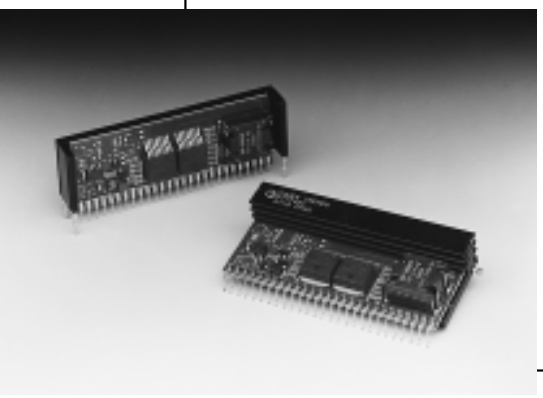
PT7749 Series

18 AMP "CURRENT BOOSTER" FOR PT7700 SERIES

Revised 8/13/98



The PT7749 is a new high-performance 18 Amp "Current Booster" for the PT7700 Series housed in a 27-pin SIP package.

Multiple PT7749 boosters will operate in parallel with the PT7700 boosting output current in increments of 18A . Combinations of PT7700s and PT7749 current boosters can easily supply enough power for virtually any multiple megaprocessor application.

A PT7749 current booster adds a parallel output stage driven by the PT7700. As such, the system runs in perfect sychronization providing a low noise solution.

The PT7749 only operates in combination with the PT7700 series and is not a stand-alone product. Therefore please refer the PT7705, PT7706, or PT7707 series data sheet for performance specifications. The PT7749 also has the same mechanical dimensions and package options as the PT7700 series.

Features

- Current Boost
- Automatically Tracks Vout of PT7700
- High Efficiency
- Input Voltage Range: 3V to 5.5V
- Synchronized with PT7700
- 27-pin SIP Package
- Run up to 4 in Parallel - 90 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	V_{in}	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

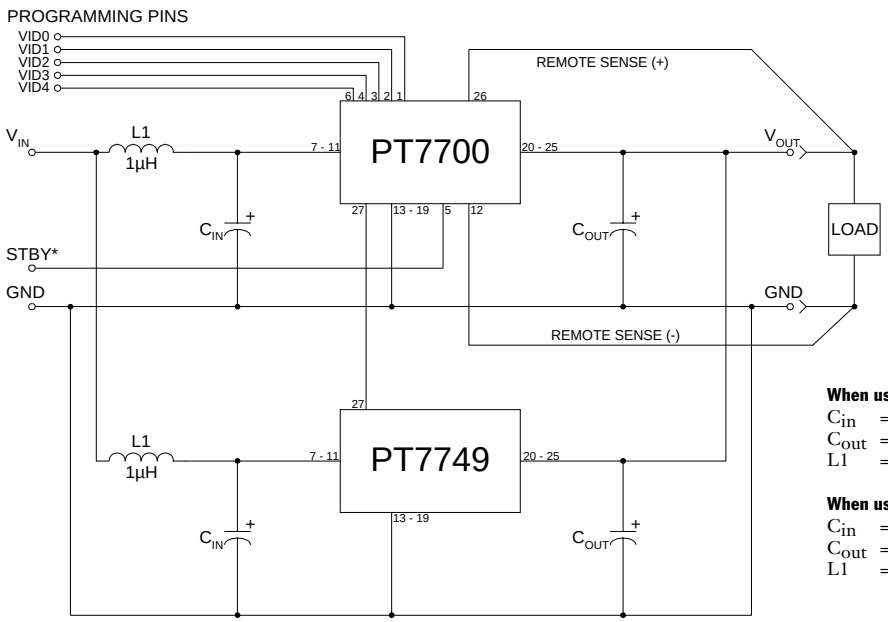
PT7749❑

(For dimensions and PC Board layout, see Package Styles 800 and 810.)

PT Series Suffix (PT1234X)

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

Standard Application



When used with PT7705/7706:
C_{in} = Required 1200µF electrolytic
C_{out} = Required 1200µF electrolytic
L1 = Optional 1µH input choke

When used with PT7707:
C_{in} = Required 1200µF electrolytic
C_{out} = Required 330µF electrolytic
L1 = Optional 1µH input choke

Output Capacitors: *When used with a PT7705or PT7706, the PT7749 requires a minimum ouput capacitance of 1200µF. When used with a PT7707, the PT7749 requires a minimum ouput capacitance of 330µF for proper operation. Do not use Oscon type capacitors. The maximum allowable output capacitance is 15,000µF.*

Input Filter: *An input filter is optional for most applications. The input inductor must be sized to handle 18ADC with a typical value of 1µH. The input capacitance must be rated for a minimum of 1.3Arms of ripple current. For transient or dynamic load applications, additional capacitance may be required.*

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