**AXCELIS Optima MC**
**Vintage:** 2007
Desc:
AXCELIS Optima MC; Axcelis Medium Current Implanter OptimaMD, 1-250keV singly
charged, single wafer, 6 bottle gas box, Eterna ion source (W), dual vaporizer, Plasma Flood Gun, electrostatic chuck,;

The Optima Ion Implantation system (300mm)

Includes the following items:

Injector system, includes:
90 Degrees Radially indexed Dipole Magnet

Target Positioning/Scanning System Includes:
Parallel Beam Using Scanning.
Electrostatic Angle correction.
Solid State Digital Scanning.
Programmable 0 Degrees to 45 Degrees Tilt.
Wafer repositioning through 330 degrees during implant.

End Station, Includes:
Mechanical Limit throughput of 330 WPH
Automated Flat/Notch Alignment Capability.
In-Air/In-Vacuum Continuous Throughput Serial Wafer Handling System.
Sub-Class 1, ULPA Filtered In Air Wafer Handling.

Gas Bottle Enclosure:
Gas Box Strings:
The Basic System Configuration requires Gas Strings (channels).
Buyer must Choost from the Gas Box Fitting Options.
Unit 1662L Mass Flow Controllers included on each string.

A. Line 1 Gas String
HP Argon from External Supply via ¼" VCR fitting

B. Line 2 Gas String
SDS BF3 Enriched Bottle with DIN 8 Fitting
C. Line 3 Gas String
SDS Phosphine Bottle with ½" VCR fitting
D. Line 4 Gas String
SDS Arsine Bottle with ¼" VCR Fitting
E. Line 5 Gas String
HP GeF4 Bottle with ¼" VCR Fitting
F. Line 6 Gas String
HP Xe Bottle with DIN 6 fitting

Vacuum Pumps
Roughing Pump
Edwards Dry Pump consisting of:
1 each Edwards IGX100 Dry Pumps (Beamline);
1 each Edwards IGX100 Dry Pump (End Station).
Note: Roughing pumps can not be remote. Remote of beamline pump will affect throughput and beamline can not jump HV gap.

High Vacuum Pumps (End Station)
CTI Cryo Pump System (25' Remote)
1 ea CTI IS 8, 2 ea CTI IS 250 Cryo pumps

High Vacuum Pumps (Source & Beamline)
Seiko Turbo "No Battery" Pump Package consisting of:
1 each: Seiko STP-A1303C; Seiko STP-1003C-200K
2 each: Seiko Turbo Pump Controllers.

Wafer Handling
300MM Brooks V6M PDO w/ Hermos Tag Readers (Set of 4) or equivalent.

Exhaust:
Top Plumbing Exhaust System

Source

ETERNA ELS Ion Source with Dual Vaporizer, Moly

Qty 2 Source Liner (Recommend Qty 2 to allow rapid PM)
Source liner to allow rapid PM

Qty 2 Electron Shower:
300mm Plasma Flood Gun (Xe w/DIN 6 Connection)

Indicator Lights
Light Tower – 4 Lamp, red, amber, green and blue

Chiller
Affinity Chiller (25' Remote)

Remote Workstation
Qty 1 Remote Workstation

Qty 1 Lead Floor

Qty 0 Mylar Template

Qty 1 Removal tools Kit
Removal tools kit, 1st tool only

Qty 1 Fab Starter Kit Options
300mm End Station Set up Fixtures, 1st tool only