

NAG Library Routine Document

X05AAF

Note: before using this routine, please read the Users' Note for your implementation to check the interpretation of *bold italicised* terms and other implementation-dependent details.

1 Purpose

X05AAF returns the current date and time.

2 Specification

```
SUBROUTINE X05AAF (ITIME)  
INTEGER ITIME(7)
```

3 Description

X05AAF returns the current date and time as a set of seven integers.

4 References

None.

5 Arguments

- 1: ITIME(7) – INTEGER array *Output*
On exit: the current date and time, as follows:
- ITIME(1)
Contains the current year.
- ITIME(2)
Contains the current month, in the range 1–12.
- ITIME(3)
Contains the current day, in the range 1–31.
- ITIME(4)
Contains the current hour, in the range 0–23.
- ITIME(5)
Contains the current minute, in the range 0–59.
- ITIME(6)
Contains the current second, in the range 0–59.
- ITIME(7)
Contains the current millisecond, in the range 0–999.

6 Error Indicators and Warnings

None.

7 Accuracy

The accuracy of this routine depends on the accuracy of the host machine. In particular, on some machines it may not be possible to return a value for the current millisecond. In this case, the value returned will be zero.

8 Parallelism and Performance

X05AAF is not threaded in any implementation.

9 Further Comments

None.

10 Example

This example prints out the vector ITIME after a call to X05AAF.

10.1 Program Text

```

Program x05aafe

!      X05AAF Example Program Text

!      Mark 26 Release. NAG Copyright 2016.

!      .. Use Statements ..
      Use nag_library, Only: x04acf, x04adf, x04baf, x05aaf
!      .. Implicit None Statement ..
      Implicit None
!      .. Parameters ..
      Integer, Parameter          :: iounit = 53, nout = 6
      Character (*), Parameter    :: fname = 'x05aafe_output.txt'
!      .. Local Scalars ..
      Integer                     :: ifail
      Character (80)              :: rec
!      .. Local Arrays ..
      Integer                     :: itime(7)
!      .. Executable Statements ..
      Write (nout,*) 'X05AAF Example Program Results'

!      Associate fname with iounit and open the unit for writing:
      ifail = 0
      Call x04acf(iounit,fname,1,ifail)

!      Get the time array:
      Call x05aaf(itime)

!      Stamp the output file:
      Call x04baf(iounit,
&         'File created by NAG x05aaf example program, time stamp:')
      Write (rec,99999) itime
      Call x04baf(iounit,rec)

!      Close the output file:
      ifail = 0
      Call x04adf(iounit,ifail)

      Write (nout,*) 'File created and stamped successfully.'

99999 Format (I4.4,2I2.2,'-',3(I2.2,':'),I3.3)
End Program x05aafe

```

10.2 Program Data

None.

10.3 Program Results

```

X05AAF Example Program Results
File created and stamped successfully.

```
