

ERWHI HEDGEHOG BOM rev. Apr 2019

Component	BOM ID	Productor	Productor code	Qty	available at	link
UP2	T1#1	AAEON	RE-UPS-APLX7-A10-0464	1	UpShop	<a href="https://up-shop.org/home/270-up-squared.html?search_query=x7-E3950&amp;results=8#/137-up_squared_board-atom_x7_e3950_4gb_memory_64gb_emmc">https://up-shop.org/home/270-up-squared.html?search_query=x7-E3950&amp;results=8#/137-up_squared_board-atom_x7_e3950_4gb_memory_64gb_emmc</a>
AI Core X	T1#2	AAEON	PER-TAICX-A10-001	1	UpShop	<a href="https://up-shop.org/featured/261-up-ai-core-x.html">https://up-shop.org/featured/261-up-ai-core-x.html</a>
WiFi kit	T1#3	AAEON	RE-UPWFKITEXAR1	1	UpShop	<a href="https://up-shop.org/up-peripherals/153-m2-2230-wifi-kit-for-up-squared-metal-chassis.html?search_query=RE-UPWFKITEXAR1&amp;results=2">https://up-shop.org/up-peripherals/153-m2-2230-wifi-kit-for-up-squared-metal-chassis.html?search_query=RE-UPWFKITEXAR1&amp;results=2</a>
D435	T1#4	Intel	82635AWGDVKPRQ	1	Digikey	<a href="https://www.digikey.it/product-detail/it/intel/82635AWGDVKPRQ/544-3603-ND/9926002">https://www.digikey.it/product-detail/it/intel/82635AWGDVKPRQ/544-3603-ND/9926002</a>
USBC - USB3A 25cm angle cable	T1#5	Openll	B07C93TX5F	1	Amazon	<a href="https://www.amazon.it/dp/B07C93TX5F/?coliid=I2V2W4KQ8LMV7H&amp;colid=2BZYA0TYTOWSI&amp;psc=0&amp;ref=lv_ov_lig_dp_it">https://www.amazon.it/dp/B07C93TX5F/?coliid=I2V2W4KQ8LMV7H&amp;colid=2BZYA0TYTOWSI&amp;psc=0&amp;ref=lv_ov_lig_dp_it</a>
Chassis	T1#6	check docs	-	1	check repo	<a href="https://github.com/gbr1/erwhi-hedgehog-mechanics">https://github.com/gbr1/erwhi-hedgehog-mechanics</a>
Sengi	T1#7	check docs	-	1	check repo	<a href="https://github.com/gbr1/sengi">https://github.com/gbr1/sengi</a>
Sengi-Up Cable	T1#8	check SENGI-UP sheet	-	1	check assembly manual	<a href="https://github.com/gbr1/erwhi-hedgehog">https://github.com/gbr1/erwhi-hedgehog</a>
Encoder	T1#9	check docs	-	2	check repo	<a href="https://github.com/gbr1/encoder-kit">https://github.com/gbr1/encoder-kit</a>
Magnet Bracket	T1#10	check docs	-	2	check repo	<a href="https://github.com/gbr1/erwhi-hedgehog-mechanics">https://github.com/gbr1/erwhi-hedgehog-mechanics</a>
Magnet	T1#11	MTS magnete	SD-6x2.5-NI-N35SH	2	MTS magnete	<a href="https://www.mtsmagnete.de/en/high-temperature-magnets/discs/6x2-5-mm-nickel-plated-up-to-150-c-diametrically-magnetised/a-4471/">https://www.mtsmagnete.de/en/high-temperature-magnets/discs/6x2-5-mm-nickel-plated-up-to-150-c-diametrically-magnetised/a-4471/</a>
Encoder Cable	T1#12	check ENCODER CABLE sheet	-	2	check assembly manual	<a href="https://github.com/gbr1/erwhi-hedgehog">https://github.com/gbr1/erwhi-hedgehog</a>
Motor with cables and connector	T1#13	check MOTOR sheet	-	2	check assembly manual	<a href="https://github.com/gbr1/erwhi-hedgehog">https://github.com/gbr1/erwhi-hedgehog</a>
Motor brackets kit	T1#14	Pololu	1086	1	TME	<a href="https://www.tme.eu/it/details/pololu-1086/accessories-for-micromotors/pololu/micro-metal-gearmotor-bracket-pair-whi/">https://www.tme.eu/it/details/pololu-1086/accessories-for-micromotors/pololu/micro-metal-gearmotor-bracket-pair-whi/</a>
Wheels kit	T1#15	Pololu	1425	1	TME	<a href="https://www.tme.eu/it/details/pololu-1425/accessories-for-robotics-and-rc/pololu/pololu-wheel-70x8mm-pair- -black/">https://www.tme.eu/it/details/pololu-1425/accessories-for-robotics-and-rc/pololu/pololu-wheel-70x8mm-pair- -black/</a>
Omniwheel	T1#16	Nexus Robot	14108	1	Robotshop	<a href="https://www.robotshop.com/eu/en/48mm-omniwheel-compatible-servos-lego-mindstorms-nxt.html">https://www.robotshop.com/eu/en/48mm-omniwheel-compatible-servos-lego-mindstorms-nxt.html</a>
Shaft (ø3 40mm)	T1#17	-	-	1	check assembly manual	<a href="https://github.com/gbr1/erwhi-hedgehog">https://github.com/gbr1/erwhi-hedgehog</a>
Ball caster	T1#18	Pololu	954	1	TME	<a href="https://www.tme.eu/it/details/pololu-954/accessories-for-robotics-and-rc/pololu/ball-caster-with-3-4-plastic-ball/">https://www.tme.eu/it/details/pololu-954/accessories-for-robotics-and-rc/pololu/ball-caster-with-3-4-plastic-ball/</a>
Battery Holder	T1#19	MPD	BH-18650-W	2	Digikey	<a href="https://www.digikey.it/product-detail/it/mpd-memory-protection-devices/BH-18650-W/BH-18650-W-ND/3029217">https://www.digikey.it/product-detail/it/mpd-memory-protection-devices/BH-18650-W/BH-18650-W-ND/3029217</a>
Power Switch with cables	T1#20	check POWER SWITCH sheet	-	1	check assembly manual	<a href="https://github.com/gbr1/erwhi-hedgehog">https://github.com/gbr1/erwhi-hedgehog</a>
EXT DC Plug with cables	T1#21	check EXT DC Plug sheet	-	1	check assembly manual	<a href="https://github.com/gbr1/erwhi-hedgehog">https://github.com/gbr1/erwhi-hedgehog</a>
Wago 221-412	T1#22	Wago	221-412	4	TME	<a href="https://www.tme.eu/it/details/221-412/connettori-rapidi/wago/">https://www.tme.eu/it/details/221-412/connettori-rapidi/wago/</a>
Wago 221-413	T1#23	Wago	221-413	1	TME	<a href="https://www.tme.eu/it/details/221-413/connettori-rapidi/wago/">https://www.tme.eu/it/details/221-413/connettori-rapidi/wago/</a>
Power Cable	T1#24	check POWER CABLE sheet	-	1	check assembly manual	<a href="https://github.com/gbr1/erwhi-hedgehog">https://github.com/gbr1/erwhi-hedgehog</a>
Jack Cable	T1#25	check JACK CABLE sheet	-	1	check assembly manual	<a href="https://github.com/gbr1/erwhi-hedgehog">https://github.com/gbr1/erwhi-hedgehog</a>
Standoff M2.5x6	T1#26	Dremec	212X06	5	TME	<a href="https://www.tme.eu/it/details/tfm-m2.5x6_dr212/distanziali-in-metallo/dremec/212x06/">https://www.tme.eu/it/details/tfm-m2.5x6_dr212/distanziali-in-metallo/dremec/212x06/</a>
Standoff M2.5x15	T1#27	Dremec	212X15	5	TME	<a href="https://www.tme.eu/it/details/tfm-m2.5x15_dr212/distanziali-in-metallo/dremec/212x15/">https://www.tme.eu/it/details/tfm-m2.5x15_dr212/distanziali-in-metallo/dremec/212x15/</a>
Standoff M2.5x20	T1#28	Dremec	212X20	5	TME	<a href="https://www.tme.eu/it/details/tfm-m2.5x20_dr212/distanziali-in-metallo/dremec/212x20/">https://www.tme.eu/it/details/tfm-m2.5x20_dr212/distanziali-in-metallo/dremec/212x20/</a>
NUTS M2.5	T1#29	Accu	HPN-M2.5-A2	28	Accu	<a href="https://www.accu.co.uk/en/hexagon-nuts/7886-HPN-M2-5-A2">https://www.accu.co.uk/en/hexagon-nuts/7886-HPN-M2-5-A2</a>
SCREW M2.5x8 ISO7380	T1#30	Accu	SSB-M2.5-8-A4	9	Accu	<a href="https://www.accu.co.uk/en/socket-button-screws/8269-SSB-M2-5-8-A4">https://www.accu.co.uk/en/socket-button-screws/8269-SSB-M2-5-8-A4</a>
SCREW M2.5x10 ISO7381	T1#31	Accu	SSB-M2.5-10-A2	8	Accu	<a href="https://www.accu.co.uk/en/socket-button-screws/8094-SSB-M2-5-10-A2">https://www.accu.co.uk/en/socket-button-screws/8094-SSB-M2-5-10-A2</a>
SCREW M3x6 Philips	T1#32	Bossard		2	TME	<a href="https://www.tme.eu/it/details/b3x6_bn660/bulloni/bossard/1250477/">https://www.tme.eu/it/details/b3x6_bn660/bulloni/bossard/1250477/</a>
Travel Case		Max	MAX235H155S	optional	Amazon	<a href="https://www.amazon.it/gp/product/B00PULACG6/ref=ppx_yo_dt_b_asin_title_o03_s00?ie=UTF8&amp;psc=1">https://www.amazon.it/gp/product/B00PULACG6/ref=ppx_yo_dt_b_asin_title_o03_s00?ie=UTF8&amp;psc=1</a>

BOM for 1 Jack Cable assembly

Component	BOM ID	Productor	Productor code	Qty	available at	link
CONN VH 2POS	T2#1	JST Sales America Inc	VHR-2N	1	Digikey	<a href="https://www.digikey.it/product-detail/it/jst-sales-america-inc/VHR-2N/455-1183-ND/608624">https://www.digikey.it/product-detail/it/jst-sales-america-inc/VHR-2N/455-1183-ND/608624</a>
CABLE VH 6"	T2#2	JST Sales America Inc	ASVHSVH16K152	2	Digikey	<a href="https://www.digikey.it/product-detail/it/jst-sales-america-inc/ASVHSVH16K152/455-3106-ND/6009482">https://www.digikey.it/product-detail/it/jst-sales-america-inc/ASVHSVH16K152/455-3106-ND/6009482</a>
Power Jack angle	T2#3	Lumberg	NES/J 21 W	1	TME	<a href="https://www.tme.eu/it/details/nes_j21w/connettori-dc/lumberg/nes-j-21-w/">https://www.tme.eu/it/details/nes_j21w/connettori-dc/lumberg/nes-j-21-w/</a>

BOM for 1 Power Cable assembly

Component	BOM ID	Productor	Productor code	Qty	available at	link
CONN VH 2POS	T3#1	JST Sales America Inc	VHR-2N	1	Digikey	<a href="https://www.digikey.it/product-detail/it/jst-sales-america-inc/VHR-2N/455-1183-ND/608624">https://www.digikey.it/product-detail/it/jst-sales-america-inc/VHR-2N/455-1183-ND/608624</a>
CABLE VH 6"	T3#2	JST Sales America Inc	ASVHSVH16K152	2	Digikey	<a href="https://www.digikey.it/product-detail/it/jst-sales-america-inc/ASVHSVH16K152/455-3106-ND/6009482">https://www.digikey.it/product-detail/it/jst-sales-america-inc/ASVHSVH16K152/455-3106-ND/6009482</a>

BOM for 1 Power Switch assembly

Component	BOM ID	Productor	Productor code	Qty	available at	link
POWER SWITCH	T4#1	E-Switch	R1966DBLKBLKCF	1	Digikey	<a href="https://www.digikey.it/product-detail/it/e-switch/R1966DBLKBLKCF/EG1841-ND/61120">https://www.digikey.it/product-detail/it/e-switch/R1966DBLKBLKCF/EG1841-ND/61120</a>
22 AWG WIRE	T4#2	-	-	-	-	-

BOM for 1 EXT DC Plug assembly

Component	BOM ID	Productor	Productor code	Qty	available at	link
CONN PWR JACK	T5#1	MPD	EJ501A	1	Digikey	<a href="https://www.digikey.it/product-detail/it/mpd-memory-protection-devices/EJ501A/EJ501A-ND/2439531">https://www.digikey.it/product-detail/it/mpd-memory-protection-devices/EJ501A/EJ501A-ND/2439531</a>
22 AWG WIRE	T5#2	-	-	-	-	-

BOM for 1 Motor with cables

Component	BOM ID	Productor	Productor code	Qty	available at	link
SH cable 6"	T6#1	JST Sales America Inc	ASSHSSH28K152	2	Digikey	<a href="https://www.digikey.it/product-detail/it/jst-sales-america-inc/ASSHSSH28K152/455-3076-ND/6009452">https://www.digikey.it/product-detail/it/jst-sales-america-inc/ASSHSSH28K152/455-3076-ND/6009452</a>
CONN SH 2POS	T6#2	JST Sales America Inc	SHR-02V-S-B	1	Digikey	<a href="https://www.digikey.it/products/it?keywords=SHR-02V-S-B">https://www.digikey.it/products/it?keywords=SHR-02V-S-B</a>
Motor 150:1 dual shaft HPCB	T6#3	Pololu	3076	1	TME	<a href="https://www.tme.eu/it/details/pololu-3076/motori-dc/pololu/150-1-micro-metal-gearmotor-hpcb-dual/">https://www.tme.eu/it/details/pololu-3076/motori-dc/pololu/150-1-micro-metal-gearmotor-hpcb-dual/</a>

BOM for 1 encoder cable

Component	BOM ID	Productor	Productor code	Qty	available at	link
SH cable 2"	T7#1	JST Sales America Inc	ASSHSSH28K51	4	Digikey	<a href="https://www.digikey.it/product-detail/it/jst-sales-america-inc/ASSHSSH28K51/455-3075-ND/6009451">https://www.digikey.it/product-detail/it/jst-sales-america-inc/ASSHSSH28K51/455-3075-ND/6009451</a>
CONN SH 4POS	T7#2	JST Sales America Inc	SHR-04V-S-B	2	Digikey	<a href="https://www.digikey.it/product-detail/it/jst-sales-america-inc/SHR-04V-S-B/455-1379-ND/759868">https://www.digikey.it/product-detail/it/jst-sales-america-inc/SHR-04V-S-B/455-1379-ND/759868</a>

BOM for 1 SENGI-UP cable

Component	BOM ID	Productor	Productor code	Qty	available at	link
SH cable 6"	T8#1	JST Sales America Inc	ASSHSSH28K152	8	Digikey	<a href="https://www.digikey.it/product-detail/it/jst-sales-america-inc/ASSHSSH28K152/455-3076-ND/6009452">https://www.digikey.it/product-detail/it/jst-sales-america-inc/ASSHSSH28K152/455-3076-ND/6009452</a>
CONN SH 10POS	T8#2	JST Sales America Inc	SHR-10V-S-B	2	Digikey	<a href="https://www.digikey.it/product-detail/it/jst-sales-america-inc/SHR-10V-S-B/455-1385-ND/759874">https://www.digikey.it/product-detail/it/jst-sales-america-inc/SHR-10V-S-B/455-1385-ND/759874</a>