Functional Fluid applications

Xaar's a world leader in inkjet technology

INDUSTRIAL INKJET

Developing deposition solutions for your Functional Fluid application

1 Fluid evaluation

- Complex rheology testing
- Ink development guidance
- Fluid physicals measurement
- Materials compatibility testing

2 Jetting optimisation

- Printhead waveform configuration
- Application and fluid optimisation
- In-flight droplet visualisation

3 Sample production

- Pre and post jetting treatments
- Measurement of sample properties
- Drop deposition configuration options

4 Applications development

- Provision of Xaar Inkjet Development System
- Laboratory scale integration and testing support
- Education and training

5 Continued support

- Application improvements
- Product support and advice
- Application evaluation and testing
- Future development and enhancement support

Get ahead

With access to innovative technology and inkjet expertise from the leaders for over 25 years, get ahead of the competition and achieve more with Xaar.

Save development time and reduce costs

- No early stage capital investment
- No large fluid volumes at the outset
- Very early fluid verification
- Application samples for review and test
- Easily scalable results.

Improve application performance

- Optimised waveforms
- Consultancy and advice from inkjet specialists
- Take control of long term development
- Fast response to issues, application improvements and new technologies.

Digital inkjet deposition for displays

Jettable layers using Xaar printheads

1 Cover glass
- Obscuration
- Isolation
- Transparent Conductive Oxide (TCO)
- Microlens arrays

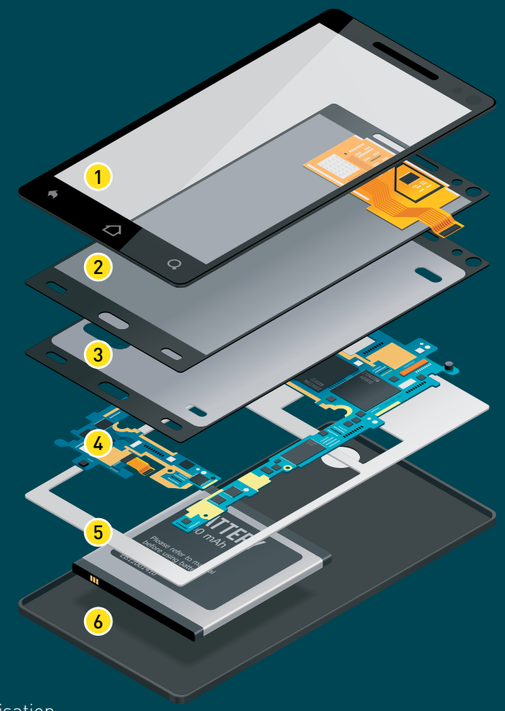
2 Passive thin film layers
- Encapsulation layers
- Polarizers
- RGB filters

3 Active layers
- Emissive layers
- Transport layers

4 Board/substrate layers
- Solder mask and etch mask
- Legend/notation
- Isolation barriers

5 Back-end layers
- Antenna
- Conductive tracking

6 Product print
- Phone case decoration and personalisation



Xaar printhead portfolio

Xaar 128

Nozzle density: 185 npi

Drop volume[a]: 40 or 80 pL

Fluid types: ● ●

Maximum greyscale levels: 2

Xaar 501

Nozzle density: 180 npi

Drop volume[a]: 8 to 40 pL

Fluid types: ● ●

Maximum greyscale levels: 6

Xaar 502

Nozzle density: 180 npi

Drop volume[a]: 15 to 75 pL

Fluid types: ● ●

Maximum greyscale levels: 6[a]

Xaar 1003

Nozzle density: 360 npi

Drop volume[a]: GS6 - 6 to 42 pL
GS12 - 12 to 84 pL
GS40 - 40 to 160 pL

Fluid types: ● ● ● ●

Maximum greyscale levels: 5[b], 8

Xaar 1003 AMp

Nozzle density: 360 npi

Drop volume[a]: 1 to 3 pL

Fluid types: ● ● ●

Maximum greyscale levels: 8

Xaar 1003 AMx

Nozzle density: 360 npi

Drop volume[a]: 6 to 42 pL

Fluid types: ● ● ●

Maximum greyscale levels: 6

Xaar 2002

Nozzle density: 720 npi

Drop volume[a]: 6, 12 or 40 pL

Fluid types: ● ● ●

Maximum greyscale levels: 8

[a] Dependent upon printhead model and ink type
[b] GS40 variant only

Fluid type key:

● Solvent ● UV
● Oil ● Soluble salts

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