

DAFTAR ISI

| | |
|---|------|
| HALAMAN JUDUL | i |
| LEMBAR PENGESAHAN | ii |
| LEMBAR ORISINALITAS | iii |
| ABSTRAK | iv |
| ABSTRACT | v |
| KATA PENGANTAR | vi |
| UCAPAN TERIMA KASIH | vii |
| DAFTAR ISI | viii |
| DAFTAR GAMBAR | x |
| DAFTAR TABEL..... | xi |
| DAFTAR LAMPIRAN..... | xii |
| BAB 1 PENDAHULUAN | 1 |
| 1.1 Latar Belakang..... | 1 |
| 1.2 Rumusan Masalah | 1 |
| 1.3 Tujuan..... | 2 |
| 1.4 Manfaat..... | 2 |
| 1.5 Batasan Masalah | 2 |
| 1.6 Metodologi Penelitian..... | 3 |
| 1.7 Sistematika Penulisan | 3 |
| BAB 2 DASAR TEORI..... | 5 |
| 2.1 Modulasi QAM (<i>Quadrature Amplitude Modulation</i>) | 5 |

| | | |
|--------------|---|-----------|
| 2.2 | Modulasi 16 QAM | 6 |
| 2.3 | Demodulator 16 QAM | 7 |
| 2.4 | Altium Designer | 10 |
| 2.5 | Osiloskop | 10 |
| 2.6 | Function Generator | 11 |
| 2.7 | Spektrum Analyzer | 11 |
| 2.8 | Power Supply | 11 |
| BAB 3 | PERANCANGAN DAN REALISASI | 12 |
| 3.1 | Pendahuluan | 12 |
| 3.2 | Simulasi Rangkaian | 13 |
| 3.2 | Prinsip Kerja Demodulator 16 QAM | 15 |
| 3.2.1 | Balanced Modulator | 16 |
| 3.2.2 | LPF | 17 |
| 3.2.3 | ADC | 19 |
| 3.2.4 | ADDER | 23 |
| BAB 4 | ANALISA DAN PENGUKURAN | 24 |
| BAB 5 | PENUTUP | 36 |
| 5.1 | Kesimpulan | 36 |
| 5.2 | Saran | 36 |
| | DAFTAR PUSTAKA | 37 |
| | LAMPIRAN A Gambar Skematik Rangkaian | |
| | LAMPIRAN B Datasheet | |