

Bill of material for Juma JFET preamplifier (<http://www.diyaudio.com/forums/pass-labs/244106-lsk-pre-baf-2013-a.html>)
for Dual channel rev 2.6 and PS rev.2.6 (2014-01-21)

Part	Value	Package	Description	Buerklin	Farnell
Input section (common components)					
C7	0u1	C150-091X182		43 D 312	1890162
C10	0u1	C150-091X182		43 D 312	1890162
J1	IN	22-23-2031	MOLEX - 22-29-2031 - HEADER, THT, VERTICAL, 2.54MM, 3WAY		1360131
J2	OUT	22-23-2031	MOLEX - 22-29-2031 - HEADER, THT, VERTICAL, 2.54MM, 3WAY		1360131
Q3	BC560C	TO92-EBC	PNP Transistor	12 S 5900	1467886
Q4	BC550C	TO92-EBC	NPN Transistor	12 S 5250	2101813
Q13	BC560C	TO92-EBC	PNP Transistor	12 S 5900	1467886
Q14	BC550C	TO92-EBC	NPN Transistor	12 S 5250	2101813
R1	100K	0207/10			2329987
R2	330R	0207/10			1634037
R3	330R	0207/10			1634037
R4	1K/2W	0207/10	Not required if CCS is used		1565434
R5	1K/2W	0207/10	Not required if CCS is used		1565434
R10	15R/1W	0207/12			1735037
R13	15R/1W	0207/12			1735037
R28	100K	0207/10			2329987
R29	330R	0207/10			1634037
R30	330R	0207/10			1634037
R31	1K/2W	0207/10	Not required if CCS is used		1565434
R32	1K/2W	0207/10	Not required if CCS is used		1565434
R36	15R/1W	0207/12			1735037
R38	15R/1W	0207/12			1735037
Input section – 2SK24/2SJ103 version					
C1	100uF	E5-10,5	PANASONIC – EEUFC1H101, 100UF, 50V		1848464
C2	100uF	E5-10,5	PANASONIC – EEUFC1H101, 100UF, 50V		1848464
C8	100uF	E5-10,5	PANASONIC – EEUFC1H101, 100UF, 50V		1848464
C9	100uF	E5-10,5	PANASONIC – EEUFC1H101, 100UF, 50V		1848464
P1	200R	S64W	Multiturn trimpot	76 E 2658	9353224
P4	200R	S64W	Multiturn trimpot	76 E 2658	9353224
Q1	2SK246	TO92-FET	Rotate when mount to fit 2SK170V pinout	-	-
Q2	2SJ103	TO92-FET	Rotate when mount to fit 2SJ74V pinout	-	-
Q11	2SK246	TO92-FET	Rotate when mount to fit 2SK170V pinout	-	-
Q12	2SJ103	TO92-FET	Rotate when mount to fit 2SJ74V pinout	-	-
R6	470R	0207/10			2330156
R7	9K	0207/10	9K1		2330241

R8	18K	0207/10		9475699
R9	6K8	0207/10		2330213
R11	9K	0207/10	9K1	2330241
R12	18K	0207/10		9475699
R33	470R	0207/10		2330156
R34	9K	0207/10	9K1	2330241
R35	18K	0207/10		9475699
R37	6K8	0207/10		2330213
R39	9K	0207/10	9K1	2330241
R40	18K	0207/10		9475699

Input section – 2SK170V/2SJ74V version (SKIP THIS SECTION IF YOU DECIDE TO MAKE 2SK24/2SJ103 VERSION!)

C1	47uF	E5-10,5	PANASONIC – EEUTA1J470, 47UF, 63V	2118199
C2	47uF	E5-10,5	PANASONIC – EEUTA1J470, 47UF, 63V	2118199
C8	47uF	E5-10,5	PANASONIC – EEUTA1J470, 47UF, 63V	2118199
C9	47uF	E5-10,5	PANASONIC – EEUTA1J470, 47UF, 63V	2118199
C11	120p	C050-025X075	53 D 703	1835009
C30	120p	C050-025X075	53 D 703	1835009
P1	20R	S64W	Multiturn trimpot	76 E 2652 9353739
P4	20R	S64W	Multiturn trimpot	76 E 2652 9353739
Q1	2SK170V	TO92-FET	-	-
Q2	2SJ74V	TO92-FET	-	-
Q11	2SK170V	TO92-FET	-	-
Q12	2SJ74V	TO92-FET	-	-
R6	220R	0207/10		1565294
R7	10K	0207/10		2329990
R8	10K	0207/10		2329990
R9	2K2	0207/10		2330087
R11	10K	0207/10		2329990
R12	10K	0207/10		2329990
R14	27R	0207/10		2330085
R25	27R	0207/10		2330085
R33	220R	0207/10		1565294
R34	10K	0207/10		2329990
R35	10K	0207/10		2329990
R37	2K2	0207/10		2330087
R39	10K	0207/10		2329990
R40	10K	0207/10		2329990

CCS section (suggested by Koja, can be used with any input section)

J3	OUT2	22-23-2021	Required if output signal splitting is needed	1360130
J4	OUT2	22-23-2021	Required if output signal splitting is needed	1360130

Q1A	J310	TO92-FET		-	1364035
Q2A	J310	TO92-FET		-	1364035
Q11A	J310	TO92-FET		-	1364035
Q12A	J310	TO92-FET		-	1364035
R4A	330R	0207/10			1634037
R4B	100R	0207/10			1652646
R5A	330R	0207/10			1634037
R5B	100R	0207/10			1652646
R9A	220R	0207/10	Required if output signal splitting is needed		1565294
R9B	220R	0207/10	Required if output signal splitting is needed		1565294
R31A	330R	0207/10			1634037
R31B	100R	0207/10			1652646
R32A	330R	0207/10			1634037
R32B	100R	0207/10			1652646
R37A	220R	0207/10	Required if output signal splitting is needed		1565294
R37B	220R	0207/10	Required if output signal splitting is needed		1565294
Buffer					
C3	10uF	ECAP3.5/8	PANASONIC – EEUTA1H100, 10UF, 50V		2118183, 8126992
		C105-091X182M	Possible C3 replacement in film version	51 D 466	1413755, 2098648
C4	47uF	ECAP2.5/7	PANASONIC – EEUFC1H470, 47UF, 50V		1848463
C5	47uF	ECAP2.5/7	PANASONIC – EEUFC1H470, 47UF, 50V		1848463, 2098648
C6	10uF	ECAP3.5/8	PANASONIC – EEUTA1H100, 10UF, 50V		2118183, 8126992
		C105-091X182M	Possible C3 replacement in film version	51 D 466	1413755, 2098648
C12	47uF	ECAP2.5/7	PANASONIC – EEUFC1H470, 47UF, 50V		1848463
C13	47uF	ECAP2.5/7	PANASONIC – EEUFC1H470, 47UF, 50V		1848463
Q5	BF862	SOT-23		-	1758058, 2133897
Q6	BC550C	TO92-EBC	NPN Transistor	12 S 5250	2101813
Q7	BC550C	TO92-EBC	NPN Transistor	12 S 5250	2101813
Q8	BC550C	TO92-EBC	NPN Transistor	12 S 5250	2101813
Q15	BC550C	TO92-EBC	NPN Transistor	12 S 5250	2101813
Q16	BC550C	TO92-EBC	NPN Transistor	12 S 5250	2101813
Q17	BC550C	TO92-EBC	NPN Transistor	12 S 5250	2101813
Q18	BF862	SOT-23		-	1758058, 2133897
P2	50R	S64W	Multiturn trimpot	76 E 2654	9353275
P5	50R	S64W	Multiturn trimpot	76 E 2654	9353275

R15	56K	0207/10	2330186
R16	6R8	0207/10	2330217
R17	10K	0207/10	2329990
R18	15R	0207/10	2330022
R19	6K8	0207/10	2330213
R20	470R	0207/10	2330156
R21	47R	0207/10	2330160
R22	15R	0207/12	1735037
R23	15R	0207/10	1735037
R24	2M2	0207/10	2330093
R41	470R	0207/10	2330156
R42	56K	0207/10	2330186
R43	6K8	0207/10	2330217
R44	6R8	0207/10	2330217
R45	15R	0207/10	2330022
R47	47R	0207/10	2330160
R46	10K	0207/10	2329990
R48	15R/1W	0207/12	1735037
R49	15R/1W	0207/12	1735037
R50	2M2	0207/10	2330093

Power supply					
C14	220uF	ECAP5/13	PANASONIC – EEUFC1H221, 220UF, 50V		2326293
C15	220uF	ECAP5/13	PANASONIC – EEUFC1H221, 220UF, 50V		2326293
C16	220uF	ECAP5/13	PANASONIC – EEUFC1H221, 220UF, 50V		2326293
C17	220uF	ECAP5/13	PANASONIC – EEUFC1H221, 220UF, 50V		2326293
C18	220uF	ECAP5/13	PANASONIC – EEUFC1H221, 220UF, 50V		2326293
C19	220uF	ECAP5/13	PANASONIC – EEUFC1H221, 220UF, 50V		2326293
C20	1000uF/50V	ECAP7.5/16	PANASONIC – EEUFC1H102, 1000UF, 50V		1848454
C21	1000uF/50V	ECAP7.5/16	PANASONIC – EEUFC1H102, 1000UF, 50V		1848454
C22	220uF	ECAP5/13	PANASONIC – EEUFC1H221, 220UF, 50V		2326293
C23	220uF	ECAP5/13	PANASONIC – EEUFC1H221, 220UF, 50V		2326293
C24	220uF	ECAP5/13	PANASONIC – EEUFC1H221, 220UF, 50V		2326293
C25	220uF	ECAP5/13	PANASONIC – EEUFC1H221, 220UF, 50V		2326293
C26	220uF	ECAP5/13	PANASONIC – EEUFC1H221, 220UF, 50V		2326293
C27	1000uF/50V	ECAP7.5/16	PANASONIC – EEUFC1H102, 1000UF, 50V		1848454
C28	1000uF/50V	ECAP7.5/16	PANASONIC – EEUFC1H102, 1000UF, 50V		1848454
C29	220uF	ECAP5/13	PANASONIC – EEUFC1H221, 220UF, 50V		2326293
D5	MUR820	TO220/DO41	DIODE, ULTRAFAST, 8A, 200V or 1N4007	26 S 8100	1625178, 2317417
D6	MUR820	TO220/DO41	DIODE, ULTRAFAST, 8A, 200V or 1N4007	26 S 8100	1625178, 2317417
D7	MUR820	TO220/DO41	DIODE, ULTRAFAST, 8A, 200V or 1N4007	26 S 8100	1625178, 2317417
D8	MUR820	TO220/DO41	DIODE, ULTRAFAST, 8A, 200V or 1N4007	26 S 8100	1625178, 2317417

D9	1N4007	DO41-10	DIODE	26 S 8100	
D10	MUR820	TO220/DO41	DIODE, ULTRAFAST, 8A, 200V or 1N4007	26 S 8100	1625178, 2317417
D11	MUR820	TO220/DO41	DIODE, ULTRAFAST, 8A, 200V or 1N4007	26 S 8100	1625178, 2317417
D12	MUR820	TO220/DO41	DIODE, ULTRAFAST, 8A, 200V or 1N4007	26 S 8100	1625178, 2317417
D13	MUR820	TO220/DO41	DIODE, ULTRAFAST, 8A, 200V or 1N4007	26 S 8100	1625178, 2317417
D14	1N4007	DO41-10	DIODE	26 S 8100	
IC1	7924	TO220V	VOLTAGE REGULATOR	-	9666290
IC2	7824	TO220V	VOLTAGE REGULATOR	50 S 1750	9666257
J5	GND TAB	PCB_TAB	PCB mounting tab	05 F 270	892609
J8	AC IN	TBLOCK5.0_3	Terminal block, PT 2.5/3-5.0-H, 3-pole, 10 mm	09 H 2401	1793675
KK1	SK104-PAD	SK104-PAD	Heatsink, H 50.8 mm, 9.0 K/W, SK 104 50.8 STS	70 B 677	1892331
KK2	SK104-PAD	SK104-PAD	Heatsink, H 50.8 mm, 9.0 K/W, SK 104 50.8 STS	70 B 677	1892331
KK3	SK104-PAD	SK104-PAD	Heatsink, H 50.8 mm, 9.0 K/W, SK 104 50.8 STS	70 B 677	1892331
KK4	SK104-PAD	SK104-PAD	Heatsink, H 50.8 mm, 9.0 K/W, SK 104 50.8 STS	70 B 677	1892331
Q19	IRF610	TO220BV	Power MOSFET N-Channel	24 S 3256	8648328
Q20	IRF9620	TO220BV	Power MOSFET P-Channel	-	9103570
R27	100R/2W	R_0617/22		32 E 708	1462388
R51	470R/2W	R_0617/22		18 E 704	1462390
R52	27R/2W	R_0617/22		32 E 694	1462382
R53	10K	0207/10			2329990
R54	330R	0207/10			1634037
R55	100R/2W	R_0617/22		32 E 708	1462388
R56	470R/2W	R_0617/22		18 E 704	1462390
R57	27R/2W	R_0617/22		32 E 694	1462382
R58	10K	0207/10			2329990
R59	330R	0207/10			1634037

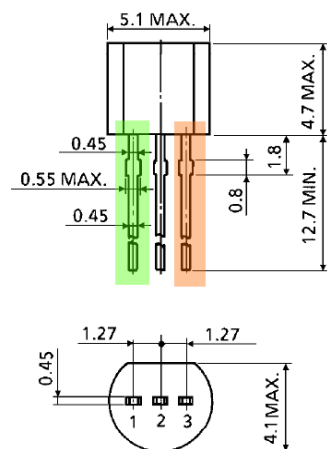
Separate power supply PCB components

C14	220uF/axial	E22-9/30-10		11 D 305, 11 D 395	8823642, 8823790
C15	220uF/axial	E22-9/30-10		11 D 305, 11 D 395	8823642, 8823790
C18	220uF/axial	E22-9/30-10		11 D 305, 11 D 395	8823642, 8823790
C25	220uF/axial	E22-9/30-10		11 D 305, 11 D 395	8823642, 8823790
D1	MUR820	TO220/DO41	DIODE, ULTRAFAST, 8A, 200V or 1N4007	26 S 8100	1625178, 2317417
D2	MUR820	TO220/DO41	DIODE, ULTRAFAST, 8A, 200V or 1N4007	26 S 8100	1625178, 2317417
F1		SH22,5A	FUSE HOLDER grid 22,5mm, isolated cap OGN0031 8201, Schurter		1162740
			SCHURTER - 0853.0551 - COVER, FOR OGN FUSEHOLDERS		1176774
J1		22-23-2051	MOLEX - 22-29-2051 - HEADER, VERTICAL, SQ PIN, 0.1", 5WAY		1360133

J2	22-23-2051	MOLEX - 22-29-2051 - HEADER, VERTICAL, SQ PIN, 0.1", 5WAY	1360133
NTC1 10R	NTC_R		80 E 6583, 1704469 80 E 6621
TR1	PCB_TRAFO2	PCB Transformer 2x115V, 2x18V, 10-30VA (Block FL type or Spitznagel SPF type)	34 C 634, 34 1131491, 1131498, C 644, 34 C 1131505, 1131518, 654 1131524

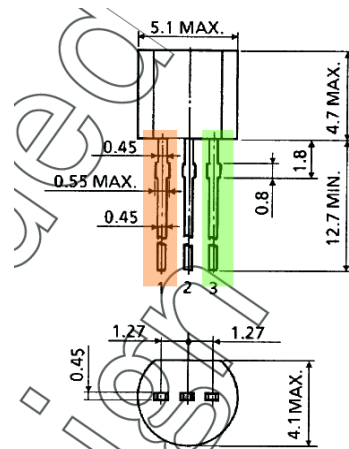
Single channel additional components

J1	IN	22-23-2021	MOLEX - 22-29-2031 - HEADER, THT, VERTICAL, 2.54MM, 2WAY	1360130
J2	OUT	22-23-2021	MOLEX - 22-29-2031 - HEADER, THT, VERTICAL, 2.54MM, 2WAY	1360130
J4	POWER	22-23-2051	MOLEX - 22-29-2051 - HEADER, VERTICAL, SQ PIN, 0.1", 5WAY	1360133



2SK170/2SJ74 pinout

- 1. DRAIN
- 2. GATE
- 3. SOURCE

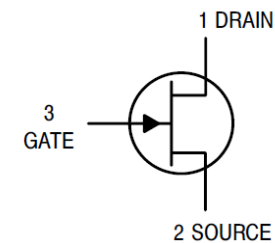
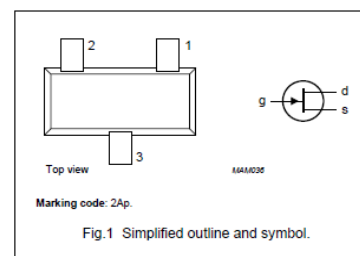


2SK246/2SJ103 pinout

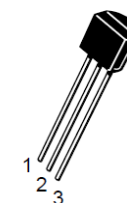
- 1. SOURCE
- 2. GATE
- 3. DRAIN

PINNING SOT23

PIN	DESCRIPTION
1	source
2	drain
3	gate



J310 pinout



TO-92
CASE 29-11
STYLE 5