ITRI’s On-chip AC LED Lighting Technology was named a winner of the R&D 100 Award by R&D Magazine, as one of the top technological innovations of 2008, and on October 16 the award was officially presented to ITRI at a ceremony in Chicago. Accepting the honor on behalf of ITRI was the Deputy General Director of ITRI’s Electronics and Optoelectronics Research Laboratories (EOL), Dr. Jon S. Hsu. Dr. Hsu explained that on-chip AC LED lighting technology is a major breakthrough for the future of illumination. Adopting an AC LED for lighting means that the AC-DC converter is no longer necessary, resulting in a 15-30% energy saving in electricity conversion. Together with a hot swapping design and miniaturized characteristics, novel lighting designs are more easily achieved. It is believed that this technology will have huge potential in the lighting market within the next five years. Dr. Hsu also mentioned that since the announcement that it had won the prestigious R&D 100 Award, numerous international lighting suppliers have taken note of this new technology.

Mr. Tim Studt, Chairman of R&D 100 Awards, stated that the ITRI’s On-chip AC-LED Lighting Technology creates a new capability within the market place that wasn’t there before, and will thus have significant impact. He further mentioned that, among the award’s large panel of judges, those with electronic backgrounds in particular were quick to see the technological significance of this innovation. “That’s why we gave the award to the On-chip AC-LED lighting technology,” Mr. Studt said.

This year’s R&D 100 Awards were judged by 20 experts from various scholastic and technological fields in the US. American or European companies and laboratories generally account for the majority of nominees, with Asian companies seldom in the running for this award. This year, the only other recipients from Asia besides ITRI were Koito Manufacturing and Toyota Motor, both of Japan.

Since its establishment in 1963, the R&D 100 Awards have honored the 100 most innovative new technologies each year in order to promote them and encourage future innovation. Many technologies that impact our daily lives have been honored, including Polacolor film (1963), the flashcube (1965), the automated teller machine (1973), the halogen lamp (1974), the fax machine (1975), the liquid crystal display (1980), the printer (1986), the Kodak Photo CD (1991), the Nicoderm antismoking patch (1992), Taxol anticancer drug (1993), lab-on-a-chip (1996) and HDTV (1998).