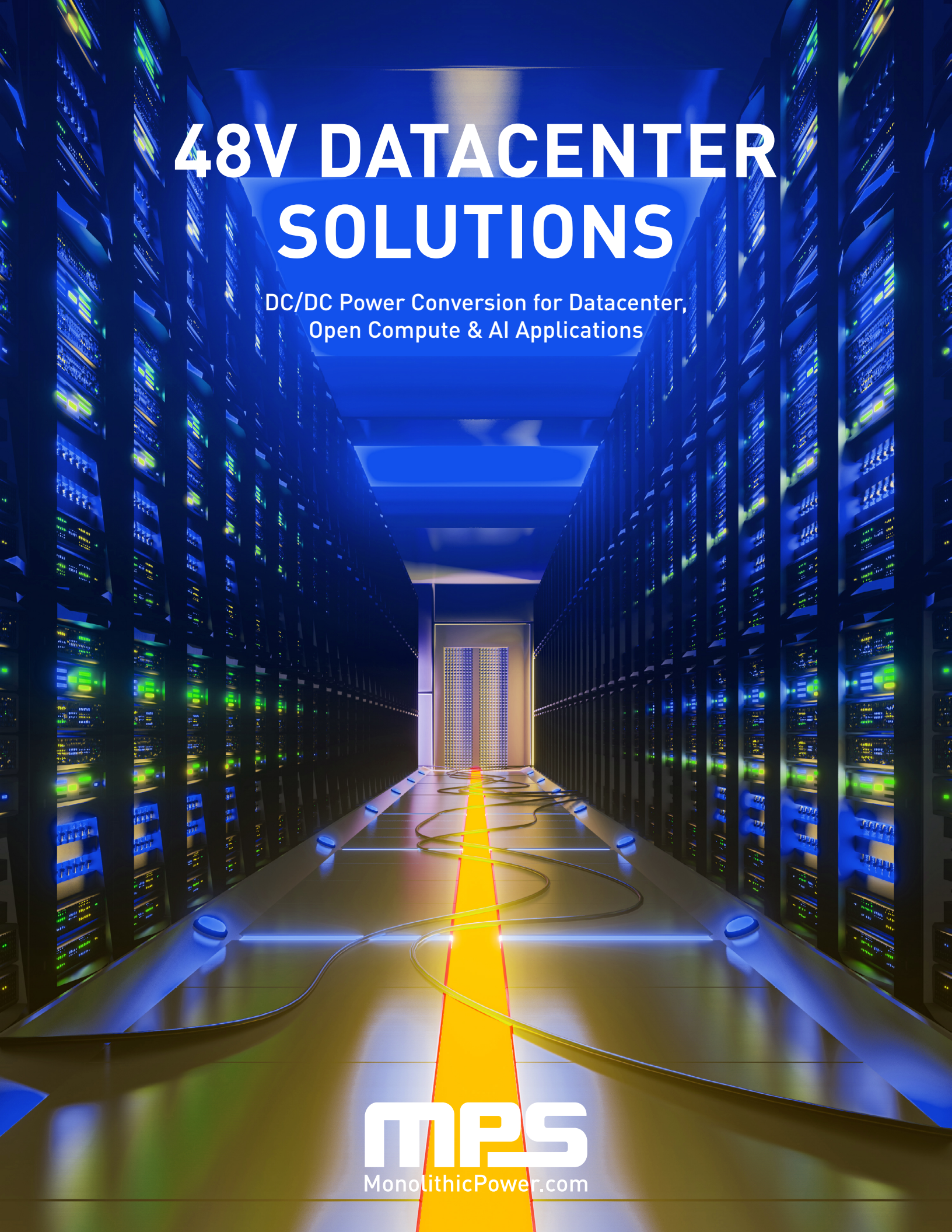

48V DATACENTER
SOLUTIONS
DC/DC Power Conversion for Datacenter,
Open Compute & AI Applications
MPS
MonolithicPower.com

Table of Contents

Overview

Today's datacenters use an average of 25kW per rack to power AI accelerators, servers, storage, and networking equipment. Most are leveraging a legacy architecture of powering basic CPUs with high levels of efficiency. Hence, the traditional 12V power architecture has been widely accepted and implemented (see Figure 1).

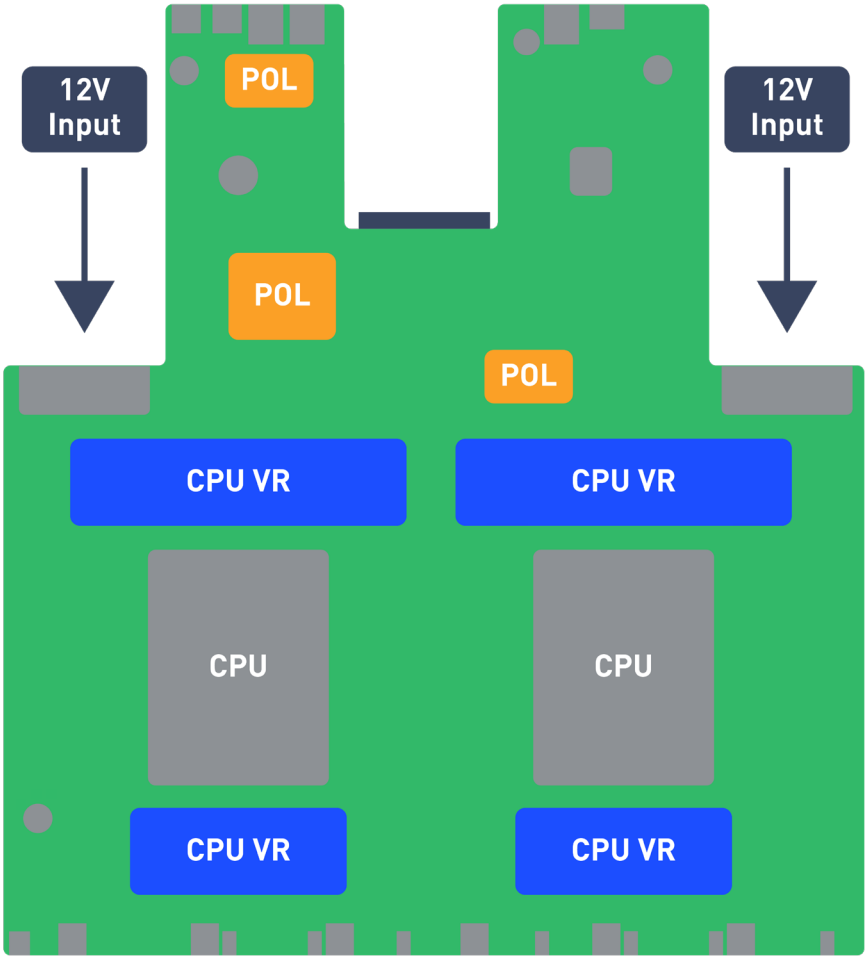


Figure 1: Traditional 12V Power Distribution

To support machine learning and high-performance computing workloads, there is an increasing shift towards a higher percentage of AI accelerator content in new datacenter builds. As a result, datacenters' power architecture is evolving to accommodate new, higher power requirements. For example, the next-generation rack populated with multiple AI accelerator trays will consume over 100kW of power. At this power level, the distribution losses in a 12V system will increase by the square of the current (I^2R), and more copper must be used in the backplane or wiring harness to control the distribution losses. Ultimately, this limits the power delivery capability of the system.
In order to meet the industry's new power requirements, MPS has developed solutions for a more efficient power architecture, using a 48V distribution voltage that is capable of a 16x reduction in power distribution losses.

MPS 48V Power Structure

Two-Stage, 48V Processor Architecture

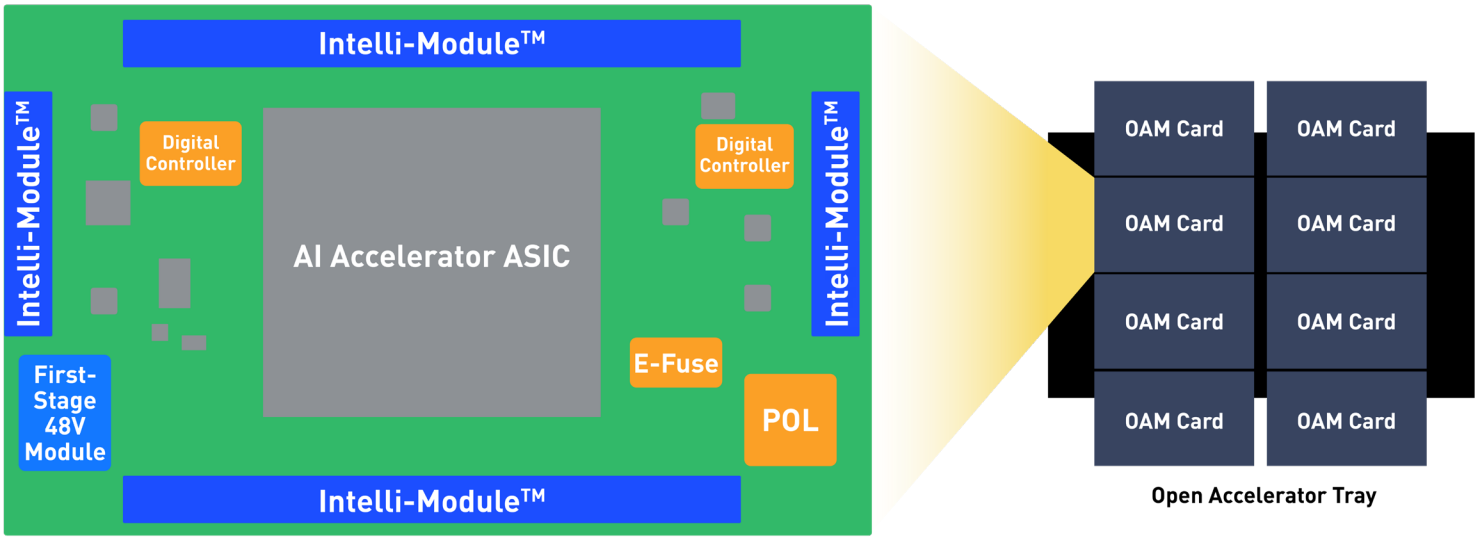


Figure 2: OAM Card with 48V Input

- Total system efficiency is optimized
- First-stage solution: MPS power modules
  - Available with regulated output and fixed input-to-output ratios
  - Offered at various power levels
  - Support for parallel operation
- E-Fuse – Provides system protection from excessive voltage or current point-of-load (POL) and generates system voltages to power interface circuits
- Second-stage solution: digital multi-phase controller + Intelli-Phase™ or Intelli-Module™
  - The Intelli-Phase™ family offers continuous current ratings up to 90A
  - Intelli-Module™ solutions offer continuous current ratings up to 170A

Intelli-Phase™ is MPS's state-of-the-art power stage technology. These DrMOS devices use our monolithic process to drastically improve performance, and incorporate advanced features, including current sense, temperature sense, and fault reporting.

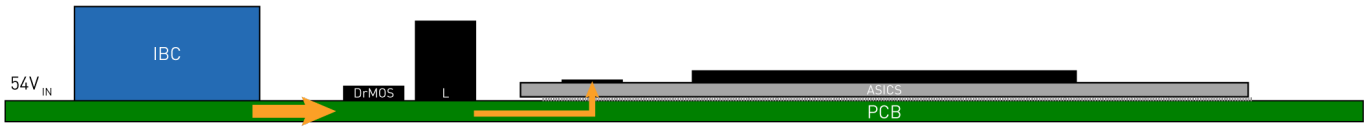
Intelli-Modules™ are MPS's latest open-frame power modules, and are part of our second-stage solution. Intelli-Modules™ can achieve high power density and optimize thermal performance in space-constrained applications.

Lateral vs. Z-Axis Power Delivery™

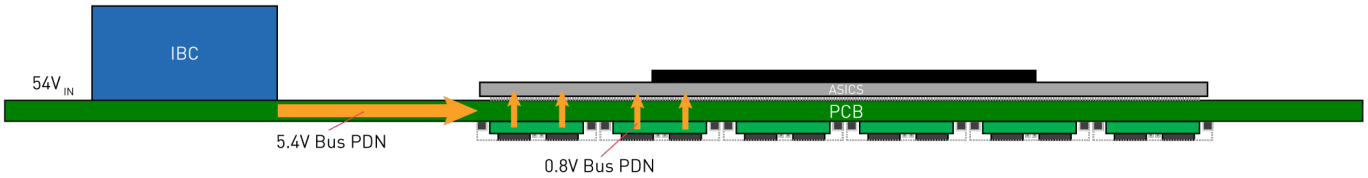
Today's datacenters use a lateral power delivery system, in which the power voltage regulators are placed on the top side of the board around the processor. As the current demand of CPUs and GPUs increases, the distance between the voltage regulator and the point of load become a significant factor for PDN losses. In addition, increased PDN means that the system requires a large amount of output capacitance for the voltage regulators.

Z-Axis Power Delivery™ is a method by which the voltage regulators are placed on the bottom side of the PCB below the processors. This results in a significant reduction (more than 10x) in PDN losses.

Lateral Power Delivery <1000A



Z-Axis Power Delivery™ >1000A



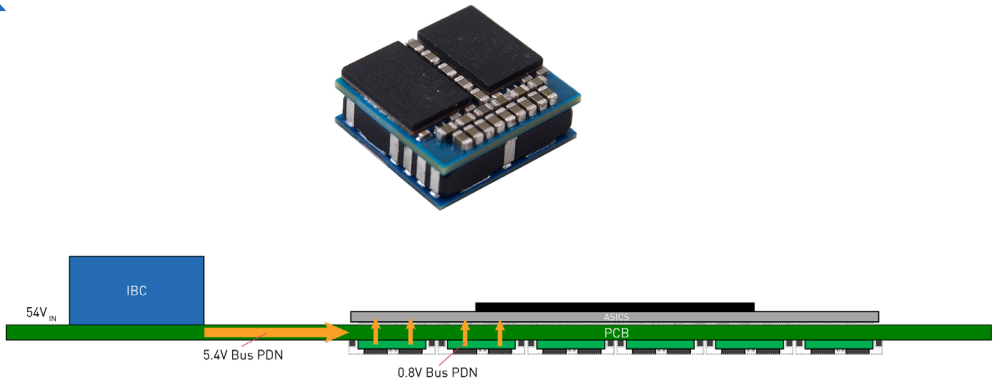
MPS offers power module solutions with <4mm height to fit in the limited space on the bottom side of the PCB.

Contact MPS for more information on Z-Axis Power Delivery™ EVBs

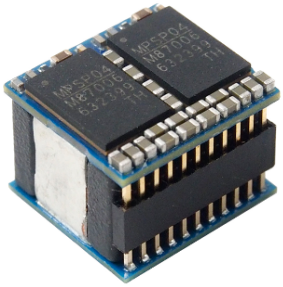
Adapting Power Solutions to the Increased Current Requirement of AI Processors

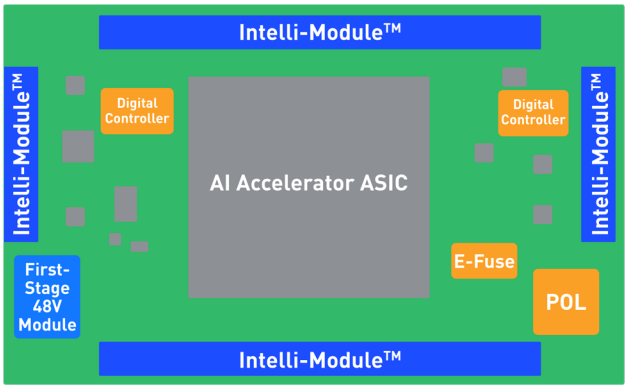
Increased Current Requirements

Z-Axis Power Delivery™
Ex: MPC22166-A

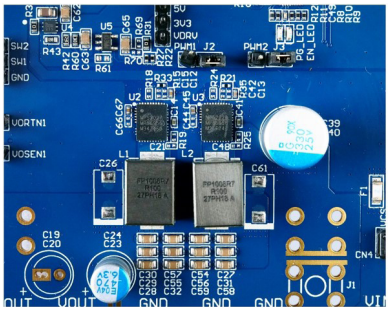


Lateral Power Delivery Using Modules
Ex: MPC22167





Lateral Power Delivery Using DrMOS
Ex: MP87006

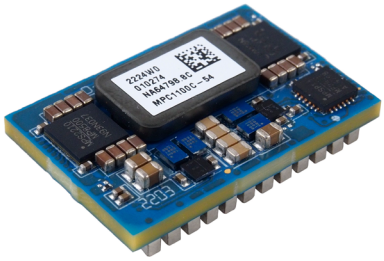


First-Stage Solution: Power Modules

MPS offers multiple options for first-stage modules

8:1 & 10:1 IBC Modules

54V to 6.75V or 5.4V

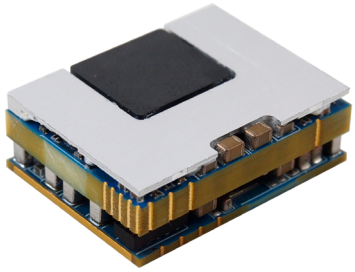


Enables a higher-frequency second stage due to lower switching losses, which allows the use of a smaller, shorter inductor

- Best for Z-Axis Power Delivery™ (ZPD)

4:1 IBC Modules

54V to 13.5V



Higher power density, established common footprint in the market

- Best for lateral power delivery (LPD)

Regulated Modules

54V to 12V

Targeted for systems such as CPU servers that require a regulated 12V supply

All of MPS's IBC modules can be paralleled to reach >1kW power levels.

MPC1100C-54 – 10:1 Fixed-Ratio, Digital, DC/DC 300W Power Module

The MPC1100C-54 is an open-frame, digital DC/DC power module with continuous power up to 300W. This module accepts up to a 60V input, and is configured in a 10:1 input-to-output ratio. It offers a digital controller with a multiple-time programmable (MTP) memory, which can be easily configured to quickly bring up the system and nimbly adapt to system requirements.

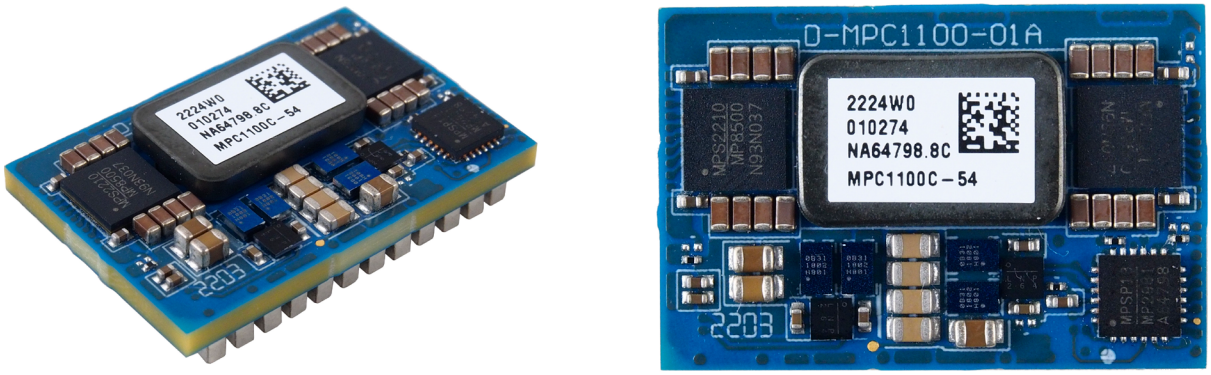


Figure 3: MPC1100C-54

Features:

- Input Voltage Range: 40V to 60V
- 10:1 Input-to-Output Ratio
- Power Density: 1700W/in^3
- Non-Isolated LLC Topology
- Compatible with Serial Interface
- Supports Parallel Operation
- Built-In MTP to Store Custom Configurations
  - Under-Voltage Lockout (UVLO)
  - V_{OUT} Over-Voltage Protection (OVP) and Under-Voltage Protection (UVP)
  - OCP_TDC/SPIKE
  - Over-Temperature Protection (OTP)
- GUI Configuration Software Provided

Dimensions:
27mmx18mmx6.1mm

Part Number	V_{IN} (V)	V_{OUT} Range (V)	Power Density (W/in^3)	P_{OUT} (W)	Peak Efficency (%)	Efficiency @ 300W (%)
MPC1100C-54-0002	40 to 60	4 to 6	1700	300	96.7	95.3

MPC10106-54-0500 – 8:1 Fixed-Ratio, Digital, DC/DC 500W Power Module

The MPC10106-54-0500 is an open-frame, digital DC/DC power module with continuous power up to 500W. This module accepts up to a 60V input, and is configured in an 8:1 input-to-output ratio. It offers a digital controller with a multiple-time programmable (MTP) memory, which can be easily configured to quickly bring up the system and nimbly adapt to system requirements.

Features:

- Input Voltage Range: 40V to 60V
- 8:1 Input-to-Output Ratio
- Power Density: 2634W/in^3
- Non-Isolated LLC Topology
- Compatible with Serial Interface
- Built-In MTP to Store Custom Configurations
  - V_{IN} Under-Voltage Lockout (UVLO)
  - V_{OUT} Over-Voltage Protection (OVP) and Under-Voltage Protection (UVP)
  - OCP_TDC/SPIKE
  - Over-Temperature Protection (OTP)
- GUI Configuration Software Provided

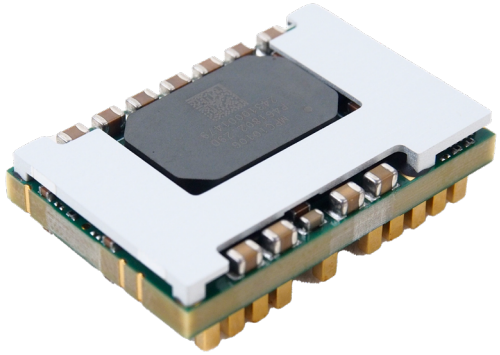


Figure 4: MPC12106-54-0750

Dimensions:
24mmx18mmx6.4mm

Part Number	V_{IN} (V)	V_{OUT} Range (V)	Power Density (W/in^3)	P_{OUT} (W)	Peak Efficency (%)	Efficiency @ 750W (%)
MPC10106-54-0500	40 to 60	5 to 7.5	2634	500	97.8	95.9

MPC12106-54-0750 – 4:1 Fixed-Ratio, Digital, DC/DC 800W Power Module

The MPC12106-54-0750 is an open-frame, digital DC/DC power module with continuous power up to 750W. This module accepts up to a 60V input, and is configured in a 4:1 input-to-output ratio. It offers a digital controller with a multiple-time programmable (MTP) memory, which can be easily configured to quickly bring up the system and nimbly adapt to system requirements.

Features:

- Input Voltage Range: 40V to 60V
- 4:1 Input-to-Output Ratio
- Power Density: 3310W/in^3
- Non-Isolated LLC Topology
- Compatible with Serial Interface
- Built-In MTP to Store Custom Configurations
  - V_{IN} Under-Voltage Lockout (UVLO)
  - V_{OUT} Over-Voltage Protection (OVP) and Under-Voltage Protection (UVP)
  - OCP_TDC/SPIKE
  - Over-Temperature Protection (OTP)
- GUI Configuration Software Provided

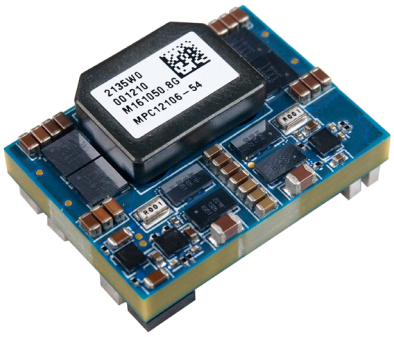


Figure 5: MPC12106-54-0750

Dimensions:
24mmx18mmx8.6mm

Part Number	V_{IN} (V)	V_{OUT} Range (V)	Power Density (W/in^3)	P_{OUT} (W)	Peak Efficency (%)	Efficiency @ 750W (%)
MPC12106-54-0750-xxxx	40 to 60	10 to 15	3310	800	98.1	96.5

MPC42013 – Regulated, 12V, Digital DC/DC 1300W and 1600W Power Modules

The MPC42013 is a quarter-brick, open-frame, digital DC/DC power module with continuous power up to 1300W and 1600W. This module operates from a 40V to 60V DC primary bus to a regulated 12V output voltage. It offers a digital controller with a multiple-time programmable (MTP) memory, which can be easily configured to quickly bring up the system and nimbly adapt to system requirements.

Features:

- Input Voltage Range: 40V to 60V
- Power Density: 906W/in^3
- Hybrid Buck Topology
- Compatible with Serial Interface
- Option for Active Current-Sharing in Parallel or Differential Remote Sense Mode
- Built-In MTP to Store Custom Configurations
  - V_{IN} Under-Voltage Lockout (UVLO)
  - V_{OUT} Over-Voltage Protection (OVP) and Under-Voltage Protection (UVP)
  - OCP_TDC/SPIKE
  - Over-Temperature Protection (OTP)
- GUI Configuration Software Provided

Figure 6: MPC42013

Dimensions:
58.4mmx36.8mmx13.2mm

Part Number	V_{IN} (V)	V_{OUT} (V)	Power Density (W/in^3)	P_{OUT} (W)	Peak Efficency (%)	Efficiency @ 750W (%)
MPC42013-54-1300	40 to 60	12	751	1300	97.8	97.4
MPC42013-54-1600	40 to 60	12	924	1600	97.8	97

Second-Stage Solution: Digital Multi-Phase Controller + Intelli-Phase™ or Intelli-Module™

MPS has a robust product portfolio of digital multi-phase controllers and Intelli-Phase™ and Intelli-Module™ solutions.
For more information, visit monolithicpower.com/en/products/power-management/data-center.html

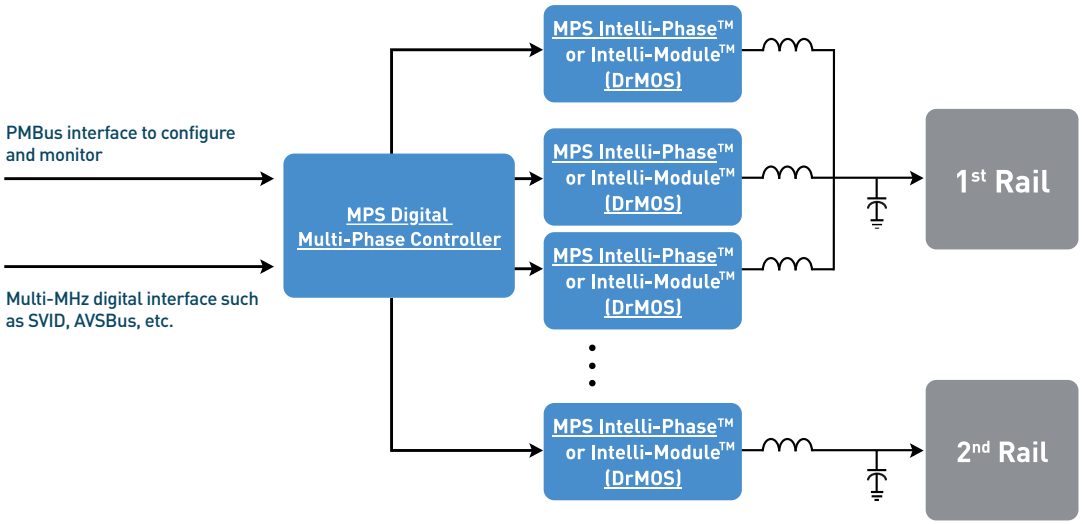


Figure 7: Second-Stage Digital Multi-Phase Controller + Intelli-Phase™ or Intelli-Module™ Block Diagram

Digital Multi-Phase Controller Features:

- Patented Constant-On-Time (COT) Control
- Multiple Loops, Flexible Phase Assignment
- Interface Options: SVID, SVI2/3, OVR, or AVSBus
- Fault Handling and Telemetry Capabilities

Intelli-Phase™ Features:

- Family of Devices Ranges from 12A to 100A
- Wide f_{SW} Range: Balance between Transient and Efficiency
- Built-In ZCD, OCP, NOCP, OTP, and SCP
- Minimal External Components

Intelli-Module™ Features:

- High Power Density in Space-Constrained Applications
- Flexible Output Assignment
- Support Parallel Operation for Higher Power Delivery
- Optimized for Top-Side Cooling

Type of Product	Part Number	Part Description
Digital multi-phase controller	MP2975	Dual loop, 8-phase digital multi-phase controller
	MP29816	Dual-loop, 16-phase digital multi-phase controller
	MP2928	Triple loop, 12-phase digital multi-phase controller
DrMOS Intelli-Module™	MP87006	16V, 90A Intelli-Phase™ in 4mmx6mm package
	MP87001-A	16V, 90A Intelli-Phase™ in 5mmx6mm package
	MPC22157	16V, 130A Intelli-Module™ in 9mmx10mmx8mm footprint
	MPC22165A	16V, 170A Intelli-Module™ in 9mmx10mmx4mm footprint

MPC22166-A – 130A, Two-Phase Intelli-Module™ with Quiet Switcher™ Technology

The MPC22166-A is a non-isolated, step-down power module with 130A of continuous output peak current. This module integrates driver MOSFETs and an inductor in a compact package to save layout space and achieve a higher power density. It is scalable for many modules in parallel, up to 2kW or more of power. The 4mm maximum height makes it suitable for many applications, such as Z-Axis Power Delivery™ and PCIe form factor boards.

Features:

- Input Voltage Range: 4V to 16V
- Output Voltage Range: 0.5V to 2V
- 130A Output Current
- Top-Side Cooling Package
- Current Sense: Accu-Sense™
- Temperature Sense
- Current Limit Protection
- Supports Parallel Operation
- Over-Temperature Protection (OTP)
- Fault Reporting
- Common Footprint LGA-72 (9mmx10mm) Package

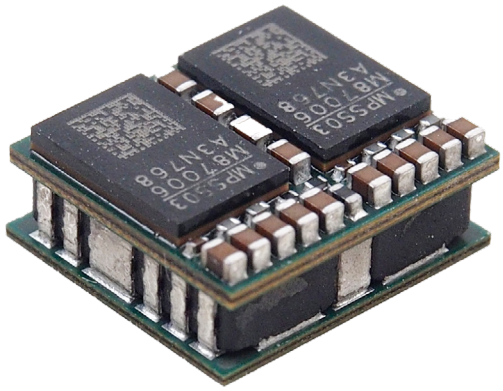


Figure 7: MPC22166-A -130A

Dimensions:
9mmx9.9mmx3.9mm

Part Number	V_{IN} (V)	V_{OUT} Range (V)	I_{OUT} (A)	f_{SW} (kHz)	Power Density (W/in³)	Peak Efficency (%)
MPC22166-A-130	4 to 16	0.5 to 2	130	600 to 1200	4904	89

MPC22166-B – 130A, Two-Phase Intelli-Module™ with Quiet Switcher™ Technology

The MPC22166-B is a non-isolated, step-down power module with 130A of continuous output peak current. This module integrates driver MOSFETs and an inductor in a compact package to save layout space and achieve a higher power density. It is scalable for many modules in parallel, up to 2kW or more of power. The 4mm maximum height makes it suitable for many applications, such as Z-Axis Power Delivery™ and PCIe form factor boards.

Features:

- Input Voltage Range: 4V to 16V
- Output Voltage Range: 0.4V to 2V
- 130A Output Current
- Current Sense: Accu-Sense™
- Temperature Sense
- Current Limit Protection
- Supports Parallel Operation
- Over-Temperature Protection (OTP)
- Fault Reporting
- Common Footprint LGA-72 (9mmx10mm) Package

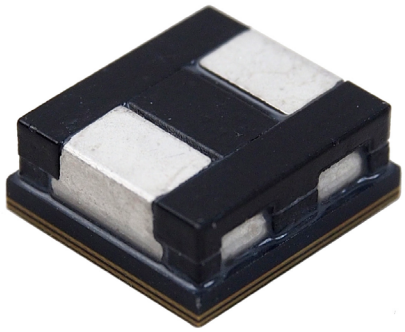


Figure 8: MPC22166-B -130A

Dimensions:
9mmx9.9mmx3.9mm

Part Number	V_{IN} (V)	V_{OUT} Range (V)	I_{OUT} (A)	f_{SW} (kHz)	Power Density (W/in³)	Peak Efficency (%)
MPC22166-B-130	4 to 16	0.4 to 16	130	500 to 1500	4904	91

MPC22167 – 130A, Two-Phase, Intelli-Module™ with Quiet Switcher™ Technology

The MPC22167 is a non-isolated, step-down power module with 130A of continuous peak output current. This module integrates driver MOSFETs and an inductor in a compact package to save board space and achieve a higher power density. It is scalable for many modules in parallel, up to 2kW or more of power. The 8mm maximum height makes it suitable for a wide range of applications, such as OAM form factor boards.

Features:

- Input Voltage Range: 4V to 16V
- Output Voltage Range: 0.5V to 2V
- 130A Output Current
- Top-Side Cooling Package
- Current Sense: Accu-Sense™
- Temperature Sense
- Current Limit Protection
- Supports Parallel Operation
- Over-Temperature Protection (OTP)
- Fault Reporting
- Common Footprint LGA-72 (9mmx10mm) Package

Figure 9: MPC22167

Dimensions:
9mmx9.9mmx7.65mm

Part Number	V_{IN} (V)	V_{OUT} Range (V)	I_{OUT} (A)	f_{SW} (kHz)	Power Density (W/in^3)	Peak Efficency @ 12V (%)
MPC22167-130	4 to 16	0.5 to 2	130	400 to 1500	2475	91

MPC22157 – 130A, Two-Phase Intelli-Module™ with Quiet Switcher™ Technology

The MPC22157 is a non-isolated, step-down power module with 130A of continuous output peak current. This module integrates driver MOSFETs and an inductor in a compact package to save layout space and achieve a higher power density. It is scalable for many modules in parallel, up to 2kW or more of power. The 8mm maximum height makes it suitable for many applications, such as OAM form factor boards.

Features:

- Input Voltage Range: 4V to 16V
- Output Voltage Range: 0.5V to 2V
- 130A Output Current
- Current Sense: Accu-Sense™
- Temperature Sense
- Current Limit Protection
- Supports Parallel Operation
- Over-Temperature Protection (OTP)
- Fault Reporting
- Common Footprint LGA-72 (9mmx10mm) Package

Figure 10: MPC22157 -130A

Dimensions:
9mmx9.9mmx7.7mm

Part Number	V_{IN} (V)	V_{OUT} Range (V)	I_{OUT} (A)	f_{SW} (kHz)	Power Density (W/in³)	Peak Efficency (%)
MPC22157-130	4 to 16	0.5 to 2	130	500 to 1500	2484	92

MPC22165-A – 170A, Two-Phase Intelli-Module™ with Quiet Switcher™ Technology

The MPC22165-A is a non-isolated, step-down power module with 170A of continuous output peak current. This module integrates driver MOSFETs and an inductor in a compact package to save layout space and achieve a higher power density. It is scalable for many modules in parallel, up to 2kW or more of power. The 10mm maximum height makes it suitable for many applications, such as OAM form factor boards.

Features:

- Input Voltage Range: 4V to 16V
- Output Voltage Range: 0.5V to 2V
- 170A Output Current
- Top Side Cooling Package
- Current Sense: Accu-Sense™
- Temperature Sense
- Current Limit Protection
- Supports Parallel Operation
- Over-Temperature Protection (OTP)
- Fault Reporting
- Common Footprint LGA-72 (9mmx10mm) Package

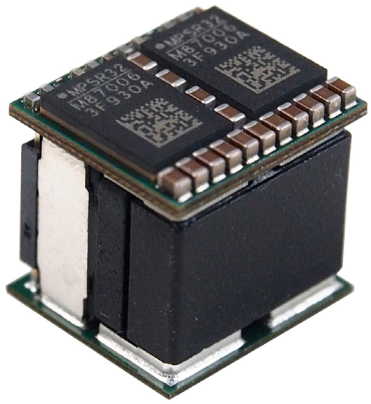


Figure 11: MPC22165-A -170A

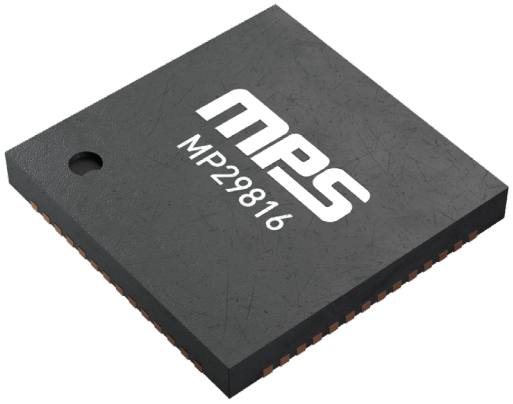
Dimensions:
9mmx9.9mmx9.7mm

Part Number	V_{IN} (V)	V_{OUT} Range (V)	I_{OUT} (A)	f_{SW} (kHz)	Power Density (W/in^3)	Peak Efficency (%)
MPC22165-A-130	4 to 16	0.5 to 2	170	600 to 1500	2579	90

MP29816 – Dual-Loop, AVSBus and OVR-16, 16-Phase Controller

Features:

- Highest Phase Count
  - Dual-Loop, 16-Phase Controller Provides Power for Nvidia PWM-VID and AVSBus Core Power
  - Stackable Controller Supports 32, 48, or 96 Phases, and Improves Current and Thermal Balance Compared to 1 PWM Driving 2 DrMOS
- Digital Control
  - Digital Loop Compensation and Load-Line Regulation
  - Nonlinear Control Reduces Output Capacitor Requirements for Transients
- Digital Configurability and Monitoring
  - Output Voltage/Current, Input Voltage/ Power and Temperature Telemetry
  - Over-Power (OP) Limit and Protection
  - Intelli-Phase™ Fault Diagnosis
  - Integrated Non-Volatile Memory (NVM) to Store VR Programming and for Black Box Capability
  - TLVR Fault Detection
- Design Flexibility
  - Automatic Phase-Shedding (APS) Improves Light-Load Efficiency
  - Configurable Voltage, Current, and Temperature Protections



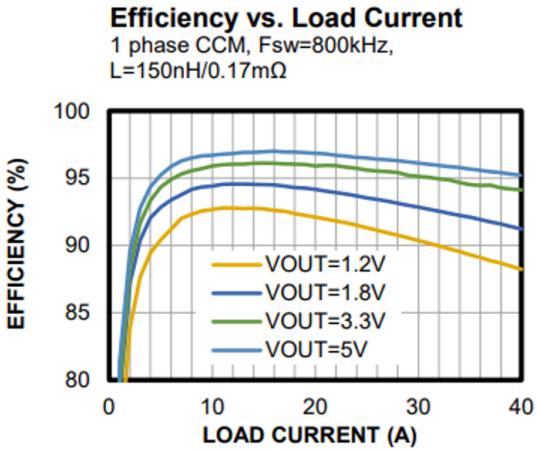
Package:
TQFN-56 (7mmx7mm)

MPQ8785 – 16V, 40A, Scalable, Digital, Synchronous Step-Down Converter with PMBus

Features:

- V_{IN} Voltage Range
  - 3.1V to 16V with External 3.3V VCC Bias
- Output Current & Voltage
  - Continuous Output Current: 40A
  - Stackable (Multi-Phase) to Support 640A (16 POLs in Parallel)
  - Adjustable Output Voltage (V_{OUT}) from 0.35V to 0.9 x V_{IN}, Up to 5.5V Max
- Buck Regulator
  - Adaptive Constant-On-Time (COT) Control
  - PMBus 1.3
  - Accurate Voltage, Current, and Telemetry Reporting
  - Accurate Current-Balance Control in Multi-Phase Configuration
  - Output Voltage True Remote Sense
- Additional Features
  - Precision Reference Voltage (V_{REF}), ±0.5% over 0°C to 70°C Junction Temp Range
  - 300kHz to 2MHz Configurable f_{SW}
  - Quiet Switcher™ Technology
  - Fault Recording (Black Box) to Ease Failure Analysis
  - Phase Redundancy
  - Automatic PMBus Address Assignment to Provide Auxiliary Phase Reading
- Protections
  - Configurable Hiccup or Latch-Off Mode
  - Input Voltage (V_{IN}) Under-Voltage Protection (UVP) and Over-Voltage Protection (OVP), V_{OUT} UVP and OVP
  - Adjustable Output Current Limit
  - Thermal Warning and Shutdown

Package:
TLGA-37 (5mmx6mm)

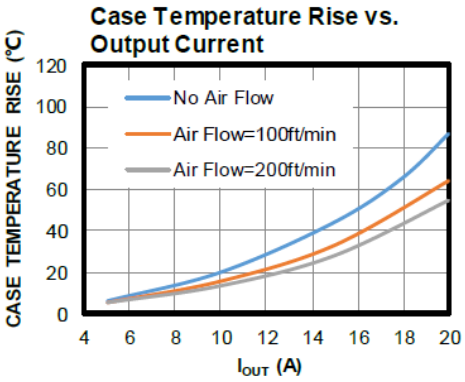


MP5048 – 60V, 15A, 7mΩ $R_{DS(ON)}$ Hot-Swap Intelli-Fuse Solution

Features:

- 60V E-Fuse with Highest Industry Current
- Flexible for Multiple Phases in System
  - Input Voltage Range: 24V to 60V
  - Scalable for Standalone or Parallel Operation
  - Configurable Output Voltage Soft Start Supports Inrush Current Control
  - 1.5% IMON Reporting Accuracy Supports Accurate System Power Reporting
- Full System Protections
  - Configurable Over-Current Protection (OCP) Limit
  - Accurate On-Die Temperature Sensing and Thermal Shutdown
  - Pin-Configurable Latch-Off and Hiccup Protections
  - Fault Pin Indicator (FLTB)

Package:
QFN-30 (5mmx5mm)



Quality Assurance & Reliability Commitment

The MPS Quality Assurance organization develops, coordinates, and champions strategic quality initiatives throughout MPS Inc., its foundries, and subcontractors. Its mission is to enable MPS to design, develop, manufacture, and deliver products to our customers with world-class quality and reliability that meet and exceed our customers' expectations.

MPS and Its Supplier Quality Systems and Certificates:

- ISO 9001:2008 (MPS)
- EU RoHS/HF/REACH Compliant (MPS)
- Sony Green Partner (MPS & Suppliers)
- TS16949 (Suppliers)
- ISO 14001 (Suppliers)

Product Quality:

- Automotive Products Qualified per AEC-Q100 Standard
- Standard Products Qualified per JEDEC and Military Standard
- Reliability Failure Rate <10FIT
- Product Quality Level <1.0ppm

Quality Control and Monitor:

- On-Site Foundry and Assembly Teams for Real-Time Actions
- Quarterly Supplier Quality Review and Annual Supplier Audit
- Short-Term Reliability Monitor Test – Daily
- Long-Term Reliability Monitor Test – Monthly
- Real-Time Engineering Actions on Monitor Failure
- Quarterly Reliability Monitor Reports

About MONOLITHIC POWER SYSTEMS

Who we are

We are creative thinkers. We break boundaries. We take technology to new levels. As a leading international semiconductor company, Monolithic Power Systems (MPS) creates cutting-edge solutions to improve the quality of life with green, easy-to-use products.

What we do

We make power design fun! With our innovative proprietary technology processes, we thrive on reimagining and redefining the possibilities of high-performance power solutions in industrial applications, telecom infrastructures, cloud computing, automotive, and consumer applications.

Where we come from

It started with a vision. Michael Hsing, pioneering engineer and CEO, founded Monolithic Power Systems, Inc. in 1997 with the belief that an entire power system could be integrated onto a single chip. Under his leadership, MPS has succeeded not only in developing a monolithic power module that truly integrates an entire power system in a single package, but also it continues to defy industry expectations with its patented groundbreaking technologies.

Our values

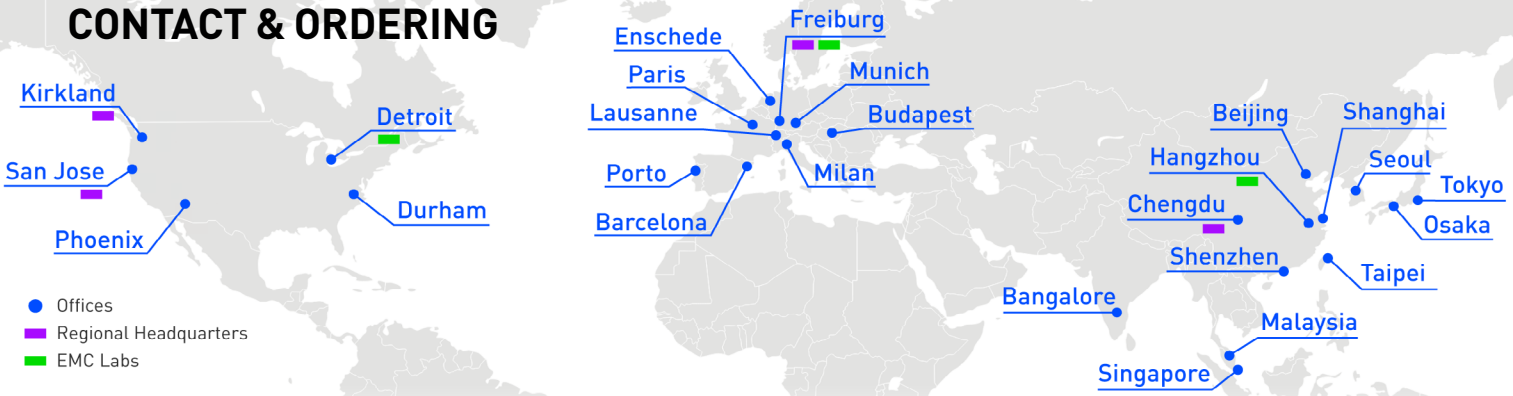
We cultivate creativity
As a company we believe in creating an environment that encourages and challenges our employees to collaborate and think outside the box to excel beyond their preconceived capabilities.

We do not accept the status quo
We do not believe in limitations. It is not about what is, but what can be. Possibilities are endless at MPS.

We are passionate about sustainability
It's about the future. From materials to finances, we are committed to conservation. We will not tolerate waste in an effort to improve and preserve the quality of life.

We are committed to providing innovative products to our customers
Let us do the heavy lifting. We relentlessly strive to make system design versatile and effortless to meet our customers'specific needs. We'll do the work, so our customers can have the fun!

CONTACT & ORDERING



FAST RESPONSE — **Quotes, Availability, Engineering Support & Samples**
MonolithicPower.com/Quote-Samples-Support

US Offices

MPS Kirkland
5808 Lake Washington Blvd. NE
Kirkland, WA 98033, USA
Tel: +1 425-296-9956

MPS Detroit
19499 Victor Parkway
Livonia, MI 48152, USA
Tel: +1 248-907-0222

MPS San Jose
79 Great Oaks Blvd.
San Jose, CA 95119, USA
Tel: +1 408-826-0600

MPS Phoenix
2065 S. Cooper Road Suite 3
Chandler, AZ 85826, USA

MPS North Carolina
Canterbury Hall
4815 Emperor Blvd.
Durham, NC 27703, USA

EU Offices

MPS Barcelona
Av. Josep Tarradellas 123, 5-A
08029 Barcelona, Spain
Tel: +34-931-815-400

MPS Munich
Alte Landstrasse 25
85521 Ottobrunn, Germany
Tel: +49-89-80913512-0

MPS Portugal
Rua D. Manuel II, 290, Piso 7
4050-344 Porto,
Portugal

MPS Germany
Gutenbergstrasse 4,
77955 Ettenheim,
Germany

MPS Lausanne
Route de Lully 5 A
1131 Tolochenaz, Switzerland
Tel: +41-21-805-0100

MPS Netherlands
Hengelosestraat 581
7521 AG Enschede
The Netherlands

Order Direct
monolithicpower.com

Online Order Support
monolithicpower.com/onlineorders

Asia Offices

MPS China Chengdu
#8 Kexin Road West Park of Export
Processing Zone West Hi-Tech Zone
Chengdu, Sichuan, 611731
Tel: +86-28-8730-3000

MPS China Hangzhou
Floor 6, Building A2, Xixi Center,
No. 588 West Wenyi Road, Xihu District
Hangzhou, Zhejiang, 310012
Tel: +86-571-8981-8588

MPS China Shanghai
Floor 27, Magnolia Plaza, No. 777,
Hongqiao Road, Xuhui District
Shanghai 20030
Tel: +86-21-2225-1700

MPS China Shenzhen
Room 1401, Kingkey Riverfront Times
Square Branch North,
Binhe Avenue South, Futian District
Shenzhen Guangdong, 518054
Tel: +86-755-3688-5818-5852

MPS Taiwan
29F, No. 97, Section 1, Xintai 5th Road
Xizhi District, New Taipei City
Tel: +886-2-86911600

MPS Japan Tokyo
Shinjuku Sumitomo Bldg. 31F
2-6-1 Nishishinjuku Shinjuku-ku,
Tokyo 163-0231, Japan
Tel: +81-3-5989-0885

MPS Japan Osaka
Room 301, NLC Shin-Osaka Business
Zone III, 3-14-20 Nishinakajima,
Yodogawa-ku, Osaka-shi,
Osaka 532-0011, Japan
Tel: +81-6-6300-7432

MPS Singapore
No. 8 Ubi Road 2
#08-12 Zervex, Singapore 408538

MPS Korea
C 403, 4F Pangyo Digital Center, 242,
Pangyo-ro, Bundang-gu, SeongNam-si,
Gyeonggi-do, Korea 13487
Tel: +82-70-7830-9950

MPS India
Unit G-12, Prestige Towers,
No 99 / 100, Residency Road,
Bangalore 560025
Tel: +91-80-4124-0312 / 20

MPS Investor Relations
monolithicpower.com/investors

MPS 48V Datacenter Solutions

DC/DC Power Conversion for Datacenter,
Open Compute & AI Applications

MPS
MonolithicPower.com