

Over 70,000 employees are active in Toshiba's main product areas. In industrial electronics activities include: computers, data processing systems, electronic cash registers, PBX, automated tellers, ultrasonic diagnostic equipment, radar, TV and radio broadcasting equipment and satellite communication systems. In electronic components, Toshiba products include: VLSI memories, GaAs LSIs, logic ICs, microprocessors, gate arrays, transistors, diodes, LEDs, thyristers, photocouplers, electronic tubes, semiconductor-lasers, image sensors, optoelectronics, LCDs, solar batteries and printed circuit boards.

Toshiba allocates over 5 per cent of its sales revenues to R&D. It has a long track record of successful independent product development, but also works with other companies in co-development ventures. To demonstrate some of the topics of R&D in Toshiba, the company is working with: a process using electron beam exposure technology for forming 0.25 μ m patterns (used, for example, in patterns for memory of up to 64 megabytes); a very high speed gate array and a multiplication LSI chip using the CMOS-SOS technique; high output GaAs FET for microwave communication (20 W-output class FET providing output twice that of present GaAs FET); a 32-bit image processor LSI with a fastest processing time of 50 ns; and a hetero-function-type bipolar transistor (HBT) (produces a trial IC with 97 transistors integrated on a 0.35 mm x 2.5 mm rectangular GaAs chip).

Some mission members visited the Komaki plant where, among other things, Toshiba's work in electronic warfare is carried out. Discussions centred on frequency halvers and digital R.F. memory for Japanese defense electronics applications. Toshiba representatives demonstrated a high level of interest and knowledge in these areas, but gave no clear indication of their need or program potential for Canadian companies.

More generally, Toshiba didn't indicate any specific areas they would be interested in for licensing, technology transfer, joint ventures or other relationships with foreign companies.