**Fetch & Decode:** PCout, MARin, Rd, IncPc

PCin(incrementor), MDRout, IRin

**Fetch Source: All:** bit OR on: R0out, SOURCEin

R1out, SOURCEin

R2out, SOURCEin

R3out, SOURCEin

R4out, SOURCEin

R5out, SOURCEin

R6out, SOURCEin

R7out, SOURCEin

**Register indirect:** SOURCEout, MARin, Rd

MDRout, SOURCEin

**Auto Increment:** SOURCEout, MARin, Rd, Zin, Inc

Bit OR on: Zout, R0in

Zout, R1in

Zout, R2in

Zout, R3in

Zout, R4in

Zout, R5in

Zout, R6in

Zout, R7in

**Auto Decrement:** SOURCEout, Dec, Zin

Bit OR on: Zout, R0in, MARin, Rd

Zout, R1in, MARin, Rd

Zout, R2in, MARin, Rd

Zout, R3in, MARin, Rd

Zout, R4in, MARin, Rd

Zout, R5in, MARin, Rd

Zout, R6in, MARin, Rd

Zout, R7in, MARin, Rd

**Indexed:** PCout, MARin, Rd, IncPc

MDRout, Yin, PCin(Incrementor)

SOURCEout, Yout, Add, Zin

Zout, MARin, Rd

**Other than Register Direct/Indirect:** Bit Or on: MDRout, MARin, Rd

MDRout, SOURCEin

**Fetch Destination:**

**All:** bit OR on: R0out, DESTin

R1out, DESTin

R2out, DESTin

R3out, DESTin

R4out, DESTin

R5out, DESTin

R6out, DESTin

R7out, DESTin

**Register Indirect:** DESTout, MARin, Rd

MDRout, DESTin

**Autoincrement:** DESTout, MARin,Rd,Inc,Zin

Bit OR on: Zout, R0in

Zout, R1in

Zout, R2in

Zout, R3in

Zout, R4in

Zout, R5in

Zout, R6in

Zout, R7in

**Autodecrement:** DESTout, Dec, Zin

Bit OR on: Zout, R0in, MARin, Rd

Zout, R1in, MARin, Rd

Zout, R2in, MARin, Rd

Zout, R3in, MARin, Rd

Zout, R4in, MARin, Rd

Zout, R5in, MARin, Rd

Zout, R6in, MARin, Rd

Zout, R7in, MARin, Rd

**Indexed:** PCout, MARin, IncPc, Rd

PCin(incrementor), MDRout, Yin

DESTout, Yout, Add, Zin

Zout, MARin, Rd

**Other than Register Direct/Indirect:** Bit OR on: MDRout,MARin,Rd

MDRout, DESTin

**Save in Dest: Register direct:** Bit OR on: Zout, R0out

Zout, R1out

Zout, R2out

Zout, R3out

Zout, R4out

Zout, R5out

Zout, R6out

Zout, R7out

**Else:** Zout, MDRin, Wr