

USB-A Breakout Module (Female Port)

CHIP: *SS-52100-001***SIZE:** *25mm x 18.5mm*

DESCRIPTION:

This USB-A Breakout Module features pin headers for VDD, GND, and the differential data pairs. The module is a USB-A receptacle with +5v VBUS and host-side hardware (this USB module provides power from your board, to the peripheral). The module features an AP2171W power switch for USB VBUS. The module features comprehensive ESD & overcurrent protections, including diodes on data pairs along with decoupling capacitors & the power switch.

This module takes out the tedious, unpredictable troubles that come from USBs, and will let you streamline and debug your inventions & innovations.

This board is perfect for peripheral hosting (provided you have a host controller), providing peripherals with power, data logging & fetching, and most importantly: education.

Happy building!

PINOUT:

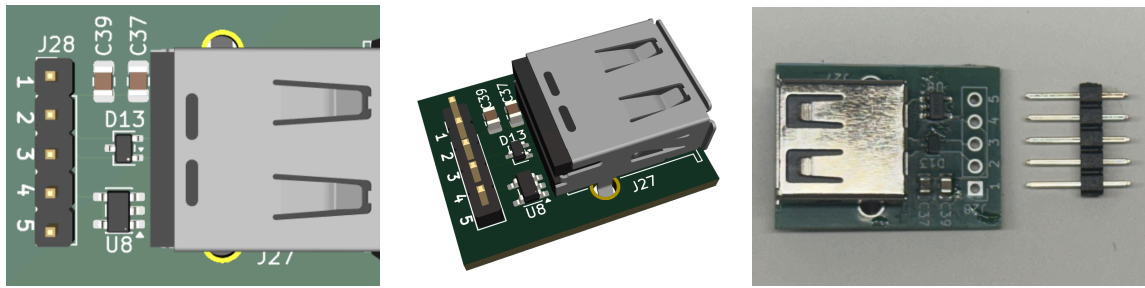
PIN	NAME	DOES THIS
1	GND	Ground
2	D+	Positive Data Line
3	D-	Negative Data Line
4	VDD	+5v
5	GND	Ground

APPLICATIONS:

- Hosting peripherals such as mice, keyboards, etc
 - Power supply for low current peripherals & systems
 - Data Transmission between hosts & slaves
 - Data logging & fetching
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CHIPS ON BOARD:

COMPONENT	PART #	JOB	DATASHEET
USB-A	SS-52100-001	USB-A Port	[Manufacturers Datasheet]
Power Switch	AP2171W	Overcurrent & Power Management	[Manufacturers Datasheet]
Diode	SP0502BAJT	ESD Protection	[Manufacturers Datasheet]

PHOTOS:**NOTES & DEBUGGING:**

- This module's ESD protections do not ensure a board's safety. They act as 1 very valuable layer of protection, however proper handling, design & care are also vital.
- The differential data pairs are relatively sensitive, on breadboards and protoboards, lower speeds are highly popular & widely standard

Feel free to send any questions to sales@meridianelectronic.com

Check MeridianElectronic.com for datasheets, 3D printing, solder stencils & more!