e TILES

QUICK GUIDE

etiles.com

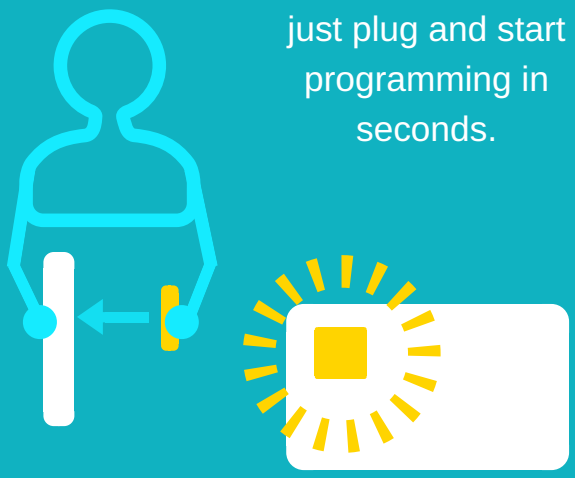
eTiles

VS

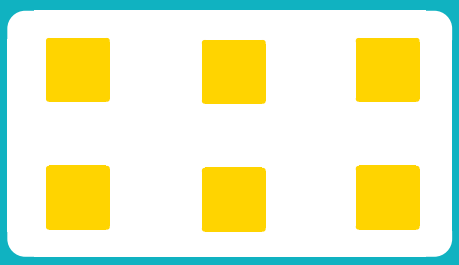
Conventional methods

1, 2, 3 Done!

No soldering required, just plug and start programming in seconds.



No messy cables.



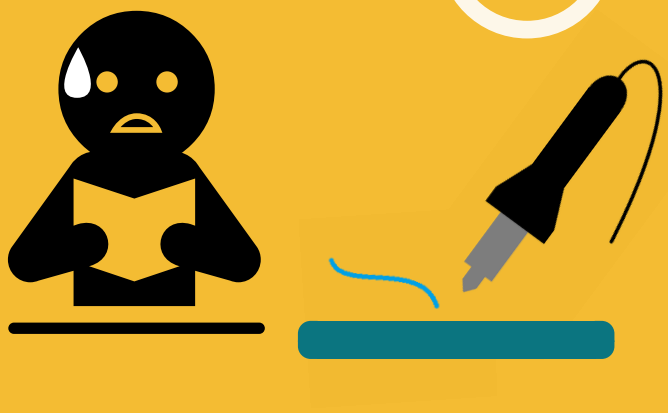
Clean design, which can be left inside projects as the finalized version.

No need to worry about accidentally connecting a cable to the wrong pin and frying the circuitry.

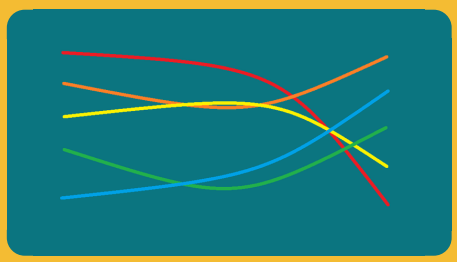
Can **SAVE** some money.

Spend 15-20 minutes soldering pins and sifting through documentation to figure out how to properly connect the cables.

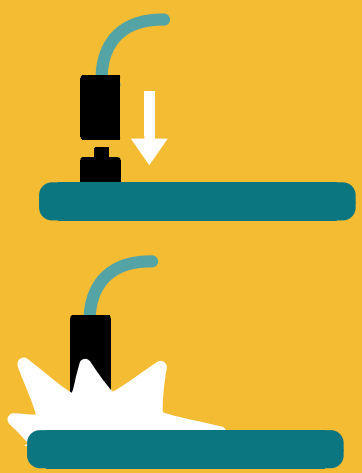
15-20 mins.



Cables all over the place.



Too messy and bulky to be left inside projects as the finalized version.



The chances of wrong connections occurring and therefore, wasting money, are quite high.

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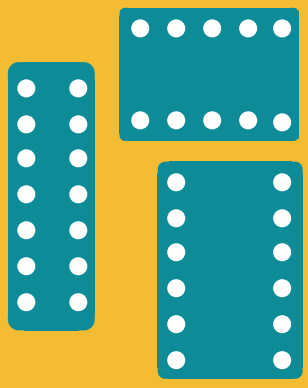
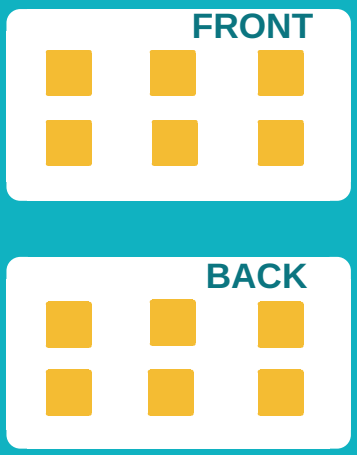
Compact, standardized dimensions for the entire system. Can **SAVE** a lot of **SPACE** in your project.



Random sizes of boards that may take up more space than desired.

Most of the tiles are just 1 x 1cm in size, meaning you can easily fit a dozen or so on a single development board.



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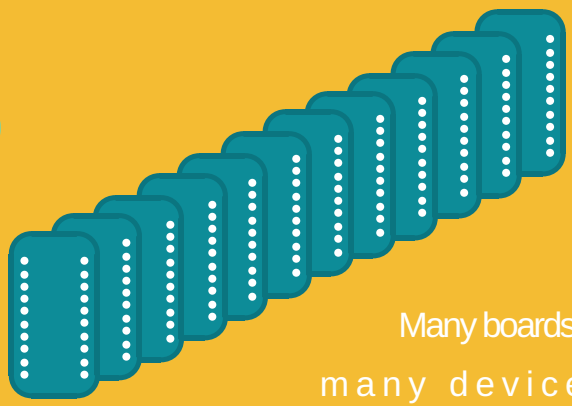
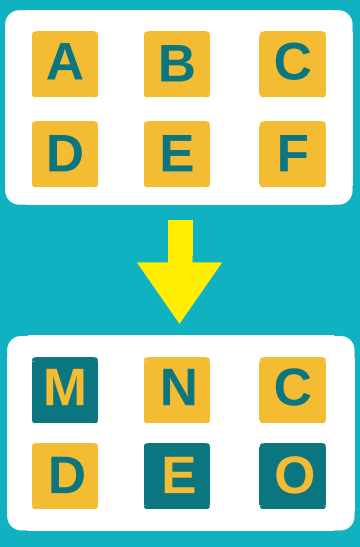


Many boards for many devices.

12 in 1



Modular, allowing quick mixing and matching of different sensors according to project requirements.

Not modular, taking up more time and space to test different combinations of sensors.

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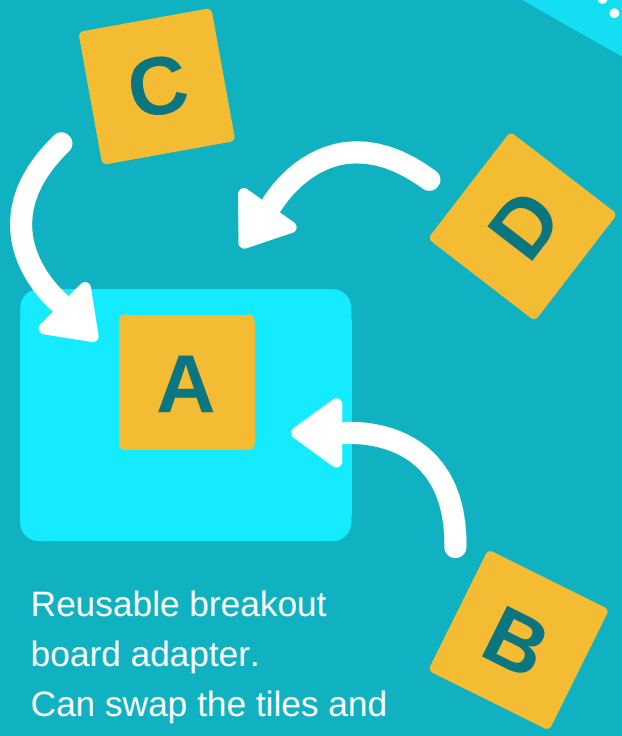
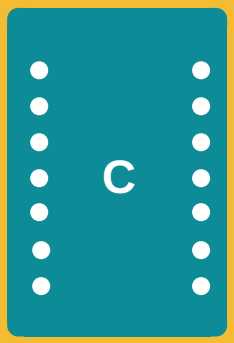
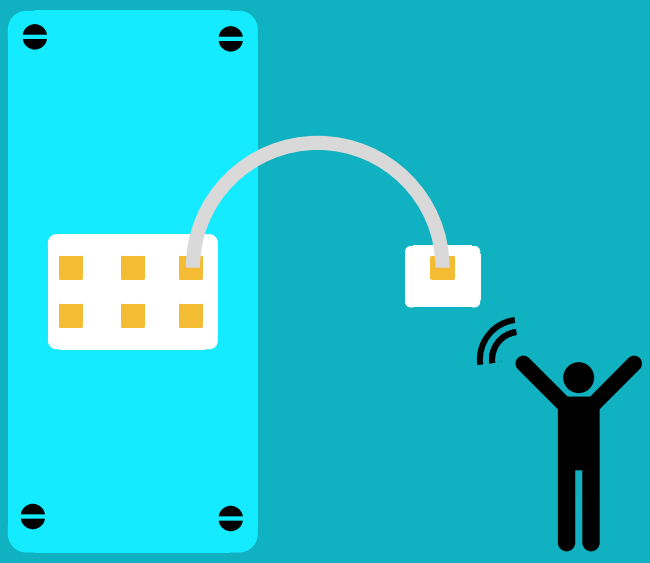


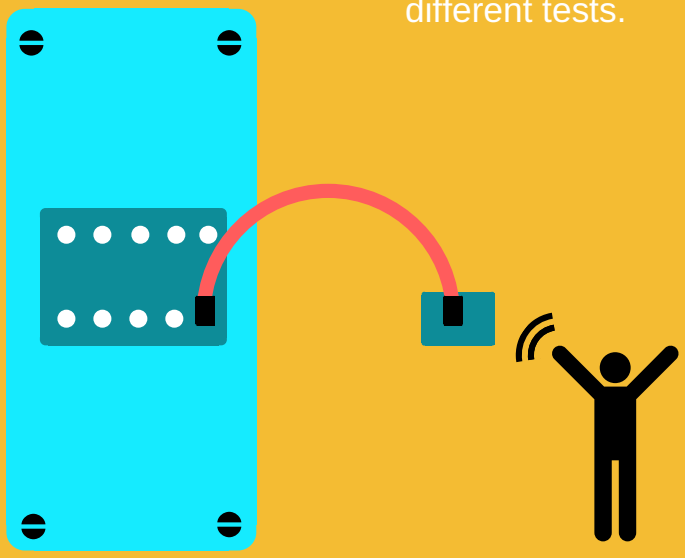
Reusable breakout board adapter.
Can swap the tiles and do as many different tests as desired.



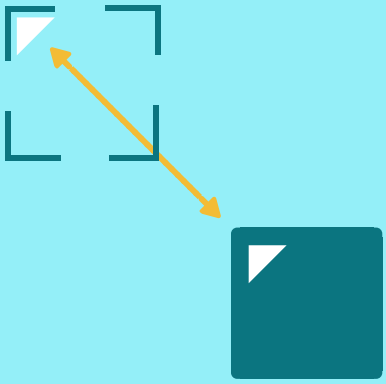
Have to use multiple breakout boards to perform different tests.



Can use extremely thin and space-saving Flat Flexible Cables (FFC) to place sensors at a location away from the development board.

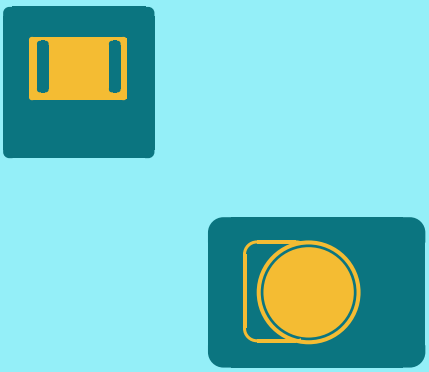


Have to use regular jumper cables to place sensors at a location away from the development board.



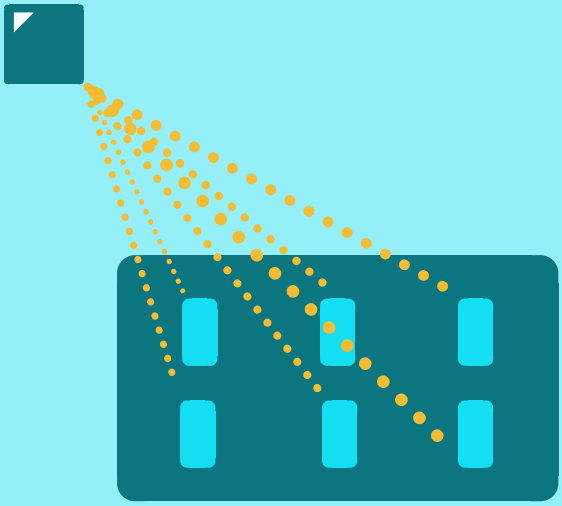
Positioning of the eTiles

Each tile has a white triangle on the upper-left corner that allows you to position it correctly on the eTiles DevBoard. You just have to match the triangle with its counterpart on each tile frame of the board.



Power

Use the Coin Cell Holder Tile or JST Battery Connector Tile to power up the eTiles DevBoard.

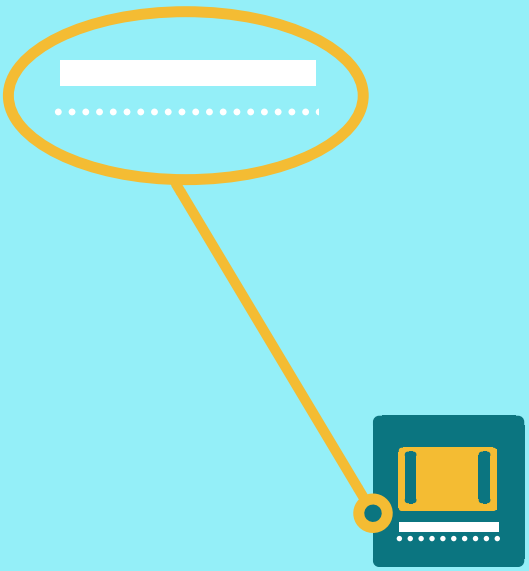


Compatibility of the eTiles with the connectors on the DevBoard

Each connector has all the necessary signal pins for the tiles:

- Reset
- I2C (SDA, SCL)
- UART (Rx, Tx)
- 1 Analog I/O pin
- 1 Digital I/O pin
- SPI (CLK, MISO, MOSI)

Each tile maps only the signals it needs to the connector. Since each connector is standardized, users can freely connect any tile onto any available slot on the DevBoard.



Connection orientation indicator for the Flat Flexible Cable connector

There is a pair of solid and dotted lines below each ribbon connector for those tiles and boards that contain such connectors. These lines are for you to quickly connect the ribbon cable to the connector without having to look inside it to figure out on which side the contacts should go. The dotted line resembles the contacts whereas the solid one resembles the smooth side.