

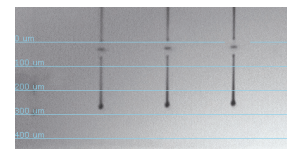
System Description

- Flat substrate, xyz stage, "ink jet" deposition system
- Low cost, user-fillable piezo-based ink jet print cartridges
- Built-in drop jetting observation system
- Fiducial camera for substrate alignment and measurement
- Variable jetting resolution and pattern creation PC-controlled with Graphical User Interface (GUI) application software
- Capable of jetting a wide range of fluids
- Heated vacuum platen
- Cartridge cleaning station
- Includes PC, monitor, and software



Mechanical System

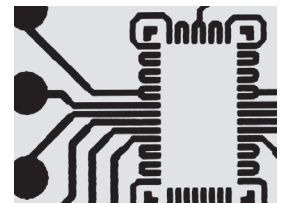
- Printable area
 - Substrate < 0.5 mm thickness: 210 mm x 315 mm (8.27 in x 12.4 in)
 - Substrate 0.5 - 25 mm thickness: 210 mm x 260 mm (8.27 in x 10.2 in)
- Repeatability: ± 25 µm (± 0.001 in)
- Substrate holder
 - Vacuum platen
 - Temperature adjustable; ambient to 60° C
- System Footprint: 673 mm x 584 mm x 419 mm (26 in x 23 in x 16 in)
- Weight approximately 43 kg (95 lbs)
- Power 100-120/200-240 VAC 50/60 Hz 375 W maximum
- Operating range 15-40° C at 5-80% RH non-condensing
- Altitude up to 2000 m
- Safety and EMC compliance
 - Safety: NRTL Certified to EN 61010-1, UL 61010-1, CSA 22.2 No. 61010-1
 - EMC: EN61326-1 Class A, FCC Part 15 Class A



Drop Watcher View

Fiducial Camera

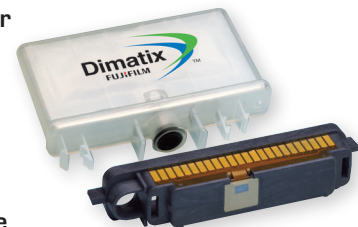
- Allows substrate alignment using reference marks
- Allows positioning a print origin or reference point to match substrate placement
- Provides measurement of features and locations
- Provides inspection and image capture of printed pattern or drops
- Provides cartridge alignment when using multiple cartridges
- Allows matching drop placement to previously patterned substrate



Fiducial Camera View

Cartridge

- Type: Piezo-driven jetting device with integrated reservoir and heater
- Usable Ink Capacity: Up to 1.5 ml (user-fillable)
- Materials Compatibility: Many water-based, solvent, acidic or basic fluids
- Number of Nozzles: 16 nozzles, 254 µm spacing, single row
- Drop Volume: 1 (DMC-11601) and 10 (DMC-11610) picoliter nominal



Control PC and Application Software

- Pre-loaded patterned templates
- Pattern preview
- Editors: Pattern, piezo drive waveform, cleaning cycle, substrate setting
- Bitmap (1 bit) files accepted
- DXF, Gerber, GDSII and OASIS file conversion to Bitmap

Replaceable Items

- Print cartridge with one-time user-fillable reservoir
- Cleaning station nozzle blotting pad
- Drop watcher fluid absorbing pad



FUJIFILM Dimatix, Inc. • 2230 Martin Avenue • Santa Clara, CA 95050 • USA

Tel: (408) 565-9150 • Fax: (408) 565-9151

E-mail: infomdd@dimatix.com • URL: www.dimatix.com