

# FPA-3030iWa Wide-Field i-line Stepper for IoT Device Applications



## Wide-Field i-line Stepper for $\leq 200$ mm Wafer Fabrication

FPA-3030iWa [30iWa] Steppers deliver performance and flexibility required for manufacturing and R&D environments and support a variety of substrates including GaAs, GaN and transparent sapphire and SiC wafers.

The 30iWa features a 52 mm x 52 mm wide-field projection lens with a variable numerical aperture (NA) ranging from 0.16 to 0.24, delivering a large depth of focus (DOF) and is designed to enable high-precision imaging over large topography or through thick resist.

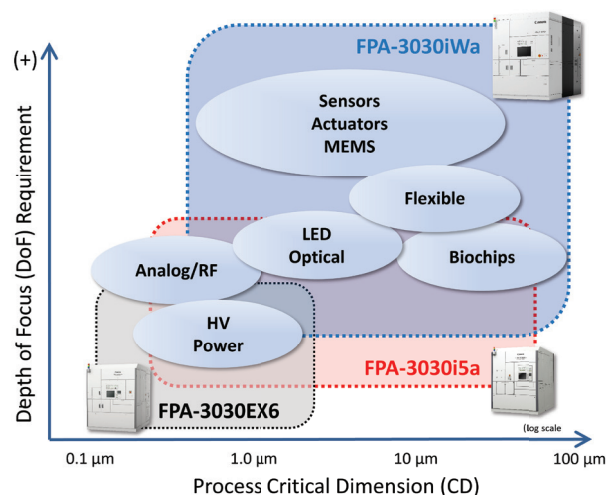
The field size, depth of focus, productivity and available options of the 30iWa make it a cost-effective solution for challenging  $\leq 200$  mm wafer processes for innovative Internet-of-Things (IoT) applications.

## FPA-3030iWa FEATURES

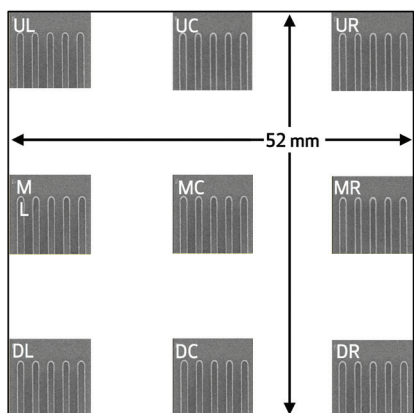
- Resolution  $\leq 0.8 \mu\text{m}$
- Lens Reduction 2:1
- Wide Field 52 x 52 mm
- Substrate handling capability: 50, 75, 100, 125, 150, 200 mm
- FPA-3030iWa Steppers leverage and extend proven Canon FPA-3000 Stepper designs
- Canon Built-In Metrology (CANOMAP)

## 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



FPA-3030 Series steppers support processes requiring high-resolution and large DoF



FPA-3030iWa Steppers feature a large exposure field and  $0.8 \mu\text{m}$  resolution capability.

## SPECIFICATIONS

Technology	i-line Stepper (365 nm)
Resolution	$\leq 0.8 \mu\text{m}$
Overlay	$\leq 100$ nm (Front) $\leq 500$ nm (Front)*
Numerical Aperture	0.16 – 0.24
Lens Reduction Ratio	2:1
Exposure Field	52 x 52 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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