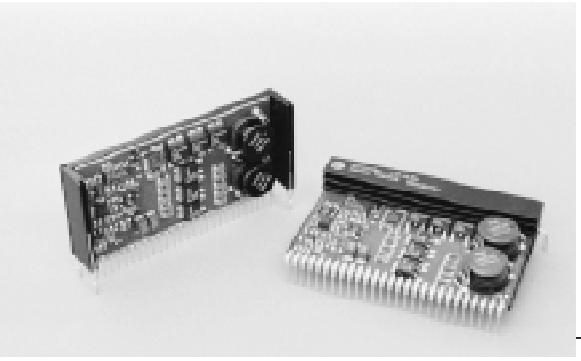
32 Amp "Current Booster" for PT7778 Regulator

SLTS117

(Revised 8/31/2000)



Description

The PT7740 is a high-output 32 Amp "Current Booster" designed to operate with the PT7778 regulator. Up to two PT7740 boosters will operate in parallel with a PT7778, boosting output current in increments of 32A. Combinations of a PT7778 series regulator and PT7740 current boosters can supply enough power for virtually any multiple mega-processor application.

The booster adds a parallel output stage that is driven directly by the regulator. Both operate in perfect sychronization for a low noise solution.

The PT7740 only operates with a PT7778 regulator and is not a stand-alone product. Please refer to the PT7778 data sheet for the performance specifications. The current booster has the same package options as its companion regulator.

Features

- 32A Current Boost
- Tracks Vo of a PT7778
- High Efficiency
- Input Voltage Range: 3.1V to 3.6V
- Synchronized with PT7778
- 27-pin SIP Package
- Run up to 2 in Parallel (96A)

Pin-Out Information

Pin	Function
1	Do not connect
2	Do not connect
3	Do not connect
4	Do not connect
5	Do not connect
6	Do not connect
7	V_{in}
8	V_{in}
9	V_{in}
10	V_{in}
11	V_{in}
12	Do not connect
13	GND

Pin	Function
14	GND
15	GND
16	GND
17	GND
18	GND
19	GND
20	V_{out}
21	V_{out}
22	V_{out}
23	V_{out}
24	V_{out}
25	V_{out}
26	Do not connect
27	Master Sync In

Ordering Information

PT7740❑

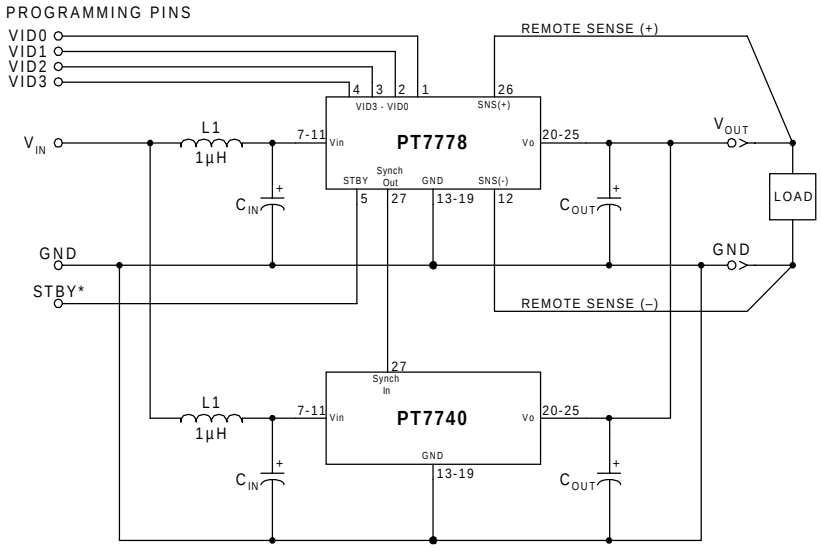
(For dimensions and PC Board layout, see Package Styles 1020 and 1030.)

PT Series Suffix

(PT1234X)

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

Standard Application



External Capacitors: *When used with a PT7778, the PT7740 requires a minimum ouput capacitance of 330µF. The maximum allowable output capacitance is 30,000µF. The PT7740 also requires a minimum input capacitance of 2400µF, which must be rated for a minimum of 2.0Arms of ripple current. For transient or dynamic load applications, additional capacitance may be required. For further information, see the accompanying application note on capacitor selection for this product.*

Input Filter: *An input filter inductor is optional for most applications. The input inductor must be sized to handle 32ADC with a typical value of 1µH.*

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