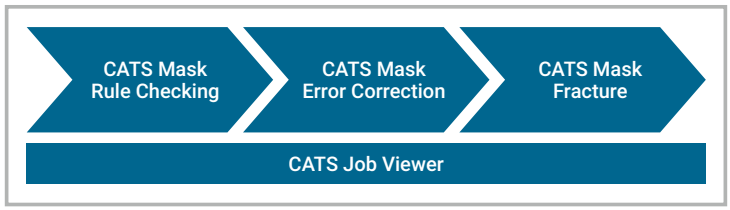
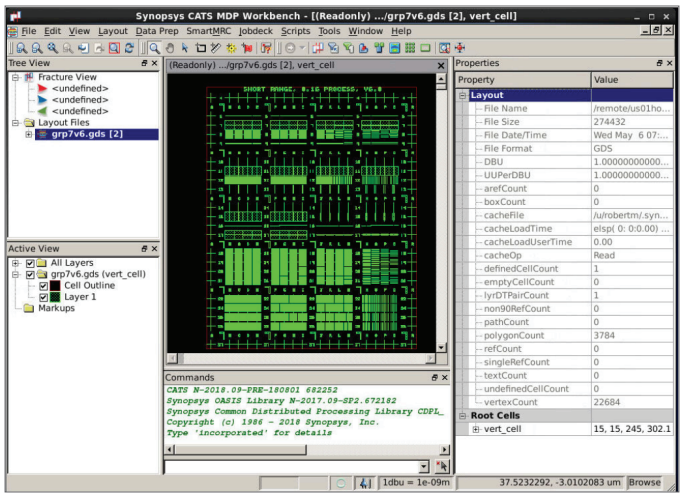
CATS

Mask Data Preparation Software

CATS is the industry leading platform for mask data preparation (MDP) that has been enabling semiconductor photomask manufacturing for decades. CATS MDP provides a comprehensive solution that performs mask fracture, mask error correction, mask rule checking, and a graphical and job view debugging platform. The CATS platform features industry leading performance, scalability on thousands of cores, and tight integration into the Synopsys Proteus Platform.





Benefits:

- Trusted accuracy with two decades of production proven photomasks
- Comprehensive mask data prep platform that can enables fracture, mask rule checking, graphical debugging, and mask error correction
- Integration into Proteus OPC platform through PCX enables fracture to complete within minutes of wafer level OPC completion
- Industry leading fracture performance for MEBES, Variable Shaped Beams, multibeam mask writer fracturing
- Native curvilinear engine provides maximum QoR

Applications

CATS Mask Rule Checking features industry leading SmartMRC, whose native curvilinear engine provides unprecedented accuracy and runtime. SmartMRC features unique curvilinear commands and interface to accurately define and check complex curvilinear designs.

CATS Mask Error Correction leverages Synopsys leading OPC correction and modeling technology to provide a model-based approach to compensating for mask writing discrepancies. Highest accuracy is achieved with a native curvilinear correction engine, and tight integration into the Proteus Platform.

CATS Fracture features industry leading performance and supports all major mask writer formats for MEBES, Laser Write, Variable Shaped Beam (VSB), and Multibeam Mask Writers (MBMW). The Synopsys Proteus CATS Exchange (PCX) can enable fracture to complete minutes of correction.

Features:

- Supports manhattan and curvilinear inputs and output
- Jobdeck graphical viewing and editing
- CD Metrology and Inspection support
- CATS Mask Error Correction technology provides a model-based approach to compensate for mask writing discrepancies
- Manhattan and curvilinear checking with market leading SmartMRC
- Integration into the Proteus OPC platform
- Defect avoidance capabilities
- Scalable distributed processing on thousands of cores

For more information please contact your local sales representative or email us at manufacturing@synopsys.com

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