



PRE-PRODUCTION

Barco Ucam integrated pre-production CAM stations
 Barco Silverwriter imagesetter
 Windows-based support workstations
 Cimnet Systems Engenix (automated traveler generation)
 Polar Instruments controlled impedance 2D field solver

DRILL ROOM

Excellon drills (4)
 Posalux high speed drill
 Resin debur machine
 Glenbrook X-ray

PRINT ROOM

Fully Automated Bacher 700 printing system
 Maintech DFL2200 Double-roll cut sheet laminator
 OLEC Accuprint AP30 Fine Line 8KW exposure unit
 Chemcut 547XL dry film developer
 Violux/Douthitt screen production system
 Automated environmental control system

MULTILAYER

TMP 4 opening vacuum lamination press
 Prepreg storage unit
 Excellon flash router
 Environmentally controlled layup room
 Bacher automated post-etch punch (4 camera alignment)

PROCESS ROOM

MacDermid electroless line
 IS dry film stripper
 Chemcut 547XL etcher
 Western Technology conveyORIZED tin strip line
 Lantronics TT30 vertical Hot Air Leveler (45 degree)
 Western Technology conveyORIZED pre and post-clean system
 MacDermid Sterling Silver line
 MacDermid OSP line

PLATING ROOM

5 cell copper plating line with automated brightener replenishing system
 2 cell nickel plating line
 Nickel / gold tab plating system
 Rohm & Haas ENIG line

PLANT SYSTEMS

Water pre-treatment plant
 Integrated backup and fault detection compressed air system
 85,000 CFM make-up air system
 Chicago Plastics mist eliminator
 Reverse osmosis water generator with de-ionization system
 50 HP vacuum system
 50+ Windows XP shop floor movement/tracking stations
 3-50HP compressors with On-Demand Smart System

PROCESS CONTROL LAB

Ionic contamination analyzer (panel and piece format)
 Statistical process control system
 Milton Roy spectrophotometer
 Nikon Optiphot—100 microscope
 CVS automated plating bath analyzer
 Buehler automated cross-section equipment
 Buehler Isomet 1000 precision saw
 Buck atomic absorption unit (AA)
 CMI 900 X-Ray fluorescence measurement system
 Polar Instruments CITS500 controlled impedance tester

SOLDERMASK / NOMENCLATURE

Argus top/bottom spray system with I.R. tack cure
 IS Pumiflex scrubber
 DPI500 automated screen printer
 Tunnel oven
 Chemcut 547XL soldermask developer
 Grieve ovens
 Via plug screen tables

MACHINING

Excellon Mark VI routing machines
 AccuSystems AS-150-SE jump score machine
 Bevelmate
 Depanelizer

INSPECTION AND ELECTRICAL TEST

Camtek 3G-MS AOI with EYE-Q intelligent software
 Mania Acceler8 scanner
 Mania Ultim8 (1000 volt) high-speed flying probe tester (2)
 ACU-GAGE coordinate measuring machine (large format)