



Project Valkyrie - Stage-I

NB! WORK IN PROGRESS - STAGE I Release Candidate

Development Team Members

Mark Bridgewater - NZ

Chris Lombardi - US

Roy Berntsen - NO

Valkyrie	3d Printer - Budget	Price exl VAT								\$	1,695		
Valkyrie	3d Printer - Premium	Price exl VAT								\$	1,953		
Category	Part Type	Description	Cut Length mm	Total mm	BOM Quantity	Pack Price \$	Pack Order Quantity	Line Price \$				Order Parts Link	Option
Hardware	T-Slot 2020	Z 2020 Rear Center	359	359	1	\$ 7.26	1	\$ 8.00					Color: 359 mm
Hardware	T-Slot 2020	X 2020 Rear Top	420	420	1	\$ 9.50	1	\$ 9.50					Color: 420 mm
Hardware	T-Slot 2040	X 2040	420	1680	4	\$ 10.54	4	\$ 42.16					Color: 420 mm
Hardware	T-Slot 2040	Y 2040	480	1920	4	\$ 11.12	4	\$ 44.48					Color: 480 mm
Hardware	T-Slot 2040	Z 2040	750	3000	4	\$ 14.70	4	\$ 58.80					Color: 750 mm
Hardware	Bracket	2028 L Bracket			42	\$ 5.00	5	\$ 25.00					5x Color: 10pcs 2028
Motionparts	Linear Rails	MGN 12h - Z Axis	350		3	\$ 15.60	3	\$ 46.80					3xGL: 350 - C: MGN12 H
Motionparts	Linear Rails	MGN 12h - Y Axis	400		2	\$ 17.50	2	\$ 35.00					2xGL: 400 - C: MGN12 H
Motionparts	Linear Rails	MGN 9h - X Axis	400		1	\$ 16.00	1	\$ 16.00					1xGL: 400 - C: MGN9 H
Hardware	Frame Bundle	2040 Frame Kit - Budget			1	\$ 265.00		\$ -				Budget Frame + Rail Bundle Kit	
Hardware	Frame Bundle	2040 Frame Kit - Misumi Premium			1	\$ 523.00	1	\$ 523.00				Premium Frame + Rail Bundle	
Hardware	Tube	20x20x18 Carbon Tube	410	500	1	\$ 20.00	1	\$ 20.00				20X20X18MM 500MM	
Hardware	Plate	Cast Aluminium 350x350x8mm	350		1225	\$ 0.08	1225	\$ 98.00				1225 cm^2	
Hardware	Print Surface	Removal Spring Steel PEI Sheet	330		1	\$ 50.00	1	\$ 50.00				1x Size: (130C)330x330mm	WB 150C-Mag Sheet
Hardware	Rod	5x25mm Rod For Tension Forks	25		5	\$ 1.20	1	\$ 1.20				1x Length: 25mm 8PC	
Hardware	Rod	5x40mm Rod For AB Idlers	40		12	\$ 3.00	3	\$ 9.00				3x Length: 40mm 5PC	
Hardware	Rod	5x50mm Rod For Ball Joint	50		6	\$ 3.00	2	\$ 6.00				2x Length: 50mm 4PC	
Hardware	Ball Joint	Precision Ball 10mm M4			3	\$ 3.00	1	\$ 3.00				1x Size: 10pc	
Hardware	Magnet	Neodmium Magnet	30		3	\$ 2.50	2	\$ 5.00				2x 30x10x5mm-2pcs	
Hardware	Bearings	625 2ZZ			6	\$ 7.50	1	\$ 7.50				10pcs 625ZZ 5x16x5mm	
Fasteners	Nut	M3 Nut			21	\$ 1.00	1	\$ 1.00				1x Size: M3 50PCS	
Fasteners	Nut	M3 Nut Hammer Nut			34	\$ 3.00	1	\$ 3.00				1x 50PCS Size: 20-m3	
Fasteners	Screw	M3x08 BH			24	\$ 1.00	1	\$ 1.00				1x Size: M3 50PCS - 8mm - 304 SS	
Fasteners	Screw	M3x08 SH			34	\$ 1.00	1	\$ 1.00				1x Size: M3 50PCS - 8mm - 304 SS	
Fasteners	Screw	M3x10 BH			33	\$ 1.00	1	\$ 1.00				1x Size: M3 50PCS - 10mm - 304 SS	
Fasteners	Screw	M3x16 BH			8	\$ 2.00	1	\$ 2.00				1x Size: M3 50PCS - 16mm - 304 SS	
Fasteners	Screw	M4 D5 L55 Shoulder Screw			3	\$ 4.00	3	\$ 12.00				3x Size: M4-D5mm	
Fasteners	Nut	M4 Nut			6	\$ 1.50	1	\$ 1.50				Size: M4 50PCS	
Fasteners	Nut	M4 Nut Lock Nut			3	\$ 1.50	1	\$ 1.50				Size: M4 50PCS - Color SS	
Fasteners	Washer	M4 WASHER			3	\$ 1.00	1	\$ 1.00				1x M4 50pcs	
Fasteners	Screw	M4x16 CS			3	\$ 2.00	1	\$ 2.00				1x Size: M4 20PCS - 16mm - 304 SS	
Fasteners	Screw	M4x20 CS			3	\$ 2.00	1	\$ 2.00				1x Size: M4 20PCS - 20mm - 304 SS	
Fasteners	Nut	M5 Nut			4	\$ 2.00	1	\$ 2.00				1x Size: M5 50PCS	
Fasteners	Nut	M5 Nut Hammer Nut			30	\$ 11.00	1	\$ 11.00				1x M5 100 PCS	
Fasteners	Nut	M5 Nut Locknut			5	\$ 2.81	1	\$ 2.81				1x M5 50 PCS - SS	
Fasteners	Nut	M5 Nut T-Nut			84	\$ 13.50	1	\$ 13.50				1x M5 100PCS	
Fasteners	Washer	M5 WASHER			89	\$ 1.28	2	\$ 2.56				2x M5 50PCS	
Fasteners	Screw	M5x10 BH			111	\$ 2.69	12	\$ 32.28				12x 10PCS Size: M5 - 10mm - SS	
Fasteners	Screw	M5x20 BH			7	\$ 8.00	1	\$ 8.00				1x 10PCS Size: M5 - 20mm - SS	
Fasteners	Bolt	M5x30 HEX			5	\$ 2.57	1	\$ 2.57				1x 10 PCS Size: M5 - 30mm	
Fasteners	Shim	M5x6.5x1 Precision Shim			33	\$ 16.00	1	\$ 16.00				1x 200PCS Size: 6.5x5x1mm	
Fasteners	Washer	Cup Washer for Outer Panels				\$ 8.00	1	\$ 8.00				1x 20PCS cup head washer	
Fasteners	Washer	M3 WASHER				\$ 0.74	1	\$ 0.74				1x: M3 50pcs	
Electronics	Controller Board	Big Dipper D3 Mini			1	\$ 71.00	1	\$ 71.00				1x Big Dipper	Octopus+TMC2209x8
Electronics	PSU	Power Supply Unit			1	\$ 23.00	1	\$ 23.00				24V10A 240W	
Electronics	Switch	Power Switch			1	\$ 7.50	1	\$ 7.50				1x Power switch	
Electronics	Heater	Keenovo 750W Silicone Heating Pad	300		1	\$ 78.39	1	\$ 78.39				1x Select Color: 220V/110V	1x 220V/110V
Electronics	Switch	Solid State Relay			3	\$ 26.00	3	\$ 78.00				Genuine Omron Solid State Relay	Size: SSR 25DA
Electronics	Probe	Z Probe - BI Touch Type			1	\$ 20.00	1	\$ 20.00				3D Touch	
Electronics	Accelerometer	LI53DSH Accelerometer			1	\$ 2.00	1	\$ 2.00				1x LI53DSH Accelerometer	1x ADXL345 for Klipper
Electronics	Fuse	Thermal Fuse for Silicone Heating Pad			1	\$ 3.00	1	\$ 3.00				250V 15A 135 deg Fuse	
Extruder	Hotend	Dragon AC Hotend			1	\$ 73.50	1	\$ 73.50				Color: Dragon-Standard flow	
Extruder	Thermistor	PT1000 Thermistor Up to 450C			1	\$ 13.50	1	\$ 13.50				1x PT1000 Thermistor Cartridge	
Extruder	Extruder	Bontech LGX Lite			1	\$ 70.00	1	\$ 70.00				LGX* Lite + LDO NEMA 14	
Motionparts	Belt	Timing Belt 2GT 9mm 135C	1000	8000	8	\$ 59.00	1	\$ 59.00				1x 8M Heat Resistant - 9mm	
Motionparts	Idler	Idlers Smooth 11mm			10	\$ 4.10	10	\$ 41.00				10x W 11mm without t	
Motionparts	Idler	Idlers Toothed 11mm			5	\$ 6.00	5	\$ 30.00				5x W 11mm with t	
Motionparts	Pulley	Pulley 11mm 2GT			5	\$ 4.00	5	\$ 20.00				5x For 9mm	
Motionparts	Gear	2GT 20T-80T 4:1 Belt Gear	200	600	3	\$ 16.00	3	\$ 48.00				3x 20T(5mm)-80T(5mm)-200mm	
Motionparts	Steppermotor	42mm NEMA 17 1.7A			5	\$ 14.50	5	\$ 72.50				1x 5Pcs 40mm 45N-cm 2A	
Insulation	Insulation	PIR - Polyisocyanurate			5	\$ 12.00	5	\$ 60.00				TBD	
Panel	Panels	Aluminum Composite Material			5	\$ 25.00	5	\$ 125.00				TBD	
Panel	Window Front	Polycarbonate Sheet	300		1	\$ 25.00	2	\$ 50.00				Specification: 350x350x3mm	
Insulation	Bed Insulation	3D Printer Heat insulation	350		1	\$ 10.00	1	\$ 10.00				Size: 350x350mm	
Hardware	Bearings	Draw Slides	400		2	\$ 24.00	1	\$ 24.00				Color: Buffer 16inch 40cm	
Fasteners	Screw	M3x12 Countersink Screw			5	\$ 2.28	1	\$ 2.28				1x Size: M3 50PCS - 12mm - SS	
Fasteners	Screw	M3x35 BH Screw			3	\$ 4.51	1	\$ 4.51				1x Size: M3 50 PCS - 35mm - SS	
Fasteners	Nut	M3 Nylock Nuts			11	\$ 0.49	1	\$ 0.49				1x Size: M3 50PCS - SS	
Fasteners	Screw	M3x08 BH			3	\$ 0.99	1	\$ 0.99				1x Size M3 50PCS - 8mm - SS	
Fasteners	Bearings	608 Bearings			3	\$ 5.01	1	\$ 5.01				1x Size: ABEC-1 ZZ	
Fasteners	Screw	M5 Shoulder x40 Screw (M4 thread)			1	\$ 13.50	1	\$ 13.50				1x 5xM4x40 pack 10	
Fasteners	Collar	M5 Retaining Collar (6mm tall)			1	\$ 3.62	1	\$ 3.62				GDZ5-D5-10-6	
Electronics	Sensor	5KG Load Cell and HX711 ADC			1	\$ 3.00	1	\$ 3.00				Color: 5KG With HX711	
Fasteners	Controller Board	Arduino Nano			1	\$ 4.78	1	\$ 4.78				1x Arduino Nano	
Fasteners	Screw	M4 x14 Countersink Screws			1	\$ 2.00	1	\$ 2.00				1x Size: M4 20PCS - 14mm - SS	
Fasteners	Screw	M4x20 Countersink Screws			2	\$ 2.50	1	\$ 2.50				1x Size M4 20PCS - 20mm - SS	
Fasteners	Bushing	5x8x2.5M Bushings			2	\$ 4.31	1	\$ 4.31				1x Bushings 5x8x2.5	
Fasteners	Spring	Tension Spring			1	\$ 1.72	1	\$ 1.72				1x Length 15mm - Wire 0.7 - OD 8	
Fasteners	Bearings	5x10x4mm Thrust Bearing			1	\$ 2.44	1	\$ 2.44				1x Thrust Bearing	
Fasteners	Spacer	M3x15 Spacers			3	\$ 2.38	1	\$ 2.38				1x Size 3x15 - Red	
Fasteners	Spacer	M3x30 FF Standoff			4	\$ 3.27	1	\$ 3.27				1x Size: M3 - 30mm	
Fasteners	Spacer	M3x30 FM Standoff			4	\$ 2.57	1	\$ 2.57				1x Size: 5PCS M3XL M-F	
Fasteners	Screw	M4x14 Cap Head Screw			12	\$ 2.75	1	\$ 2.75				M4 x 14 Soc HD 20pcs	
Fasteners	Screw	M3x10 BH			8	\$ 1.75	1	\$ 1.75				1x Size: M3 50PCS - 10mm - SS	
Electronics	Fan	6038 Fan 2B06038B12G			1	\$ 12.00	1	\$ 12.00				1x Size: NEW	
Electronics	Heater	PTC Heater 12x7cm 260C			1	\$ 12.00	1	\$ 12.00				PTC Heater with Cord (US or EU)	
Electronics	Fuse	Thermal Fuse 95C			1	\$ 3.96	1	\$ 3.96				1x 15A - 95C	
Electronics	Magnet	Round Strong Magnets With Hole			3	\$ 4.50	1	\$ 4.50				1x Color: 8x3-3mm-20pcs	
Electronics	Sensor	dht22			1	\$ 4.00	1	\$ 4.00				RepRap ONLY- 1x Humidity Sensor	Klipper Humid Sensor
Fasteners	Screw	M2.5x6 Cap Head Screw (dh22 only)			1	\$ 0.87	1	\$ 0.87				RRF ONLY - 1x Size M2.5 - 6mm - SS	
Drying Agent	Desiccant	Silica Gel			1	\$ 21.50	1	\$ 21.50				1x 500g Orange Desiccant	
Valkyrie	Budget A Bundle Price	Price exl VAT						\$			1,695		
Valkyrie	Premium Budle Price	Price exl VAT						\$			1,953		