops for Buckle Locking	20Pcs 51mm Tri Glide Adjust Buckle	2	1.37		2.74	aliexpress.com
13	Straps - Feet 25mm Hook Loop	25mm Hook Loop + Buckles	1	1.20		1.20	aliexpress.com
14	503450 LiPo 3.7V with 2-Pin PH 2mm	10Pcs	1	15.52		15.52	aliexpress.com
15	JST PH 2mm 2-Pin Connector Plug	20Pcs	1	1.55		1.55	aliexpress.com
16	ZH 1.5mm 1 x 5pin Connector & Cable Kit	5Pcs - ZH1.5mm 5 Pin - 15cm or 20cm	1	1.13		1.13	aliexpress.com
17	SlimeVR BNO085 IMU OPTIONAL for better Chest/Hip/Waist	BNO085-IMUMODULE-R22	0	9.00	0.00		shop.slimevr.dev
18	Polyimide Tape for battery Insulation (Optional)	15mm x 30m	1	1.29		1.29	aliexpress.com
19	100nf Capacitor for Extension Tracker PCB	0.1uf/100nf 0602	1	0.77		0.77	aliexpress.com
20	Ali Express Combined Shipping + Discounts (12/2023)	Shipping	1	-9.67	1.99	-7.68	
				~	£/GBP	8.26	94.23
						-53.65%	- 109.09
				~	£/GBP	8.26	68.33
						-66.39%	- 134.99
				vs BNO 3DCased			

3D Print Cost (8111X - JLPCB)	Top	Base	Total	Total Estimate	/Each
Tracker Extension 25mm (Pair)	0.41	0.24	0.65	1.60	0.80
R3 Mini 103450	1.09	0.81	1.90	26.70	2.67
R3 Mini 503450	0.87	0.81	1.69	24.30	2.43

503450 = 5 x 34 x 50mm Battery & 103450 = 10 x 34 x 50mm Battery size



VRChat supports a maximum of eight additional (virtual) trackers in addition to the headset and controllers

- Feet
- Knees
- Hip
- Chest
- Elbows + Shoulders (one tracker will be mapped for elbows and shoulders simultaneously. Which must be worn above the elbow)

Slimes end up with multiple physical = fewer virtual trackers in VRChat, so most of these above can benefit from additional IMU's for improved tracking such as the feet and and hand/wrist.

SlimeVR Tracker Placement Options

- 1 tracker: waist
- 2 trackers: waist, chest
- 3 trackers: waist, upper legs
- 5 trackers: chest/waist, upper legs and lower legs.
- 6 trackers: chest, hip/waist, upper legs and lower legs.
- 7 trackers: chest, waist, hip, upper legs and lower legs.*
- 8 trackers: chest, hip, upper legs, lower legs and feet.
- 9 trackers: chest, waist, hip, upper legs, lower legs and feet. **
- 10 trackers: chest, hip, upper legs, lower legs, feet and upper arms.
- 11 trackers: chest, waist, hip, upper legs, lower legs, feet and upper arms.
- 12 trackers: upper chest, chest, waist, hip, upper legs, lower legs, feet and upper arms.
- 14 trackers: upper chest, chest, waist, hip, upper legs, lower legs, feet, upper arms and shoulders OR lower arms.

SlimeVR Mounting Points Options

- Head: for vtubing/mocap, in place of a VR/HMD as tracker.
- Neck: works best behind neck, not in front - **WARNING:** Neck tracker can be deadly if strap cuts off circulation to the head!
- Upper Chest: facing forward, above the breasts.
- Chest: facing forward, on the middle or lower part of the chest.
- Waist: facing foward or to the side on your waist (above you hip, around the level of your belly button).
- Hip: facing forward or back on your hip (where you put your belt).
- Upper leg: just above the knee or higher up the thigh.
- Lower leg: on the ankle facing any direction you like, but best facing outwards.
- Foot: on top of the foot. Trackers 'up' facing toward the ankle, and 'front' facing the ceiling.
- Upper arm: on upper arm, above elbow and on the side or back (forward being your bicep).
- Shoulder: on top of the shoulder.
- Lower arm: on lower arm, below elbow, inwards and close to the elbow.

Recommended Tracker Placement

- Chest
- Waist
- Hip
- Upper Legs
- Lower Legs
- Feet
- Lower Arms (instead of upper arm to have good controller rotation and no chicken arms)

