

# Z01BEFP

## NAG Parallel Library Routine Document

### 1 Description

Z01BEFP returns the topology used by BLACS (see [1]) for broadcasting and for global operations in the NAG Parallel Library routines.

### 2 Specification

```
SUBROUTINE Z01BEFP(OPERAT, TOP)
  CHARACTER*1      OPERAT, TOP
```

### 3 Data Distribution

#### 3.1 Definitions

None.

#### 3.2 Global and Local Arguments

The input argument OPERAT is local but it will ordinarily be called with the same value on every processor (as if it were global). The output argument TOP is local.

### 4 Arguments

- 1: OPERAT — CHARACTER\*1 *Local Input*  
*On entry:* indicates the topology used for a specific operation:  
    if OPERAT = 'B' then the topology for a broadcast operation is returned;  
    if OPERAT = 'G' then the topology for a global operation is returned;  
    otherwise a default topology '1' is returned.
- 2: TOP — CHARACTER\*1 *Local Output*  
*On exit:* the communication topology to be used (see [1] for details).

### 5 Errors and Warnings

None.

### 6 Further Comments

None.

### 7 References

- [1] Dongarra J J and Whaley R C (1995) A users' guide to the BLACS v1.0. *LAPACK Working Note 94 (Technical Report CS-95-281)* Department of Computer Science, University of Tennessee, 107 Ayres Hall, Knoxville, TN 37996-1301, USA.  
URL: <http://www.netlib.org/lapack/lawns/lawn94.ps>