Department of Electrical and Electronics Engineering

PROJECT TITLE	**WIRELESS POWER TRANSMISSION WITH SELF REGULATED OUTPUT VOLTAGE FOR BIO-MEDICAL IMPLANTATION**
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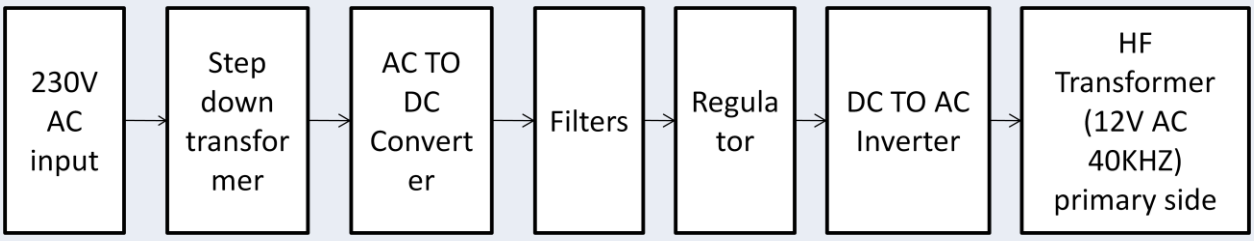
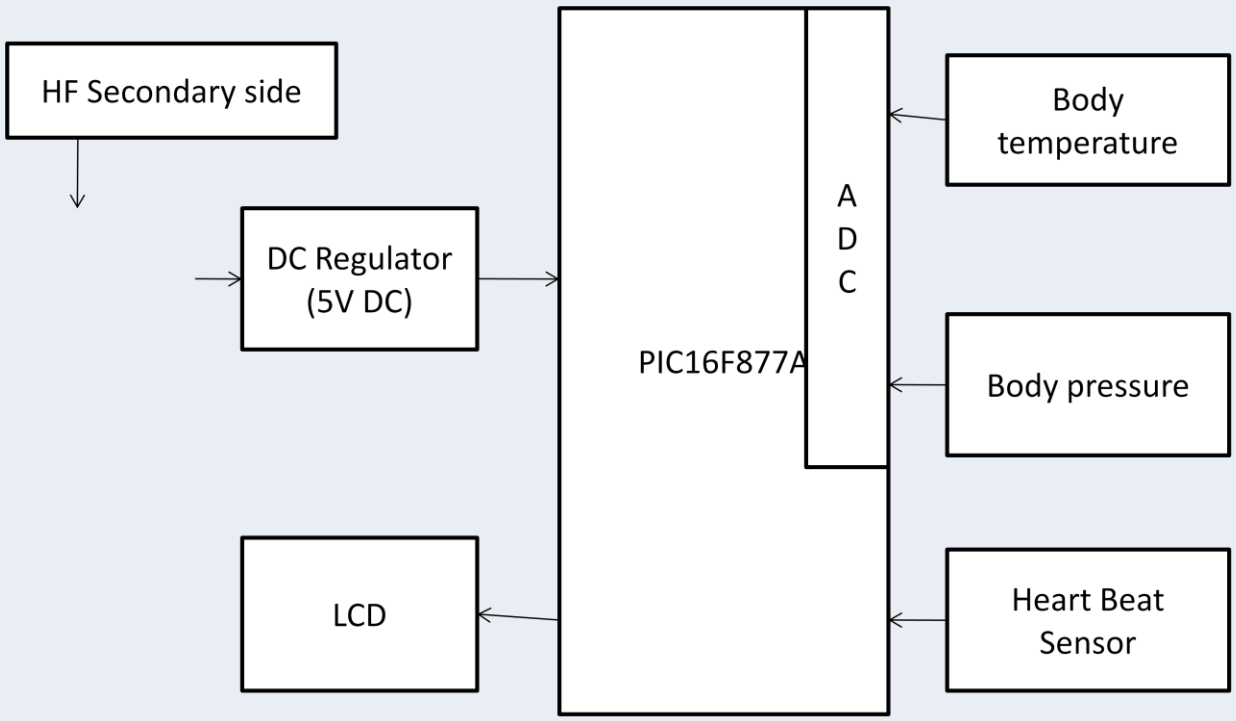
OBJECTIVE	Our main objective is to transfer the power without any man-made conductors (wireless) and implement in the medical field.
ABSTRACT/IDEA	Wireless power or wireless energy transmission is the transmission of electrical energy from a power source to an electrical load without man-made conductors. Wireless transmission is useful in cases where interconnecting wires are inconvenient, hazardous, or impossible. The wireless transmission of alternating current achieves long ranges that are superior to the resonant electrical induction methods and favorably comparable to the electromagnetic radiation methods. Since wireless power transfer technology (WPT) gains its popularity, broad range of application and research are performed in the field of medical implantable applications. This paper presents a wireless power transfer (WPT) system for powering implantable bio-medical devices; the system is configured to achieve high efficiency with printed-circuit-board pattern coils and to maintain constant output voltage against coupling and loading variations without any additional blocks. It is shown that the parallel-resonant transmitter (TX) and receiver (RX) topology is advantageous for high efficiency even with lossy but compact components. In addition, the output voltage of the topology is insensitive to coupling and/or loading variations if the operating frequency is automatically adjusted according to coupling variations. A parallel-resonant class-D oscillator TX is developed to track the optimum operating frequency for the constant output voltage. In our proposed system, we use wireless technology to transfer the health condition of the patient to the doctor or care taker. We use sensors to measure the temperature, pressure and heart rate of the patient. All the details are sent to doctor/care taker through wireless.
TECHNOLOGY USED	1. GSM Technology 2. Wireless technology

APPLICATION	1. Health care Services 2. Smart Environment Services
REQUIREMENTS	**HADRWARE :** Micro controller(PIC16F877A) Temperature sensor Body Pressure sensor Heart beat LCD AC to DC filter DC to AC inverter Regulator & filter circuit

BLOCK DIAGRAM





CONCLUSION

In our proposed system, we use wireless technology to transfer the health condition of the patient to the doctor or care taker. We use sensors to measure the temperature, pressure and heart rate of the patient. All the details are sent to doctor/care taker through wireless/ care taker through wireless. Since the transformation of the data are through wireless we use some techniques to transfer the data without any losses and more secure.