



Elevate

Superior Quality Process Chemistry
For Today's Semiconductor Manufacturing





Elevate

Working closely with our customers to create the perfect solution

Technic, a global leader in process chemistry for over 70 years, offers a full range of products and specialized process applications to the semiconductor industry. From ultrapure front end process chemistry like etchants, cleaners and strippers to high speed copper pillar baths for advanced packaging applications marketed under the Elevate brand name. Technic remains a reliable resource to some of the most advanced wafer manufacturing operations around the world.

Expertise for today's demands

Silicon semiconductors, compound semiconductors and glass substrates all benefit from the use of products formulated by Technic. Our goal is to offer easy to control processes that provide a performance advantage over the industry standards. Technic's highly trained Research and Development teams in the US, Europe and Asia are constantly working to stay ahead of the status quo and offer proprietary products that provide our customers with a distinct advantage.

Working together

At Technic we place high value on the relationship we have with our customers working in partnership to ensure the right product for each application. Because of the extensive experience of our Technical Field Staff, our customers feel confident when they install a Technic product into their production lines. Our ongoing global technical support and service remains one of our highest priorities.

Advantages

For advanced semiconductor applications, Technic's Elevate brand includes metal plating baths, photoresist strippers and metal etchants proven to outperform the leading competition with high reliability and a number of distinct advantages.

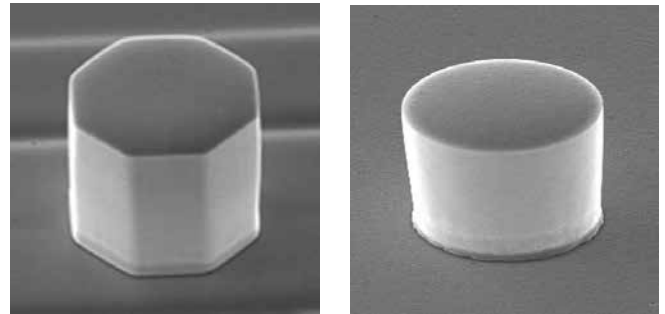
Copper

Elevate Cu 6340

Low stress copper bath that can be used for RDL and general purpose semiconductor plating. Plates at 1 – 2 microns/minute with virtually no internal stress.

Elevate Cu 6370

High speed copper plating bath able to achieve a plating rate of 3 - 4 microns per minute on a variety of semiconductor structures while maintaining good WIW and WID coplanarity. Ideally suited for standard pillars, micro pillars, RDL and other advanced packaging technologies. Produces a bright deposit and is fully analyzable with Technic's Real Time Analyzer (RTA).



50 micron and 25 micron diameter pillars plated in Elevate Cu 6370

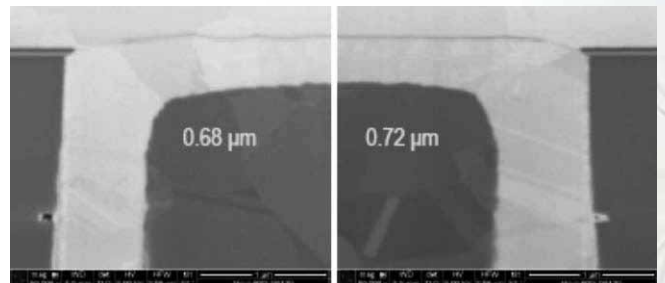
Precious Metals

Elevate Gold 7934

A cyanide based electrolytic gold plating process that produces a deposit that exhibits excellent functional performance such as wire bonding and solderability from a very stable and simple to operate solution.

Elevate Gold 7990

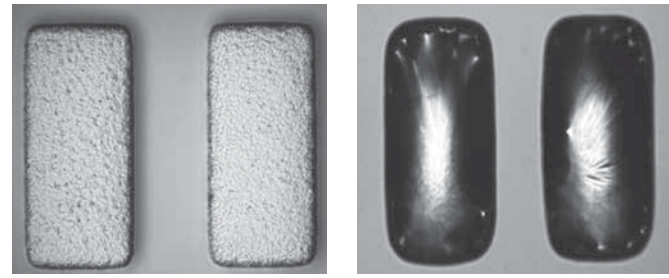
Electrolytic non-cyanide gold process that produces pure, soft gold deposits. Offers several advantages over standard sulfite gold baths including neutral pH, no metallic grain refiners, longer bath life, exceptional throwing power and a very stable electrolyte.



Excellent surface to via plating ratio with Elevate Gold 7990

Elevate AuSn 8020

Gold-tin alloy plating process that produces alloy ranges from 55 – 82% gold content with a corresponding melting point of 280°C – 320°C. Optimum gold-tin alloys are produced from a one step, single bath process.



Elevate AuSn 8020 deposit before and after reflow

Nickel and Tin

Elevate Ni 5910

All purpose nickel sulfamate bath that can be used for several applications including pillar and bump plating. Can also be formulated for high speed plating.

Elevate Ni 5930

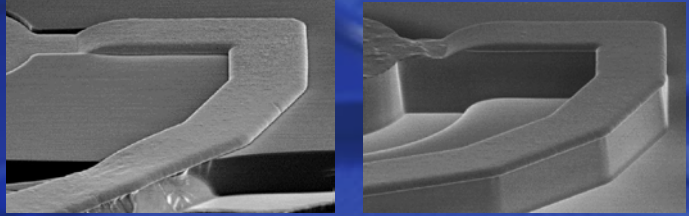
High throwing power nickel sulfate bath, for improved distribution and reduced plating time on complex features.

Elevate Tin 5011

Pure tin process that is ideal for use as a copper pillar tin cap. Produces a very small grain deposit for optimum reflow and whisker resistant performance. Can also be supplied with low alpha and ultra low alpha tin.



Technic Photoresist Strippers, Metal Etchants and Cleaners



Az 15nXT photoresists before and after stripping with TechniStrip NI555 for 6 min @ 60°C.

TechniStrip P1331

An advanced photoresist stripper that has a wide range of applications from DUV to thick negative resins and passivation layer reworking. Ideal for use in back end applications like TSV, Cu pillar, bumping, etc. Offers complete resin dissolution of thick film photoresist such as THB151N, THB121N, AZ125XT, etc.

TechniStrip NF52

A highly effective negative tone photoresist remover used mainly for advanced packaging applications. Developed to remove laminated photoresist and liquid resins, the novel stripping formulation of this TMAH/DMSO chemistry exhibits high dissolution performance and excellent metal compatibility compared to standard TMAH based blends.

TechniStrip NI555

Specially formulated to fully dissolve AZ EM advanced line of photoresist: AZ15nXt, AZ40XT and AZnLOF 2000 series. High metal compatibility from a DMSO and TMAH free solution.

TechniEtch SLC

Highly selective copper seed layer etch chemistry that provides very low pillar undercut and minimal metal oxidation of tin and tin/silver.

TechniEtch ACI2

Iodine based gold etchant that has been formulated to obtain high etch rates at room temperature, extended bath life, improved wetting and better stability even in the presence of metal contamination.

TechniClean CA25

Post Etch Residue remover that has been designed to provide an optimum balance of surface wetting, reduced potential, chelating capacity and residue solubility to accomplish complete PER dissolution at a low temperature and short processing time for various electronic features such as lines, vias and pads.

World-wide Technic offices and facilities



About Technic

Since its inception in 1944, Technic Inc. has remained a financially strong private corporation and has established a global reputation for technical excellence in the electrodeposition of precious metals. Following the expansion of our product lines through organic growth, strategic partnerships, and acquisitions, Technic has become a global leader in:

- Specialty Chemicals
- Surface Finishing Equipment
- Engineered Powder and Flake
- Analytical Control Tools

Our primary end use markets include:

- Semiconductors
- Electronic Connectors
- Photovoltaic Cell Manufacturing
- Electronic Components
- Printed Circuit Boards
- Industrial Finishing
- Decorative Applications
- Medical

Technic currently operates over 20 global facilities in 14 countries within North America, Asia, and Europe. Our Advanced Engineered Solutions approach to customer projects allows Technic to add substantial and differentiated value to the markets and customers we serve. We look forward to helping you realize the maximum potential from your new product development goals.



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