

Micross Hi-Rel Power Solutions acts as an extension of our customers in-house design team and engages at all levels to design and manufacture the right solution for our customers.

**RAD-HARD, ITAR FREE
100 KRAD AND 60 MEV**

MANUFACTURING

Micross designs and manufactures space-grade board-based power solutions in Copenhagen, Denmark. The 1,800 m² facility houses both development and manufacturing activities in the same building.

Our manufacturing line is qualified to IPC JSTD-001H Class 3 with Space Addendum. Inspection is done according to IPC-A-610H Class 3.

We deliver full design data package and supporting documentation for easy acceptance and the next level of assembly. Our team is ready to support before, during and after project execution.

- › Rad-Hard and Rad-Tolerant Products
- › Detailed Worst-Case and FEM Analysis
- › Mechanical Vibration and Shock
- › TVAC, Burn-In, and Thermal Cycling

HERITAGE

Micross' design and manufacturing team has a strong heritage within high reliability power electronics going back 30+ years delivering application specific power supplies to all major space and defense companies.

DESIGN EXPERTISE

Micross design team engages directly with our customers and can help specify and review the power system architecture. Our focus and experience lies in designing application specific power supplies serving the defense and space market tailored to our customers requirements. We design, develop, manufacture and test complete DC/DC solutions for effortless integration at next level of assembly.

RAPID DELIVERY FOR TAILOR DESIGNS

- › 6 Months for Engineering Models
- › 9 Month for CDR Data Packaging
- › 12 Months for Flight Units

Design Data-Package

- Worst-Case Analysis
- Radiation Analysis
- Parts 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 (for Each Deliverable Item)
- Micross Standard Product Assurance Plan
- Compliance Statement for Specification
- Configuration Status List
- Loop Stability and SET Test Reports

Product Portfolio

Micross PCB Platforms Can Be Tailored to Customer Specification on Both Input and Output



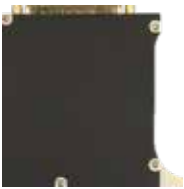
Low Power RF M-Series (5W to 25W)

- Up to 4 Outputs
- Linear Post Regulators, All O/P
- Low Noise, High CS Rejection
- Output Sequencing
- Low Power RF, LNA, MRO, etc.
- Isolated Pulse Command I/F
- EMI Input Filter



RF Amplifiers & Mixed Signal E-Series (75W to 190W)

- Up to 4 Outputs
- High Efficient Main Output(s)
- Linear Post Regulators
- Output Sequencing
- RF Amplifiers (Tx) GaAs and GaN
- Isolated Pulse Command I/F
- EMI Input Filter



Bus Converter EBS-Series (200W to 400W)

- Single Output
- Complete Unit in Chassis
- For Hot Redundant Systems
- Isolated Bus Converter
- Parallel Operation



Digital and Mixed Signal Z-Series (180W to 325W)

- Single or Dual Output
- High Output Current (to 60A)
- Low Output Voltage (to 1V)
- Remote Sense (ZxR)
- High Efficiency
- Cold Redundancy (ZxR)
- Complete Unit in Chasis (ZxR)
- Programmable Current Source (ZAC)
for Optical Inter-Satellite Links

Product	O/P	Power	Size (mm)	Mass
MLN	2	5W	60 x 50	< 45g
MAS	3	15W	85 x 50.8	< 72g
MAHB	4	20W	85 x 71	< 95g
MBH	3	30W	105 x 68.5	< 115g
EAL	4	75W	142 x 80	< 200g
EARB	3	130W	155 x 65	< 250g
EARC	3	170W	155 x 84	< 285g
EART	3	140W	155 x 84	< 285g
EGB	3	190W	153 x 95	< 300g
EGBL	3	120W	155 x 70 x 23.5	< 250g
EGBN	3	70W	124.2 x 84.7 x 23.6	< 225g
EADP	4	160W	171.5 x 103	< 400g
EANR	2	115W	155 x 75	< 250g
EBS	1	400W	190 x 90.5	< 470g
ZB	1	250W	140 x 100	< 350g
ZAR	2	100W	157.3 x 125.3	< 475g
ZBR	1	180W	157.3 x 125.3	< 475g
ZAC	1	325W	100 x 254	< 640g
TPSU	4	400W	180 x 120	< 520g

SAR and High Power RF TPSU-Series (400W)

- Four Dual Output
- Designed for Low Frequency Pulsed Load
- Synthetic Aperture Radar Applications
- Output Sequencing
- High Efficiency



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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