

# Parlex Technology Roadmap for Rigid-Flex & Multilayer FPC (as of 2008)

METRIC	Driver	Standard User	Advanced User	Future	Long Term
<b>Time Frame</b>		Today	Limited Production	1-3 years	≥ 4 years
<b>Key Parameters</b>					
• <b>Minimum Line &amp; Space (mm)</b>	Portable electronics, displays	0.125 / 0.125	0.1 / 0.1	0.075 / 0.075	0.05 / 0.05
• <b>Hole diameter D/S (mm)</b>	Portable electronics, displays	0.254	0.2	0.15	≤0.1
• <b>Hole diameter- multilayer (mm)</b>	Displays, portable electronics	0.35	0.3	≤0.25	≤0.2
• <b>Blind vias (mm)</b>	Portable electronics		L1 > L2	Buried vias	In development
• <b>Layer count (mm)</b>	Portable electronics	1 – 8	1 – 10	1 – 10	1 – 10
• <b>Soldermask registration (mm)</b>	Camera phones, ECUs	±0.076	±0.06	±0.06	±0.06
• <b>Coverlay registration (mm)</b>	Camera phones, printers	±0.125	±0.125	±0.125	±0.125
<b>Functionality &amp; Materials</b>					
• <b>Surface finish</b>	Technology, Customers, Environmental & RoHS	Immersion, Au/Sn/Ag	Immersion, Au/Sn/Ag	RoHS Compliance	Compliance to future regulations
• <b>Substrates</b>	Cost, signal, speed, RoHS	PI, PEN Adhesive, Adhesiveless	Thin FR4, high speed laminate, RoHS compliance	RoHS Compliance	Optical fiber
• <b>Embedded passives</b>	Technology	Resistors	Inductors	Capacitors	Transistors