



ADVANCED DIRECT IMAGING by ALTIX

# ADIX SA



**ALDS-Power4+™**  
High Power LEDs  
High Resolution DMD



4 LEDs wavelengths per Photo Head

**Higher** Precision  
Reliability  
Flexibility

## Unique Solution for All Direct Imaging Applications

Resolution



Down to  
10µm | 0.4 mil

Registration



±8µm | ±0.3mil  
Image to Panel

High  
Throughput



≥ 5100 prints / day

High Savings



-80%  
Cost of ownership



# ADIX SA for All Imaging Needs



Enhanced 4 LEDs Photo Heads for Higher Productivity and Printing Quality

High Accuracy Registration

Print on All Types of Photoresists & Soldermasks

Lower Cost of Ownership

Fully Intuitive & Friendly HMI

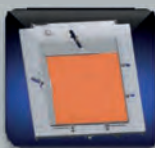
**From 1 to 6 ALDS-Power4+™ Photo Heads - Upgradable on site**

## ADIX SA Specifications

<b>APPLICATIONS</b>	PCB • FPCB / Flex • Photo Chemical Milling • IC Substrate • Touch Panel		
<b>Process</b>	Inner Layer • Outer Layer • Soldermask (PSR) Conventional		
<b>Imaging Resist Materials</b>	• DI/LDI Specific Dry Film, Ink & Solder Resists From 10 to		
<b>Resist Sensitivity</b>	1,250mJ/cm <sup>2</sup> and above		
<b>Exposure Area</b>	From 228 x 254mm up to 610 x 762mm • From 9"x10" up to 24"x30"		
<b>Panel Thickness</b>	0,04 to 6mm	•	1,6 to 236mils
<b>RESOLUTION - L/S</b>	10/10µm • 0.4/0.4 mil <sup>(1)</sup>		20/20µm • 0.8/0.8 mil <sup>(1)</sup>
<b>RESOLUTION - DAM</b>	NA		
<b>Edge Roughness</b>	±0,5µm		25µm (1mil)
<b>Depth of Focus</b>	±0,5µm		± 1,5µm
<b>Light Engine</b>	ALDS-Power4+™		
<b>Imaging Heads</b>	From 1 to 6 Heads – Upgradable on site		
<b>Autofocus</b>	±8mm		• ±315mils
<b>Exposure Spectrum</b>	4 LEDs wavelengths per Photo Head		
<b>ALIGNMENT</b>	±8µm	•	±0.3mil (Image to Panel Registration)
	±12µm	•	±0.5mil (Side to Side Registration)
<b>CCD Cameras</b>	2 Cameras - for Outer Layers (Alignment on 4 Holes) - for Soldermask Registration (Alignment on 4 Copper Targets)		
	3 Cameras for Inner Layers (Alignment on 3 Fiducials)		
<b>Method</b>	Real Time Scaling & Partitioning with all kinds of fiducials		
<b>THROUGHPUT</b>			
<b>Exposure Time</b>	14s with 30mJ/cm <sup>2</sup> resist for 457 x 610mm (18" x 24") image size and with 6 Heads <sup>(2)</sup>		
<b>ALDS-Power4™</b>	Data preprocessing in hidden time + High UV Power with 4 LEDs per Photo Head		
<b>SOFTWARE</b>	ALTIX Direct Imaging Suite™ with 22" touch screen		
<b>Data Input</b>	Extended Gerber, ODB++ (option) - Others upon request		
<b>Languages</b>	English, Simplified & Traditional Chinese, Korean, German, French...		
<b>HIGH YIELD</b>			
<b>Air Cleanliness</b>	Hepa Filter Class 100		
<b>Features</b>	Stainless Steel (Frames & Covers)		
<b>GENERAL UTILITIES</b>			
<b>Power Supply</b>	220/400/480V	3 Phases	50/60Hz
<b>Power Consumption</b>	4kW		
<b>Air Supply</b>	6 bars   1.5m <sup>3</sup> /min		
<b>Water Supply</b>	Water pressure 3–5 bars	Flow rate: 23l/min @ 12°C or 33l/min @ 14°C	
<b>Machine Weight</b>	3,500kg • 7,716lbs		
<b>Dimensions</b>	2,870mm (L) x 1,750mm (W) x 1,870mm (H) • 113" (L) x 69" (W) x 74" (H)		

(1) depending on photoresist, surface preparation & DES process • (2) estimated time given as reference but can fluctuate according to the process adjustments

### Unique Features



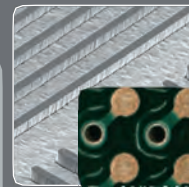
#### Unique Panel Holding

Fully automated bar clamping system & vacuum table for holding all panels thicknesses and counteract warp & twist



#### Highest Image Quality

±8mm high dynamic autofocus and up to ±200µm depth of focus to overcome uneven topography surfaces



#### Higher Resolution: 10µm L/S(\*)

Use multi-wavelengths UV-LED for best resolution and higher polymerization efficiency on all types of conventional dry film, ink or solder resists

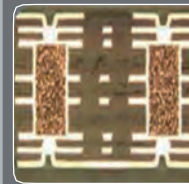
(\*) Depend on Photo Head Type



#### Highest Imaging Quality with ALDS™

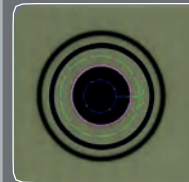
Imaging on double or triple dry film laminated layers

Excellent and sharp edges



#### Higher Registration: ±8µm

Real time scaling and partitioning to reach the highest local registration for very demanding application



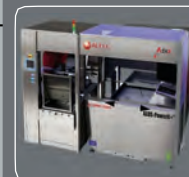
#### Side to Side Registration: ±12µm

Highest side-to-side registration on all area of the panels thanks to its unique way of registration



#### Higher Productivity

4 UV LED wavelengths for the highest efficiency printing



#### Smart Automation

Fully automated systems and customized solutions for high mix, small, medium & mass production



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**Imaging with us!**



**www.altix.fr**