

# uRAD AWR-HPA adapter

Adapter for connecting uRAD Automotive to Raspberry Pi

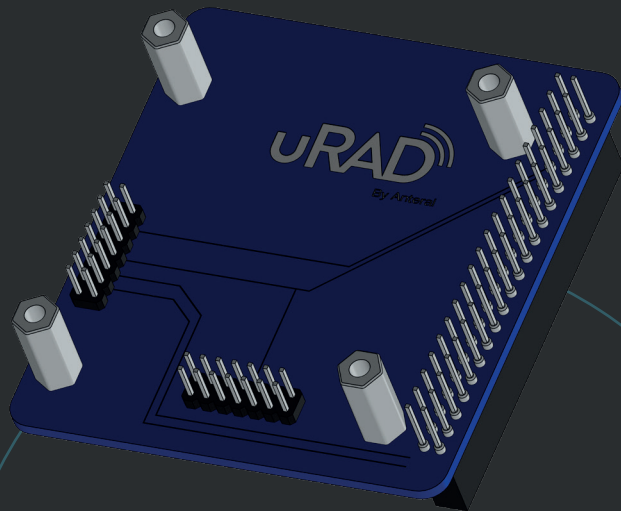
## DESCRIPTION

This product consists on a PCB to connect uRAD Automotive HPA radar version with a Raspberry Pi.

It is comprised of the necessary connectors for attaching the Raspberry Pi and uRAD and four metal spacers for mechanical stability and heat dissipation. Moreover, they have a jumper to connect the 5V power supply pin of uRAD with the 5V power supply pin of the Raspberry Pi. Therefore, you can power the radar by USB or Raspberry Pi.

On the other hand, it has the necessary pads for any user to add a commercial **accelerometer** module (MPU6050) and a **magnetometer** module (HMC5883L) in case they require their use. Modules are not included with purchase.

Do not hesitate to contact us at [contact@urad.es](mailto:contact@urad.es) if you have any doubt.



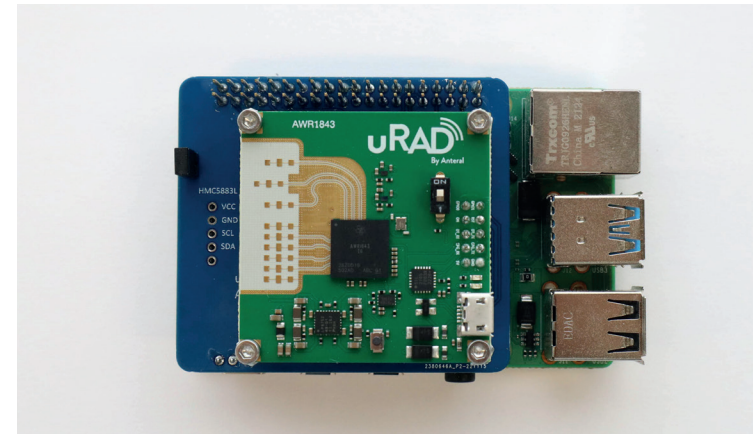
## PIN INTERCONNECTION

uRAD Automotive-HPA pins	Raspberry Pi pins
5V	5V (pin 2,4)
GND	GND (pin 6, 9, 14)
CFG_RX	UART_TX (pin 8)
DATA_TX	UART_RX (pin 10)
RST	GPIO5 (pin 29)
ON/OFF	GPIO6 (pin 31)
GPIO0	GPIO19 (pin 35)
GPIO1	GPIO13 (pin 33)

Magnetometer HMC5883L pins	Raspberry Pi pins
VCC	5V (pin 2,4)
GND	GND (pin 6, 9, 14)
SCL	SCL = GPIO3 (pin 5)
SDA	SDA = GPIO2 (pin 3)
DRDY	GPIO22 (pin 15)

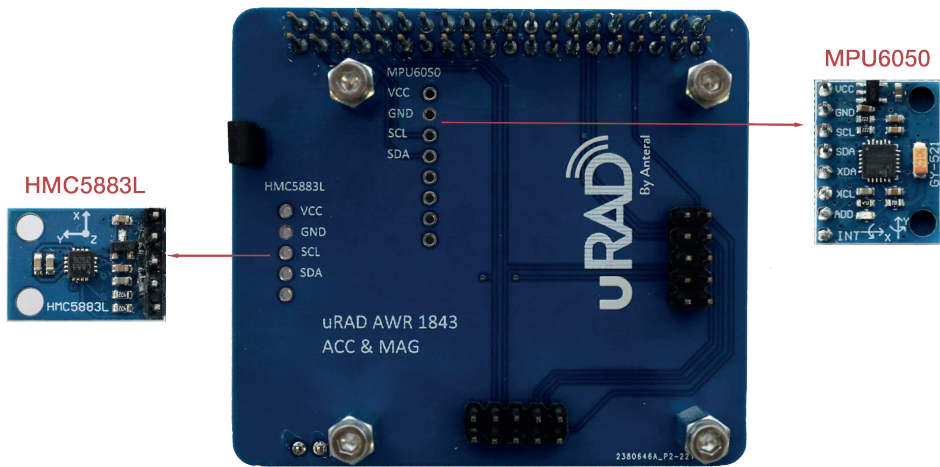
Accelerometer MPU6050 pins	Raspberry Pi pins
VCC	5V (pin 2,4)
GND	GND (pin 6, 9, 14)
SCL	SCL = GPIO3 (pin 5)
SDA	SDA = GPIO2 (pin 3)
XDA	No connected
XCL	No connected
INT	GPIO27 (pin 13)
ADO	GPIO17 (pin 11)

The AWR-HPA PCB adapter has two connectors for **two different mounting options**. So regardless of the orientation of the Raspberry Pi, you can have the radar axes aligned as you wish.



Last version: 02/12/2022

The necessary pads for adding a commercial **accelerometer** module (MPU6050) and a **magnetometer** module (HMC5883L) are:



## OUTLINE

