Efficient Power Conversion
909 N. Pacific Coast Hwy, Ste. 230
San Diego, CA 92121
United States

48 V Bulk Capacitors

48 V Medium Frequency Capacitors

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100 V to 5 V Housekeeping Power Supply

Title: AP1065 Rev. 1.1

- 10 V min. to 100 V max.
- 5.2 V 400 mA max.
- Power indicator

Efficient Power Conversion
909 N. Pacific Coast Hwy, Ste. 230
El Segundo, CA 90245
United States
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3V3 500 mA max.

5 V to 3.3 V

Power indicator
5 V to 3.3 V LDO power supply

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The 0 ohm resistor can be modified to filter spikes from the comparator lines.

VddPullup is connected to 3.3V or 5V depending on microcontroller voltage.

The 0 ohm resistor can be modified to filter spikes from the comparator lines.

VddPullup is connected to 3.3V or 5V depending on microcontroller voltage.
DC Input
64 Vmax.

Decoupling Capacitors

Power Stage

Optional Diodes
Bi-Directional 80 V Current Sense Amplifier

Offset Voltage = 1.65 V

INA240A1PWR Gain 20V/V

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Bi-Directional Over Current Detection

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Title: AP1034
Size: 1
Sheet: 1
Revision: 1

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Shaft encoder connection
Quadrature with Index
Supports optical and hall

Source Selection

Quadrature Encoder Interface without 5V regulator
Temperature sense using AD590 with separate AGND

- 150°C scale to 3.3V
- 25°C scale to 2.3V
- -55°C scale to 1.7V

Components:
- AD590JCPZ-R5 (U40)
- R40: 0805 0E 0.125W
- R41: 0805 7.87k E 0.25W
- C40, C41: 0805 100nF 50V
- PIC4001, PIC4002
- PIC4101, PIC4102
- CO40
- PIR4001, PIR4002, PIR4101, PIR4102
- PIU4001, PIU4002, PIU4003, PIU4004, PIU4005
- POAGND, POVCC, POTsns