

# IHS 4DOnline Web Services



**The Source**

for Critical Information and Insight™

Integrate the leading electronic component library with product data and lifecycle management applications

IHS 4DOnline Web Services Integration Framework provides integration of IHS Electronic Database component information with in-house product data and lifecycle management (PDM/PLM) applications.

Using standard XML web services communications, existing component data can be enriched with parametric attributes and documentation to significantly improve design and sourcing decisions. And, a tailored update schedule can synchronize critical life cycle and environmental compliance data with IHS Electronics Database updates.

## Challenges of Electronics Manufacturing

How often do errors in BOMs affect your product release or quality goals? Do you miss part reuse opportunities because of incorrect or incomplete component data? Or, can you increase sourcing from preferred suppliers and get better terms? How much time do you spend looking for detailed component data?

These errors and lost opportunities typically occur when parts are selected from uncontrolled sources such as engineering libraries or outdated vendor catalogs and websites.

Today, major manufacturers in every industry realize that making the best design and sourcing decisions requires current, accurate information integrated with existing processes and workflows.

## The Leading Resource for Current, Accurate Electronic Component Information

- More than 25 million components from over 500 manufacturers organized by part type with standardized attributes and units
- Complete documentation including current and historical datasheets, application notes, product change notices, end of life notices, and certificates of compliance
- Current status and availability, lifecycle stage, last time buy and delivery dates, alert notifications, estimated years to end of life
- Environmental compliance, RoHS status, substance levels, manufacturing parameters, compliant replacements
- Standardized manufacturer names including tracking of parts transferred to and from manufacturers due to mergers and acquisitions
- Continuously updated by a team of component engineers using ISO Certified processes

## Easily Integrated into Product Management Systems

Predefined part and attribute data is accessible on demand using XML communication in HTTP via secure connection to the 4DOnline web portal

**Benefits**

Integrating IHS component information with your business processes and tools through the IHS Web Service enables:

- Enrichment of component information available
- Improved and standardized access to accurate component information

Access to IHS Reference Data within your business workflows, decision support tools, and product management tools enables best in class solutions that provide these additional benefits:

- Make better design and sourcing decisions faster
  - Research parts from multiple manufacturers in one search, compare alternates and download documents without visiting multiple web sites
  - Provide design and procurement teams with access to consistent component information in the context of existing applications
  - Optimize designs for the supply chain by identifying more opportunities to source preferred parts and manufacturers
  - Eliminate duplicate parts to consolidate purchases from preferred suppliers for better terms.

Accelerate manufacturing and product introductions by uncovering errors that affect time-to-market and quality goals.

- Validate BOMs with a professionally maintained electronic component database
- Avoid production delays due to obsolete or non-compliant parts
  - Download current availability, lifecycle forecast, and projected EOL information as required in project workflows
  - Identify obsolete or excess inventory with automatic updates for product events including PCNs, EOL Notices, last time buy and delivery notices, availability of lead-free replacements
- Maintain product deliveries and sales in markets restricted by environmental regulations
  - Identify compliant replacement parts and lead-free manufacturing parameters
  - Provide documentation to verify compliance claims

- Reduce costs of maintaining existing component information libraries.

**Partnered for Success**

IHS has over 45 years of experience developing critical information resources. Today, IHS partners with leading PLM system developers Agile, Avnet Prémier/Arena Solutions, i2 and Parametric Technology Corporation to deliver integrated solutions for managing product innovation and development.

Using the robust Web Services Integration Framework, IHS partners and customers have developed integrations to our reference content for solutions that enrich component information, perform part matching, supplier mapping, taxonomy mapping and periodic synchronization of component information.

Sample XML Data Sets	Data Attribute
Part Details	Description Package description Manufacturer Status Life cycle stage and code Years to End of Life
Technical Attributes	Commodity-specific technical attributes such as Voltage, Tolerance, and Capacitance
Alternates	Form/Fit/Function or Functional equivalent
Manufacturer	Manufacturer name Contact information Web site link
Manufacturer Transfers	Parts transfers due to mergers and acquisitions
Hazardous Materials	RoHS Compliant RoHS Exemptions RoHS ID and Number Item Concentration and Substance Weights of six substances banned in RoHS directive
Documents	Datasheets Application notes Certificates of Compliance
Alerts	Change Notices Failure Notices Last Time Buy & Delivery Dates Life Cycle Alert Prediction Date



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