

Sheet1

Parts guide for the Arduino Uno 8x1 multiplexer shield printed circuit board

<u>Schematic ID</u>	<u>Part</u>	<u>Value</u>	<u>Vendor</u>
C1	Capacitor	100uF	DigiKey
C2	Capacitor	10uF	DigiKey
C3	Capacitor	220nF (0.22uF)	DigiKey
D1	Diode	50V / 1A	DigiKey
F1	Polyswitch (resettable fuse)	0.2A	DigiKey
Error	Red LED	3mm	DigiKey
On/Off	Yellow LED	3mm	DigiKey
Run	Green LED	3mm	DigiKey
IC1	Voltage regulator (positive)	5V	DigiKey
IC2	Multiplexer	4051BE 8x1	DigiKey
IC3	Voltage reference	Ref02 5V	DigiKey
ICSP	Header	2x3	DigiKey
S1	Tactile switch	24V, 0.05A	DigiKey
S2	Slide switch	30V, 0.2A	DigiKey
ST1	Screw terminal	1x12	DigiKey
ST2	Screw terminal	1x12	DigiKey
Board PWR	Power jack	2.1mm	DigiKey
R0	Resistor	100K, 1/4W, 1%	DigiKey
R1	Resistor	100K, 1/4W, 1%	DigiKey
R2	Resistor	100K, 1/4W, 1%	DigiKey
R3	Resistor	100K, 1/4W, 1%	DigiKey
R4	Resistor	100K, 1/4W, 1%	DigiKey
R5	Resistor	100K, 1/4W, 1%	DigiKey
R6	Resistor	100K, 1/4W, 1%	DigiKey
R7	Resistor	100K, 1/4W, 1%	DigiKey
R8	Resistor	10K, 1/4W, 1%	DigiKey
R9	Resistor	1K, 1/4W, 5%	DigiKey
R10	Resistor	100K, 1%	DigiKey
R11	Resistor	100K, 1%	DigiKey
R12	Resistor	100K, 1%	DigiKey
R13	Resistor	1K, 1/4W, 5%	DigiKey
R14	Resistor	1K, 1/4W, 5%	DigiKey
R15	Resistor	10K, 1/4W, 1%	DigiKey
R16	Resistor	4.7K, 1/4W, 1%	DigiKey
	IC Socket	16 position (8x2)	DigiKey
	IC Socket	8 position (4x2)	DigiKey

Additional parts required for the project

Stackable header kit x 2 2x8Pin, 2x6Pin	SparkFun	PRT-10007
Arduino Uno R3	SparkFun	DEV-11021
Adafruit data logging shield	Adafruit	ID: 1141

Vendor Part Number

P5152-ND
P14482-ND
445-2849-ND
1N4001FSCT-ND
RXEF020-ND
754-1218-ND
754-1220-ND
754-1217-ND
LM7805CT-ND
296-2057-5-ND
REF02CPZ-ND
3M9459-ND
SW400-ND
EG1903-ND
A98043-ND
A98043-ND
CP-102A-ND
RNF14FTD100KCT-ND
RNF14FTD100KCT-ND
RNF14FTD100KCT-ND
RNF14FTD100KCT-ND
RNF14FTD100KCT-ND
RNF14FTD100KCT-ND
RNF14FTD100KCT-ND
RNF14FTD100KCT-ND
RNF14FTD10K0CT-ND
CF14JT1K00CT-ND
RNF14FTD100KCT-ND
RNF14FTD100KCT-ND
RNF14FTD100KCT-ND
CF14JT1K00CT-ND
CF14JT1K00CT-ND
RNF14FTD10K0CT-ND
RNF14FTD4K75CT-ND
A100206-ND
A100204-ND