



# EQUIPMENT LIST

## PRE-PRODUCTION

Ucamco Ucam integrated pre-production CAM stations  
Windows 11-based Engineering workstations  
Aptean Engenix (automated traveler generation)  
Apsim RLGC integrated 2D field solver

## DRILL ROOM

Excellon drills (2)  
Pluritec Automated drills (3)  
Posalux high speed drill  
Pluritec X-Ray & high-speed drill  
Resin debur machine

## PRINT ROOM

Automated Orbotech Paragon 9800i LDI  
Maintech DFL2200 Double-roll cut sheet laminator  
Hakuto 6630NP laminator  
Automated Orbotech Nuvogo 600 LDI (Soldermask) - **2019**  
Advanced Engineering (AE) mylar peeler  
Automated Wise dry film developer - **2023**  
Technosystems Robotic Loader & Unloader - **2021**  
Class 100,000 clean room

## MULTILAYER

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

## PROCESS ROOM

MacDermid electroless line  
Wise automated SES line (barcode recipe controlled) - **2022**  
Wise automated 4 brush debur - **2022**  
Lantronics TT30 vertical Hot Air Leveler (45 degree)  
NTO Lead-Free Hot Air Leveler  
Western Technology conveyORIZED pre and post-clean system  
MacDermid Sterling Silver line

## PLATING ROOM

8 cell automated copper plating line with pulse rectification  
2 cell automated copper via fill tanks - **2023**  
Nickel / gold tab plating system

## VIA FILL

ITC THP 35 automated vacuum assist via fill machine  
Wise Cleverstar 650 planarizer

## 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  
60+ Windows 10 shop floor movement/tracking stations  
3-100HP compressors with On-Demand Smart System

## PROCESS CONTROL LAB

Ionic contamination analyzer (panel and piece format)  
Statistical process control system  
Milton Roy spectrophotometer - **2023**  
Nikon Optiphot—100 computerized microscope  
CVS automated plating bath analyzer - **2022**  
Buehler automated cross-section equipment  
Buck atomic absorption unit (AA) - **2023**  
Bowman X-Ray fluorescence measurement system - **2023**  
Polar Instruments CITS880s controlled impedance tester

## SOLDERMASK / NOMENCLATURE

Argus top/bottom spray system with I.R. tack cure  
Automated IS Pumiflex scrubber  
DPI500 automated screen printer  
Tunnel oven  
Fully Automated Orbotech Sprint 200 ink jet printer  
Wise soldermask developer - **2023**  
PQ Systems ovens - **2023**  
Atma automated via plug screener

## MACHINING

Excellon Mark VI routing machines  
AccuSystems AS-I50-SE jump score machine  
Shoda Automated jump score machine - **2021**  
Bevelmate  
Depanelizer

## INSPECTION AND ELECTRICAL TEST

CIMS Galaxy AOI (0.25mil) - **2022**  
ATG A7a automated flying probe tester w/ 1000V Hipot  
ATG A7a automated flying probe tester w/ 1000V Hipot - **2023**  
ATG A7 manual flying probe tester w/ 1000V Hipot - **2023**  
MicroVu automated CMM (large format) - **2022**