



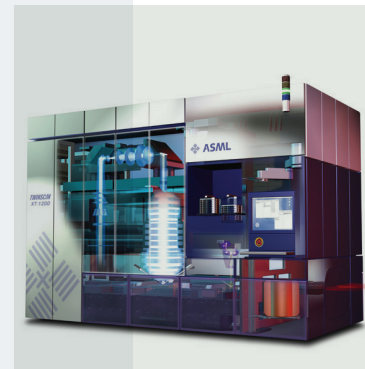
Patterning (Lithography, Plasma Etch & Strip)

Key Features

- › SPC-controlled stable industry-standard high-volume manufacturing equipment set
- › World-class 200mm 65nm technology node-capable lithography, etch and clean tools
- › Amorphous carbon ARC layers for high-resolution lithography
- › I-Line, DUV and 193nm high NA lithography capability
- › Pitch doubling/double patterning expertise for finer features
- › Resist trimming for fine-feature transistor development
- › Novel metal patterning and etch capability for superconducting, new Non-Volatile Memory applications, e.g., PCM, MRAM, etc.
- › Deep silicon etch for MEMS, Through Silicon Vias (TSV) and high-voltage applications

SVTC Technologies is an independent semiconductor process-development foundry that enables the development and commercialization of innovative semiconductor-based technologies and products in an accelerated, cost-effective and IP-secure way.

With patterning such a crucial aspect of semiconductor manufacturing processes, SVTC Technologies offers an impressive range of lithography and dry plasma etch capabilities, from leading equipment manufacturers. Located at our San Jose, California, and Austin, Texas, facilities, SVTC's wide range of advanced patterning tools can help you achieve production-ready products faster and more efficiently.



Lithography

Capability	Tools	FE/BE	Location
193 nm Lithography \geq 70 nm L/S resolution, OL \leq 25 nm	ASML XT1250/500 (NA _{max} 0.85) + DNSRF3	FE/BE	San Jose
193 nm Lithography \geq 90 nm hole resolution, OL \leq 25 nm	ASML XT1250/500 (NA _{max} 0.85) + DNSRF3	FE/BE	San Jose
248 nm Lithography \geq 180 nm L/S resolution, OL \leq 45nm	ASML 5500/500 (NA _{max} 0.63) + DNS80B	FE/BE	San Jose
248 nm Lithography \geq 220 nm hole resolution OL \leq 45nm	ASML 5500/500 (NA _{max} 0.63) + DNS80B	FE/BE	San Jose
I-line lithography \geq 350 nm resolution w OL \leq 60nm	ASML 5500/100 (NA _{max} 0.6) + DNS 80B	FE/BE	San Jose
Fusion UV Bake for PR cross linking	Fusion UV	FE/BE	San Jose
Spin On Dielectric & Other Material Coating	TEL ACT 8 SOD SYSTEM	FE/BE	Austin
193 nm Lithography \geq 80 nm L/S resolution, OL \leq 30 nm	ASML XT1100/500 (NA _{max} 0.75) + FSI POLARIS 2500 TRACK	FE/BE	Austin
193 nm Lithography \geq 100 nm hole resolution, OL \leq 30 nm	ASML XT1100/500 (NA _{max} 0.75) + FSI POLARIS 2500 TRACK	FE/BE	Austin
248 nm Lithography \geq 180 nm L/S resolution, OL \leq 60nm	Microscan 3 (NA _{max} 0.6) + DNS 80B TRACK	FE/BE	Austin
248 nm Lithography \geq 220 nm hole resolution OL \leq 60nm	Microscan 3 (NA _{max} 0.6) + DNS 80B TRACK	FE/BE	Austin
Proximity Print \geq 1 μ	Suss Microtech MA8 + Suss Microtech Track	FE/BE	Austin
Wafer Bonder Aligner	Suss Microtech MA/BA8	FE/BE	Austin

Dry Plasma Etch & Strip

Capability	Tools	FE/BE	Location
Silicon Etch: Gate Stack & Shallow Trench	AMAT DPS II, LAM 4400	FE	San Jose
Silicon Etch: Deep Trench Etch	LAM9400 DSIE	FE	San Jose
Dielectric Etch: Oxide, Nitride, BARC	AMAT MxP+ & eMAX-CT	FE/BE	San Jose
Front End Plasma resist strip	Novellus Iridia	FE/BE	San Jose
Back End Plasma resist strip	Novellus PEP3011 (Gasonics)	BE	San Jose
Metal Etch: AlCu/Ti/TiN/TiW etc.	LAM Research 9620 TCP	BE	San Jose
Novel Metal Etch: PCM, MRAM, etc.	Tegal 6520 Hre - Medium and High Temperature	BE	San Jose
Front End Resist Ash, (1) CH. - O2/CF4	Axcelus Fusion Asher 200MCU	FE	Austin
Dielectric Etch: 9100	LRCTCP 9400PTX/9100 chamber	FE	Austin
Poly Etch: 9400DFM	LRCTCP 9400PTX/9400FM chamber	FE	Austin
Dielectric Etch: Oxide, Nitride, BARC	AMAT Super E Chamber	FE	Austin
Silicon Etch: Deep Trench Etch	AMAT DPS-DT	FE/BE	Austin
Metal Gate Etch: DPS II	AMAT Centura DPSII	FE/BE	Austin
Novel Metal Etch: DPS II/ High Temp	AMAT Centura DPSII High Temp	FE/BE	Austin
Tungsten (W) Etch: Clamped	LRC Rainbow 4728 Tungsten	BE	Austin
Metal Plasma Etch: AlCu/Ti/TiN/TiW etc.	LRC Research 9600 TCP	BE	Austin
Backend Resist Ash (2 chambers)	ULVAC Enviro	BE/CU	Austin
DRM Oxide Etch: Oxide Etch	TEL Unity II E	BE/CU	Austin
DRM Oxide Etch: Low-K Etch	TEL Unity II E	BE/CU	Austin

FACT SHEET



SVTC Technologies

3901 North First Street
San Jose, CA 95134
(408) 240-7000

2706 Montopolis Drive
Austin, TX 78741
(512) 356-2000