

ANNEAL MODULE FOR SEMICONDUCTOR WAFERS

ABSTRACT OF THE INVENTION

An anneal module for annealing semiconductor material wafers and similar
5 substrates reduces particle contamination and oxygen ingress while providing uniform
heating including for 500°C processes. The anneal module may include a process
chamber formed in a metal body having internal cooling lines. A hot plate has a
pedestal supported on a thermal choke on the body. A gas distributor in the lid over the
hot plate flows gas uniformly over the wafer. A transfer mechanism moves a hoop to
10 shift the wafer between the hot plate and a cold plate.

Fig. 1