AI Product FAQs

Frequently asked questions and answers from our customers about AllSpice AI Design Review Agent (DRCY) and related capabilities. Please reach out to our support team for additional questions or concerns about our AI product offering.

🔒 Data Privacy / Security

What model does your AI use?

AllSpice currently uses Claude Sonnet 4.0 via AWS Bedrock for Cloud and Enterprise deployments. Model choices may evolve as the ecosystem improves and are subject to change. Customers may bring their own model provider in supported configurations. AllSpice is designed to support multiple models rather than a single vendor lock-in. We are building a configurable interface for model URL, token, and specification settings.

How do you train your models?

Allspice does not fine-tune foundation models on customer data. DRCY operates by applying task-specific prompting and structured context drawn from design files, component metadata, and referenced datasheets at review time. Customer data is used only for in-session inference and is not retained for model training.

What controls have been implemented to ensure customer data is not exposed to public learning models?

AllSpice provides contractual AI Terms, available upon request, that guarantee customer data is not exposed to public learning models.

For Dedicated Server Deployments, DRCY runs on Amazon Bedrock, which provides explicit data-protection guarantees. According to Amazon Bedrock documentation, prompts and completions are not stored, logged, or used to train AWS or third-party models.

How do you handle internal or NDA-restricted datasheets?

DRCY can reference private datasheets in analysis:
1. Using built-in adapter to access customer's internal part library API based on specific customer configuration
2. Using datasheets users uploaded into the project repository

What happens to our data if we stop using AllSpice?

You can export your data at any time. Upon account closure, data is retained per our data retention policy and then securely deleted.

⚡ Accuracy & Performance

How do you reduce false positives?

DRCY applies a scoring rubric and structured evaluation framework during development and testing. Reducing false positives is a core focus of the product, and accuracy improves continuously through expanded test coverage and targeted guardrails.

Each finding includes referenced schematic locations and datasheet citations to support engineer review and judgment.

How long does it typically take the AI to analyze a large schematic project, like one with 44 pages?

The analysis time can vary from 30 minutes to a couple hours, depending on the complexity and number of components in the design. The AI runs in the background, so users can initiate the review and come back later to see the results.

⚙️ Features

Can DRCY validate maximum voltage ranges and flag incorrect power connections?

Yes. DRCY compares constraints extracted from datasheets with your schematics to identify mismatches, including out-of-range voltages and missing or incorrect power connections.

Can DRCY flag obsolete or near end-of-life components?

Not reliably at this time. Component lifecycle and availability checks are currently better handled through deterministic automation workflows such as AllSpice Actions. Lifecycle awareness is on the DRCY roadmap.

Can DRCY interpret regulator configurations and apply min, max, and tolerance ranges?

Yes. DRCY leverages the regulator configurations using datasheet-defined minimum, maximum, and tolerance ranges in combination with schematic context.

How does DRCY find and prioritize datasheets?

Datasheets are prioritized in the following order order:

- Datasheets uploaded directly into the repository
- Datasheet links derived from component attributes
- Internal API (if configured) or manufacturer datasheet sourced via DigiKey

How does your AI handle complex or long datasheets?

The AI uses a multi-stage process to digest datasheet information and correlate it with the schematic. It relies on any context provided in the schematic, like pin comments, to understand how the pins are being used. The AI aims to focus on the most critical issues rather than trying to infer everything from the datasheet alone.

Can DRCY detect missing ESD on user-touchable interfaces?

In many cases. DRCY learns from your design patterns. For example, if similar connectors include ESD protection, it will flag comparable interfaces that lack it. We are adding support for project-level guidance files to make such rules more explicit in the future.

Does DRCY rely only on net names? Can it infer beyond names?

Net names are one signal. DRCY also verifies voltage support and other constraints inferred from part configuration. We are expanding our test coverage to further strengthen this behavior.

Can DRCY learn from previous design reviews within the same organization?

At the moment, DRCY does not currently learn from previous design reviews within an organization.

Users can provide feedback via emoji reactions directly on review comments, UI. which is used to guide future product improvements. Organization-wide learning and persistent context are planned for future releases.

Our biggest pain is PCB layout and routing. How can schematic checks help?

DRCY helps PCB teams by finding problems before layout starts. AI helps shift-left common issues like incorrect or underused netclasses, footprint mismatch, lost layout notes, pin-swaps, incorrect ground pads, and connector confusion.

🧩 Choosing AI vs. Deterministic Automation

When are AllSpice Actions a better fit than AI?

AllSpice Actions

- Best suited for deterministic, rule-based workflows defined in YAML and applied to structured data.
- Ideal for repetitive checks with clearly defined rules and outcomes.

AI Agent DRCY

- Analyzes schematics using combined schematic and datasheet context rather than predefined rules.
- Well suited for design review feedback that requires interpretation and engineering judgment.