面板级封装泛曝光系统

用于 **RDL** 面板级封装的 **&** 玻璃面板曝光

特征 – Model 6020

- Topside / Bottom Side Alignment
- High throughput
- 1KW – 8KW Collimated Beam Light Source from 12"sq – 20"sq Beam Sizes
- 3-5% Light Source Beam Uniformity
- High Speed Encoders & Motors for Auto-alignment
- SECS / GEM Capability

Wide Variety of Panel Handling

- 12"sq to 20"sq Panels
- Stepper Chuck Option for Sub-Panel Processing
- 14"sq to 24"sq Mask Inserts

WEDGE EFFECT LEVELING
SUPERB PROCESS REPEATIBILITY
<2.0um PRINTING RESOLUTION
REMOTE DIAGNOSTICS

The Model 6020 is a large area Fully automated production Mask Aligner or Auto-Flood Exposure System engineered for RDL First Panel Level Advanced Packaging (PLP) and markets requiring exposure of large glass panels. Using OAI's advanced beam optics, the Series 6020 utilizes a UV light source with beam size from 12"sq to 20i"sq using while applying 1KW – 8KW lamp powers. This provides a uniform beam of ≤3 to 5%. In mask aligner mode the system enables a printing resolution of ≤2.0um . The optional Smart cam high resolution CCD camera system provides accurate topside alignment and ease of operation utilizing OAI's Pattern recognition software. The Series 6020 can handle a wide variety of substrate thickness from thin to thick and bonded panels . The substrate chuck provides XYZ and theta motion including stepping function to allow processing of full or sub-panels bonded on a large panel. Using Robotic handling ,the system can be stand alone or fully integrated with photo resist processing.. OAI's Series 6020 is the total package for performance, dependability and repeatability for RDL First PLP production or exposure of large area glass panels.

Specifications: Model 6020

Large Area Production Mask Aligner or Flood Exposure System

Exposure System

Exposure Modes	Vacuum contact	Hard contact	Soft contact	Proximity (20µ gap)
Resolution	≤2.0µ	2.0-3.0µ	3.0 – 5.0µ	5.0µm

Advanced Beam Optics

Long working distance light source allows for all fixed optical components and more exposures

Uniform Beam Size:	12” – 20” square
Lamp Power:	1KW – 8KW
Uniformity:	Better than ±3 to 5%
Camera:	4MP Dual Camera GigE with large field of view

Alignment System

Pattern Recognition:	OAI’s enhanced pattern recognition software
Alignment Accuracy:	0.5µ topside and 1.0µ with top to bottom optional backside alignment
Auto-alignment:	Top to bottomside Topside

Wafer Handling

Substrate size :	12”sq to 20”sq
Mask size:	14”sq to 24”sq
Thin substrates:	1mm
Thick & Bonded Substrates:	Up to 5000µm
Stepper Chuck (Option):	Multiple steps (customized)
Run-out compensation:	Standard software or optional thermal chuck
Wedge Effect Leveling :	3 point or optional non-contact laser gap measurement

Available Options

IR Auto-align,
Temperature Controlled Wafer Chuck
Integrated Lithography Cluster for Full Lithography
SECS/Gem Software
Non-contact Leveling

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