

QUANTUM COMPUTING HARDWARE



precisionexpedited.com

Quantum hardware in copper and stainless.

Cryostat plates, thermal links, sample mounts, RF and microwave housings, and vacuum hardware for quantum computing programs. Precision Expedited sources CNC machining, wire EDM, and finishing through a vetted vendor network that machines C101 copper, aluminum, and stainless to ± 0.001 " on critical features. Technical data is handled under NIST 800-171 compliant controls, and one contact stays with your program.

How We Review It

Your project manager and a technical lead review every print within 24 hours. For cryogenic and vacuum hardware we confirm copper grade, plating callouts, and surface finish requirements, then route the job only to shops with a track record in that material.

What We Source

Matched to shops proven in copper and vacuum parts.

- **Cryostat Plates** · Machined C101 copper
- **Thermal Links** · Copper, plated to spec
- **Sample + Chip Mounts** · Tight-tolerance machined
- **RF + Microwave Housings** · Aluminum and copper
- **Vacuum Flanges + Ports** · Stainless, to spec
- **Cable Brackets** · Machined and formed
- **Support Structures** · Machined frames
- **Test Fixtures** · Fast-turn prototypes

Specifications

- **Tolerances:** ± 0.001 " on critical features
- **Materials:** C101 + C110 copper, aluminum 6061, 316L stainless
- **Processes:** CNC, wire EDM, sheet metal, finishing
- **Finishes:** Gold and nickel plating, passivation
- **Documentation:** Material + plating certs, FAI on request
- **Quote review:** Within 24 hours

Before It's Built

Quantum hardware usually starts as a physics lab drawing. We check for sharp internal corners that copper won't hold cleanly, plating callouts that conflict with the base metal, and cleaning and packaging requirements for vacuum service. You hear about it before the quote goes out.

Quality + Compliance

ISO 9001:2015

AS9100D Compliant

ITAR Registered

NIST 800-171 Compliant

Tolerances to ± 0.001 "

Inspection before shipment

Domestic sourcing

Built Fast. Built Right.

Send us your files.

Scan or visit precisionexpedited.com/contact

