












	Part	Description	Price	Quantity	OEM	URL 1	URL 2
Electrical							
	NI cRIO-9024	Real-Time Controller: 800 MHz, 512 MB DRAM, 4 GB Storage	1242	1	<a href="http://www.ni.com/">http://www.ni.com/</a>	<a href="http://sine.ni.com/nips/cds/view/p">http://sine.ni.com/nips/cds/view/p</a>	N/A
	NI cRIO-9111	4-slot reconfigurable embedded chassis that accepts any CompactRIO I/O module	899.1	1	<a href="http://www.ni.com/">http://www.ni.com/</a>	<a href="http://sine.ni.com/nips/cds/view/p">http://sine.ni.com/nips/cds/view/p</a>	N/A
	NI 9870	Includes 10P10C-DE9 Cables (x4) For interfacing with sensors and controllers	596	1	<a href="http://www.ni.com/">http://www.ni.com/</a>	<a href="http://sine.ni.com/nips/cds/view/p">http://sine.ni.com/nips/cds/view/p</a>	N/A
	Microstrain 3DM-GX3® -45	3 Axis Gyroscope, 3 Axis Accelerometer, GPS	3795	1	<a href="http://www.microstrain.com/">http://www.microstrain.com/</a>	<a href="http://www.microstrain.com/inertial/3dm-gx3-45#?tab=buy">http://www.microstrain.com/inertial/3dm-gx3-45#?tab=buy</a>	N/A
	RoboteQ HBL2350	Roboteq's is a high-current, dual channel controller for the hall-sensor equipped brushless hubmotors	625	1	<a href="http://www.roboteq.com/">http://www.roboteq.com/</a>	<a href="http://roboteq.com/brushless-dc-motor-controllers/hbl2350-">http://roboteq.com/brushless-dc-motor-controllers/hbl2350-</a>	<a href="http://www.robotmarketplace.com/products/RTQ-">http://www.robotmarketplace.com/products/RTQ-</a>
	ZyXEL WiFi Router	ZyXEL Wireless N Pocket Travel Router and Access Point (MWR102)	24.71	1	<a href="http://www.zyxel.com/">http://www.zyxel.com/</a>	<a href="http://www.amazon.com/ZyXEL-Wireless-Pocket-Travel-MWR102/dp/B005V">http://www.amazon.com/ZyXEL-Wireless-Pocket-Travel-MWR102/dp/B005V</a>	<a href="http://www.newegg.com/Product/Produc">http://www.newegg.com/Product/Produc</a>
	Emergency Stop Switch w/ Key	For emergency and lock security	69.95	1	<a href="http://www.ia.omron.com/">http://www.ia.omron.com/</a>	<a href="http://www.digikey.com/product-search/en?mpart=A22E-MK-02&amp;vendor=236">http://www.digikey.com/product-search/en?mpart=A22E-MK-02&amp;vendor=236</a>	<a href="http://www.omron-ap.co.in/product_info/A22E">http://www.omron-ap.co.in/product_info/A22E</a>
	Yellow E-stop box	To mount E-stop	33.43	1	<a href="http://www.ia.omron.com/">http://www.ia.omron.com/</a>	<a href="http://www.digikey.com/catalog/en/part">http://www.digikey.com/catalog/en/part</a>	



Note	
	8040.35
Use torque control setting	
Verry Handy for rapid testing and live feeds	
Key may be more trouble that it's worth	



Note	
Had to swap to Normally Closed	
Would get a shorter barrel length	
To protect IMU investment from unregulated power rial	
Would recomend a trigger voltage lower than 24v with current setup	
Great for large gauge cable	

	Part	Description	Price	Quantity	OEM	URL 1	URL 2
	Tysonic Rechargeable Battery	Tysonic Non-Spillable Sealed Lead Acid (SLA/AGM) Rechargeable Battery 12V, 7.5 Ahr, Terminal Type: F2)	21.99	2	<a href="http://www.batteryonestop.com/baotongusa/inc">http://www.batteryonestop.com/baotongusa/inc</a>	<a href="http://www.powerwerx.com/batteries-chargers/sealed-lead-acid-absorbent-glass-mat-battery.html">http://www.powerwerx.com/batteries-chargers/sealed-lead-acid-absorbent-glass-mat-battery.html</a>	N/A
Frame Components							
	80x80mm aluminum extrusion	center column	18.9	1	<a href="http://www.8020.net/">http://www.8020.net/</a>	<a href="http://download.8020.net/2012_Product_C">http://download.8020.net/2012_Product_C</a>	
	40x80mm aluminum extrusion	junction joints	6.72	2	<a href="http://www.8020.net/">http://www.8020.net/</a>	<a href="http://download.8020.net/2012_Product_C">http://download.8020.net/2012_Product_C</a>	
	40x80mm aluminum extrusion	forks	16.8	4	<a href="http://www.8020.net/">http://www.8020.net/</a>	<a href="http://download.8020.net/2012_Product_C">http://download.8020.net/2012_Product_C</a>	
	extrusion end caps	caps	1.6	8	<a href="http://www.8020.net/">http://www.8020.net/</a>	<a href="http://download.8020.net/2012_Product_C">http://download.8020.net/2012_Product_C</a>	
	machining	labor for machining by 80-20	87.1		<a href="http://www.8020.net/">http://www.8020.net/</a>	<a href="http://download.8020.net/2012_Product_C">http://download.8020.net/2012_Product_C</a>	
	self tapping cap screws	screw in the end caps	0.28	16	<a href="http://www.8020.net/">http://www.8020.net/</a>	<a href="http://download.8020.net/2012_Product_C">http://download.8020.net/2012_Product_C</a>	
	end fasteners	attach joints to column	1.65	8	<a href="http://www.8020.net/">http://www.8020.net/</a>	<a href="http://download.8020.net/2012_Product_C">http://download.8020.net/2012_Product_C</a>	
	anchor fastener	attach components to frame	3.25	8	<a href="http://www.8020.net/">http://www.8020.net/</a>	<a href="http://download.8020.net/2012_Product_C">http://download.8020.net/2012_Product_C</a>	
	roll in T-nut - M4	attach components to frame	1.6	10	<a href="http://www.8020.net/">http://www.8020.net/</a>	<a href="http://download.8020.net/2012_Product_C">http://download.8020.net/2012_Product_C</a>	
	roll in T-nut - M5	attach components to frame	1.6	6	<a href="http://www.8020.net/">http://www.8020.net/</a>	<a href="http://download.8020.net/2012_Product_C">http://download.8020.net/2012_Product_C</a>	
	roll in T-nut - M6	attach components to frame	1.6	12	<a href="http://www.8020.net/">http://www.8020.net/</a>	<a href="http://download.8020.net/2012_Product_C">http://download.8020.net/2012_Product_C</a>	

Note	
part#: 40-8080 - cut to 300mm	
part#: 40-4080 - cut to 160mm	
part#: 40-4080 - cut to 400mm	
part# 40-2045 this was required to use official 80- 20 parts	
part# 40-3267	
part# 40-3891	
part# 40-3897	
part# 13027	
part# 13028	
part# 13031	

	Part	Description	Price	Quantity	OEM	URL 1	URL 2
	bolt assortment	attach components to frame	12.46	1	Titan	<a href="http://www.amazon.com/Titan-45307-Metric-Socket-Assortment/dp/B009">http://www.amazon.com/Titan-45307-Metric-Socket-Assortment/dp/B009</a>	
	Industrial Strength Velcro - White	attach components to frame and other components	27.97	1	Velcro	<a href="http://www.lowes.com/ProductDisplay">http://www.lowes.com/ProductDisplay</a>	

Note	
purchased through amazon from Tool Liquidators part# Titan 45307	
purchased from lowes part# 20048- 90198	