



MARCH MaxVIA and MaxVIA-Plus

High-Throughput Plasma Treatment for Printed Circuit Board Assembly

The MaxVIA™ and MaxVIA™-Plus plasma systems build on the success of the MARCH VIA product series to support high-throughput printed circuit board manufacturing with outstanding plasma treatment uniformity.

The MaxVIA and MaxVIA-Plus systems provide the following:

Industry-Leading Efficiency and Plasma Uniformity

- Vertical loading and easy-to-use carts minimize idle time to increase productivity. The fast vacuum pump down and enhanced process cycle time boost productivity further.
- A single space-saving enclosure houses the vacuum system, plasma chamber, control electronics, and 40 kHz power supply.
- The unique power-power electrode configuration generates a balance, allowing both sides of the substrate to receive uniform plasma treatment.

Application Flexibility

- Equipped with a touchscreen PC Operator Interface, the system provides a range of control and data collection capabilities.
- Store unlimited recipes for easy batch-to-batch transition. Password protection prevents unauthorized login.
- Accommodates a variety of panel sizes within a small footprint.

Key Applications and Benefits

- High Flux Electrode (HFE) design with a temperature-controlled cooling loop delivers superior plasma treatment uniformity for PCB panel, desmear, landing pad cleaning, etchback for HDI, and flexible and rigid circuit board applications.
- High throughput.
- Low CF₄ gas consumption for desmear and etchback applications contributes to the lowest cost of ownership in their class.
- Unique vacuum and gas flow technology, advanced electrode designs, and superior temperature management.
- Provides front and rear system access to all interior components for convenient service.

MaxVIA and MaxVIA-Plus

Specifications

Enclosure Dimensions	W x D x H – Footprint	1652 W x 1747 D x 2445 H mm (65 W x 69 D x 97 H in.)
	Net Weight	MaxVIA: 2330 kg (5137 lbs) MaxVIA-Plus: 2380 kg (5247 lbs.)
Chamber	Available Cells	MaxVIA: 13 MaxVIA-Plus: 15
Electrodes	Configuration	Temperature Controlled Power-Power
	Working Area	1118 D x 610 H mm; (44D x 24H in.)
RF Power	Standard Wattage	10 kW
	Frequency	40 kHz
Gas Control	Available Flow Volumes	2000 or 5000 sccms
	Maximum Number of MFCs	4
Control System	Interface	EPC with PC-based touchscreen interface
Vacuum Pump	Standard Purged Pump Package	530 cfm
	Cooling Water Flow	9.5 slm
	N2 Pump Purge Flow	14 slm
Facilities	Power Supply	MaxVIA: 380-415 VAC, 40 A, 3-Phase WYE+ Ground; 50/60 Hz MaxVIA-Plus: 208 VAC, 50 A, 3-Phase + Ground; 50/60 Hz
	Process Gas Fitting Size & Type	6.35 mm (0.25 in.) Swagelok
	Process Gas Purity	CF4 = 99.97%; O2 = 99.996%; N2 = 99.99%; Ar = 99.999%; H2 = 99.999%
	Process Gas Pressure	1.03 bar (15 psig) min. to 1.7 bar (25 psig) max., regulated
	Purge Gas Fitting Size & Type	9.5 mm (0.375 in.) Swagelok Tube
	Purge Gas Purity	N2 = 99%
	Purge Gas Pressure	1.03 bar (15 psig) min. to 1.7 bar (25 psig) max., regulated
	Pneumatic Valve Fitting Size & Type	9.5 mm (0.375 in.) Swagelok
	Pneumatic Gas Purity	CDA, Oil Free, Dewpoint ≤7°C (45°F), Particulate Size <5 µm
	Pneumatic Gas Pressure	6.2 bar (90 psig) min. to 6.9 bar (100 psig) max., regulated
	Exhaust Fitting	NW 40 @ Utility Panel
	Compliance	USA
International		CE Marked
Ancillary Equipment	Gas Generators	Nitrogen
	Facilities	Chiller, Scrubber, Transformer

MaxVIA and MaxVIA-Plus

System Packages

Nordson Electronics Solutions builds the future of electronics reliability all across the globe. We're proud of the decades of service and solutions we've provided to enhance component reliability. No matter where you are, you've likely manufactured or purchased a product made reliable with our equipment. The MaxVIA and MaxVIA-Plus offer industry-leading throughput and reliability for printed circuit board assembly applications, designed to last and provide cutting-edge capabilities.

Explore the MaxVIA and MaxVIA-Plus system packages.

For more information, contact us at info-electronics@nordson.com.

Essential	Uniformity and repeatability.	These essential 40 kHz plasma treatment systems deliver high process repeatability and uniformity and accommodate all common gases, including CF ₄ , oxygen, nitrogen, and argon.
Productivity	Advanced throughput and yield.	Accelerate throughput and yield with a power-power electrode configuration that allows both sides of the substrate to receive exceptionally uniform etchback treatment. Balanced vacuum, gas flow, and temperature management technologies enhance optimal performance.

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February 2025



Electronics Solutions