

DESIGN & DISCOVERY

Open Days July 1990

RUTHERFORD APPLETON LABORATORY

SCIENCE AND ENGINEERING RESEARCH COUNCIL

SPECIALIST ELECTRONIC WORKSHOP

The Specialist Electronic Workshop provides engineering support to the design engineers working at RAL and in collaborating institutions. In order to avoid damage to the modern components employed in fabrication, the workshop is a designated static-sensitive area and is fully-equipped with static-dissipative flooring, benches and procedures.



PCB Assembly



Module Prototype Assembly

The workshop provides facilities which complement those of commercial companies, utilising a range of prototyping and small batch manufacturing techniques which are described below and overleaf.

MODULE PROTOTYPE ASSEMBLY

- Layout of prototype circuit boards using CAD
- Assembly from diagrams and schematic drawings
- Design and manufacture of test equipment
- Commissioning of completed modules

SMALL BATCH ASSEMBLY OF PCBs

- Assembly and wiring of boards using conventional components and hand soldering

WIRE WRAPPING

- Semi-automatic using downloaded CAD information

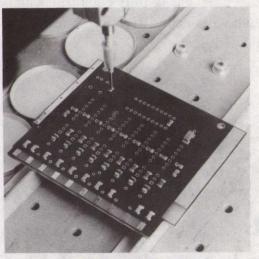
SURFACE MOUNT ASSEMBLY

- Clean room conditions
- Miniature components
- High density circuits
- Special solder techniques

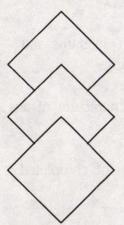
The availability of these in-house facilities for prototyping and for small batch production complemented by commercial facilities allows the provision of a very flexible service to the scientific and engineering research community.



Wire Wrap



SMT Component Placement



For further information, contact Peter Sharp or Andrew Kurzfeld on 0235 446242 or 0235 445286.

