productivity and efficiency. Implementation by large companies such as Wal-mart ... its per unit cost as well as its supporting equipment and training costs. The originality of this study lies in the idea that few practical and pragmatic approaches have been taken within the academic field of study for the implementation of RFID into the healthcare supply chain. Much of the research has focused on specific companies or portions of the supply chain and not the entire supply chain. Also, many of the papers have discussed the future of the supply chain that is heavily dependent on advances in RFID technology. A few viable applications of how RFID technology can be implemented in the healthcare

319. Multi-scale Modeling and Analysis of Nano-RFID Systems on HPC Setup

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In this paper we have worked out on some the complex modeling aspects such as Multi Scale modeling, MATLAB Sugar based modeling and have shown the complexities involved in the analysis of Nano RFID (Radio Frequency Identification) systems. We have shown the modeling and simulation and demonstrated some novel ideas and library development for Nano RFID. Multi scale modeling plays a very important role in nanotech enabled devices properties of which cannot be explained sometimes by abstraction level theories. Reliability and packaging still remains one the major hindrances in practical implementation of Nano RFID based devices. And to work on them modeling and simulation will play a very important role. CNTs is the future low power material that will replace CMOS and its integration with CMOS, MEMS circuitry will play an important role in realizing the true power in Nano RFID systems. RFID based on innovations in nanotechnology has been shown. MEMS modeling of Antenna, sensors and its integration in the circuitry has been shown. Thus incorporating this we can design a Nano-RFID which can be used in areas like human implantation and complex banking applications. We have proposed modeling of RFID using the concept of multi scale modeling to accurately predict its properties. Also we give the modeling of MEMS devices that are proposed recently that can see possible application in RFID. We have also covered the applications and the advantages of Nano RFID in various areas. RF MEMS has been matured and its devices are being successfully commercialized but taking it to limits of nano domains and integration with singly chip RFID needs a novel approach which is being proposed. We have modeled MEMS based transponder and shown the distribution for multi scale modeling for Nano RFID.