DATASHEET

Centrios Circuit Edit System

Rapid prototyping and silicon debug/repair for 14 nm and up design-rule devices

An advanced dedicated circuit edit system that uses an innovative simultaneous dualnozzle gas-delivery system in combination with a broad portfolio of chemistries and the latest FIB technology for unparalleled control and precision for every type of edit.

In time-sensitive markets, you need time-saving capabilities. The Thermo Scientific[™] Centrios[™] Circuit Edit System is specifically designed for the fast-paced modern tech world. Whether you want to ensure availability of first silicon working parts, or need small volume manufacturing of repaired parts, the Centrios Circuit Edit System enables rapid prototyping of new designs as well as testing and evaluation. There is no more need to wait for mask re-spin and wafer fab processing.

With its dual-nozzle Thermo Scientific MultiChem[™] Gas Delivery System, Thermo Scientific Tomahawk[™] WDR FIB Column, and NEXS CAD navigation the Centrios Circuit Edit System performs challenging front- and back-side edits with precision, control and accuracy with fast startup, easy operations and robust reliability.



Key Benefits

Superior image / milling resolution using field-proven Tomahawk WDR FIB technology with latest beam profile improvements.

Enhanced milling precision and control in planarity/ uniformity, delayering/etch stopping and high-acuity drilling of high-aspect-ratio VIAs using simultaneous dual-nozzle gasdelivery system and proprietary gas chemistry portfolio.

Built on the Thermo Scientific Helios™ DualBeam platform with over 1000 systems worldwide.

Dedicated circuit-edit-focused road map to future performance enhancements, gas chemistries, and machine automation.

Lower cost of operation with NEXS CAD Software for navigation and Thermo Scientific[™] iFAST[™] Software for machine automation.

Specifications

- Ion Column: Tomahawk WDR Ion Column, gallium liquid metal, 1000 hour lifetime
- Accelerating voltage: 0.5 kV 30 kV
- Beam current: 1.2 pA 65 nA
- Image resolution: 3.5 nm
- Stage: 5-axes motorized eucentric
 - X, Y motion 100 mm
 - Tilt -10° to 60°
 - Rotation 360°
- End-point detection: Simultaneous SE/specimen current
- System control: Two 24-inch LCD displays (1920 x 1200)
- Operating system: Windows® based



Find out more at thermofisher.com/centrios

For current certifications, visit thermofisher.com/certifications. © 2019 Thermo Fisher Scientific Inc. All rights reserved. All trademarks are the property of Thermo Fisher Scientific and its subsidiaries unless otherwise specified. DS0305-EN-01-2020