Hardware Team Training details

1. Resistor and Capacitors Part number selection.
2. Alternate Part number searching
3. Block diagram preparation using VISIO.
4. System Level, Top level, Detailed Level
5. How to find correct pin outs and mechanical diagrams in data sheet with respect to part number.
6. How to decode the part numbers in data sheets.
7. Schematic symbol library creation.
8. Online Pinout Imports for FPGA and Processors.
9. PCB Footprint library creation. (IPC wizard & Manual)
10. Online FP and Symbol with 3D download and import to MSPL format.
11. How to Verify Symbol and FP.
12. MSPL Database and data base Entry.
13. Altium Database syncing and Verification
14. Everything about Altium ,Single and Multi Board Projects , MSPL Formats, File name Formats, Folder name Formats, Output Formats.
15. Scheamtic Sheet Formatting (Title , title box, Index, Revision )
16. Project Settings ( Error Reporting, Connection matrix, ECO, Sheet References)
17. Schematic Capturing
18. Annotation and Validation
19. Schematic Verification
20. Power tree preparation (Top Power Flow, IC level)
21. Power analysis. (IO, Iq, Branch Currents and Regulator efficiency)
22. Schematic Netlist & Copper Netlist , Generation and Verification (MSPL Format)
23. Explaining about BOM for different departments (Purchase, Assembly, variants, Consolidated)
24. Generation of Board BOM (MSPL)
25. BOM Compression ( Capacitors and Resistors)
26. Generation of System BOM (Mechanical, Looms, Non electrical, connectors and mating)
27. BOM Verification
28. Explaining about layout guidelines document and preparation of Layout guidelines document.
29. How to Convert Schematic to PCB ( Footprints to PCB Linking ,How to fix board dimensions , etc..)
30. PCB Project Rules and Stack-up settings.
31. Component Placement as per LGD.
32. Placement Verification
33. Trace width calculation for particular current value.
34. PCB Routing
35. Project DRC ERC and validation
36. Routing verification.
37. Gerber Generation (MSPL, Fabricators formats, Testing, Assembly)
38. Gerber verification using viewmate
39. Documentation (Assembly,Testing, Software, Simulation)
40. Board Requirement Specification Document (HRS)
41. Power Net
42. Testing Documents (ATP, HCD)
43. Signal Reference List
44. Signal Flow Diagram
45. Looming Documentation (IWD, EWD)
46. Thermal Analysis and Signal Integrity Input document
47. Derating Document
48. How to Make Reports in each stage ( Project Auditing)
49. Final deliverable checking.
50. Final check list.