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Release Date: 24 Mar 2025

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Overview

This patch introduces support for a new nSpec hardware and software status monitoring board, and fixes a long lived bug within our DI alignment that intermittently caused small scanning positioning errors.

New Features

Highlights

NSPEC-9113: nSpec Status Monitor

The nSpec Status monitor is an electrical board that customers can connect to with AUX connectors for a readout of nSpec EMO state and nSpec Software Status. It is compatible with all nSpec models, and is a new optional add-on available for tools. In production environments, this can be used as a single source of truth for monitoring the tool hardware and software production readiness status. The board also enables remote EMO for the nSpec hardware. For more information, please refer to https://nanotronics.atlassian.net/wiki/x/AQC9-Q

New Features Changelog

T	Key	Release Notes Summary
	NSPEC-9143	nSpec Status Monitor

Bug Fixes

Highlights

NSPEC-9139: Cannot Use Rev0 Nanotronics Illuminator Boards

We have two versions of the Nanotronics Illuminator board (common to nSpec PRISM tools). The original revision failed to connect at startup as of version v0.24.2.3. This issue has now been corrected.

NSPEC-9179: DI Alignment Misalignments

We have learned that there was a bug within our north-south alignment routine that could cause an extremely small misalignment of the south fiducial on the order of 0-5 pixels. The end impact observed was that the scan position may be several pixels shifted from the desired position. In most applications the error is well within Device Inspection Analysis positional tolerances, however there are some low-tolerance applications where this misalignment did cause intermittent false positive defect detections. This alignment error has now been corrected.

Changelog

T	Key	Release Notes Summary	Affected Releases
	NSPEC-9139	Cannot Use Rev0 Nanotronics Illuminator Boards	0.24.2.3, 0.24.2.6
	NSPEC-9179	DI Alignment can Intermittently have Milliradian Misalignments	0.22.0.0, 0.23.0.0, 0.24.0.0, 0.24.1.0, 0.24.2.0
	NSPEC-9197	Device Yield Crashes when Opening Tile View	0.24.2.0