

TI-Innovator™ I/O Breadboard Pack Component Details

Addressable components

Component	Description
Red LEDs Green LEDs	Light-emitting diode that emits light when current passes through it.
RGB (Red-Green-Blue) LEDs	Light-emitting diode with independently adjustable red, green and blue elements. Can produce a wide variety of colors.
Thermistor	Resistor whose resistance changes based on temperature. Used for measurement and control.
7-segment Display	Array of LEDs arranged to display numbers and some alphabetic characters. Also has an LED for a decimal point.
Small DC Motor	Motor that converts direct current electrical power into mechanical power.
TTL Power MOSFET	Transistor used for amplifying or switching electronic signals.
TI Analog Temperature Sensor	Sensor that reports a voltage proportional to the ambient temperature within a range of -55°C to 130°C.
Visible Light Sensor	Sensor that reports the level of ambient light.
Infrared Transmitter (yellow dot)	Side emitting Infrared LED, designed to be paired with the LTR-301 Photo-Transistor.
Infrared Receiver (red dot)	Side sensing Infrared photo transistor, designed to be paired with the LTE-302 Infrared Emitter.

Passive Components

Component	Image	Description
Resistor 100 Ohm		Resistor that provides 100 Ohms of resistance in a circuit. Color Code Value: brown, black, brown.
Resistor 1K Ohm		Resistor that provides 1K Ohms of resistance in a circuit. Color Code Value: brown, black, red.
Resistor 10K Ohm		Resistor that provides 10K Ohms of resistance in a circuit. Color Code Value: brown, black, orange.
Resistor 100K Ohm		Resistor that provides 100K Ohms of resistance in a circuit. Color Code Value: brown, black, yellow.
Diode		Component that allows an electric current to pass in one direction, while blocking current in the opposite direction.
SPDT Slide Switch		Single pole, double throw switch. Slide the switch knob back and forth to open and close contacts.
8 Position DIP Switch		Set of 8 slide switches used to customize the behavior of the circuit components for specific situations.
8 100 Ohm resistor SIP Package		8 100 Ohm resistor SIP package for use with the 8 Position DIP Switch.
Potentiometer with Knob		Variable resistor with knob used to change the resistance in a circuit.
Capacitor 100μF		Capacitor that temporarily stores an electric charge of up to 100μF.
Capacitor 10μF		Capacitor that temporarily stores an electric charge of up to 10μF.
Capacitor 1μF		Capacitor that temporarily stores an electric charge of up to 1μF.
40-Pack Male to Male Breadboard Jumper Cables		Male to Male jumper cables for connecting components on the breadboard.
10-Pack Male to Female Breadboard Jumper Cable		Male to female jumper cables for connecting components on the breadboard.
Breadboard		Platform for connecting the electronic components of a project by inserting component leads and jumper cables into pins.
4-AA Battery Holder		4AA battery holder with tined solid leads for easy breadboard insertion.