

Sprint™ Family *Inkjet Legend Printing Solutions*



Sprint™ Family

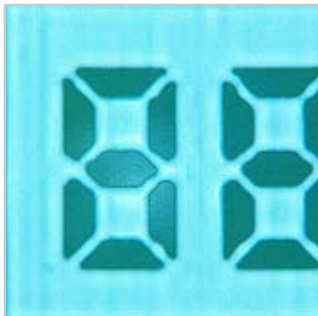
Utilizing the newest inkjet technologies, Orbotech's next generation Sprint models print superior quality legend at high speed on a wide range of panel thicknesses. Delivering the industry's highest performance, Sprint is optimized for high-end legend designs in high mix production of HDI and MLB PCBs.



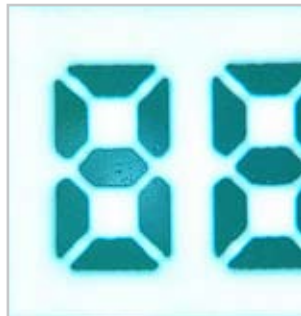
Other inkjets



Sprint straight lines



Other inkjets



Sprint excellent and uniform area fill

Benefits

Superior Quality at High Speed

- Production grade results in a single pass
- Printing down to 0.5mm height text and 3mil features
- Excellent and uniform area fill
- Straight lines in any angle

Print on Any Rigid Panel

- Specially designed table to flatten thick and thin panels
- Pin-less alignment
- 1.5mm depth-of-focus (DOF) for uniform printing over thick traces

Exceptional UCI (UV Curing Integrated) Technology™

- Superior control of drop size and position accuracy
- Elimination of two baking cycles and multiple panel handling
- Print side A-A or A-B

Digital Printing

- Shortest time to market – print directly from CAM
- Save on stencils and screen costs
- Superior image placement and registration
- Easy traceability
- Clean process with the lowest cost of ink per print

Easy to Learn & Operate

- Intuitive user interface using a touch screen
- Automated data transfer from any CAM system

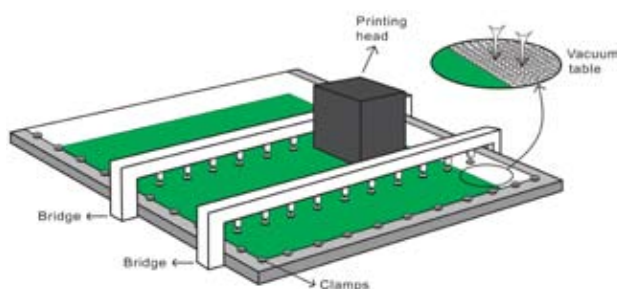


Superior Quality at High Speed

Sprint eliminates the trade-off between printing quality and throughput. By utilizing variable drop size technology, Sprint prints superior quality legend in a single pass of the print head to significantly increase printing throughput. The system achieves straight lines at any angle and uniform coverage of fill areas.

Print on Any Rigid Panel

- A combination of vacuum, clamps and retractable bridges completely flattens the printing area to ensure the highest quality printing on a variety of panel thicknesses.
- Pin-less alignment eliminates the need for pinning holes and reduces panel load/un-load time.
- High depth-of-focus (DOF) of 1.5mm enables uniform legend printing over non-uniform surfaces in one pass.

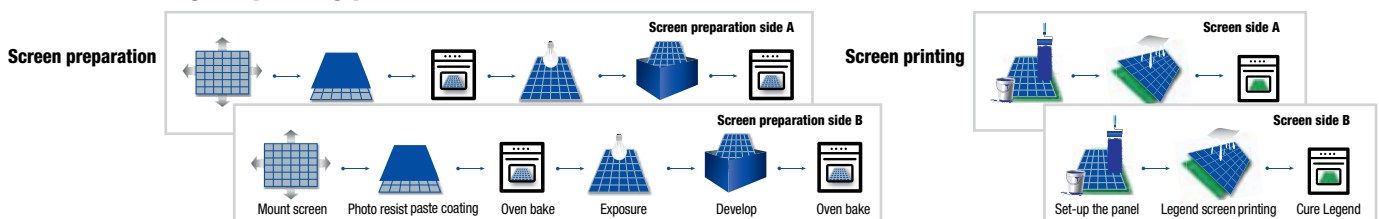


UCI (UV Curing Integrated) Technology™

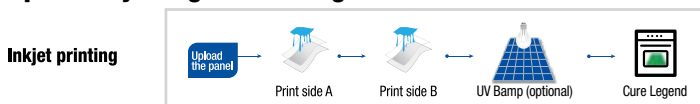


Orbotech's unique UCI Technology enables to achieve the highest quality with the best operational efficiency. A patented UV light source cures the ink immediately as it hits the surface, resulting in a cured legend after printing each side of the panel.

Conventional legend printing process



Sprint Inkjet Legend Printing



Shorter time-to-market: Sprint inkjet replaces the lengthy screen preparation process

UCI Technology Advantages:

- Superior quality: Ink drops are cured instantly for uniform line width and height
- Reduced cycle time by eliminating two baking cycles
- Increased operational flexibility: print side A-A B-B, or side A-B

Digital Printing

- Shorter time-to-market: replaces the lengthy screen preparation process
- Cost saving: eliminates costly stencils and screens
- Automatic registration and scaling. Achieve registration accuracy down to 35µm
- Traceability: multiple serialization and bar-coding options defined per panel, strip or even per individual PCBs
- Lowest ink cost per print: closed loop ink supply system for zero ink waste

Easy to Learn & Operate

- Simple and easy operation requiring only minimal training. No process expertise is required
- Fully automated data transfer from CAM

Field-Proven Solution

Orbotech's field-proven Sprint family is the industry's best selling inkjet legend printers. These printers use field proven inks from leading material suppliers, achieving up to 9H hardness, superior adhesion, excellent whiteness and are certified for UL and key MIL standards.