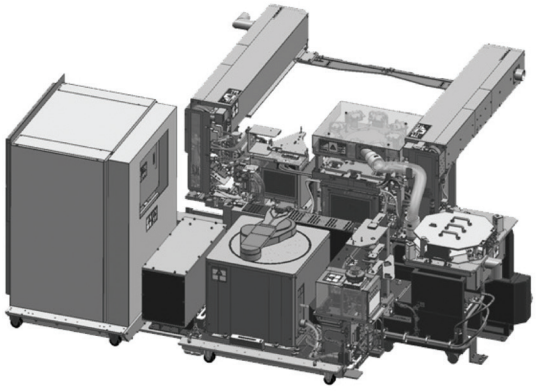
FPA-6300ESW KrF Scanner for Full-Size CIS & FPGA Applications

FPA-6300ESW FEATURES

- Lens Reduction 3.125:1
- Expanded field size from 26 x 33 mm to 33 x 42.2 mm
- Flexible alignment solutions including alignment through multi-color RGB photo resist
- Proven FPA-6300 Platform
- Canon Built-In Metrology (CANOMAP)

KEY OPTIONS

- CD Uniformity Improvement
- Wide Band Off-Axis Scope (WB-OAS)
- Die-by-Die Overlay Compensation (EAGA)
- Advanced Flexible Illumination System (AFIS)
- 200, 300 mm wafer handling
- Standard Mechanical Interface Over Head Transport Kit (SMIF-OHT)
- Focus Spot Automatic Chuck Cleaning
- Pellicle Particle Checker
- PC Remote Console
- GEM-compliant online software

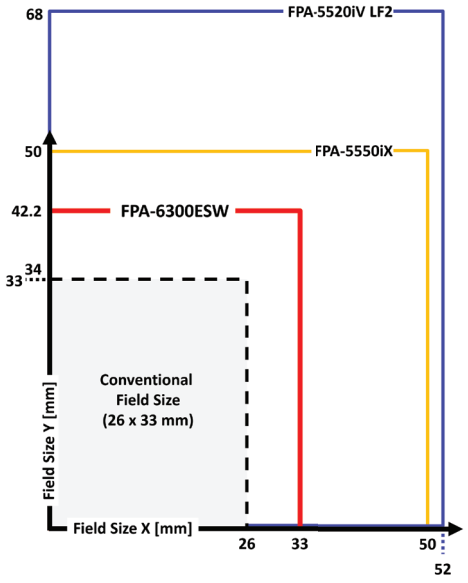


FPA-6300 Scanners and FPA-5550 Steppers can be configured for 200 mm or 300 mm processes.

Wide-Field KrF Scanner for Single-Exposure Large Device Fabrication

FPA-6300ESW [ESW] wide-field DUV Scanners are capable of 130 nm resolution across a large exposure area. The ESW adopts a unique 3.125X reduction projection lens to yield a large 33 x 42.2 mm field size for large device fabrication without stitching.

Originally designed to support CMOS Image Sensor and color filter production on 300 mm wafers, the ESW can be configured to support 200 or 300 mm wafer processes including Sensor, Advanced Packaging and Display manufacturing.



FPA-6300ESW Scanners are Canon's highest resolution, large-field lithography systems supporting production of large sensors, displays and packages without shot stitching.

SPECIFICATIONS	
Technology	KrF Scanner (248 nm)
Resolution	≤ 130 nm
Overlay	≤ 9 nm
Numerical Aperture	0.45 – 0.70
Lens Reduction Ratio	3.125:1
Exposure Field	33 x 42.2 mm
Substrate Size Options	200, 300 mm
Dimensions (W x D x H)	2.3 x 5.2 x 2.9 m

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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