

Also important in the total industrial picture are the roles of associations and universities in Japan. Universities are important in two primary ways: they supply the trained engineers, researchers and other high-talent personnel needed by government, industry and the universities themselves; and they participate in microelectronics research and development, both in terms of meeting national R&D objectives and in specific commercialization projects and cooperative research with industry.

There are several associations in Japan involved with electronics and microelectronics. These associations are powerful. They maintain close ties with government. In fact, government, universities and industry are often all members of the same association. In fact, current or retired government officials often sit on the boards of directors of such associations.

Associations have representatives from nearly all companies in a given field. They serve as a platform for developing consensus in industry and have substantial influence when government comes to form policies. Other roles for associations include gathering and publishing statistics on the industry, conducting surveys, making forecasts and long-range predictions on the industry, acting as a contact point for industry joint ventures and cooperation, and assisting members with international dealings.

In the electronics field, the major associations include the Electronic Industries Association of Japan (see the mission visits material for details), the Communication Industries Association of Japan (which focuses on telecommunications) and the Japan Electronic Industries Development Association (with its focus on computers, computer-related hardware and other related areas). In software there are two main associations: the Japan Information Processing Development Center with its close government connections and focus on software distribution and promotion (see the mission visits section for details) and the Japan Software Industry Association, with its concern for R&D in software.

### **Implications for Canadian Industry**

While this overview of the Japanese situation in microelectronics is brief, general and highly simplified, it does demonstrate a number of characteristics relevant to Canadian companies wishing to be involved in business with Japanese companies.