



STS Multiplex ICP Deep Reactive Ion Etcher (DRIE), 6"-8"

Semi auto mode

Frequency: 600 Hz

Mode: Bosch

Generator rack

Chiller

Pump

Chamber:

Deep silicon etch process

SOI Trench etch

Gas line: (4) Valves - MFC Filters (VCR)

ICP 240BF Source (ASE-exc PSU / Matching unit)

Temperature: 5°C - 40°C

ICP SC160M Process chamber (MESC)

RF Supply / Matching unit: 300/30 W (13.56 MHz)

RF Supply / Matching unit: 1 kW (13.56 MHz)

Chamber parts: Substrate, 6" (Mechanical clamping)

Chamber externals: ICP V2

Mechanical wafer clamp electrode (Tripod)

With he backside cooling

Process chamber:

ICP V2 Unified ISO250 (Inc insulation spacers) SR

With 160 adapter

LEYBOLD MAG900CT Turbo pump

EDWARDS iQDP80 (M) Dry pump

Includes:

EDWARDS D146 Penning gauge

MKS 51A and SMC ZSE6B Pressure switches

EDWARDS 655 100 mT Cap man gauge

EDWARDS E2M40 PFPE vacuum pump

NW16 Bypass pump line

Gas box

Affinity chiller

Electric cluster cabinet

Lower electrode: ICP WTC Tripod lift

Substrate clamping / Platen: ICP WTC Tripod 150 mm

Lower RF enclosure / MU: ICP V2 WTC H/F, L/F (SOI)

Electrode lift stops: 96 mm

Electrode spacing: 136 mm

HBC Assembly: ICP V2

TYLAN CDLD 10T Cap man gauge

TYLAN FC2901 50 sccm He Cal MFC

Upper electrode with aperture mounting

Upper electrode source: ICP Balun

Upper RF enclosure / MU: Balun 1kW (High cool)

Chamber lid: ICP Heated

RF Generators:

Upper: ENI ACG10B 1 kW (13.56 MHz)

Lower: ENI ACG3B 300 - 30 W (13.56 MHz)

LF5 Pulse gen switch unit

Bypass pumping: Automatic NW16

Heated foreline: ICP

NW40 (1m) Pumping line

EDWARDS iQDP80 (M) Backing pump

Chamber heating: (4) WATLOW 700 W Cartridge heaters

Gasbox: (4) lines (Includes PFC1 module)

Chamber cover panels: ICP V2

Gases / MFC Size (sccm) / Seal type / Line type / Gas type

C4F8(S) / 200 / VITON / G12 / Clean

SF6(S) / 300 / VITON / G12 / Clean

O2(S) / 100 / VITON / G12 / Clean

Ar / 100 / VITON / G12 / Clean / Process

Loadlock:

Carousel vacuum loadlock

Carousel loadlock parts: (2) Substrates, 6"

EDWARDS RF Rack mount Cabinet F (Fomblin) Rotary pump

Power supply: 208 V, 3 Phase, 60 Hz