

Key Features

- * Front and backside alignment capability
- * Non-contact lithography
- * Ability to place multiple lithography layers on a single reticle
- * Off-axis MVS with focus and illumination controls
- * High wafer plane irradiance
- * Simple integration with existing processes
- * Compact system footprint
- * A proven projection lithography platform in semiconductor, thin film head and Microsystems production environments

IMAGING AND LENS

	Lens Option	
	1.0 μm	2.0 μm
Resolution	1.0 μ m	2.0 μ m
Usable Depth of Focus (at resolution limit)	$\geq 3.0 \mu$ m	$\geq 10 \mu$ m
Usable Depth of Focus (4 μ m L/S in 10 μ m resist)	$\geq 14.0 \mu$ m	$\geq 20.0 \mu$ m
Lens Distortion (100%)	≤ 160 nm	≤ 350 nm
Exposure Uniformity	$\leq 3.0 \%$	$\leq 5.0 \%$
Standard Field Size	30 x 15 mm	
Wafer Plane Irradiance	≥ 1000 mW/cm ²	
Exposure Spectrum	390 – 450 nm Broadband	

ALIGNMENT SYSTEM

MVS Alignment (site by site, 100% front side)	$\leq \pm 150$ nm	$\leq \pm 250$ nm
DSA Alignment (Enhanced global alignment, back side)	$\leq 2.0 \mu$ m (3 sigma)	$\leq 3.0 \mu$ m (3 sigma)
Alignment Spectrum	530 – 570 nm, Broadband	

THROUGHPUT (wafers per hour at 100 mJ/cm² , front side align)

100 mm Wafer	85 wph	85 wph
125 mm Wafer	51 wph	51 wph
150 mm Wafer	42 wph	42 wph

RETICLE

Substrate Type	3 x 5 x 0.090 inch quartz	5 x 5 x 0.090 inch quartz
Fields per Reticle Row	2 – 4	2 - 4