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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: target register
- Rm: operand register 1
- Rn: operand register 2

### **Instructions (8-bit):**

- [aa bb cc dd]:
  - 2-bit opcode: aa
  - 2-bit destination register: bb
  - 2-bit source/operand register: cc
  - 2-bit target/operand register: dd
- BOOST (BOOST Rd, Rm, Rn):
  - 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, Rm, Rn):
  - 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 target 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 target register: {00, 01, 10, 11}