

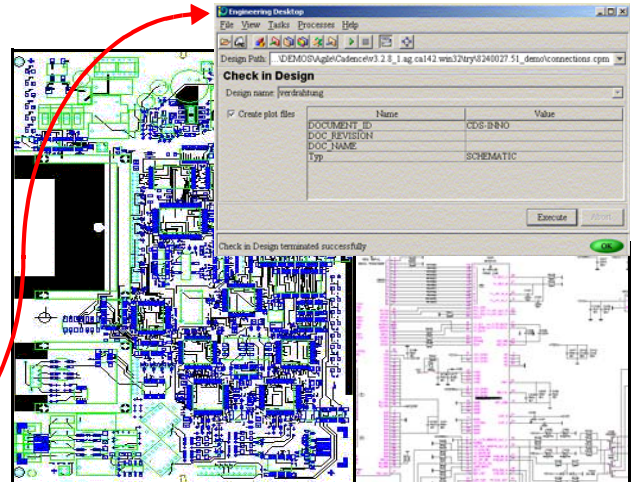
P-CAD® with Product Lifecycle Management

You have invested all this knowledge into your P-CAD design. Now you want to...

- associate it with the versioned data of enclosure, software, documentation, harness, cabinet...
- forward data to other persons in manufacturing, service, qc, purchasing, test, materials control...

You want this process to be automatic, painless, easy and quick and you want to focus on design, not on databases and processes in the company.

➔ You want Integrate



Operation

You operate an Integrate function from the Integrate Java® GUI. The integration establishes the communication between your P-CAD design tools and the PLM system.

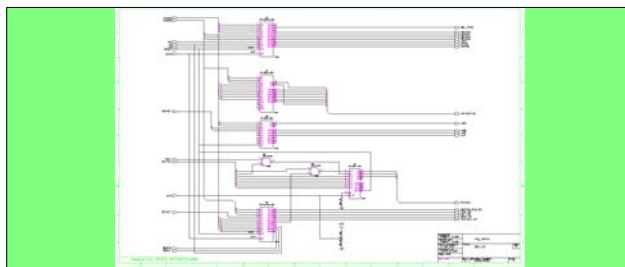
Synchronize Metadata

Build the data model of the electronic product automatically in PLM. In the same process, deposit metadata like part number and version from PLM once per project into the P-CAD design structure.

Metadata	Metadata in Table Field	Field Type
Document No.	T_DOC_DAT_DOCUMENT_ID	S80
Revision	T_DOC_DAT_DOC_VERSION	S10
Version	T_DOC_DAT_DOC_REVISION	S10
Customer	T_DOC_DAT_SEC_CUSTOMER	S20

Check-in

Update drawing frame properties in schematics and text strings in PCB drawings with metadata. Check an innovation container along with plot files of your design into PLM for ECO.



Redesign

Resolve the design for ECO or re-use from an innovation container in PLM into the P-CAD design environment for immediate use, with optional reservation of the design in PLM.

Get

Reuse a design or part of it in a new design.

BOM

Extract preliminary Bill-of-Materials data after physical netlisting into PLM for advance material disposition. Update the BOM in PLM after PCB Layout with associated accessory parts like sockets, heatsinks and firmware. The BOM includes relation attributes like reference designator, x, y, rot, and side.

12050301	340	1	R4	4.445	18.431	180
12050315	350	1	R5	5.955	15.316	180
12050347	360	1	R6	13.325	2.857	180
10721715	370	1	R14	6.955	40.640	90

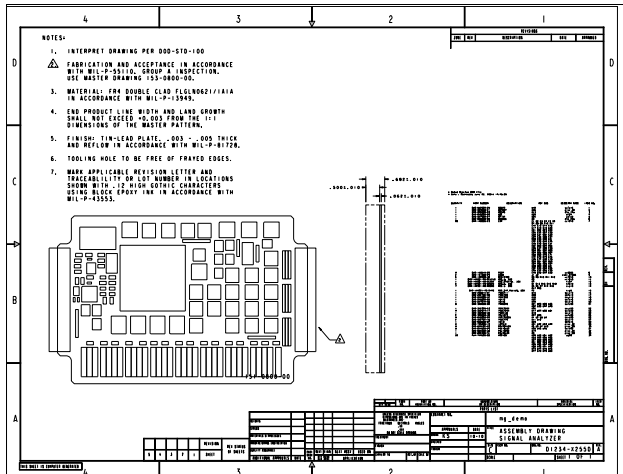
Support of your company's BOM structure including variant Bill-of-Materials from the P-CAD design.

Board Fabrication

Based on configurable Views, build and check-in a versioned container of Gerber and Excellon data for the manufacture of the bare PCB or panel. The data then might be accessed via a password-protected PLM web client by your PCB manufacturer. Optionally also check in the board drawing.

Board Assembly

Deposit versioned data for the variant assembly of the board in PLM such as top and bottom assembly plots which are automatically created for viewing from PLM.



Publish Parts

Capture classified electronic component descriptions in PLM including the release state. Synchronize the items with the part descriptions in the P-CAD library.

bom_back

Review and optionally backannotate legal Bill-of-Material changes from PLM into P-CAD.

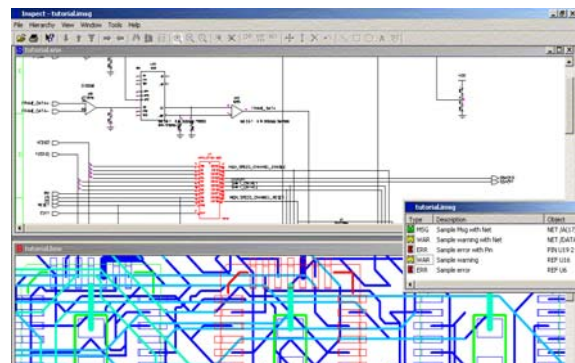
Adaptability

There is a host of features which distinguish your company processes from other companies, ranging from fundamental topics like part number format and BOM sorting sequence to the automatic extraction of variant assembly plots.

So Integrate modules have editable configuration files. These are adapted in the introductory phase to your companies' processes.

Spotlights on some Features

- Interactively selectable variant Bill-of-Materials, schematic plots and assembly plots.
- **BOM**: supports accessory part association with in-circuit programs as pre-programmed devices, multi_level definition of sequence of parts, creation of manufacturing BOMs which optionally include assembly line management data.
- **meta4plot**: update of metadata in drawing frames of plots triggered by a state change in PLM. E.g.: authorized, date, and released, date.
- **Publish Parts**: electronic item synchronisation from PLM into the P-CAD library with optional display of associated data sheets. Optional function **Import Parts** to create preliminary classified electronic items in PLM from the P-CAD library.
- Support of Workflow, History, designer-group based access control, data reservation, ECO process and concurrent engineering.
- Interdepartmental cooperation synchronized in PLM with mechanical design data, programmable logic association, electrical and harness design data, software design.
- Optionally integrated operation with Inspect, an advanced viewing and analysis tool for schematics and PCB data.



- Optional support of concurrent design in distributed engineering organisations.
- Monitor the design progress by grading the design process for cost, MTBF, or multi-suppliers.