Laser Direct Imaging
PLI 220 Speedlight 2D for Ceramic PCBs
**TECHNICAL SPECIFICATIONS**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
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<tbody>
<tr>
<td><strong>PLI 220</strong></td>
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<tr>
<td>Throughput (18 mJ/cm²)</td>
<td>8 DCBs/table: Up to 2,840 exposures/hour (1,420 two-sided DCBs/hour)</td>
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<td>Resist pattern</td>
<td>Minimum feature (line/space): 25 µm* Roughness: ± 2.5 µm Data resolution: 2 µm Depth of field: ± 300 µm</td>
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<td>Registration</td>
<td>Front to back side: up to ± 10 µm</td>
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<tr>
<td>Panel format</td>
<td>Size, max.: 660 x 650 mm (expandable to 660 x 850 mm) Thickness: 0.05 mm – 8 mm Exposure field width, max.: 650 mm</td>
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<td>Panel weight</td>
<td>Max. 6 Kg</td>
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<tr>
<td>Light source</td>
<td>Laser diodes with 405 nm wavelength</td>
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* Requires appropriate resists as well as appropriate upstream and downstream process designs.

**FEATURES**

- Max. throughput of up to 2,840 exposures/hour with 8 DCBs per table.
- Pilot panel scaling: Up to 10 pilot panels.
- Traceability: Flexible serialization. Various possibilities* to expose the serial number of the panel, or individual regions of the panel with ascending numbers. Even with several different sequences of numbers.
- Multispool: Handling spool data for several imaging systems.
- Order statistics.
- Registration accuracy peaking in ± 5 µm @ 3 Sigma** with patented corner registration.
- Line enlargement or thinning compensates for line thickness modifications due to downstream processes.
- „Step and Repeat": Partial registration of up to 64 regions with all registration methods mentioned.
- Smart Service Concept.

* Offers a wide range of customization options.
** Depending on method and registration mark quality and accuracy.

- MultiScan technology (9 polygons, 288 diode lasers) for high-throughput/high accuracy exposures.
- Conductive pattern determined in real time for each exposure.
- Registration/alignment and scaling in real time.

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