





Facility strengths

Item	Feature	
Dust Control	<ul style="list-style-type: none">◆ All Factory Clean Control<ul style="list-style-type: none">- Image / PSR : 1,000 Class- Lay-up / AOI / BBT / Final Inspection : 10,000 Class	
Product Handling	<ul style="list-style-type: none">◆ Full Auto Line<ul style="list-style-type: none">- Full auto Lay-up- Auto L/Unloading of Cu Plating and Ni/Au Plating process- Auto Sorter (Including Air Cleaner)◆ Non contact Line<ul style="list-style-type: none">- MSAP Developer / PSR Developer	


Facility strengths

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<p>Quick Turn</p>	<ul style="list-style-type: none"> ◆ Film-less exposure M/C (Art work film-free) - Image LDI / PSR UV-DI ◆ All Process In-house - None Outsourcing 	
<p>DATA Control</p>	<ul style="list-style-type: none"> ◆ ITS (Information Tracking System) - Products Tracking (Panel / Strip level) - X-out Auto Tracking & Non-scratch (AOI, AFVI) ◆ SPC System - SPC Control both of X and Y factor in every process 	

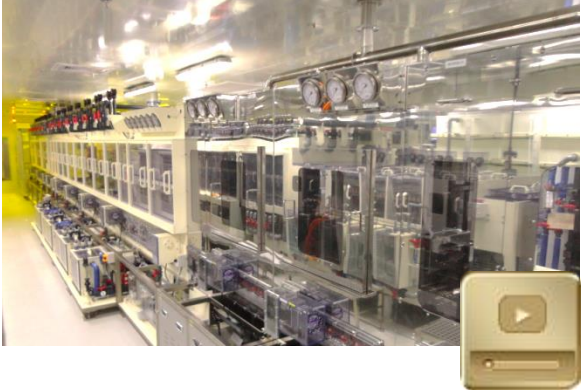
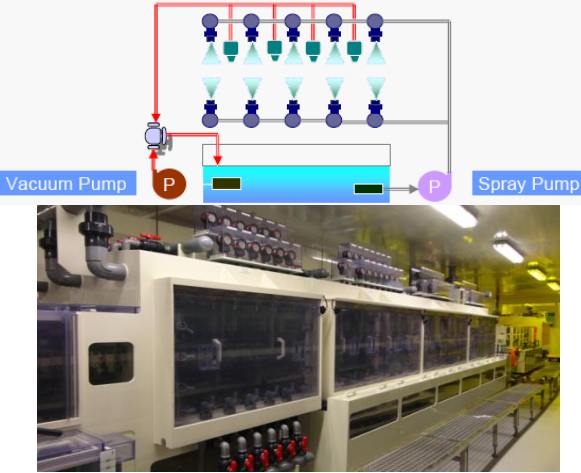
Facility strengths

Item	Feature	
Lamination Auto Layup	<ul style="list-style-type: none">◆ Full Auto Lay-up system<ul style="list-style-type: none">- High quality assuranceAuto thick. measurement : 15pt/pnl◆ High productivity<ul style="list-style-type: none">- over 4pnls/min	
Continuous Vertical E'lectro Cu Plating	<ul style="list-style-type: none">◆ Dedicated thin panel plating<ul style="list-style-type: none">- 0.04mmT core with 2/2um Cu foil◆ Dedicated filled via plating<ul style="list-style-type: none">- Dimple $\leq 5\mu\text{m}$(FC) / 168ea Rectifier◆ High quality plating system<ul style="list-style-type: none">- Covariance $\leq 5\%$, Range $\leq 5\mu\text{m}$ with 25um panel plating	


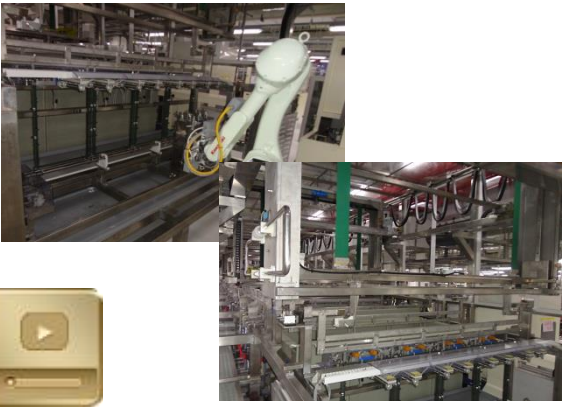
Facility strengths

Item	Feature	
Image LDI	<ul style="list-style-type: none">◆ Non contact<ul style="list-style-type: none">- No need film: Reducing lead-time and Decreasing running cost- Less scratch, Dent, Foreign material◆ High resolution<ul style="list-style-type: none">- L/S=15/15μm◆ High alignment accuracy<ul style="list-style-type: none">- under $\pm 10\mu$m	 <p>The image shows a schematic diagram of the Image LDI process at the top, illustrating the alignment of a mask and the exposure of a photoresist layer. Below the diagram is a photograph of the industrial Image LDI machine, which is a large, grey, multi-unit system. A small yellow play button icon is overlaid on the bottom right of the photograph.</p>
Vacuum-laminator	<ul style="list-style-type: none">◆ All automatic system<ul style="list-style-type: none">- Auto cut Pre-tack + Vacuum laminator◆ Thin panel capability<ul style="list-style-type: none">- 0.04mmT core with 2/2μm Cu foil◆ Adoptable all material<ul style="list-style-type: none">- DF/ABF/DFSR◆ for PSR flatten<ul style="list-style-type: none">- PSR flatness: $\leq 3\mu$m	 <p>The image shows a photograph of a vacuum laminator, which is a large industrial machine with a glass-enclosed chamber. The machine is situated in a clean, well-lit industrial environment.</p>

Facility strengths

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<p>MSAP & PSR Developer (Contact free)</p>	<ul style="list-style-type: none"> ◆ Non contact <ul style="list-style-type: none"> - Increasing quality and capability - Less D/F damage, Less Scratch, Less Foreign material ◆ Thin panel capability <ul style="list-style-type: none"> - 0.04mmT 	
<p>DES Vacuum Etching</p>	<ul style="list-style-type: none"> ◆ Vacuum etching system <ul style="list-style-type: none"> - Improvement of etching efficiency - L/S=25/25μm (by subtractive method) 	

Facility strengths


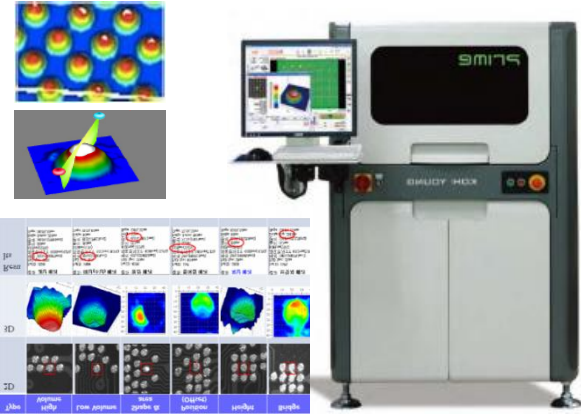
Item	Feature	
PSR UV-DI	<ul style="list-style-type: none">◆ Non contact<ul style="list-style-type: none">- No need film: Reducing lead-time and Decreasing running cost- Less scratch, Dent, Foreign material◆ High resolution system<ul style="list-style-type: none">- SR Opening min.50um◆ High alignment accuracy<ul style="list-style-type: none">- under $\pm 15\mu\text{m}$	 <p>The top image shows a close-up of a mask aligner with a green mask and a wafer. The bottom image shows a long, yellow industrial machine, likely a UV-DI system, with a play button icon in the bottom right corner.</p>
Au plating	<ul style="list-style-type: none">◆ Full Automation<ul style="list-style-type: none">- All moving part adopted‘Raydent coating’ to prevent corrosion- Auto L/Unloading◆ Excellent thickness uniformity<ul style="list-style-type: none">- $Cpk \geq 1.33$	 <p>The top image shows a robotic arm in a plating tank. The bottom image shows a plating tank with a play button icon in the bottom left corner.</p>

Facility strengths

Item	Feature
<p data-bbox="73 496 361 601">SOP Solder printer</p>	<ul data-bbox="394 436 1188 661" style="list-style-type: none">◆ Adopting 'Pump head'<ul style="list-style-type: none">- Increasing solderpaste transferring efficiency- min. bump pitch 140um
<p data-bbox="131 1003 305 1093">Coining machine</p>	<ul data-bbox="394 875 1074 1225" style="list-style-type: none">◆ High bump quality by adopting 'Ceramic punch'<ul style="list-style-type: none">- Less dent, scratch, chip off◆ High alignment accuracy<ul style="list-style-type: none">- Adopting CCD, alignment accuracy $\pm 0.1\text{mm}$



Facility strengths

Item	Feature	
<p>SOP X-Ray Void inspection</p>	<ul style="list-style-type: none"> ◆ Semi-automatic bump void inspection <ul style="list-style-type: none"> - Void monitoring and management after deflux ◆ Fine resolution <ul style="list-style-type: none"> - 100nm 	 <p>The image shows a DAGE XD7500VR X-ray inspection machine. It is a large, white and blue industrial unit with a control panel on the left side. An inset image in the top left corner shows a close-up of the inspection area, displaying several circular bumps with blue highlights indicating voids.</p>
<p>SOP 3D-SPI</p>	<ul style="list-style-type: none"> ◆ Quality assurance <ul style="list-style-type: none"> - First article check after Solderprint and Coining ◆ High accuracy <ul style="list-style-type: none"> - 4way projection system : Height 1um / Volume 3% ◆ Inspection capability <ul style="list-style-type: none"> - min. bump dia. 60um / pitch 120um 	 <p>The image displays a 3D-SPI inspection machine and its software interface. The machine is a tall, grey unit with a control panel and a monitor. The software interface is shown in two parts: a top-left inset showing a 3D surface plot of a bump with a color gradient, and a larger bottom-left inset showing a complex software dashboard with multiple data windows, including 2D and 3D views of the inspected surface.</p>

Thank you for attention!

