# TWIN-64
## Architecture Document

Helmut Fieres
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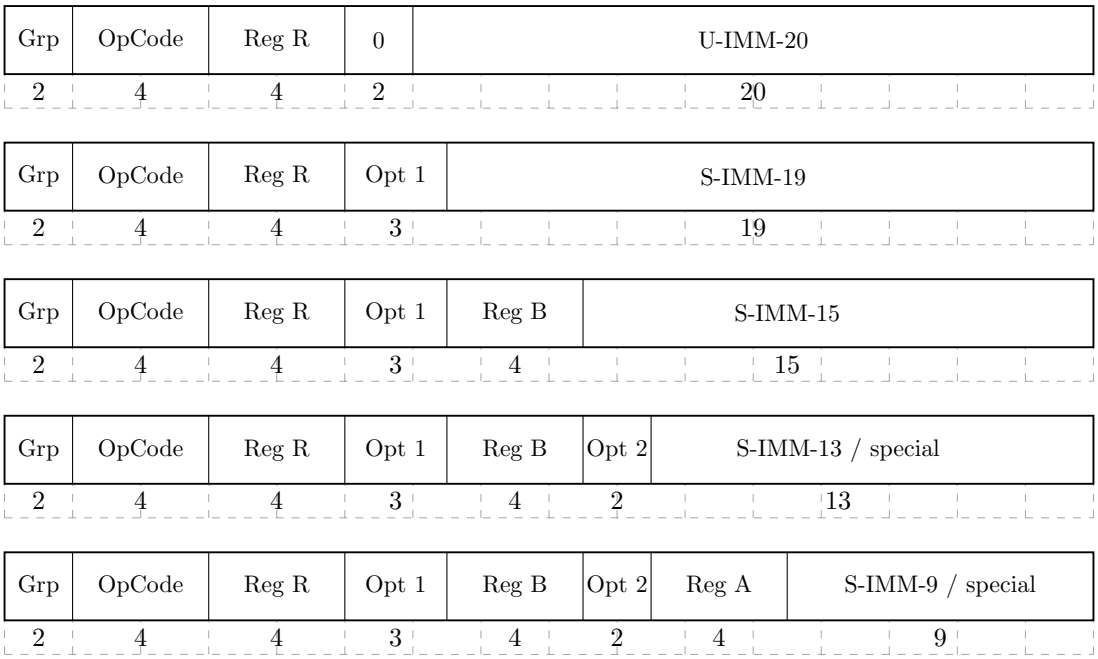
# Contents

# Introduction

## Instruction Formats




## This book

# Instruction Set Reference

add general remarks, description format, etc.

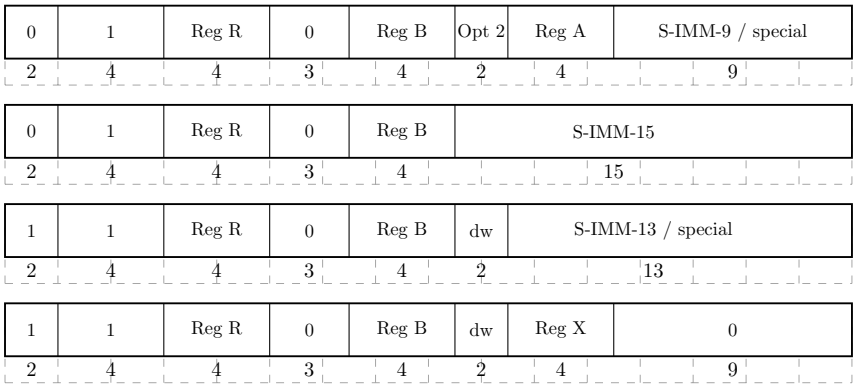
# ADD Integer Addition

## Syntax

```
ADD RegR, RegB, RegA
ADD RegR, RegB, Immed15
ADD RegR, Immed13( RegB )
ADD RegR, RegX ( RegB )
```

## Format

The ADD instruction uses the register, the immediate, the indexed and the register indexed instruction formats.




## Description

Adds `RegR` and `RegB`, storing result in `RegR`.

## Operation

`RegR <- RegB + RegA` (register format)
`RegR <- RegB + immOperand( )` (immediate format)
`RegR <- RegR + memOperand( )` (indexed formats)

## Exceptions

OVERFLOW_TRAP
ALIGNMENT_TRAP
mem ref traps...

## Notes

None.