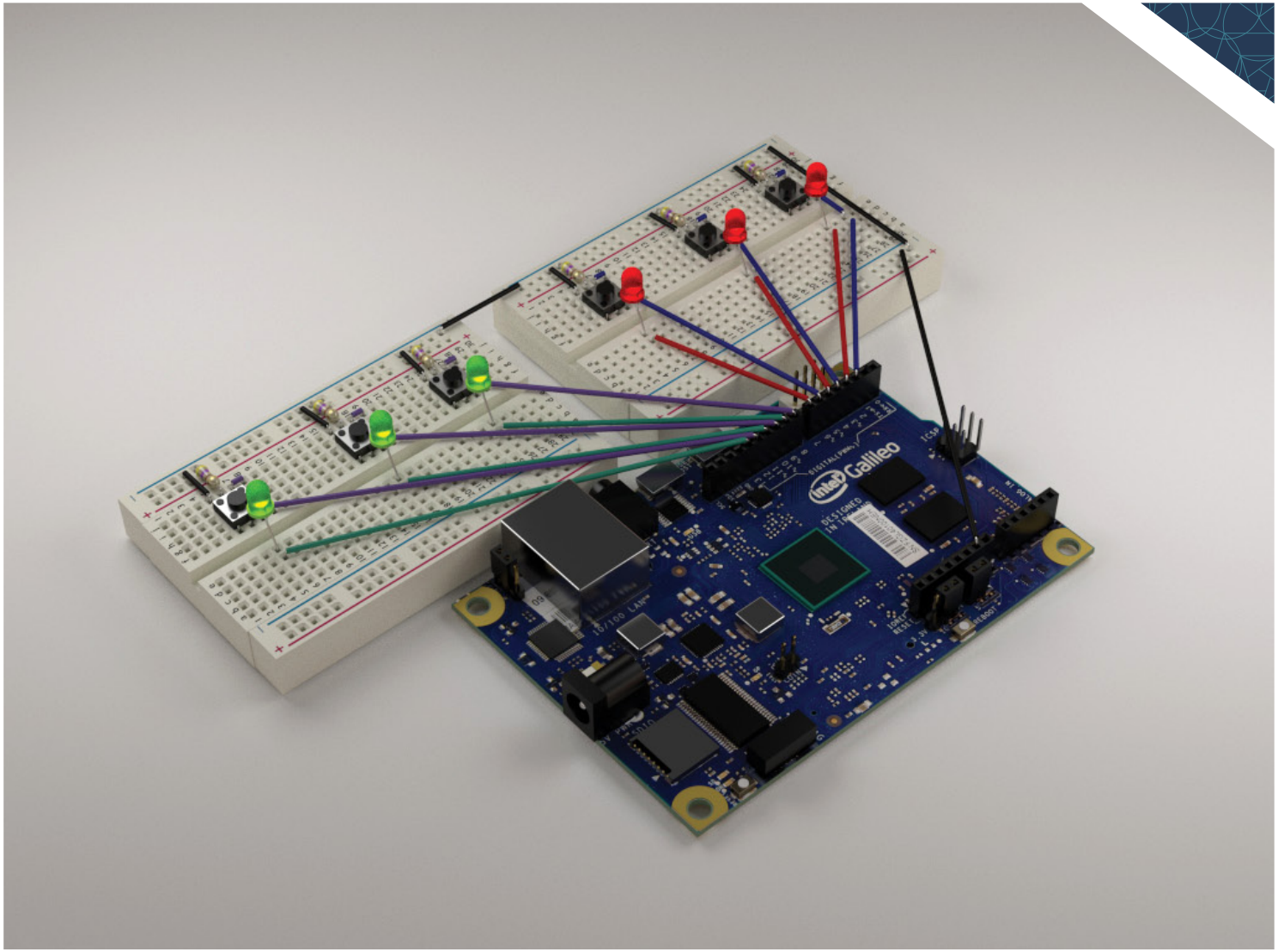
intel Galileo

What will you make?

STEAM CARNIVAL

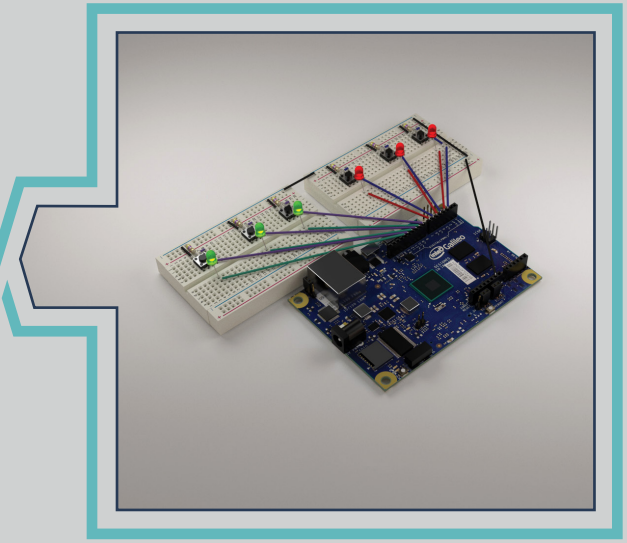


BUTTON GAME KIT MANUAL

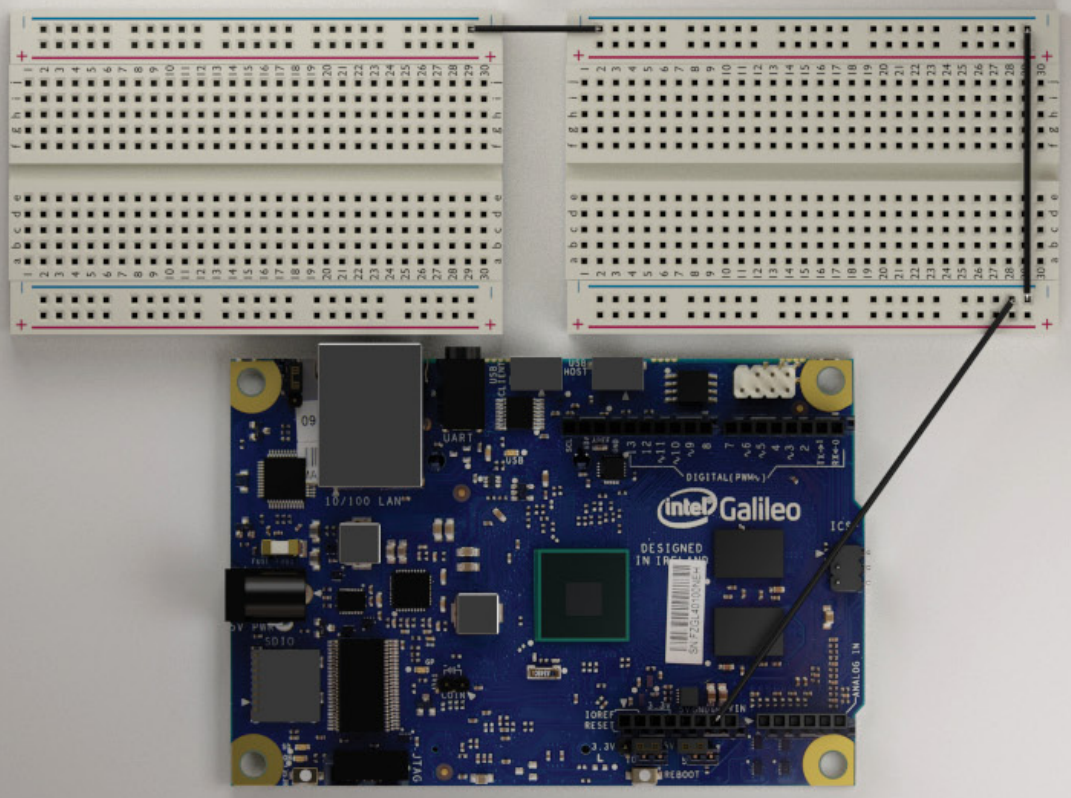
WHAT IS THE BUTTON GAME KIT?

The Button Game Kit is based on Button Wall, a popular STEAM Carnival game. The original Button Wall is a two-player game where the object is to use the whole body to hit a series of button combinations while a timer runs out. Powered by an Intel® Galileo, this tabletop version lets you build your own Button Game using the exact same components, except fewer buttons! Now you and another player can test your reaction time with your fingers instead. Let's build it!

Here are the parts you will need:
http://2bc.io/galileo-cart



CONNECTING THE GROUND



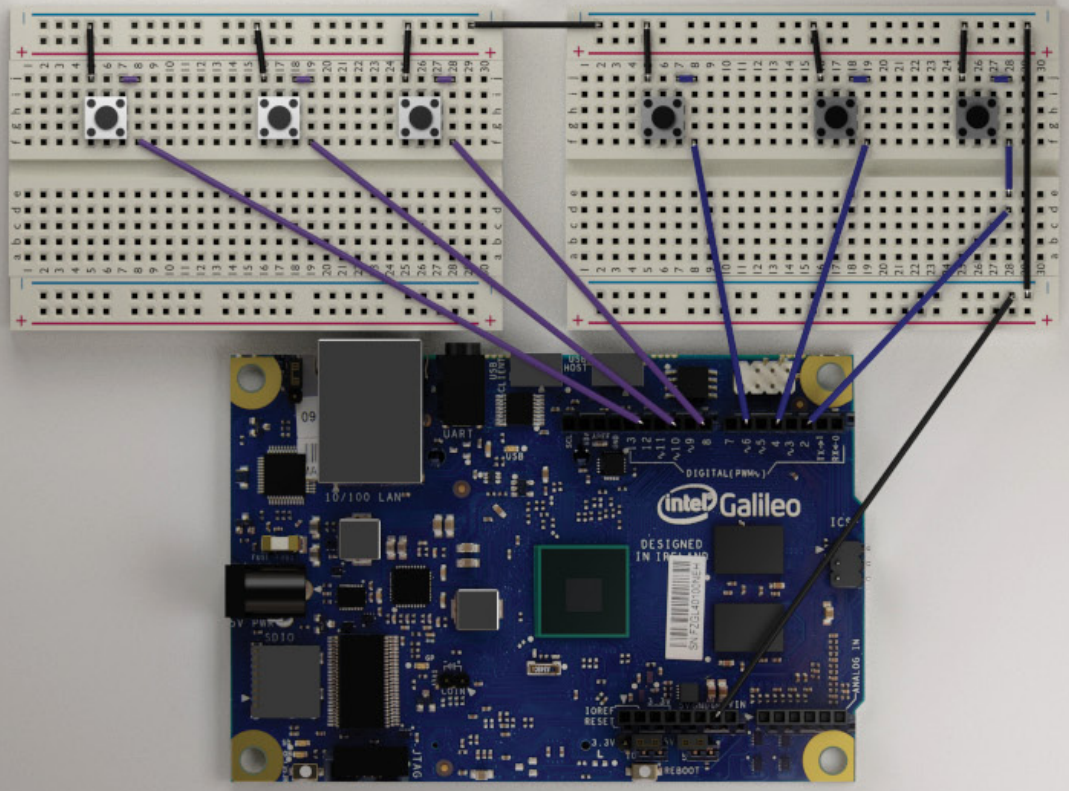
JUMPER WIRES

Connect the ground on Galileo (GND) to the ground(–) on the breadboard.

Connect the ground(–) on one side of the breadboard to the ground(–) on the other side.

Connect the ground of one breadboard to the ground of the other breadboard.

ADDING BUTTONS



RIGHT BOARD

JUMPER WIRES

j5 to ground(–)
j16 to ground(–)
j25 to ground(–)
j7 to j8
j18 to j19
j27 to j28
f8 to digital pin 12 of Galileo
f19 to digital pin 10 of the Galileo
f28 to digital pin 8 of the Galileo

BUTTONS

Insert a button at f5 - i5 - f7 - i7
Insert a button at f16 - i16 - f18 - i18
Insert a button at f25 - i25 - f27 - i27

LEFT BOARD

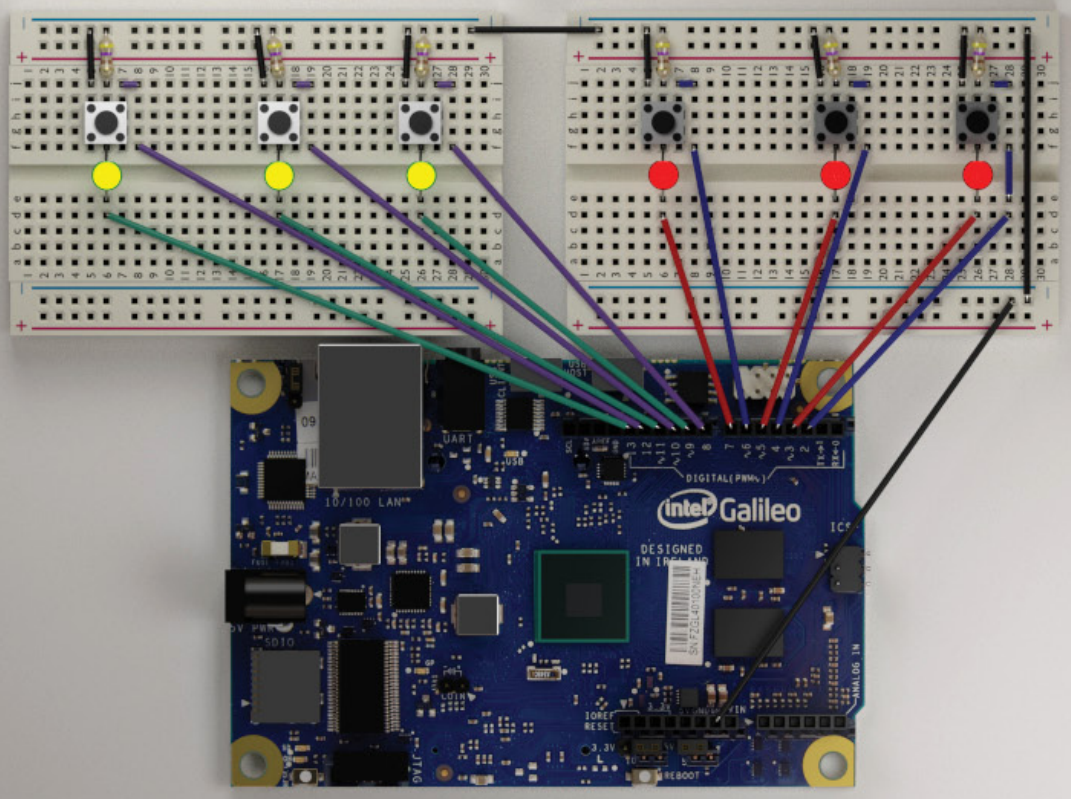
JUMPER WIRES

j5 to ground(–)
j16 to ground(–)
j25 to ground(–)
j7 to j8
j18 to j19
j27 to j28
e28 to f28
f8 to digital pin 6 of Galileo
f19 to digital pin 4 of the Galileo
d28 to digital pin 2 of the Galileo

BUTTONS

Insert a button at f5 - i5 - f7 - i7
Insert a button at f16 - i16 - f18 - i18
Insert a button at f25 - i25 - f27 - i27

ADDING LEDs



RIGHT BOARD

JUMPER WIRES

d6 to digital pin 13 of the Galileo
d17 to digital pin 11 of the Galileo
d26 to digital pin 9 of the Galileo

RESISTORS

Insert a 470ohm resistor between j6 and ground(–)
Insert a 470ohm resistor between j17 and ground(–)
Insert a 470ohm resistor between j26 and ground(–)

LEDs

Insert a green LED between e6 and f6 (flat side of LED)
Insert a green LED between e17 and f17 (flat side of LED)
Insert a green LED between e26 and f26 (flat side of LED)

LEFT BOARD

JUMPER WIRES

d6 to digital pin 7 of the Galileo
d17 to digital pin 5 of the Galileo
d26 to digital pin 3 of the Galileo

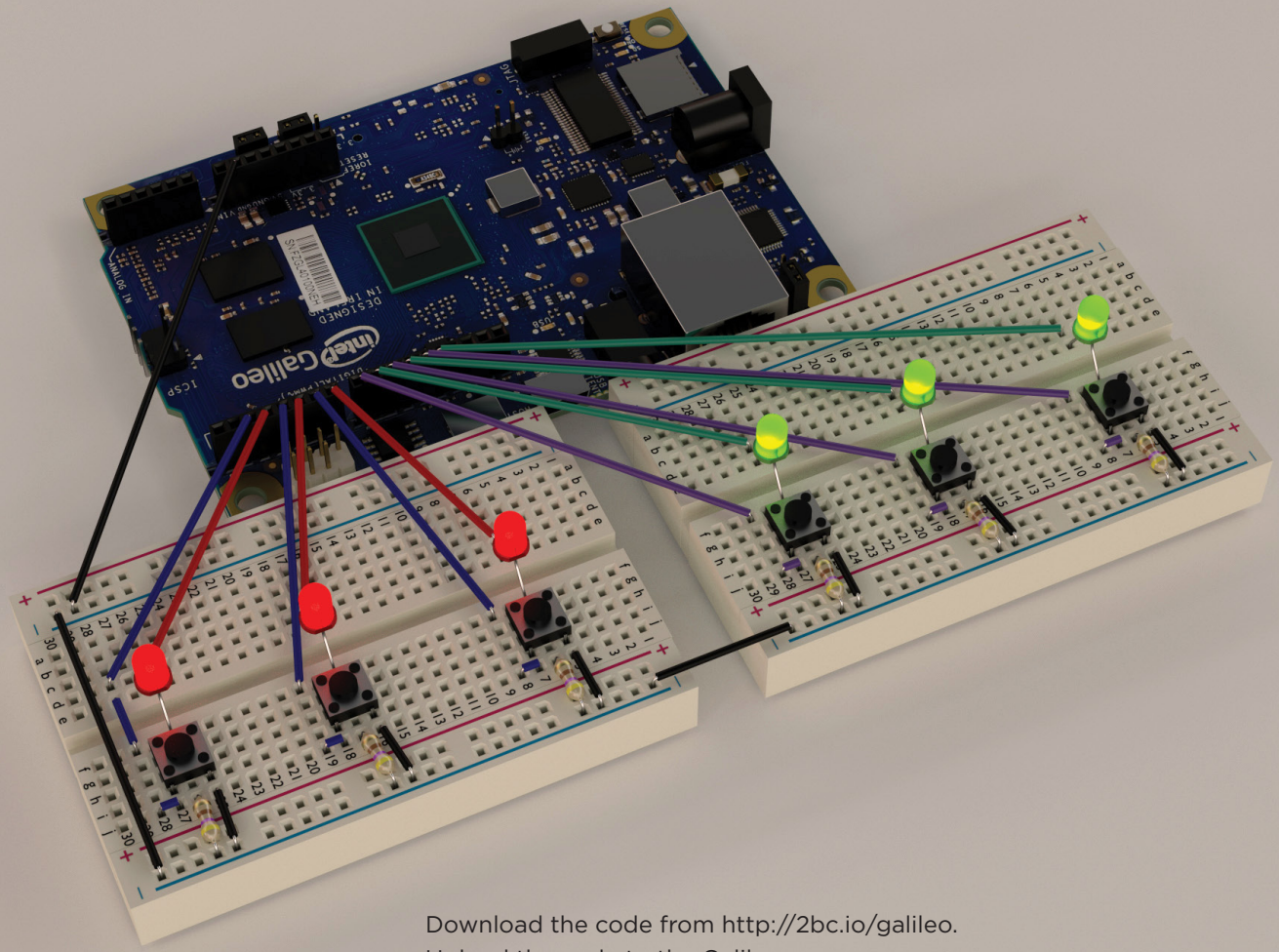
RESISTORS

Insert a 470ohm resistor between j6 and ground(–)
Insert a 470ohm resistor between j17 and ground(–)
Insert a 470ohm resistor between j26 and ground(–)

LEDs

Insert a red LED between e6 and f6 (flat side of LED)
Insert a red LED between e17 and f17 (flat side of LED)
Insert a red LED between e26 and f26 (flat side of LED)

HOW TO PLAY



Download the code from http://2bc.io/galileo.
Upload the code to the Galileo.
Once lights start to flash, push a button to start a 2 player game (red vs green).
The LEDs will light up with a random combination.
Press the corresponding buttons to score 1 point and get a new light combination.
After 30 seconds of gameplay, the lights will flash to indicate the winner.

MORE INFORMATION

Source code and a PDF of this manual is available at:

http://2bc.io/galileo

Learn more at:

http://maker.intel.com