PT7741 Series

32 AMP "CURRENT BOOSTER" FOR PT7779 REGULATORS

Preliminary 2/17/2000

Advanced Information

The PT7741 is a high-performance 32 Amp "Current Booster", specifically designed to operate with the PT7779 regulator.

A PT7741 booster will operate in parallel with a PT7779 to provide an additional 32A of output current.

A combination of a PT7779 and up to two PT7741 boosters can power virtually any multiple mega-processor application with up to 96A of supply current.

Each PT7741 current booster adds another output stage to the PT7779 regulator and operates in perfect sychronization.

The PT7741 is not a stand-alone product and can only be used in combination with the PT7779. Please refer to the PT7779 series data sheet for the performance specifications. The PT7741 booster has the same mehanical dimensions and package options as the PT7779 regulator.

Features

- 32A Current Boost
- Automatically Tracks Vo of PT7779
- High Efficiency
- Short Circuit Protection
- Input Voltage Range: 4.5V to 5.5V
- Synchronized with PT7779
- 27-pin SIP Package
- Run up to 2 in Parallel - 96 Amps

Pin-Out Information

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

Ordering Information

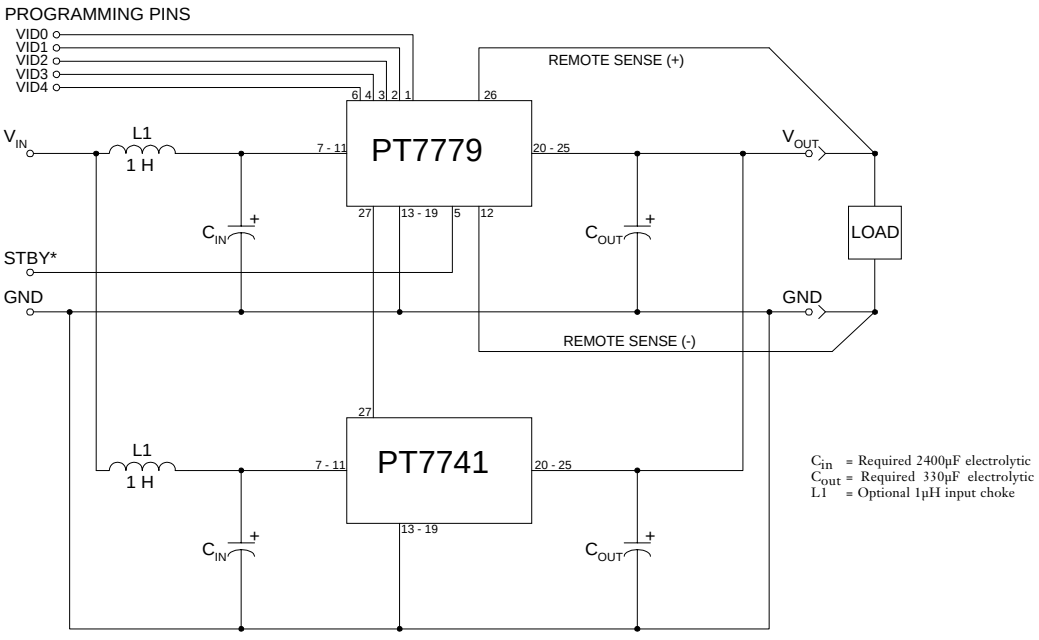
PT7741❑

(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

Standard Application



C_{in} = Required 2400µF electrolytic
C_{out} = Required 330µF electrolytic
L1 = Optional 1µH input choke

Output Capacitors: *The PT7779 and PT/7741 each require a minimum ouput capacitance of 330µF for proper operation. Do not use Oscon type capacitors.*

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 4.2Arms of ripple current. For transient or dynamic load applications, additional capacitance may be required.*