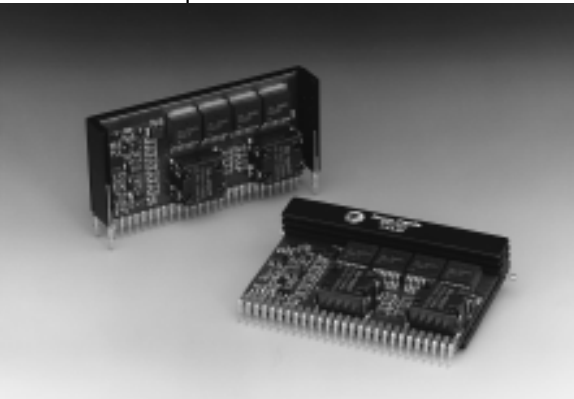


PT7746 Series

**32 AMP "CURRENT BOOSTER"
 FOR PT7770 SERIES**

Revised 8/13/98



The PT7746 is a new high-performance 32 Amp "Current Booster" for the PT7770 Series housed in a 27-pin SIP package.

Multiple PT7746 boosters will operate in parallel with the PT7770 boosting output current in increments of 32A. Combinations of PT7770s and PT7746 current boosters can easily supply enough power for virtually any multiple mega-processor application.

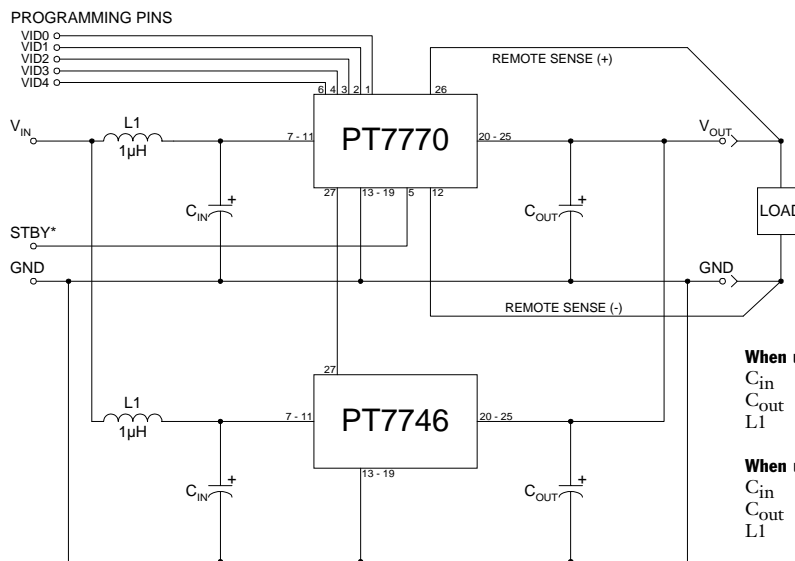
A PT7746 current booster adds a parallel output stage driven by the PT7770. As such, the system runs in perfect synchronization providing a low noise solution.

The PT7746 only operates in combination with the PT7770 series and is not a stand-alone product. Therefore, please refer to the PT7771, PT7772, or PT7777 series data sheet for performance specifications. The PT7746 also has the same mechanical dimensions and package options as the PT7770 series.

Features

- 32A Current Boost
- Automatically Tracks V_o of PT7770
- High Efficiency
- Input Voltage Range: 3V to 5.5V
- Synchronized with PT7770
- 27-pin SIP Package
- Run up to 2 in Parallel - 96 Amps

Standard Application



Ordering Information

PT7746□

(For dimensions and PC Board layout, see Package Styles 1020 and 1030.)

PT Series Suffix (PT1234X)

Case/Pin Configuration	
Vertical Through-Hole	N
Horizontal Through-Hole	A
Horizontal Surface Mount	C

Pin-Out Information

Pin	Function	Pin	Function
1	Do not connect	14	GND
2	Do not connect	15	GND
3	Do not connect	16	GND
4	Do not connect	17	GND
5	Do not connect	18	GND
6	Do not connect	19	GND
7	V_{in}	20	V_{out}
8	V_{in}	21	V_{out}
9	V_{in}	22	V_{out}
10	V_{in}	23	V_{out}
11	V_{in}	24	V_{out}
12	Do not connect	25	V_{out}
13	GND	26	Do not connect
		27	Master Sync In

When used with PT7771/7772:
 C_{in} = Required 2400µF electrolytic
 C_{out} = Required 2400µF electrolytic
 L1 = Optional 1µH input choke

When used with PT7777:
 C_{in} = Required 2400µF electrolytic
 C_{out} = Required 680µF electrolytic
 L1 = Optional 1µH input choke

Output Capacitors: When used with a PT7771 or PT7772, the PT7746 requires a minimum output capacitance of 2400µF. When used with a PT7777, the PT7746 requires a minimum output capacitance of 680µF for proper operation. Do not use Oscon type capacitors. The maximum allowable output capacitance is 30,000µF.

Input Filter: An input filter is optional for most applications. The input inductor must be sized to handle 32ADC with a typical value of 1µH. The input capacitance must be rated for a minimum of 2.6Arms of ripple current. For transient or dynamic load applications, additional capacitance may be required.

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