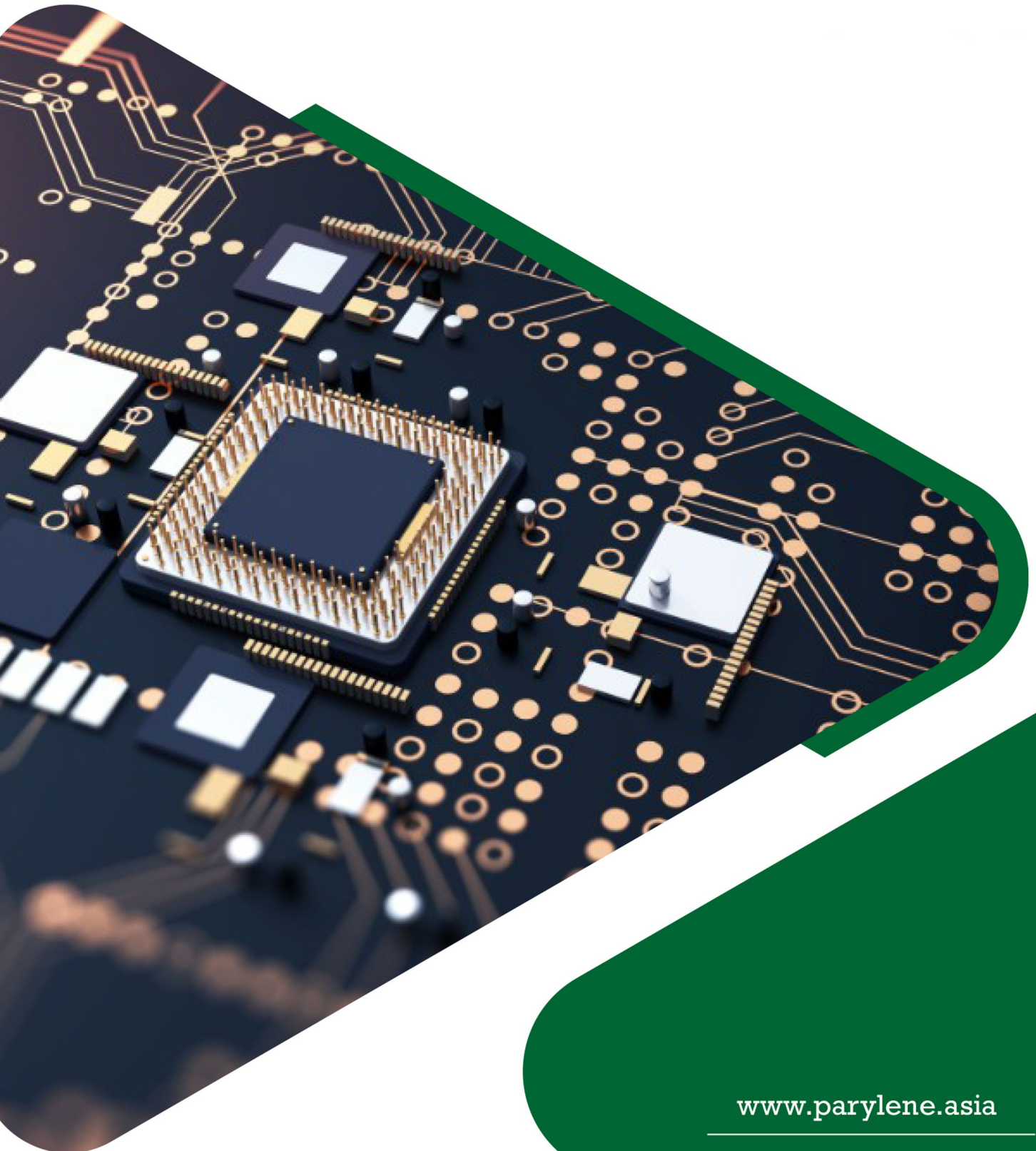




Parylene Asia
Technologies

(An ISO 9001:2015 Certified Company)

BROCHURE

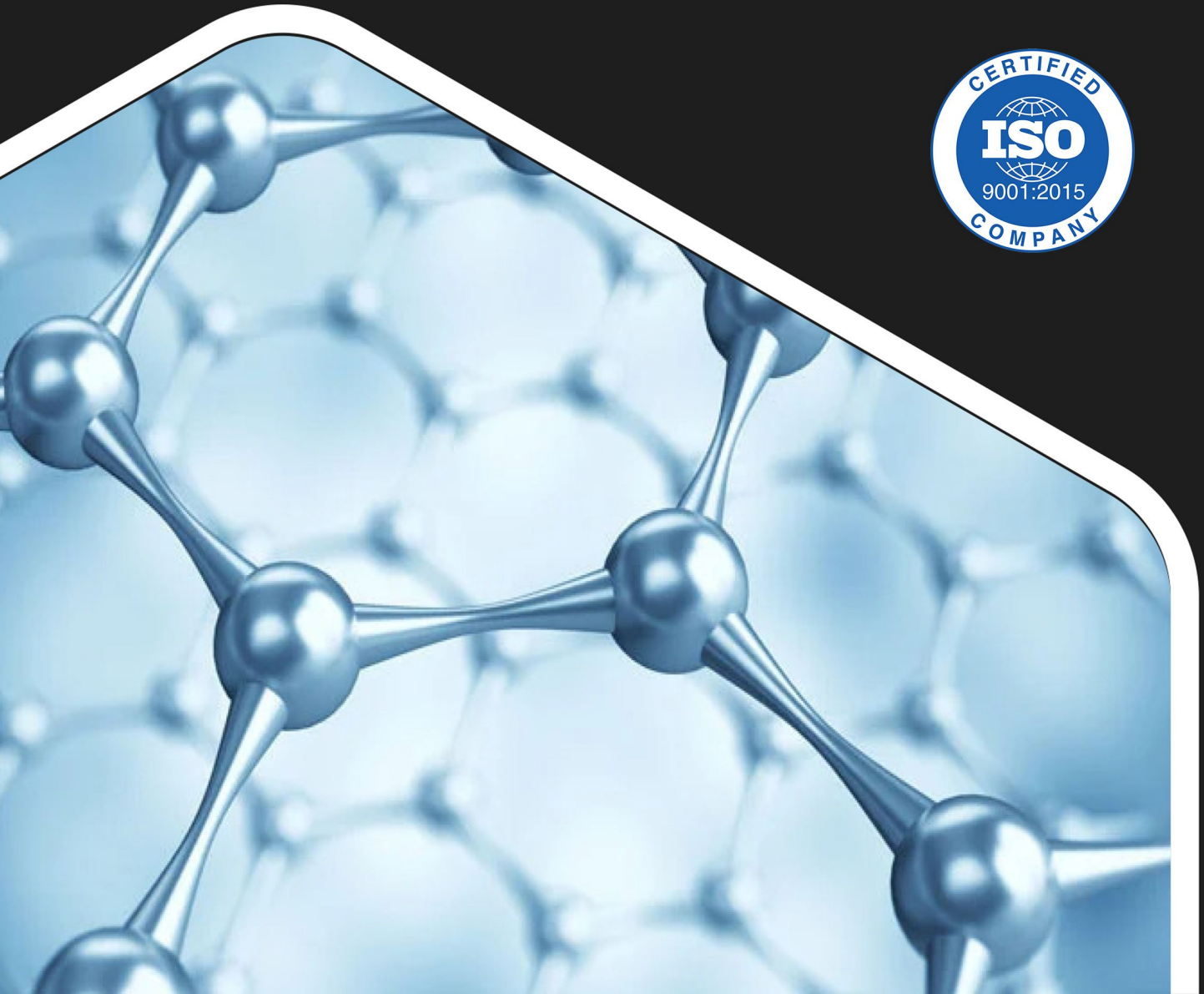


www.parylene.asia

About Us

Your Partner in Leading Edge Surface Treatment Technology!

Parylene Asia Technologies (PAT) is a specialised provider of a unique conformal surface coating based on a family of paraxylylene derivatives (dimers), which undergo a vapourisation and polymerisation process to form what is commonly known in industry as 'Nano coating'. Nano coating is a generic name for a proven class of polymer-based conformal coating which has been widely deployed in Europe and North America in a variety of high-value sectors such as the electronics, automotive, aerospace, medical, museum, association and industrial industries.



Parylene Coating

Parylene Coating is the Modern Technology in Conformal Coating

Parylene is a conformal protective polymer coating material utilized to uniformly protect any component configuration on such diverse substrates as metal, glass, paper, resin, plastic, ceramic, ferrite & silicon.

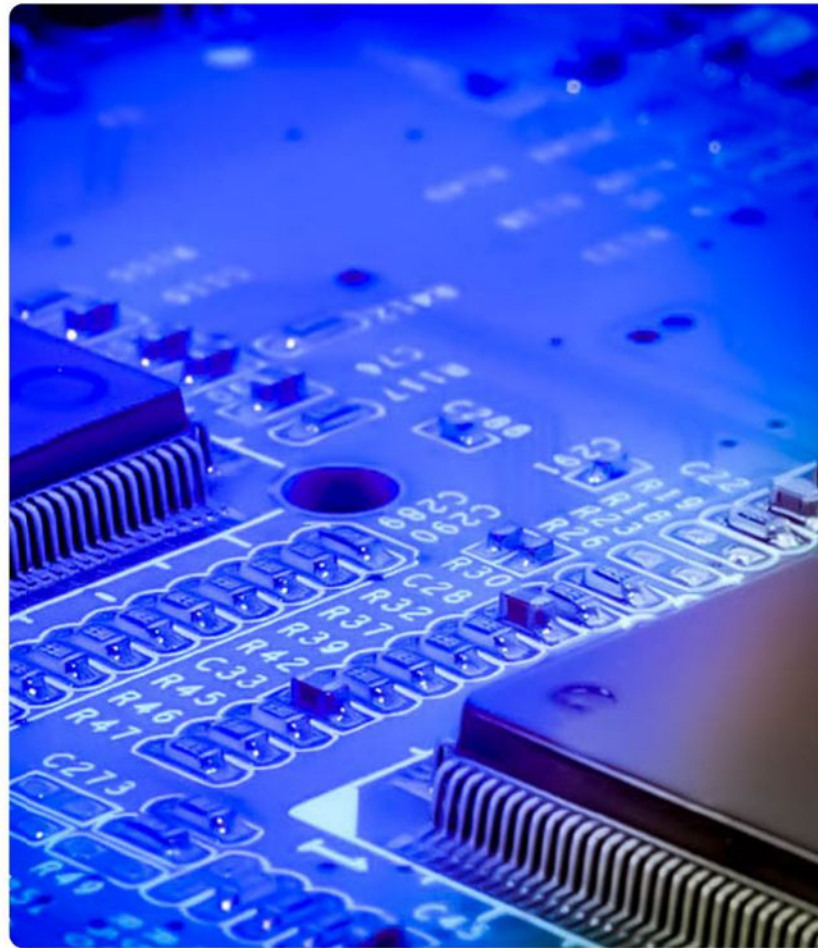


What is Parylene ?

A name that refers to a polymer series based on p-Xylylene POLY(PARA-XYLYLENE).

A truly conformal, thin, optically clear, inert coating applied in a vacuum chamber at room temperature. A non-line-of-sight coating that follows molecular level deposition process. A chemically pure coating that does not use any catalysts or leachable materials.

- ⊞ Completely conformal
- ⊞ Ultra-thin and lightweight
- ⊞ Moisture & chemical barrier
- ⊞ High Dielectric strength
- ⊞ Chemical insolubility
- ⊞ Optically Clear - Colourless
- ⊞ Environmental friendly



Parylene coating provides unmatched conformity, uniformity and freedom from pinholes and defects for coatings as thin as 1 micron.

How Parylene Works

Applied via vapour deposition in a vacuum chamber, the Parylene Coating Process exhibits superior characteristics and addresses shortcomings of traditional coating processes.

STEP1: Vaporization of Polymer Material

STEP 2: Pyrolysis to Monomer

STEP 3: Deposition on Surface at room temperature and in vacuum.



Vaporization

Raw material dimer is vapourised under Controlled temperature Temperature setting depends on amount of dimer used and coating thickness.



Pyrolysis

Gas dimer undergoes pyrolysis under high heat to break down into reactive monomers which then flows into the vacuum chamber.



Deposition

Reactive monomers flows into chamber under high vacuum state and cools to form polymer layer, Necessary for products to be in vacuum and rotated for uniform.



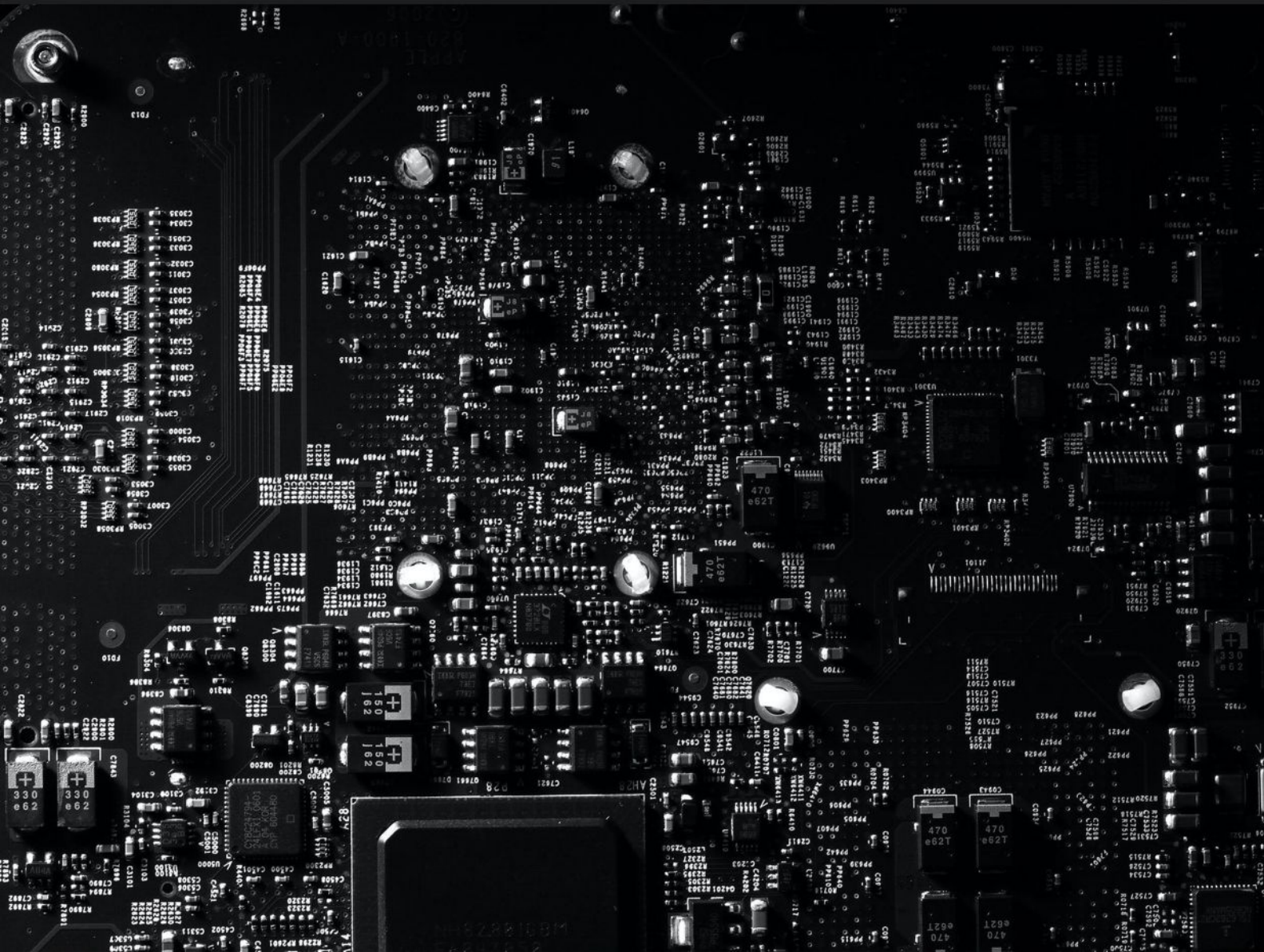
Cold Trap

The excess monomer is cooled through the cold trap and dispose Environmentally friendly.

Applications

Parylene coating provides unmatched conformity uniformity and freedom from pinholes and defects for coatings as thin as 1 micron.

- ⌘ Electronics (Printed Circuit Boards)
- ⌘ LED Displays
- ⌘ Medical Devices
- ⌘ Military Aerospace
- ⌘ Renewable Energy
- ⌘ Ferrite/Steel Products
- ⌘ Rubber/ Silicone



Parylene for EV

- ⌘ Parylenes already protect millions of automotive electronics, but they'll be indispensable for protecting the even more numerous and sophisticated electronics in the EV market of tomorrow.
- ⌘ With the number of critical electronics in EV systems increasing, ultra-thin, pinhole free Parylene conformal coatings will be essential to delivering the most reliable, high-performance protection for PCBs, ECUs, ADAS, LEDs and more.
- ⌘ Parylene provides unmatched thermal stability for protection in harsh environments. These coatings, enabling manufacturers to meet regulatory as well as performance milestones as the global industry moves toward an eco-friendly automotive future.

Automotive Coating Applications

- ⌘ Mass air temperature and Pressure sensors
- ⌘ Emission Sensors
- ⌘ Tire Pressure Monitoring Systems(TPMS)
- ⌘ Diesel fuel heaters
- ⌘ O-rings, Seals & Engine Gaskets
- ⌘ Fuel cell & hybrid electronic systems
- ⌘ Engine electronics
- ⌘ MEMS sensors



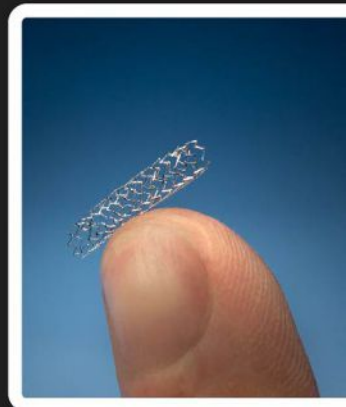
Electronics Coating Applications

- ⌘ Printed Circuit Boards
- ⌘ Military PBCA
- ⌘ Automotive Electronics
- ⌘ Microelectronic Mechanical Systems (MEMS)
- ⌘ Semiconductor wafers
- ⌘ Consumer Electronics
- ⌘ Medical PCBA



Medical Device Coating Applications

- ⌘ ICDs, pacemakers, VADs
- ⌘ Drug delivery devices
- ⌘ Neurostimulators
- ⌘ Cardiac Assist Devices
- ⌘ Cochlear, Intraocular implants
- ⌘ Semiconductor wafers
- ⌘ Consumer Electronics
- ⌘ Pressure Sensors
- ⌘ Ultrasound Transducers
- ⌘ Needles & Epidural Probes



Aerospace Coating Applications

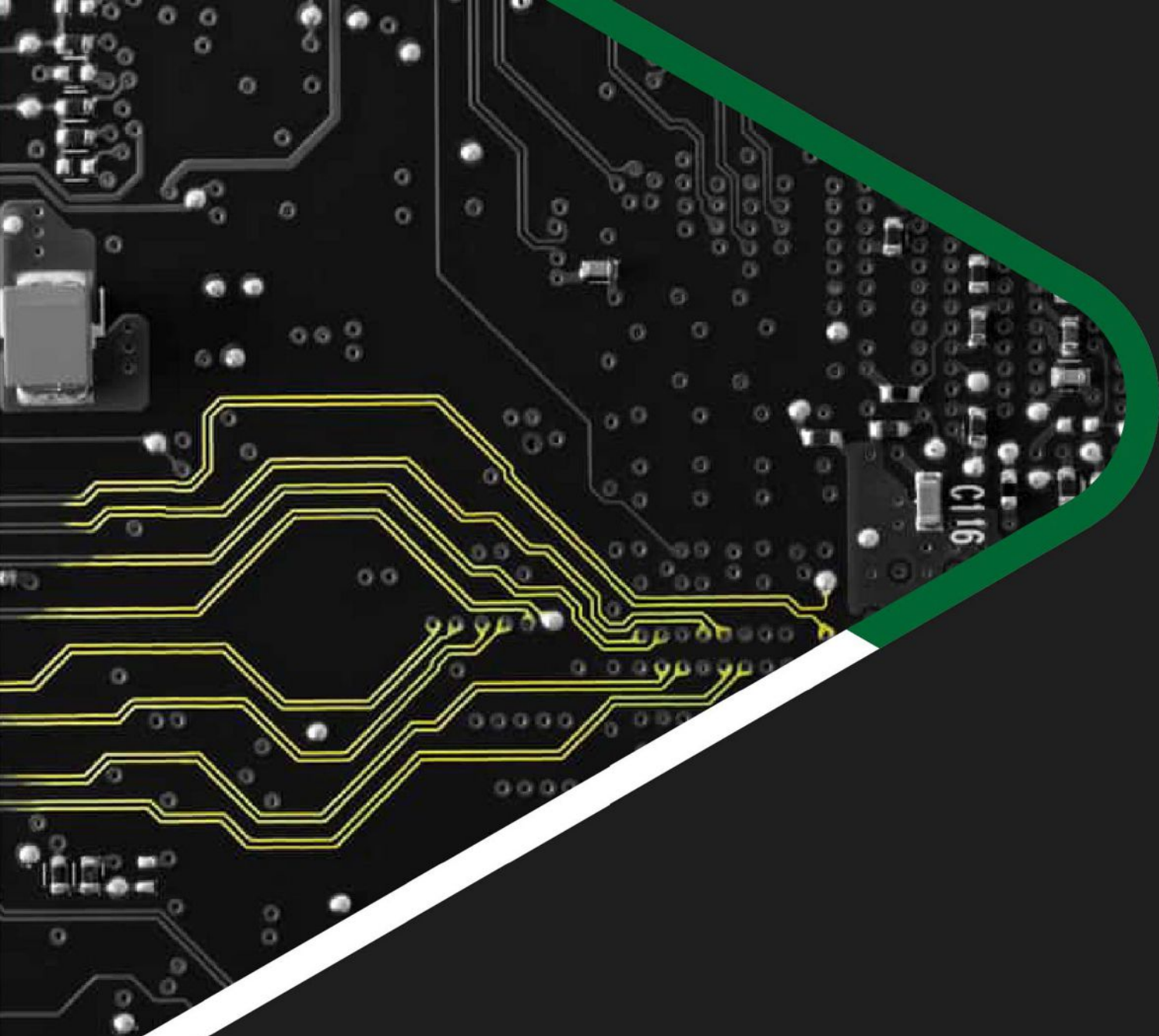
⌘ Military/Commercial

MEMS
Sensors
Circuit card assemblies
Power supplies
Backplanes
Elastomeric parts

⌘ Aerospace

Spacecraft & Satellite electronics
Cameras and assemblies
International Space Station
Remote arm components
Lab equipment





GET IN TOUCH!



CORPORATE OFFICE:

#226, Parylene Asia Technologies Pvt Ltd, INTENT InfoTech Building, Maria Street, Mariyannapalya, Near Manyata Tech Park, Bangalore - 560 024. INDIA.



080 - 22331306
+91 9840264453



www.parylene.asia
enquiry@parylene.asia

FACTORY:

Parylene Asia Technologies Pvt Ltd, Doddaballapur Integrated Textile Park Ltd., SW-51, Phase II, Doddaballapur, Apparel Park, Doddaballapur, Bangalore - 561 203. INDIA.

