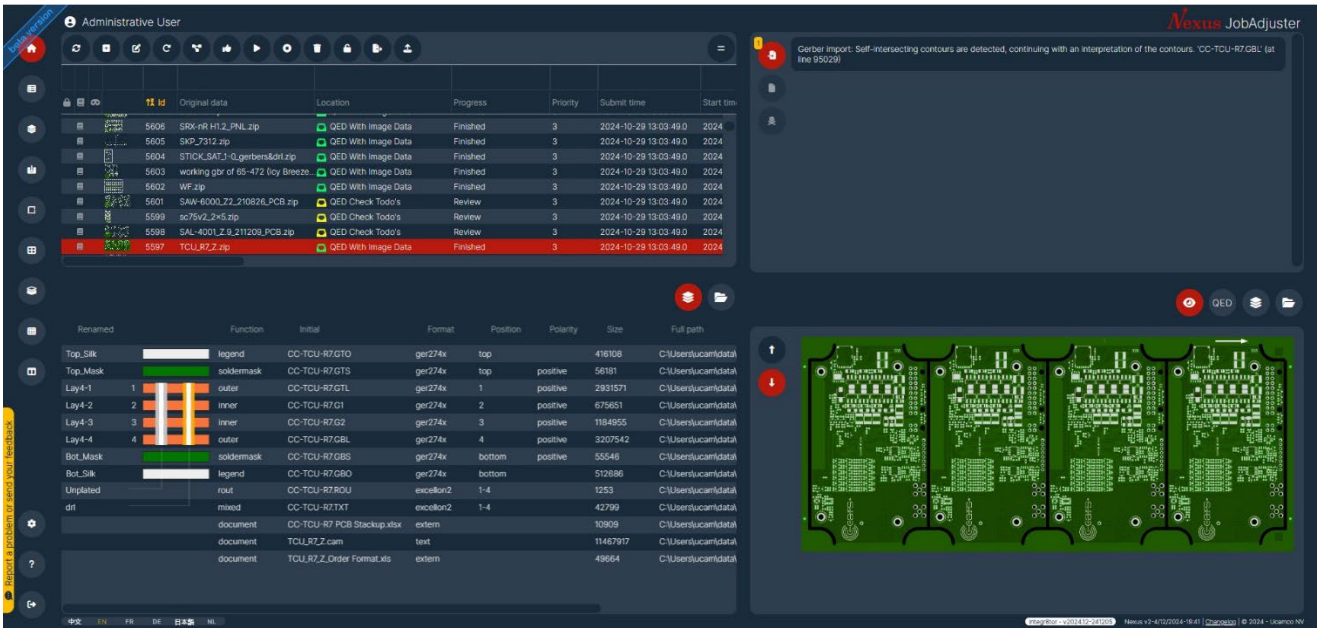
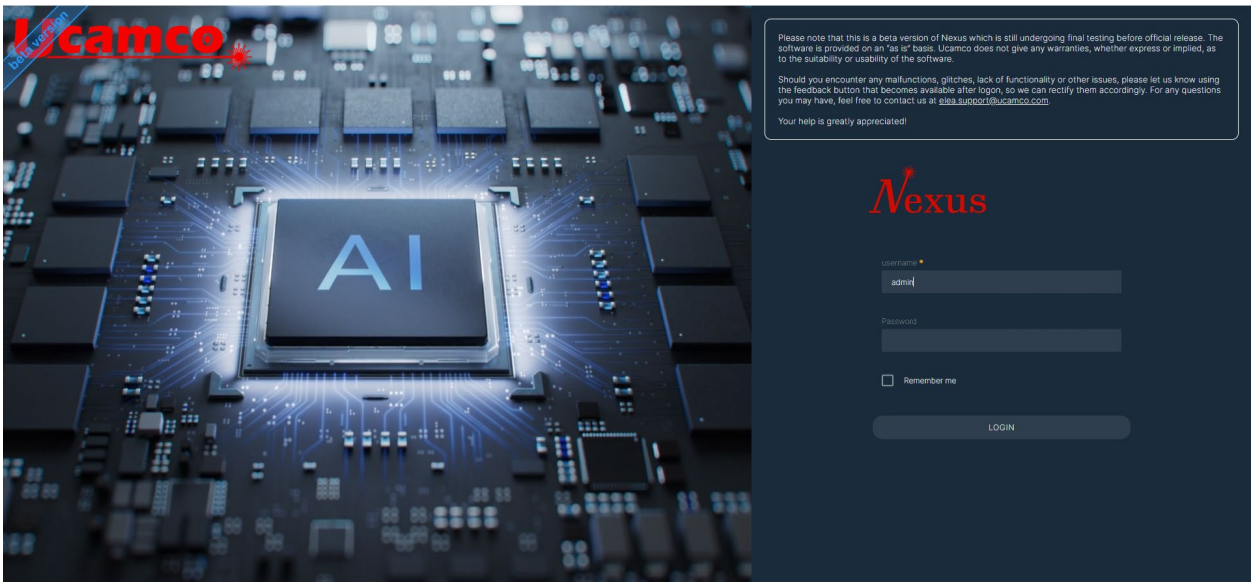
Nexus JobAdjuster



Nexus JobAdjuster provides extensive, browser-based viewing of job data and analysis results, along with a comprehensive suite of data editing functions to address any issues that may hinder successful analysis. Similar to Nexus JobManager, the capabilities of Nexus JobAdjuster are not constrained by client-oriented licenses. Instead, the software configuration of the Integr8tor Nexus server determines the analyses performed. If any problems arise or results need fine-tuning, dedicated Nexus JobAdjuster apps are available to handle these tasks simply and efficiently. Moreover, Nexus JobAdjuster offers exceptional versatility and integration, connecting seamlessly to its UcamX Workflow Edition and SpeedStack client applications through a new data transfer interface that eliminates the need for Windows shares.

Nexus JobAdjuster's full features and capabilities include:

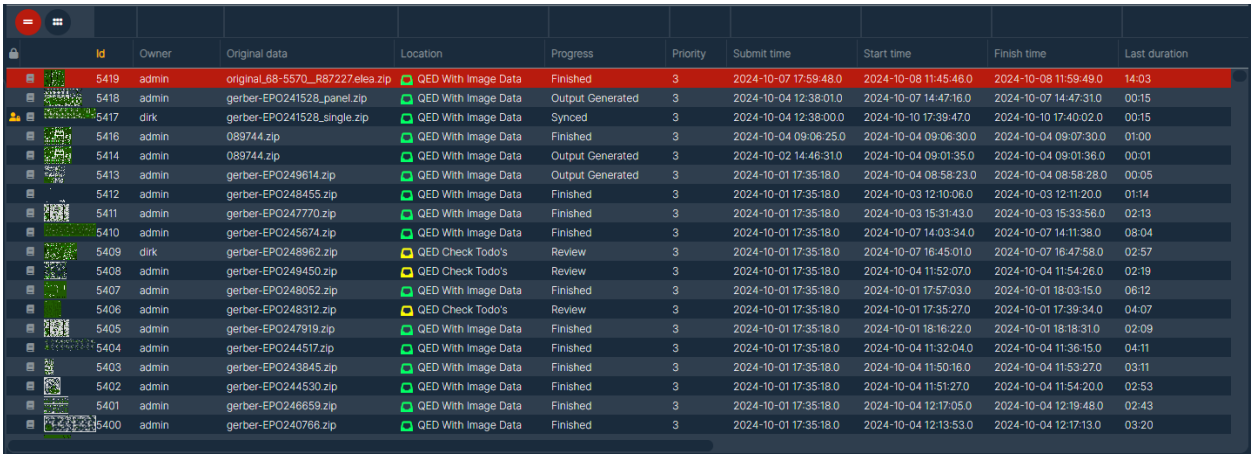
- User authentication
    - ➢ Logging into the Nexus JobAdjuster application and validating user credentials with the Integr8tor Nexus server



- Job Queue Viewing
    - ➢ Seeing the list of jobs currently available on the Integr8tor Nexus server, either in table or in tile view
    - ➢ Discovering which of these jobs are in progress, queueing up to be processed, require attention, have completed,…

- Applying filters to reduce the full job queue to a subset of entries for easy retrieval of customer-specific archives, references, processing times, duplicate archives, ...

Table view

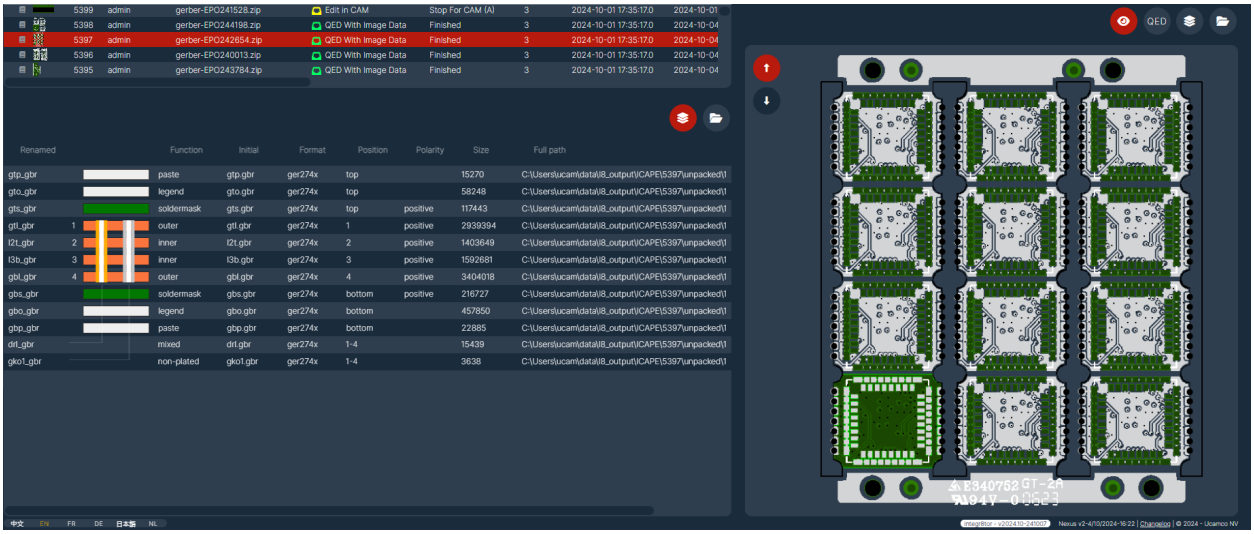


Id	Owner	Original data	Location	Progress	Priority	Submit time	Start time	Finish time	Last duration
5419	admin	original_68-5570__R87227.elea.zip	QED With Image Data	Finished	3	2024-10-07 17:59:48.0	2024-10-08 11:45:46.0	2024-10-08 11:59:49.0	14:03
5418	admin	gerber-EPO241528_panel.zip	QED With Image Data	Output Generated	3	2024-10-04 12:38:01.0	2024-10-07 14:47:16.0	2024-10-07 14:47:31.0	00:15
5417	dirk	gerber-EPO241528_single.zip	QED With Image Data	Synced	3	2024-10-04 12:38:00.0	2024-10-10 17:39:47.0	2024-10-10 17:40:02.0	00:15
5416	admin	089744.zip	QED With Image Data	Finished	3	2024-10-04 09:06:25.0	2024-10-04 09:06:30.0	2024-10-04 09:07:30.0	01:00
5414	admin	089744.zip	QED With Image Data	Output Generated	3	2024-10-02 14:46:31.0	2024-10-04 09:01:35.0	2024-10-04 09:01:36.0	00:01
5413	admin	gerber-EPO249614.zip	QED With Image Data	Output Generated	3	2024-10-01 17:35:18.0	2024-10-04 08:58:23.0	2024-10-04 08:58:28.0	00:05
5412	admin	gerber-EPO248455.zip	QED With Image Data	Finished	3	2024-10-01 17:35:18.0	2024-10-03 12:10:06.0	2024-10-03 12:11:20.0	01:14
5411	admin	gerber-EPO247770.zip	QED With Image Data	Finished	3	2024-10-01 17:35:18.0	2024-10-03 15:31:43.0	2024-10-03 15:33:56.0	02:13
5410	admin	gerber-EPO245674.zip	QED With Image Data	Finished	3	2024-10-01 17:35:18.0	2024-10-07 14:03:34.0	2024-10-07 14:11:38.0	08:04
5409	dirk	gerber-EPO248962.zip	QED Check Todo's	Review	3	2024-10-01 17:35:18.0	2024-10-07 16:45:01.0	2024-10-07 16:47:58.0	02:57
5408	admin	gerber-EPO249450.zip	QED Check Todo's	Review	3	2024-10-01 17:35:18.0	2024-10-04 11:52:07.0	2024-10-04 11:54:26.0	02:19
5407	admin	gerber-EPO248052.zip	QED With Image Data	Finished	3	2024-10-01 17:35:18.0	2024-10-01 17:57:03.0	2024-10-01 18:03:15.0	06:12
5406	admin	gerber-EPO248312.zip	QED Check Todo's	Review	3	2024-10-01 17:35:18.0	2024-10-01 17:35:27.0	2024-10-01 17:39:34.0	04:07
5405	admin	gerber-EPO247919.zip	QED With Image Data	Finished	3	2024-10-01 17:35:18.0	2024-10-01 18:16:22.0	2024-10-01 18:18:31.0	02:09
5404	admin	gerber-EPO244517.zip	QED With Image Data	Finished	3	2024-10-01 17:35:18.0	2024-10-04 11:32:04.0	2024-10-04 11:36:15.0	04:11
5403	admin	gerber-EPO243845.zip	QED With Image Data	Finished	3	2024-10-01 17:35:18.0	2024-10-04 11:50:16.0	2024-10-04 11:53:27.0	03:11
5402	admin	gerber-EPO244530.zip	QED With Image Data	Finished	3	2024-10-01 17:35:18.0	2024-10-04 11:51:27.0	2024-10-04 11:54:20.0	02:53
5401	admin	gerber-EPO246659.zip	QED With Image Data	Finished	3	2024-10-01 17:35:18.0	2024-10-04 12:17:05.0	2024-10-04 12:19:48.0	02:43
5400	admin	gerber-EPO240766.zip	QED With Image Data	Finished	3	2024-10-01 17:35:18.0	2024-10-04 12:13:53.0	2024-10-04 12:17:13.0	03:20

Tile view

- Job Querying
  - Clicking a single job queue entry to access its top-level details:
    - Full contents of the incoming archive
    - Layer stackup image and functions, referenced to original and renamed PCB layer names
    - PCB top/bottom view, based on settings for solder mask, legend, and surface finish
    - Per-layer view of all PCB layers
    - Contents viewing of any text/PDF/Word/Excel/... document in the incoming archive

- Info/warning/error messages encountered while processing
- Access to the Quotation and Engineering Data (QED) PDF report



- Add Job
  - Creating a new entry in the job queue by submitting an archive to the Integr8tor Nexus server, automatically triggering a data input and analysis
  - Entering any of the product's technical specifications already known at the time of submit

- Modify Job
  - Completing or changing the product's technical specifications from the Modify Job dialogue
  - Automated partial job reprocessing to bring images and QED PDF in line with updated info

- Restart Job
  - Restarting data input and analysis of a previously processed job, while keeping or changing technical specifications as needed

- Move Job
  - Making a job reprocess only a selected part of the entire data input and analysis process

- Accept Remarks
  - Acknowledging Job Remarks issued by the server during processing, tidying-up all Job Remark references in the QED report

- Continue Job
  - Allowing a job that was stopped along the way to continue its route

- Abort Job
  - Interrupting a running job

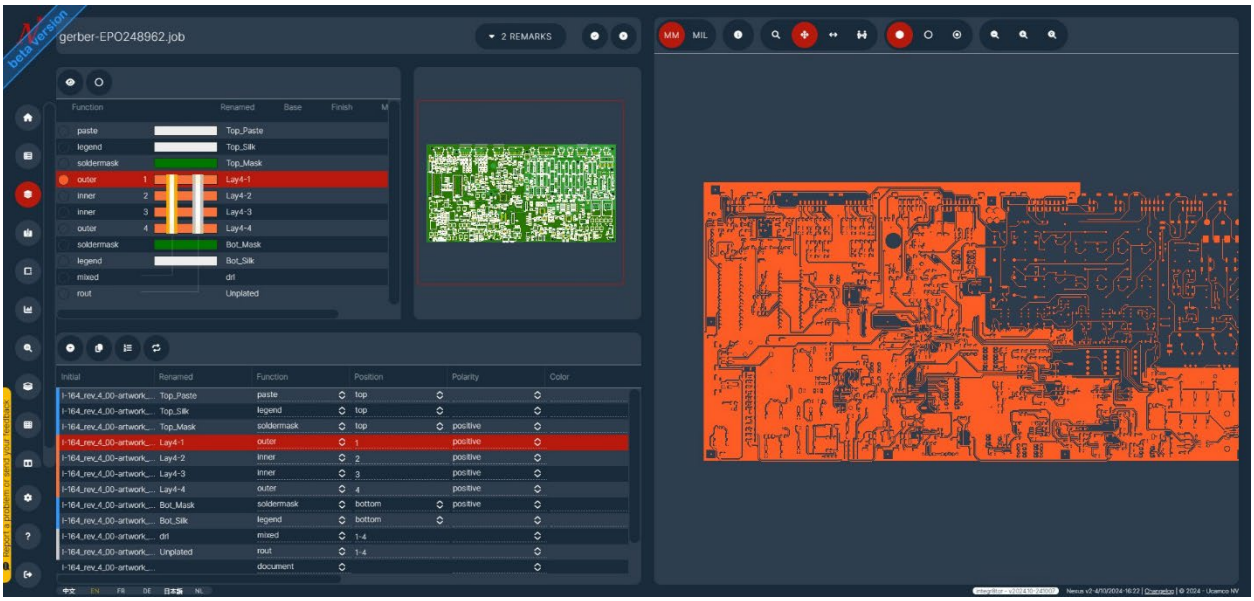
- Remove Job
  - Deleting an entry and its associated data from the job queue

- Unlock Job
  - Removing an unintended job lock to make the job available for further use

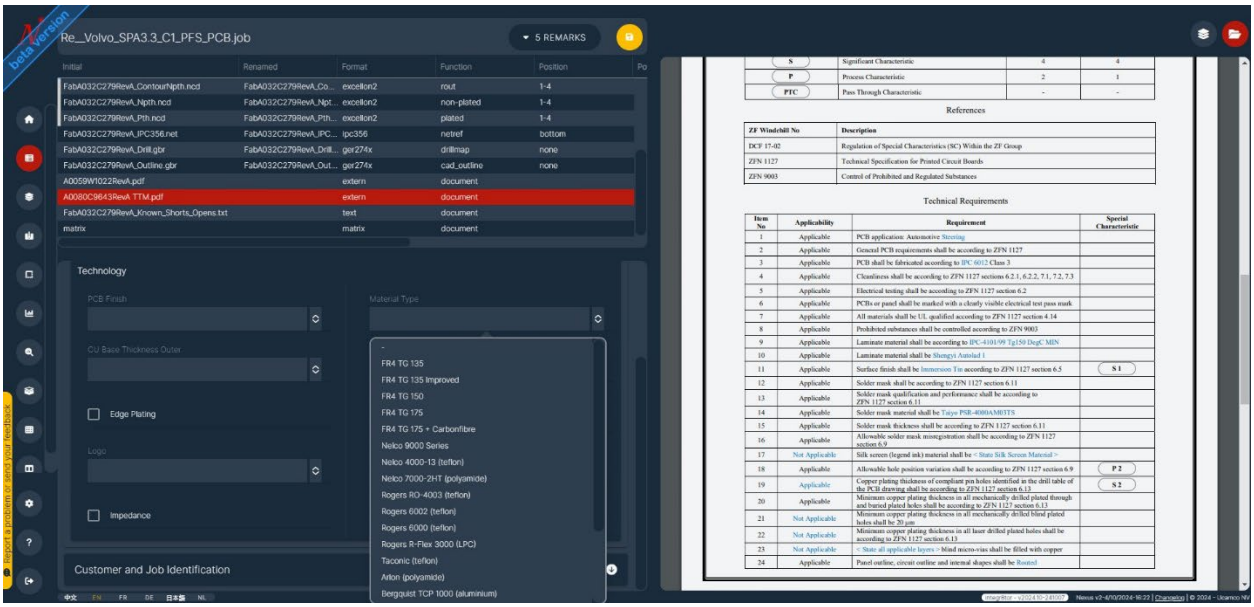
- **Links to external applications**
  - **Bi-directional hotlink to *UcamX Workflow Edition* (WE) for full-scale DPF layout editing capabilities. Note that this functionality requires a UcamX_WE version v2024.11-2412XX or higher**
  - **Bi-directional hotlink to Polar Instruments' *SpeedStack* Stack up Builder tool for advanced base material handling, stackup DRC's and before-and-after pressing material thickness calculations (Polar license required)**

- Layer Stackup Review and Edit
  - Layer stackup reviewing and editing in a dedicated application
  - Extended layer attributes table with original layer names, renamed layer names, layer functions, layer positions, polarity, colors, base and finished copper thickness and etch compensation values
  - **Editing of any of these layer attributes**
  - **Drag and drop functionality for easy corrections in case of incorrect stackup**

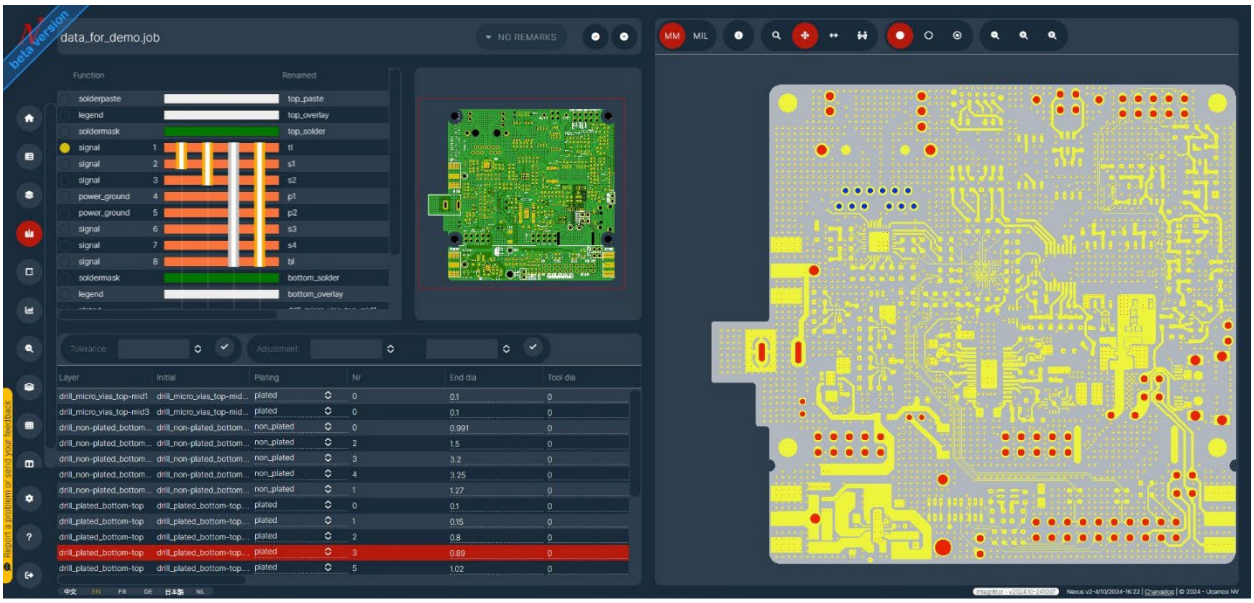
- **Consolidating all modifications in the job on the Integr8tor Nexus server with a (partial) rerun**
- Fully dynamic, high resolution, multiple-layer PCB graphics with built-in zooming and measuring capabilities



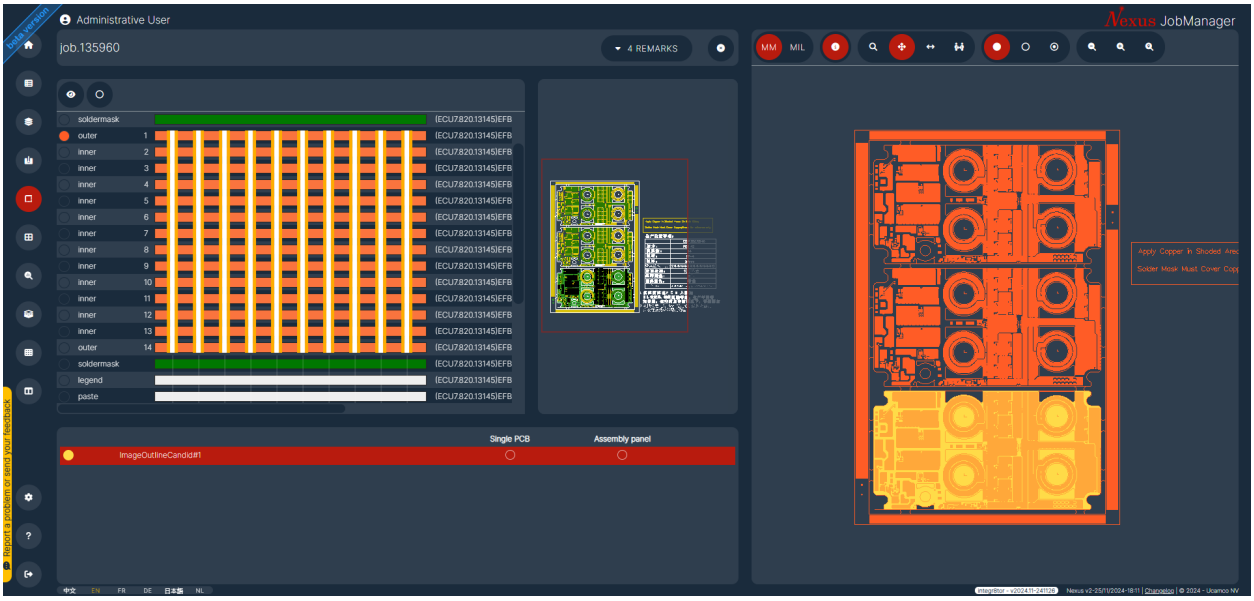
- Tec-spec Review and Edit
  - Dedicated application for entering or reviewing a product's technical specifications
  - **Full functionality and information storage available even when a job is still running to speed up the entire process**
  - **Manually drag and drop values from documentation files to the Tec-spec input form**
  - Side-by-side display of Tec-spec input from and archive documentation files contents
  - **Optionally extendable with AI-powered PDF Xtract plug-in for automatic extraction of technical specifications**
  - Tracing AI-recognized technical specifications to their origin (under development)
  - **Storing Tec-spec results with the job on the Integr8tor Nexus server**



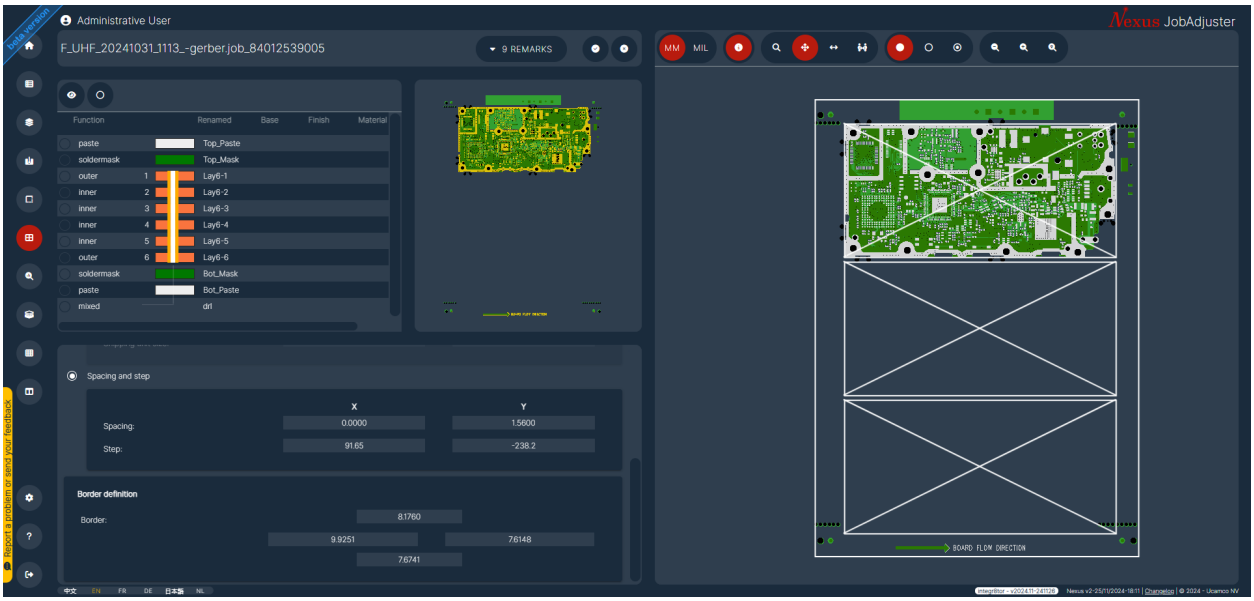
- Drill Data Review and Edit
  - ➢ Reviewing correct drill tool attribute assignment:
    - End diameter and tool diameter
    - Plated/non-plated recognition
    - Laser drilling recognition
    - Tool function (via, component,…)
    - Hole and slot counts
  - ➢ **Rectifying any inconsistencies in the drill tool attributes and registering the updated information with the Integr8tor Nexus server**



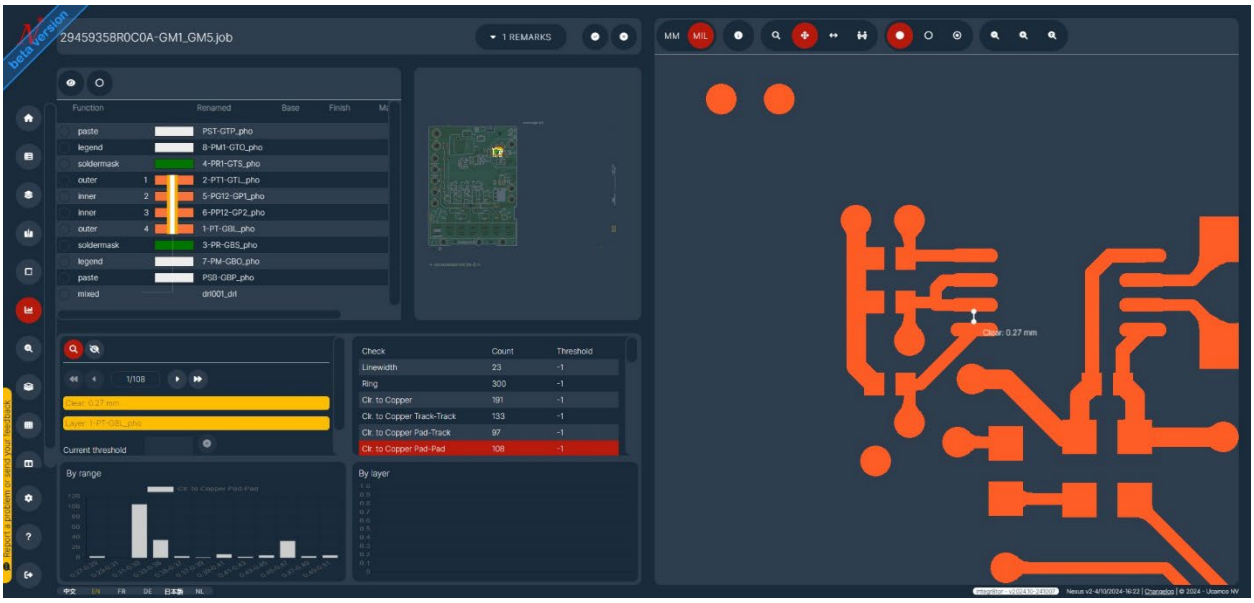
- Outline Review and Edit
  - Reviewing one or several potential outline candidates the system has discovered while searching for the best possible PCB or assembly panel outline
  - **Picking such an outline candidate and promoting it to become the job or assembly panel outline**
  - **Manually selecting chains of vectors from other layers and declare them as the job or assembly panel outline (under development)**



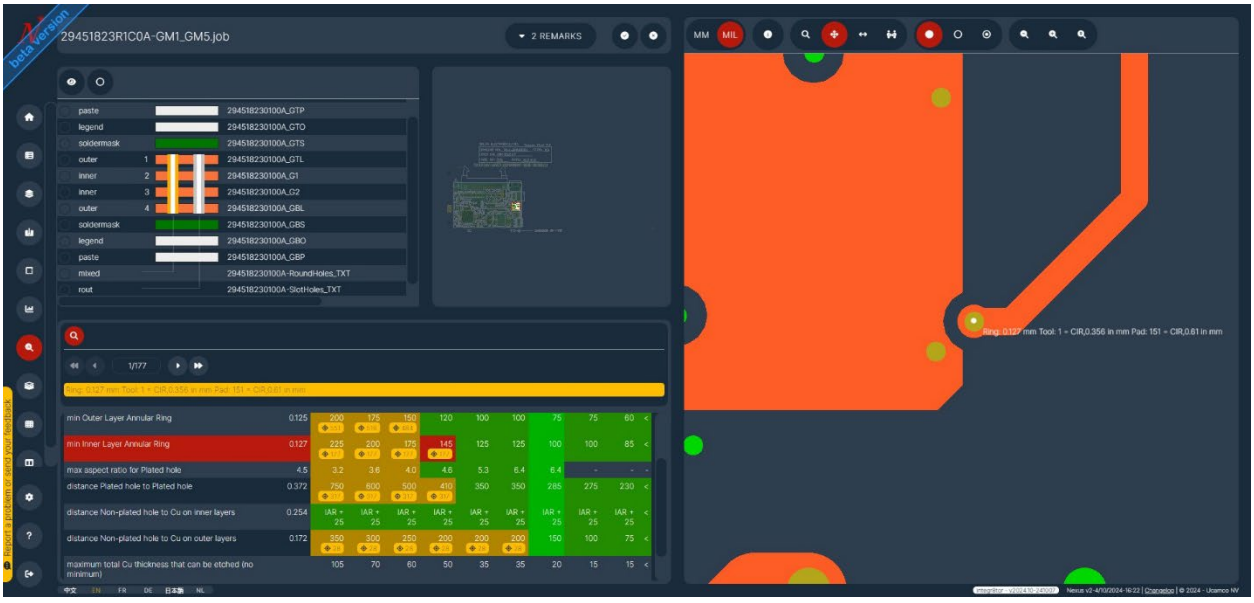
- Sizes Review and Edit
  - Reviewing an assembly panel layout, either manually defined or resulting from the assembly panel auto-recognition server module (licensed – under development)
  - Checking the correctness of the number of repeats in X and Y, the step values, and the size and location of the rail areas
  - Validating the correct single image definition in case of incoming flat panel data
  - **Overwriting any of these settings and saving them to the Integr8tor Nexus server**
  - **Triggering a partial reprocessing of the job and update of QED documentation**



- Hotspot Review and Thresholding (Integr8tor Nexus hotspot server license required for generating analysis data)
  - Reviewing smallest values from the analysis results and locating them on the board
  - Supporting fully dynamic, high resolution PCB graphics with on-screen feedback
  - Including feature measurements and query functionality to validate analysis results
  - Filtering on hotspot type, PCB layer or value range
  - **Blanking out non-relevant analysis values and replacing them with a higher, more pertinent value and location in QED PDF (under development)**

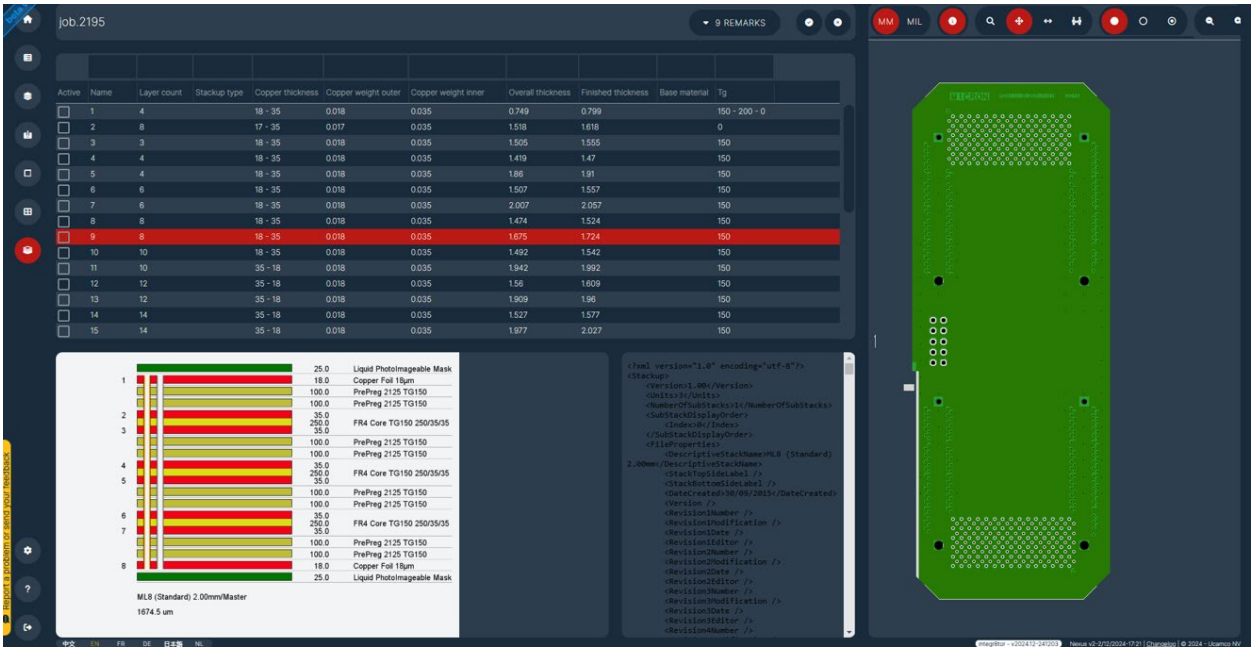


- Capabilities Review (Integr8tor Nexus DFM Classes server license required for generating analysis data)
  - ➢ Consulting the results of a board's manufacturability analysis
  - ➢ Locating the features on the board responsible for pushing it into a higher manufacturability class
  - ➢ Supporting fully dynamic high-resolution PCB graphics with on-screen manufacturing class violation feedback
  - ➢ Including feature measurement and query capabilities



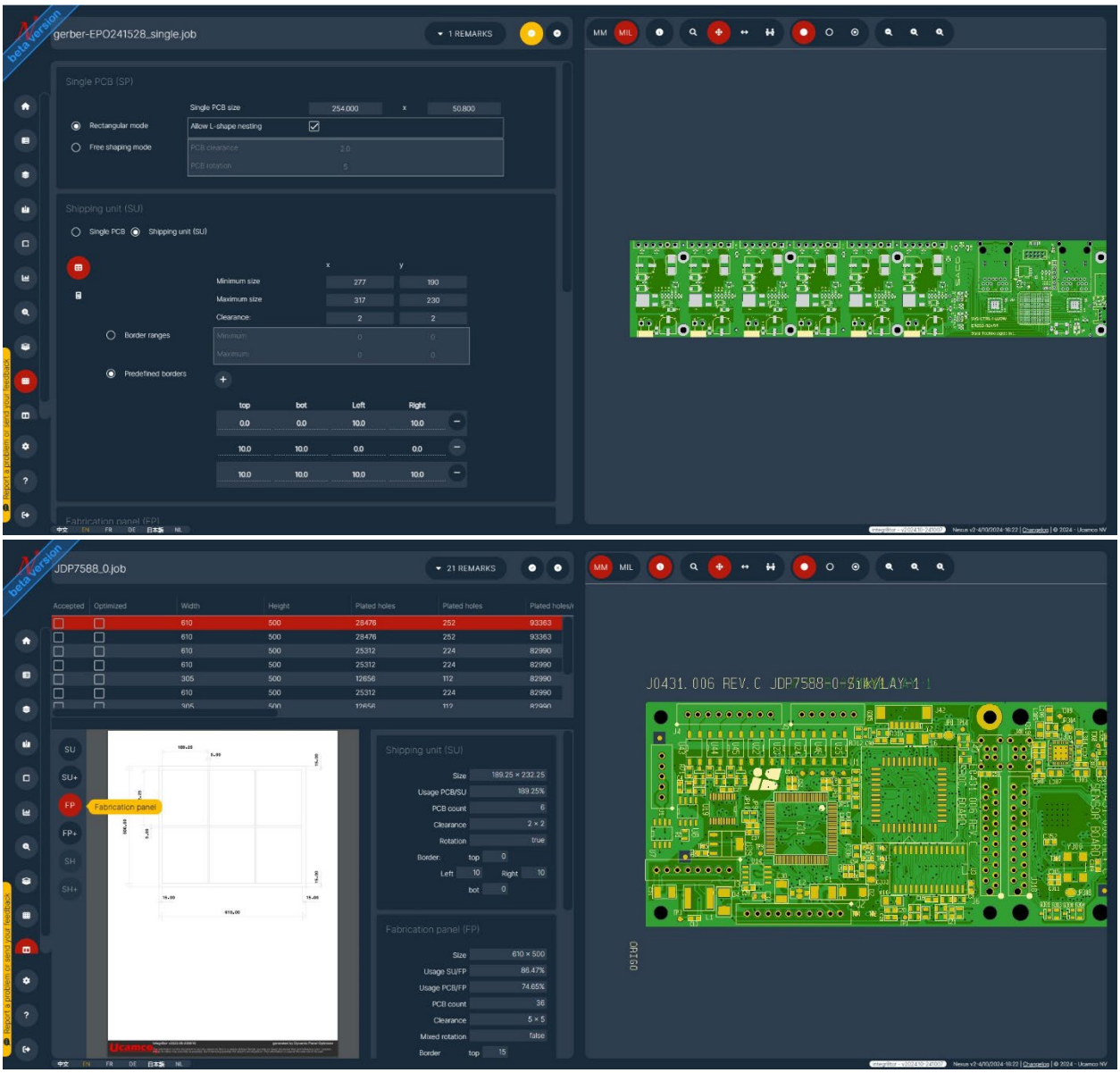
- Stackup assignment from library (Integr8tor Nexus Stackup Template Library server license required)
    - ➢ Checking for existing stackups in the library on the server to match customer requirements in terms of
        - Finished stackup thickness
        - Layer count
        - Base material requirements
        - PCB type
        - Copper weights
        - Tg value

    - ➢ Identifying “closest fit” if no 100% match turns out available
    - ➢ **Selecting a stackup from the templates library and attaching it to the job**



- Panel Setup and Layouts Review (Integr8tor Nexus Dynamic Panel Optimizer server license required for generating analysis data)
    - ➢ Reviewing different assembly and fabrication panel layout solutions, optionally with the corresponding material sheet cutting proposals
    - ➢ Identifying the solutions that provide best yield or material utilization
    - ➢ Dimensioned drawings and real product PDF panel images with textual feedback

- **Modifying DPO's default nesting mode, rotation/spacing constraints, panel, border and rail size settings, and triggering a new run of the Panel Optimizer**
- **Selecting the panel solution to be included on QED PDF**



- **Software setup and configuration**
  - **Dedicated environment for system setup and Nexus client user interface configuration**


Server
Units
Unit
mm
Decimals
3
Paths
Work folder
C:\Users\ucam\data\i8_output\%customer%\%pid%
Ustack exchange folder
C:\tmp\i8polar\%pid%
OpenOffice folder
C:\Program Files\LibreOffice
Session server
Min port range (> 1000)
30000
Max port range (> 1000)
60000
Max idle time (> 0)
3600000
ms