

**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**