QuickLoad-Central and QuickEdit User Guide

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Introduction

Navigating QuickLoad Central

The **File Stores** tab allows you to add or remove the saved locations where STDF files are stored. You can also select to show files from only one file store, or from all file stores.

From the **Filter** tab, you can apply filter criteria to narrow the list of files and lots shown on the **Dashboard**.

The **Analytics Dashboard** tab, or *Dashboard*, includes the majority of the available options for working with STDF data.

On the **Logs** tab, log messages are shown for all operations, including many changes to configuration settings. To clear the log, right-click and choose **Clear Log**.

Viewing QuickLoad-Central Information

From the **File Stores** tab, the **Filter** tab, or the **Dashboard**, you can click **About QuickLoad-Central** in the bottom right corner to open the **About** window. This window shows the software version, your license number, and information about the components of QuickLoad-Central. You can also register a new software license from this window.

Registering a License

1. From the **About QuickLoad-Central** window, click **Register New License**.
2. In the **Input** dialog box, type or paste your license number.
3. Click **OK**. Your new license is registered.

Managing File Stores

File Stores are the folders where QuickLoad-Central looks for STDFs (including gzipped ones) to preprocess and show on the Analysis Dashboard. This is not applicable to QuickEdit. Subfolders of File Stores will also be searched.

Adding File Stores

1. Launch QuickLoad-Central. The **Getting Started** dialog box opens.
2. Click **OK**. The **Choose a folder** window opens.
   a. From the **File Stores** tab, you can also click **Add** or right-click and select **Add File Store**.
3. Browse to a location where STDF files are stored.
4. Click **Open**. The file store is added to the **Dashboard**.

Removing File Stores

1. From the **File Stores** tab, click the file store you want to remove.
2. Click **Remove**. The file store is removed from the **Dashboard**.
   a. You can also right-click the file store and select **Remove File Store**.

Managing the File List

Filtering by File Store

To show files from only one file store:

1. From the **File Stores** tab, right-click a file store and select **Show Only Files from This File Store**.
2. Files from the selected file store are shown on the **Dashboard**.

To show files from all file stores:

1. From the **File Stores** tab, right-click and select **Show Files from All File Stores**.
2. Files from all file stores are shown on the **Dashboard**.

Filtering the File List

To apply filter criteria:

1. Click the **Filter** tab.
2. Enter filter criteria in one or more fields. Fields may be left blank.

Note: Filters will add a wildcard before and after the search strings you enter. Text filters are case-insensitive. For example, abc in the Lotid filter will match a file with lotid ABC (or ABCD because of the automatic wildcard).

3. Click **Apply Filter** or press Enter. A filtered list of files is shown on the **Dashboard**.

To remove filter criteria:

1. Click the **Filter** tab.
2. Click **Clear Filter**. The filter fields are cleared and all files are shown on the **Dashboard**.
   a. From the **Dashboard**, you can also right-click and select **Remove Current Filter**.

Selecting Files

To select a file from the **Dashboard**, select the check box for the file. You can also right-click and choose **Select All Files** or **Unselect All Files**.

Using the File List Management Menu

From the **Analysis Dashboard**, you can right-click to access the **File List Management** menu. This menu includes the following options.

Option	Description
Reprocess Selected Files	Reprocesses the selected files based on the current configuration settings
Forget Selected Files	Removes the selected files from the file list
Add Comments to Selected Files	Opens a dialog box for each selected file; enter a file description

Editing Lot Attributes

1. From the **Dashboard**, select the check box for each file you want to edit lot attributes for.
   a. If you select multiple files, the lot attribute values you enter will be applied to all of the selected files.
2. Right-click and choose **Edit Lot Attributes**.
3. From the **Edit Lot Attributes** dialog box, enter values for the following fields as needed:
   a. Lot ID
   b. Sublot ID
   c. Testcode
   d. Wafer ID
   e. User Text

f. Flow ID

g. Proc ID

h. Mode Code

i. Retest Code

j. Temperature

4. Optionally, select the **Insert WRR If Missing** check box to insert a Wafer Results Record in any selected file that is missing one.

5. Click **OK**.

Merging Files

1. From the **Dashboard**, select the check box for a file.
2. Right-click and choose **QuickEdit Selected Files**.
3. From the **QuickEdit** window, click **File** and choose **Merge STDF**.
4. From the **Open STDF File** dialog, browse to the file you want to merge and click **Open**. The selected file is merged with the file that was already open. Some header information of the selected file may be discarded when the files are merged.
5. Click the save icon to save the merged file.

Merging normally merges the current file and the new selected files into the equivalent of one file. However, if the "Merge Wafers When Merging Files" option (under Options->File Loading) is checked. Each wafer will be merged separately. For example, if you loaded a file from wafer 1 and merge in 1 file from wafer 1 and 2 files from wafer 2, the resulting data in memory will have one set of records for wafer 1 and one set for wafer 2.

Data Views

These views are available as tabs in QuickEdit, and can be opened from the View menu. They are also available as output formats in QuickLoad-Central under "Send Data to Excel", "Send Data to JMP" and "Manage Auto-generation of Extracts". There are two types of data views

- Views based on STDF record types. These views show all instances of a given STDF record type (for example the Master Information Record or Parametric Test Results record) in the loaded files and are editable.
- Reports derived from the data in the loaded STDFs

Table	Description
All Records	All STDF records in the loaded file. Useful for editing specific records
Bin % Pareto	Shows all bins and the % for each. Soft/hard and separated by lot and wafer are controlled by File Summary configuration options
Bin Count Pareto	Same as Bin % Pareto except with counts instead of %
File Summary	Multi-table report. Shows basic info about first file (lot, program, etc), part counts, bin counts, test fail counts. Has many configuration options such as breaking data down by lot and wafer and whether to show site-specific counts
Lot Tree	Hierarchical view of files, lots, tests, parts

Lot Yield	For each lot shows the number of units tested and failed
Multiple Results by Test	Shows one row per test, one column per unit. For MPR (multiple results per test) tests shows one row per pin per test, which is how it is different from Results by Test
Parametric Results	Important view with one row per unit, one column per test, plus lots of descriptive columns. Has many filter options.
Part Summary	Has one row per unit, with columns with information about the unit. Similar to Parametric Results but with only the columns describing the unit.
Part Test Rows	Has one row for each test for each part. This table can get quite large, so it is best to use it with small files.
Record Type Counts	Shows the total number of records for each STDF record type in the loaded files
Results by Test	Important view with one row per unit, one column per test. Has many filter options.
Stacked Bin Map	Shows the number of occurrences at each x,y location of each bin. Normally used when loading multiple wafers together. Soft vs hard bin is controlled by Wafer Bin Map use hard bin option.
Statistics	Shows common statistics for each test (median, yield, mean, cpk, etc.)
Test Conditions	Will show identified test conditions if one of the test condition DTR options is selected and followed in the loaded files.
Test Descriptions	Shows key information about each test (limits, test order, etc.) Limits can be edited here.
Test Fail %	Shows number of tested, failed, yield % for each lot or wafer for each test
Validation Errors	Identifies problems and spec violations in the loaded STDFs
Wafer Bin Changes	For wafer data with multiple files loaded, shows x/y locations with bin changes between files
Wafer Bin Map CSV	Tabular wafer map
Wafer Bin Table	One row per x/y location, shows bin value for each file loaded that has wafer data

Changing Configuration Settings

From the **Dashboard**, right-click and select **Configuration**, then select the check box for a configuration option to enable it. To disable a configuration option, clear the check box for the option.

If you open a file in QuickEdit and change configuration settings from the Options menu, they will automatically be updated in the Configuration menu of the Dashboard. Likewise, any settings you change from the Dashboard are also updated in QuickEdit.

The Configuration menu includes global settings, PAT Limits, Sanity Limits, and the following submenus:

- Charts

- File Loading
- File Saving
- File Summary
- Parametric Results
- Tests
- Wafer Bin Map

Global settings, PAT Limits, and the options for each submenu are described in separate sections.

Global Settings

Option	Description
Convert File Store CSV and WAT to STDF	QLC will attempt to convert files with CSV or WAT suffixes to STDF if they are found in one of the File Stores. Conversion will only work if the CSV is similar to the format used by QLC/QE Parametric Results or if the WAT file uses the TSMC WAT file format.
Extra Logging Of Report Generation	Will include extra logging of automatically generated reports.
Include Out of Sequence Test Results	Causes QE & QLC to include test results in association with the next part if they are not properly logged between the PIR and PRR. This problem does not occur often.
Pregenerate File Statistics	Automatically generates file statistics in the background when you open QuickLoad-Central.
Read Test Conditions from DTR with COND:name=value,[name=value]…	Reads test conditions from the Datalog Text Record (DTR) if the DTR record starts with "COND:" and then defines the condition as key value pairs separated by commas, for example "COND:temp=25,voltage=7". Each test condition for a part will have its own row in the "Parametric Results" table.
Read Test Conditions from DTR with Custom Key Name	Reads test conditions from the Datalog Text Record where the record text is keyname=value and the keyname is defined using the "Customize Test Condition Key" option on the Options menu. For example, if the custom key name is "INC" the DTR text entry could be "INC=25". Test conditions will be shown in "Parametric Results" as described above.
Read Wafer Info From DTR	QLC & QE will attempt to read the wafer id from DTR (datalog text) records if the DTR follow certain standard formats. Usually this is used for final test data where the wafer information is stored on each part.
Remove Deleted Files From Dashboard	If files are deleted from the file store their information will be removed from the database and dashboard.
Save All Data in DB (Postgres Only)	If you are using a Postgres db to store the data instead of the default sqlite, additional information will be cached about files.
Use File-based Dashboard	See *Use File-based Dashboard Options*
Use UTC Instead of Local Time	Uses Coordinated Universal Time (UTC) instead of local time for various date fields

Set Storage Location for Database	By default, QuickEdit and QuickLoad-Central both use a sqlite database. This is included with the installation. If you want to use sqlite but with a file stored in a non-default location, choose the "Set Storage Location for Sqlite Database File" sub-option and choose the directory where the file will be stored. If you want the same database to be used by several users, especially for QuickLoad-Central, sqlite may not work well because only one user can open the file at a time. In this case, QuickLoad-Central will also work with a Postgresql database. Instructions for downloading and setting up Postgresql are outside the scope of this manual, but you can configure QuickLoad-Central to use a new or existing Postgresql database. Choose the sub-option for "Set Postgresql DB Location" and enter the requested configuration information. For best results, restart QuickLoad-Central after setting this option. Once this is done, QuickLoad-Central should then work smoothly with multiple users.

Use File-based Dashboard Options

The Dashboard shows different columns when **Use File-based Dashboard** is selected or cleared. Columns in *italics* are shown with either Use File-based Dashboard selection, although the columns may change position.

Selected				
Lotid	*Sublotid*	*Start Time*	*File Name*	*Part Type*
Program	*Program Rev*	*Parts*	*Good Parts*	*Tests*
Yield	*Avg Test Time*	*File_Size*	*Testcode*	*Tester*

Cleared				
Part Type	*Program*	*Program Rev*	*Lotid*	*Sublotid/Waferid*
Test Code & Temperature	*Test Step (retest step)*	*Tester & Operator*	*Handler/Probe Card*	*Start & Finish Time*
Parts	*Good Parts*	*Yield*	*Top Fail Tests*	*Avg Test Time*

Configuring PAT Limit and Sanity Limit Preferences

1. Right-click and select **Configuration**, then click **PAT Limits Configuration**. The Define PAT Limit Preferences dialog opens. Click Sanity (Outler) Limits Configuration for an equivalent dialog that controls sanity limits that are optionally used to remove outliers from charts.
2. Click the list and choose one of the following options for the center point and standard deviation version:
   a. **Center:Mean and Sigma:Standard Deviation**

b. Center:Median and Robust Sigma:IQR/1.349
3. Enter a number in the **Sigma Count** field, or click the up and down arrows to change the number.
4. Click **OK**.

Chart Options

Option	Description
Assuming Missing Retest Point Matches Original in Kappa	For Kappa Correlations between probe and reprobe, if an X/Y location lacks a value in the reprobe file, assume it has the same bin as in the original file
Default Zoom to Limits	Zoom charts to limits rather than data
Generate Separate Pareto Per File	Shows a separate pareto chart for each selected file
Include Bin Name in Description	Adds the bin name to the bin number in charts
Include Goal Cpk in Test Stats Table When Set	Include the goal Cpk with test statistics
Include Others Category in Paretos	Combine all residual bins or tests into an Others group and include that in the pareto
Maximize Plot Window Size	Opens charts in maximized windows
One Point Per File on Yield Trend	Show one point per file rather than one point per lot on Yield Trend chart
Show Count on Pareto	Show the numeric value of each bar on pareto charts
Show One Plot Per Page	Shows one plot per page when saving charts to PDF
Show Pct on Pareto	Show the pct of total of each bar on pareto charts
Use Partid as X Value On Trend Charts	Use the partid as the x value, rather than using the index in the dataset.
Use Small Point Size in Charts	Shows smaller sized data points in charts

File Loading Options

Option	Description
Always Recreate STDF Summary Records	When selected, STDF summary records are automatically recreated.
Merge Simultaneously Open Files	When selected, if you open an additional file, it will be merged with the first file you opened. Some header information will be discarded from the second file.
Merge Wafers When Merging Files	Merges files for each wafer separately if multiple wafers are present in a merge. They will all be on one view, but they will be combined separately under each wafer id, each having its own set of summary records, unique x/y values, etc.

File Saving Options

Option	Description
Save All Test Info in Every Record	When selected, all test information is saved in every record, even if some of the test information is identical for all records.

File Summary Options

Option	Description
Include Hard Bins in Summary	Show counts and description for each hard bin
Include Head in Site Description	Most files only rely on test site and not test head, but technically STDFS rely on both, and both are shown with this option
Include Only Last Result for Each Test for Each Part	If a test is performed multiple times for a part, only the last one will be included in test summary statistics
Include Lots	Make a separate column for each lot in the File Summary table showing number of units tested and failed
Include Site Results	Shows separate soft bin counts and percentages for each site
Include Soft Bins in Summary	Show counts and description for each soft bin
Include Sublots	Make a separate column for each wafer in the File Summary table showing number of units tested and failed
Separate Lots by Test Stage	Show separate counts for each test stage for each lotid.
Show Empty Bins	Shows the bin records for empty bins
Use Current Limits When Recreating Summaries	Recreates summaries using the current edited limits, not the original limits in the file

Parametric Results Options

Option	Description
Describe Pin With Channel Name	Uses the channel name for the pin when building test names for tests derived from MPR records, that is tests that reported one result for pin.
Describe Pin With Logical Name	Uses the logical name for the pin in names for tests derived from MPR records.
Describe Pin With Physical Name	Uses the physical name for the pin in names for tests derived from MPR records.
Display Scaled Test Results	When selected, the scale listed for the test in the file will be used in displayed results. For example, if the unit for a test is V and the scale is 3, results or limits will be displayed as mV. If the scale is –3, they will be displayed as kV.
Display Scaled Test Results Using Format String	Formats results using a format string provided in the file, after scaling the result as described above. This defines the number of digits shown before and after the decimal point.
Display Unscaled Test Results Using Format String	Formats results using a format string provided in the file. This defines the number of digits shown before and after the decimal point.
Ignore Test Plan Delimiter	Some testers record a fake part called "Test Plan Delimiter", possibly with test config info. Omit this part from part lists and summaries.
Show Cycle Count for FTR	For functional test results show the cycle count field as the result for the test

Show Limits as First Rows	Shows rows for low and high limits and units at the top of the Parametric Results view. This is especially useful when exporting data to CSV or Excel.
Show Non-Test Rows First in Results By Test	In the Results By Test view show first the rows that do not show test results.
Show Only First Failed Test	In the list of failed tests for each part show only the test that failed first, according to results order in the file.
Show PF Per Test	Shows a Pass/Fail result for each test for a part.
Sort Tests By Test Order	Shows tests in the order they first occurred in file, rather than alphabetically
Use Part Sequence Instead of Partid	Some test platforms do not provide a valid partid. This option says to use the sequence (ie 1 for the first part, 2 for the second, etc.) as the partid

Parts Options

Option	Description
Create Missing PRR	If the file contains PIR without a missing PRR, create them. This usually happens in a file that ended unexpectedly.
Force Superseding of Duplicate Partids	For repeated partids only the latest value is shown and included in counts.
Force Superseding of Duplicate X/Y Parts	Data may contain duplicate X/Y combinations, often the result of retesting the same part. When this option is selected, the latest duplicate X/Y parts are shown by default in views such as Parametric Results. When it is cleared, all duplicate X/Y parts are shown.
Include Original Results of Retested Parts in Counts	When selected, counts on File Summary and Statistics analysis will include all results for retested parts. When cleared, counts only include the latest results for retested parts.
Use QRTAG GDR Entries as Partid	If the file had Generic Data Records matching certain conventions, they will be treated as a serial number stored on the part and used as the Partid.

Tests Options

Option	Description
Allow Multiple Tests Per Name	Allows tests to be created that share a name but have different number
Allow Multiple Tests Per Number	Allows tests to be created that share a number but have different names
Allow Multiple Tests Per Number But Share Limits	Identifies tests by the combination of number and name, but tests share limits
Allow Variable Limits	Allows the limits for a test to change during testing
Include Test Name in Displayed Test Name	Includes test name in test-based column headers
Include Test Number in Displayed Test Name	Includes test number in test-based column headers

Include Units in Displayed Test Name	Includes test unit of measure in test-based column headers
Make Separate Test Per MPR PIN	For Multiple Parametric Results tests, creates a separate test in views such as Parametric Results for each pin used for test
Merge Programs When Loading Multiple Files	When multiple files are being loaded, merge programs so that equivalent tests are combined.
Store Part Test Time as Test	Treat the test time of each part as a test to support visualization of test time.
Trunc Test Names At First Space	Truncates test names at the first space in the name. This may affect uniqueness.

Wafer Bin Map Options

When all Wafer Bin Map options are cleared, only soft bin numbers are shown in the chart. The options allow you to include the bin count and bin name, or use hard bin data instead of soft bin data. Additional wafer map options such as rotation are available using the "Wafer Map, Custom Stacked or Bin" chart.

Option	Description
Include Bin Count in Wafer Map	Shows the bin count in parentheses in the wafer map
Include Bin Name in Description	Shows the bin number and name in the wafer map
Include Bin Percent on Wafer Map	Include bin percent on wafer map legend
Reverse X Axis of Wafer Map	
Reverse Y Axis of Wafer Map	
Show Bin Number on Wafer Map	Include bin number on wafer map legend
Show Surrounding Grid on Wafer Map	Show not just the wafer, but the surrounding cells of the grid. This sometimes facilitates viewing edge die or non-standard shapes, for example from strip test.
Show Wafer Edge on Wafer Map	Draws the edge of the wafer
Use Hard Bin in Summary and Wafer Map	Shows hard bin data in the file summary and in the wafer bin map (also a File Summary option)

Making Charts

You can make charts for a single file, or for multiple files at the same time. For some chart types, a separate chart will open for each file; for others, the charts will show combined data for all selected files, grouped by file.

1. From the **Dashboard**, select the check box for each file you want to make a chart for.
2. Right-click and choose an option from the **Make Charts** menu.
   a. For some options, a separate chart is shown for each selected file.
   b. For other options, a combined chart is shown with data grouped by file.
   c. In QuickEdit, make charts by selecting an item on the Charts menu
3. From any chart, you can right-click to access options to copy, save, or print the chart. You can also zoom in or out, select auto range, or view chart properties. Some charts have additional options, such as zoom to data or zoom to limits.
4. Available Charts

Chart Name	Description
Bin Failure Pareto	Pareto of failure bins, showing bars for most frequent bins and cumulative curve
Bin Pareto	Like Bin Failure Pareto but includes all bins
Box Plot	Graphically depicts groups of data through their quartiles
Combine Plot Types	Includes multiple selected charts, for example statistics and histogram for each selected test
Drift Analysis	Trend chart with additional statistics showing additional statistics about differences between the parts in the 2+ groups, if all groups have same number of parts
Gauge R&R	Analysis of differences between groups, if all groups have same number of parts
Histogram	Divides results into bins of equal range and shows bar plot of number of parts in each bin
Kappa Correlation	Tabular analysis of bin result changes between two files
Limit Analysis	Enables what if analysis for new limit or Cpk values. Includes all fields from Statistics, updating failure counts & Cp* based on new limits or goal Cpk. If used in Combine Plot Types, limit lines on other plots are also updated for new hypothetical limits
Normal Probability Plot	Plots actual results against percentage of normal result
Scatter Plot	Plots results of one test against another with one point showing the results of each part for the two tests
Stacked Bin Map	For each bin (or selected bin for custom stacked map) draws one wafer map showing the percentage of units at each x/y location that have the applicable bin(s). Primarily useful when you have loaded or selected multiple wafers
Statistics	Tabular showing statistics for each test (or each test for each group) such as low, high and total failure count and yield, quartiles, standard deviation, Cpl, Cpu, Cpk
Test Bar Chart	A chart showing the selected tests, with the % of units tested and failed for each.
Test Fail Pareto	Pareto of tests that failed the most frequently in the included data
Trend Chart	X/Y plot with parts on X axis and test result on y axis

Wafer Bin Map	Classic wafer map with one color per bin, showing bin at each location on wafer
Wafer Map, Custom Stacked or Bin	Generates bin or stacked wafer map with various configuration options such as defining bins to be stacked and rotating wafer
Wafer Parametric Map	Divides results for selected tests into ranges, assigns colors to the ranges and then shows the applicable color for each die location
Yield Trend	X/Y plot of yields. X is configurable typically has one entry per lot, ordered by time, with yield on y scale

For **Combine Plot Types**, select the check box for each type of plot you want to combine in the chart.

For **Bin Pareto**, **Bin Failure Pareto**, **Kappa Correlation, Stacked Bin Map**, **Stacked Pass Fail Map**, **Test Fail Pareto**, **Wafer Bin Map**, **Wafer Map Custom Stacked or Bin, Wafer Pass Fail Map**, and **Yield Trend**, you do not need to enter parameters.

For **Box Plot**, **Drift Analysis**, **Gauge R&R**, **Histogram**, **Normal Probability Plot**, **Scatter Plot**, **Statistics**, **Test Bar Chart, Trend Chart**, and **Wafer Parametric Map**, you will enter parameters to determine the chart display.

Making Charts with Parameters

1. From the Select Tests to Include dialog, highlight each test you want to include in the chart by clicking with the mouse. Hold down the control key while clicking to select multiple tests or hold down the shift while clicking to select a range of tests.
2. To divide the results for each test into multiple groups, click **Grouping Level 1** and select a column to group by (for example Lot id, Sublotid (waferid) or Test_site).
   a. Repeat this with **Grouping Level 2** and **Grouping Level 3**, if needed.
   b. You can limit the set of values to include for any of the grouping levels being used by clicking "Filter Input File Values", highlighting the values to include, and clicking OK.
3. Enter values for **Graph Label**, **X Axis Label**, and **Y Axis Label**, if needed. You can also leave one or more of these fields blank to use the default values.
4. Select or clear the check box for each of the following options (some options do not apply to all charts):
   a. **Draw spec limits**: shows spec limits on the chart
   b. **Draw PAT limits**: shows PAT limits on the chart
      i. You can define PAT limit preferences by selecting **PAT Limits** from the Configuration menu.
   c. **Filter outliers with sanity limits**: does not show values that occur outside of the high and low sanity limits
      i. Click **View/Edit Sanity Limits** to adjust the high and low sanity limits as needed.
   d. **Filter Part List**: opens a dialog where you can select parts to exclude
   e. **Draw separate plot for each group**: shows a separate plot for each group, rather than showing all groups on one chart
   f. **Separate plot per test pin:** for tests with one result per pin from MPR records, charts each pin separately
   g. **Show one plot at a time**: shows each chart separately and provides Next Chart and Prev Chart navigation buttons, rather than showing all charts at once
   h. **Label group values**: shows a label with the values for each group

5. For Histogram, you must select one of the following options:
   a. **Fast Bin Calculation**:
   b. **Optimal Bin Calculation**:
   c. **Specify Bin Count**: enter a value for the bin count
   d. **Specify Bin Width**: enter a value for the bin width
6. Histogram also includes the **Draw Normal Curve** option. Check the box for this option if you want to show the normal curve on the chart.
7. Trend Chart include the **Draw Groups Sequentially** option. Check the box for this option to show groups in a sequential order.
8. Trend Chart, Drift Analysis and Scatter Plot include several **Fit Line Using Method** options. Choose from the following options to connect points or fit a line to the data.
   a. No Line: does not show a line
   b. Connect Points: shows lines connecting points along the x-axis.
   c. Ordinary Least Squares Regression: fits line to the points using least squares
   d. Polynomial Regression:
   e. Power Regression:
9. For Gauge R&R you must have multiple files loaded together but not merged. Parts are implicitly compared and you should choose one or more other groups, for example tester and test site.
10. For Drift Analysis, load two or files with data for the same partids. Group by input file, or equivalent. The analysis will draw the trend chart with additional fields characterizing the drift between group values at the bottom of the chart.
11. To change the chart type to be draw, or include additional ones, click Change Chart Type, then check the chart types to be included.

12. Click OK.

Managing Auto-generation of Extracts

From the Manage Auto-generation of Extracts menu, you can set the root location for extracts and select which extracts will be auto-generated when you launch QuickLoad-Central.

Setting the Root Location for Extracts

1. From the **Dashboard**, right-click and select **Set Root Location for Extracts** from the **Manage Auto-generation of Extracts** menu.
2. From the dialog box, browse to the folder location where you want auto-generated extracts to be stored.
3. Click **Open**.

Enabling Auto-generated Extracts

When you enable an auto-generated extract option, the extract is immediately auto-generated for each file and saved to the root location. Extracts are also processed for each new file you add, as long as the extract option is still enabled.

1. From the **Dashboard**, right-click and select the check box for an option in the **Manage Auto-generation of Extracts** menu.

2. To enable another auto-generated extract option, right-click and choose to the **Manage Auto-generation of Extracts** menu. Select the check box for the auto-generated extract you want to enable.

Viewing Extract and Report Files

1. From the **Dashboard**, select the check box for each file you want to view extract and report files for.
2. Right-click and choose **Show Generated Extracts and Reports**. The **Extract and Report Files** window opens, showing a list of files.
3. Right-click a file and select **Open File** or **Open Folder Containing File**.

Exporting Data

You can select files and send data to Excel or JMP. You can also export data from selected files to a CSV file or export the current dashboard data in CSV format.

Sending Data to Excel

1. From the **Dashboard**, select the check box for each file you want to send to Excel.
2. Right-click and choose **Send Data to Excel**, then choose a report option. Table… lists the available reports.
3. The data is saved to a CSV file in a subfolder of your root location for extracts, and QuickLoad-Central attempts to open the file in Excel or whatever application is associated with CSV files on your system.

Sending Data to JMP

1. From the **Dashboard**, select the check box for each file you want to send to JMP.
2. Right-click and choose **Send Data to JMP**, then choose a report option. Table… lists the available reports.
3. The data is saved to a JSL file in a subfolder of your root location for extracts, and QuickLoad-Central attempts to open the file in JMP.

Exporting Data to a File

1. From the **Dashboard**, right-click and select **Export Data to File**, then choose **Parametric Results**.
2. From the **Save** window, browse to the folder location where you want to save the file.
3. Enter a file name.
4. Click **Save**.

Exporting the Dashboard

1. From the **Dashboard**, right-click and select **Export Dashboard**.
2. From the **Export Dashboard** window, browse to the folder location where you want to save the current dashboard data.
3. Edit the filename as needed and add a file extension, such as .csv or .txt.
4. Click **Save**. An **Export Complete** message is shown.

Editing Files

To open files for editing from the **Dashboard**, select the files, right-click and choose **QuickEdit Selected Files**.

The first time you open a file with QuickEdit, the **File Summary** table is shown. The **Parametric Results**, **All Results**, **Hardware Bin Records (HBR)**, and **Software Bin Records (SBR)** tables also open by default. The tables that are shown when you close a file will be shown the next time you open a file.

To open additional tables, right-click and select an option from the **View Report Table** menu or the **View STDF Record Type Table** menu.

To close a table, right-click it and select **Close Current Table**.

When you right-click a table, you also have options to find a column; sort table rows; cut, copy, and paste data; and export data to a CSV file.

From the **File Summary** table, you can right-click a parametric test and choose **Statistics**, **Box Plot**, **Histogram**, **Normal Probability Plot**, or **Trend Chart** to view the selected chart for the test.

From other tables, such as **Parametric Results**, you can right-click a record and choose options to edit or delete it. The Edit option opens a dialog box containing the fields you can edit within the record.

Managing Files in QuickEdit

Opening New Files

1. Choose **Open** from the **File** menu or the open icon from the toolbar.
2. Browse to the file location and click **Open**.

Opening Recent Files

1. Choose **Open Recent Files** from the **File** menu or from the toolbar.
2. Select the check box for each file you want to open and click **Open Selected Files**.

Viewing and Editing STDF Files

Sorting Data

To sort data in most tables, click any column header. In most views you can also sort by multiple columns.

1. Right-click and choose **Sort Table Rows**.
2. You can click **Restore Original Order** to go back to the original sort order of the file, or click **Reverse Original Order** to reverse the original sort order of the file.
3. To sort by multiple levels, choose an option from the **Column For Next Sort Level** list and click **Add Sort Level**.
   a. You can select the **Sort Z-A** check box to add Z-A sorting for the selected column.

4. To remove one or more rows from the sorting list, select the check boxes for each one in the **Delete** column and click **Delete Selected Rows**.
5. Click OK.

Editing Data

1. Choose a tab.
2. Right-click in any cell and choose **Edit [record type]**. For example, choose Edit MIR.
3. A window opens, showing editable fields sorted in the order they appear in the file. Edit values as needed and click **Save**.

Adding Data

1. Choose **Create Record** from the **Edit** menu.
2. Choose the type of STDF record you want to create.
3. Enter values for the new record.
4. Click **Create**.
5. Choose a location within the file for the new record.
   a. If needed, you can edit the values in a record after you create it.

Recalculating Statistics after Editing Data

1. From the **View | Reports** menu, choose **Test Descriptions**.
2. To edit the test name, number, limits or unit, click the corresponding cell, edit the value, and then click in another cell.
3. To remove tests, highlight all or part of the rows for the tests you want to delete. Right click and choose **Delete Selected Tests**.
4. From the **Options | File Summary** menu, select **Use Current Limits When Recreating Summaries**.
5. From the **File** menu, choose **Recreate Summary Records**. All pass/fail information for the test is recalculated using the new limits.
6. From the **File** menu, choose **Save As** to save your changes into a new file.

Saving New Files

You can save a new file in STDF, CSV, XLSX, JSL, or HTML format.

1. From the **File** menu, choose **Save As**. You can also click the save button on the toolbar.
2. In the new window, enter a file name and choose the location where you want to save the file.
3. Click **Save**.

Filtering QuickEdit Views

The views showing part and test raw data (Parametric Results, Results by Test, Multiple Results by Test) have filters available to help the user focus on the data of interest. If a filter has been applied, all charts and exports will only show the current data until the filter is removed.

1) Exclude

a. Exclude Superseded Parts—hide parts that are known to have been retested later, either from matching lot + wafer + x + y or by matched lot + serial number or if the superseded flag is set on the STDF PRR record.
b. Exclude all retests of parts—identified in the same ways as #1, except for the superseded flag.
c. Excluded Selected Hard Bin,
d. Exclude Selected Soft Bin ,
e. Exclude Selected Site —hide all parts with the same value for the selected filter field as the parts in the currently selected rows (or columns for views with the parts as columns such as Results by Test).
f. Excluded Failed Parts—hide all parts with the fail flag set.
g. Exclude Tests With Failures—hide all tests that were failed for any parts.
h. Exclude Failed Parts and Tests—combines #6 & #7.
i. Exclude Parts Failing Selected Tests—excludes all parts that failed any tests that are highlighted.
j. Exclude Selected Parts—excludes all highlighted parts.
k. Excluded Selected Tests—excludes all highlighted tests.
2) Include—most of the include options are the same as the exclude options, except only the affected rows are shown, instead of the affected rows being hidden.
a. Define Test Name Filter...--this allows the user to specify all or part of a test name and keep only the matching tests. Multiple filters can be entered, with a space, then the word OR, then another space between filters.
3) Show Random Sample—a random set of parts will be retained. The user can choose to keep 1, 10, 25, or 50% of the parts.
4) Clear—clear all test-based filters, part-based filters or all filters.

Retest Data in File Summaries

1. To only show bin and test counts for the latest testing of each X/Y and partid, make sure the option "Include Original Results of Retested Parts in Counts" is not checked. Otherwise all testing will be included.
2. This affects all bin counts, test execution and failure counts in the File Summary view as well as the Statistics chart (which is actually a data table).

Raw Data Views

1. Whether parts that were tested again later (superseded parts) are shown in raw views such as Parametric Results is controlled by two settings.
a. If the option "Force Superseding of Duplicate X/Y Parts" is checked, by default superseded data for a part are not shown.
b. The Filter Data option on the right click menu of Parametric Results can control this several ways
   i. Exclude Superseded Parts and Include Only Latest Testing will both exclude rows that do not represent the latest testing of a part.
   ii. Exclude Retested Parts and Include Only First Testing will only show the first time a part was tested.
   iii. Clear Filters will remove these options and show all parts.

Creating STDF from Other Formats Using QuickEdit

Make STDF from CSV

QuickEdit can create STDF files from CSV, but only if the CSV follows an expected structure. The structure matches that created by exporting Parametric Results to CSV from QuickEdit, with a few additional fields available as noted below.   If you need an example file to create this format, please contact us.

1. Click QuickEdit Advanced menu and choose Make STDF From CSV
2. Choose the csv file name
3. After the file loads choose File menu, Save As to save the new data as an STDF. Or you can proceed with analysis.

The following additional column names can be used in the CSV that are not currently in the Parametric Results export format:

*   start_t (file test start time)
*   finish_t (file test finish time)
*   tstr_typ (tester type)
*   cabl_id
*   card_id
*   cont_id
*   dib_id
*   extr_id
*   hand_id
*   lasr_id
*   load_id

Tips for successful use of the CSV to STDF tool

*   Header values (ie values not specific to a part such as part id or x location or to a test result) are only read from the first row in the file that represents a part
*   If you export Parametric Results to csv you will see the format for including test limits and units in the csv. CSV to STDF will read this same format
*   You can add additional test columns at the end of the file before loading it back into QuickEdit. This is an excellent way to add calculated values to an STDF and chart them in QuickEdit.

Make STDF from JSON

QuickEdit can export JSON files that contain one entry per record in the file. These JSON files can be edited and then imported into a new STDF using this option.

Make STDF from TDTF

This will create an STDF file based on standard interpretation of a TDTF (Tester Data Text Format) file.

Make STDF from WAT

This will create an STDF file base on standard interpretation of a WAT export from certain foundries.

Creating from Other Formats

The API underlying QuickEdit is designed to allow easy incorporation of other data formats, for example from non-STDF testers and foundry Etest files. If you are interested in adding one of these contact us at *sales@sprysoftware.net*.