

Part Description	Part Number	Manufacturer	Vendor	Unit Price	Quantity	Price	Lead Time	Link	Notes
Display Enclosure					1				
Desktop	N82E16883103415	Accer	Newegg	\$599.99	1	\$599.99	1 day	<a href="http://www.">http://www.</a>	
USB Stick	N82E16820161417	Wintec	Newegg	\$7.99	1	\$7.99	1 day	<a href="http://www.">http://www.</a>	
USB Hub	N82E16817182057	Rosewell	Newegg	\$14.99	1	\$14.99	1 day	<a href="http://www.">http://www.</a>	
Arduino Board	-	-	-	-	1	-	-		
Site Visits	-	-	-	\$450.00	2	\$900.00	-		
<b>Mechanical</b>									
Thermal Insulation	Super Firetemp 'M' 5' x 4' x 1"	Advanced Material Science	-	\$67.91	1	\$0.00	1 day	<a href="http://advan">http://advan</a>	POC: Eric Ganster eric@advancedmaterialscience.com 724-736-8108 phone
MACHINING/PREFAB		Advanced Material Science	-	\$681.00	1	\$681.00	1 day		
Low-Carbon Steel Sheet 16" x 16" x 2"	1388K861	Mcmaster-Carr	-	\$395.27	1	\$0.00	1 day	<a href="http://www.">http://www.</a>	
Low-Carbon Steel Sheet 16" x 16" x 1.5"	1388K761	Mcmaster-Carr	-	\$317.24	2	\$0.00	1 day	<a href="http://www.">http://www.</a>	
Multipurpose Aluminum (Alloy 6061) 3/8" Thick X 10" Width X 3' Length	8975K133	Mcmaster-Carr	-	\$68.89	1	\$68.89	1 day	<a href="http://www.">http://www.</a>	
Multipurpose Aluminum (Alloy 6061) Rect Tube 1/8" Wall Thickness, 1-1/2" X 1-1/2", 6' Length	6546K12	Mcmaster-Carr	-	\$43.65	6	\$0.00	1 day	<a href="http://www.">http://www.</a>	
Multipurpose Aluminum (Alloy 6061) Rect Tube 1/4" Wall Thickness, 2-1/2" X 2-1/2", 3' Length	6546K313	Mcmaster-Carr	-	\$70.31	1	\$0.00	1 day	<a href="http://www.">http://www.</a>	
Multipurpose Aluminum (Alloy 6061) Rect Tube 1/4" Wall Thickness, 2" X 2", 3' Length	6546K273	Mcmaster-Carr	-	\$55.02	1	\$0.00	1 day	<a href="http://www.">http://www.</a>	
Multipurpose Aluminum (Alloy 6061) .125" Thick, 48" X 48"	89015K88	Mcmaster-Carr	-	\$283.35	2	\$0.00	1 day	<a href="http://www.">http://www.</a>	
Multipurpose Aluminum (Alloy 6061) w/ Cert 1/2" Thick, 12" Wide, 6' Length	1614T843	Mcmaster-Carr	-	\$228.76	1	\$228.76	1 day	<a href="http://www.">http://www.</a>	
Metric Flat Head Phillips Machine Screw Zinc-Plated STL, M6 Size, 40mm Length, 1mm Pitch, packs of 100	91420A442	Mcmaster-Carr	-	\$13.75	1	\$13.75	1 day		
Metric 18-8 Stainless Steel Low Head Socket Cap Screw, M6 Size, 60 mm length, 1 mm Pitch, Packs of 5	92855A643	Mcmaster-Carr	-	\$7.68	1	\$0.00	1 day		
Metric Flat Head Phillips Machine Screw Zinc-Plated STL, M8 Sz, 35mm Length, 1.25mm Pitch	91420A540	Mcmaster-Carr	-	\$6.50	2	\$13.00	1 day		
Metric Zinc-Plated Steel Hex Nut Class 8, M8 Size, 1.25mm Pitch, 13mm W, 6.5mm H	90591A161	Mcmaster-Carr	-	\$5.07	1	\$5.07	1 day		
Type 316 SS Pan Head Phillips Machine Screw 6-32 Thread, 3/8" Length	91735A146	Mcmaster-Carr	-	\$5.37	1	\$5.37	1 day		
18-8 SS Standard Helical Insert without Tang 6-32 Internal Thread, .276" Length, NAS1130	91990A225	Mcmaster-Carr	-	\$4.97	6	\$29.82	1 day		
25lb. Handle Magnets	472855	Grainger		\$7.01	8	\$56.08	1 week?		<a href="http://www.truevalue.com/product/Powerful-Handle-Magnet-25-Lb-Pull/10547.uts?keyword=handle%20magnets#undefined">http://www.truevalue.com/product/Powerful-Handle-Magnet-25-Lb-Pull/10547.uts?keyword=handle%20magnets#undefined</a>
Zinc-Plated STL Flat Head Phil Machine Screw 1/4"-20 Thread, 1-1/2" Length	90273A546	Mcmaster-Carr	-	\$7.34	1	\$0.00	1 day		
Zinc-Plated STL Flat Head Phil Machine Screw 1/4"-20 Thread, 1-3/4" Length, packs of 50	90273A548	Mcmaster-Carr	-	\$7.44	1	\$0.00	1 day		
Zinc-Plated STL Flat Head Phil Machine Screw 1/4"-20 Thread, 7/8" Length, packs of 100	90273A541	Mcmaster-Carr	-	\$8.55	1	\$0.00	1 day		
Square Head Extended (Dog) Point Set Screw Alloy Steel, 3/8" -16 Thread, 3/4" Length	91418A622	Mcmaster-Carr	-	\$3.50	6	\$0.00	1 day		
Zinc-Plated STL Flat Head Phil Machine Screw 3/8"-16 Thread, 1" Length, packs of 25	90273A624	Mcmaster-Carr	-	\$6.61	1	\$0.00	1 day		
Zinc-Plated STL Flat Head Phil Machine Screw 3/8"-16 Thread, 3" Length, packs of 10	90273A636	Mcmaster-Carr	-	\$5.42	1	\$0.00	1 day		
Znc-Pltd Grade 2 STL Nylon-Insert Hex Locknut 3/8"-16 Thread Size, 9/16" Width, 29/64" Height, packs of 100	90640A131	Mcmaster-Carr	-	\$6.90	1	\$0.00	1 day		

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Grade 8 Alloy Steel Hex Head Cap Screw Zinc Yellow-Plated, 1/4"-20 Thread, 3" Length	91257A554	Mcmaster-Carr	-	\$10.33	1	\$0.00	1 day		
Grade 8 Alloy Steel Hex Head Cap Screw Zinc Yellow-Plated, 1/4"-20 Thread, 4" Length	91257A558	Mcmaster-Carr	-	\$4.06	1	\$0.00	1 day		
Hand-Held Retrieving and Holding Magnet 100# Approx Pull, 3-3/8" L X 2-3/8" W X 4-13/16" H	57865A55	Mcmaster-Carr	-	\$115.05	4	\$0.00	1 day	http://www.	
GAST Pump, 1/8 HP - ROA-P251-AA	5Z669	Grainger		\$358.50	-1	\$0.00	1 day	http://www.	
Industrial-Shape Hose Coupling Set - 1/4" Cplg Size, 1/4" Male NPTF x 1/4" Female NPTF	560K12	Mcmaster-Carr		\$6.05	-6	\$0.00	1 day	http://www.	
Universal Hose Sockets - 1/4" NPTF Femle, 1/4" Cplg Size	53475K21	Mcmaster-Carr		\$8.84	-8	\$0.00	1 day	http://www.	
Industrial Shaped Hose Coupling - Znc-Pltd, 3/8" NPTF Male, 1/4" Cplg Size	6534K47	Mcmaster-Carr		\$1.44	-1	\$0.00	1 Day	http://www.	
Industrial Shaped Hose Coupling - Znc-Pltd, 1/4" NPTF Male, 1/4" Cplg Size	6534K46	Mcmaster-Carr		\$1.03	-1	\$0.00	1 Day	http://www.	
Aluminum Manifold with Brass Push-to-Connect Tube Fitting 6 Outlets for 1/4" Tube OD, 3/8" NPTF Inlet	4785K22	Mcmaster-Carr		\$69.44	-1	\$0.00	1 day	http://www.	
High-Temp Type 321SS Braided Air & Water Hose W/SS - Male x Male Fittings - 1/4" ID, 1800 PSI	5680K61	Mcmaster-Carr		\$79.61	-7	\$0.00	1 day	http://www.	10 Ft
Arrow 3/16" Medium 1/4" Grip Range 50 Pack Aluminum Rivets	Item: 45313 Model: RMA3/16IP	Arrow	Lowes	\$5.28	1	\$5.28	1 day	http://www.	
Corrosion-Resistant PVC Enclosure (NEMA 4X/13) - 12.9" H x 12.9" W x 4.7" D	8261K29	Mcmaster-Carr		\$88.76	2	\$177.52		http://www.	
Custom Cut Mirror (8" x 3")			Lowes	\$25.00	1	\$25.00	1 day		
Clear Diffuser									
FASTENERS		FASTENAL/Mcmaster-Carr		\$100.00	1	\$100.00			
Paragon Water Jet cutting - 0.125" shutter		Paragon Steel Rule Die Inc.		\$13.00	6	\$78.00		http://www.	
Paragon Water Jet cutting and bending - 0.125" Magnet Support		Paragon Steel Rule Die Inc.		\$20.00	6	\$120.00			
Paragon Water Jet cutting, bending and welding - 0.125" Enclosure		Paragon Steel Rule Die Inc.		\$120.00	6	\$720.00			
Minitec - Support and Sliding System		Minitec		\$2,670.07	1	\$2,670.07	2 weeks		
<b>Electrical</b>									
USB to RS422 Cable	B001MSV7VA	CablesToBuy	Amazon	\$21.95	6	\$131.70	3-5 days	http://www.	
Time of Flight Sensor	ILR-1181-30	Micro-Epsilon	MCT/RAM	\$1,840.00	6	\$11,040.00	2 weeks	http://www.	
Green LED	720-LTL29SP2R125Z	Osram Opto	Mouser	\$0.98	20	\$19.64	1 day	http://www.	
Red LED	720-LSL296-N1Q2-1-Z	Osram Opto	Mouser	\$0.12	40	\$4.76	1 day	http://www.	
Resistor (0 ohm)	667-ERJ-3GEY0R00V	Panasonic	Mouser	\$0.04	20	\$0.80	1 day	http://www.	
Resistor (330 ohm)	667-ERJ-3EKF3300V	Panasonic	Mouser	\$0.02	30	\$0.45	1 day	http://www.	
Resistor (360 ohm)	667-ERJ-3EKF3600V	Panasonic	Mouser	\$0.02	30	\$0.45	1 day	http://www.	Not Rrequired
Resistor (10k ohm)	ERJ-3EKF1002V	Panasonic	Mouser	\$0.04	15	\$0.60	1 day	http://www.	
Diode	512-GF1J	Fairchild Semiconductor	Mouser	\$0.17	10	\$1.70	1 day	http://www.	
Transistors (Darlington)	863-MBT2222ADW1T1G	On Semiconductor	Mouser	\$0.23	6	\$1.38	1 day	http://www.	Not Required
DB9 Socket	651-1688997	Phoenix Contact	Mouser	\$0.61	50	\$30.70	1 day	http://www.	Ordered 15 more 4/25
Resistor (750 ohm)	667-ERJ-3EKF7500V	Panasonic	Mouser	\$0.02	50	\$0.75	1 day	http://www.	Ordered 20 more 4/25

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DB9 Housing	651-1688861	Phoenix Contact	Mouser	\$2.48	8	\$19.84	1 day	<a href="http://www.">http://www.</a>	
DB9 Strain Relief	651-1655658	Phoenix Contact	Mouser	\$9.19	7	\$64.33	1 day	<a href="http://www.">http://www.</a>	Received 2 of 7
D-sub Pin Remover Tool	276-1426	Radio Shack	Radio Shack	\$3.99	1	\$3.99	1 day	<a href="http://www.">http://www.</a>	
Butt Splice	571-323975	TE Connectivity	Mouser	\$0.47	25	\$11.85	1 day	<a href="http://www.">http://www.</a>	
Heat Shrink Tubing	5174-13641	3M Electronic Specialty	Mouser	\$0.91	1	\$0.91	1 day	<a href="http://www.">http://www.</a>	
Wire (24AWG)	602-1550-100-02	Belden Wire & Cable	Mouser	\$29.81	4	\$119.24	1 day	<a href="http://www.">http://www.</a>	
Wire (24AWG/4 Shielded)	566-9502-100	Belden Wire & Cable	Mouser	\$59.28	2	\$118.56	2 weeks	<a href="http://www.">http://www.</a>	Received 1 of 2 spools
Wire Wrap (large)	602-130018-50BK	Alpha Wire	Mouser	\$31.96	2	\$63.92	1 day	<a href="http://www.">http://www.</a>	Not Required
Wire Wrap (small)	602-160012-50BK	Alpha Wire	Mouser	\$171.83	1	\$171.83	1 day	<a href="http://www.">http://www.</a>	
Wire Labels	644-S100X150VADY	Panduit	Mouser	\$0.20	100	\$20.00	1 day	<a href="http://www.">http://www.</a>	Not Required
PCB Board	PCB01	ExpressPCB	ExpressPCB	\$75.00	1	\$99.45	5 days		ETA: Wednesday April 12
Diffuser Sheet (Lens)		Grainger	Grainger	\$23.88	1	\$23.88	1 day	<a href="http://www.">http://www.</a>	
Right Angle Round Connector (12 pin)	99 5630 75 12	Binder	Binder USA	\$22.53	6	\$135.18	1 week	<a href="http://www.">http://www.</a>	
Panel Mount Round Connector (12 pin)	09 0131 80 12	Binder	Binder USA	\$15.10	6	\$90.60	1 week	<a href="http://www.">http://www.</a>	
Straight Round Connector (6 pin)	99 5122 40 06	Binder	Binder USA	\$12.03	1	\$12.03	1 week	<a href="http://www.">http://www.</a>	
Panel Mount Round Connector (6 pin)	09 0123 89 06	Binder	Binder USA	\$11.90	1	\$11.90	TBD	<a href="http://www.">http://www.</a>	
Wire Grommet	571-2-1102771-0	TE Connectivity	Mouser	\$3.44	1	\$3.44	1 day	<a href="http://www.">http://www.</a>	
Power Supply (120VAC to 24VDC)	675-CENB1050A2403F01	Condor / SL Power	Mouser	\$26.39	1	\$26.39	1 day	<a href="http://www.">http://www.</a>	
Transistors (Darlington)	522-FZTA14TA	Diodes Inc.	Mouser	\$0.48	10	\$4.80	1 day	<a href="http://www.">http://www.</a>	
Power Supply (120VAC to 15VDC)	552-PSA-A18U-150	Phihong	Mouser	\$17.73	1	\$17.73	1 day	<a href="http://www.">http://www.</a>	
Ordered - Received									
Ordered - Not Received									
Not Ordered									
						Parts Total:	\$18,773.38		
						5% Contingency:	\$938.67		
						Grand Total:	\$19,706.14		