Sheet1

| | Instruction | AU | MUX A/PC | MUX B/O | MUX AU/Mem | MEM Ctrl | Write Enable Registers | Notes |
|---|-------------|---------|-----------|---------|------------|-----------|------------------------|---|
| | SUB | 001 | 1 Default | Default | Default | Default | Α | |
| | ADD | Default | Default | Default | Default | Default | A | |
| | LDAC | Default | 001 | 0 000 | 1 Default | Default | A | |
| | LDBC | Default | 001 | 0 000 | 1 Default | Default | В | |
| | STAM | Default | 001 | 000 | 1 Default | 0101 | L Not Applicable | ADD O-reg + 0 to get to the correct address |
| | LDAM | Default | 001 | 000 | 1 000 | 1 Default | Α | ADD O-reg + 0 to get to the correct address |
| | LDBM | Default | 001 | 000 | 1 000 | 1 Default | В | |
| 1 | LDAL | Default | Default | 000 | 1 000 | 1 Default | alter A | ADD A+ O-reg to get to the correct address |
| | Fetch | Default | 000 | 1 001 | 0 000 | 1 Default | Opcode O-reg | |
| | PC+1 | x100 | 000 | 1 001 | 0 Default | Default | PC | Performs PC + 0 + Carry |