



Part Number	Description	Designator	Supplier	Quantity	Cost Per Board	Essential	Optional	Purpose
DFR0010	DFRDUINO NANO V3.1 (ARDUINO NANO	A1	ECEN SHOP	1	\$ 4.00	\$ 4.00		Control
GPTS203211B	SWITCH PUSHBUTTON SPST 1A 30V	B0, B1, B2, B3, B4, B5	DigiKey	6	\$ 4.44		\$ 4.44	Buttons
PS1240P02BT	Piezo Buzzer, Through Hole	BZ1	DigiKey	1	\$ 0.67	\$ 0.67		Sound
PJ-037A	CONN PWR JACK 2X5.5MM SOLDER	DC1	DigiKey	1	\$ 0.58	\$ 0.58		Power
68016-208HLF	Header 8 Right Angle 100 mil	H1	DigiKey	1	\$ 0.50		\$ 0.50	External Connections
LTL-4223	2 V drop 10 mA Red	LED1, LED2	DigiKey	2	\$ 0.72		\$ 0.72	Indicator Lights
SIT1534AI-H4-DCC-00.032G	Factory Programmable Oscilator	O1	DigiKey	1	\$ 2.12		\$ 2.12	Accurate Timing
3310R-125-103L	POT 10K OHM 1/4W PLASTIC LINEAR	POT1	DigiKey	1	\$ 2.74		\$ 2.74	Volume Control
200MSP1T1B1M2QEH	SWITCH TOGGLE SPDT 3A 120V	PWRSW	DigiKey	1	\$ 2.23	\$ 2.23		Power Switch
2N3904BU	TRANS NPN 40V 0.2A TO-92	Q1	DigiKey	1	\$ 0.21	\$ 0.21		Sound
CF14JT330R	330	R1	DigiKey	1	\$ 0.10		\$ 0.10	Indicator
MFR-25FBF52-9K53	9.53k	R2	DigiKey	1	\$ 0.10	\$ 0.10		Display
CF14JT1K00	1k	R3	DigiKey	1	\$ 0.10		\$ 0.10	Indicator
CF14JT1K00	1k	R4	DigiKey	1	\$ 0.10		\$ 0.10	Volume
CF14JT100R	100	R5	DigiKey	1	\$ 0.10		\$ 0.10	Volume
CF14JT18R0	18	R6	DigiKey	1	\$ 0.10	\$ 0.10		Sound
4116R-2-103LF	Resistor Pack	RP1	DigiKey	1	\$ 1.16	\$ 1.16		Control
LDQ-N516RI	LED 7-SEG .56 QUAD S-RED CC MULT	S1, S2	DigiKey	2	\$ 13.46	\$ 6.73	\$ 6.73	Display (1 Minimum)
SLG12014	SWITCH SLIDE SPDT 300MA 125V	SW0	DigiKey	1	\$ 1.34		\$ 1.34	I/O Switch
MAX7221	Serially Interfaced, 8-Digit LED Display Driver	X1	DigiKey	1	\$ 9.20	\$ 9.20		Display
RM3X10MM 2701	M3 Machine Screws		DigiKey	5	\$ 2.70		\$ 2.70	Mounting
	Breadboard Wire		ECEN SHOP		\$ 0.50	\$ 0.50		Bypassing Parts Extra Parts
				Total	\$ 43.97	\$ 25.48	\$ 18.99	
OSH PARK FAB			OSH PARK				\$ 33.00	
ECEN SHOP FAB			ECEN SHOP			\$ 4.00		
				Total		\$ 29.48	\$ 77.47	
				Quality		Basic	Full	