

ERWHI HEDGEHOG BOM rev. Apr 2019

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

BOM for 1 Jack Cable assembly

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

BOM for 1 Power Cable assembly

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

BOM for 1 Power Switch assembly

Component	Productor	Productor code	Qty	available at	link
POWER SWITCH	E-Switch	R1966DBLKBLKCF	1	Digikey	https://www.digikey.it/product-detail/it/e-switch/R1966DBLKBLKCF/EG1841-ND/61120
22 AWG WIRE	-	-	-	-	-

BOM for 1 EXT DC Plug assembly

Component	Productor	Productor code	Qty	available at	link
CONN PWR JACK	MPD	EJ501A	1	Digikey	https://www.digikey.it/product-detail/it/mpd-memory-protection-devices/EJ501A/EJ501A-ND/2439531
22 AWG WIRE	-	-	-	-	-

BOM for 1 Motor with cables

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

BOM for 1 encoder cable

Component	Productor	Productor code	Qty	available at	link
SH cable 2”	JST Sales America Inc	ASSHSSH28K51	4	Digikey	https://www.digikey.it/product-detail/it/jst-sales-america-inc/ASSHSSH28K51/455-3075-ND/6009451
CONN SH 4POS	JST Sales America Inc	SHR-04V-S-B	2	Digikey	https://www.digikey.it/product-detail/it/jst-sales-america-inc/SHR-04V-S-B/455-1379-ND/759868

BOM for 1 SENGI-UP cable

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