ACKNOWLEDGEMENTS

I would like to express my deep sense of gratitude and indebtedness to Dr. P. CHANDRA SEKHAR REDDY and Dr. B. STEPHEN CHALRES under whose guidance this thesis work had been carried out. Mere words would not be sufficient to place on record the erudite guidance, sustained encouragement, constructive comments and inspiring discussions with them during the course of this work. I consider myself to be fortunate to have worked under them. They in fact have been the source of inspiration for this work. It has been a privilege and pleasure working under their guidance and it has been an experience, which I shall cherish for a long time.

I would like to thank Dr. K. SOUNDARA RAJAN, Principal, JNTU College of Engineering, Anantapur, for his help, and Sri. K. RAMA NAIDU, Associate Professor & Head, Department of Electronics & Communications Engineering, JNTU College of Engineering, Anantapur, for his encouragement, help and timely suggestions.

I also want to thank my colleagues Sri. K. SUDHAKAR, Sri. CH. NAGARAJU, Sri. G. S. SURENDRA BABU, Sri. B. K. VARA PRASAD and others for their timely co-operation. I would like to express my heartfelt thanks to Mr. S. KISHOR KUMAR & Mr. M. RANGANATH for preparing this thesis.

I would like to express my gratitude to my co-brother Sri. P. JOHN VICTOR and my brother Sri. G. JOEL for their constant encouragement. I also want to thank my brother-in-law Sri. B. GIDEON PRAVEEN for his timely help in collecting the literature and solving software problems.
My deepest gratitude goes to my wife MADHURI and my son NOEL who showed infinite patience and understanding during my absorption in this long project, and offered the type of moral support and loving encouragement which only they can offer.

Finally, I would like to thank ALMIGHTY GOD for giving me wisdom and strength to complete this thesis work.