

power-S.501

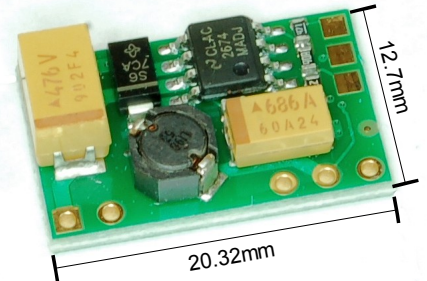
OEM step-down switching voltage regulator module for embedded systems power supply.

AVAILABLE OPTIONS

Module Name	Voltage Regulator	Continuous Output Current	Output Voltage Options
power-S.501	LM2674 Step-Down Regulator	500mA max.	selectable by jumper: 5.0V, 3.3V, 2.5V

VOLTAGE REGULATOR

The power-S.501 power supply module is based on National Semiconductor's LM2674 step-down switching regulator. All necessary components are integrated on a tiny 20x13mm module, no external components are required. The LM2674 provides an efficiency up to 96% and can be operated at an input voltage up to 40V.



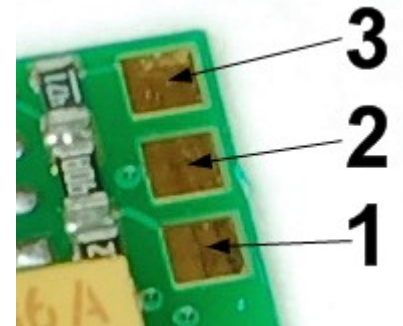
SHUTDOWN

The LM2674 provides a TTL shutdown capability. Driving the ON/OFF pin externally low enters a low power standby mode. If shutdown is not used, this pin may be left open.

OUTPUT VOLTAGE SELECTION

The output voltage of the power-S.501 can be set to three different voltages by setting a solder jumper. The right picture shows the pad numbers of the solder jumper. See the following table for output voltage configuration.

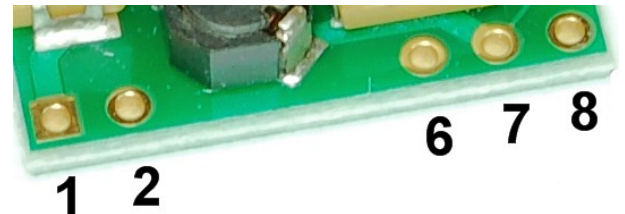
closing pads	output voltage
1-2	5V
2-3	3.3V
1-2-3	2.5V



PINOUT

The picture right shows the pin numbers of the module. See the table below for signal assignment. All pins are placed on a standard 2.54mm (1/10inch) grid.

Pin	1	2	6	7	8
Signal	Vin	GND	On /Off	Vout	GND



OPERATING CHARACTERISTICS

Symbol	Parameter	Condition	Min	Typ	Max	Units
Vin	Input Voltage		8.0		40	V
Vout	Output Voltage	jumper 1-2		5.0		V
		jumper 2-3		3.3		V
		jumper 1-2-3		2.5		V
Iout	Output Current (continuous)				500	mA
T	Operating Temperature (industrial temperature range on request)		-20		+70	°C

DESIGN AND HANDLING GUIDELINES

This module – just like any other semiconductor devices – is susceptible to damage by ESD. Suitable precautions should be taken when handling and transporting devices. The possible damage to devices depends on the circumstances of the handling and transporting, and the nature of the device. The extent of damage can vary from immediate functional or parametric malfunction to degradation of function or performance in use over time. Devices suspected of being affected should be replaced.

DISCLAIMER

chip45 GmbH & Co. KG makes no warranty for the use of its products and assumes no responsibility for any errors which may appear in this document nor does it make a commitment to update the information contained herein. chip45 GmbH & Co. KG products are not intended for use in medical, life saving or life sustaining applications. chip45 GmbH & Co. KG retains the right to make changes to these specifications at any time, without notice. All product names referenced herein are trademarks of their respective companies.