

Eclipse

Direct Metallization

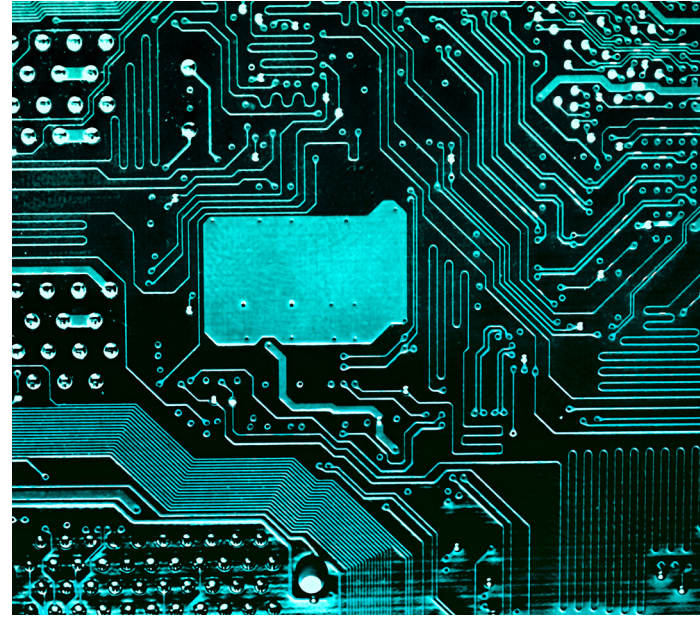
The Ultimate Choice For Mission-Critical PTH Reliability

Eclipse is the benchmark in PTH direct metallization processes, engineered specifically for fabricators and OEMs that require consistently high performance, reliability and durability. Simpler to run and considerably more cost-efficient than electroless copper, Eclipse provides high technology capabilities and RoHS-compliance all in one.

Carbon-based Eclipse features 10:1 aspect ratio and higher PTH capability, while achieving over 500 IST cycles. The new sustainability leader reduces process steps by 50%, eliminates 100% of chelated metals and enables manufacturers to decrease chemical usage and water consumption by 90%. Utilizing an automated horizontal process, Eclipse delivers unmatched coverage and connectivity for the most challenging designs, and is supported by MacDermid Alpha's renowned hands-on global technical service.

KEY FEATURES

- Delivers maximum IST cycles to failure
- OEM approvals in all end-use markets
- Environmentally friendly low cost alternative to electroless copper
- Compatible with all circuit board types
- Production-proven for HDI and high aspect ratio through holes
- Does not require palladium metal for seed layer

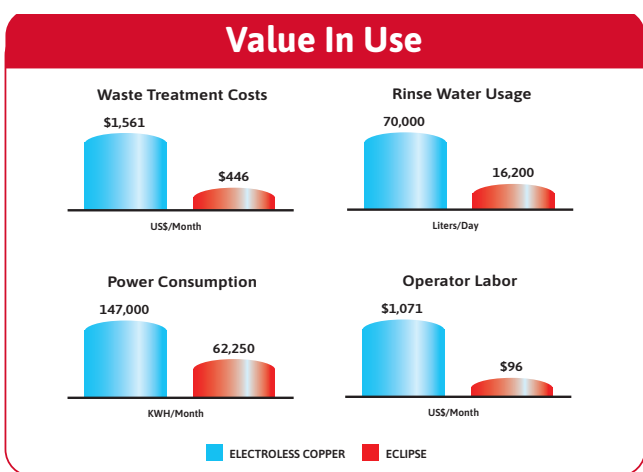


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Direct Metallization

The Most Reliable PTH Metallization Process For The Lowest Cost Of Ownership

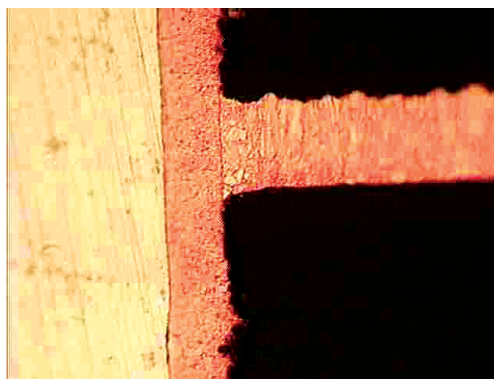
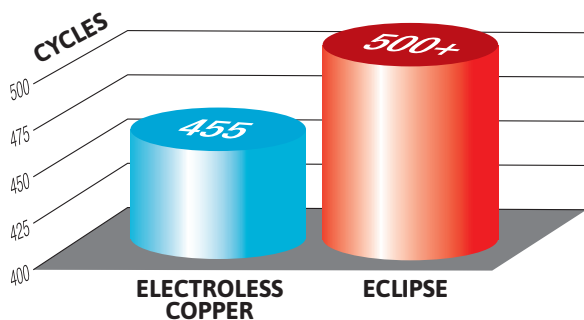
When you are looking for quantifiable reasons to switch from electroless copper to an environmentally-responsible and cost-efficient PTH metallization process, our revolutionary Eclipse formulation is your solution. Now you can dramatically reduce volatiles and waste pollutants, eliminate unwanted heavy metals and formaldehyde, and extend the life of your bath- all without sacrificing reliability, hole integrity, and microvia reliability at a greatly improved total operating cost.



Production-Proven Reliability

Test Method	# Cycles	Result	
Thermal Stress Test	IPC TM-2.6.8	6	Pass
Fluidized Sand Thermal Cycle Test	IPC TM-2.6.8.2 (AT&T FSB)	40	Pass
Air -to-Air Thermal Cycle Test	MIL-T-Cycle	400	Pass
Component Rework Simulation	IPC TM-2.4.36	5	Pass
Military Approval	MIL-P-55110F	-	Pass
Delco Thermal Stress Test	TS-101	1,000	Pass

1ST CYCLES TO FAILURE



Direct metallization allows copper plating directly onto the innerlayer, maximizing reliability with no interfering layers.

