OrCAD X & Altium Designer
OrCAD vs Altium: Platform Functionalities

Features	OrCAD X	Altium
• SCHEMATIC CAPTURE		
Schematic sheet limits	Unlimited	Unlimited
Hierarchical schematic capture with integrated analog mixed-signal simulation	✔	✔
Built-in SPICE simulator with model library and migration support for LTSpice/PSpice	✔	✔
Variant management tools for complex projects	✔	✔
Crypted simulation models (PSpice)	✔	✘
Integrated pre-layout signal integrity analysis	✔	✘
• PCB LAYOUT		
Board size limits	Unlimited	Unlimited
Signal and plane layer limits	200 conductors & unlimited mechanical	32 signals & 16 planes & unlimited mechanical
High speed design and rigid-flex design features included in standard license	✔	✔
Rules-driven design for modern PCB (HDI, Rigid-flex, and Multiboard)	✔	✔
Advanced interactive routing features with built-in signal integrity tools	✔	✔
Online 3D clearance checks in 2D and 2D canvas	✔	✔
Photo-realistic 3D viewer with real-time clearance checking	✔	✔
Integrated impedance and coupling analysis	✔	✘
Quick and dynamic updates of copper under placement and routing	✔	✘
Parts placement in 3D	✔	✔
Visual DC power distribution analysis in the PCB layout	Requires Sigrity OptimizePI	Requires Power Analyzer
• LIBRARY MANAGEMENT		
Built-in BOM management with real-time supply chain	✔	✔
Unified libraries with symbols, footprints, simulation models, and distributor links	✔	✔
Management of lifecycles, in-design validation and templates	✔	Requires Altium Subscription
• MANUFACTURING		
Built-in fabrication and assembly drawing generation tools	✔	✔
Intuitive interface for manufacturing output creation	✔	✔
Quickly generate ECOs, reports, and documention	✔	✔
Share and view Gerbers, ODB++ files, and assembly steps in a browser	✘	✔

Features	OrCAD X	Altium
• PRODUCT DESIGN		
Support for multi-board systems and assemblies	✔	Requires Altium Subscription
Multi-board 3D product viewer from any web browser	✘	Requires Altium Subscription
Multi-board mechanical integration for SOLIDWORKS®	✔	Requires Altium Subscription
Built-in harness design tools	✘	Requires Altium Subscription
• CLOUD SERVICES		
Version control, templates, and component libraries stored in cloud	✔	Requires Altium Subscription
Built-in task management and commenting for design files and BOMs	✔	Requires Altium Subscription
Concurrent PCB team design internally and externally	✔	Requires Altium Subscription
Intuitive co-design internally and externally via work groups	✔	✘
• PLATFORM INTEGRATION		
Advanced integration with SOLIDWORKS® for MCAD component placement, copper geometry, enclosure exchange, and multi-board/rigid-flex sync	✔	Requires Altium Subscription
PLM integration with Arena® PLM, PTC Windchill, Aras PLM, Oracle Agile PLM, Teamcenter®, 3DSConnector	Additional service	Requires Altium Subscription
Multiple importer utilities to convert files from other ECAD platforms	✔	Requires Altium Subscription
• WORKFLOW		
Managed workflows for part requests, design reviews, project creation/release, and lifecycle approvals	✔	Requires Altium Subscription
Change notifications and change conflict prevention for design documents	✔	Requires Altium Subscription
Centralized control over design environments, document templates, and output files for every team member	✔	Requires Altium Subscription
• MAINTENANCE & SUPPORT		
Backwards compatible with files from all previous releases	✔	✔
On-demand training courses, knowledge base, and community forums	✔	Requires Altium Subscription
Live chat and support tickets	Artedas customer service includes local hotline support, access to COS (Cadence Online Support), software downloads and free online resources.	Requires Altium Subscription, which includes support tickets, chat function, documentation center and access to Altium community forums

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