

Instruction	Description
Arithmetic, Rotate, And Shift Instructions	
ALU ALU_SHF DBL_SHIFT	Perform an arithmetic operation Perform an arithmetic operation and shift Concatenate and shift two longwords
Branch and Jump Instructions	
BR, BR=0, BR!=0, BR>0, BR>=0, BR<0, BR<=0, BR=count, BR!=count BR_BSET, BR_BCLR BR=BYTE, BR!=BYTE BR=CTX, BR!=CTX BR_INP_STATE BR_SIGNAL JUMP RTN	Branch or branch conditional Branch if bit set or clear Branch if byte equal or not equal Branch on current context Branch on event state Branch if signal deasserted Jump to label Return from branch or jump
Reference Instructions	
CSR FAST_WR LOCAL_CSR_RD, LOCAL_CSR_WR R_FIFO_RD PCI_DMA SCRATCH SDRAM SRAM T_FIFO_WR	CSR reference Write immediate data to thd_done CSRs Read and write CSRs Read the receive FIFO Issue a request on the PCI bus Scratchpad memory request SDRAM reference SRAM reference Write to transmit FIFO
Local Register Instructions	
FIND_BST, FIND_BSET_WITH_MASK IMMED IMMED_B0, IMMED_B1, IMMED_B2, IMMED_B3 IMMED_W0, IMMED_W1 LD_FIELD, LD_FIELD_W_CLR LOAD_ADDR LOAD_BSET_RESULT1, LOAD_BSET_RESULT2	Find first 1 bit in a value Load immediate value and sign extend Load immediate byte to a field Load immediate word to a field Load byte(s) into specified field(s) Load instruction address Load the result of find_bset
Miscellaneous Instructions	
CTX_ARB NOP HASH1_48, HASH2_48, HASH3_48 HASH1_64, HASH2_64, HASH3_64	Perform context swap and wake on event Skip to next instruction Perform 48-bit hash function 1, 2, or 3 Perform 64-bit hash function 1, 2, or 3