

Technical Specifications for PCB Fabrications Machine

-2/c-

S. No	Name of Items	Nature of Items with general Specification (Technical Specifications)	Qty
1.	Prototyping Machine for PCB and RF Antenna Design with automatic tool change	<p>Single & Double side PCB milling & Drilling and RF Antenna Design or more</p> <p>Working Area: 225 × 175 × 25 mm or better</p> <p>Max. PCB Size: 190 × 130 mm or better</p> <p>Tool Changer Automatic Tool changer: Minimum 12 station or more</p> <p>Milling spindle: High Speed Spindle Minimum 60,000 RPM or more, software controlled brushless/Stepper /Servo motor with pneumatic clamp or more</p> <p>Resolution:1µm or better</p> <p>Repeatability: ± 0.005 mm or better</p> <p>Tool-holder: 3.175mm or better</p> <p>Milling depth adjustment: micrometer precise depth adjustment or better</p> <p>Drilling speed:120 strokes/min or better</p> <p>Travel speed X/Y: 40 mm/s or more</p> <p>Dimensions: W-420 x D-455 x H-435 mm (16,5" x 17,9" x 17,1")</p> <p>Isolation and Track Width- The machine should be capable of making tracks and isolation upto 0.1mm (4 mil) or better</p> <p>X/Y/Z drives: hybrid motors or better</p> <p>Machine table: Flat milled aluminium table with central T-slot or better</p> <p>Software: Machine control and CAM operation Trackmaker should be in single software which should be supplied with the machine and Trackmaker software should have a USB Dongle based licensing.</p> <p>CAM operations, e.g. to generate tool paths for PCB milling machines and for editing, converting, and manipulating data generated by diverse CAD packages. No other software should be needed to move the drive axis or machine PCB. Software should support Import formats - Gerber D & X, Excellon, ODB++, DXF, HPGL or better</p> <p>Dust Extractor: software controlled dust extraction unit which can be switched on or off automatically with machine spindle motor.</p> <p>Dimensions and weight: Machine should be a tabletop unit for lab work and weight must be less than 50 Kgs</p> <p>Z Depth Regulation: Machine should have micrometer depth regulation and should be capable to make working antennas or better</p> <p>Acoustic Cabinet: should be included for sound reduction and job safety purpose or better</p> <p>Air Compressor: should be supplied along with the machine or better</p> <p>CAD Packages need to be supplied with machine to test and use full capability of PCB Prototyping and Antenna Prototyping or better</p> <p>Connectivity: USB Only</p> <p>Must supply one unit of PCB short locator to test and measure fault if any on the pcb</p> <p>Applications: Rapid Prototyping, Technology Research, Teaching, Student Project, PCB Engraving/Milling, model making, Antenna Prototyping or more</p> <p>Universal cutter for 0.2 – 0.5mm paths – 2 pcs</p> <p>Micro cutter for 0.1 – 0.15mm – 1 pcs</p> <p>Contour router 2mm – 1 pcs</p> <p>End mill 1mm – 1 pcs, Drill bit 0.6mm – 1 pcs,</p> <p>Drill bit 0.8mm – 1 pcs</p> <p>Drill bit 1mm – 1 pcs</p> <p>Drill bit 1.5mm – 1 pcs</p> <p>Drill bit 3mm – 1 pcs</p> <p>Cooper plates FR4, format A5, 2 sided – 30 pcs</p> <p>Cooper plates FR4, format A5, 1 sided – 30 pcs</p> <p>Drill underlay material, format A5 – 2 pcs</p> <p>Metal wood cleaning pad – 1 pcs</p> <p>Warranty: 03 Years or more</p>	01

08

Imon