ATLAS Pixel Detector Flexible Printed Circuit Board
Design ID number: AFH 4.1
MANUFACTURING SPECIFICATIONS

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Number of metal layers	2
Substrate material	25.4 µm (1 mil) Upilex w/sputtered seed metal (e.g., Cr or TI) and sputtered CU starter layer
Metalization:	
Base metalization	14 µm (0.55 mil) Cu minimum
Barrier metal (where required)	2 µm , ± 0.5 µm (0.079 mil ±0.020 mil) Ni
Au plating (compatible with ultrasonic Al wire bonding):	0.2 µm (0.0079 mil) maximum
Top to bottom metal registration tolerance	No via hole breakout of cover pads
Cover layer (solder mask) top & bottom	25.4 µm (1 mil) Pyralux PC 1010
Required cover layer placement accuracy:	
Bottom	± 125 µm (4.92 mil)
Top	± 125 µm (4.92 mil)

Substrate size: 86.6 mm x 19.6 mm (3.409 in. x 0.7717 in.)