



EMS MAGICIAN DELUXE

Software to Automate Your Assembly Process

Converting raw data from your customers into information you can use can be tedious, time consuming and error prone. Customers give us data in all kinds of formats. Rarely, are we lucky enough to receive data that is complete and error free.

EMS Magician Deluxe gives you powerful automation tools that help you convert the data you receive from your customer into a consistent, structured format that you can use downstream in your assembly processes.

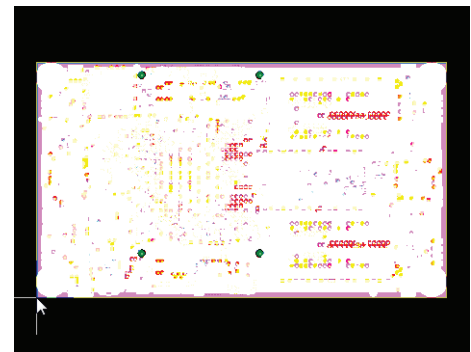
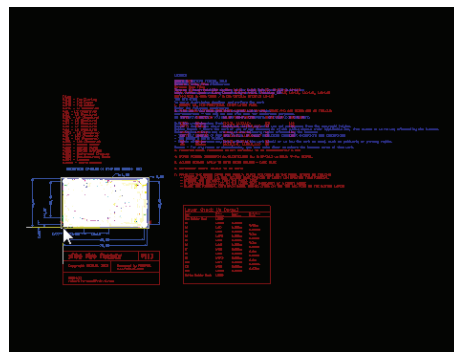


PCB Analyzer

– Organize data received from your customer into a uniform consistent format.

Quickly recognize layer types and rename layers so they make sense. Get rid of the data you don't need and organize the data you do need. Automatically clip data to the board outline.

1*	Gerber Files: GTD	1*	BoardOutline
2*	Gerber Files: GTP	2*	TopSolderPaste
3*	Gerber Files: GTS	3*	TopSilkScreen
4*	Gerber Files: GTL	4*	TopSolderMask
5*	Gerber Files: G1	5*	TopCopper
6*	Gerber Files: G2	6*	2
7*	Gerber Files: G3	7*	3
8*	Gerber Files: G4	8*	4
9*	Gerber Files: G5	9*	5
10*	Gerber Files: G6	10*	6
11*	Gerber Files: G7	11*	7
12*	Gerber Files: G8	12*	8
13*	Gerber Files: GP1	13*	9
14*	Gerber Files: GP2	14*	10
15*	Gerber Files: GBL	15*	11
16*	Gerber Files: GB5	16*	BottomCopper
17*	Gerber Files: GBP	17*	BottomSolderMask
18*	Gerber Files: GB0	18*	BottomSilkScreen
19*	Gerber Files: GM2	19*	BottomSolderPaste
20*	Gerber Files: GM28	20*	PlatedDrills
21*	Gerber Files: GM3	21*	NonPlatedDrills
22*	Gerber Files: GM4	22*	L1-L2-BLI
23*	NC Drill Files: TX1	23*	L2-L3-BUR
24*	NC Drill Files: TX1	24*	L3-L10-BUR
25*	NC Drill Files: TX2	25*	L10-L11-BUR
26*	NC Drill Files: TX3	26*	L11-L12-BLI
27*	NC Drill Files: TX5		
28*	NC Drill Files: TX4		



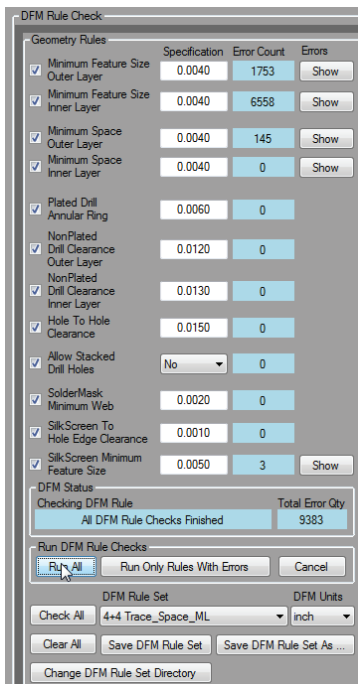
From This

To This

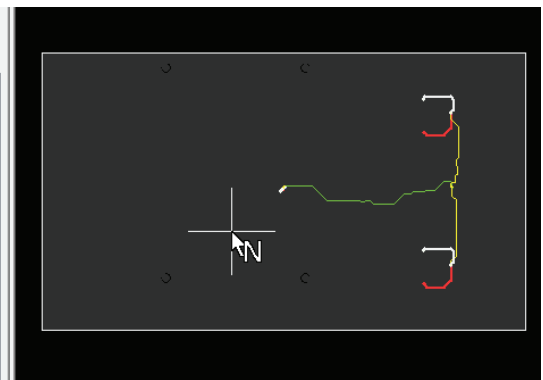
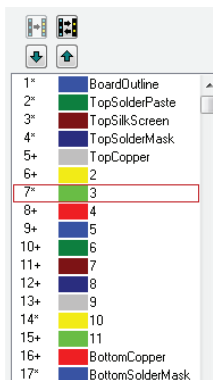
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Custom DFM Checks – If you are providing a turnkey service to your customer that includes the fabrication of a PCB board, then use the PCB Analyzer DFM checks to ensure that your customer data is ready for manufacture. You can



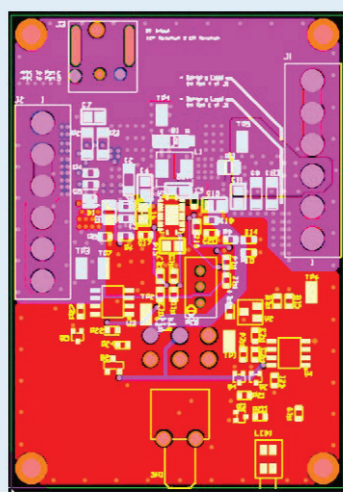
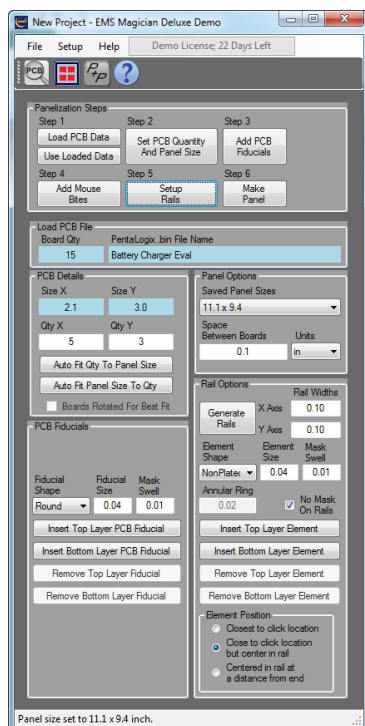
configure and save your own DFM Rule Sets. Quickly run the DFM Rule checks and find errors that, if unfixed would bring the manufacturing process to a halt. Report these problems back to your customer so they can correct their design. This is a service that your customers will appreciate and come to rely on. If you're confident that the data is good (or if the board has already been manufactured), then simply skip the DFM Rule check. Automatically extract a netlist (both IPC-356 and Pentalogix F04 formats). Follow electrically connected nets by clicking on any element associated with the net.



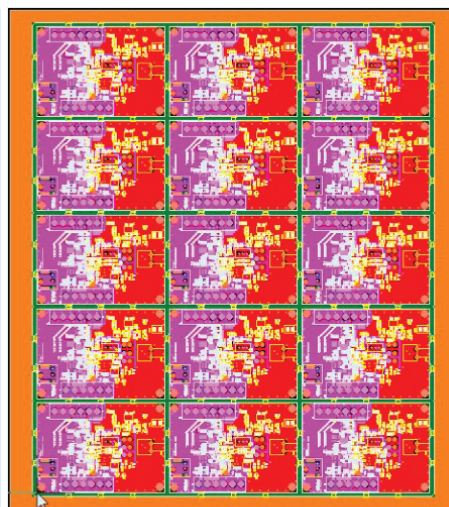


PCB Single Design Panelizer

- You can quickly create an X by Y array from customer supplied one-up data files. Auto-fit board quantity to panel size - or alternatively, set the desired X by Y array quantities and let EMS Magician calculate the most optimum panel size for you. Quickly add PCB fiducials . . . One mouse click does it all. Add mouse bites with a few clicks of the mouse. Add rails, rail tooling holes and rail fiducials. All in just a few minutes!



From This



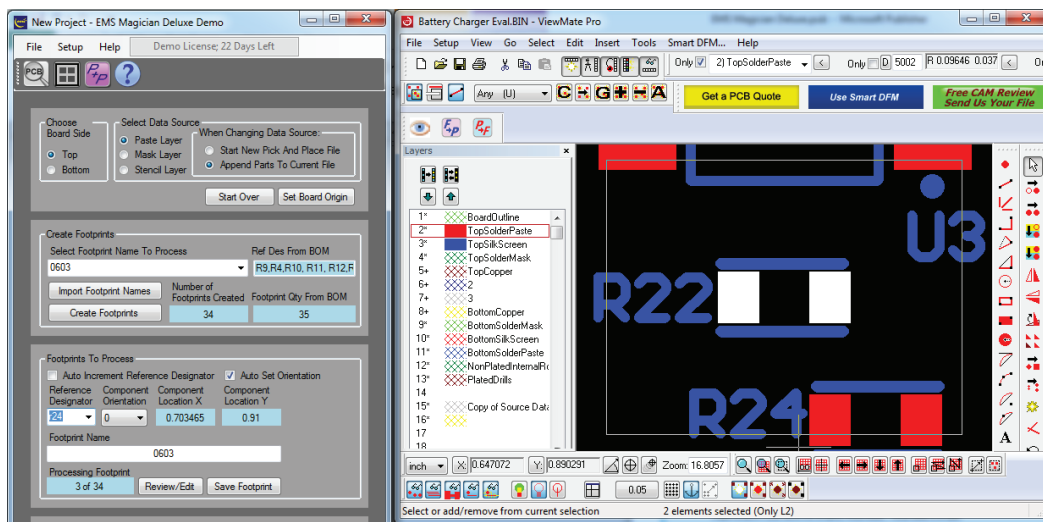
To This

In Less Than 5 Minutes!



Pick and Place File Builder

- No pick and place file available? No problem. Use the Pick and Place File Builder to create a pick and place file from the raw Gerber data. While not essential, you can import a BOM if you have it to simplify the process. The process is simple.



Enter a footprint name.

Select one of the footprints in ViewMate PRO.

Click on the "Create Footprints" button.

EMS Magician finds the remaining footprints.

Assign a reference designator to each footprint.

EMS Magician automatically sets orientation.

Use the included "Footprint Player" to review created footprints. Set the review delay from 2 to 30 seconds. EMS Magician shows you one component at a time. You can quickly review reference designator and component orientation. No need to select each component . . . EMS Magician cycles through each component without user intervention. If you find a problem, pause the player and edit the data.

