

The NEXTRA® 3D Layout system extends 2D PCB layout systems with features for integrated electromechanical layout and interfaces that allows efficient communication with 3D MCAD systems.

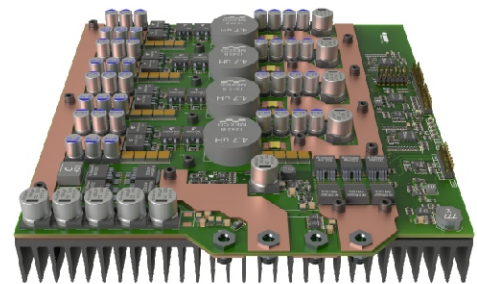
NEXTRA - 3D PCB LAYOUT

INTEGRATION

2D PCB Interfaces

Altium Designer
 Cadence Allegro/OrCAD
 Mentor Graphics Expedition (BoardStation)
 Mentor Graphics PADS
 Zuken CR-5000/CR-8000
 Zuken Visula/CADSTAR (CADIF)

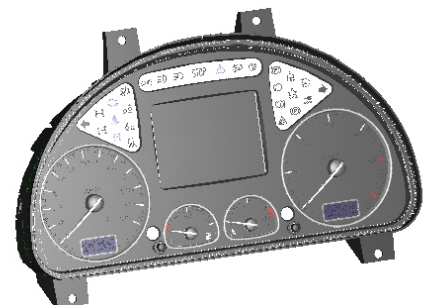
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3D MCAD Interfaces

Dassault Systèmes Catia V5
 Dassault Systèmes Catia V4
 Dassault Systèmes SolidWorks
 Autodesk Inventor
 Parametric Technology Pro/Engineer
 Siemens PLM NX
 ACIS
 STEP (AP203 & AP214)
 IGES

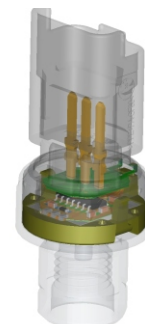
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OPTIMIZATION

3D Component shapes
 3D Collision detection
 Components clearance offset
 Component placement
 Routing & copper editing

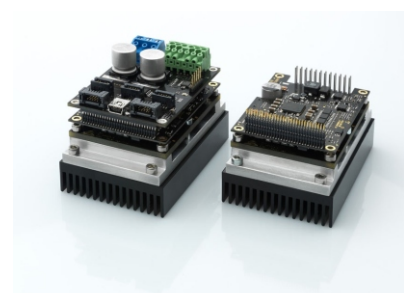
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FUNCTION

Flex / Rigid Flex / Advanced Flex
 MID
 Creepage
 Air Gap

- ✓
- ✓
- ✓
- ✓



NEXTRA - 3D LAYOUT - MODULES

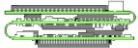
Flex

Flex allows to create and edit non-planar, multi-layer boards that reflect flexible foil carriers. Layout and routing functions are supported. Interfaces exchange flattened representation of the flex board.



Rigid Flex

Rigid flex allows to create and edit non-planar, multilayer boards with varying board stack-ups per area. that reflect rigid-flex systems. Layout and routing functions are supported. Interfaces export length corrected flattened representation of the rigid-flex board.



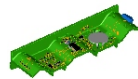
Advanced Flex

Advanced flex allows to create and edit the shape of a flexible carrier within an electro-mechanical assembly. NEXTRA® enables to efficiently design the shape taking into account 3D paths and 2D contours.



MID (Molded Interconnect Device)

MID allows to layout a design on an arbitrarily 3D shaped geometry. Such carriers are molded thermoplastics with circuitry applied in various technologies.



Multi Board

Multi board allows to layout a logical pcb design on an arbitrary number of boards. The boards may be of any technology supported by NEXTRA®.



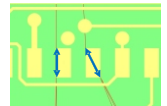
Multi Design

Multi design allows to create and edit an assembly of an arbitrary number of NEXTRA® designs and mechanical parts and assemblies. It allows to check for layout problems and fix those in the electro-mechanical assembly.



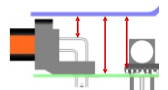
Creepage

Creepage checks a given layout according to creepage violations. It takes into account net classes defined in constraint management systems and allows to define constraints on-line.



Clearance (Air Gap)

Air gap analyzes a given electromechanical assembly according to air gap violations. It takes into account net classes defined in constraint management systems and allows to define constraints on-line.



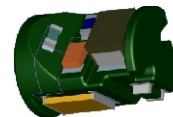
Placement

The placement functionality is a standard module for all NEXTRA® products. It allows to place design objects on any supported board technology and supplies associated functionality.



Routing

The routing functionality allows to route connectivity and edit conductor geometry on any supported board technology. It is a standard module for the MID module and an optional feature for other NEXTRA® modules.



Minimum:

Intel Pentium IV/AMD Athlon
MS Windows Vista SP2
4 GB MB RAM
500 MB free hard disk storage
network interface card

Recommended:

Intel i7/AMP Opteron
MS Windows 8.1 x64 or higher
16 GB MB RAM
RAID 0
1 GB free hard disk storage

Please ask us for advice when you plan a new computer for NEXTRA®. The configuration is heavily depending on your application, products and environment.

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