



1200MW

Next Generation Mask Writer



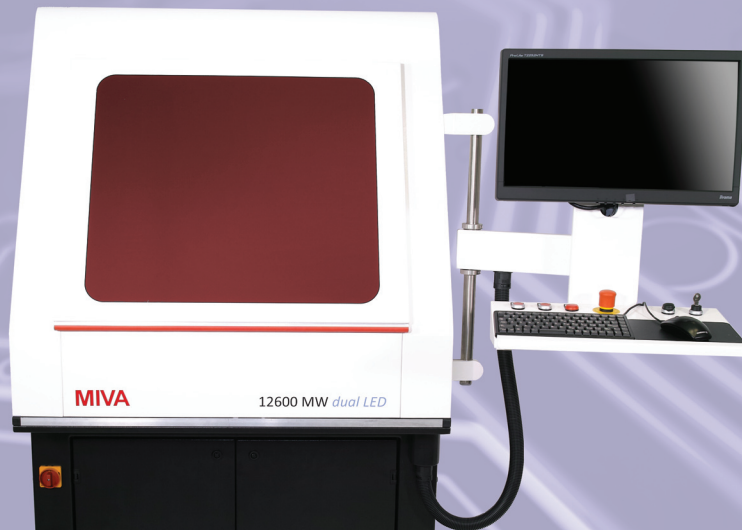
- **305mm x 407mm Imaging Area**
- **6 μ , 3 μ , 1.5 μ structures**
- **Additive Imaging sub 2 μ**
- **DART compatible**
- **LED or Laser Light Engine Selectable**
- **Dual Resolution Selectable**
- **Chip on foil local scaling option**





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Next Generation Imaging incorporates major advances in our tuneable quad-wave LED powered projector technology, new methods of data processing, an external rasterisation engine, no capture related data reloads, full area high resolution scaling, yield and quality improvement tools and much more.

Multiple wavelengths can be chosen from to drive the MIVA 1200MW light engine. LED Light Engines are driven by two LED sources (360nm, 370nm, 390nm, 405nm or 525nm selectable) or a single wavelength LASER source (selectable from 375nm or 405nm). For dual LED Light Engines, energy output from each source is tunable to match resist sensitivity for imaging efficiency and best sidewall steepness. The LASER output energy is tunable to match the type and thickness of photoresist being imaged.

DART Compliant: NextGen includes the External Rasterization Engine. This allows high speed rasterization on the fly including digital linewidth compensation and scaling with no wait-states. Use the DART Optimization Suite for full process control.

Vision Enhancements: Miva's new vision technology permits feature measurement and improves target acquisition. NextGen's larger field of view makes panel placement easy and can eliminate the need for capture related data reloads.

Structure Sizes: Mask Writers are currently available to image 6µm, 3µm or 1,5µm minimum structure sizes



DART Optimization Suite:

DART is a quality and yield improvement tool. The DART OS module allows the user to check develop, etch and plating performance everywhere on the panel, then make process adjustments based on the topographical map such as spray bar pressures, AB etch rates, and the like.

External Rasterization Engine:

Provides high speed rasterization at 10x system resolution for high speed, precision digital feature manipulations.

First Article Tool:

The first article tool allows operator level confirmation of feature size post develop/etch/plating. Coupon measurement results are applied to digitally compensate feature sizes.

Process Control Tool:

Miva's DART system allows you to integrate develop, etch and plating results into the digital imaging process to improve the quality of panels leaving all of these production stages. DART is a feature of the MIVA imaging tool and allows the DI to interpret external process data algorithmically and test coupons visually, and to subsequently (and automatically) implement appropriate changes at the imaging stage, such as feature size, scaling, registration, uniformity across the panel etc, to improve feature size, registration, and total yield.