ADDIU Add Immediate Unsigned Word

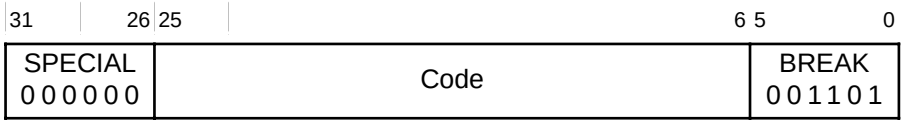
ADDU Add Unsigned Word

BGEZAL Branch on Greater than or Equal to Zero And Link

BGTZ Branch on Greater Than Zero

BREAK

Break Point



Format : BREAK

Fonction : To cause a Breakpoint exception

Description :

A breakpoint exception occurs, immediately and unconditionally transferring control to the exception handler. The code field is available for use as software parameters, but is retrieved by the exception handler only by loading the contents of the memory word containing the instruction.

Restrictions : None

Exceptions : Breakpoint

Notes : None

COP0

Coprocessor system operation

Format : COP0 cop_fun

Fonction : Execute a coprocessor system function

Description :

The coprocessor instruction defined by the cop_fun field is done by the

J — Jump

J 0 0 0 0 1 0	instr_index

Format : J target

Fonction : To branch within the current 256 MB-aligned region

Description :

This is a PC-region branch (not PC-relative); the effective target address is in the “current” 256 MB-aligned region. The low 28 bits of the target address is the instr_index field shifted left 2 bits. The remaining upper bits are the corresponding bits of the address of the instruction in the delay slot (not the branch itself).

Restrictions : None

Exceptions : None

Notes : Forming the branch target address by catenating PC and index bits

LUI — Load Upper Immediate

LW — Load Word

LWC0

Load Word to Coprocessor System

LWC0 1 1 0 0 0 0	base	cs	offset

MFHI

Move From HI register

SPECIAL 000000	0 0000000000	rd	0 00000	MFHI 010000

Format : MFHI rd

Fonction : To copy the special purpose HI register to a GPR

Description : rd ← HI

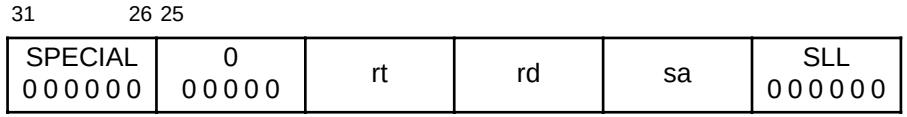
MULTU

Multiply Unsigned Word

OR

SLL

Shift Word Left Logical



Format : SLL rd, rt, sa

Fonction : To left-shift a word by a fixed number of bits

Description : rd ← rt << sa

The contents of the low-order 32-bit word of GPR rt are shifted left, inserting zeros into the emptied bits; the word result is placed in GPR rd. The bit-shift amount is specified by sa.

Restrictions : None

Exceptions : None

Notes : SLL r0, r0, 0, expressed as NOP, is the assembly idiom used to denote no operation.

SLT

Set On Less Than

SPECIAL 0 0 0 0 0 0	rs	rt	rd	0 0 0 0 0 0	SLT 1 0 1 0 1 0

Format : SLT rd, rs, rt

Fonction

SLTIU

Set on Less Than Immediate Unsigned

SLTIU 0 0 1 0 1 1	rs	rt	immediate

Format : SLTIU rt, rs, immediate

Fonction : To record the result of an unsigned less-than comparison with a constant

Description : rt

SRA

Shift Word Right Arithmetic

SPECIAL	0	
0 0 0 0 0 0	0 0 0 0 0	rt

SW

Store Word

SW