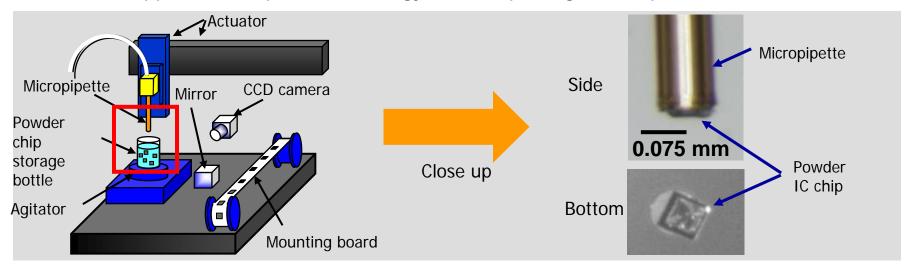
NRD 09-0602

2009/6/2 Release

## A new handling technology for 0.075 sq mm powder IC chip Applied cell capture technology enables putting fine chips on substrate



Hitachi, Ltd. has developed a new handling technology for power IC chip of 0.075 square mm  $\times$  7.5  $\mu$  m thickness (1  $\mu$  m is 1 thousandth mm). The chip, which can be embedded into papers, is expected to be a key device in pioneering new markets, where it can cheaply and easily manage a number of article and identify papers such as securities. Manipulating a fine chip in a dry environment has been difficult due to adhesion of the other chips and scattering from the influence of electrostatic phenomena. However, using the cell trapping technology (cell manipulation) used in biotechnology and cutting-edge medical fields, and dispersing IC chips in solution, this technology can put the chips on the substrate one by one free from the influence of electrostatic phenomena.