Dual **i**n-line **P**ackage Raspberry **Pi** PICO

The Ultimate Universal Aluminum Case
for the Raspberry Pi® PICO

DiP-Pi PICO Universal and PIoT Case

No Solder – No Cables – No Lost Time

Product Presentation

Especially designed for the Raspberry Pi® PICO

General

Dual **i**n-L**i**ne **P**ackage Raspberry **Pi PICO** (**DiP-Pi PICO**) is a family of self-containing, stackable add-ons to the Raspberry Pi PICO® that decrease to the minimum user involvement for hardware development of application/idea testing based on Raspberry Pi PICO.

Following this approach our company developed a series of **Aluminum Profile based Cases** that can held Raspberry Pi® PICO and one additional HAT on Top. Four different types of DiP-Pi Cases have been released. DiP-Pi Cases has been designed on that way, where no need to solder anything or solder just a few pins depending to the application.

Transparent Top Cover give an opportunity to the user to easy use a display or LED indications. There is also optionally white Top Cover ideal for applications where is no need to have user view to the case/system internals.

DiP-Pi Cases can be used as a stand-alone device or screwed to rails. Additional embedded functionalities are covering most of the standard applications requirements and are covering +/-12V RS232 double driver, Ambient Light Sensor Interface (Ambient Sensor is not included), 2 independent relays with appropriate Terminals Blocks, Groovy Interface (3V3 or 5V0), as also 1-wire interface. There is also an internal space for 300 mAh battery (not included) if DiP-Pi PIoT with UPS functionality is used.

Assembly of the DiP-Pi cases as also mounting the internals are absolutely simple and easy to be done by any even non-technical user.

Frequently Asked Questions and Answers

Question: What is the DiP-Pi Universal Case?
Answer: The **DiP-Pi Universal Case** an Enclosure for the Raspberry Pi PICO, manufactured from aluminum with removable transparent window (cover) on top. It is dedicated to being used with any of existing PICO boards.

Question: What is the DiP-Pi PIoT Case?
Answer: The **DiP-Pi PIoT Case** an Enclosure for the Raspberry Pi PICO, manufactured from aluminum with removable transparent window (cover) on top. It is dedicated to being used with DiP-Pi PIoT series of boards.

Question: Is the DiP-Pi Universal Case compatible with all HAT to the Raspberry Pi PICO?
Answer: As far the HAT is following the PICO dimensions or are slightly wider or longer it is compatible.

Question: Do I need to solder anything to use the DiP-Pi Universal Case?
Answer: No. The **DiP-Pi Universal Case** is designed on that way, that user does not need to solder anything to it. Just pass through the Raspberry Pi® PICO with header and use it.

Question: How can I use with this case Raspberry Pi® PICO, and any extra HAT?
Answer: Very simple, just pass the Raspberry Pi PICO through the provided PCB, and plug on top the extra HAT. Screw the front and rear plastic covers.

Question: OK. Looks it is simple. But I would like to add a few of my own parts to the design. Is it possible?
Answer: Yes. In the **DiP-Pi Universal Case** Solo, there are places designed and dedicated for that. A series of holes matrix with pitch of 1.27mm can be easily used for this.

Question: What versions of the DiP-Pi Case are existing?
Answer: There are 4 versions of the **DiP-Pi Case:**

- **DiP-Pi Universal Case Solo**
- **DiP-Pi Universal Case Advanced**
- **DiP-Pi PIoT Case Solo**
- **DiP-Pi PIoT Case Advanced**

Question: What are the differences between of these 4 types of cases?
Answer1: Basically, the Versions **Solo** are a passive (without any additional functionality) and is used to hold Raspberry Pi® PICO with one extra HAT on Top.

Answer2: Alternatively, the Versions **Advanced** are an Active (with many additional functionality) and are used to hold Raspberry Pi® PICO with one extra HAT on Top. Before use of it, user need to check with provided schematics if planned to use application is compatible with occupied (used) pins of the Raspberry Pi® PICO.

Question: I made an application; can I be supplied with DiP-Pi Cases dedicated to my specific application?
Answer: Yes, we are an owner of the design, and it can be adopted to your needs for any QTY. It is including length of the case as also front and rear plastic covers.

Question: What are the mounting ways of this cases?
Answer: All DiP-Pi Cases can be used as stand alone or screwed to a rail.

Question: How can I compare the differences between of these 4 types of cases?
Answer: See below Table to check the difference.

Comparison Table

Functionality	DiP-Pi Cases Types			
	Universal Solo	**Universal Advanced**	**PIoT Solo**	**PIoT Advanced**
Other PICO HAT Compatibility	Compatible with All HATs, as far dimensions similar or bigger to: 34mm wide (max) 100mm long (max) Recommended to keep Official Raspberry Pi PICO dimensions	Compatible with most of other HATs as far dimensions. User needs to check with schematic about PICO used PINS of additional HAT	Not Compatible with other HATs, it is only to be used with DiP-Pi PIoT HATs. No extra features added	Not Compatible with other HATs, it is only to be used with DiP-Pi PIoT HATs. Plenty of other additional features added
Case Dimensions	43mm wide 30mm high 57mm long	43mm wide 30mm high 57mm long	43mm wide 30mm high 57mm long	43mm wide 30mm high 57mm long
Mounting Type	Stand alone or rail mounting	Stand alone or rail mounting	Stand alone or rail mounting	Stand alone or rail mounting
Case Body Color	Black	Black	Black	Black
Top Cover Color	Transparent or White	Transparent or White	Transparent or White	Transparent or White
Raspberry Pi PICO Mounting way	Pass through, no soldering is needed	Pass through, no soldering (or few) is needed	Pass through no soldering is needed	Pass through no soldering (or few) is needed
Place for user additional parts	Yes	No	No	No
Addition Features:	None. Just hold the Raspberry Pi® PICO and possible extra HAT	Yes, plenty listed below	None. Just hold the Raspberry Pi® PICO DiP-Pi PIoT PCB	Yes, plenty listed below
Addition Relay	none	2 independent relays with appropriate Terminals Blocks	none	1 independent relay with appropriate Terminals Block
Embedded PWM Sounder (buzzer)	none	Yes	none	Yes
Additional 2 User LEDs	none	yes	none	none
+/- 12V serial Port driver	none	Yes, 2 independent drivers	none	Yes, 1 independent driver
Ambient Light Sensors	none	Yes, Sensor is not included	none	Yes, Sensor is not included
Groovy Interface	none	Yes, selectable 3V3 and 5V0	none	Yes, selectable 3V3 and 5V0
1-wire Interface	none	Yes, 3V3 and 5V0 compatible	none	Yes, 3V3 and 5V0 compatible
Internal Space for 300 mAh battery	none	none	Yes	Yes
PCB detailed Labeling	Yes	Yes	Yes	Yes