

## **IR3899MTRPBF**

Data Sheet

Conv DC-DC 1V to 21V Synchronous Step Down Single-Out 0.5V to 18.06V 9A 16-Pin QFN EP T/R

Manufacturers <u>Infineon Technologies Corporation</u>

Package/Case PQFN 4 x 5

Product Type Power Management ICs

RoHS Rohs

Lifecycle



Images are for reference only

Please submit RFQ for IR3899MTRPBF or <a href="mailto:s:sales@ovaga.com"><u>Emailto:s:sales@ovaga.com</u></a> We will contact you in 12 hours.

**RFO** 

## **General Description**

Single 5V and 12V application

Wide Input Voltage Range from 1.0V to 21V with external Vcc

Output Voltage Range: 0.5V to 0.86\* Vin

Enhanced Line/Load Regulation with Feed-Forward

Programmable Switching Frequency up to 1.5MHz

Internal Digital Soft-Start/Soft-Stop

Enable input with Voltage Monitoring Capability

Thermally Compensated Current Limit with hiccup mode over current protection

Variable Internal LDO to enhance light load efficiency

External Synchronization with Smooth Clocking

Enhanced Pre-Bias Start-Up

Precision Reference Voltage (0.5V+/-0.5%) with margining capability

Vp for Tracking Applications

Integrated MOSFET drivers and Bootstrap Diode
Thermal Shut Down
Programmable Power Good Output with tracking capability
Monotonic Start-Up
Operating temp: -40°C where Tj is < 125°C
Small Size: 4mm x 5mm QFN
Lead-free, Halogen-free and RoHS Compliant
Desktop and Workstations
Fan
Graphic Boards
Netcom and Telecom
Point of Load
Pump
Servers and Storage
Solar
UPS
Welding

**Features** 

Single 5V and 12V application

Wide Input Voltage Range from 1.0V to 21V with external Vcc

Output Voltage Range: 0.5V to 0.86\* Vin

Enhanced Line/Load Regulation with Feed-Forward

Programmable Switching Frequency up to 1.5MHz

Internal Digital Soft-Start/Soft-Stop

Enable input with Voltage Monitoring Capability

Thermally Compensated Current Limit with hiccup mode over current protection

Variable Internal LDO to enhance light load efficiency

External Synchronization with Smooth Clocking

Enhanced Pre-Bias Start-Up

Precision Reference Voltage (0.5V+/-0.5%) with margining capability

Vp for Tracking Applications

Integrated MOSFET drivers and Bootstrap Diode

Thermal Shut Down

Programmable Power Good Output with tracking capability

Monotonic Start-Up

Operating temp: -40°C where Tj is < 125°C

Small Size: 4mm x 5mm QFN

Lead-free, Halogen-free and RoHS Compliant

**Application** 

Desktop and Workstations

Fan

Graphic Boards

Netcom and Telecom

Point of Load

Pump

Servers and Storage

Solar

UPS

Welding





## **Related Products**



IRS2101SPBF

Infineon Technologies Corporation SOIC-8



IRS21864SPBF

Infineon Technologies Corporation SOIC-14



IRS2003STRPBF

Infineon Technologies Corporation SOIC-8



IR3897MTRPBF

Infineon Technologies Corporation PQFN 4 x 5



IR3898MTRPBF
Infineon Technologies Corporation
PQFN 4 x 5



IR21531SPBF
Infineon Technologies Corporation
SOIC-8



AUIRS2301STR
Infineon Technologies Corporation
SOIC-8



IR1168SPBF
Infineon Technologies Corporation
SOIC-8