

MPI\_Type\_c2f(3)

LAM/MPI

MPI\_Type\_c2f(3)

**NAME**

`MPI_Type_c2f` – Convert a datatype handle from its C representation to its Fortran representation

**SYNOPSIS**

```
#include <mpi.h>
MPI_Fint
MPI_Type_c2f(MPI_Datatype datatype)
```

**INPUT PARAMETER**

**datatype**  
 - C datatype handle

**RETURN VALUE**

**f\_handle**  
 - Fortran datatype handle

**NOTES FOR FORTRAN**

All MPI routines in Fortran (except for `MPI_WTIME` and `MPI_WTICK` ) have an additional argument `ierr` at the end of the argument list. `ierr` is an integer and has the same meaning as the return value of the routine in C. In Fortran, MPI routines are subroutines, and are invoked with the `call` statement.

All MPI objects (e.g., `MPI_Datatype` , `MPI_Comm` ) are of type `INTEGER` in Fortran.

**ERRORS**

This function does not return the normal `MPI_SUCCESS` integer value upon success. Instead, it returns a handle to the converted object. If an error occurs, the appropriate NULL handle will be returned.

**SEE ALSO**

`MPI_Type_c2f(3)`

**MORE INFORMATION**

For more information, please see the official MPI Forum web site, which contains the text of both the MPI-1 and MPI-2 standards. These documents contain detailed information about each MPI function (most of which is not duplicated in these man pages).

<http://www mpi-forum.org/>

**LOCATION**

`handles.c`

