

*In the Name of Allah the Most Beneficent the Most  
Merciful*



**Intelligence Power Sharing of Transformer with Auto  
Protection Using Microcontroller**

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### List of Software's

- **Mat lab**
  - WPL v2.36
  - Arduino-To-Atmega8-Pins
  - Proteus v8
  - Pic Microcontroller
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## Certificate

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This is to certify that Haris Naveed , Saad Murtaza and M. Ali Khan have successfully completed their final year project. This project “**Intelligence Power Sharing of Transformer with Auto Protection**” had been assigned to them to fulfill the partial requirements for the bachelor degree of **Electrical Engineering**.

Engr. Arif Saeed

**Project Supervisor**

Professor Jamel Ahmad

**Professor**

Undertaking

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We certify that project work titled “**Intelligence Power Sharing of Transformer with Auto Protection**” is our own work. The work has not, in whole or in part, been presented elsewhere for assessment. Where material has been used from other sources it has been properly acknowledged / referred.

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## Abstract

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The objective of the project “Intelligent Power Sharing Transformers”

At peak times when the load requirements increases, the transformers whether they be power transformers at substations or some specific distribution transformers, tend to overload, meaning they heat up their losses (copper and iron) increases and if the transformer continues to run in this overload state...its secondary winding can burn up, thus reducing the life or destroying the transformer altogether.

When designing low-voltage power systems to supply large load currents, paralleled lower-current modules are often preferred over a single, large power converter for several reasons. These include the efficiencies of designing and manufacturing standard converters which can be combined in whatever number necessary to meet a given load requirement.

At present load sharing of transformer is done by paralleling the transformer. That is primary of the transformer is always energized. This method is following on olden days also. The challenge in paralleling modular supplies is to insure predictable, uniform current sharing-regardless of load levels and the number of modules.