

2.2 The COMPLEX argument types

To conform to the Fortran 77 standard the array arguments listed as COMPLEX (COMPLEX*16 in the D version) in §2.1 should strictly be REAL (DOUBLE PRECISION in the D version) arrays with an extra first dimension of 2, e.g.

```
REAL A(2,10),B(2,10),W(2,10)
REAL VALUE(10)
- - -
CALL EC09C(A,B,VALUE,5,W)
```

Most implementations of Fortran allow such arguments to be passed in the more convenient form of COMPLEX (COMPLEX*16 in the D version).

3 GENERAL INFORMATION

Use of common: None.

Workspace: See argument W.

Other routines called directly: EA09C/CD.

Input/output: None.

Portability: EC09CD uses COMPLEX*16 facility.

4 METHOD

The Hermitian tri-diagonal matrix is transformed into a real form by a unitary diagonal transformation. The subroutine EA09C/CD for the real case is then used.