Peripheral Controller Breadboard Bill of Materials

12 - December - 2023   **Jessica McArthur**

Item Number	Quantity	Compontent Type	Value	Project Component(s) Included	Package	Supplier	Part Number	Cost/Part (Based on 100 QTY)	Cost/ PCB	Cost for 100 PCB
1	7	Resistor	100Ω	R1, R2, R3, R5, R7, R10, R13	SMD- 0805	Digi-Key Electronics	RNCP0805FTD100RCT-ND	$0.03	$0.21	$20.79
2	4	Resistor	1KΩ	R15, R18, R21, R22,	SMD- 0805	Digi-Key Electronics	RNCP0805FTD1K00TR-ND	$0.03	$0.11	$10.84
3	11	Resistor	330Ω	R4, R6, R8, R9, R11, R12, R14, R16, R17, R19, R20	SMD- 0805	Digi-Key Electronics	13-RC0805FR-7W330RLTR-ND	$0.05	$0.55	$54.89
4	4	Capacitor	.010µF, 6.3V	C1, C2, C3, C4	SMD- 0805	Digi-Key Electronics	399-17649-2-ND	$0.15	$0.60	$60.44
5	1	LED Array Bar	Red, 10 wide	BAR1	THD	Digi-Key Electronics	160-1066-ND	$0.62	$0.62	$62.16
6	1	Dip Switch	10 SPST	SW1	SMD	Digi-Key Electronics	2449-KG10E-ND	$0.81	$0.81	$80.98
7	6	Tactile Switch	SPST-NO 0.05A 12V	SW2, SW3, SW4, SW5, SW6, SW7	THD	Digi-Key Electronics	CKN9092-ND	$0.18	$1.10	$110.16
9	2	Rotary Encoder Switch	Incremental (Quadrature)	SW8, SW9	THD-Horizontal	Digi-Key Electronics	PEC12R-4125F-N0012-ND	$0.97	$1.94	$194.21
10	1	Pic 1788 Development Board	PCB	N/A	THD	ISU Robotics	N/A	$5.00	$5.00	$500.00
11	1	LED - Clear Standard	Yellow, 5mm,	D1	THD	Digi-Key Electronics	365-1183-ND	$0.24	$0.24	$24.20
12	1	Breadboard	Solderless	N/A		Digi-Key Electronics	1286-1220-ND	$49.00	$49.00	$4,900.00
							Total Cost:		**$60.19**	**$6,018.67**