

# McPhail Zero Analog Shield v1.0

Arduino Zero shield for the analog signal processing McPhail circuitry

## Bill of Materials

Ref	Qty	Description	Digikey PN
C1	1	CAP ALUM 330UF 20% 16V RADIAL	732-8798-1-ND
C10	1	CAP CER 0.27UF 16V X7R 0603	490-6427-1-ND
C11 C13 C2 C7	4	CAP CER 1.5UF 25V X7R 1206	1276-6873-1-ND
C12 C28 C8	3	CAP CER 0.01UF 50V X7R 0603	490-1512-1-ND
C14 C29 C4 C9	4	CAP CER 1UF 25V X7R 0805	1276-1066-1-ND
C15 C6	2	CAP CER 22UF 25V X7R 1210	1276-3392-1-ND
C16 C17 C19 C22	4	CAP CER 2.2UF 25V X7R 0805	1276-2953-1-ND
C18	1	CAP CER 33PF 16V X7R 0603	478-6211-1-ND
C20 C21 C23 C24	4	CAP CER 4.7UF 50V X7R 1206	1276-2789-1-ND
C25	1	CAP CER 10UF 16V X7R 0805	1276-2872-1-ND
C26	1	CAP CER 0.1UF 100V X7R 0603	490-3285-1-ND
C27	1	CAP CER 0.022UF 50V X7R 0603	1276-2004-1-ND
C3	1	CAP CER 0.22UF 25V X7R 0603	1276-1111-1-ND
C5	1	CAP CER 0.039UF 50V X7R 0603	1276-2056-1-ND
J1 J2	2	CONN TERM SCREW GREEN 2.54MM 2POS TH	ED10561-ND
J3	1	HEADER MALE 1POS	952-1902-ND
LED1	1	LED AMBER DIFFUSED 0603 SMD	475-2712-1-ND
R1 R32	2	RES SMD 220 OHM 5% 1/10W 0603	311-220GRCT-ND
R10	1	RES SMD 732 OHM 1% 1/10W 0603	P732HCT-ND
R11 R8	2	RES SMD 1.43K OHM 1% 1/10W 0603	P1.43KHCT-ND
R12 R16 R23	3	RES SMD 2.26K OHM 1% 1/10W 0603	311-2.26KHRCT-ND
R13	1	RES SMD 10K OHM 1% 1/8W 0603	RNCP0603FTD10K0CT-ND
R14	1	RES SMD 470 OHM 5% 1/4W 0603	RHM470DCT-ND
R15	1	RES SMD 97.6K OHM 1% 1/10W 0603	P97.6KHCT-ND
R17	1	RES SMD 68 OHM 1% 1/10W 0603	P68.0HCT-ND
R18 R19	2	RES SMD 91K OHM 1% 1/10W 0603	P91.0KHCT-ND
R2	1	RES SMD 64.9K OHM 1% 1/10W 0603	P64.9KHCT-ND
R20 R21	2	RES SMD 220K OHM 5% 1/8W 0805	P220KACT-ND
R22 R26	2	RES SMD 2.2K OHM 5% 1/10W 0603	P2.2KGCT-ND
R24 R28	2	RES SMD 22K OHM 5% 1/10W 0603	P22KGCT-ND
R25 R29	2	RES SMD 4.32K OHM 1% 1/10W 0603	P4.32KHCT-ND
R27	1	RES SMD 2.94K OHM 1% 1/10W 0603	P2.94KHCT-ND
R3 R4	2	RES SMD 100K OHM 1% 1/10W 0603	RMCF0603FG100KCT-ND
R30 R6	2	RES SMD 3.83K OHM 1% 1/10W 0603	P3.83KHCT-ND
R31	1	RES SMD 0.0 OHM JUMPER 1/8W 0603	MCT0603-0.0-ZZCT-ND
R5	1	RES SMD 1.87K OHM 1% 1/10W 0603	P1.87KHCT-ND
R7	1	RES SMD 10 OHM 1% 1/10W 0603	P10.0HCT-ND
R9	1	RES SMD 470 OHM 5% 1/4W 0603	311-1.02KHRCT-ND
S1	1	SWITCH TACTILE SPST-NO 0.05A 12V	SW1020CT-ND
U1 U2	2	IC OPAMP QUAD GP RRO 1MHZ SOIC14	MCP6004T-I/SLCT-ND
U3	1	IC OPAMP GP 3MHZ RRO 14SOIC	296-39258-1-ND
U4	1	IC OPAMP GP 1MHZ RRO MCP6001 SOT23-5	MCP6001T-I/OTCT-ND

Ref	Qty	Description	Adafruit PN
U5	1	ARDUINO ZERO SHIELD	2843

### Assembly Info for Quoting



