

Mnemonic: LDI Immed,SRd

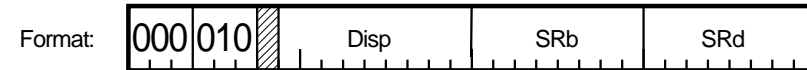
Instruction: Load Immediate



Description: Immed->SRd ; (Immed=17bits)

Mnemonic: LDB SRb,Disp,SRd

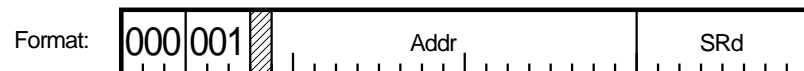
Instruction: Load based



Description: M[SRb+Disp]->SRd ; (Disp=9bits)

Mnemonic: LD Addr,SRd

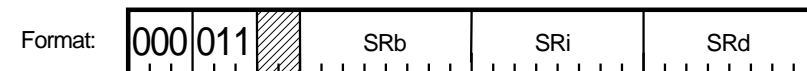
Instruction: Load direct



Description: M[Addr]->SRd ; (Addr=17bits)

Mnemonic: LDBI SRb,SRi,SRd

Instruction: Load base-indexed



Description: M[SRb+SRi]->SRd

Mnemonic: LDBS SRb,Sft,SRd

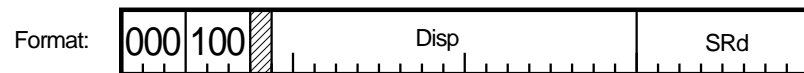
Instruction: Load base-shifted



Description: $M[SRb \gg Sft] \rightarrow SRd$; (Sft=9bits)

Mnemonic: LDPCB Disp,SRd

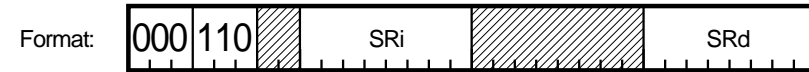
Instruction: Load PC-based



Description: $M[PC + Disp] \rightarrow SRd$; (Disp=17bits)

Mnemonic: LDPCBI SRi,SRd

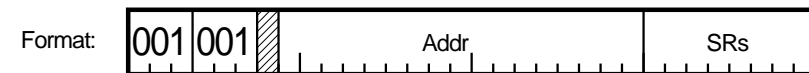
Instruction: Load PC-base-indexed



Description: $M[PC + SRi] \rightarrow SRd$

Mnemonic: ST Addr,SRs

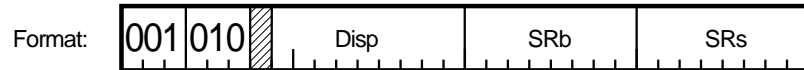
Instruction: Store direct



Description: $SRs \rightarrow M[Addr]$; (Addr=17bits)

Mnemonic: STB SRb,Disp,SRs

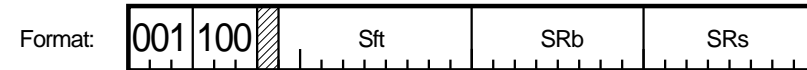
Instruction: Store based



Description: $SRs \rightarrow M[SRb + Disp]$; (Disp=9bits)

Mnemonic: STBS SRb,Sft,SRs

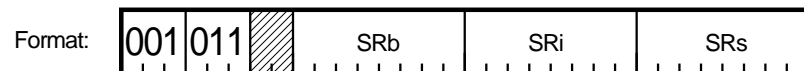
Instruction: Store base-shifted



Description: $SRs \rightarrow M[SRb \gg Sft]$; Sft=9bits

Mnemonic: STBI SRb,SRi,SRs

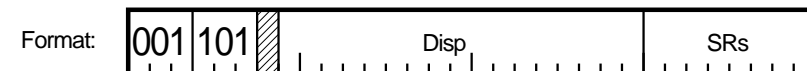
Instruction: Store base-indexed



Description: $SRs \rightarrow M[SRb + SRi]$

Mnemonic: STPCB Disp,SRs

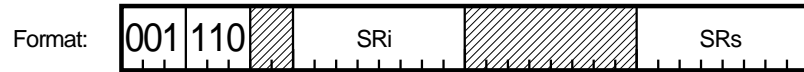
Instruction: Store PC-based



Description: $SRs \rightarrow M[PC + Disp]$; Disp=17bits

Mnemonic: STPCBI SRi,SRs

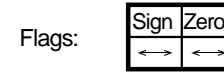
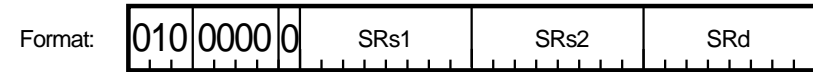
Instruction: Store PC-base-indexed



Description: $SRs \rightarrow M[PC+SRi]$

Mnemonic: ADD SRs1,SRs2,SRd

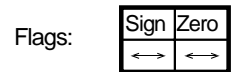
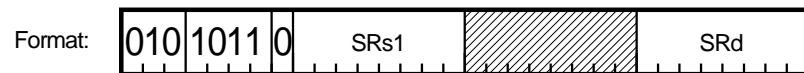
Instruction: Integer addition



Description: $SRs2 + SRs1 \rightarrow SRd$

Mnemonic: NOT SRs1,SRd

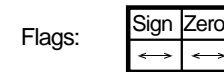
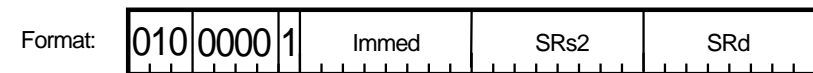
Instruction: Logical NOT



Description: $\sim SRs1 \rightarrow SRd$

Mnemonic: ADDI Immed,SRs2,SRd

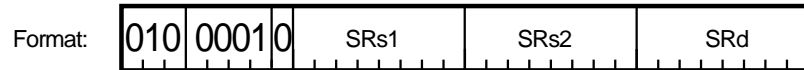
Instruction: Integer addition immediate



Description: $SRs2 + Immed \rightarrow SRd$; (Immed=8bits)

Mnemonic: SUB SRs1,SRs2,SRd

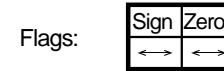
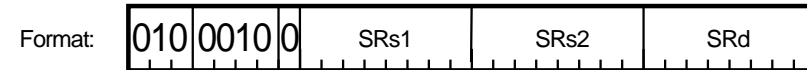
Instruction: Integer subtract



Description: SRs2 - SRs1 -> SRd

Mnemonic: MUL SRs1,SRs2,SRd

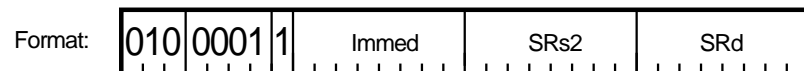
Instruction: Integer multiply



Description: SRs2 x SRs1 -> SRd

Mnemonic: SUBI Immed,SRs2,SRd

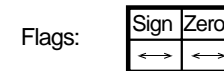
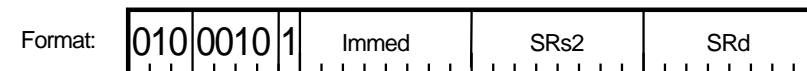
Instruction: Integer subtract immediate



Description: SRs2 - Immed -> SRd ; (Immed=8bits)

Mnemonic: MULI Immed,SRs2,SRd

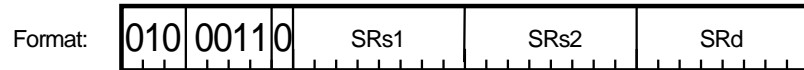
Instruction: Integer multiply immediate



Description: SRs2 x Immed -> SRd ; (Immed=8bits)

Mnemonic: DIV SRs1,SRs2,SRd

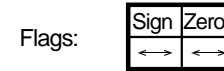
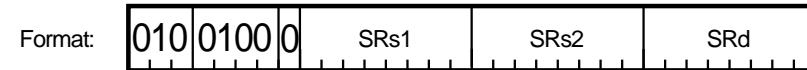
Instruction: Integer division



Description: $SRs2 \div SRs1 \rightarrow SRd$

Mnemonic: MOD SRs1,SRs2,SRd

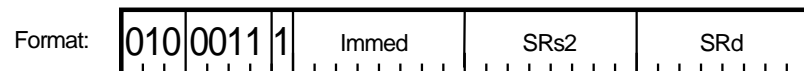
Instruction: Integer modulo



Description: $SRs2 \bmod SRs1 \rightarrow SRd$

Mnemonic: DIVI Immed,SRs2,SRd

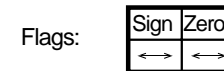
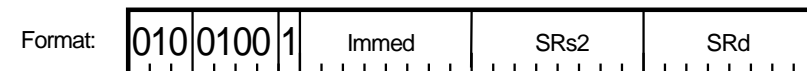
Instruction: Integer division immediate



Description: $SRs2 \div \text{Immed} \rightarrow SRd$; (Immed=8bits)

Mnemonic: MODI Immed,SRs2,SRd

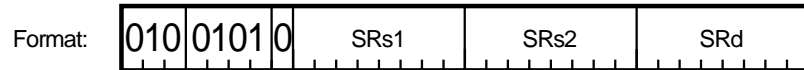
Instruction: Integer modulo immediate



Description: $SRs2 \bmod \text{Immed} \rightarrow SRd$; (Immed=8bits)

Mnemonic: RSUB SRs1,SRs2,SRd

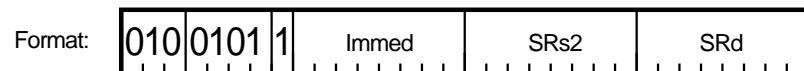
Instruction: Integer reverse subtract



Description: SRs1 - SRs2 -> SRd

Mnemonic: RSUBI Immed,SRs2,SRd

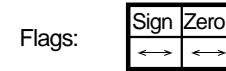
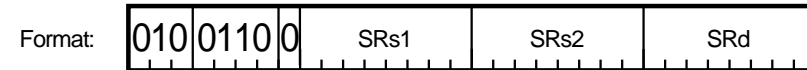
Instruction: Integer reverse subtract immediate



Description: Immed - SRs2 -> SRd ; (Immed=8bits)

Mnemonic: UMUL SRs1,SRs2,SRd

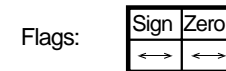
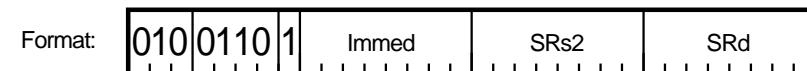
Instruction: Unsigned integer multiply



Description: SRs2 x SRs1 -> SRd (unsigned)

Mnemonic: UMULI Immed,SRs2,SRd

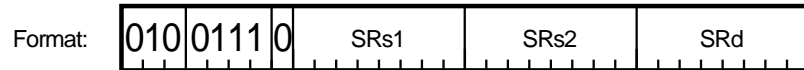
Instruction: Unsigned integer multiply immediate



Description: SRs2 x Immed -> SRd ; (Immed=8bits,unsigned)

Mnemonic: UDIV SRs1,SRs2,SRd

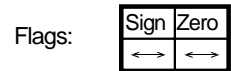
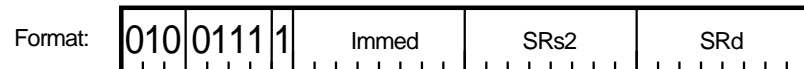
Instruction: Unsigned integer division



Description: $SRs2 \div SRs1 \rightarrow SRd$ (unsigned)

Mnemonic: UDIVI Immed,SRs2,SRd

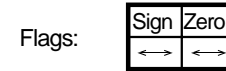
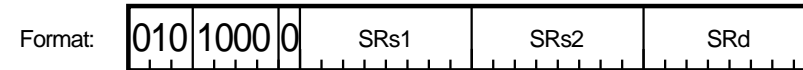
Instruction: Unsigned integer division immediate



Description: $SRs2 \div Immed \rightarrow SRd$; (Immed=8bits,unsigned)

Mnemonic: AND SRs1,SRs2,SRd

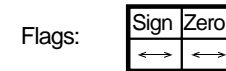
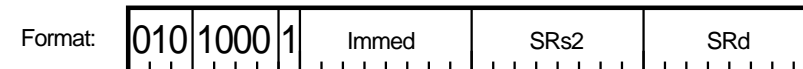
Instruction: Logical AND



Description: $SRs2 \& SRs1 \rightarrow SRd$

Mnemonic: ANDI Immed,SRs2,SRd

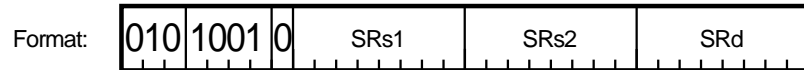
Instruction: Logical AND immediate



Description: $SRs2 \& Immed \rightarrow SRd$; (Immed=8bits)

Mnemonic: OR SRs1,SRs2,SRd

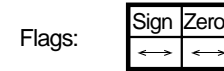
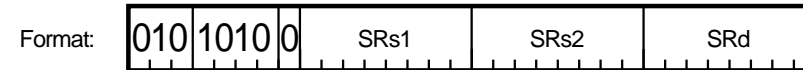
Instruction: Logical OR



Description: $SRs2 \mid SRs1 \rightarrow SRd$

Mnemonic: XOR SRs1,SRs2,SRd

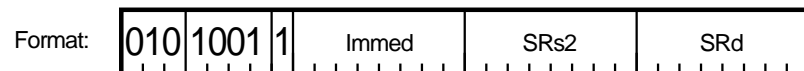
Instruction: Logical XOR



Description: $SRs2 \wedge SRs1 \rightarrow SRd$

Mnemonic: ORI Immed,SRs2,SRd

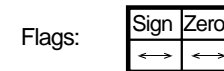
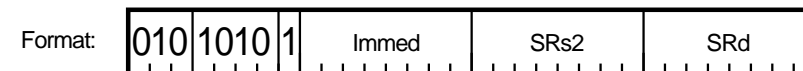
Instruction: Logical OR immediate



Description: $SRs2 \mid Immed \rightarrow SRd$; (Immed=8bits)

Mnemonic: XORI Immed,SRs2,SRd

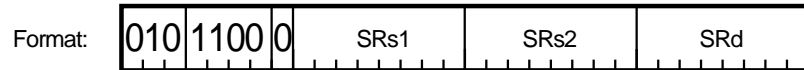
Instruction: Logical XOR immediate



Description: $SRs2 \wedge Immed \rightarrow SRd$; (Immed=8bits)

Mnemonic: SRL SRs1,SRs2,SRd

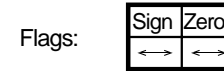
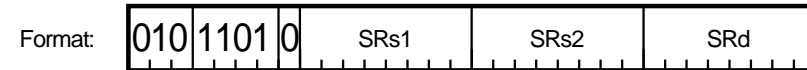
Instruction: Shift right logical



Description: $SRs2 \gg SRs1 \rightarrow SRd$

Mnemonic: SLL SRs1,SRs2,SRd

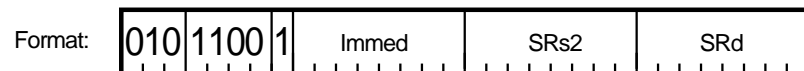
Instruction: Shift left logical



Description: $SRs2 \ll SRs1 \rightarrow SRd$

Mnemonic: SRLI Immed,SRs2,SRd

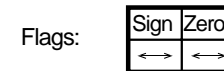
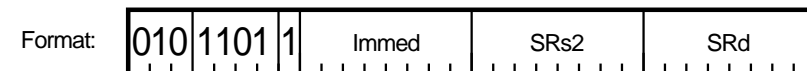
Instruction: Shift right logical immediate



Description: $SRs2 \gg Immed \rightarrow SRd$; (Immed=8bits)

Mnemonic: SLLI Immed,SRs2,SRd

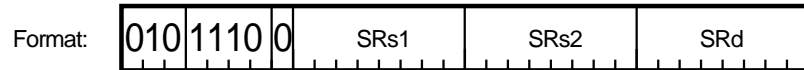
Instruction: Shift left logical immediate



Description: $SRs2 \ll Immed \rightarrow SRd$; (Immed=8bits)

Mnemonic: SRA SRs1,SRs2,SRd

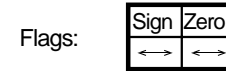
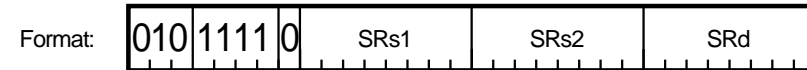
Instruction: Shift right arithmetic



Description: $SRs2 \gg SRs1 \rightarrow SRd$

Mnemonic: SLA SRs1,SRs2,SRd

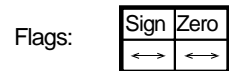
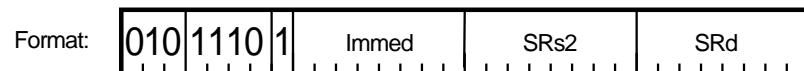
Instruction: Shift left arithmetic



Description: $SRs2 \ll SRs1 \rightarrow SRd$

Mnemonic: SRAI Immed,SRs2,SRd

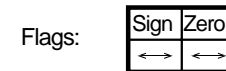
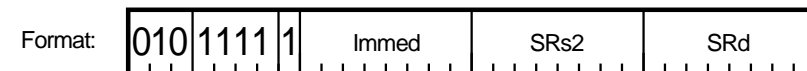
Instruction: Shift right arithmetic immediate



Description: $SRs2 \gg Immed \rightarrow SRd$; (Immed=8bits)

Mnemonic: SLAI Immed,SRs2,SRd

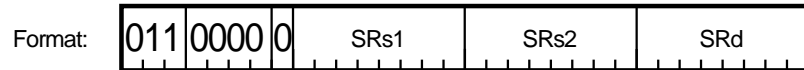
Instruction: Shift left arithmetic immediate



Description: $SRs2 \ll Immed \rightarrow SRd$; (Immed=8bits)

Mnemonic: FADD SRs1,SRs2,SRd

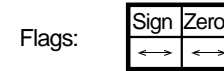
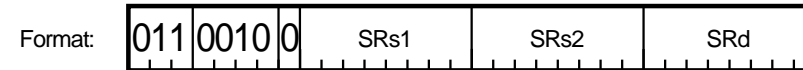
Instruction: floating point addition



Description: $SRs2 + SRs1 \rightarrow SRd$

Mnemonic: FMUL SRs1,SRs2,SRd

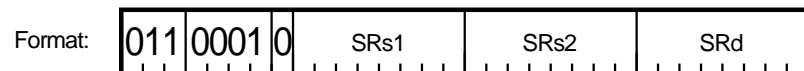
Instruction: floating point multiply



Description: $SRs2 \times SRs1 \rightarrow SRd$

Mnemonic: FSUB SRs1,SRs2,SRd

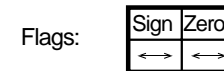
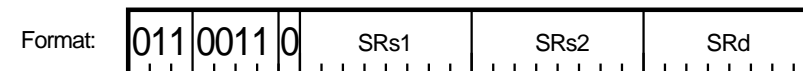
Instruction: floating point subtract



Description: $SRs2 - SRs1 \rightarrow SRd$

Mnemonic: FDIV SRs1,SRs2,SRd

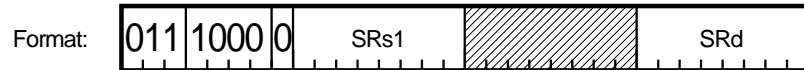
Instruction: floating point division



Description: $SRs2 \div SRs1 \rightarrow SRd$

Mnemonic: INT SRs1,SRd

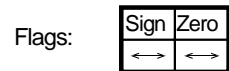
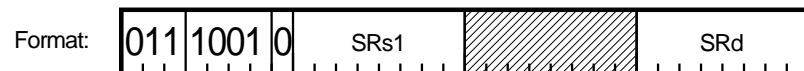
Instruction: floating point to integer conversion



Description: (int)SRs1 -> SRd

Mnemonic: FLT SRs1,SRd

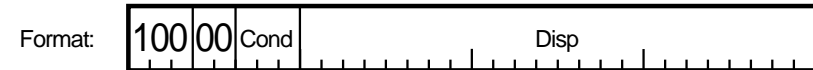
Instruction: integer to floating point conversion



Description: (float)SRs1 -> SRd

**Mnemonic: JMP Disp ; JR Disp
JC Cond,Disp ; JRC Cond,Disp**

Instruction: Jump Relative
Jump Relative Conditional

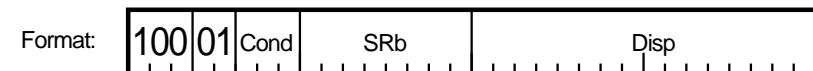


Description: if (Cond) then PC + Disp -> PC (Disp=24bits)

- Cond: 000 - jump always
- 001 - plus
- 010 - minus
- 011 - zero
- 100 - not plus
- 101 - not minus
- 110 - not zero
- 111 - (reserved)

**Mnemonic: JB SRb,Disp
JBC Cond,SRb,Disp**

Instruction: Jump Based
Conditional Jump Based

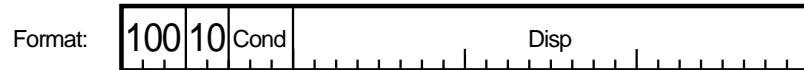


Description: if Cond then SRb + Disp -> PC (Disp=16bits)

- Cond: 000 - jump always
- 001 - plus
- 010 - minus
- 011 - zero
- 100 - not plus
- 101 - not minus
- 110 - not zero
- 111 - (reserved)

**Mnemonic: JMPL Disp ; JRL Disp
JCL Cond,Disp ; JRCL Cond,Disp**

Instruction: Jump Relative and Link
Jump Relative Conditional and Link

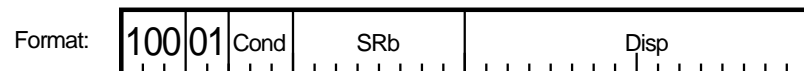


Description: if (Cond) then PC+2 -> LinkReg ; PC + Disp -> PC (Disp=24bits)

Cond: 000 - jump always
001 - plus
010 - minus
011 - zero
100 - not plus
101 - not minus
110 - not zero
111 - (reserved)

**Mnemonic: JBL SRb,Disp
JBCL Cond,SRb,Disp**

Instruction: Jump Based and Link
Conditional Jump Based and Link

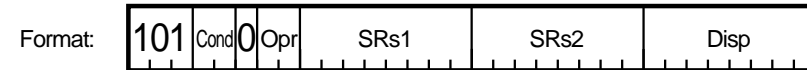


Description: if Cond then PC -> LinkReg ; SRb + Disp -> PC (Disp=16bits)

Cond: 000 - jump always
001 - plus
010 - minus
011 - zero
100 - not plus
101 - not minus
110 - not zero
111 - (reserved)

Mnemonic: CJ(Cond) Opr,SRs1,SRs2,Disp

Instruction: Compare and jump conditional

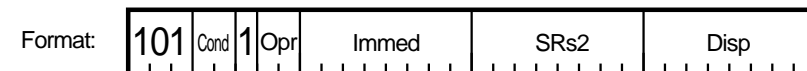


Description: if (SRs2 op SRs1 = Cond) then PC+Disp -> PC ; (Disp=8bits)

Cond: 00 - plus (CJP)
01 - minus (CJM)
10 - zero (CJZ)
11 - not zero (CJNZ)
Opr: 00 - SRs2 - SRs1 (SUB)
01 - SRs1 - SRs2 (RSUB)
10 - SRs2 AND SRs1 (AND)
11 - SRs2 OR SRs1 (OR)

Mnemonic: CJ(Cond)I Opr,Immed,SRs2,Disp

Instruction: Compare and jump conditional immediate

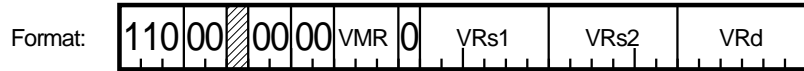


Description: if (Immed op SRs1 = Cond) then PC+Disp -> PC ; (Disp=8bits)

Cond: 00 - plus (CJP)
01 - minus (CJM)
10 - zero (CJZ)
11 - not zero (CJNZ)
Opr: 00 - SRs2 - Immed (SUB)
01 - Immed - SRs2 (RSUB)
10 - SRs2 AND Immed (AND)
11 - SRs2 OR Immed (OR)

Mnemonic: VFADD VRs1,VRs2,VRd{,VMR}

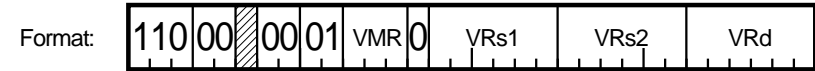
Instruction: Vector floating point addition



Description: VRs2 + VRs1 -> VRd ; using vector mask register VMR

Mnemonic: VFSUB VRs1,VRs2,VRd{,VMR}

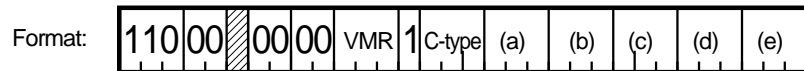
Instruction: Vector floating point subtract



Description: VRs2 - VRs1 -> VRd ; using vector mask register VMR

Mnemonic: CVFADD src1,src2,dstn{,VMR}

Instruction: Vector floating point addition with chaining

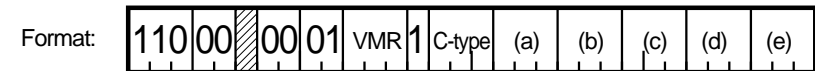


Description: src2 + src1 -> dstn ; using vector mask register VMR

src1	src2	dstn	
VRs1	VRs2	CNd	Ctype=001,(a)(b)=VRs1,(c)(d)=VRs2,(e)=CNd
VRs1	CNs2	VRd	Ctype=010,(a)(b)=VRs1,(c)=CNs2,(d)(e)=VRd
VRs1	CNs2	CNd	Ctype=011,(a)(b)=VRs1,(c)=CNs2,(e)=CNd
CNs1	VRs2	VRd	Ctype=100,(a)=CNs1,(b)(c)=VRs2,(d)(e)=VRd
CNs1	VRs2	CNd	Ctype=101,(a)=CNs1,(b)(c)=VRs2,(e)=CNd
CNs1	CNs2	VRd	Ctype=110,(a)=CNs1,(c)=CNs2,(d)(e)=VRd
CNs1	CNs2	CNd	Ctype=111,(a)=CNs1,(c)=CNs2,(e)=CNd

Mnemonic: CVFSUB src1,src2,dstn{,VMR}

Instruction: Vector floating point subtract with chaining

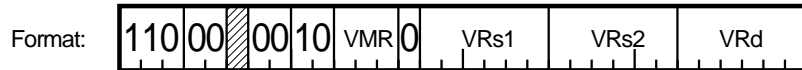


Description: src2 - src1 -> dstn ; using vector mask register VMR

src1	src2	dstn	
VRs1	VRs2	CNd	Ctype=001,(a)(b)=VRs1,(c)(d)=VRs2,(e)=CNd
VRs1	CNs2	VRd	Ctype=010,(a)(b)=VRs1,(c)=CNs2,(d)(e)=VRd
VRs1	CNs2	CNd	Ctype=011,(a)(b)=VRs1,(c)=CNs2,(e)=CNd
CNs1	VRs2	VRd	Ctype=100,(a)=CNs1,(b)(c)=VRs2,(d)(e)=VRd
CNs1	VRs2	CNd	Ctype=101,(a)=CNs1,(b)(c)=VRs2,(e)=CNd
CNs1	CNs2	VRd	Ctype=110,(a)=CNs1,(c)=CNs2,(d)(e)=VRd
CNs1	CNs2	CNd	Ctype=111,(a)=CNs1,(c)=CNs2,(e)=CNd

Mnemonic: VFMUL VRs1,VRs2,VRd{,VMR}

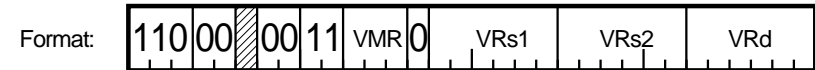
Instruction: Vector floating point multiply



Description: $VRs2 \times VRs1 \rightarrow VRd$; using vector mask register VMR

Mnemonic: VFDIV VRs1,VRs2,VRd{,VMR}

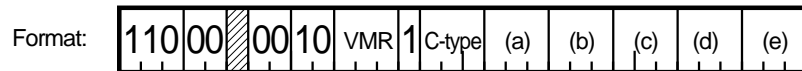
Instruction: Vector floating point division



Description: $VRs2 \div VRs1 \rightarrow VRd$; using vector mask register VMR

Mnemonic: CVFMUL src1,src2,dstn{,VMR}

Instruction: Vector floating point multiply with chaining

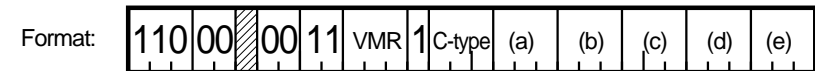


Description: $src2 \times src1 \rightarrow dstn$; using vector mask register VMR

src1	src2	dstn	
VRs1	VRs2	CNd	Ctype=001,(a)(b)=VRs1,(c)(d)=VRs2,(e)=CNd
VRs1	CNs2	VRd	Ctype=010,(a)(b)=VRs1,(c)=CNs2,(d)(e)=VRd
VRs1	CNs2	CNd	Ctype=011,(a)(b)=VRs1,(c)=CNs2,(e)=CNd
CNs1	VRs2	VRd	Ctype=100,(a)=CNs1,(b)(c)=VRs2,(d)(e)=VRd
CNs1	VRs2	CNd	Ctype=101,(a)=CNs1,(b)(c)=VRs2,(e)=CNd
CNs1	CNs2	VRd	Ctype=110,(a)=CNs1,(c)=CNs2,(d)(e)=VRd
CNs1	CNs2	CNd	Ctype=111,(a)=CNs1,(c)=CNs2,(e)=CNd

Mnemonic: CVFDIV src1,src2,dstn{,VMR}

Instruction: Vector floating point division with chaining

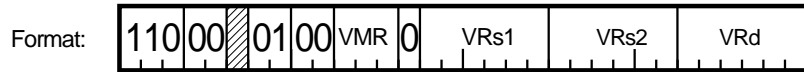


Description: $src2 \div src1 \rightarrow dstn$; using vector mask register VMR

src1	src2	dstn	
VRs1	VRs2	CNd	Ctype=001,(a)(b)=VRs1,(c)(d)=VRs2,(e)=CNd
VRs1	CNs2	VRd	Ctype=010,(a)(b)=VRs1,(c)=CNs2,(d)(e)=VRd
VRs1	CNs2	CNd	Ctype=011,(a)(b)=VRs1,(c)=CNs2,(e)=CNd
CNs1	VRs2	VRd	Ctype=100,(a)=CNs1,(b)(c)=VRs2,(d)(e)=VRd
CNs1	VRs2	CNd	Ctype=101,(a)=CNs1,(b)(c)=VRs2,(e)=CNd
CNs1	CNs2	VRd	Ctype=110,(a)=CNs1,(c)=CNs2,(d)(e)=VRd
CNs1	CNs2	CNd	Ctype=111,(a)=CNs1,(c)=CNs2,(e)=CNd

Mnemonic: VADD VRs1,VRs2,VRd{,VMR}

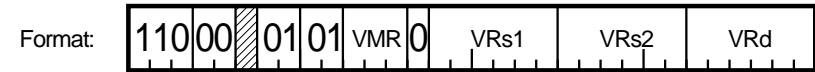
Instruction: Vector integer addition



Description: VRs2 + VRs1 -> VRd ; using vector mask register VMR

Mnemonic: VSUB VRs1,VRs2,VRd{,VMR}

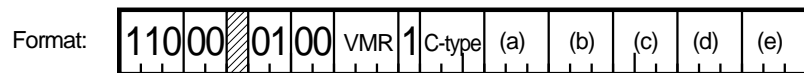
Instruction: Vector integer subtract



Description: VRs2 - VRs1 -> VRd ; using vector mask register VMR

Mnemonic: CVADD src1,src2,dstn{,VMR}

Instruction: Vector integer addition with chaining

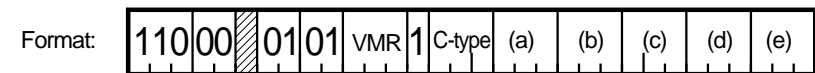


Description: src2 + src1 -> dstn ; using vector mask register VMR

src1	src2	dstn	
VRs1	VRs2	CNd	Ctype=001,(a)(b)=VRs1,(c)(d)=VRs2,(e)=CNd
VRs1	CNs2	VRd	Ctype=010,(a)(b)=VRs1,(c)=CNs2,(d)(e)=VRd
VRs1	CNs2	CNd	Ctype=011,(a)(b)=VRs1,(c)=CNs2,(e)=CNd
CNs1	VRs2	VRd	Ctype=100,(a)=CNs1,(b)(c)=VRs2,(d)(e)=VRd
CNs1	VRs2	CNd	Ctype=101,(a)=CNs1,(b)(c)=VRs2,(e)=CNd
CNs1	CNs2	VRd	Ctype=110,(a)=CNs1,(c)=CNs2,(d)(e)=VRd
CNs1	CNs2	CNd	Ctype=111,(a)=CNs1,(c)=CNs2,(e)=CNd

Mnemonic: CVSUB src1,src2,dstn{,VMR}

Instruction: Vector integer subtract with chaining

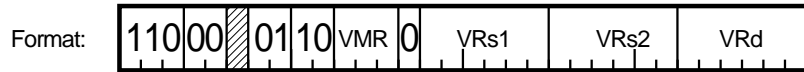


Description: src2 - src1 -> dstn ; using vector mask register VMR

src1	src2	dstn	
VRs1	VRs2	CNd	Ctype=001,(a)(b)=VRs1,(c)(d)=VRs2,(e)=CNd
VRs1	CNs2	VRd	Ctype=010,(a)(b)=VRs1,(c)=CNs2,(d)(e)=VRd
VRs1	CNs2	CNd	Ctype=011,(a)(b)=VRs1,(c)=CNs2,(e)=CNd
CNs1	VRs2	VRd	Ctype=100,(a)=CNs1,(b)(c)=VRs2,(d)(e)=VRd
CNs1	VRs2	CNd	Ctype=101,(a)=CNs1,(b)(c)=VRs2,(e)=CNd
CNs1	CNs2	VRd	Ctype=110,(a)=CNs1,(c)=CNs2,(d)(e)=VRd
CNs1	CNs2	CNd	Ctype=111,(a)=CNs1,(c)=CNs2,(e)=CNd

Mnemonic: VMUL VRs1,VRs2,VRd{,VMR}

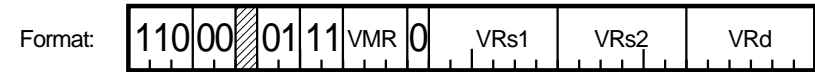
Instruction: Vector integer multiply



Description: $VRs2 \times VRs1 \rightarrow VRd$; using vector mask register VMR

Mnemonic: VDIV VRs1,VRs2,VRd{,VMR}

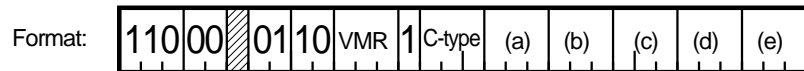
Instruction: Vector integer division



Description: $VRs2 \div VRs1 \rightarrow VRd$; using vector mask register VMR

Mnemonic: CVMUL src1,src2,dstn{,VMR}

Instruction: Vector integer multiply with chaining

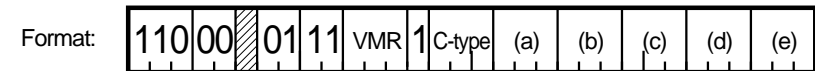


Description: $src2 \times src1 \rightarrow dstn$; using vector mask register VMR

src1	src2	dstn	
VRs1	VRs2	CNd	Ctype=001,(a)(b)=VRs1,(c)(d)=VRs2,(e)=CNd
VRs1	CNs2	VRd	Ctype=010,(a)(b)=VRs1,(c)=CNs2,(d)(e)=VRd
VRs1	CNs2	CNd	Ctype=011,(a)(b)=VRs1,(c)=CNs2,(e)=CNd
CNs1	VRs2	VRd	Ctype=100,(a)=CNs1,(b)(c)=VRs2,(d)(e)=VRd
CNs1	VRs2	CNd	Ctype=101,(a)=CNs1,(b)(c)=VRs2,(e)=CNd
CNs1	CNs2	VRd	Ctype=110,(a)=CNs1,(c)=CNs2,(d)(e)=VRd
CNs1	CNs2	CNd	Ctype=111,(a)=CNs1,(c)=CNs2,(e)=CNd

Mnemonic: CVDIV src1,src2,dstn{,VMR}

Instruction: Vector integer division with chaining

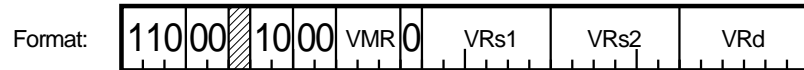


Description: $src2 \div src1 \rightarrow dstn$; using vector mask register VMR

src1	src2	dstn	
VRs1	VRs2	CNd	Ctype=001,(a)(b)=VRs1,(c)(d)=VRs2,(e)=CNd
VRs1	CNs2	VRd	Ctype=010,(a)(b)=VRs1,(c)=CNs2,(d)(e)=VRd
VRs1	CNs2	CNd	Ctype=011,(a)(b)=VRs1,(c)=CNs2,(e)=CNd
CNs1	VRs2	VRd	Ctype=100,(a)=CNs1,(b)(c)=VRs2,(d)(e)=VRd
CNs1	VRs2	CNd	Ctype=101,(a)=CNs1,(b)(c)=VRs2,(e)=CNd
CNs1	CNs2	VRd	Ctype=110,(a)=CNs1,(c)=CNs2,(d)(e)=VRd
CNs1	CNs2	CNd	Ctype=111,(a)=CNs1,(c)=CNs2,(e)=CNd

Mnemonic: VAND VRs1,VRs2,VRd{,VMR}

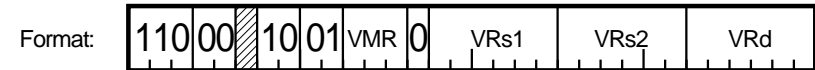
Instruction: Vector logical AND



Description: VRs2 & VRs1 -> VRd ; using vector mask register VMR

Mnemonic: VOR VRs1,VRs2,VRd{,VMR}

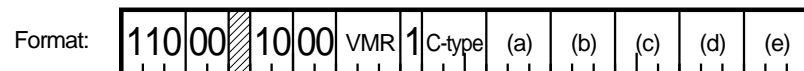
Instruction: Vector logical OR



Description: VRs2 | VRs1 -> VRd ; using vector mask register VMR

Mnemonic: CVAND src1,src2,dstn{,VMR}

Instruction: Vector logical AND with chaining

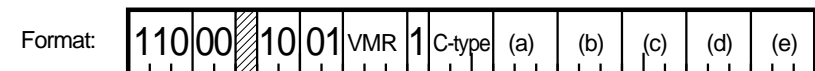


Description: src2 & src1 -> dstn ; using vector mask register VMR

src1	src2	dstn	
VRs1	VRs2	CNd	Ctype=001,(a)(b)=VRs1,(c)(d)=VRs2,(e)=CNd
VRs1	CNs2	VRd	Ctype=010,(a)(b)=VRs1,(c)=CNs2,(d)(e)=VRd
VRs1	CNs2	CNd	Ctype=011,(a)(b)=VRs1,(c)=CNs2,(e)=CNd
CNs1	VRs2	VRd	Ctype=100,(a)=CNs1,(b)(c)=VRs2,(d)(e)=VRd
CNs1	VRs2	CNd	Ctype=101,(a)=CNs1,(b)(c)=VRs2,(e)=CNd
CNs1	CNs2	VRd	Ctype=110,(a)=CNs1,(c)=CNs2,(d)(e)=VRd
CNs1	CNs2	CNd	Ctype=111,(a)=CNs1,(c)=CNs2,(e)=CNd

Mnemonic: CVOR src1,src2,dstn{,VMR}

Instruction: Vector logical OR with chaining



Description: src2 | src1 -> dstn ; using vector mask register VMR

src1	src2	dstn	
VRs1	VRs2	CNd	Ctype=001,(a)(b)=VRs1,(c)(d)=VRs2,(e)=CNd
VRs1	CNs2	VRd	Ctype=010,(a)(b)=VRs1,(c)=CNs2,(d)(e)=VRd
VRs1	CNs2	CNd	Ctype=011,(a)(b)=VRs1,(c)=CNs2,(e)=CNd
CNs1	VRs2	VRd	Ctype=100,(a)=CNs1,(b)(c)=VRs2,(d)(e)=VRd
CNs1	VRs2	CNd	Ctype=101,(a)=CNs1,(b)(c)=VRs2,(e)=CNd
CNs1	CNs2	VRd	Ctype=110,(a)=CNs1,(c)=CNs2,(d)(e)=VRd
CNs1	CNs2	CNd	Ctype=111,(a)=CNs1,(c)=CNs2,(e)=CNd

Mnemonic: VXOR VRs1,VRs2,VRd{,VMR}

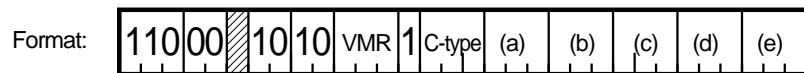
Instruction: Vector logical XOR



Description: $VRs2 \wedge VRs1 \rightarrow VRd$; using vector mask register VMR

Mnemonic: CVXOR src1,src2,dstn{,VMR}

Instruction: Vector logical XOR with chaining

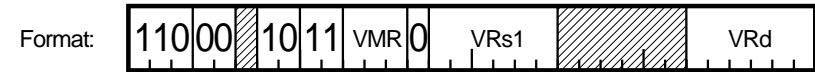


Description: $src2 \wedge src1 \rightarrow dstn$; using vector mask register VMR

src1	src2	dstn	
VRs1	VRs2	CNd	Ctype=001,(a)(b)=VRs1,(c)(d)=VRs2,(e)=CNd
VRs1	CNs2	VRd	Ctype=010,(a)(b)=VRs1,(c)=CNs2,(d)(e)=VRd
VRs1	CNs2	CNd	Ctype=011,(a)(b)=VRs1,(c)=CNs2,(e)=CNd
CNs1	VRs2	VRd	Ctype=100,(a)=CNs1,(b)(c)=VRs2,(d)(e)=VRd
CNs1	VRs2	CNd	Ctype=101,(a)=CNs1,(b)(c)=VRs2,(e)=CNd
CNs1	CNs2	VRd	Ctype=110,(a)=CNs1,(c)=CNs2,(d)(e)=VRd
CNs1	CNs2	CNd	Ctype=111,(a)=CNs1,(c)=CNs2,(e)=CNd

Mnemonic: VNOT VRs1,VRd{,VMR}

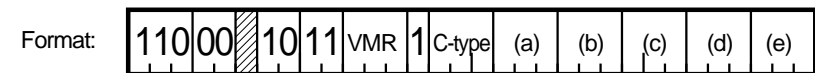
Instruction: Vector logical NOT



Description: $\sim VRs1 \rightarrow VRd$; using vector mask register VMR

Mnemonic: CVNOT src1,dstn{,VMR}

Instruction: Vector logical NOT with chaining

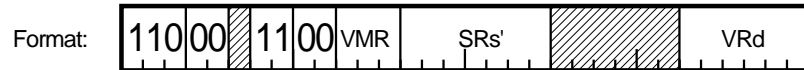


Description: $\sim src1 \rightarrow dstn$; using vector mask register VMR

src1	dstn	
VRs1	CNd	Ctype=001,(a)(b)=VRs1,(e)=CNd
CNs1	VRd	Ctype=100,(a)=CNs1,(d)(e)=VRd
CNs1	CNd	Ctype=101,(a)=CNs1,(e)=CNd

Mnemonic: VBCAST SRs',VRd{,VMR}

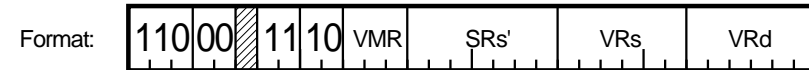
Instruction: Vector broadcast



Description: SRs' -> VRd (broadcast) ; using vector mask register VMR

Mnemonic: VSRL SRs',VRs,VRd{,VMR}

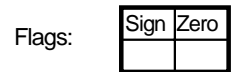
Instruction: Vector shift right logical



Description: VRs >> SRs' -> VRd ; using vector mask register VMR

Mnemonic:

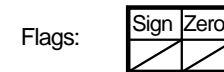
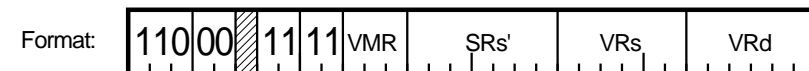
Instruction:



Description:

Mnemonic: VSLL SRs',VRs,VRd{,VMR}

Instruction: Vector shift left logical



Description: VRs << SRs' -> VRd ; using vector mask register VMR

Mnemonic: VLIR VRd,SRb,SRi{,VMR}

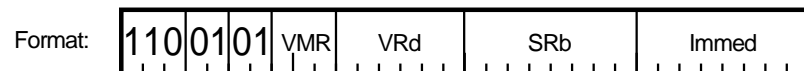
Instruction: Vector load, increment is register



Description: for(i=0;i<128;i++) M[SRb+SRi] -> VRd[i]
using vector mask register VMR

Mnemonic: VLII VRd,SRb,Immed{,VMR}

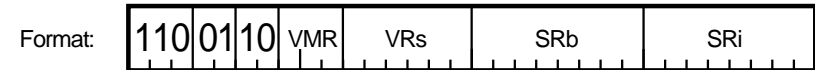
Instruction: Vector load, increment is immediate



Description: for(i=0;i<128;i++) M[SRb+Immed] -> VRd[i]
using vector mask register VMR

Mnemonic: VSIR VRs,SRb,SRi{,VMR}

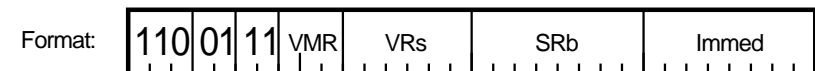
Instruction: Vector store, increment is register



Description: for(i=0;i<128;i++) VRs[i] -> M[SRb+SRi]
using vector mask register VMR

Mnemonic: VSII VRs,SRb,Immed{,VMR}

Instruction: Vector store, increment is immediate



Description: for(i=0;i<128;i++) VRs[i] -> M[SRb+Immed]
using vector mask register VMR

Mnemonic: LVLV VRI,VRd{,VMR}

Instruction: List vector vector load



Description: for(i=0;i<128;i++) M[VRi[i]] -> VRd[i]
using vector mask register VMR

Mnemonic: LVST VRI,VRs{,VMR}

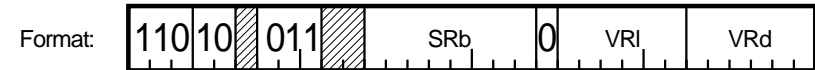
Instruction: List vector vector store



Description: for(i=0;i<128;i++) VRs[i] -> M[VRi[i]]
using vector mask register VMR

Mnemonic: LVBLD VRI,VRd,SRb

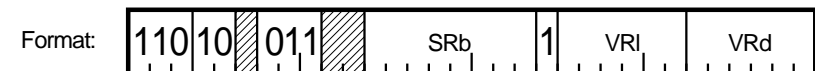
Instruction: List vector-based vector load



Description: for(i=0;i<128;i++) M[VRi[i]+SRb] -> VRd[i]

Mnemonic: LVBST VRI,VRs,SRb

Instruction: List vector-based vector store



Description: for(i=0;i<128;i++) VRs[i] -> M[VRi[i]+SRb]

Mnemonic: VMRSET Cond,VRs,VMRd

Instruction: Vector mask register set

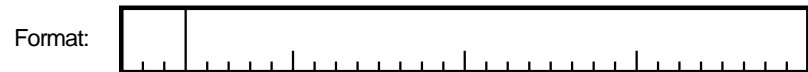


Description: for(i=0;i<128;i++) if cond(VRs[i]) then TRUE -> VMRd[i]
 else FALSE -> VMRd[i]

- Cond: 0000 - Floating zero (FZ) 1000 - Integer zero (IZ)
- 0001 - Floating nonzero (FNZ) 1001 - Integer nonzero (INZ)
- 0010 - Floating plus (FP) 1010 - Integer plus (IP)
- 0011 - Floating nonplus (FNP) 1011 - Integer nonplus (INP)
- 0100 - Floating minus (FM) 1100 - Integer minus (IM)
- 0100 - Floating nonminus (FNM) 1100 - Integer nonminus (INM)

Mnemonic:

Instruction:



Description:

Mnemonic: VMRAND VMRs1,VMRs2,VMRd

Instruction: Vector mask register AND



Description: VMRs1 & VMRs2 -> VMRd

Mnemonic: VMROR VMRs1,VMRs2,VMRd

Instruction: Vector mask register OR



Description: VMRs1 | VMRs2 -> VMRd

Mnemonic: VMRXOR VMRs1,VMRs2,VMRd

Instruction: Vector mask register XOR



Description: $VMRs1 \wedge VMRs2 \rightarrow VMRd$

Mnemonic: VMRNOT VMRs,VMRd

Instruction: Vector mask register NOT



Description: $\sim VMRs \rightarrow VMRd$

Mnemonic: VINT VRs,VRd{,VMR}

Instruction: Vector floating point to integer conversion



Description: $(int)VRs \rightarrow VRd$; using vector mask register VMR

Mnemonic: VFLT VRs,VRd{,VMR}

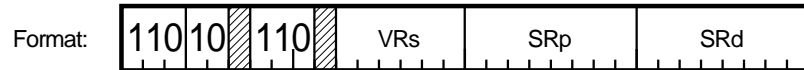
Instruction: Vector integer to floating point conversion



Description: $(float)VRs \rightarrow VRd$; using vector mask register VMR

Mnemonic: MOVVS VRs,SRp,SRd

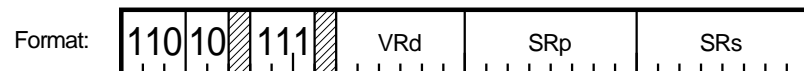
Instruction: Move vector to scalar register



Description: VRs[SRp] -> SRd

Mnemonic: MOVSV VRd,SRp,SRs

Instruction: Move scalar to vector register



Description: SRs -> VRd[SRp]