TWIN-64 Architecture Document

Helmut Fieres June 5, 2025

Contents

| Introduction | | | | | | | | | | | | | | | | | | | |] |
|---------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|
| Instruction Formats | | | | | | | | | | | | | | | | | | | | |

CONTENTS

Introduction

Instruction Formats

| Grp | OpCode | Reg R | 0 | | | U-IMM- | 20 |
|---------------|--------|-------|-------|-------|-------|--------|-------------------|
| 2 | 4 | 4 | 2 | | | 20 | |
| | | | | | | | |
| Grp | OpCode | Reg R | Opt 1 | | | S-IMM- | 19 |
| $\frac{2}{2}$ | 4 | 4 | 3 | | | 19 | |
| | | | | | | | |
| Grp | OpCode | Reg R | Opt 1 | Reg B | | S-IM | M-15 |
| 2 | 4 | 4 | 3 | 4 | | | 5 |
| | | | | | | | |
| Grp | OpCode | Reg R | Opt 1 | Reg B | Opt 2 | S-IM | IM-13 / special |
| 2 | 44 | 4 | 3 | 4 | 2 | | 13 |
| | | | | | | | |
| Grp | OpCode | Reg R | Opt 1 | Reg B | Opt 2 | Reg A | S-IMM-9 / special |
| 2 | 44 | 4 | 3 | 4 | 2 | 4 | 9 |

This book

CONTENTS