



DIRECT IMAGING SYSTEM

MIVA 1200 MW

HIGH END PRECISION
MASK WRITER FOR
MEMS AND MICROFLUIDICS



ULTRA FINE FEATURES
Down to 1.5 μm .



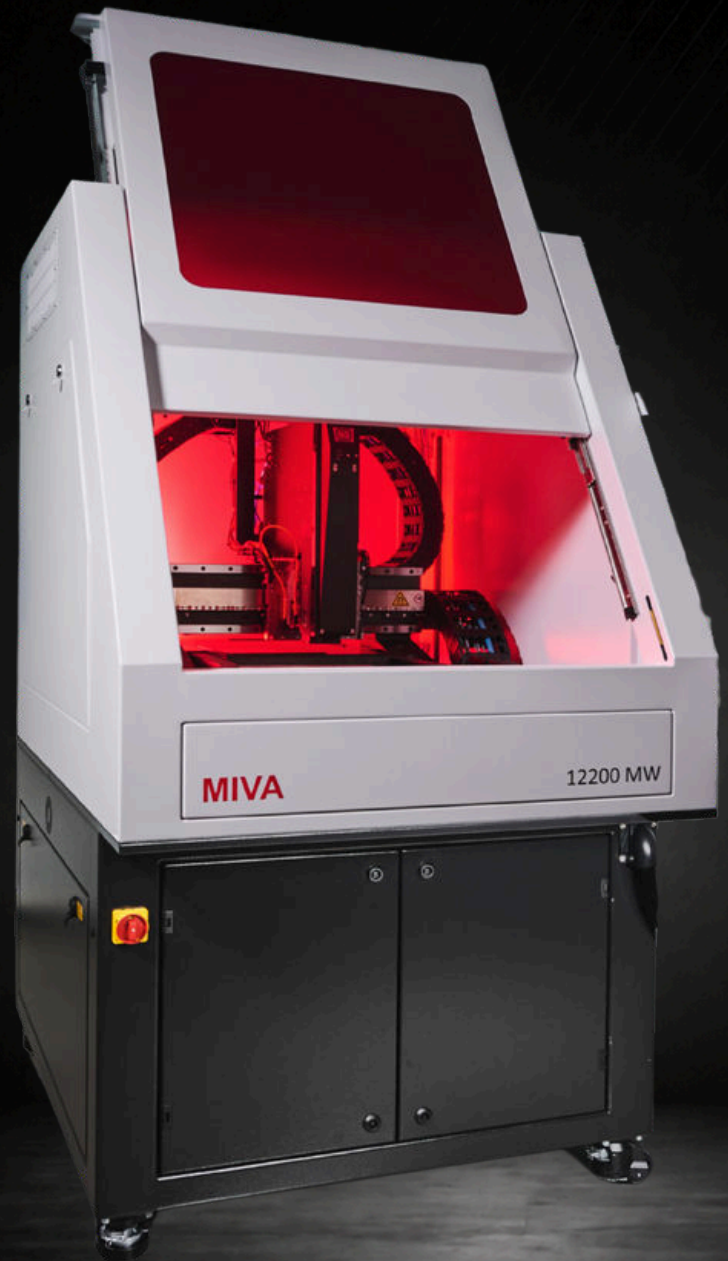
OPTICAL ALIGNMENT
For sequential build.



INTEGRATED AUTOFOCUS
For highest accuracy.



CLIMATE CONTROLLED
For stable process conditions.

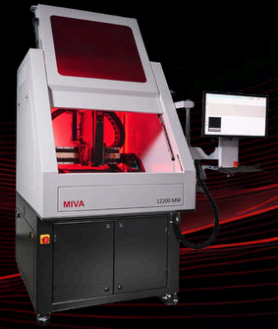


**MIVA
meets
your needs.**

MIVA direct imaging systems combine precision, reliability and innovation to meet the most demanding requirements in microfabrication.

MIVA 1200 MW

NEXT GENERATION MASK WRITING SERIES



TECHNICAL DATA

Machine positional accuracy @21°C	Positioning resolution 20 nm, linearity over 100mm: 0.4 µm, Registration < 2.5 µm
Physical size	H: 71"/180cm, W: 48"/122cm, D: 60"/153cm
Power requirements	220-240 VAC, 50/60 Hz, 3.5 kW (550 W when idle)
Compressed air	Integrated gas filtering system for 60 L/min @ 6 bar (air or compressor optional)
Technology	DMD Raster Image Projection Technology / Solid state UV light sources
Environment	Dependent on resist/emulsion sensitivity - yellow or red safe light conditions recommended for loading panels or other media
Recom. temp./humidity	21°C, 50% RH
Media	Resist coated masks or panels up to 12mm thick, UV sensitive films
User dialogue	Intuitive surface for operation by keyboard or remote control.
Communications	Local area network, removable media
Protocol emulations	Gerber RS 274-X, PostScript, TIFF (+ on request)
User interface	xDI Multihead control program (Windows compatible)

PERFORMANCE

Resolution/Technology	Imaging Speed	Imaging Time
2 µm Single Wavel. Laser	5.2 mm²/s	32min (100x 100mm), 288min (300x300mm)
2.5 µm Single Wavel. Laser	10.4 mm²/s	16min (100x 100mm), 144min (300x300mm)
4 µm Single Wavel. Laser	23.4 mm²/s	7.1min (100x 100mm), 64min (300x300mm)
6 µm Multi Wavel. LEDs	46.9 mm²/s	3.5min (100x 100mm), 32min (300x300mm)
15 µm Multi Wavel. LEDs	375 mm²/s	0.5min (100x 100mm), 4min (300x300mm)

Throughput assumes 0.5 micron AZ1518 resist.
10micron quad assumes 15 micron high speed resist.



DART YIELD IMPROVEMENT TOOL

The DART is included in the machine configuration. It delivers advanced yield improvement through precise alignment and process compensation.



LED/LASER SELECTION

Selectable LED or Laser exposure technology dep. on the application. LEDs for maximum throughput. Lasers for highest precision.



330 x 457 mm IMAGING AREA

Large field area of 330 x 457 mm. High productivity for large substrates.



DUAL RESOLUTION SELECTABLE

Dual Resolution Selectable. Choose between two resolutions in one exposure.



meets your needs

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FIND YOUR LOCAL
MIVA REPRESENTATIVE

