MPC42013-X-54-1600

DDIGITAL DC/DC POWER MODULE

PRELIMINARY SPECIFICATIONS SUBJECT TO CHANGE

DESCRIPTION

The MPC42013-X-54-1600 is a high efficiency non-isolated power module with quarter brick form factor, operating from a 40-60V DC primary bus to a regulated 12V output voltage, and can deliver up to 1600W continuous power at typical 54V input voltage.

The built-in multiple-time programmable (MTP) memory can store and restore device configurations. The fault status, input voltage, output voltage, current, and temperature can be easily monitored via the PMBus/I2C interface.

The MPC42013-X-54-1600 is available in a through hole (58.4x36.8x13.2mm) package.

FEATURES

- Supports up to 1600W Continuous Power
- Quarter brick: 58.4x36.8x13.2mm
- Built-In MTP to Store Custom Configurations
- Input & Output Voltage, Output Current, and Temperature Monitoring via the PMBus/I2C interface
- VIN OVP/UVP, Output OVP/UVP, OCP, OTP Protection
- Option for Parallel Load Line Current Sharing or Differential Remote Sense
- PMBus Communication
- Support Wave and Reflow Soldering

APPLICATIONS

- Data Center
- DC Power Distribution
- High End Computing Systems

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TYPICAL APPLICATION

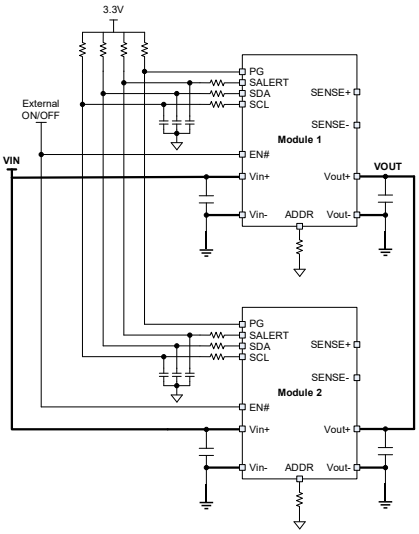

Figure 1: MPC42013-A-54-1600
Load line current sharing Option-A

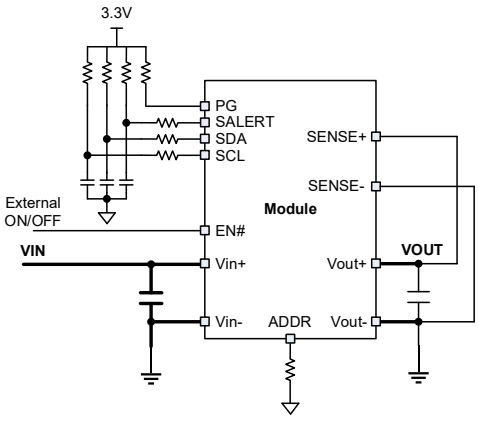

Figure 2: MPC42013-B-54-1600
Remote sense Option-B

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ORDERING INFORMATION

Part Number*	Brief Description	Package	Top Marking	MSL Rating
MPC42013-A-54-1600-0400	Load line current sharing	Through hole	See Below	3
MPC42013-B-54-1600-0420	Remote sense	Through hole	See Below	3

*For Tray, add suffix -T (e.g. MPC42013-A-54-1600-T)

TOP MARKING(MPC42013A)

LOT ID

Date code + Serial number

2D ID

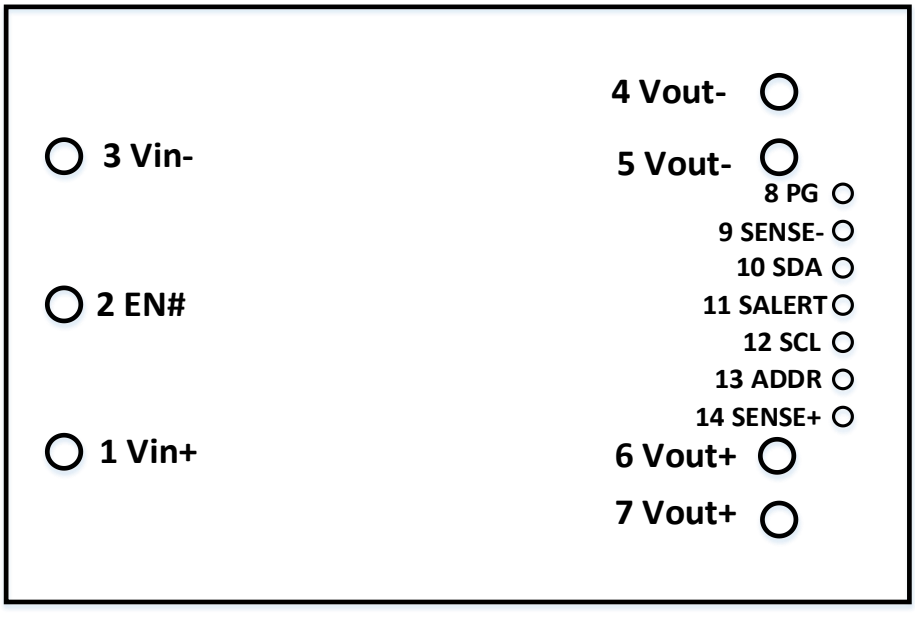
TOP MARKING(MPC42013B)

LOT ID

Date code + Serial number

2D ID

PACKAGE REFERENCE



MPC42013-X-54-1600 BOTTOM VIEW (58.4mmx36.8mm)

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