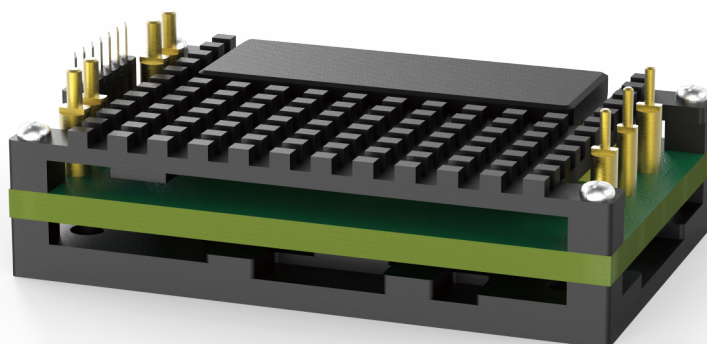


1600 W Digital Quarter Brick DC/DC Power Module

The power module is a high-power digital DC/DC converter. It achieves peak efficiency of up to 98.3% at 54 V input and 50% load. The module is a non-isolated quarter-brick converter, delivering a fully regulated 12.0 V output with a continuous power rating of 1600 W and a peak power capability of up to 2400 W for a limited duration. It is designed for through-hole mounting using wave soldering or pin-in-paste production processes. The module also incorporates an optimized baseplate design to improve thermal performance while minimizing overall height.

Key Features

- Peak efficiency up to 98.3% at 54 V input
- Fully regulated output voltage
- Comprehensive protection: input UVLO, input OVP, output OVP, OCP, and OTP
- Monotonic startup and pre-biased startup
- No minimum load required
- Parallel operation with direct output connection and active current sharing
- Non-isolated topology



IPM54U120136QPN

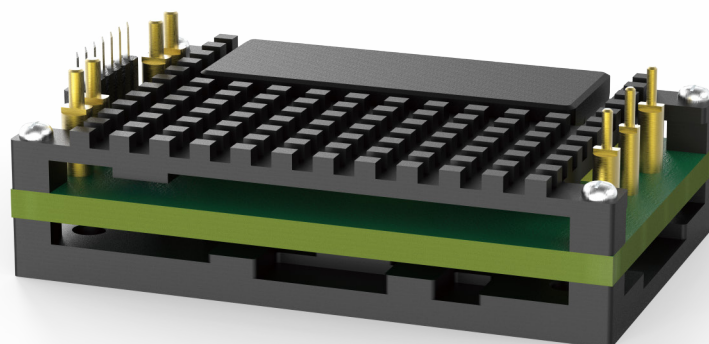
Parameter	1600 W Digital Quarter Brick DC/DC Power Module (IPM54U120136QPN)
Rated Power	1600 W
Peak Power	2400 W
Product series	RBC
Dimension (D x W x H)	58.4 x 36.8 x 15.1 (mm)
Input Voltage	40 to 60 V
Output Voltage	12.0 V
Output Current	167 A
Efficiency	98.3% @ 54Vin 50% load
Cooling Method	Force air cooling / Water cooling
Altitude	3050 m
Ripple & Noise	120 mV (peak-to-peak)
Current Sharing	Tolerance ±5% @ 20%-50% load; Tolerance ±2% @ >50% load
Protection	UVP, OVP, OCP, SCP, OTP
Safety Standard	CB, UL, CE
IEC	62368 / 60950
Communication Protocol	PMBus1.2

2000 W Digital Quarter Brick DC/DC Power Module

The power module is a high-power digital DC/DC converter. It achieves peak efficiency of up to 98.3% at 54 V input and 50% load. The module is a non-isolated quarter-brick converter, delivering a fully regulated 12.0 V output with a continuous power rating of 2000 W and a peak power capability of up to 3000 W for a limited duration. It is designed for through-hole mounting using wave soldering or pin-in-paste production processes. The module also incorporates an optimized baseplate design to improve thermal performance while minimizing overall height.

Key Features

- Peak efficiency up to 98.3% at 54 V input
- Fully regulated output voltage
- Comprehensive protection: input UVLO, input OVP, output OVP, OCP, and OTP
- Monotonic startup and pre-biased startup
- No minimum load required
- Parallel operation with direct output connection and active current sharing
- Non-isolated topology



IPM54U120167QPN

Parameter	2000 W Digital Quarter Brick DC/DC Power Module (IPM54U120167QPN)
Rated Power	2000 W
Peak Power	3000 W
Product series	RBC
Dimension (D x W x H)	58.4 x 36.8 x 15.1 (mm)
Input Voltage	40 to 60 V
Output Voltage	12.0 V
Output Current	167 A
Efficiency	98.3% @ 54Vin 50% load
Cooling Method	Force air cooling / Water cooling
Altitude	3050 m
Ripple & Noise	120 mV (peak-to-peak)
Current Sharing	Tolerance ±5% @ 20%-50% load; Tolerance ±2% @ >50% load
Protection	UVP, OVP, OCP, SCP, OTP
Safety Standard	CB, UL, CE
IEC	62368 / 60950
Communication Protocol	PMBus1.2