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Notes:
Unless otherwise specified
Cut length +- 3mm
Molex strip length +- 0.5mm
Ring terminal strip length +- 0.5mm

1xEL-MS0418] Conn Housing 10Pos .100 Dual

1x [EL-MS0062] Female 4 pos conn.
4x [EL-MS0059] Female Molex Pin

Pin 1 — Strip 4mm — 1x [EL-WR0099] – 22awg 4 cond. Grey Wire **Length = 175mm** — Strip 4mm
Pin 2 — Strip insulation 30mm — Strip insulation 30mm
Pin 3
Pin 4

Pin 22 — E2 motor
Pin 21
Pin 20
Pin 19

21x [EL-MS0059] Female Molex Pin

2x [PC-CN0032] Term Block Plug 2POS
Pin 1 — *Strip 7.3mm* — 1x [EL-WR0103] – 24awg Red Wire **Length = 200mm** — Strip 4mm — Pin 18 — Heat 2

2x [EL-MS0362] 24 AWG 6.0mm Pin Length Single Wire Insulated Ferrule
Pin 1 — *Strip 7.3mm* — 1x [EL-WR0107] – 24awg White Wire **Length = 200mm** — Strip 4mm — Pin 17 — 24v fan

1X [EL-MS0141] Term Ring Non Ins 26-22awg
Strip 4mm — 1x [EL-WR0105] – 24awg Black Wire **Length = 95mm** — Strip 4mm — Pin 16

1x [EL-WR0111] – 24awg Blue Wire **Length = 165mm** — Strip 4mm — Pin 15 — Servo 2

2x [EL-MS0059] Female Molex Pin

1x [PC-CN0001] Female 2pin Housing
Pin 2 — *Strip 4mm* — 1x [EL-WR0119] – 24awg Green Wire **Length = 200mm** — Strip 4mm — Pin 14 — TH2

1x [EL-MS0059] Female Molex Pin
Pin 3 — *Strip 4mm* — 1x [EL-WR0107] – 24awg White Wire **Length = 200mm** — Strip 4mm — Pin 13 + — 24v

Strip 4mm
Pin 3
Pin 8

4x [EL-MS0059] Female Molex Pin
1x [EL-MS0062] Female 4pin Housing
Pin 4 — Strip 4mm — 1x [EL-WR0111] – 24awg Blue Wire **Length = 200mm** — Strip 4mm — Pin 12 -
Pin 1 — Strip 4mm — 1x [EL-WR0103] – 24awg Red Wire **Length = 200mm** — Strip 4mm — Pin 11 + — 5v
Pin 2 — Strip 4mm — 1x [EL-WR0105] – 24awg Black Wire **Length = 200mm** — Strip 4mm — Pin 10 -

1x [EL-MS0059] Female Molex Pin
1x [PC-CN0001] Female 2pin Housing
Pin 2 — *Strip 4mm* — 1x [EL-WR0104] – 24awg Orange Wire **Length = 200mm** — Strip 4mm — Pin 9 — TH1

1x [EL-WR0120] – 24awg Purple Wire **Length = 165mm** — Strip 4mm — Pin 8 — Servo 1

1x [PC-CN0032] Term Block Plug 2POS
Pin 1 — *Strip 7.3mm* — 1x [EL-WR0109] – 24awg Yellow Wire **Length = 200mm** — Strip 4mm — Pin 7 — E1 heat

1x [EL-MS0489] Female 22pin Housing

Strip 4mm
4x [EL-MS0059] Female Molex Pin
25mm

Pin 5 — Pin 1 — Pin 6 — Pin 10

1x [EL-MS0362] 24 AWG 6.0mm Pin Length Single Wire Insulated Ferrule

1x [EL-MS0247] Black Shrink Tubing 25mm
15mm

1x [EL-MS0062] Female 4pin Housing
4x [EL-MS0059] Female Molex Pin
Pin 1 — 1x [EL-WR0099] – Grey 4 22awg cond. Wire **Length = 145mm** — Strip 4mm — Pin 6
Pin 2 — Strip 30mm — Strip insulation 30mm — Pin 5 — E1 motor
Pin 3 — Pin 4
Pin 4 — Strip 4mm — Pin 3

[EL-MS0540] Ferrite Core 277 OHM Hinged

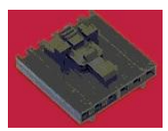
1X [EL-MS0141] Term Ring Non Ins 26-22awg
1x [EL-WR0105] – 24awg Black Wire **Length = 65mm** — Pin 2
Strip 4mm — Strip 4mm

*1x [EL-MS0247] **BLACK** Shrink Tubing 55mm*

1x [EL-WR0109] – 24awg Yellow Wire **Length = 260** — Strip 4mm — Pin 1
1x [EL-WR0103] – 24awg Red Wire **Length = 260** — Strip 4mm — Pin 2
1x [EL-WR0105] – 24awg Black Wire **Length = 260** — Strip 4mm — Pin 3
1x [EL-WR0104] – 24awg Orange Wire **Length = 260** — Strip 4mm — Pin 4
1x [EL-WR0105] – 24awg Black Wire **Length =180** — Strip 4mm — Pin 5

1X [EL-MS0141] Term Ring Non Ins 26-22awg
Strip 4mm

5x [EL-MS0059] Female Molex Pin
1x Female 6pin Housing [PC-CN0118]



Note: Wire lengths shown are cut lengths. Cut Tolerance: +/- 2.0mm

		ALEPH OBJECTS® INCORPORATED	LULZBOT
DRAWN BY Josh W	DATE 11/20/17		
CHECKED BY Franklin M.	DATE 4/18/19	**CB Extruder Sensor Harness, Assembled**	
EL-HR0153		FILE NAME EL-HR0153_CB_extruder_sensor_harness.odg	SHEET **1** / REV. **D**

AO P/n	qty	unit	Supplier	supplier P/n
EL-MS0141	3	pce	tti	P22-4R-M
EL-MS0062	3	pce	sager	50579404
EL-MS0059	46	pce	tti	16-02-0086
PC-CN0032	3	pce	tti	395300002
EL-MS0362	3	pce	digikey	FSD74-8-D
EL-MS0418	1	pce	digikey	22552101
EL-MS0489	1	pce	mouser	538-50-57-9422
PC-CN0118	1	pce	digikey	WM2904-ND
EL-MS0247	80	mm	electronics distributors corp	88-01870
EL-WR0105	800	mm	allcable	HU1569247BK
EL-WR0099	320	mm	allcable	C0762A.41.10
EL-WR0103	660	mm	allcable	HU1569247RD
EL-WR0107	400	mm	allcable	HU1569247WE
EL-WR0111	365	mm	allcable	HU1569247BE
EL-WR0119	200	mm	allcable	HU1569247GN
EL-WR0104	460	mm	allcable	HU1569247OE
EL-WR0120	165	mm	allcable	HU1569247VT
EL-WR0109	460	mm	allcable	HU1569247YW
EL-MS0540	1	pce	digikey	240-2344-ND

Rev	Date	Changes	Change By
A	1/7/19	Add clip on ferrite and heat shrink tubing to sensor/ servo wires	JW
B	1/22/19	Change servo 1 from pin 7 to pin 8	JW
C	1/30/19	Add strip tolerance	JW
D	2/4/19	Change position of ground wire so pin out will be sequential	JW