

**NAME**

atan – arc tangent function

**SYNOPSIS**

**jsr   r5,atan[2]**

**double atan(x)**

**double x;**

**double atan2(x, y)**

**double x, y;**

**DESCRIPTION**

The *atan* entry returns the arc tangent of fr0 in fr0; from C, the arc tangent of  $x$  is returned. The range is  $-\pi/2$  to  $\pi/2$ . The *atan2* entry returns the arc tangent of fr0/fr1 in fr0; from C, the arc tangent of  $x/y$  is returned. The range is  $-\pi$  to  $\pi$ .

**DIAGNOSTIC**

There is no error return.

**BUGS**