



IoT Builder

Remote Interface builder for Internet of Things

Summary


IOTBuilder is a unique product that can be added to Visual Designer to allow the development of remote user interfaces to Arduino products without writing any code.

- Front Panel Designer with buttons, switches, dials, displays and charts.
- Respond to UI actions in your program with simple flowchart methods.
- System level simulation and single step debugging of the entire system.
- Control the simulation or the real hardware from your phone or tablet.

Variants

The following is a current list of supported variants in the Arduino™ AVR® family:

- Arduino Uno, Arduino Mega, Arduino Leonardo, Arduino Yun

 *The full Proteus VSM for AVR Product also includes simulation of the entire range of supported Atmel AVR variants.*

Shields

The following is a list of Arduino™ shields which are directly supported by the Visual Designer flowchart programming environment:

- Any schematic of a shield that you draw yourself
- Adafruit 16 Channel PWM Servo Shield.
- Adafruit 4 Channel Relay Numato Shield.
- Adafruit TFT Display based on ILI9341.
- Adafruit Trellis Shield.
- Adafruit Weather Station Shield.
- Arduino™ HYT271 Pressure, Humidity and Temperature Breakout.
- Motor Shield (R3) with Stepper Motor.
- Adafruit 2 Channel Relay Numato Shield.
- Adafruit Data Logger Shield.
- Adafruit NeoPixel Shield.
- Adafruit Wave Shield (Plays Audio WAV files).
- Motor Shield V2 with Servos, DC and Stepper Motors.
- Motor Shield V2 with four DC Motors.
- Motor Shield (R3) with DC Motors.

Grove Modules


The following Grove modules and sensors are directly integrated into Visual Designer and can be added to your project straight from the Peripheral Gallery:

- Grove 128x64 OLED Display Module.
- Grove 4-Digit Display Module.
- Momentary Action Push Button.
- Grove Buzzer Module.
- Grove Differential Amplifier Module.
- Grove I2C 12-Bit ADC Module.
- Grove 80cm InfraRed Proximity Sensor.
- Grove Luminance Sensor Module.
- Grove Relay Module.
- Grove SPDT Slide Switch Module.
- Grove Touch Sensor Module.
- Thermistor Based Temperature Sensor Module.
- Grove RGB LCD Module.
- Grove LED Bar Module.
- Grove single LED Module (Blue, Green, Yellow, Red).
- Grove Light Sensor Module.
- Grove Rotary Angle Potentiometer based sensor.
- Grove RTC Module.
- Grove Servo Motor Module.
- Grove Sound/Volume Level Sensor.
- Grove Ultrasonic Ranger Module.
- Grove Voltage Divider Module.
- Grove RS232/TTY Terminal Module.

Breakouts

The following breakout boards are supported directly by Visual Designer:

- Arduino™ Alphanumeric LCD Breakout Board
- Arduino™ DHT22 Humidity Temperature Breakout Board
- Arduino™ MCP3208 12bit ADC Breakout Board
- Arduino™ Real Time Clock Breakout Board
- Arduino™ TC74 Temperature Sensor Breakout Board
- Adafruit K Type Thermocouple Amplifier AD8495 Breakout
- HYT271 Pressure, Humidity and Temperature Breakout
- Arduino™ SPDT slide Switch Breakout
- LED Breakout (Red/Blue/Green/Yellow)
- Generic Input Voltage Device Breakout
- Arduino™ Servo Motor Breakout Board
- Arduino™ GPS Breakout Board
- Arduino™ Rotary Angle Potentiometer Breakout Board
- Simple, momentary action push button breakout
- Arduino™ Piezo Buzzer Breakout Board
- Arduino™ DHT11 Humidity Temperature Breakout Board.
- Arduino™ MCP23008 IO Expander Breakout Board
- Arduino™ MCP4921 12bit DAC Breakout Board
- Arduino™ SD Card with SPI Interface Breakout Board
- Arduino™ MCP23008 Numeric Keypad Breakout Board
- Arduino™ MPX4250AP Pressure Gauge Breakout Board
- Arduino™ PCD8544 Nokia 3310 LCD Breakout Board

 *More advanced users can pick, place and wire from the many thousands of embedded peripherals in the Proteus libraries. These are all included with Visual Designer but users will have to program at a lower level, using the CPU methods in Visual Designer to drive the Arduino pins directly.*

With continual development on the Proteus Design Suite we endeavour to keep all content updated with the latest product details. On rare occasions this may not happen immediately, and website content will then be incomplete or inaccurate. We will attempt to correct any such errors as soon as possible, E&OE.