

CREATE FULLY FUNCTIONAL POPULATED ELECTRONIC DEVICES

LEVERAGE PROVEN TECHNOLOGIES TO GENERATE END-TO-END PROTOTYPING OF ADDITIVELY MANUFACTURED ELECTRONICS (AME)



- Combined place & dispense processes
- Small footprint
- Expandable in any direction
- Mineral cast chassis
- Nonstop feeder & production changeover
- Fast, durable linear motors



- Multi-material, multi-layer printer
- Generates entire circuits
- Ensures IP protection
- Environmentally sustainable
- Designs from concept to validation
- Lowers R&D operation costs

DragonFly IV® is a multi-material 3D printing system able to craft functional circuit boards and electronic devices within hours by simultaneously depositing proprietary conductive and dielectric substances, while integrating in-situ capacitors, antennas, coils, transformers, and electromechanical components.

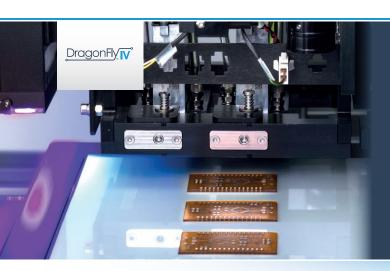
Essemtec Fox is a proven surface-mount-technology (SMT) pick-and-place system that allows for printed circuit board (PCB) placement accuracy and speed, with high-quality engineering.

Side-by-side they are a complete AME prototyping solution that accelerates the assembly process, overcomes soldering challenges, protects IP, and creates supplementary internal synergy.





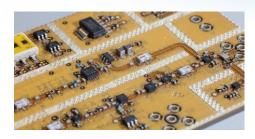
COMBINING AME & SMT MAXIMIZES R&D POSSIBILITIES!



- PoC for 3D Hi-PEDs
- Build volume 160x160x3 mm
- Conductive and dielectric inks
- Conductivity 30% ± 5%
- 75/100 µm L/S
- 150 µm VIA
- Low thickness variation <5%
- IST (IPC-650) over 300 thermal cycles (RT to 100°C)
- HATS (IPC-650) over 500 thermal cycles (0 to 70°C)
- Footprint: 1400x800x1800 mm

- Standalone configuration
- 2-axes pick-and-place head
- Up to 12'000 cph
- Feeder package 4-72 mm tape
- Tray for single component
- Solder paste jet valve build-in
- Dispensing speed up to 150,000 dph
- Case size 01005 (0.4×0.2 mm)
- User-friendly SW, Gerber file import
- Footprint: 880x1090 mm





MULTI-LAYER PCB PRODUCED ON DRAGONFLY AND FOX



Nano Dimension® is a sole provider of intelligent machines that are changing the way the world manufactures. Our pioneering solutions are transforming design and production to match the efficiency demands of Industry 4.0.

Essemtec, a Nano Dimension division, leads the industry in adaptive SMT pick-and-place robotics and equipment for both high-speed- and micro-dispensing, as well as an intelligent production storage and logistic systems.