

	IPS9 daughter card for M2x: MILPITAS					Detailed Parts List					8/12/23	
row	ID	qty	value	description	power rating	PCB lead spacing	body size on PCB	lead diam on PCB	important considerations	example Mouser P/N (option 1)	example Mouser P/N (option 2)	
1	R1	1	0R47	0.47 ohms (5%)	0.25W	vertical mount	6.3 x 2.4 mm or less	0.55 mm	select for lowest cost	660-CF1/4CT52RR47J		
2	R2, 3	2	1R0	1.0 ohms (1%)	1/6 W	3.4 mm	3.4 x 1.9 mm or less	0.55 mm	metal film resistor	603-MFR-12FTF52-1R		
3	R4	1	649	649 ohms (1%)	1/6 W	3.4 mm	3.4 x 1.9 mm or less	0.55 mm	metal film resistor	71-CMF50649R00FHCB		
4	R5	1	1.6K	1.6K ohms (1%)	1/6 W	3.4 mm	3.4 x 1.9 mm or less	0.55 mm	metal film resistor	MFR-12FTF52-1K6	if unavailable use 620 ohms	
5	R6	1	7.5K	7.5K ohms (1%)	1/6 W	3.4 mm	3.4 x 1.9 mm or less	0.55 mm	metal film resistor	603-MFR-12FTF52-7K5		
6	R7,8	2	1K	1.0K ohms (1%)	0.5 W	vertical mount	6.3 x 2.4 mm or less	0.55 mm	metal film resistor	279-LR1F1K0		
7	R9,R10	1	499	499 ohms (1%)	1/6 W	3.4 mm	3.4 x 1.9 mm or less	0.55 mm	metal film resistor	603-MFR-12FTF52-499R		
8	R11	1	3.9K	3.9K ohms (1%)	1/6 W	3.4 mm	3.4 x 1.9 mm or less	0.55 mm	metal film resistor	603-MFR-12FTF52-3K9		
9	C1	1	1000U	1000 uF 35V electrol		5 mm	10 mm diameter	0.55 mm	select for lowest cost	667-EEU-FS1V102L		
10	C2	1	47U	47 uF 35V electrol		2.5 or 3.5	6.3 mm diam	0.55 mm	select for lowest cost	710-860080573003	710-860080573003 - corrected	
11	C3	1	2.2U	2.2 uF 50V ceram X7R		5 mm		0.55 mm	select for lowest cost	810-FG24X7R1H225KRT6		
12	C4-C7	4	0.1U	0.1 uF 50V ceram X7R		5 mm		0.55 mm	select for lowest cost	594-K104K15X7RF53H5		
13	C8	1	220U	220 uF 16V nonpolar		5 mm	10 mm diameter	0.55 mm	choose Nichicon UES !!	647-UES1C221MPM		
14	D1,2	2	1N4741A	11V, 1W Zener		10 mm		0.7 mm	select for lowest cost	78-1N4741A-TR		
15	IC1	1	LT1122	Opamp, single		DIP-8			Linear Technology - Milpitas	584-LT1122DCN8#PBF	if unavailable, TLE2071 or LT1056	
16	IC2	1	LM7171	Opamp, single		DIP-8			Texas Instruments	926-LM7171BIN/NOPB	none	
17	SOK1,2	2	DIP-8	DIP Sockets		DIP-8			choose milled pins	110-87-304-41-001101	Do not use are cheap @ amazon	