Revised 1/13/99

PT7748 Series

17 AMP "CURRENT BOOSTER" FOR PT7720 SERIES
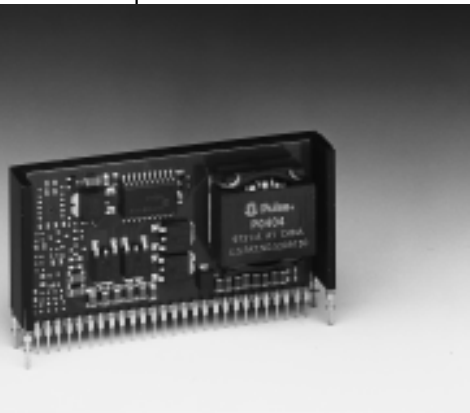
The PT7748 is a new high-performance 17 Amp "Current Booster" for the PT7720 Series housed in a 27-pin SIP package. Multiple PT7748 boosters will operate in parallel with the PT7720 Series boosting output current in increments of 17A. Combinations of PT7720 and PT7748 current boosters can easily supply enough power for virtually any multiple megaprocessor application.

A PT7748 current booster adds a parallel output stage driven by the PT7720. As such, the system runs in perfect sychronization providing a low noise solution.

The PT7748 only operates in combination with the PT7720 series and is not a stand-alone product. Therefore please refer the PT7720 series data sheet for performance specifications. The PT7748 also has the same mechanical dimensions and package options as the PT7720 series.

Features

- 17A Current Boost
- Automatically Tracks Vout of PT7720
- High Efficiency
- Input Voltage Range:
  11V to 14V
- Synchronized with PT7720
- 27-pin SIP Package
- Run up to 4 in Parallel - 85 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

PT7748☐

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 1200μF electrolytic
L1 = Optional 1μH input choke
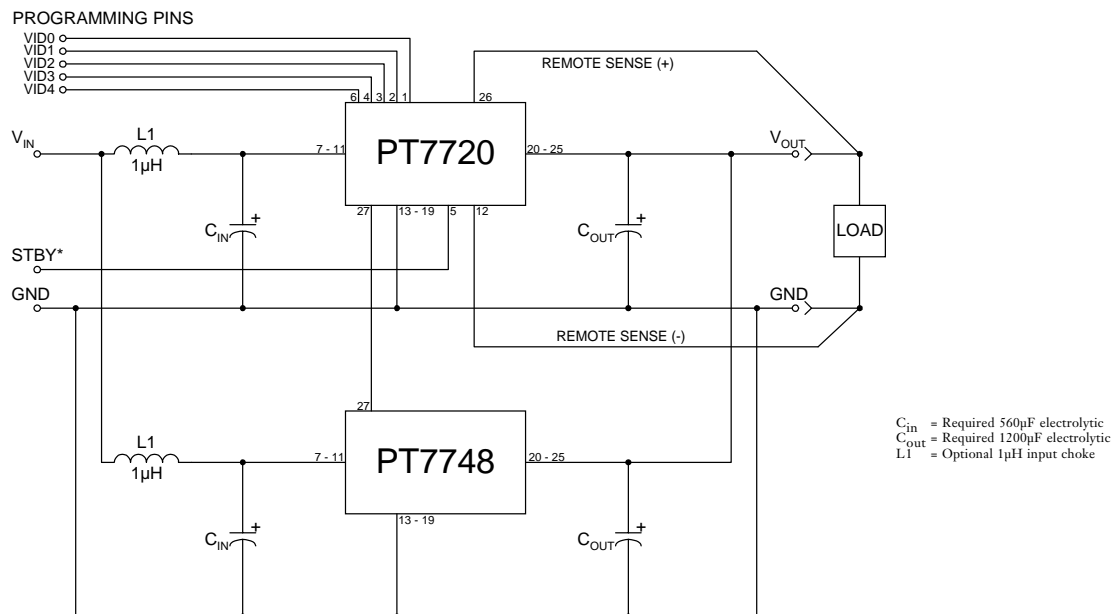
Output Capacitors: *The PT7720 series requires a minimum output capacitance of 1200μF for proper operation. Do not use Oscon type capacitors. The maximum allowable output capacitance Is (57,000 ÷ Vout)μF, or 15,000μF, whichever is less.*

Input Filter: *An input inductor is optional for most applications. The input inductor must be sized to handle 7ADC with a typical value of 1μH. The input capacitance must be rated for a minimum of 4.0 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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