

NAME

TPV2R8 – Convert a two-part value to a REAL*8.

SYNOPSIS

RESULT=TPV2R8(TPV,L)

TPV2R8 is the REAL*8 value returned
 TPV(2) is the INTEGER*4 two-part value to convert
 L is the INTEGER*4 number of small things in a big one in the two-part value

DESCRIPTION

This routine computes $TPV2R8 = DFLOAT(TPV(1)) + DFLOAT(TPV(2))/DFLOAT(L)$, which is the floating point equivalent of the two-part value in the units of the big part.

SEE ALSO

R82TPV, which converts a REAL*8 to a two-part value
 and TPVADD, TPVSUB, TPVNML, TPVSCL, TPVMLT, TPVDIV, TPVMAX

BUGS

The possibility that $L=0$ is not guarded against, so in that case a floating-point division by zero yields plus infinity as the result of the conversion.

LINKAGE

gfortran source.f -L\${HOME}/lib -lmisc

AUTHOR

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EXAMPLE

```

      INTEGER*4  TPV(2) /38,18/
      REAL*8  TPV2R8
      WRITE(6,901)  TPV,TPV2R8(TPV,12)
901  FORMAT(' [',I2,',',I2,',']= ',F4.1)
      STOP
      END
```

This program finds $38+18/12 = 39.5$ as shown by the output below.

```

unix[1] a.out
[38,18]=39.5
unix[2]
```