

# Tech article



Radio Frequency Identification Technology (RFID) Overview of the Technology RFID: The RFID Technology is a new technology that tracks and monitors all moving objects with the aid of RFID Tags. These tags are mini micro chips that are inserted into the object. The tags have certain minute barcode numbers that could be accessed by the readers and transmitters and who in turn, have the capacity to read out information to interrogators, readers and to the final data base (control room) within milliseconds. So in other words, it is a technology that uses electromagnetic waves to exchange data and information between a terminal and object within milliseconds. So the work of the technology is to identify all moving objects with the aid of computer chipped tags. Lui and Chen 2009, in their article titled “ Applications of RFID technology for improving production efficiency in an integrated-circuit packaging house”, defined the radio frequency identification (RFID) as an emerging technology that can be used to expand the possibilities for data capture. They stress that one of the primary use of the RFID technology, is for process control and material handling applications which can produce benefits of flexibility and interactivity. (2203) Potential impact for companies Lui and Chen 2009, explains that an integrated-circuit (IC) packaging house must be able to provide clients with instant and accurate information on its products and services. In order to do that properly, an IC packaging house must keep track of all its wafers, regardless of whether those wafers are in packaging, testing, or shipping. In order to achieve this, the company combines the RFID technology with an enterprise resource planning otherwise known as an ERP system for resolving various wafer receiving and inventory transaction problems. An electronic control system is thus developed using Oracle application

implementation methodology or (AIM) to integrate RFID technology and the ERP system. This electronic control system has been implemented at a local IC packaging company. Results from this study suggest that RFID contributes significant improvements to the wafer receiving process and the inventory transaction process which reduces labour costs and human errors. Aside from that factor, the companies control system greatly reduces operators' workloads and operation costs. (2204) Also the RFID Technology is employed in tracking cars, and trucks carrying goods. This has really helped the Automobile industry to both reduce vehicle theft and keep accurate records of the movement of company vehicles around the country as they perform their daily functions. This Technology saves company cost and keeps products safe. Reference Liu, C. M., and L. S. Chen. " Applications of RFID technology for improving production efficiency in an integrated-circuit packaging house." *International Journal of Production Research* 47. 8 (2009): 2203-2216. Business Source Premier. EBSCO. Web. 18 Jan. 2011.