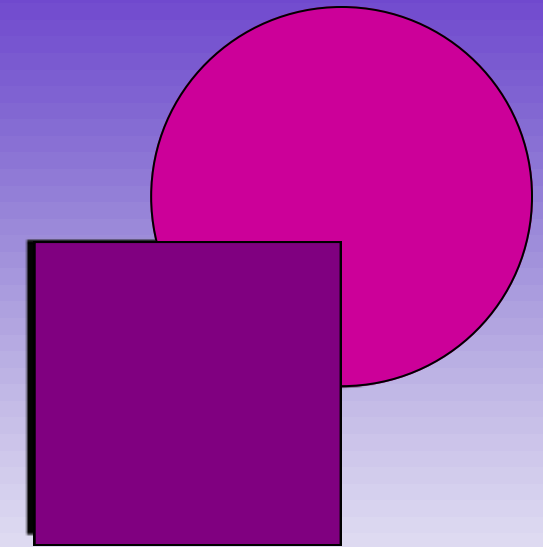




valley design corp.



Valley Design Corp.

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European Sales:

Germany: germany@valleydesign.com | France: france@valleydesign.com

AS9100D / ISO 9001:2015

Certified

ITAR Registered

World of Precision and Innovation

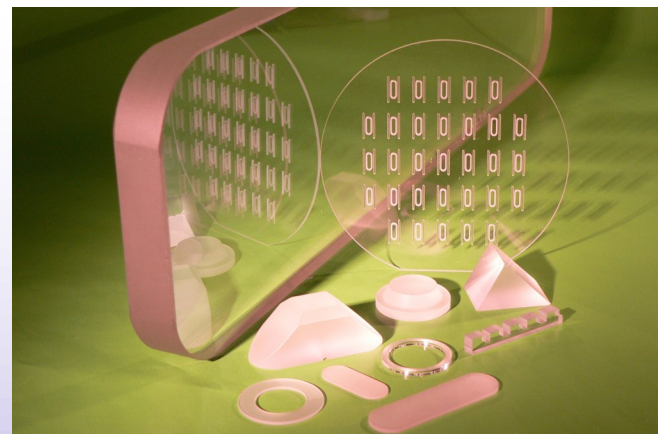
Our Company

Valley Design was founded in 1975, and over the past 5 decades has become a recognized world leader in advanced materials processing. From wafers and substrates to complex components, Valley offers one-stop shopping for precision lapping, polishing, dicing, 3/4/5 Axis CNC machining and other machining services. We can fabricate intricate shapes and features in your material or ours including Fused Silica, Quartz, Optical Glass and Color Filter Glass of all types, 96% - 99.8% Alumina, Aluminum Nitride, Sapphire, Macor, Silicon Carbide SiC, SiSiC, metals and more.

Special Capabilities:

- Ultra-thin: 10 μ m—15 μ m
- Ultra-flat: 1/10 wave
- Super Polishing: 1 Angstrom / 10/5 scratch/dig
- Tight Tolerances: \pm 0.5 μ m
- TTV: < 0.5 μ m

Parts from as small as 0.127mm square up to 48" diameter are handled by Valley Design. We process materials to ultra-thin thicknesses, some as thin as 10 μ m. We work with micron level tolerances, difficult surface finish, parallelism and flatness specifications, and provide some of the quickest lead times in the industry. Many raw materials and thousands of finished wafers and substrates are in stock from our extensive inventory. Make Valley Design your one-stop shop for wafers and substrates, components and optics requiring precision lapping and polishing, dicing, complex CNC machining, and any other precision machining requirements you may have.



Why Try Valley Design?

- 50 years of experience in precision lapping, polishing, dicing and CNC machining of all materials
- Excellent reputation for precision, innovation, quality and customer service
- Flexibility to work with our customers from R&D prototypes to full production
- Wide variety of equipment to process all materials from soft PEEK to hard Sapphire
- Large in stock inventory of materials including Fused Silica, Glass, Ceramics, Sapphire and more
- Comprehensive process, fixturing, equipment and tooling knowledge
- Advanced R&D and metrology capabilities featuring World Class CMM metrology:
Keyence IM-6125, Keyence XM-5000, Keyence VK-X3000 Series 3D Surface Profiler
- Highly experienced and skilled process technicians—100's of years of collective experience
- 35,000 square feet manufacturing facilities—AS9100D / ISO 9001:2015 certified, ITAR registered
- Worldwide customer base with direct sales representation in Germany and France

Products / Applications

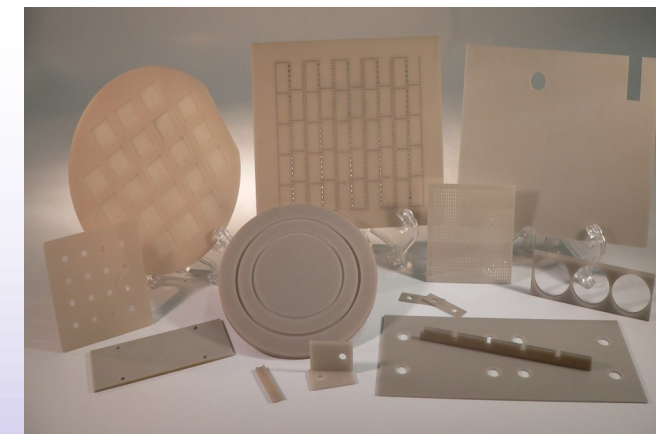
- Standard and custom sized substrates, wafers, discs, windows, and flat optics of all types of materials, many from stock
- Precision shims, spacers, sub-mounts, washers and rings, which can be sequentially spaced to < 1/4 μ m, flat to 1/10 wave, lapped or polished
- Large geometry ceramics up to 450mm diameter
- SEMI standard dummy wafers up to 450mm diameter
- Standard and custom color glass filters
- Wafer and vacuum chucks
- Flat lenses, filters, etalons, prisms, wedges
- Ultra-thin wafers and substrates 10-15 μ m thick
- ESD Chuck refurbishing
- Substrates for capacitors and thin film circuits
- Large wind tunnels, slides and plates
- Sensors, integrated circuits, semiconductors
- Photonic, optical and microelectronic devices
- Semiconductor, Medical, Aerospace, Research

Materials Processed

- Fused Silica and Fused Quartz
- Single Crystal Quartz
- Optical Glass of all types
- Aluminum Nitride
- 96% - 99.8% Alumina
- CVD Silicon Carbide, SiSiC
- Macor
- Sapphire—A plane, C plane, R plane
- Silicon
- Aluminum and Stainless Steel
- Copper and Titanium
- Molybdenum
- Germanium
- Ferrites
- Color Filter Glasses
- PEEK and Teflon
- Hastelloy, Inconel alloys
- Many other exotic materials

Many materials in stock:

www.valleydesign.com/stockpage.htm



Precision Machining Services

- Single and Double Side Lapping, Polishing, Backgrinding: Over 100 machines from 12" up to 64" for small to large geometry to process parts from 0.127mm square up to 48" diameter
- Production Dicing: Over 15 Programmable DISCO and K&S dicing saws
- 3/4/5 Axis Haas CNC Machining: Complex shapes and features include through-holes and pockets, corner chamfers and radii, steps, slots, edge chamfers
- CNC milling and shaping
- Precision shims and spacers sized to micron level tolerances
- Ultra-Thin polishing to 10-15 μ m
- Hole Drilling and Core Drilling
- Optical Edge / Angle Polishing
- Module, Die and Bonded Wafer Thinning