WINFORD
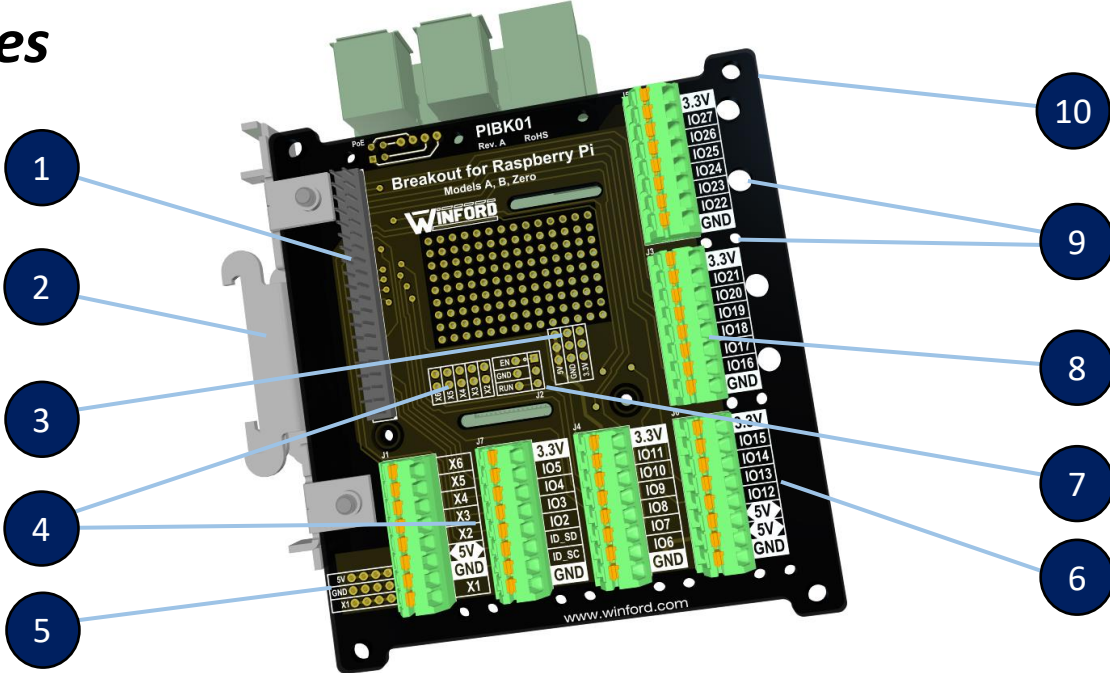
Overview

This product provides an easy, convenient way to use a Raspberry Pi as well as mount on a DIN rail. From making connections to the various signals to adding your own interface circuitry, a number of useful design features make the process easier. Simply plug in your Raspberry Pi, and get started!
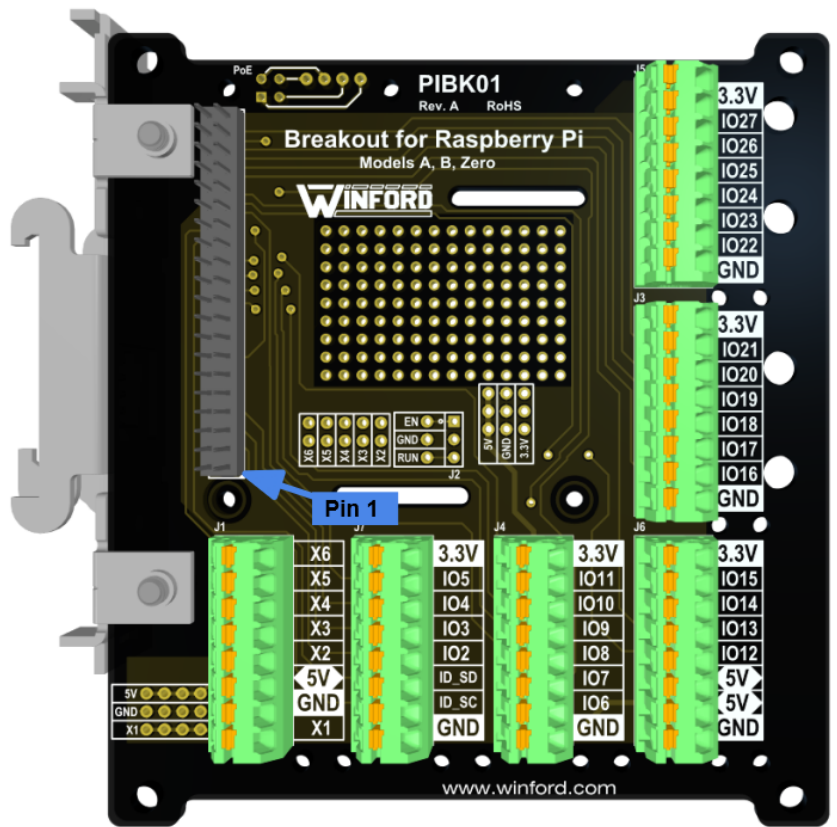
Key Features

1	Pin header (top side) allows a hat to be inserted and removed as needed* **(-STK version only)** Socket header (bottom side) allows a Raspberry Pi to be added and removed as needed
2	Space-saving DIN mount clip results in Raspberry Pi and PIBK01 being perpendicular to DIN rail
3	Prototype area includes clearly-marked pads tied to 3.3V, 5V, and GND
4	Access external signals at proto area using extra terminal block positions (X1 thru X6)
5	Pad group allows user to add a DC-DC converter for operation at higher supply voltages*
6	I/O pin numbers are well-ordered and are shown directly on the PCB
7	Provision made for accessing extra R.Pi signals RUN, ENABLE, and PoE (requires user-installed headers)* (R.Pi 4 only)
8	Fast, easy wire connections are made with spring terminal blocks that are accessible even when a hat is installed (typical hat sizes, applies to -STK version only**)**
9	Holes allow zip-ties to be used for strain-relief feature on signal wires and R.Pi cables
10	If needed, holes in the corners (0.15" diam) allow standoffs to be used for panel-mount or benchtop applications (The DIN clip can be removed by taking out 2 screws.)

*See the app note on the product page at **www.winford.com/pibk01.php** for helpful information on these features.

Raspberry Pi Header Pinout

2x20 HEADER PINOUT (Top-Side View)

IO21	40	39	GND
IO20	38	37	IO26
IO16	36	35	IO19
GND	34	33	IO13
IO12	32	31	IO6
GND	30	29	IO5
ID_SC	28	27	ID_SD
IO7	26	25	GND
IO8	24	23	IO11
IO25	22	21	IO9
GND	20	19	IO10
IO24	18	17	3.3V
IO23	16	15	IO22
GND	14	13	IO27
IO18	12	11	IO17
IO15	10	9	GND
IO14	8	7	IO4
GND	6	5	IO3
5V	4	3	IO2
5V	2	1	3.3V

The 2x20 header pinout matches the pinout of the Raspberry Pi.

Signals at the 2x20 header are directly connected to the terminal blocks, as indicated by the label at each terminal block position.
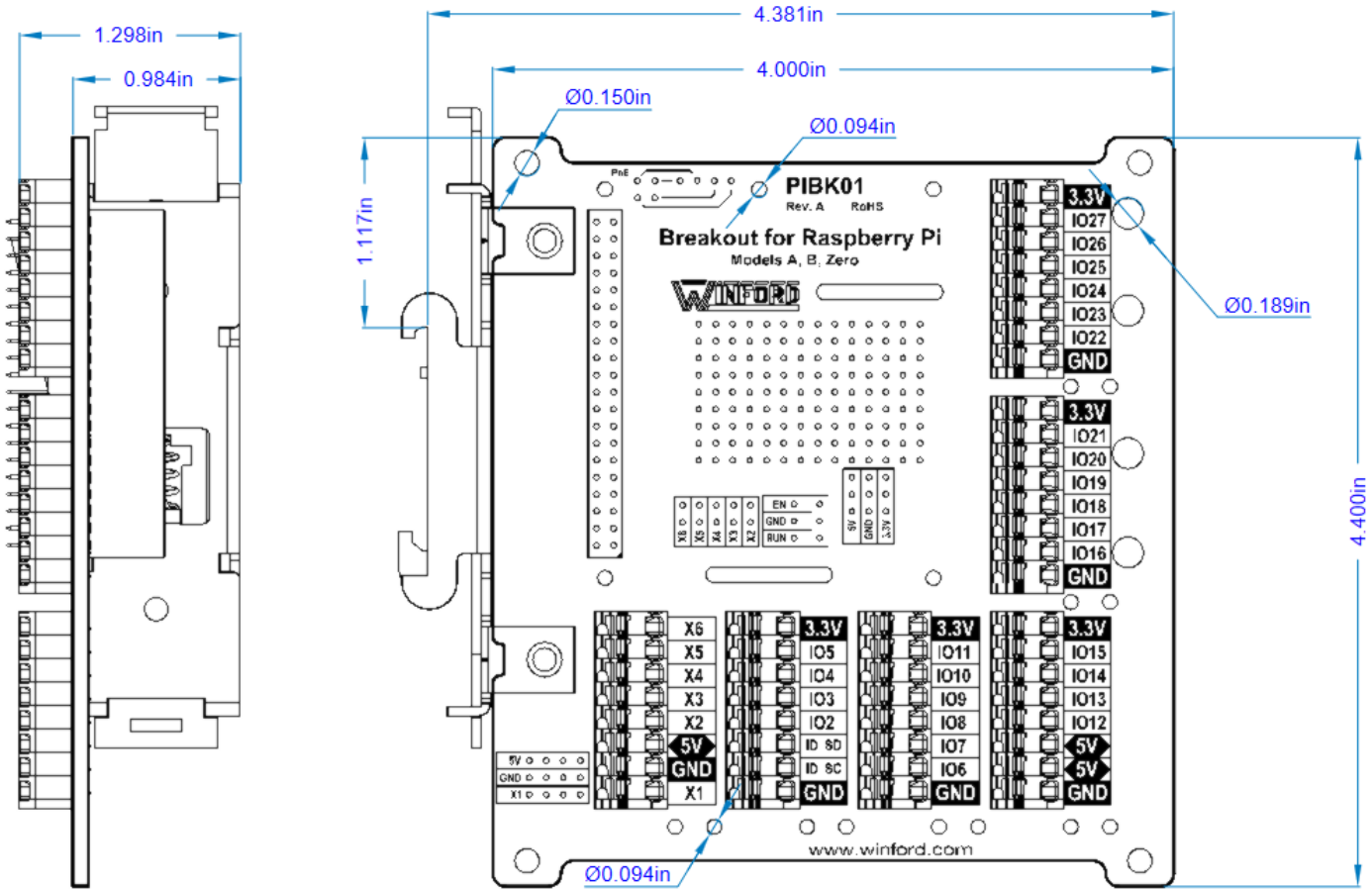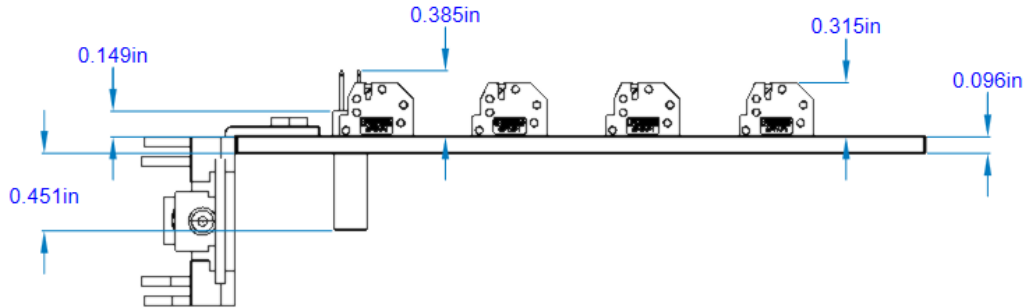
Mechanical Drawing
(-STK version with stacking header is shown)
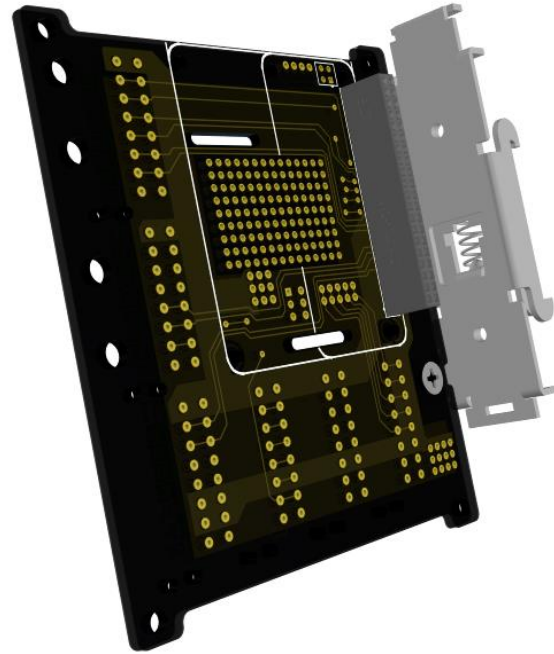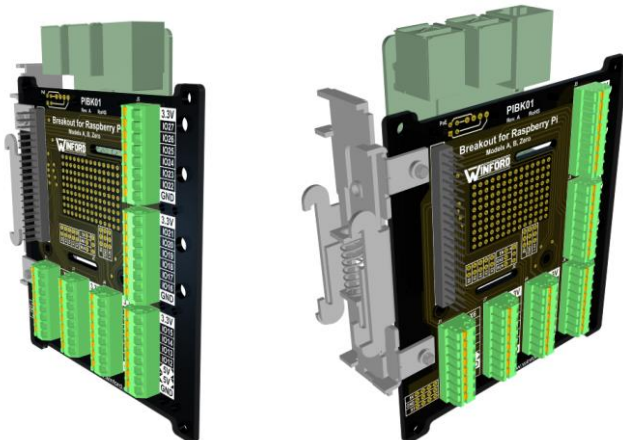
Additional Features

- Designed for Raspberry Pi 4

- Also suitable for Rasperry Pi 3 (A, B, Zero)**

- High-quality spring terminal blocks

- PCB size: 4.0" x 4.4"

- Screws and standoffs (#2-56 thread) included for mounting one Raspberry Pi to the PIBK01.

- Slots in the PCB accommodate camera and display flex cables (not included)

- Assembled at Winford Engineering manufacturing facility in Michigan, USA

** Not designed to interface to R.Pi 3 enable signal (J2) since the location of this signal is different on the R.Pi 3 vs the R.Pi 4.
Due to one of the ribbon cable pass-thru slot locations, only 3 mounting holes are available for R.Pi Zero.

Back Side

PIBK01 with Raspberry Pi Model B
(Raspberry Pi not included)