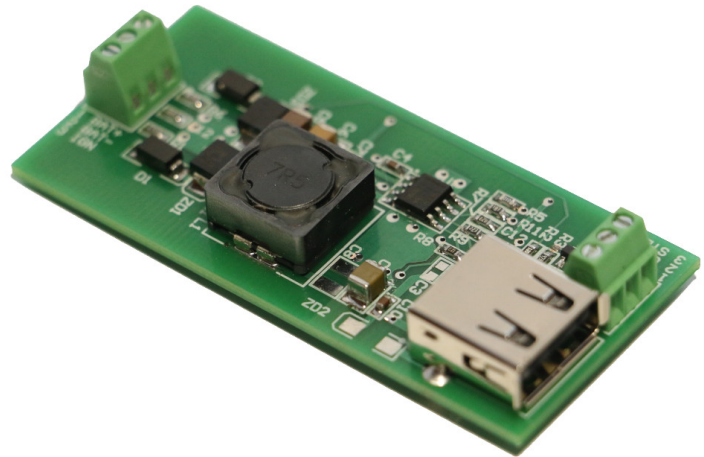


BWS CAR PS V1

12V to 5V DC 2.5A
synchronous power supply

Overview

High efficiency synchronous power supply with ignition state detection equipped optionally with USB-A female socket for the power output.



All pictures shown are for illustration purpose only. Actual product may vary depending on production serie.

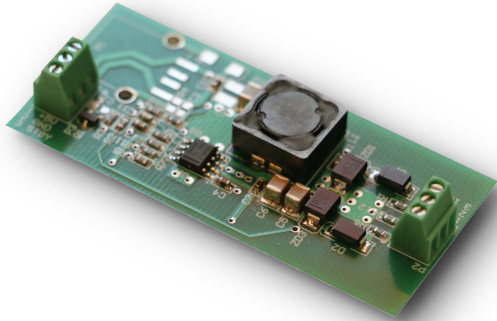
Electrical characteristics

Input voltage range	7V-16V
Output voltage	5V ±2.5%
Maximum output current	2.5A
Ignition voltage detection threshold	7V
Operating temperature range	-40°C ÷ +50°C
Maximum Output Voltage Ripple	50mV
Quiescent current	0.72mA
Efficiency	80%
Ignition detection	Via external pull-up resistor (min. 1.8kohm) Active by LOW state

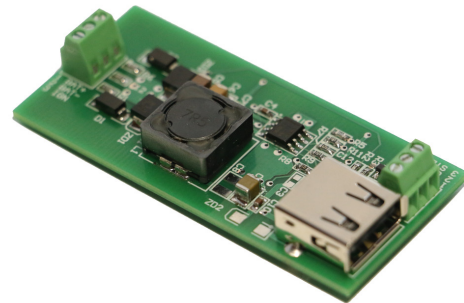
Synchronous DC/DC Converter with

- Overcurrent protection
- Thermal protection
- Overvoltage Transient Protection
- ESD protection HBM ±2kV

Available variants



BWS CAR PS V1 BASIC



BWS CAR PS V1 USB

All pictures shown are for illustration purpose only. Actual product may vary depending on production serie.

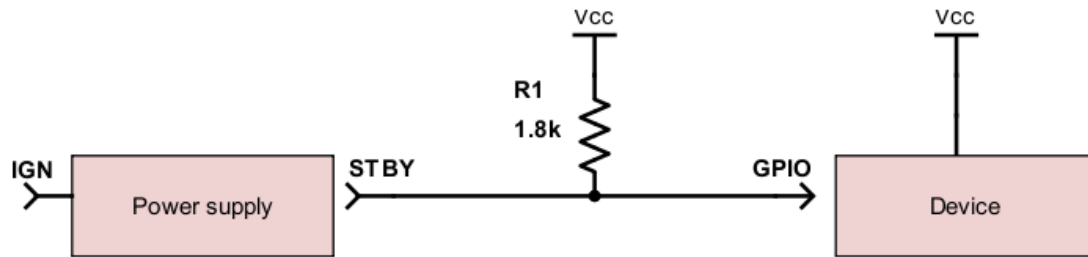
Input pins

BAT+	Positive from the input power source
BAT-	Negative from the input power source
IGN	Positive from the ignition source

Output pins

+5V	+5V power output
GND	GND power output
STBY	Via external pull-up resistor (min. 1.8kohm). Active by LOW state.
USB-A female socket	5V 2.5A power output (available only in BWS CAR PS V1 USB)

IGN-STBY



IGN Pin	STBY Pin	Description
$\geq +7V$	0V	Ignition is on
$< +7V$	VCC	Ignition is off

Dimensions

Width	65mm
Height	10mm
Length	30mm
Weight (Basic)	13g
Weight (USB)	24g