

TAILORED TO SPECIFICATIONS

- Fully Customizable to Match Satellite Platform and Payload Requirements
- Single Output, Low Voltage, High Power with Option for Remote Sense
- Onboard EMC Filters Ensures Compliance Without Additional Filtering
- Input to Output Power Efficiency of up to 94%

FEATURE-RICH

- Remote Sense and Single Point Failure Free for Output Over Voltage
- Output OR-ing and Over Voltage Protection for Redundant Systems
- Input Under Voltage Protection
- Telemetries: ON/OFF Status, Temperature, Input Current, Output Voltage
- ON/OFF Telecommand



Micross ZBR converter offers state of the art performance and is specifically designed for digital payloads requiring low voltage and high current. The ZBR has excellent power conversion efficiency and is designed for operating in a cold redundant configuration and can be tailored to the specific spacecraft bus and equipment requirements.

RAD-HARD, ITAR FREE
100 kRad and 60 MeV



Design Expertise

Micross' design team helps review and specify payload specific DC-DC converters to ensure maximum compatibility and minimum risk at equipment level. We design, develop, manufacture and test complete DC-DC solutions for effortless payload integration.



Design Flexibility

The ZBR can be tailored to most satellite platforms and the outputs can be configured to customer specific payload requirements.

Output 1: +1V to +10V 50A / 250W max



Rapid Delivery for Tailored Designs:

- 6 Months for Engineering Models
- 9 Months for CDR Datapackage
- 12 Months for Flight Units

Mechanical:

- PCB Outline: 157mm x 123mm x 26.5mm (Board)
189mm x 30.0mm x 131mm (Chassis)
- Mass: <475g (Board, < 790g (Incl. Chassis)

Electrical Performance

- WC EOL Output Voltage Accuracy: $\pm 2\%$ Including Line and Load
- Load Step Transient Response: $\pm 5\%$ for a 50% to 100% Load Step

Output CE:

- $V_1 < 1.0\text{mVrms}$ (50Hz to 50MHz)

CS Rejection Input to Outputs:

- $V_1 > 40\text{dB}$

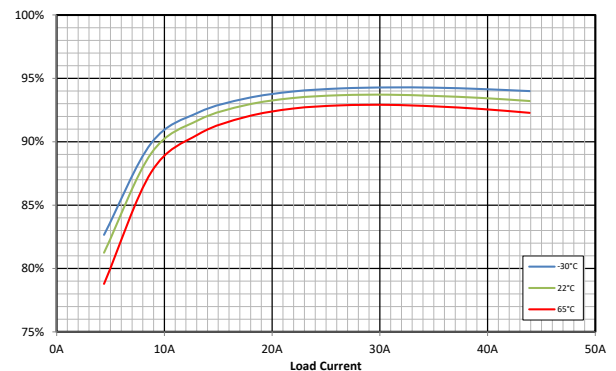
Design Datapackage

- Worst Case Analysis
- Radiation Analysis
- Part Stress Analysis
- Reliability Assessment
- Thermal Analysis
- FMECA
- Mechanical Analysis
- Declared Components List
- Declared Process List
- Declared Materials List

Product Control Documentation

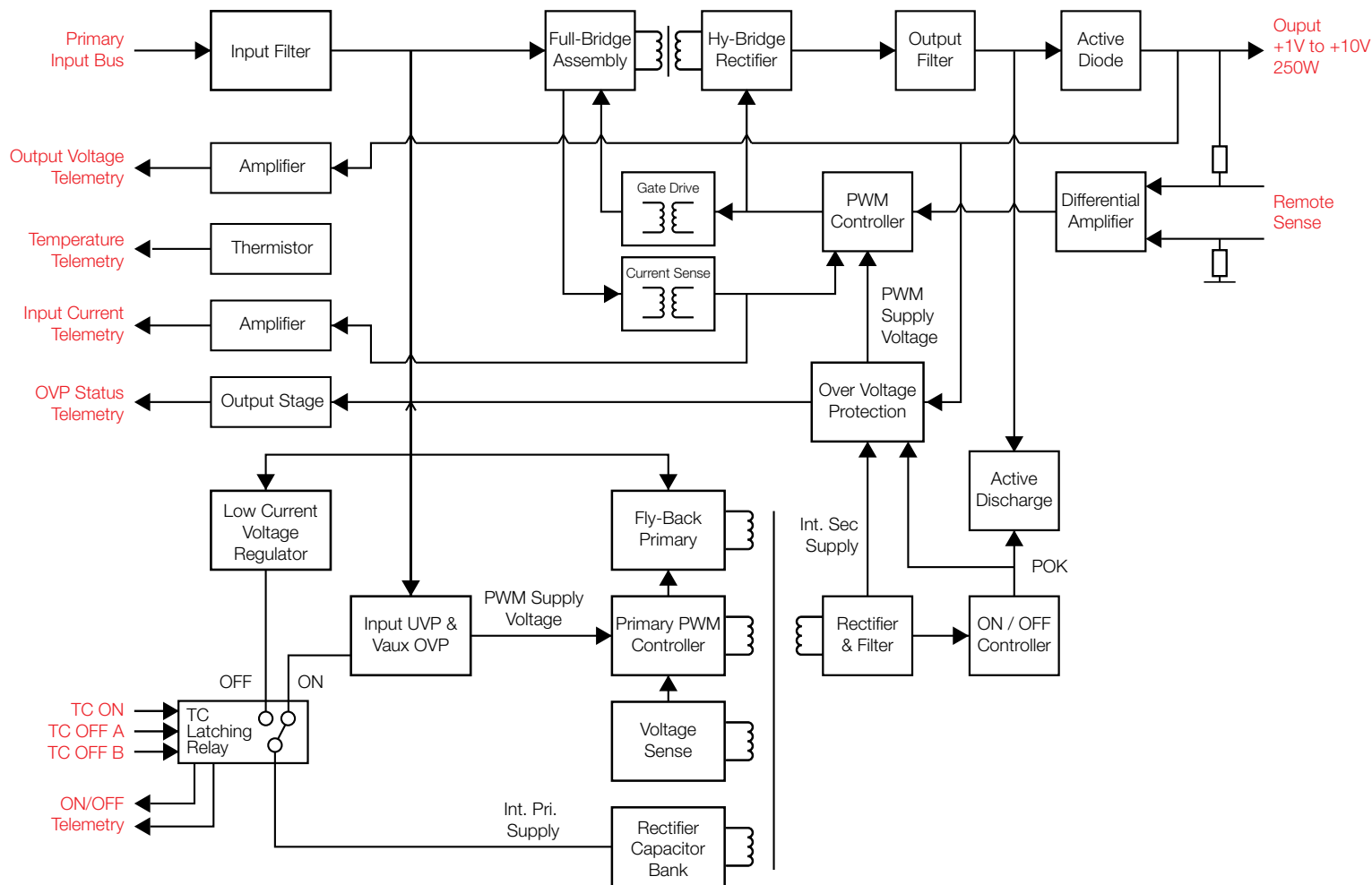
- Interface Schematics
- Interface Control Drawing
- User's Manual
- Test Plan
- Acceptance Test Procedure
- EMC Test Procedure and Report
- EIDP (One for Each Deliverable Item)
- Micross Standard Product Assurance Plan
- Compliance Statement for Specification
- Configuration Status List
- SET and Loop Stability Test Reports

Typical Efficiency



All 4 Outputs Loaded Equal Relative to Max Load

ZBR Series Generic Block Schematic



Flight Qualified and Export Approved Configurations

Part Number	Input Voltage	V1
12151	96V - 103V	+5.9V / 45A
12206	98V - 101V	+6.5V / 30A

ECCN: 9A515.y.1

About Micross

Micross is the most complete provider of advanced microelectronic services and component, die and wafer solutions. With the broadest authorized access to die & wafer suppliers, an extensive portfolio of hi-rel power, RF, optoelectronics, memory, data bus, logic, and SMD/5962 qualified products, and the most comprehensive advanced packaging, assembly, modification, upscreening, and test capabilities, Micross is uniquely positioned to provide unparalleled high-reliability solutions, from bare die, to fully packaged devices including hermetic ICs/MCMs, PEMS, ASICs, FPGAs, and PCBs, to complete program life-cycle sustainment. For more than 45 years, Micross has been a trusted source for the aerospace, defense, space, medical, energy, communications, and industrial markets.



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