

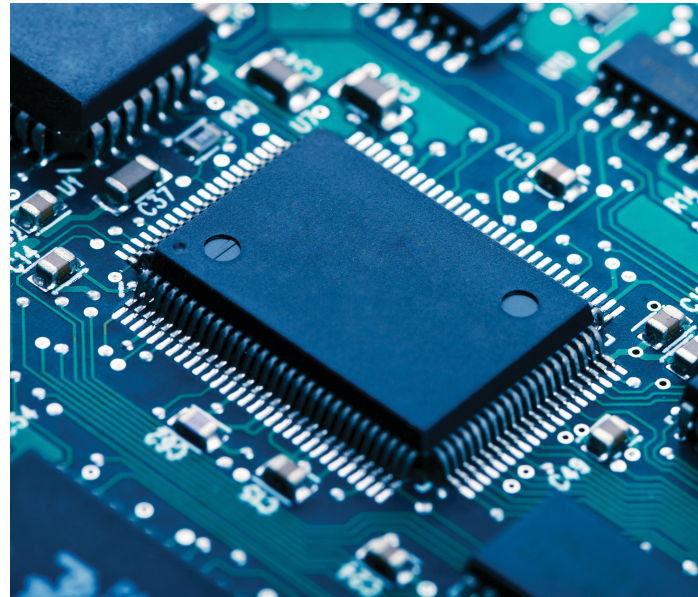
# Sterling

Immersion Silver Final Finish

## Experts Agree. Silver Is Better & Sterling Is The Best.

Sterling is the MacDermid Enthone immersion silver finish, specified by hundreds of fabricators, assembles and OEM's worldwide to provide consistent solderability, low contact resistance, process simplicity, and a long shelf life.

Sterling is a tarnish resistant silver finish that provides exceptional solderjoint strength, touchpad functionality, wire bondability, and in-circuit test compatibility. It offers benefits throughout the supply chain: fabricators receive a versatile and flexible solution that can be applied with either horizontal or vertical equipment; assemblers get a durable finish that performs through multiple heat excursions, and high yields due to complex flux and paste compatibility; and OEM's receive uncontested reliability and service life due to the resulting Cu/Sn solder joint. As immersion silver has become the market leading Pb-free alternative to tin/lead finishes, Sterling is what to choose when only the best will do.



## KEY FEATURES

- Specified by fabricators, assemblers and OEM's worldwide
- Exceptional solderjoint strength, touchpad functionality and wire bondability
- Superior conductivity for ultra-high RF applications
- The clear solution for black pad, tin whiskers and exposed copper



**MacDermid Enthone**

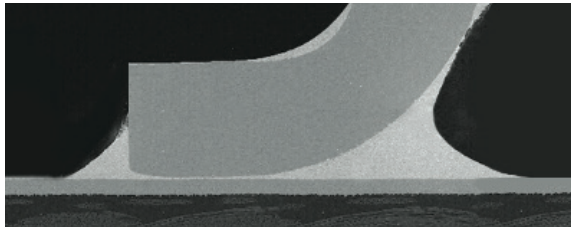
CIRCUITRY SOLUTIONS

# Sterling

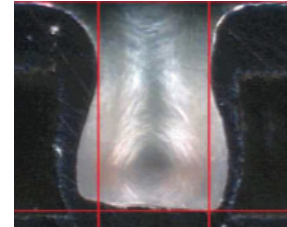
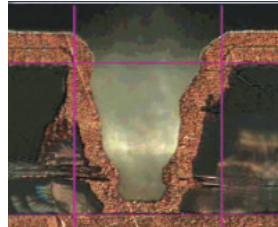
Immersion Silver Final Finish

## Immersion Silver For All Final Finish Requirements

From automotive to computers, military to communications, MacDermid Enthone's **Sterling** is the choice of OEM's worldwide. Sterling provides highest assembly yields, excellent contact functionality, and predictable solderability with multiple reflows. It is also aluminum wire-bondable, resulting in ultimate assembly flexibility, while its blind microvia plating offers the required technology and reliability levels for complex application.



Sterling consistently delivers strong and durable solder joints. During soldering, the thin silver finish dissolves entirely into the bulk solder, resulting in a reliable and resilient copper/tin solder joint.



Sterling delivers reliable and consistent silver plating in blind microvias, meeting today's complex technological demands, and enabling maximum utilization of circuit board real estate.

## Sterling Superiority

	<b>STERLING</b>	<b>OSP</b>	<b>ENIG</b>	<b>TIN</b>	<b>HASL</b>
<b>Flatness</b>	Planar	Planar	Planar	Planar	Poor
<b>Solderjoint</b>	Cu/Sn	Cu/Sn	Ni/Sn	Cu/Sn	Cu/Sn
<b>Ease of Use</b>	High	High	Low	Moderate	Moderate
<b>Contact Functionality</b>	Excellent	None	Excellent	Moderate	Moderate
<b>Shelf-life</b>	12 Months	6 Months	24 Months	6 Months	18 Months
<b>High Frequency Performance</b>	Excellent	Excellent	Poor	Moderate	Moderate
<b>Pb-Free Challenges</b>	Drop-in	Temperature Sensitive	Brittle joints	Intermetallic Growth	Contains Lead



macdermidalpha.com  
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MacDermid Enthone is a product brand of MacDermid Alpha Electronics Solutions.