

# DEVELOPMENT PI CONTROLLER FOR BATTERY CHARGER USING POWER FACTOR RECTIFIER

## Thesis is present in partial fulfillment for the award of Bachelor of Engineering (Hons) Electrical Universiti Teknologi Mara



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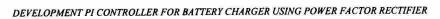
#### **ABSTRACT**

This paper illustrates simulation evaluations of a PI Controller of battery Charger employing Power Factor Correction (PFC) rectifier using MATLAB Simulink simulation packages and will be compared with hardware prototype. The proposed system will use single-phase incorporated with proportional-integral control technique to gives appropriate compensation to resolve problems caused by the load such as current displacement, current harmonics and to improves PF. The output current of single-phase rectifier will be used as reference current for PI Controller. The results obtain will compared and improves with more establish topology and techniques.



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