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CS382-B

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SleepyU Manual

Naming Conventions:

- BOOST => ADD

- FALL => SUB

- FETCH => LDR

- TUCK => STR

- Rd => destination register

- Rs => source register

- Rt => offset register

- R1 => operand register 1

- R2 => operand register 2

Instructions (8-bit):

- BOOST (BOOST Rd, R1, R2):

    - 2-bit opcode: {00}

    - 2-bit destination register: {00, 01, 10, 11}

    - 2-bit operand register 1: {00, 01, 10, 11}

    - 2-bit operand register 2: {00, 01, 10, 11}

- FALL (FALL Rd, R1, R2):

    - 2-bit opcode: {01}

- ○ 2-bit destination register: {00, 01, 10, 11}

- ○ 2-bit operand register 1: {00, 01, 10, 11}

- ○ 2-bit operand register 2: {00, 01, 10, 11}

- FETCH (FETCH Rd, [Rs, Rt]):

  - ○ 2-bit opcode: {10}

  - ○ 2-bit destination register: {00, 01, 10, 11}

  - ○ 2-bit source register: {00, 01, 10, 11}

  - ○ 2-bit offset register: {00, 01, 10, 11}

- TUCK (TUCK Rd, [Rs, Rt]):

  - ○ 2-bit opcode: {11}

  - ○ 2-bit destination register: {00, 01, 10, 11}

  - ○ 2-bit source register: {00, 01, 10, 11}

  - ○ 2-bit offset register: {00, 01, 10, 11}