EECE401 Senior Design I Electrical and Computer Engineering Howard University Dr. Charles Kim -- Instructor WWW.MWFTR.COM/SD1415.html



The doctor uses the hospital's intranet [8] to send the encrypted command [5] to the Intel Atom chip [2]. The internet capabilities are via the Ethernet [6]. The Intel Atom chip [2] communicates the encrypted data command to the FPGA chip [1] via the Peripheral Component Interconnect (PCI) [7]. The FPGA chip [1] will decrypt the data received and store the command on the SD card [9]. The FPGA chip is synchronized to the board's internal clock [12]. The FPGA chip will also send the data to the medical device [3] via USB connection [4] and will display updates on the monitor [10] via VGA connection [10].



The doctor uses the hospital's intranet [8] to send the encrypted command [5] to the Intel Atom chip [2]. The internet capabilities are via wireless (wifi) capabilities [6]. The Intel Atom chip [2] communicates the encrypted data command to the FPGA chip [1] via the Peripheral Component Interconnect (PCI) [7]. The FPGA chip [1] will decrypt the data received and store the command on external USB storage [9]. The FPGA chip is synchronized to one of the board's internal clocks [12]. The FPGA chip will also send the data to the medical device [3] via USB connection [4] and will display updates on the on-board LCD display [10].