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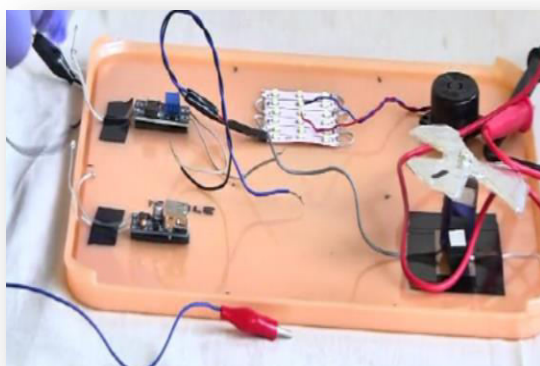
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Research Article

*Available Online through***www.ijptonline.com****AUTOMATIC STEP-UP POWER FROM JUMBO URINE****M G Gireeshan, Dr. R Vasuki**¹Research Scientist, Bio Medical Engineering, BharathUniversity, Chennai.²HOD, Bio medical Engineering, BharathUniversity, Chennai.*Email: mggireeshan@gmail.com**Received on 12-02-2016**Accepted on 05-03-2016***Introduction**

In this system is combination of elephant urine cell with voltage booster Dc to Dc with the help of M360. This system is use for portable emergency lamp from elephant urine. The M360 is a constant frequency, 6-pin SOT23 current mode step-up converter intended for small, low power applications. The M360 switches at 1.2MHz and allows the use of tiny, low cost capacitors and inductors 2mm or less in height. Internal soft-start results in small inrush current and extends battery life. The M360 features automatic shifting to pulse frequency modulation mode at light loads. The M360 includes under-voltage lockout, current limiting, and thermal overload protection to prevent damage in the event of an output overload. The M360 is available in a small 6-pin SOT-23 package.

Working the elephant urine cell is connected to the input of this system they output will get neatly 2 times multiple The M360 uses a fixed frequency, peak current mode boost regulator architecture to regulate voltage at the feedback pin. The operation of the M360 can be understood by referring to the block diagram. At the start of each oscillator cycle the MOSFET is turned on through the control circuitry. To prevent sub-harmonic oscillations at duty cycles greater than 50 percent, a stabilizing ramp is added to the output of the current sense amplifier and the result is fed into the negative input of the PWM comparator.



When this voltage equals The output voltage of the error amplifier the power MOSFET is turned off. The voltage at the output of the error amplifier is an amplified version of the difference between the 0.6V bandgap reference voltage and the feedback voltage. In this way the peak current level keeps the output in regulation. If the feedback voltage starts to drop, the output of the error amplifier increases. These results in more current to flow through the power MOSFET, thus increasing the power delivered to the output. The M360 has internal soft start to limit the amount of input current at startup and to also limit the amount of overshoot on the output.

Microcontroller

Micro controllers are widely used in control applications since the on-chip peripheral given makes the design simple and economical. The instruction set of micro controller is versatile and suited for control applications. Higher

Performance: The integration of different Integrated Circuits reduces the length of the travelling route and time of data to be transmitted resulting in higher performance. Lower Energy Consumption: Integration of various Integrated Circuits

eliminates buffers and other interface circuits. As the number of components is reduced less power will be

consumed. Slimmer and more compact: Housed in a single separate package, the chips is smaller and thus occupy less area

on the PCB. Hence products using embedded systems are slimmer and compact. System Design and Development:



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