

Supplier	Part Description	Part Number	Where to get more...
Altium	Altium Designer Software	14-000-S	<a href="http://www.altium.com">www.altium.com</a>
American Casting	Bag & Tag Seals	9001-16	<a href="http://www.americancasting.com">www.americancasting.com</a>
Analog Devices	Accelerometer	ADXL234	This product not available for purchase, design files posted <a href="#">here</a>
Analog Devices	Gyro	ADW22307	This product not available for purchase, design files posted <a href="#">here</a>
Anderson Power Products	SB50 Red Housing	992G1-BK	<a href="http://www.andersonpower.com">www.andersonpower.com</a>
Anderson Power Products	Contact #6/#8 AWG	265G5	<a href="http://www.andersonpower.com">www.andersonpower.com</a>
AndyMark	C-Base	AM-0735	<a href="http://www.andymark.com">www.andymark.com</a>
AndyMark	CIMple Box Gearbox	AM-0734	<a href="http://www.andymark.com">www.andymark.com</a>
AndyMark	6" HiGrip FIRST Wheel	AM-0940	<a href="http://www.andymark.com">www.andymark.com</a>
AndyMark	S35-26LE Sprocket	AM-0744	<a href="http://www.andymark.com">www.andymark.com</a>
AndyMark	S35-12DHE	AM-0743	<a href="http://www.andymark.com">www.andymark.com</a>
AndyMark	35 Series Roller Chain	AM-0367	<a href="http://www.andymark.com">www.andymark.com</a>
AndyMark	Connecting Link for 35 Chain	AM-0368	<a href="http://www.andymark.com">www.andymark.com</a>
AndyMark	3/8" ID Ball Bearing	AM-0209	<a href="http://www.andymark.com">www.andymark.com</a>
AndyMark	Battery Plug	AM-0122	<a href="http://www.andymark.com">www.andymark.com</a>
AndyMark	10-24 Thread Forming Screw	AM-1123	<a href="http://www.andymark.com">www.andymark.com</a>
AndyMark	CIM Motor	AM-0255	<a href="http://www.andymark.com">www.andymark.com</a>
AndyMark	Gasket Kit for cRIO	AM-0590	<a href="http://www.andymark.com">www.andymark.com</a>
AndyMark	9015 Motor	AM-9012	<a href="http://www.andymark.com">www.andymark.com</a>
AndyMark	PG71 Motor	AM-9014	<a href="http://www.andymark.com">www.andymark.com</a>
austriamicrosystems	Magnetic Rotary Encoder	AS5030-AB	<a href="http://www.austriamicrosystems.com/eng/Products/Magnetic-Encoders">www.austriamicrosystems.com/eng/Products/Magnetic-Encoders</a> or from <a href="http://digikey.com">digikey.com</a>
austriamicrosystems	Magnetic Linear Encoder	AS5304-AB	<a href="http://www.austriamicrosystems.com/eng/Products/Magnetic-Encoders">www.austriamicrosystems.com/eng/Products/Magnetic-Encoders</a> or from <a href="http://digikey.com">digikey.com</a>
Autodesk	Inventor CAD Software	N/A	<a href="http://www.autodesk.com/first">www.autodesk.com/first</a>
AutomationDirect.com	Push to Connect Pneumatic Fittings	Various	<a href="http://www.automationdirect.com">www.automationdirect.com</a>
AutomationDirect.com	Direct Mount Terminal Strip	BM-M092CS	<a href="http://www.automationdirect.com">www.automationdirect.com</a>
AutomationDirect.com	Wire	Various	<a href="http://www.automationdirect.com">www.automationdirect.com</a>
AutomationDirect.com	Ethernet Crossover Cable	078-505	<a href="http://www.automationdirect.com">www.automationdirect.com</a>
Axis	Camera, Axis M1011	M1011	Many retailers have this item. No specific outlet has been arranged.
BaneBots	Motors	Various	<a href="http://www.banebots.com">www.banebots.com</a>

BaneBots	CIM Motor	M4-R0062-12	<a href="http://www.banebots.com">www.banebots.com</a>
Batteries Plus New Hampshire	Battery Charger	sc-600A	Many retailers have this item. No specific outlet has been arranged.
Beckler's Carpet Outlet, Inc.	Competition Carpet	#50510/ 30753	See Note 6
Bimba	Pneumatic Cylinders	Various	<a href="http://www.bimba.com">www.bimba.com</a>
Bishop-Wisecarver Corp	Aluminum Extrusion	Various	<a href="http://www.bwc.com">www.bwc.com</a>
Burndy	Tie Wraps	Various	<a href="http://www.andymark.com">www.andymark.com</a>
Burndy	Mechanical Lugs	KPA4CUNPL	<a href="http://www.andymark.com">www.andymark.com</a>
Burndy	Compression Lugs	YAZV6CTC14FX	<a href="http://www.andymark.com">www.andymark.com</a>
Allied Electronics	Jumper	374-1253	Many retailers have this item. No specific outlet has been arranged.
Cable Wholesale	Cable, RJ12	8102-66107	Many retailers have this item. No specific outlet has been arranged.
Cable Wholesale	DB9/RJ12 Adapter	31D1-16400	Many retailers have this item. No specific outlet has been arranged.
Cablesforless.com	Ethernet Cable	Various	Many retailers have this item. No specific outlet has been arranged.
Clippard	Air Volume Chamber	SS-1154	<a href="http://www.clippard.com/distributors">www.clippard.com/distributors</a>
Cross The Road Electronics	CAN Cable Kit	CTRE-FRC-CAN1	<a href="http://www.crosstheroadelectronics.com">www.crosstheroadelectronics.com</a>
CTL Corp	2GO Classmate PC	NBCE11F <sup>Note 1</sup>	<a href="http://www.ctlcorp.com/go/first">www.ctlcorp.com/go/first</a>
Current Logic	Power Converter	360-CPR	<a href="http://www.current-logic.com">www.current-logic.com</a>
Cypress Semiconductor	PSoC 3 First Touch Kit	CY8CKIT-003	<a href="http://www.cypress.com">www.cypress.com</a>
Denso	Window Motor (Left)	262100-3040	<a href="#">Not available for purchase</a>
Denso	Window Motor (Right)	262100-3030	<a href="#">Not available for purchase</a>
Denso	Throttle Control Motor	AE235100-0160	Not available for purchase
Diamond Technologies	Power Connector, Wago 2 Pole	734-102	<a href="http://www.diamont.com">www.diamont.com</a>
D-Link	Robot Radio	DAP-1522	Many retailers have this item. No specific outlet has been arranged.
ebm-papst	Fans	Various	Contact <a href="mailto:dottie.reeve@us.ebmpapst.com">dottie.reeve@us.ebmpapst.com</a>
EnerSys	Batteries	NP18-12B	<a href="http://www.dantona.com">www.dantona.com</a>
eStop Robotics	Ethernet Jack Extension	CBL-EJX001	<a href="http://www.estoprobotics.com">www.estoprobotics.com</a>
eStop Robotics	Battery Base	ESR-357	<a href="http://www.estoprobotics.com">www.estoprobotics.com</a>
Festo	24VDC Double Solenoid Valve	566475 <sup>Note 2</sup>	<a href="http://www.festo.com/cms/en-us_us/ols.htm">http://www.festo.com/cms/en-us_us/ols.htm</a>
Festo	Push/Pull Fitting	183740 <sup>Note 2</sup>	<a href="http://www.festo.com/cms/en-us_us/ols.htm">http://www.festo.com/cms/en-us_us/ols.htm</a>
Festo	Control Box	566716 <sup>Note 2</sup>	<a href="http://www.festo.com/cms/en-us_us/ols.htm">http://www.festo.com/cms/en-us_us/ols.htm</a>
Festo	0.5m Solenoid Cable	566654 <sup>Note 2</sup>	<a href="http://www.festo.com/cms/en-us_us/ols.htm">http://www.festo.com/cms/en-us_us/ols.htm</a>
Fisher Price - Power Wheels	Motors	3800-9697D	Not available for purchase

Freelin-Wade Company	Pneumatic Tube	Various	<a href="http://www.freelin-wade.com/first.htm">www.freelin-wade.com/first.htm</a>
Gates Corporation	Belts and Pulleys	Various <sup>Note 1</sup>	<a href="http://www.gates.com/first">www.gates.com/first</a>
Gopher	Game Piece	71-502 <sup>Note 5</sup>	<a href="http://www.gopher.com">www.gopher.com</a>
Haydon Kerk Motion Solutions, Inc.	Leadscrew Assembly	BZ8M16 x 15"	<a href="http://www.haydonkerk.com">www.haydonkerk.com</a>
HITEC RCD	Servo	333225	Many retailers have this item. No specific outlet has been arranged.
Honeywell Sensing & Control	V Basic Switches	V7-2B17D8-048	<a href="http://www.honeywell.com/sensing">www.honeywell.com/sensing</a>
HPE Automation	Teflon Tape	Various	<a href="http://www.hpeco.com">www.hpeco.com</a>
igus Inc.	igus Parts Bag	Various <sup>Note 1</sup>	<a href="http://www.igus.com">www.igus.com</a>
Innovation First International	Spike H-Bridge Relay	217-0220	<a href="http://www.vexrobotics.com/frc">www.vexrobotics.com/frc</a>
Innovation First International	Victor 884 12 Volt Speed Controller	Victor 884 12/12	<a href="http://www.vexrobotics.com/frc">www.vexrobotics.com/frc</a>
Java	Software		<a href="http://www.java.com">www.java.com</a> or <a href="http://www.netbeans.org">www.netbeans.org</a>
Kent Elastomer	Latex Tubing	Various	Many retailers have this item. No specific outlet has been arranged.
Maxbotix	Sonar Range Finder	LV-MaxSonar-EZ1	<a href="http://www.maxbotix.com">www.maxbotix.com</a>
Microsoft	Kinect	LPF-00068	<a href="http://www.microsoftstore.com/Xbox_Kinect">www.microsoftstore.com/Xbox_Kinect</a>
Nason	Low Pressure Switch	SM-2B-115R/443	<a href="http://www.nasonptc.com">www.nasonptc.com</a>
National Instruments	Compact RIO (cRIO)	cRIO-FRC II <sup>Note 1</sup>	<a href="http://www.ni.com">www.ni.com</a>
NH Precision	Camera Case	AM-0568	<a href="http://www.andymark.com">www.andymark.com</a>
Norgren	Regulator	R07-100-RNEA	<a href="http://www.norgren.com/usa">www.norgren.com/usa</a>
Norgren	Relief Valve	16-004-011	<a href="http://www.norgren.com/usa">www.norgren.com/usa</a>
Norgren	Gauge	18-013-212	<a href="http://www.norgren.com/usa">www.norgren.com/usa</a>
Norgren	Mounting Bracket	18-025-003	<a href="http://www.norgren.com/usa">www.norgren.com/usa</a>
Parker Hannifin	Pneumatic Fittings	Various	<a href="http://www.parker.com">www.parker.com</a>
Pelham Plastics	Coupler, Denso Motor	Denso-6	Not available for purchase
RAF Electronics	Standoff, Male/Female	219-1048	<a href="http://www.rafhdwe.com/">www.rafhdwe.com/</a>
Reflexite	Reflective Material	GP020	<a href="http://www.reflexite.com">www.reflexite.com</a> or <a href="http://www.andymark.com">www.andymark.com</a>
Rockwell Automation	Photo Sensor	42EF-D1MNAK-A2	<a href="http://www.rockwellautomation.com">www.rockwellautomation.com</a>
Rockwell Automation	Panel Signal Device	855PB-B12ME522	<a href="http://www.rockwellautomation.com">www.rockwellautomation.com</a>
Ruland Manufacturing Company	Ruland Bag Components	Various	<a href="http://www.ruland.com">www.ruland.com</a>
Sauro	Power Connector, cRIO	CTF040V8	Many retailers have this item. No specific outlet has been arranged.

SDSHobby	2-Wire Jumper Cable	Various	Many retailers have this item. No specific outlet has been arranged.
SDSHobby	DB37 Extension Cable	Various	Many retailers have this item. No specific outlet has been arranged.
SDSHobby	RC Extension Cable	Various	Many retailers have this item. No specific outlet has been arranged.
SDSHobby	Y-Adapter Cable	Various	Many retailers have this item. No specific outlet has been arranged.
Snap Action, Inc	Circuit Breakers	Various	<a href="http://www.andymark.com">www.andymark.com</a>
Targus	USB Hub	ACH102USX	<a href="http://www.targus.com/us/epp/first.aspx">www.targus.com/us/epp/first.aspx</a>
Terminal Supply Company	High Amp Circuit Breaker	CB3SM12U	<a href="http://www.terminalsupplyco.com">www.terminalsupplyco.com</a>
Texas Instruments Incorporated	Gray Jaguar	MDL-BDC	<a href="http://www.andymark.com">www.andymark.com</a> (available only in <i>FIRST</i> Choice)
Texas Instruments Incorporated	Black Jaguar	MDL-BDC-24	<a href="http://www.luminarymicro.com">www.luminarymicro.com</a> or <a href="http://www.ti.com">www.ti.com</a> or <a href="http://www.digikey.com">www.digikey.com</a> or <a href="http://www.andymark.com">www.andymark.com</a>
Texas Instruments Incorporated	High-Performance Analog Devices	HPA	<a href="http://www.luminarymicro.com">www.luminarymicro.com</a> or <a href="http://www.ti.com">www.ti.com</a> or <a href="http://www.digikey.com">www.digikey.com</a> or <a href="http://www.andymark.com">www.andymark.com</a>
TigerDirect.com	Attack 3 Joystick	963291-0403	Many retailers have this item. No specific outlet has been arranged.
Total Electronics	Power Distribution Board	AM-0265	<a href="http://www.andymark.com">www.andymark.com</a>
Total Electronics	Digital Sidecar	AM-0266	<a href="http://www.andymark.com">www.andymark.com</a>
Total Electronics	Analog Breakout	AM-0267	<a href="http://www.andymark.com">www.andymark.com</a>
Total Electronics	Solenoid Breakout	AM-0268	<a href="http://www.andymark.com">www.andymark.com</a>
Triangle Manufacturing Company	Triangle Bag Components	Various	<a href="http://www.TriangleOshkosh.com/robotics">www.TriangleOshkosh.com/robotics</a>
Tyco Electronics	Electric Terminals	Various	Many retailers have this item. No specific outlet has been arranged.
US Digital	Optical Encoder	E4P-360-250-S4149 <sup>Note 3</sup>	<a href="http://www.usdigital.com/first">www.usdigital.com/first</a>
Vex Robotics	CIM Motor	217-2000	<a href="http://www.vexrobotics.com/frc">www.vexrobotics.com/frc</a>
Viair	Air Compressor	00090	<a href="http://www.viair.com">www.viair.com</a>
WAGO Corporation	2 Position PCB Terminal Strip	739-302	<a href="http://www.wago.com">www.wago.com</a>
WAGO Corporation	2 Position Vertical Header	734-132	<a href="http://www.wago.com">www.wago.com</a>
WAGO Corporation	2 Position Right Angle Header	734-162	<a href="http://www.wago.com">www.wago.com</a>
WAGO Corporation	2 Position Female Plug	734-102	<a href="http://www.wago.com">www.wago.com</a>
WAGO Corporation	12 Position Custom PCB Assembly	745-0003	<a href="http://www.wago.com">www.wago.com</a>
WAGO Corporation	8 Position Custom PCB Assembly	745-0003	<a href="http://www.wago.com">www.wago.com</a>
Wind River	VxWorks Edition 3.3	500-115975	<a href="http://www.windriver.com">www.windriver.com</a>

## Notes

1. This item may be available at a discount for FRC participants. The discount may be limited in availability, please contact supplier for details.
2. Each team must register on the OLS, and choose the “purchaser” option for placing orders. Two other options are offered, but those are usually used for engineer data. Only credit cards can be used to order parts, and the “bill to” and “ship to” addresses must match. Once they have completed their registration, after 24 hours, please contact Festo for final registration. This can be done by dialing 1-800-993-3786. Ask for either Carole Nimrod or Santos West. Either of them will complete the registration process, and orders then can be placed directly from the OLS. Should a school wish to recover the sales tax, they can forward their tax exempt certificate to Helen Kinsley, by e-mail at [helen.kinsley@us.festo.com](mailto:helen.kinsley@us.festo.com), or by mail at: Festo Corp., 395 Moreland Rd., Hauppauge, New York, 11788.
3. After January 9, 2012, the new part number will be E4P-360-250-N-S-S4149
4. Limited quantities of this item may be available via FIRST Choice
5. A limited number of basketballs without the FIRST or Footlocker logos are available via the Gopher website. Basketballs with the logos are available at [www.andymark.com](http://www.andymark.com) and via FIRST Choice.
6. Order the official Competition Carpet from Beckler’s Carpet Outlet, Inc., 3051 N. Dug Gap Road SW, Dalton, GA 30722, Attn: Debbie Collins, [dmcollins@becklerscarpet.com](mailto:dmcollins@becklerscarpet.com). Ordering Info: Shaw’s Neyland 20, Color: Park Bench, #50510 / 30753