
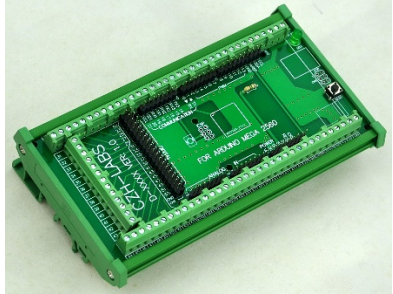
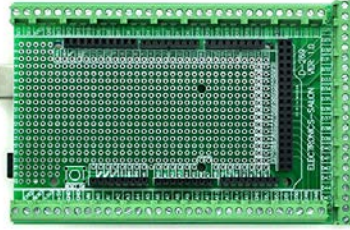
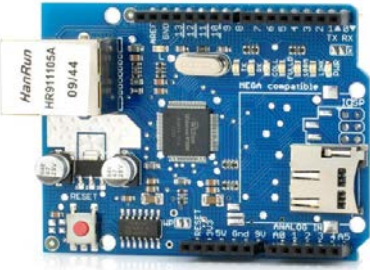
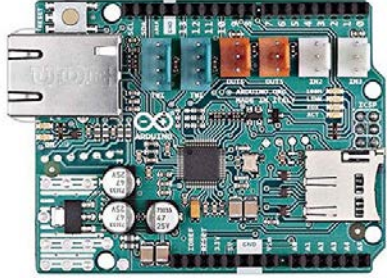

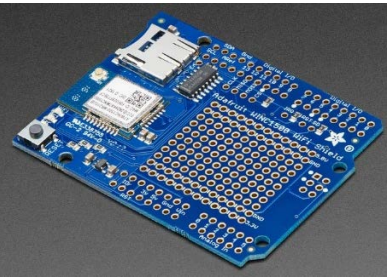

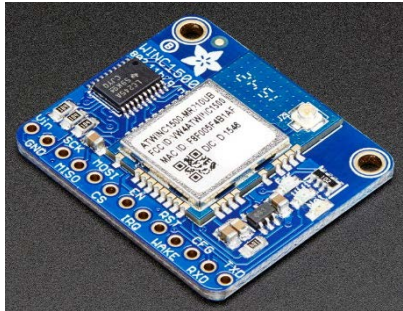

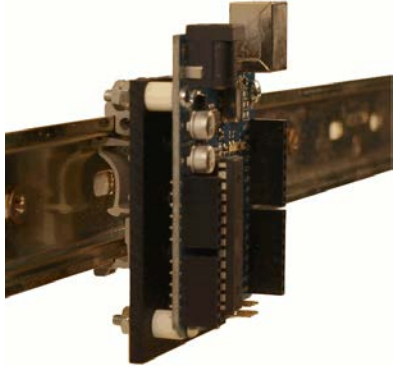










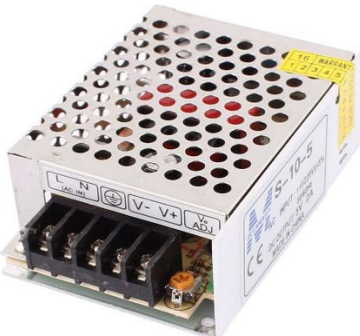
Interface	Component	Description	Notes	Picture	Order Link
Arduino MEGA 2560	Interface (required)	Main Interface	This board duplicates the original reference design. Others can be used, but some boards are modified and have different footprint and/or USB chips.		http://amzn.to/2pIS2k2
	Screw Shield (optional)	DIN Rail Mount	Will not allow additional shields, so use for USB connections to BruControl only.		http://amzn.to/2plvKiu
		Board Kit	Supplied as a DIY kit, requires soldering terminals to board. Stacks on top of interface. Allows additional shield. Needs additional 2x3 header (15mm pins) for Ethernet or Wi-Fi Shields below.		http://amzn.to/2oVTwn8 2x3 header: http://amzn.to/2p6n8T1
	Ethernet Shield (required only for Ethernet network connection to BruControl)	Ethernet 1 (WizNet 5100 based)	Ethernet Shield stacks on top of interface or screw shield. Network configuration via Interface Firmware Setup.		http://amzn.to/2p6iT9N





		Ethernet 2 (WizNet 5500 based)	Ethernet Shield stacks on top of interface or screw shield. Network configuration via Interface Firmware Setup.		https://www.digikey.com/products/en?keywords=1278-1028-ND
	Wi-Fi Shield / Board (required only for Wi-Fi network connection to BruControl)	Shield (WINC1500 based)	Wi-Fi Shield stacks on top of interface or screw shield. With onboard antenna (do not use inside metal enclosure).		https://www.adafruit.com/product/3653
		Shield (WINC1500 based)	Wi-Fi Shield stacks on top of interface or screw shield. With uFL connector (use with external antenna for metal enclosures).		https://www.adafruit.com/product/3654
		Board (WINC1500 based)	Wi-Fi board, needs be mounted separately and next to interface. With onboard antenna (do not use inside metal enclosure). Wi-Fi Shield above recommended instead, unless remote mounting is required.		https://www.adafruit.com/product/2999

		Board (WINC1500 based)	Wi-Fi board, needs be mounted separately and next to interface. With uFL connector (use with external antenna for metal enclosures). Wi-Fi Shield above recommended instead, unless remote mounting is required.		https://www.adafruit.com/product/3060
	Linux Shield (required only for Wi-Fi and/or Ethernet connection to BruControl)	Yún Shield (Arduino or other compatible)	Yún Shield stacks on top of interface or screw shield. Requires interface to be powered with 12V. Use in place of Ethernet or Wi-Fi shields/boards above. Network configuration via internal website control panel rather than via firmware settings. Caution: may impact speed/performance.		v2.4: http://amzn.to/2q6COoj v1.1: http://amzn.to/2qxeVYo
	DIN Rail Mount (optional)	Flat adapter	Do not need if using DIN Rail Mount Screw Shield above. Can be used with Board Kit Screw Shield.		https://www.rugged-circuits.com/accessories/din-rail-mount-for-arduino and https://www.rugged-circuits.com/accessories/aus-sie-shield-din-rail-mount-kit
		Vertical adapter	Cannot be used with any Screw Shields above. Can be used with other shields.		http://amzn.to/2qiun70





	Power Supply (one is required, but can be any. Switching type, 12V recommended for MEGA power supply)	12V DIN Rail Mount	12V, 15W, 1.25 Amp		http://amzn.to/2pjwhnh
			12V, 60W, 5 Amp		http://amzn.to/2pQsLLr

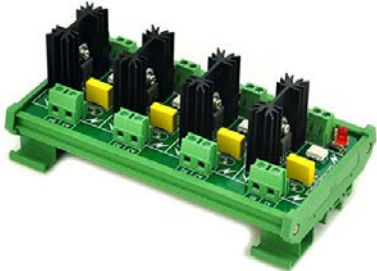
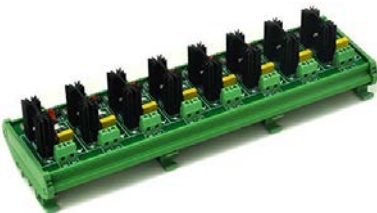
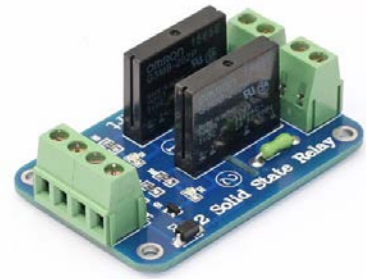

			12V, 120W, 10 Amp		http://amzn.to/2q9F7bn
		12V Brick	12V, 60W, 5 Amp		http://amzn.to/2qBZ3Dj
			12V, 120W, 10 Amp		http://amzn.to/2qKQZNU

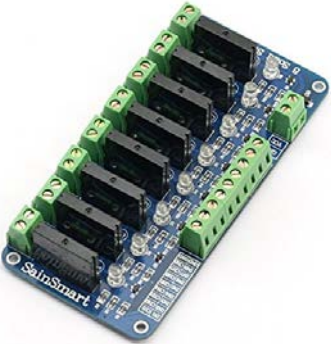


		5V DIN Rail Mount. (optional power supply to be used if accessories powered via MEGA's 5V PIN exceed 250mA).	5V, 15W, 3 Amp		http://amzn.to/2qXN7sf
			5V, 50W, 10 Amp		http://amzn.to/2q4I9vN
		5V DIN Brick. (optional power supply to be used if accessories powered via MEGA's 5V PIN exceed 250mA).	5V, 10W, 2 Amp		http://amzn.to/2pxF5WP

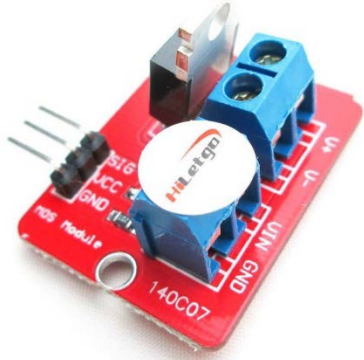
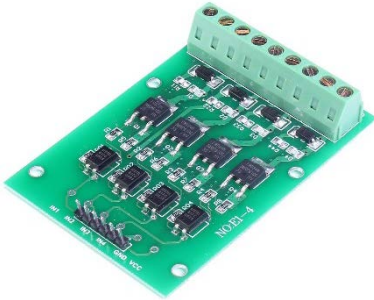
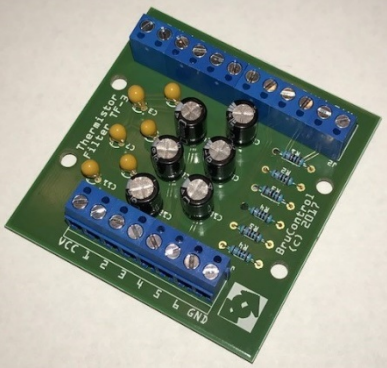
			5V, 50W, 10 Amp		http://amzn.to/2q4vyav
	Relay Board, Electro- mechanical (optional)	DIN Rail Mount	4x SPDT, 12V, Active High (will trigger with 5V input)		http://amzn.to/2pWjc4u
			8x SPDT, 12V, Active High (will trigger with 5V input)		http://amzn.to/2pUxnZF
			16x SPDT, 12V, Active High (will trigger with 5V input)		http://amzn.to/2pYnXu2

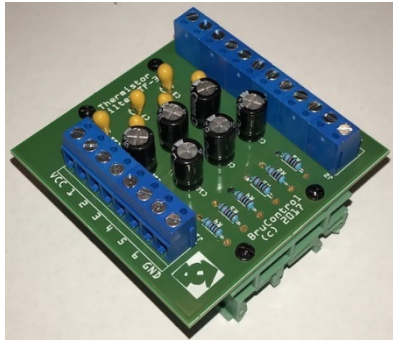
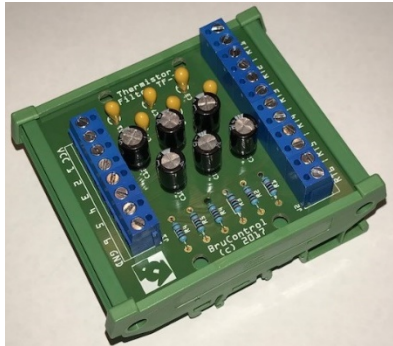

		Flat (board only)	2x SPDT, 12V, Active Low		http://amzn.to/2prqwno
			4x SPDT, 12V, Active Low		http://amzn.to/2pYi7Jh
			8x SPDT, 12V, Active Low		http://amzn.to/2priY43
			16x SPDT, 12V, Active Low		http://amzn.to/2pqOkIk


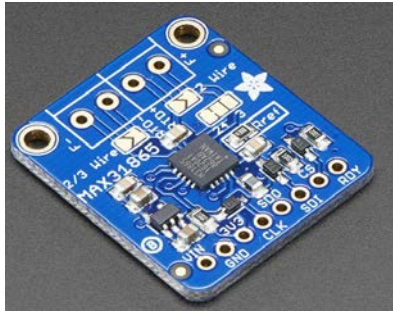
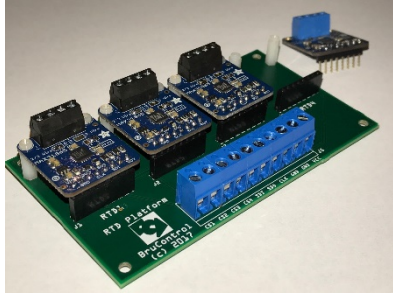

	Relay Board, SSR (optional)	DIN Rail Mount	2x SSR, 5V input, Active High, load 100 - 240VAC @ 2A max		http://amzn.to/2pdgevg
			4x SSR, 5V input, Active High, load 100 - 240VAC @ 2A max		http://amzn.to/2pWLFJr
			8x SSR, 5V input, Active High, load 100 - 240VAC @ 2A max		http://amzn.to/2pWKBVJ
			2x SSR, 5V input, Active High, load 100 – 240VAC @ 6A max		http://amzn.to/2pYofkL


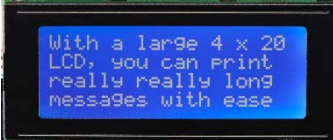

			4x SSR, 5V input, Active High, load 100 – 240VAC @ 6A max		http://amzn.to/2pnaoCM
			8x SSR, 5V input, Active High, load 100 – 240VAC @ 6A max		http://amzn.to/2pnz25Y
		Flat (board only)	2x SSR, 5V input, Active High, load 100 - 240VAC @ 2A max		http://amzn.to/2pYp4tP
			4x SSR, 5V input, Active High, load 100 - 240VAC @ 2A max		http://amzn.to/2pcZiVK

			8x SSR, 5V input, Active High, load 100 - 240VAC @ 2A max		http://amzn.to/2qSE5Nb
			2x SSR, 5V input, Active High, load 40 – 240VAC @ 5A max		http://amzn.to/2pd0Hvr
			8x SSR, 5V input, Active High, load 5 – 240VAC @ 5A max ú		http://amzn.to/2pYrEQz

	MOSFET Driver Board	Flat (board only)	Single channel MOSFET board. Similar to SSR. Use for with PWM Outputs for DC motor or DC pump variable control. 5V input, Active High, load 3 - 24VDC.		http://amzn.to/2q7A9uA
			4 channel MOSFET board. Similar to SSR. Use for with PWM Outputs for DC motor or DC pump variable control. 5V input, Active High, load 3 - 24VDC.		http://amzn.to/2pEzzBt
	Thermistor Interface (optional)	Model: TF-3 Assembled Thermistor Interface board.	6 channel thermistor divider/filter. Use with 2-wire NTC thermistors. Compatible with thermistors used with BCS or STC controllers.		http://brucontrol.com/buy/hardware/

		<p>Model: TF-3D Assembled Thermistor Interface board with DIN rail clips</p>	<p>6 channel thermistor divider/filter. Use with 2-wire NTC thermistors. Compatible with thermistors used with BCS or STC controllers. Assembled with DIN rail clips for DIN rail mounting.</p>		<p>http://brucontrol.com/buy/hardware/</p>
		<p>Model: TF-3C Assembled Thermistor Interface board with DIN rail clips</p>	<p>6 channel thermistor divider/filter. Use with 2-wire NTC thermistors. Compatible with thermistors used with BCS or STC controllers. Assembled with carrier for DIN rail mounting.</p>		<p>http://brucontrol.com/buy/hardware/</p>
		<p>DIN rail clips for TF-3 above (optional)</p>	<p>Mount clips to bottom of Thermistor Interface board for DIN rail mounting</p>		<p>http://amzn.to/2q3MWMK</p>

		DIN rail carrier for TF-3 above (optional)	Put Thermistor Interface board inside carrier for DIN rail mounting		http://amzn.to/2qot6P4
	RTD Interface (optional)	PT100 RTD Amplifier	Connects to BruControl Interface via SPI bus. Supplied as a DIY kit, requires soldering terminals to board.		https://www.adafruit.com/product/3328
		Model: RP-2. Assembled RTD Amplifier Platform.	4 channel platform for above PT100 RTD Amplifiers (amplifiers shown not included). Amplifiers plug into platform for simplified connections & wiring (pins must be soldered facing down).		http://brucontrol.com/buy/hardware/
		DIN rail clips for RP-2 above (optional)	Mount clips to bottom of RTD Amplifier Platform for DIN rail mounting		http://amzn.to/2q3MWMK

		DIN rail carrier for RP-2 above (optional)	Put RTD Amplifier Platform inside carrier for DIN rail mounting		http://amzn.to/2qZ2Qbr
	Local LCD Display (optional)	20x4 LCD Character Display	Connects to MEGA via I2C bus. Requires I2C LCD backpack. Note: Both LCD and I2C Backpack are supplied as DIY kits, requiring soldering terminals/pins to both.		LCD: https://www.adafruit.com/product/198 I2C Backpack: https://www.adafruit.com/product/292
	Interface Microcontroller Kit	Model AM-BD: Interface Assembly	MEGA, Screw Shield, DIN clips. Assembled, tested, and firmware installed.	As below without Ethernet shield.	http://brucontrol.com/buy/hardware/
		Model AM-FD: Interface Assembly	MEGA, Screw Shield, Ethernet 2 shield, DIN clips. Assembled, tested, and firmware installed.		http://brucontrol.com/buy/hardware/
		Model AM-ED: Interface Assembly	MEGA, Screw Shield, Ethernet 1 shield, DIN clips. Assembled, tested, and firmware installed.	As above, with Ethernet 1 shield in place of Ethernet 2 shield.	http://brucontrol.com/buy/hardware/
		Model AM-WD: Interface Assembly	MEGA, Screw Shield, Wi-Fi shield, DIN clips. Assembled, tested, and firmware installed.	As above, with Wi-Fi shield in place of Ethernet 2 shield.	http://brucontrol.com/buy/hardware/

		Model AM-XD: Interface Assembly	MEGA, Screw Shield, Wi-Fi shield w/ext. antenna, DIN clips. Assembled, tested, and firmware installed.	As above, with Wi-Fi shield in place of Ethernet 2 shield, plus 3dB gain antenna and uFL connector cable to antenna.	http://brucontrol.com/buy/hardware/
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