FPA-3030EX6 KrF Stepper for High-Resolution IoT Device Applications

High-Resolution KrF Stepper for Aggressive ≤ 200 mm Wafer Fabrication

FPA-3030EX6 [30EX6] Deep UV (DUV) Steppers provide a low cost alternative to Scanners for customers seeking high-resolution imaging. The EX6 can also be configured to handle different substrate materials, sizes and thicknesses required for fabricating advanced analog, sensor, RF and power devices as well as emerging Internet-of-Things (IoT) applications with special wafer requirements.

FPA-3030EX6 Steppers offer the highest level of performance among KrF (Krypton Fluoride) Excimer Laser Steppers and are designed to be a long-term solution for growing industry demands.

FPA-3030EX6 FEATURES

- 248 nm exposure wavelength Stepper
- Resolution ≤ 150 nm
- Single Machine Overlay ≤ 25 nm
- Substrate handling capability: 50, 75, 100, 125, 150, 200 mm
- e-Console Software supports advanced automation and remote operation functions
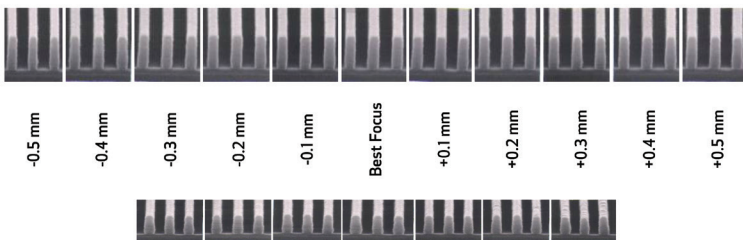- Canon Built-In Metrology (CANOMAP)

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
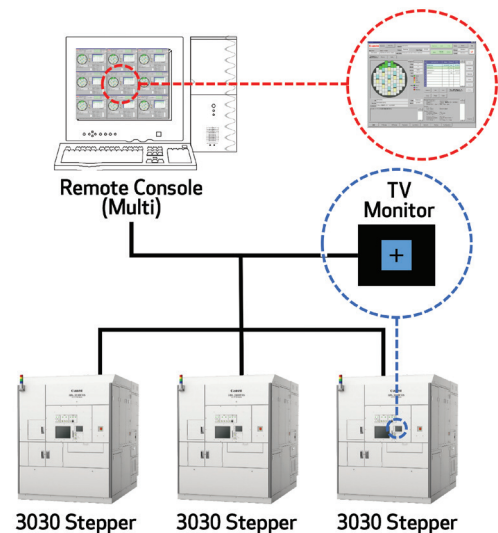
e-Console Software supports Remote Console control and troubleshooting of fleets of tools from remote locations.

FPA-3030EX6 DUV (KrF, 248 nm) Steppers provide cost-efficient high-resolution imaging on ≤ 200 mm substrates for sensor, power and IoT applications.

SPECIFICATIONS	
Technology	KrF Stepper (248 nm)
Resolution	≤ 150 nm
Overlay	≤ 25 nm
Numerical Aperture	0.50 − 0.65
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 3.0 x 2.45 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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