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Electron vs Photon

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The Electron and the Photon are two particles with several similarities. Electron was identified as a very versatile particle and the Technology is dominated by semiconductor Electronics particularly after the birth of Microelectronics, or the Integrated circuits. Electronic communication and Electronic Computers are common examples by which the Electron made its presence felt.

However the Electron cannot beat the photon in speed. The Photon can be obtained easily, though at the expense of higher cost, and of course using an electron. Thus electronic communication is now being taken over by Optical communication as the volume of traffic increases or the speed of data transfer increases. Optical switching, optical signal processing, Integrated Optics and Optoelectronic Integration, indicates that Optics will take over most of Telecommunications and Computers in the next decade with the electron and the Photon working of the two most versatile particles in nature.