

## ACKNOWLEDGMENTS

This thesis is compiled with the effort, help, and support from both students and lecturers. I would like to express my deepest gratitude and thanks to:

1. Dr.Ir.Rina Pudji Astuti, M.T.
2. Dr.Ir.Bambang Hidayat
3. Dr.Eng.Khoirul Anwar,S.T.,M.Eng.
4. Dr.-Ing Fiky Y. Suratman
5. Denny Darlis, SSi.,MT.