

## X05AAF – NAG Fortran Library Routine Document

**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 Parameters

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, for example. In this case, the value returned will be zero.

### 8 Further Comments

None.

## 9 Example

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

### 9.1 Program Text

**Note.** The listing of the example program presented below uses bold italicised terms to denote precision-dependent details. Please read the Users' Note for your implementation to check the interpretation of these terms. As explained in the Essential Introduction to this manual, the results produced may not be identical for all implementations.

```

*      X05AAF Example Program Text
*      Mark 14 Release.  NAG Copyright 1989.
*      .. Parameters ..
      INTEGER          NOUT
      PARAMETER       (NOUT=6)
*      .. Local Arrays ..
      INTEGER          ITIME(7)
*      .. External Subroutines ..
      EXTERNAL        X05AAF
*      .. Executable Statements ..
      WRITE (NOUT,*) 'X05AAF Example Program Results'
*
      CALL X05AAF(ITIME)
*
      WRITE (NOUT,99999) '      Year : ', ITIME(1)
      WRITE (NOUT,99999) '      Month : ', ITIME(2)
      WRITE (NOUT,99999) '      Day : ', ITIME(3)
      WRITE (NOUT,99999) '      Hour : ', ITIME(4)
      WRITE (NOUT,99999) '      Minute : ', ITIME(5)
      WRITE (NOUT,99999) '      Second : ', ITIME(6)
      WRITE (NOUT,99999) 'Millisecond : ', ITIME(7)
      STOP
*
99999 FORMAT (1X,A,I4)
      END

```

### 9.2 Program Data

None.

### 9.3 Program Results

```

X05AAF Example Program Results
      Year : 1997
      Month : 5
      Day : 21
      Hour : 9
      Minute : 36
      Second : 13
      Millisecond : 511

```

---