5632 Klip Halo Power Safety Datasheet

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KLIP HALO POWER INFORMATION AND POWER SAFETY DATSHEET

Introduction

When a micro:bit is connected to the Klip Halo, power can be supplied in multiple ways. Via the USB connector on the micro:bit, the JST connector on the micro:bit or Klip Halo, or using the power rings on the Klip Halo. Depending on which option is used effects the maximum and minimum voltage that can be used and the amount of current that can be drawn from the rings on the Klip Halo.

Klip Halo Power Input Specification

Min: 1.95V
Max: 3.6V (3V recommended)

Max Current

If powered using JST connector (either on Klip Halo or micro:bit), or by applying power the power rings on the Klip Halo:

- Per pin: 5mA. See http://tech.microbit.org/hardware/edgeconnector_ds/
- Total for all pins: Determined by maximum current available from the connected power source.

If powering the mirco:bit from a USB lead:

- Per pin: 5mA. See http://tech.microbit.org/hardware/edgeconnector_ds/
- Total for all pins: 90mA. See http://tech.microbit.org/hardware/powersupply/

Power Warning

The Halo has no over voltage or reverse voltage protection built in so care must be taken if applying power to the JST or rings on the Klip Halo. Make sure the polarity of the power connections are correct before powering up and do not exceed the maximum input voltage.

Important note: Care must also be taken to not power apply power to the Klip Halo directly if the micro:bit is also plugged into either a USB lead or if power is connected to the JST connection on the micro:bit.