X64000 Programming Manual WestCo

Revision II.1

The X64000 has 5 addressing modes, each of them in either of these categories: Register to Register, System call, Immediate.

They all start with the same format, opcode byte, funct3 and funct7, where these differ is after it (funct7), System call addressing takes its values from the stack, where as register to register addressing expects at least two registers within [0, 35], Immediate is quite different, it first solves the load/store problem. For instance, use 'stw' to store a 64-bit word into a register. or 'lda' to load r0 from a register address. The operating system is heavily encouraged to optimize labels at runtime (3:mld:foo), however some like 'mh' (machine halt) are used to halt the cpu (if CL=0)