

■ Ferroelectric Memory -- Ultimate IC Memory

Key point

Reliability

(Improvement in Film Quality and Structure)

High Density / High Volume

Productivity

(Repeatability, Stability, Yield etc.)

ULVAC Solutions

Sputtering System **CERAUS ZX-1000**

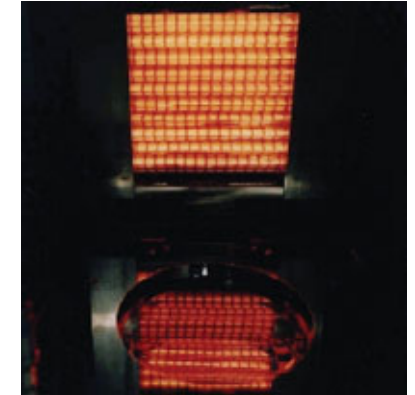
- Key for Ferroelectric Memory.
 - Sputtering System -
- Assure reliability for Ferroelectric thin film.



ULVAC, Inc.

Lamp Anneal System *for Ferroelectric thin film Crystallization* **RTA-8000**

- Specification
 - Wafer size 4-8 inch
 - Pressure Atmosphere-Vacuum
 - Heat Chamber Quarts-Metal



ULVAC-RIKO, Inc.



ULVAC, Inc.

Etching System **APIOS NE-7800**

- APIOS NE-7000 offers High capacitance and fine patterning for Ferroelectric Memory.

Ferroelectric Target **PZT, BST, STO**



ULVAC Materials, Inc.

- For stable composition in films and low particles.
- Ti, Al₂O₃ Target are typical.
- Ultra Clean Treatment is effective for particle reduction and flake peel-off prevention.