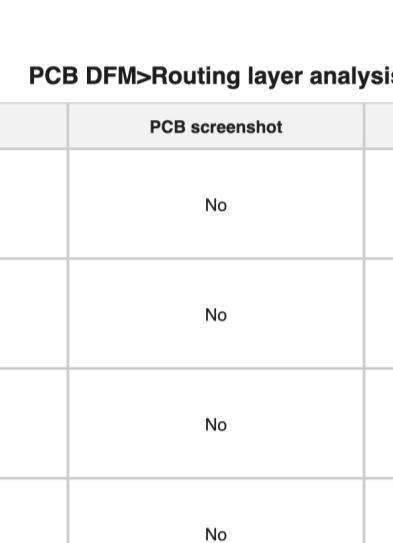
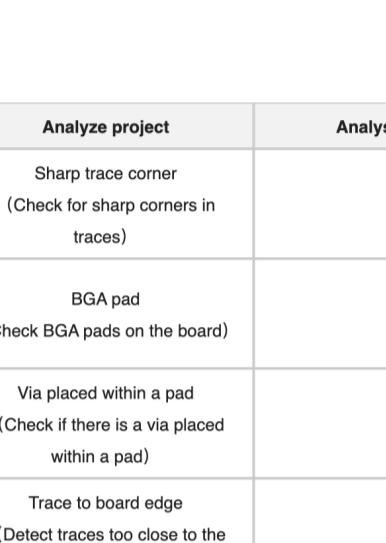


# DFM analysis report\_JLCDFM

File name:	<b>JET RANGER UPPER CONTROLLER 20251214C.zip</b>
Report generated at:	<b>2025-12-14 14:07:44</b>
PCB layers:	<b>2</b>
PCB size:	<b>9.95x9.88cm</b>

Analyze project:  PCB DFM  SMT DFM

## PCB DFM>Routing layer analysis

Analyze project	Analysis results	PCB screenshot	Layer distribution	Statistics
Sharp trace corner (Check for sharp corners in traces)	No	No	No	Danger: 0 Warning: 0 Good: 0
BGA pad (Check BGA pads on the board)	No	No	No	Danger: 0 Warning: 0 Good: 0
Via placed within a pad (Check if there is a via placed within a pad)	No	No	No	Danger: 0 Warning: 0 Good: 0
Trace to board edge (Detect traces too close to the board edge)	No	No	No	Danger: 0 Warning: 0 Good: 0
Trace spacing (Measure spacing between adjacent parallel traces)	0.2mm <b>Good</b>		Jet Ranger Upper Controller- B_Cu.gbr Jet Ranger Upper Controller- F_Cu.gbr	Danger: 0 Warning: 0 Good: 31
Unconnected trace end (Free-standing trace ends not connected to pads)	No	No	No	Danger: 0 Warning: 0 Good: 0
Trace width (Trace width information)	0.25mm <b>Good</b>		Jet Ranger Upper Controller- B_Cu.gbr Jet Ranger Upper Controller- F_Cu.gbr	Danger: 0 Warning: 0 Good: 100
Fiducial (Detect fiducial marks on the board)	No	No	No	Danger: 0 Warning: 0 Good: 0
Pad to board edge (Measure distance of pads from the board edge)	No	No	No	Danger: 0 Warning: 0 Good: 0
Pad spacing (Measure pad to pad spacing)	No	No	No	Danger: 0 Warning: 0 Good: 0
Plated through-hole to trace clearance (Measure clearance of plated through-holes to traces)	No	No	No	Danger: 0 Warning: 0 Good: 0
Annular ring (Annular ring width of pads compared to holes)	No	No	No	Danger: 0 Warning: 0 Good: 0
tth to smd (Detect clearance of vias to pads)	No	No	No	Danger: 0 Warning: 0 Good: 0
Via to pad (Detect clearance of vias to pads)	No	No	No	Danger: 0 Warning: 0 Good: 0

## PCB DFM>Soldermask layer analysis

Analyze project	Analysis results	PCB screenshot	Layer distribution	Statistics
Soldermask bridge (Detect distance between parallel soldermask opening edges)	No	No	No	Danger: 0 Warning: 0 Good: 0
Solder mask opening exposing trace (Detect clearance of solder mask openings to nearby traces)	0.2mm <b>Good</b>		Jet Ranger Upper Controller- F_Mask.gbr Jet Ranger Upper Controller- B_Mask.gbr	Danger: 0 Warning: 0 Good: 26
Soldermask opening with multiple segments (Check if solder mask openings are constructed from multiple geometric shapes)	No	No	No	Danger: 0 Warning: 0 Good: 0
Negative soldermask expansion (Detect solder mask openings smaller than their corresponding pads)	No	No	No	Danger: 0 Warning: 0 Good: 0

## PCB DFM>Silkscreen layer analysis

Analyze project	Analysis results	PCB screenshot	Layer distribution	Statistics
Silkscreen to pad (Detect clearance of silkscreen to pads)	0mm <b>Danger</b>		Jet Ranger Upper Controller- F_Silkscreen.gbr Jet Ranger Upper Controller- B_Silkscreen.gbr	Danger: 100 Warning: 0 Good: 0
Silkscreen to hole (Detect clearance of silkscreen to holes)	No	No	No	Danger: 0 Warning: 0 Good: 0
Silkscreen line width (Check silkscreen line width)	0.1mm <b>Danger</b>		Jet Ranger Upper Controller- F_Silkscreen.gbr Jet Ranger Upper Controller- B_Silkscreen.gbr	Danger: 50 Warning: 10 Good: 18

## PCB DFM>Drill layer analysis

Analyze project	Analysis results	PCB screenshot	Layer distribution	Statistics
Unconnected via (Detect isolated unconnected vias)	Unanalyzed	No	No	No
Missing plated through-hole (Detect top and bottom pads at the same location without plated through-holes)	Unanalyzed	No	No	No
Unconnected via (Detect isolated unconnected vias)	Unanalyzed	No	No	No
Plated through-hole spacing (Measure spacing between plated through-holes)	Unanalyzed	No	No	No
Short slot shorter than twice their width (Detect slots shorter than twice their width)	Unanalyzed	No	No	No
Slot width check (Measure slot width)	Unanalyzed	No	No	No
Via to PTH spacing (Measure spacing of vias to plated through-holes)	Unanalyzed	No	No	No
Unconnected via (Detect isolated unconnected vias)	Unanalyzed	No	No	No