◣ ALTAIR

CAPABILITIES CHART

ALTAIR® HYPERWORKS®: Design & Simulation Platform

ELECTRONIC SYSTEM DESIGN	Altair	APA
Wireless Connectivity, Including 5G	●	
PCB Design & Verification	●	
PCB Manufacture & Assembly Simulation	●	
System & Circuit Simulation	●	
Microcontroller Firmware Development	●	
Thermal Analysis	●	●
Electromagnetic Compatibility (EMC)a	●	●
Networking Planning & Spectrum Management	●	
eMotor Design	●	
Sensor & Actuator Design	●	
EDA Job Scheduling	●	
Embedded System Design	●	
Touchscreen		●

FLUIDS & THERMAL	Altair	APA
Flow, Heat Transfer & Turbulence	●	●
External Aerodynamics	●	●
Particle-based Fluid Dynamics	●	
Cosimulation with Discrete Element Modeling	●	
Fluid System Design	●	●
Combustion		●

INDUSTRIAL DESIGN	Altair	APA
3D Product Design	●	
3D Rendering & Animation	●	

MANUFACTURING	Altair	APA
Additive Manufacturing	●	●
Casting	●	●
Extrusion	●	
Injection Molding	●	●
Metal Forming	●	●
Polyurethane Foams	●	
Process Manufacturing	●	●

MANUFACTURING (CONT.)	Altair	APA
Forging		●
Design Life-cycle Management		●

MULTIPHYSICS	Altair	APA
Multi-body Systems	●	●
Multi-Disciplinary System	●	●
Fluid-Structure Interaction	●	●
Thermomechanical Simulation	●	
Multi-Disciplinary Optimization	●	●
Multiphysics Workflows	●	●
Uncertainly Quantification		●

STRUCTURES	Altair	APA
Simulation-driven Design	●	●
Structural Optimization	●	●
Modeling & Visualization	●	●
Linear & Nonlinear Analysis	●	●
Composite Design	●	●
Crash & Impact	●	●
Noise & Vibration	●	●
Durability	●	●
Material Information	●	●
Augmented Data Analytics	●	
Structural Design Code Compliance	●	

SYSTEM MODELING	Altair	APA
Model-based Development	●	●
Math, Scripting, & Data Analysis	●	●
Multi-body Dynamics	●	●
Discrete Element Modeling	●	●
Model-based Systems Engineering (MBSE)/Systems Requirements		●

ALTAIR HYPERWORKS (CONT.)

OPTIMIZATION	Altair	APA
Multidisciplinary	●	●
Data-mining	●	
Machine Learning (ML)	●	
Topology Optimization	●	
Design Exploration	●	●

ALTAIR® HPCWORKS™: HPC & Cloud Platform

HPC & CLOUD	Altair	APA
Workload Management & Job Scheduling	●	
HPC Administration	●	
Remote Visualization	●	
License Management	●	
Hybrid Computing	●	
Turnkey HPC & Cloud	●	
Cost Control & Allocation	●	

ALTAIR® RAPIDMINER®: Data Analytics & AI Platform

DATA ANALYTICS & AI	Altair	APA
Data Transformation	●	
Predictive Analytics & Machine Learning	●	
Real-Time Data Visualization	●	
Data Automation & Distribution	●	
Content Management	●	
IoT:		
Device Management	●	
Edge Orchestration	●	
Stream Processing	●	
Data Storage	●	
Application Enablement	●	
Real-Time Dashboards	●	
Robotic Process Automation		●

	ENTERPRISE SUITE (ENT)	MULTIPHYSICS/ MECHATRONICS ENGINEER (MME)	MECHANICAL ENGINEER (ME)	STRUCTURAL ENGINEER (AEC)	PRODUCT ENGINEER (PE)	CONCEPT ENGINEER (CE)	MECHANICAL DESIGNER (MD)	INDUSTRIAL DESIGNER (ID)	DATA ANALYST (DA)
SYSTEMS MODELING	●	●	●		●	●	○	○	
FLUIDS & THERMAL	●	●	●	●	○	○			
MANUFACTURING	●	●	●		●	○			
MULTIPHYSICS	●	●	●	●	○				
STRUCTURES	●	●	●	●*	○	○	○		
ELECTRONIC SYSTEM DESIGN	●	●	○		●	●			
INDUSTRIAL DESIGN	●	●	●		●	●	●	●	
OPTIMIZATION	●	●	●	●	○	○			
DATA ANALYTICS & AI	●	●							●

○ Partial   ● Complete   *Includes Design Code Compliance

DISCOVER HOW ALTAIR UNITS REVOLUTIONIZE YOUR APPROACH

With Altair Units – our patented, unified licensing system – you get the ability to overcome any challenge through access to Altair's industry-leading technology. Units offer teams and organizations unmatched power and flexibility by letting users run software and workloads from anywhere, giving them the freedom to choose what technology they need when they need it, and delivering unparalleled value for more than 150 Altair and partner products.

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Altair One is a turnkey high-performance computing (HPC) and cloud gateway that provides on-demand access to the tools of innovation, anywhere and anytime. Collaborate with team members all over the world and stay mobile without compromising productivity. Altair One users get all the resources they need in one place, with unlimited scalability.

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