mathieeesingtrans

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mathieeesingtrans

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```

1.2 mathieeesingtrans.library/IEEESPAcos

```
 NAME
IEEESPAcos -- compute the arc cosine of a number

 SYNOPSIS
  x   = IEEESPAcos(  y  );
d0             d0

float x,y;

 FUNCTION
Compute arc cosine of y in IEEE single precision

 INPUTS
y - IEEE single precision floating point value
```

```
 RESULT
x - IEEE single precision floating point value

 BUGS

 SEE ALSO
IEEESPCos(), IEEESPAtan(), IEEESPAsin()
```

1.3 mathieeesingtrans.library/IEEESPAsin

```
 NAME
IEEESPAsin -- compute the arcsine of a number

 SYNOPSIS
  x   = IEEESPAsin(  y  );
d0             d0

float x,y;

 FUNCTION
Compute the arc sine of y in IEEE single precision

 INPUTS
y - IEEE single precision floating point value

 RESULT
x - IEEE single precision floating point value

 BUGS

 SEE ALSO
IEEESPSin(), IEEESPAtan(), IEEESPAcos()
```

1.4 mathieeesingtrans.library/IEEESPAtan

```
 NAME
IEEESPAtan -- compute the arc tangent of number

 SYNOPSIS
  x   = IEEESPAtan(  y  );
d0       d0

single  x,y;

 FUNCTION
Compute arctangent of y in IEEE single precision

 INPUTS
y - IEEE single precision floating point value

 RESULT
x - IEEE single precision floating point value
```

```
 BUGS

 SEE ALSO
```

1.5 mathieeesingtrans.library/IEEESPCos

```
 NAME
IEEESPCos -- compute the cosine of a floating point number

 SYNOPSIS
  x   = IEEESPCos(  y  );
d0       d0

float x,y;

 FUNCTION
Compute cosine of y in IEEE single precision

 INPUTS
y - IEEE single precision floating point value

 RESULT
x - IEEE single precision floating point value

 BUGS

 SEE ALSO
IEEESPAcos(), IEEESPSin(), IEEESPTan()
```

1.6 mathieeesingtrans.library/IEEESPCosh

```
 NAME
IEEESPCosh -- compute the hyperbolic cosine of a floating point number

 SYNOPSIS
  x   = IEEESPCosh(  y  );
d0       d0

float x,y;

 FUNCTION
Compute hyperbolic cosine of y in IEEE single precision

 INPUTS
y - IEEE single precision floating point value

 RESULT
x - IEEE single precision floating point value

 BUGS
```

```
 SEE ALSO
IEEESPSinh(), IEEESPTanh()
```

1.7 mathieeesingtrans.library/IEEESPExp

```
 NAME
IEEESPExp -- compute the exponential of e

 SYNOPSIS
  x   = IEEESPExp(  y  );
d0            d0

float x,y;

 FUNCTION
Compute e^y in IEEE single precision

 INPUTS
y - IEEE single precision floating point value

 RESULT
x - IEEE single precision floating point value

 BUGS

 SEE ALSO
IEEESPLog()
```

1.8 mathieeesingtrans.library/IEEESPFieee

```
 NAME
IEEESPFieee -- convert IEEE single to IEEE single

 SYNOPSIS
  x   = IEEESPFieee(  y  );
d0                d0

float y;
float  x;

 FUNCTION
Convert IEEE single precision number to IEEE single precision.
These are included for completeness although they just
return the input parameter. A good way to remember how these
functions work is: They convert to and from the local format
to Single Precision IEEE. The local format for this library
happens to also be Single Precision IEEE.

 INPUTS
y - IEEE single precision floating point value

 RESULT
```

```
x - IEEE single precision floating point value

 BUGS

 SEE ALSO
IEEESPTieee()
```

1.9 mathieeesingtrans.library/IEEESPLog

```
 NAME
IEEESPLog -- compute the natural logarithm of a floating point number

 SYNOPSIS
  x   = IEEESPLog(  y  );
d0            d0

float x,y;

 FUNCTION
Compute ln(y) in IEEE single precision

 INPUTS
y - IEEE single precision floating point value

 RESULT
x - IEEE single precision floating point value

 BUGS

 SEE ALSO
IEEESPExp()
```

1.10 mathieeesingtrans.library/IEEESPLog10

```
 NAME
IEEESPLog10 -- compute logarithm base 10 of a number

 SYNOPSIS
  x   = IEEESPLog10(  y  );
d0              d0

float x,y;

 FUNCTION
Compute the logarithm base 10 of y in IEEE single precision

 INPUTS
y - IEEE single precision floating point value

 RESULT
x - IEEE single precision floating point value
```

```
 BUGS

 SEE ALSO
IEEESPLog()
```

1.11 mathieeesingtrans.library/IEEESPPow

```
 NAME
IEEESPPow -- raise a number to another number power

 SYNOPSIS
  z   = IEEESPPow(  x  ,  y  );
d0            d1 d0

float x,y,z;

 FUNCTION
Compute y^x in IEEE single precision

 INPUTS
x - IEEE single precision floating point value
y - IEEE single precision floating point value

 RESULT
z - IEEE single precision floating point value

 BUGS

 SEE ALSO
```

1.12 mathieeesingtrans.library/IEEESPSin

```
 NAME
IEEESPSin -- compute the sine of a floating point number

 SYNOPSIS
  x   = IEEESPSin(  y  );
d0      d0

float x,y;

 FUNCTION
Compute sine of y in IEEE single precision

 INPUTS
y - IEEE single precision floating point value

 RESULT
x - IEEE single precision floating point value

 BUGS
```

```
 SEE ALSO
IEEESPAsin(), IEEESPTan(), IEEESPCos()
```

1.13 mathieeesingtrans.library/IEEESPSincos

```
 NAME
IEEESPSincos -- compute the arc tangent of a floating point number

 SYNOPSIS
  x   = IEEESPSincos( z ,  y  );
d0         a0  d0

float x,y,*z;

 FUNCTION
Compute sin and cosine of y in IEEE single precision.
Store the cosine in *z. Return the sine of y.

 INPUTS
y - IEEE single precision floating point value
z - pointer to IEEE single precision floating point number

 RESULT
x - IEEE single precision floating point value

 BUGS

 SEE ALSO
IEEESPSin(), IEEESPCos()
```

1.14 mathieeesingtrans.library/IEEESPSinh

```
 NAME
IEEESPSinh -- compute the hyperbolic sine of a floating point number

 SYNOPSIS
  x   = IEEESPSinh(  y  );
d0       d0

float x,y;

 FUNCTION
Compute hyperbolic sine of y in IEEE single precision

 INPUTS
y - IEEE single precision floating point value

 RESULT
x - IEEE single precision floating point value

 BUGS
```

```
 SEE ALSO
IEEESPCosh, IEEESPTanh
```

1.15 mathieeesingtrans.library/IEEESPSqrt

```
 NAME
IEEESPSqrt -- compute the square root of a number

 SYNOPSIS
  x   = IEEESPSqrt(  y  );
 d0                d0

float x,y;

 FUNCTION
Compute square root of y in IEEE single precision

 INPUTS
y - IEEE single precision floating point value

 RESULT
x - IEEE single precision floating point value

 BUGS

 SEE ALSO
```

1.16 mathieeesingtrans.library/IEEESPTan

```
 NAME
IEEESPTan -- compute the tangent of a floating point number

 SYNOPSIS
  x   = IEEESPTan(  y  );
d0      d0

float x,y;

 FUNCTION
Compute tangent of y in IEEE single precision

 INPUTS
y - IEEE single precision floating point value

 RESULT
x - IEEE single precision floating point value

 BUGS

 SEE ALSO
IEEESPAtan(), IEEESPSin(), IEEESPCos()
```

1.17 mathieeesingtrans.library/IEEESPTanh

```
 NAME
IEEESPTanh -- compute the hyperbolic tangent of a floating point number

 SYNOPSIS
  x   = IEEESPTanh(  y  );
d0       d0

float x,y;

 FUNCTION
Compute hyperbolic tangent of y in IEEE single precision

 INPUTS
y - IEEE single precision floating point value

 RESULT
x - IEEE single precision floating point value

 BUGS

 SEE ALSO
IEEESPSinh(), IEEESPCosh()
```

1.18 mathieeesingtrans.library/IEEESPTieee

```
 NAME
IEEESPTieee -- convert IEEE single to IEEE single

 SYNOPSIS
  x   = IEEESPTieee(  y  );
 d0             d0

float   y;
float   x;

 FUNCTION
Convert IEEE single precision number to IEEE single precision.
These are included for completeness although they just
return the input parameter. A good way to remember how these
functions work is: They convert to and from the local format
to Single Precision IEEE. The local format for this library
happens to also be Single Precision IEEE.

 INPUTS
y - IEEE single precision floating point value

 RESULT
x - IEEE single precision floating point value

 BUGS

 SEE ALSO
```

```
IEEESPFieee()
```