96Boards Interface Mezzanine

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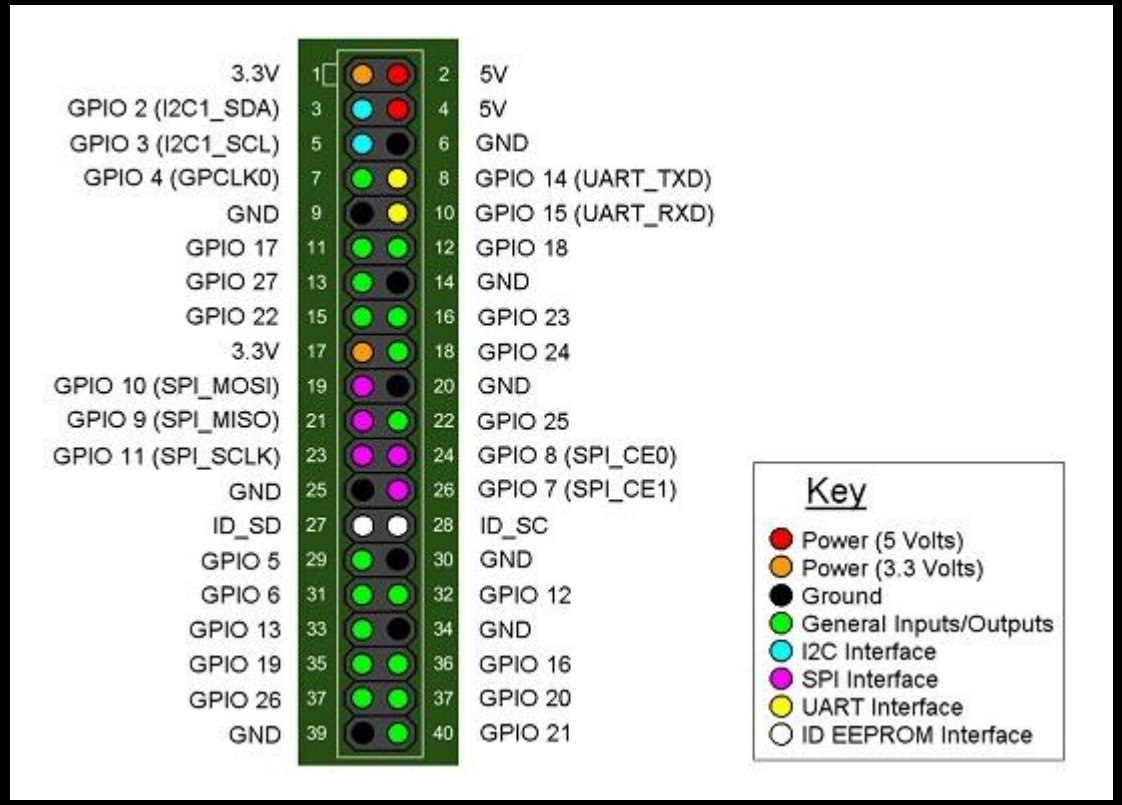
Intention of this Mezzanine Card

- Make the huge ecosystem of available shields usable for 96Boards
- Be as flexible as possible
- Use 3.3V or 5V logic level configurable for the user
- Integrated USB / UART bridge to acess the bootloader / linux kernel console
- Most wanted shield connectors are:
  - Raspi 40 Pin header
  - Mikroelektronica mikroBUS™ Click header
  - Arduino Header

Raspi 40 Pin Connector

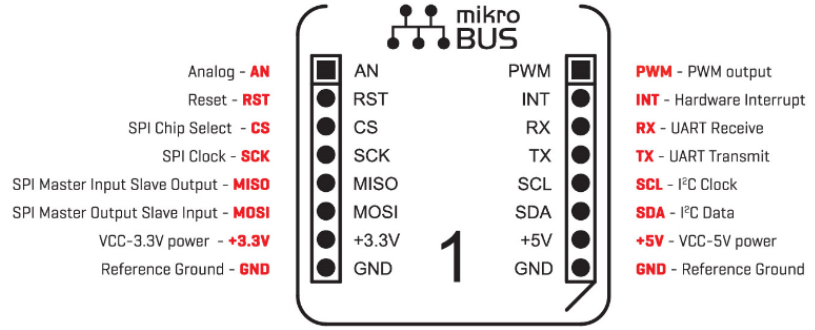


https://www.rs-online.com/designspark/introducing-the-raspberry-pi-b-plus

mikroBUS™ Click Header

mikroBUS™ socket

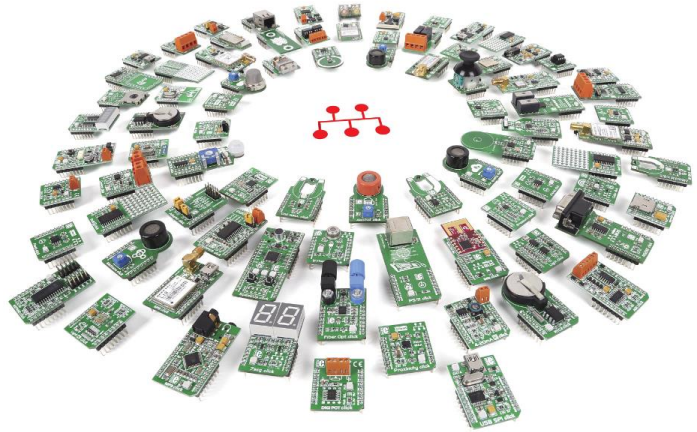
Smallest number of pins — maximum expandability.



The mikroBUS™ socket comprises a pair of 1×8 female headers with a proprietary pin configuration and silkscreen markings. The pinout (always laid out in the same order) consists of three groups of communications pins (SPI, UART and I2C), six additional pins (PWM, Interrupt, Analog input, Reset and Chip select), and two power groups (+3.3V and 5V).

click boards™

No soldering, no wires, no time-wasting.



The large number of click boards™ is the key value of the mikroBUS™ standard.

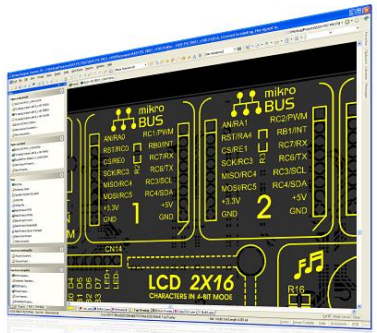
Integrate mikroBUS™ in your design

It's an open standard

mikroBUS™ is an open standard. You can freely place mikroBUS™ sockets in your final PCB designs, as long as you clearly mark them on the silkscreen with the mikroBUS™ footprint specifications:

mikroBUS™ Standard | mikroBUS™ Logo | mikroBUS™ PCB Files

You are also allowed to produce and sell your own mikroBUS™ add-on boards as well, as long as you adhere to the pre-defined specifications. The only restriction is that you are not allowed to call your board a "click board" because the name is a trademark of MikroElektronika. Let us know if you make something, send us an Email to office@mikroe.com.

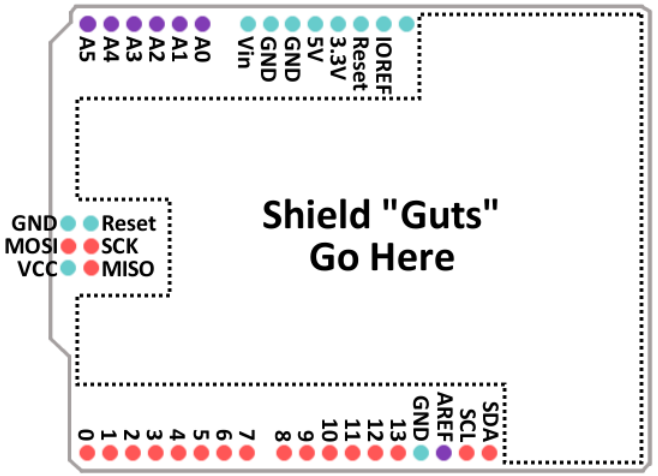


https://www.mikroe.com/mikrobus/
https://shop.mikroe.com/click

Arduino Header

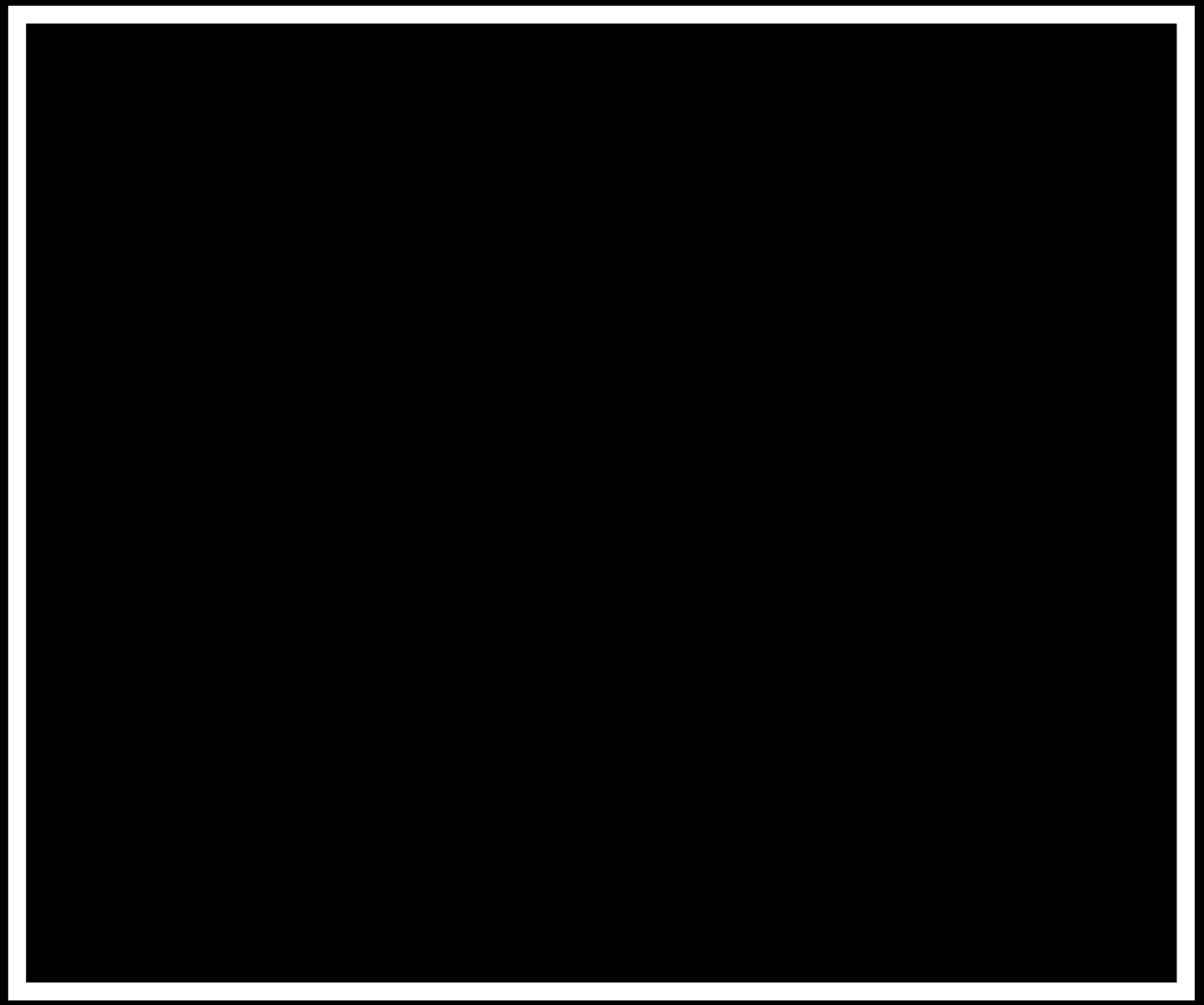
Shield Form Factor

Every Arduino shield must have the same form-factor as the standard Arduino. Power and ground pins on one eight (previously six) pin header, and analog pins on a six-pin header next to that. Digital pins cover the other edge on the other side, an eight-pin header separated from a 10-pin by that weird 0.5" spacing. Some shields also require a connection to the Arduino's ICSP header (the 2x3 programming header on the end).



Some shields use every pin on the Arduino, while others only use a couple. When stacking shields, it's important to make sure they don't use overlapping pins. Some shields communicate with the Arduino via SPI, I²C, or Serial, and others use the Arduino's interrupts or analog inputs.

https://learn.sparkfun.com/tutorials/arduino-shields



Thank you