

Linn Parts List (Bill of Materials) for Valhalla

Please note that this list is provided for guidance only. Linn Products cannot guarantee the accuracy of the information contained in the list and will not be held responsible for any errors that occur as a result of its use. Please double check that the details listed match the component that you are replacing.

Important Note

On some of our circuit boards, the BOM is split in various ways. Sometimes the 'Surface Mount' components are on a separate BOM from the 'Thru-hole' components. Sometimes they are split in other ways. If more than one BOM covers a single circuit board, then all relevant BOMs will be included here – the part you are seeking may not be in the first BOM and it may sometimes be necessary that you look at a list further on.

How to follow a Bill of Materials (BOM)

The BOM may, at first glance seem quite confusing. Once a few things are explained however, you should have no problems following it.

The main part of this document, i.e. the table, is split into nine columns as shown in the example below:

Quantity	Units	T C.Des	Part Number	Description	Type	Kit	Cost
1.00000	ONES	R C001	CAP 003	22UF,+50%,-20%,50V,ELTR,TH,PCO100, ,,,,,NCC,,RUBYCON,,MULLARD	C	Y	Y

Ignore all columns except for the middle three – these contain all the information you require as explained below:

C.Des (Component Designator)

Every component on every Linn circuit board has an individual identification code known as a 'Component Designator' (C001, Q012, R345 etc). The designator shown in the table matches that printed on the circuit board beside each component.

These designators are coded according to type of component – at the start of each designator there is a letter and this describes the component type. The main types are shown below:

- C - Capacitor
- P - Connector
- Q - Transistor
- R - Resistor
- U - IC

The components are listed in alphabetical order by Component Designator

Part Number

Our internal part number for the component. Quote this part number if ordering the part from Linn.

We advise however that you try to source parts locally as most components are commonly available from any good electronic parts supplier much faster and cheaper than we can supply and also, not every part listed here can be ordered from Linn. If you have problems sourcing the part locally, we will do our best to help you, but we cannot guarantee availability of any part listed.

Description

All the technical details that you will require to order the part from your local or national electronic spares supplier. Includes (if applicable) the name(s) of our preferred manufacturer(s) for each part.



Assembly Number: PCAS 022/L5R9 DOUBLE-SIDED VALHALLA BOARD POP.
 WITH SURGE GARD & VARISTORS

Units: ONES BOM Type: A

Quantity	Units	T C.Des	Part Number	Description	Type	Kit	Cost
1.00000	ONES	P	2E-162	SWITCH MOULDING (ON/OFF SWITCH ADAPTOR)	C	Y	Y
4.00000	ONES	P	CONN 044	PCB MOUNTING 20MM FUSE HOLDER ONE HALF PRT NO.RFS6028/001	C	Y	Y
2.00000	ONES	P	LBL 076	32MM X 7MM WHITE MATT POLYESTER (7331) LABEL FOR BARCODE PRINTING	C	N	Y
3.00000	ONES	P	MECH 007	M3 HEX FULL NUTS ZINC AND BLACK PASSIVATE	C	Y	Y
3.00000	ONES	P	MECH 049	M3 WASHER NICKEL PLATED	C	Y	Y
3.00000	ONES	P	MECH 421	M3 X 10 POZI COUNTERSINK SCREW BLACK ZINC PLATED	C	Y	Y
1.00000	ONES	P	MISS 052	THROUGH HOLE LED SLH34VR3F	C	Y	Y
1.00000	ONES	P	MISS 142	DOUBLE COATED FOAM TAPE 12 X 25 X 1.5 THK	C	Y	Y
1.00000	ONES	P	PCB 022/L5	PLATED THROUGH CIRCUIT BOARD IN FR4 MATERIAL.	C	P	Y
1.00000	ONES	P	PCB 023	FLEXIBLE CIRCUIT FOR VALHALLA BOARD SPEC TO 94V 0.	C	Y	Y
1.00000	ONES	P	SWRL 010	TYPE FUNCTION NSF KEYLITE SWITCH (EXCL LED @ CAP	C	Y	Y
2.00000	ONES	P	VAL 019	HEATSINK FOR VALHALLA BOARD	C	Y	Y
1.00000	ONES	P	VAL 056	BLACK KEYCAP FOR NSF SWITCH FOR USE ON VALHALLA BOARD	C	Y	Y
1.00000	ONES	R BR001	MISS 032	TYPE FUNCTION 1KAB100E 1.2A(MIN)1000V BRIDGE	C	Y	Y
1.00000	ONES	R C001	CAP 041	47UF,+50%,-20%,250V,ELTR,TH, PC01500,,,,,,,,NCC,,,,	C	Y	Y
1.00000	ONES	R C002	CAP 041	47UF,+50%,-20%,250V,ELTR,TH, PC01500,,,,,,,,NCC,,,,	C	Y	Y
1.00000	ONES	R C003	CAP 042	220UF,+50%,-20%,16V,ELTR,TH, PC01000,,,,,,,,NCC,,PHILIPS,,	C	Y	Y



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Quantity	Units	T C.Des	Part Number	Description	Type	Kit	Cost
1.00000	ONES	R C004	VAL 002	VALUE VOLTS TOL CONSTRUCTION 100NF(100KPF) 250V 10%	C	Y	Y
1.00000	ONES	R C005	VAL 028	VALUE VOLTS TOL CONSTRUCTION 22PF 100V 5% CERAMIC	C	Y	Y
1.00000	ONES	R C006	VAL 029	VALUE VOLTS TOL CONSTRUCTION 68PF 50V 5% CAPACITOR	C	Y	Y
1.00000	ONES	R C007	VAL 002	VALUE VOLTS TOL CONSTRUCTION 100NF(100KPF) 250V 10%	C	Y	Y
1.00000	ONES	R C008	VAL 003	VALUE VOLTS TOL CONSTRUCTION 22UF 35V	C	Y	Y
1.00000	ONES	R C009	VAL 004	VALUE VOLTS TOL CONSTRUCTION 100NF 100V 2%	C	Y	Y
1.00000	ONES	R C010	VAL 004	VALUE VOLTS TOL CONSTRUCTION 100NF 100V 2%	C	Y	Y
1.00000	ONES	R C011	VAL 004	VALUE VOLTS TOL CONSTRUCTION 100NF 100V 2%	C	Y	Y
1.00000	ONES	R C012	VAL 004	VALUE VOLTS TOL CONSTRUCTION 100NF 100V 2%	C	Y	Y
1.00000	ONES	R C013	VAL 004	VALUE VOLTS TOL CONSTRUCTION 100NF 100V 2%	C	Y	Y
1.00000	ONES	R C014	VAL 005	VALUE VOLTS TOL CONSTRUCTION 1UF 63V RADIAL	C	Y	Y
1.00000	ONES	R C015	VAL 003	VALUE VOLTS TOL CONSTRUCTION 22UF 35V	C	Y	Y
1.00000	ONES	R C016	VAL 029	VALUE VOLTS TOL CONSTRUCTION 68PF 50V 5% CAPACITOR	C	Y	Y
1.00000	ONES	R C017	VAL 006	VALUE VOLTS TOL CONSTRUCTION 0.33UF 100V 10% POLY CAP	C	Y	Y
1.00000	ONES	R C018	CAP 041	47UF,+50%,-20%,250V,ELTR,TH, PC01500,,,,,,,,NCC,,,,	C	Y	Y
1.00000	ONES	R C019	VAL 007	VALUE VOLTS TOL CONSTRUCTION 220NF 250V POLY CAP	C	Y	Y
1.00000	ONES	R C020	VAL 005	VALUE VOLTS TOL CONSTRUCTION 1UF 63V RADIAL	C	Y	Y



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Quantity	Units	T C.Des	Part Number	Description	Type	Kit	Cost
1.00000	ONES	R C021	VAL 030	VALUE VOLTS TOL CONSTRUCTION 3.3NF 50V CAPACITOR	C	Y	Y
1.00000	ONES	R D001	MISS 001	TYPE FUNCTION CASE 1N4148 DIODE	C	Y	Y
1.00000	ONES	R D002	MISS 001	TYPE FUNCTION CASE 1N4148 DIODE	C	Y	Y
1.00000	ONES	R D003	MISS 001	TYPE FUNCTION CASE 1N4148 DIODE	C	Y	Y
1.00000	ONES	R F002	MISS 036	1 AMP, 20MM QUICK BLOW FUSE	C	Y	Y
1.00000	ONES	R IC001	VAL 011	VALUE VOLTS TOL CONSTRUCTION MC3346P I.C	C	Y	Y
1.00000	ONES	R IC002	IC 004	LM324N,QUAD OP AMP,DIP14,324, NATSEM,	C	Y	Y
1.00000	ONES	R IC003	IC 028	4060B,14BIT BINARY COUNTER,DIP16, 4060B,MOTOR,PHIL	C	Y	Y
1.00000	ONES	R IC004	IC 021	4013,DUAL D-TYPE FLIPFLOP,DIP14, 4013,NATSEM,PHIL	C	Y	Y
1.00000	ONES	R IC005	IC 021	4013,DUAL D-TYPE FLIPFLOP,DIP14, 4013,NATSEM,PHIL	C	Y	Y
1.00000	ONES	R J001	CONN 153/1	6 WAY FLEXIBLE CIRCUIT CONNECTOR - RIGHT ANGLED TYPE	C	Y	Y
1.00000	ONES	R P001	CONN 042	4 WAY SCREW TERMINAL BLOCK	C	Y	Y
1.00000	ONES	R P002	CONN 042	4 WAY SCREW TERMINAL BLOCK	C	Y	Y
1.00000	ONES	R R001	MISS 171/1	TYPE FUNCTION GENERAL INFO. 40 OHM SG240 SURGE GARD THERMOSTOR	C	Y	Y
1.00000	ONES	R R002	VAL 009	VALUE VOLTS TOL CONSTRUCTION 15K PR52 RES	C	Y	Y
1.00000	ONES	R R003	VAL 009	VALUE VOLTS TOL CONSTRUCTION 15K PR52 RES	C	Y	Y
1.00000	ONES	R R004	RES 040	3K3,1%,MF,1/4W,0.25W,200V,50ppm,, ,	C	Y	Y



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Quantity	Units	T C.Des	Part Number	Description	Type	Kit	Cost
1.00000	ONES	R R005	RES 077	2K7,1%,MF,1/4W,0.25W,200V,50ppm,, ,	C	Y	Y
1.00000	ONES	R R006	VAL 033	VALUE VOLTS TOL CONSTRUCTION 100K 5% SFR25 RES	C	Y	Y
1.00000	ONES	R R007	RES 115	1M0,1%,MF,1/4W,0.25W,200V,50ppm,, ,	C	Y	Y
1.00000	ONES	R R008	RES 115	1M0,1%,MF,1/4W,0.25W,200V,50ppm,, ,	C	Y	Y
1.00000	ONES	R R009	RES 058	33K,1%,MF,1/4W,0.25W,200V,50ppm,, ,	C	Y	Y
1.00000	ONES	R R010	VAL 036	VALUE VOLTS TOL CONSTRUCTION 22K 5% SFR25 RES	C	Y	Y
1.00000	ONES	R R011	RES 058	33K,1%,MF,1/4W,0.25W,200V,50ppm,, ,	C	Y	Y
1.00000	ONES	R R012	RES 115	1M0,1%,MF,1/4W,0.25W,200V,50ppm,, ,	C	Y	Y
1.00000	ONES	R R013	RES 025	22K,1%,MF,1/4W,0.25W,200V,50ppm,, ,	C	Y	Y
1.00000	ONES	R R014	RES 076	56K,1%,MF,1/4W,0.25W,200V,50ppm,, ,	C	Y	Y
1.00000	ONES	R R015	RES 300	82K,1%,MF,1/2W,0.5W,250V,50ppm,, ,	C	Y	Y
1.00000	ONES	R R016	RES 020	8K2,1%,MF,1/4W,0.25W,200V,50ppm,, ,	C	Y	Y
1.00000	ONES	R R017	RES 014	100K,1%,MF,1/4W,0.25W,200V,50ppm,, ,	C	Y	Y
1.00000	ONES	R R018	RES 014	100K,1%,MF,1/4W,0.25W,200V,50ppm,, ,	C	Y	Y
1.00000	ONES	R R019	RES 302	36K,1%,MF,1/2W,0.25W,200V,50ppm,, ,	C	Y	Y
1.00000	ONES	R R020	RES 161	39K,1%,MF,1/4W,0.25W,200V,50ppm,, ,	C	Y	Y
1.00000	ONES	R R021	RES 014	100K,1%,MF,1/4W,0.25W,200V,50ppm,, ,	C	Y	Y



Assembly Number: PCAS 022/L5R9

DOUBLE-SIDED VALHALLA BOARD POP.
WITH SURGE GARD & VARISTORS

Units: ONES

BOM Type: A

Quantity	Units	T C.Des	Part Number	Description	Type	Kit	Cost
1.00000	ONES	R R022	RES 014	100K,1%,MF,1/4W,0.25W,200V,50ppm,, ,	C	Y	Y
1.00000	ONES	R R023	RES 131	220K,1%,MF,1/4W,0.25W,200V,50ppm,, ,	C	Y	Y
1.00000	ONES	R R024	RES 131	220K,1%,MF,1/4W,0.25W,200V,50ppm,, ,	C	Y	Y
1.00000	ONES	R R025	VAL 046	VALUE VOLTS TOL CONSTRUCTION 10K 5% SFR25 RES	C	Y	Y
1.00000	ONES	R R026	VAL 047	VALUE VOLTS TOL CONSTRUCTION 33 OHM 1% MRS25 RES	C	Y	Y
1.00000	ONES	R R027	RES 089	12K,1%,MF,1/4W,0.25W,200V,50ppm,, ,	C	Y	Y
1.00000	ONES	R R028	RES 089	12K,1%,MF,1/4W,0.25W,200V,50ppm,, ,	C	Y	Y
1.00000	ONES	R R029	RES 110	680K,1%,MF,1/4W,0.25W,200V,50ppm,, ,	C	Y	Y
1.00000	ONES	R R030	RES 010	47K,1%,MF,1/4W,0.25W,200V,50ppm,, ,	C	Y	Y
1.00000	ONES	R R031	RES 010	47K,1%,MF,1/4W,0.25W,200V,50ppm,, ,	C	Y	Y
1.00000	ONES	R R032	RES 011	560K,1%,MF,1/4W,0.25W,200V,50ppm,, ,	C	Y	Y
1.00000	ONES	R R033	RES 013	180K,1%,MF,1/4W,0.25W,200V,50ppm,, ,	C	Y	Y
1.00000	ONES	R R034	RES 040	3K3,1%,MF,1/4W,0.25W,200V,50ppm,, ,	C	Y	Y
1.00000	ONES	R R035	RES 016	270R,1%,MF,1/4W,0.25W,200V,50ppm,, ,	C	Y	Y
1.00000	ONES	R R036	RES 012	270K,1%,MF,1/4W,0.25W,200V,50ppm,, ,	C	Y	Y
1.00000	ONES	R R037	RES 040	3K3,1%,MF,1/4W,0.25W,200V,50ppm,, ,	C	Y	Y
1.00000	ONES	R R038	RES 014	100K,1%,MF,1/4W,0.25W,200V,50ppm,, ,	C	Y	Y



