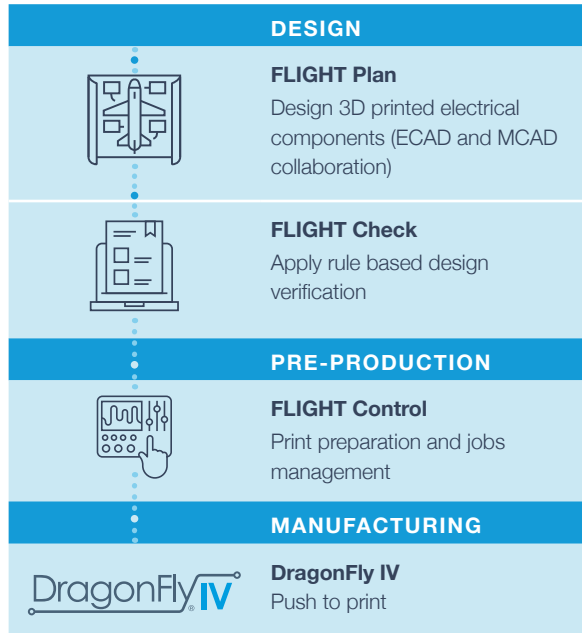


DragonFly IV and FLIGHT Software Suite

DragonFly IV is the world's first end-to-end solution to produce 3D multilayer electronics.

It reshapes electronics in form factor, performance and development cycles.



NANO DIMENSION
Electrifying Additive Manufacturing®



DOWNLOAD
THE BROCHURE



DragonFly IV

RESHAPING THE
ELECTRONICS INDUSTRY



www.nano-di.com
sales@nano-di.com
2021 © Nano Dimension Ltd.
All rights reserved.



RESHAPE
Performance



RESHAPE
Development
Cycles



RESHAPE
Form Factor

AME BENEFITS

- ONE-STOP SHOP**
 conductive and insulating layers in one process
- SEAMLESS DESIGN**
 to manufacturing process for AME (FLIGHT SW Suite)
- READY FOR FUTURE**
 production grade materials
- HIGH RESOLUTION**
 (L/S: 75/100 μm)
- UNLIMITED**
 layers count
- SIMPLE OPERATION**
 "Push to Print"

ONE-STOP SHOP SOLUTION

3D AME FABRICATION SUPPORTED BY END-TO-END PROCESSES

- Integrates 3D elements in PCB
- Print 3D Hi-PEDs (High Performance Electronic Devices)




SUPPORT OF HIGH DENSITY DESIGNS

- 75 μm traces; 100 μm spacing
- 350 μm ball pitch
- 150 μm Via

HIGH QUALITY PRINTED ELECTRONICS

- Excellent functional and structural connectivity
- High predictable conductivity (30% ± 5% vs. bulk copper)
- Low thickness variation <5%

RESHAPE ELECTRONICS

 OPTIMIZED FORM FACTOR	<p>Minimizes/condenses electronic devices</p> <p>Enables fabrication of free form 3D electro-mechanical devices, incorporating printed passive components, side contacts, and more</p>
 HIGH PERFORMANCE	<p>RF and sensing performance</p> <p>Enables printed 3D antennas/coils and eliminates loss-generators</p>
 SHORT DEVELOPMENT CYCLES	<p>Agile hardware development</p> <p>In-house, easy to use, concept validation</p>

PRINTER CAPABILITIES

Build Volume	160mm x 160mm x 3mm
Inks	Optimized silver and dielectric inks
Supported File Formats	All major ECAD and MCAD Software, ODB++, Gerber & Excellon, STLs
Resolution	18 μm (x), 18 μm (y), 10 μm (z)
Min. Line/Space	75 μm traces/100 μm spacing
Min. BGA Pitch	350 μm
Min. Via	150 μm
Min. Dielectric Layer Thickness	10.0 μm
Min. Conductive Layer Thickness	1.18 μm
Conductivity (Relative to Copper)	30% +/-5%
Dielectric Constant (Dk) @ 2GHz/15GHz	2.77/2.78
Tangential Loss (Df) @ 2 GHz/15 GHz	0.015/0.018

PRINTER SPECIFICATIONS

Dimensions	1,400mm x 800mm x 1,800mm
Weight	520kg, (1,150lbs)
Power Supply*	230VAC, 20A, 50–60Hz
Network Connectivity	Ethernet TCP/IP 10/100/1000
Operational Humidity	Above 35% non-condensing
Operational Temperature	18°C (64°F) to 28°C (82°F)
Regulatory Compliance	UL, CE, FCC
Deposition Technology	Piezo drop-on-demand inkjet
Number of Printheads	2, one for each ink: conductive and dielectric
Software	FLIGHT Software Suite (Design, Verification, Pre-Production)

* Must use UPS (Uninterruptible Power Supply)

