

# **COMMONLY USED PARTS**

- Collection of commonly used parts in engineering designs
- Passive through hole components
- Electromechanical components switches, sockets
- Active components
- Links to parts



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# **1. Passive Components**

## 1.1 Through Hole

Description	Part #	Notes	Link	Cost	Project Use
.01uF MLCC Cap	SA105C103KAR	50V at 10%	<u>Link</u>	\$0.30	Max Night, Max Bell
.1uF MLCC Cap	AA105C104K4R	50V at 10%	<u>Link</u>	\$0.89	Max Night, Max Bell
.47uF MLCC Cap	SA305E474MAR	50V at 20%	<u>Link</u>	\$0.76	Max Night, Max Bell
22uF MLCC Cap	FK20X7R1C226M	16V at 20%	<u>Link</u>	\$0.74	Max Night, Max Bell
10K <b>Ω</b> Resistor	291-10K-RC	1/4W at 5%	<u>Link</u>	\$0.054	Max Night, Max Bell
100 $\Omega$ Resistor	271-100-RC	1/4W at 1%	<u>Link</u>	\$0.09	Max Night, Max Bell



# 2. Electromechanical Components

## 2.1 Through Hole

Description	Part #	Notes	Link	Cost	Project Use
Magnetic reed switch	505-101-WS		<u>Link</u>	\$2.59	Max Bell
Terminal block	1729128	2 post	<u>Link</u>	\$0.96	Max Bell
Terminal block		2 post	<u>Link</u>	\$0.79	Max Night
Female header	M22-7131042	2mm (suitable for XBEE), 10 pin	<u>Link</u>	\$1.78	Max Bell
Female header	90147-1106	100mil 6 pin	<u>Link</u>	\$1.43	Max Night
IC Socket	2-641264-1	20 pin PDIP	<u>Link</u>	\$0.84	Max Night, Max Bell
DC Power Jack	RAPC722X	Suitable for use with listed A/C adaptor	<u>Link</u>	\$1.00	Max Night, Max Bell
SPST Switch	1055-TA1220B-E VX		<u>Link</u>	\$2.66	Max Night



# **3. Active Components**

## 3.1 Through Hole

Description	Part #	Notes	Link	Cost	Project Use
RED LED	C503B-RCN-CW0 Z0AA1	5mm round	<u>Link</u>	\$0.139	Max Bell
GREEN LED	C503B-GCN-CY0C 0791	5mm round	<u>Link</u>	\$0.226	Max Bell
3.3V LDO DC-DC Regulator	MIC2940A-3.3WT		<u>Link</u>	\$3.33	Max Bell
5.0V LDO DC-DC Regulator	LM2940CT-5.0/N OPB		<u>Link</u>	\$1.64	Max Night
PIC16F1829	PIC16F1829-I/P	20 pin PDIP	<u>Link</u>	\$2.16	Max Night, Max Bell
DC Buzzer	PB-12N23P-03Q	2300Hz, 2-5V	<u>Link</u>	\$2.89	Max Bell
XBee Pro	XBP24-ASI-001		<u>Link</u>	\$34.00	Max Bell



## 4. Miscellaneous

Description	Part #	Notes	Link	Cost	Project Use
DC Power Supply	WSU090-1300	9V, 1.3A, suitable for use with DC jack listed in document	<u>Link</u>	\$8.99	Max Light, Max Bell