FPA-3030i6 i-line Stepper for Power, 5G & IoT Applications

NEW

FPA-3030i6 FEATURES

- Resolution ≤ 350 nm
- Lens Reduction 5:1
- Substrate handling capability: 50, 75, 100, 150, 200 mm
- FPA-3030i6 Steppers leverage and extend proven Canon FPA-3000 Stepper designs
- Canon Built-In Metrology (CANOMAP)

KEY OPTIONS

- Through Silicon Alignment (TSA) Scope
- Die-by-Die Overlay Compensation (EAGA)
- Multi-Wafer Size Handling Kit
  - 75 & 100 mm, 100 & 150 mm, 150 & 200 mm
- Warped/Bonded/Transparent Wafer Handling
- Pellicle Particle Checker
- PC Remote Console
- GEM-compliant online software
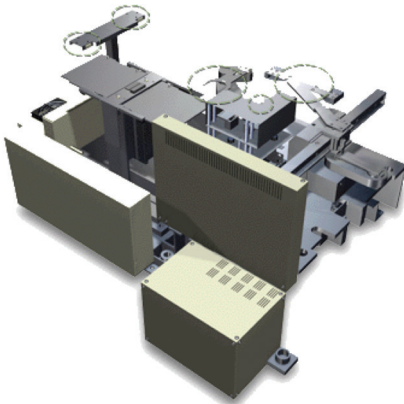
Multi-Wafer Size Handling Kits allow quick changeover between two wafer sizes
75 ↔ 100 mm, 100 ↔ 150 mm, 150 ↔ 200 mm

High-Resolution i-line Stepper for ≤ 200 mm Wafer Fabrication

FPA-3030i6 [30i6] Steppers feature new high-transmittance optics that are designed to reduce lens aberrations and improve exposure intensity. The standard throughput for the 30i6 is 130 wafers per hour and the stepper features numerical aperture options that allow exposure condition optimization according to process requirements.

The 30i6 supports a variety of substrates including GaAs, GaN, SiC, sapphire and glass. The 30i6 can be configured to process wafers from 50 mm (2") to 200 mm (8") in diameter, and with the Multi-Wafer Handling Kit option, the 30i6 steppers can handle two different wafer sizes with minimal changeover required.

The resolution, overlay, productivity and available options of the 30i6 make it a cost-effective solution for challenging ≤ 200 mm wafer processes.
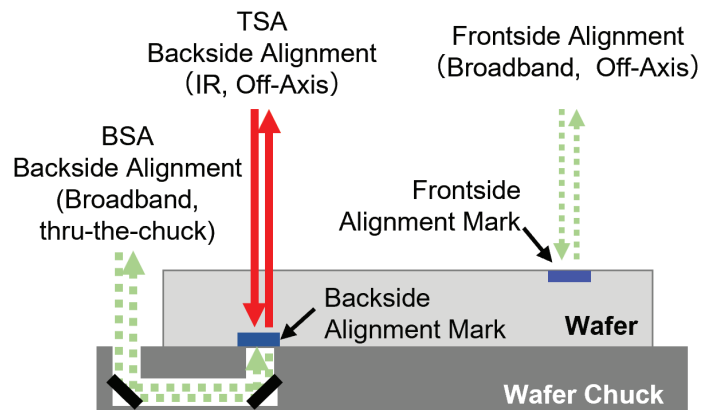
FPA-3030 Stepper Backside Alignment Options enable front-to-back overlay alignment

SPECIFICATIONS	
Technology	i-line Stepper (365 nm)
Resolution	≤ 350 nm
Overlay	≤ 40 nm (Front) ≤ 150 nm (Front, TSA)*
Numerical Aperture	0.35 − 0.63 (0.30 − 0.63)*
Lens Reduction Ratio	5:1
Exposure Field	22 x 22 mm
Substrate Size Options	50, 75, 100, 125, 150, 200 mm
Dimensions (W x D x H)	1.9 x 2.6 x 2.45 m

* = Option Required

Canon Lithography Systems

Canon Photolithography equipment is designed to help provide exceptional quality, performance, and cost of ownership for your wafer imaging applications.

Canon FPA (Fine Pattern Aligner) Series Nanoimprint, i-line and Deep Ultraviolet (DUV) lithography systems are used in the fabrication and heterogeneous integration of high-tech devices including integrated circuits, hard disk read/write heads, microelectromechanical systems (MEMS) devices, image sensors, displays, power devices and light emitting diodes (LED).

LITHOGRAPHY PRODUCTS & TARGET APPLICATIONS

Lithography Products	Technology	Resolution	Lens Red. Field Size [mm]	Substrate Options [mm]	MRAM	Logic & MPU/GPU	Medical	HDD & SCM	Power & Automotive	Waveguide & RF	Advanced Packaging	Optics & Photonics	MEMS, Sensors & IoT	PC & Mobile	5G & Data Centers	Wearables	AR/VR & Display	LED, MicroLED	Artificial Intelligence
FPA-1200NZ2C	Nanoimprint Lithography	≤15 nm	1:1 26 x 33	300	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
FPA-8000iW	i-line (365 nm) Stepper	≤ 0.8 µm	2:1 55 x 55	510 x 515			✓				✓	✓	✓	✓	✓	✓	✓	✓	✓
FPA-3030i6	i-line (365 nm) Stepper	≤ 350 nm	5:1 22 x 22	≤ 200			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓
FPA-3030iWa	i-line (365 nm) Stepper	≤ 0.8 µm	2:1 52 x 52	≤ 200			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
FPA-3030EX6	KrF (248 nm) Stepper	≤ 150 nm	5:1 22 x 22	≤ 200			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓
FPA-5520iV LF2	i-line (365 nm) Stepper	≤ 0.8 µm	2:1 54 x 68	300	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
FPA-5550iZ2	i-line (365 nm) Stepper	≤ 350 nm ≤ 280 nm (2/3 Ann.)	4:1 26 x 33	200 300	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
FPA-5510iX	i-line (365 nm) Stepper	≤ 0.5 µm	2:1 50 x 50	300			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
FPA-6300ES6a	KrF (248 nm) Scanner	≤ 100 nm ≤ 90 nm (2/3 Ann.)	4:1 26 x 33	200 300	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓
FPA-6300ESW	KrF (248 nm) Scanner	≤ 130 nm	3.125:1 33 x 42.2	200 300			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓
MS-001	Overlay Metrology	----	----	300	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

✓ Compatible with application

All options may not be available on all models. Contact Canon for details.

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