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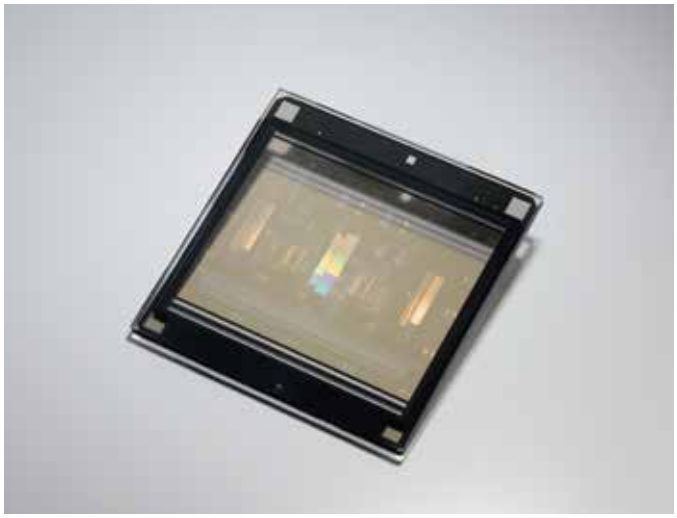
Photomasks

The photomask is an essential device to be used in the manufacturing process of integrated circuits such as LSI. It is a transparent glass plate (composite quartz) on which extremely fine microcircuit patterns are etched on the light shielded Layer and plays a role as a master when circuits are printed on silicon wafers.

Instances of Supply

- Masks for Semiconductor
- Masks for Optical waveguide
- Masks for Optical devices
- Masks for MEMS
- Masks for LED
- Masks for Micro-Lens Array
- Masks for Aligner
- Masks for Stepper
- Masks for Resist Evaluation
- Masks for Resolution evaluation
- Masks for Device Accuracy Control etc.



Data Format

- MEBES
- JEOL
- MIC
- VSB
- Gerber
- GDS
- DXF
- DWG
- BMP

* In the case of a format other than the above, please consult us.

Photomask Sizes

Substrate Size	Thickness	Material	Layer	Layer thickness	Effective Area
152 x 152 mm (6 x 6 inch)	6.35 mm (0.25inch)	Qz	Cr	105nm	146 x 146 mm
		Qz	Cr	73nm	146 x 146 mm
		Qz	MoSi (KrF-PSM)	(transmittance 6%@KrF)	146 x 146 mm
		Qz	MoSi (ArF-PSM)	(Transmittance 6%@ArF)	146 x 146 mm
	3.05 mm (0.12inch)	Qz	Cr	105nm	146 x 146 mm
	2.30 mm (0.09inch)	Qz	Cr	105nm	146 x 146 mm
127 x 127mm (5 x 5 inch)	4.60 mm (0.18inch)	Qz	Cr	105nm	120 x 120 mm
	2.30 mm (0.09inch)	Qz	Cr	105nm	120 x 120 mm

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Standard Photomask Specifications

Laser Beam Exposure

項目	Standards
	Qz Substrate
Dimensional Accuracy	Design Value ± 0.025 um
Total Pitch Accuracy	Design Value ± 0.070 um
Positioning Accuracy	Design Value ± 0.035 um
Defect Density	0.15 um 0 defects
Minimal Size	Line Pattern：0.7 um , Hole Pattern : 1.0 um

50kv Electron Beam Exposure

項目	Standards
	Qz Substrate
Dimensional Accuracy	Design Value ± 0.015 um
Total Pitch Accuracy	Design Value ± 0.050 um
Positioning Accuracy	Design Value ± 0.025 um
Defect Density	0.10 um 0 defects
Minimal Size	Line Pattern : 0.4 um , Hole Pattern : 0.6 um

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