**Date: 2/2/2014**

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| **Group Number and Name** | **#14 Low Cost RF power meter** |
| **Client/Advisor** | **Dan Stieler/ Prof Neihart** |
| **Attendees/Role** | **Silu Feng/leader Xiaoshuo Li,Yusi Xie/Key idea holder Yijia Huang/webmaster Boyang Hu,Cong Han/Communicater** |

# Past week accomplishments

What was done, who did it, and when it was done

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| * All of the group members review the knowledge of traveling waves, standing waves, transmission line, characteristic impedance and max power transfer. * We all search the RF power meter online and read their tech descriptions. * We meet together to share our resources and discuss the knowledge on Jan 28th. * We create a dropbox group to share the documents we found on Wednesday. |

# Plan for coming week

What to do, who, and when should it be done

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| * We divide into three groups to research three different types of power meters, Xiaoshuo Li and Boyang Hu will research the diode type. Cong Han and Yusi Xie will research thermistor type. Silu Feng and Yijia Huang will research thermocouple. And prepare presentation to explain the detail for each types of power meter. * We will review the knowledge of EE201, such as the 2-port network theory, reactance, transformers, Wheatstone bridge circuits. * We will look over the concept of directional couplers. |

# Pending Issues

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| * We need to know about the different kinds of power that power meters are used to measure. We need to know types of power, dB, dBm, power, average power, pulse power, peak envelope power. * We need to figure out which kind of power mentioned above is important to our client. |

# Individual Contributions

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| * Silu Feng communicate with Prof Neihart and search the RF power meter online. Reivewed the EE311 material. And also divide the six group members into three different groups to research diode-based detector, thermistor-based detector, and thermocouple-based detector. * Xiaoshuo Li research the power meter and share knowledge of RF power meter theory. * Yijia Huang build the Dropbox group and research in thermocouple. And also reviewed the 311 text book about Transmission line theory, forward traveling waves, and reverse traveling waves. * Boyang Hu has reviewed the lecture that Prof Neihart gave and did research in diode based detector. * Cong Han has reviewed some basic ee201 material. Wheatstone bridge circuits and did some research about micro strip. Also has reviewed the lecture that Dr.Nathan gave us and did a research what I have not heared before * Yusi Xie has reviewed some EE201 knowledge about inductor, capacitor and did some research in thermistor detector. |

Individual hourly Contributions

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| **NAME** | **Hours this week** | **HOURS**  **Cumulative** |
| Silu Feng | 6 | 12 |
| Xiaoshuo Li | 6 | 12 |
| Yijia Huang | 6 | 12 |
| Boyang Hu | 6 | 12 |
| Cong Han | 6 | 12 |
| Yusi Xie | 6 | 12 |

# Comments and extended discussions:

We did a great work in the past week. We need to review a lot of knowledge in the coming week and research the three different types of detector.