## VOLTAGE REGULATOR SIP MODULES

The PRL family of Voltage Regulator SIP Modules provides instant power for breadboard and prototyping digital, linear and RF circuits. They are designed specifically for use with the GD-970-3.8 and GD-980-6 Gigadapter motherboards but can be used with any circuit boards with pads on 100-mil centers, including those in the PRL-series Custom Circuit Kits. All SIP modules in this family share compatible footprints and can be powered by the PRL-980, ±8.5V/±1A AC/DC adapter.

Using low-profile pin sockets, P/N S090004, in motherboard locations P11-P16, P21-P23 and P31-P33, these voltage regulator modules can be easily interchanged for different applications. The six models currently available are:

Model No.	Output Voltage*	$ V_{\text{IN}}-V_{\text{O}} **$	Dimensions
56002777	3.3V to 5.5V/300mA	3V to 6V	0.825 x 1.5-in.
56002787	-3.3V to -5.5V/-300mA; -2V/-100mA	3V to 6V	0.825 x 2.4-in.
56002797	$\pm 3.3 \text{V to } \pm 5.5 \text{V} / \pm 300 \text{mA}$	3V to 6V	0.825 x2.4-in.
56002797-15	$\pm 13$ V to $\pm 15.5$ V/ $\pm 200$ mA	18V to 20V	0.825 x2.4-in.
56002807	$\pm 3.3 \text{V to } \pm 5.5 \text{V} / \pm 300 \text{mA}$ ; $-2 \text{V} / -100 \text{mA}$	3V to 6V	0.825 x 3.0-in.
56002817	±3.3V to 5.5V/±400mA***; +3V/150mA; -2V/-150mA	3V to 5V	1.7 x 4.5-in.
56002867	Dual 3.3V to 5.5V/300mA	3V to 6V	0.825 x2.4-in.

The 56002777 module has a single adjustable 3.3V to 5.5V/300mA output. It is designed for TTL/CMOS circuits.

The 56002787 module has an adjustable -3.3V to -5.5V/-300mA and a fixed -2V/-100mA outputs. It is designed for ECL circuits. The -2V output is the bias voltage  $V_{TT}$  for the  $50\Omega/-2V$  ECL input termination.

The 56002797 module has a pair of  $\pm 3.3$ V to  $\pm 5.5$ V/ $\pm 30$ 0mA outputs. It is designed for linear and TTL/CMOS circuits.

The 56002797-15 module has a pair of  $\pm 13$ V to  $\pm 15.5$ V/ $\pm 200$ mA outputs. It is designed for linear circuits.

The 56002807 module has a pair of  $\pm 3.3$ V to  $\pm 5.5$ V/ $\pm 300$ mA outputs and a -2V/-100mA output. It is designed for mixed ECL and TTL/CMOS circuits. **This module interferes with the DIP switch footprint in the GD-970-3.8 motherboard and that of J6 in the GD-970-3.8A motherboard.** Therefore, these components should not be used on those motherboards with this module.

The 56002817 module has a pair of  $\pm 3.3$ V to  $\pm 5.5$ V/ $\pm 400$ mA outputs, a -2V V<sub>TTN</sub> output for ECL input termination and a +3V V<sub>TTP</sub> output for PECL input termination. The +3V V<sub>TTP</sub> output is a current–sink only supply, and it should not be used for biasing TTL circuits. It is designed for mixed ECL, PECL TTL/CMOS and Linear circuits.

This module is larger than the rest and is intended for use with the GD-980-6 motherboard and the PRL-980 series extrusion. However, it can also be used with pc boards in the PRL-970 series if the aluminum enclosure is not used.

The 56002867 module has two identical adjustable 3.3V to 5.5V/300mA outputs. It is designed for mixed 3.3V and 5V TTL/CMOS circuits and also for applications where separate analog  $V_{DD}$  and digital  $V_{DD}$  supplies are required.

- \*Other output voltages available on custom orders.
- \*\*With cooling, higher input voltages can be used. Maximum  $|V_{IN}-V_{O}|$  should be limited to 8V.
- \*\*\*With cooling, output currents can be increased to ±600mA.



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## The common module pin assignment is shown below (note: not all pins are used in every module):



