ECEN 250 Remote Lab Kit: NI myDAQ, Soldering Kit, and Accessories

Item	Description
1	**NI myDAQ** - Hardware only
2	**Soldering Iron Kit** Electronics, 21-in-1, 60W Adjustable Temperature Soldering Iron, 5pcs Soldering Iron Tips, Soldering Iron Stand, Desoldering Pump, Magnifier, Solder Wire, Tweezer, PU Carry Bag
3	**PCB Holder** - Aven 17010 Adjustable Circuit Board Holder
4	**Flux Pen** - MG Chemicals Flux Pen Soldering, 2 x 10 mL, Amber
5	**Jumper wires** - Elegoo EL-CP-004 60pcs Multicolored Dupont Wire 20pin Male to Female, 20pin Male to Male, 20pin Female to Female Breadboard Jumper Wires Ribbon Cables Kit for arduino
6	**Safety Glasses** - Gateway Safety 3699 Colorful Starlite Gumballs Safety Glasses, Small, All Colors Included
7	**Kimwipes** - Kimtech Science Task Wipes Kimwipes KCC34155-06 (Original Version)
8(a)	with Screw On Cap
8(b)	**Isopropyl Alcohol** - Equate 91% Isopropyl Alcohol Antiseptic (inside Dropper bottle above)
10	**Toothbrush** - Toothbrush Individually Wrapped Standard Medium Bristle
11	**Solder Wick** - Chemtronics Desoldering Braid, Chem-Wik, Rosin, 10-50L 0.10", 1ft.
12(a)	**Solder** - Kester Sn63Pb37 2.2%/245 .020 (2463378834) (on Bobbin below)
12(b)	**Bobbin** - Class 15 Clear Bobbins Made to Fit Singer 006066008

Componets Needed For Daughter boards	Buffer	Mixer	T&B	Extras	Total per kit
LF347DT Op Amp	1	1	1	3	6
Header Pins	7	10	23	40	80
Resistors					
10 kΩ	2	7		5	14
30 kΩ	2			1	3
600 Ω		1		1	2
15 kΩ		1		1	2
100 kΩ		1		1	2
4 kΩ			8	4	12
800 Ω			4	2	6
Capacitors					
55.7 nF			2	1	3
36 nF			2	1	3
Daughter PCBs	1	1*	1*	0	1

* To be designed by students

Actual Components Supplied	Qty	
Op Amp (LF347DT)	6	
Header Pins (40 Pin Strips)	2	
Resistors		
10 kΩ, 1%, 1/4 W, SMD 0805	14	
30 kΩ, 1%, 1/4 W, SMD 0805	3	
600 Ω, SMD 0805	2	
15 kΩ, 1%, SMD 0603	2	
100 kΩ, 5%, 1/8 W, SMD 0805	2	
8.2 kΩ, SMD 1206	24	8.2 kΩ||8.2 kΩ = 4.1 kΩ
820 Ω, SMD 1206	6	
Capacitors		
47 nF, 10%, 50 VDC, SMD 0805	3	47 nF || 6.8 nF = 54 nF
6.8 nF, 10%, 50 VDC, SMD 0805	3	
33 nF, 10%, 50 VDC, SMD 0805	3	33 nF || 3.3 nF = 36 nF
3.3 nF, 10%, 100 VDC, SMD 0805	3	

Buffer PCB	1