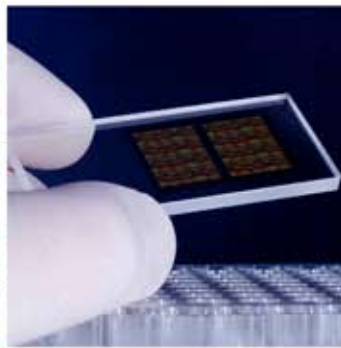




IoN Wave 10 Plasma System





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The **IoN Wave 10** plasma system is our latest advancement in microwave plasma possessing. This low cost, mid-sized wafer batch asher is loaded with advanced features and targets the needs of small scale foundries, universities and start-up companies.

The **IoN Wave 10** is equipped with new, state of the art components and software to precisely control processing parameters. Its process monitoring and data capturing software allows for the most stringent quality controls available. This technology has been successfully used for power transistors, analog devices, sensors, optical devices, photonics, MEMS/MOEMS, bio devices, etc.

The small footprint of the **IoN Wave 10** requires minimal laboratory space and provides for simple installation and maintenance. Using microwave plasma technology, this system produces high photoresist ashing rates with minimal exposure to electro static discharge (ESD).

Features include:

- Small foot print tabletop design
- Quartz chamber accommodating up to 8" wafers and quartz boats carrying up to 25, 6" wafers
- Industrial computer with Windows® based system
- Graphical User Interface (GUI) software complies with Semi E95-1101
- User access control for process development and maintenance programming.
- Remote process monitoring via Ethernet
- Onboard diagnostic features and alarm logging
- Recipe editor offers fast and versatile parameter control. Liquid Crystal Display (LCD) touch panel and keyboard
- On line Web based simulation, training and support
- Plug and play installation

Typical applications

- Photo-resist stripping
- Wafer descum
- Wafer cleaning prior to wet etching
- SU-8 removal
- Etching of passivation layers
- Device decapsulation for failure analysis
- Cleaning and surface activation
- Low temperature ashing of materials for chemical trace analysis
- Cleaning of filters and membranes

Technical Data

Process Chamber

Material	Quartz or Ceramic
Dimensions	248mm (9.76") Dia. X 245mm (9.65") L Chamber Opening 241 mm at seal plate
Volume	11.3 liters (0.4 ft3)
Process Gas Control	Up to 6 gases, MFC controlled
Base Pressure	0.07 mbar (50 mTorr)
Process Pressure	0.5 – 1.5 mbar (375 – 1125 mTorr)
Evacuation Time	~1 minute

Power Requirements

Electricity 230V, 50/60 Hz, 10A, single phase

Process Gas 1-2 Bar (15-30 psi)

Compressed Air 4-6 Bar, capable of delivering 56 Lpm (intermittent)

Purge Gas 1.3-2.7 Bar, capable of delivering 28 l/m (intermittent)

Power Output 2.45 Ghz., 0-600 Watts

Dimensions 775 x 749 x 781 mm
(30.51 x 29.49 x 30.75")

Weight 134 kg / 195 lbs.

Options

- Input power step-up transformer 115-230 VAC
- Temperature controlled plate
- 1% Pressure Monitor
- Pressure controller
- Light tower
- Barcode reader
- Alternate gas selector
- Spectrographic endpoint detection
- Faraday Cage (secondary plasma)
- Ceramic chamber, chemical resistant seals
- Table
- Printer
- Vacuum pump options:
 - 12 cfm (20 m3/h)
 - 18 cfm (31 m3/h)
 - 28 cfm (48 m3/h)
- Dry and Scroll pumps available

Safety Certification Standards

- CE certified
- EN 61010
- EN 61326

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