

(RDT004) Rapid Thermal Annealing (RTA) system

## Technical Information

- ◇ Wafer sizes: Small pieces, 2", 3", 4", 5", 6", 8" wafer capability.
- ◇ Recommended ramp up rate: Programmable, 10°C to 120°C per second.
- ◇ Recommended steady state duration: 0-300 seconds per step.
- ◇ Ramp down rate: Non-programmable, 10°C to 200°C per second.
- ◇ Recommended steady state temperature range: 150°C - 1000°C.
- ◇ ERP Pyrometer 450°C to 1000°C with  $\pm 1^\circ\text{C}$  accuracy when calibrated against an instrumented thermocouple wafer.
- ◇ Thermocouple 100-800°C with  $\pm 0.5^\circ\text{C}$  accuracy & rapid response.
- ◇ Temperature repeatability:  $\pm 0.5^\circ\text{C}$  or better at 1000°C wafer-to-wafer.
- ◇ Temperature uniformity:  $\pm 8^\circ\text{C}$  across an 8" (200mm) wafer at 1000°C. (This is a one sigma deviation 100 angstrom oxide.)