Revised 1/12/99

PT7747 Series

15 AMP "CURRENT BOOSTER" FOR PT7750 SERIES
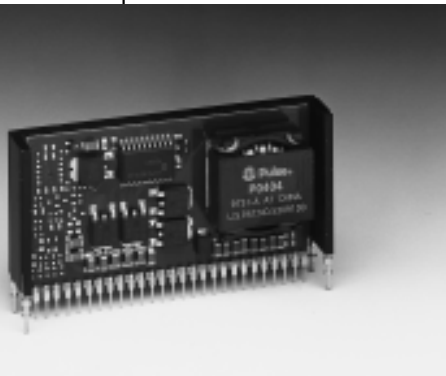
The PT7747 is a new high-performance 15 Amp "Current Booster" for the PT7750 Series housed in a 27-pin SIP package. Multiple PT7747 boosters will operate in parallel with the PT7750 Series boosting output current in increments of 15A .   Combinations of PT7750s and PT7747 current boosters can easily supply enough power for virtually any multiple megaprocessor application.

A PT7747 current booster adds a parallel output stage driven by the PT7750. As such, the system runs in perfect sychronization providing a low noise solution.

The PT7747 only operates in combination with the PT7750 series and is not a stand-alone product. Therefore please refer the PT7750 series data sheet for performance specifications. The PT7747 also has the same mechanical dimensions and package options as the PT7750 series.

Features

- 15A Current Boost
- Automatically Tracks Vout of PT7750
- High Efficiency
- Input Voltage Range:
  20V to 28V
- Synchronized with PT7750
- 27-pin SIP Package
- Run up to 4 in Parallel - 60 Amps

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	Sync In

Ordering Information

PT7747☐

PT Series Suffix (PT1234X)

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

(For dimensions and PC board layout, see Package Styles 1000 and 1010.)

Standard Application

C_{in} = Required 560µF electrolytic
C_{out} = Required 2000µF electrolytic
L1 = Optional 1µH input choke
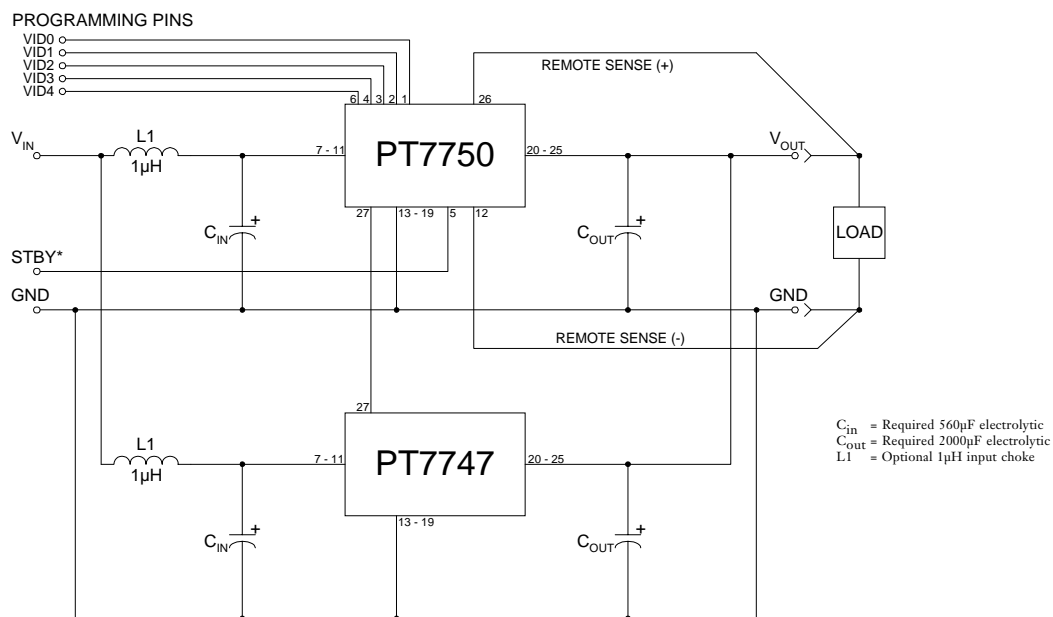
Output Capacitors: *The PT7750/PT7747 series requires a minimum output capacitance of 2000µF for proper operation. Do not use Oscon type capacitors. The maximum allowable output capacitance is (42,000 ÷ Vout)µF for the PT7751, (96,000 ÷ Vout)µF for the PT7756, or 15,000µF, whichever is less.*

Input Filter: *An input inductor is optional for most applications. The input inductor must be sized to handle 9ADC with a typical value of 1µH. The input capacitance must be rated for a minimum of 8.0 Arms of ripple current when operated at maximum output current and maximum output voltage. Contact an applications engineer for input capacitor selection for applications at other output voltages and output currents.*

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