

## **ABSTRACT**

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### **Designing the minimum system of Smart Cable Tester**

(xiv + 102 pages: 83 figures; 12 tabels)

Cable tester is an important tool to develop and maintain a network infrastructure. Commonly, cable tester has a limited functions. It only has LED indicators to display how the condition at the ends of the UTP cable. This make the tool can only be used by them who understand about cabling. By this observation of final project, Designing the minimum system of smart cable tester will become a tool that has several features and function is about to integrate due to make a more useful and helpful tool. The advantage is it will have a display system using LCD, the tool is capable to make a decision making based on the definition given. The limitations of this final project is the tool is not capable to measure how long the UTP cable, it also not capable to use if the cable is not UTP (fiber optics, coaxial).

The system will generate a several test bits to examine the cable. The results will be compared to the definition, and make the decision based on the definition. The results finaly will be shown on LCD display, including the decision made. The problem is happen when noise signal appear.

Through this observation, it's found out that the system was created is success by the results of case and condition tested. Hopely through a further research, the new features can be added to this final project observation, like function of measurement which make tool capable to measure the length of cable plugged. The success rate in this observation is 100% by term and condition that were tested.

References: 10 (1997 - 2008).