

GCSD Electrochemical Laboratory



Mission:

- Reduce development cost of engineering prototypes
- Reduce schedule time required to verify circuit design
- Develop new processes and procedures
- Provide breadboard fabrication of engineering models

Electroforming

Processing and plating of intricate feeds and transitions, as well as developmental copper plating including complex feeds, waveguides, and precision parts.

PWB Drill and Finishing

Through hole drilling of all types of PWB's and large assemblies.

Controlled Environment Etch

Fabrication of large antenna arrays, the removal of mandrels from feeds, transition and is adaptable for most large etching requirements.

Photoresist and Exposure

Application of either dry film laminate or liquid resist. Image exposure, development and removal of photoresist

Plating and Chemical Processes

PWB fabrication and surface finishing operations:

- Through-hole plating
- Electroless and Electrolytic copper and nickel plating of metal and plastic
- Electrolytic gold plating of various components
- Electroless tin plating
- Electrolytic tin-lead
- Final etching of PWB's
- Chemical milling of various metals
- Customized cleaning processes

Fabrication

2-layer and multilayer PWBs using G-10, Teflon, Duroid (all types), and Polyimide materials, antenna patterns, stripline, micro-strip, and flex circuits (including multilayer).