Technical Capabilities

ODAK PCB

Products		
Led Pcb	Single side	Double side
Multilayer	Flex Pcb	Rigid Pcb

Base material	Standard	Advanced
Panel size (mm)	450x550	on demand
Base material	FR4 CEM1 CEM3 IMS	on demand (high tg, Rogers,Teflon, Ceramic, PI, Taconic, Arlon)
Base material thicknesses	0,8 mm to 2 mm	on demand
İnner core thicknesses	0,7 mm to 1,2 mm	min 0,1mm max 1,6mm
Prepreg thicknesses (µm)	glass style 1080=70 glass style 7628=180	on demand
Flexible board thicknesses (µm)	Polyimid 25 Copper thickness 18-35 Coverlayer 25	on demand

Copper thickness	Standard	Advanced
İnner layers	18 µm, 35 µm	on demand
Outer layers	35 µm,70 µm	70 µm to up

Other surface treatments	Standard	Advanced
Solder resist	green,black,white,blue,red	orange, purple, brown
Legent printing	white, blue, black,	orange, yellow, grey, red
Finishing	Lead free HASL, 63/37 HASL,OSP,ENIG	ENEPIG, Immertion tin, Immertion silver, Hard gold

Mechanical features		Standard	Advanced
Holes and Slots (mm)	Ims	1,5 mm hole 2 mm slot	1,2 mm holes 1,5 mm slot
	FR4 CEM1 CEM3	0,3 mm hole 0,7 mm slot	0,2 mm hole 0,5 mm slot
Aspect Ratio		8	10
Milling		1,5 mm to 2 mm	1 mm to 1,5 mm
V-cut angle		45°	-
Bevelling angle range		20°-60°	-

Other special technic capabilities		
Carbon	Via plug	Countersink
Peelable	Filled and capped vias	Impedance control
Blind and Buried vias	Chamfering	

Technical Capabilities

ODAK PCB

Other features		
Solder mask thickness	A (over tracks between)	10µm-30µm
	B (track edge)	> 5µm
	C (between tracks)	> 10µm
Solder mask hardness	6H	
Max nickel thickness of gold finger	240u" (6µm)	
Max gold thickness of gold finger	60u" (1.5µm)	
Range of nickel thickness for electroless nickel and immersion gold	120 u" - 240 u" (3µm-6µm)	
Range of gold thickness for electroless nickel and immersion gold	1u" - 5 u" (0.025µm - 0.125µm)	
Ionic contamination	<1.0ugNaCl/cm2	

Tolerances	Values	
Plated through hole	± 0,075 mm	
Non plated through hole	± 0,05 mm	
Drill positioning	100 µm	
Cu min thickness through plating	class II 20 µm	class III 25 µm
Line width	± 20 %	
Solder resist positioning	± 0,1 mm	
Silk screen positioning	± 0,1 mm	
Registration of innerlayer to innerlayer	± 0,05 mm	
Image to image	± 0,075 mm	
Alignment x axis	± 0,1 mm	
Alignment y axis	± 0,1 mm	
Pcb remaining thickness (web)	± 0,1 mm	
V-cut depth	± 0,15 mm	
Dimension created by v-cut (after seperation per each v-cut)	FR4	± 0,2 mm
	CEM1	± 0,3 mm
	IMS	± 0,15 mm
Milling offset	± 0,1 mm	
Milling tolerance	± 0,2 mm	
Punching tolerance	± 0,2 mm	

Layout guidelines	Standard	Advanced
Min line width	0,15 mm	0,10 mm
Min copper to copper	0,15 mm	0,10 mm
Min annular ring	0,20 mm	0,15 mm
Min solder mask dam	0,10 mm	0,07 mm
Min solder mask clearence	0,10 mm	0,05 mm
Min legent print width/length	0,16 mm/1mm	0,10 mm/1 mm