

### C and C++ (no Fortran) Named Predefined Datatypes | Fortran types

MPI-2.1 Review 33.d'

MPI\_Fint

MPI::Fint

INTEGER

MPI-2.1 Review 33.d'

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Named Predefined Datatypes		Fortran types
[ticket107.]C type: <b>MPI_Datatype</b>	C++ type: MPI::Datatype	
[ticket107.]Fortran type: <b>INTEGER</b>		
MPI_INTEGER	MPI::INTEGER	INTEGER
MPI_REAL	MPI::REAL	REAL
MPI_DOUBLE_PRECISION	MPI::DOUBLE_PRECISION	DOUBLE PRECISION
MPI_COMPLEX	MPI::F_COMPLEX	COMPLEX
MPI_LOGICAL	MPI::LOGICAL	LOGICAL
MPI_CHARACTER	MPI::CHARACTER	CHARACTER(1)
[ticket18.] <b>MPI_AINT</b>	[ticket18.](use C datatype handle)	[ticket18.] <b>INTEGER (KIND=MPI_ADDRESS)</b>
[ticket18.] <b>MPI_OFFSET</b>	[ticket18.](use C datatype handle)	[ticket18.] <b>INTEGER (KIND=MPI_OFFSET)</b>
MPI_BYTE	MPI::BYTE	(any Fortran type)
MPI_PACKED	MPI::PACKED	(any Fortran type)

### C++-Only Named Predefined Datatypes | C++ types

C++ type: MPI::Datatype

MPI::BOOL

bool

MPI::COMPLEX

Complex&lt;float&gt;

MPI::DOUBLE\_COMPLEX

Complex&lt;double&gt;

MPI::LONG\_DOUBLE\_COMPLEX

Complex&lt;long double&gt;

### Optional datatypes (Fortran)

Optional datatypes (Fortran)		Fortran types
[ticket107.]C type: <b>MPI_Datatype</b>	C++ type: MPI::Datatype	
[ticket107.]Fortran type: <b>INTEGER</b>		
MPI_DOUBLE_COMPLEX	[ticket40.] <b>MPI::F_DOUBLE_COMPLEX</b>	DOUBLE COMPLEX
MPI_INTEGER1	MPI::INTEGER1	INTEGER*1
MPI_INTEGER2	MPI::INTEGER2	INTEGER*8
MPI_INTEGER4	MPI::INTEGER4	INTEGER*4
MPI_INTEGER8	MPI::INTEGER8	INTEGER*8
[ticket57.] <b>MPI_INTEGER16</b>		[ticket57.] <b>INTEGER*16</b>
MPI_REAL2	MPI::REAL2	REAL*2
MPI_REAL4	MPI::REAL4	REAL*4
MPI_REAL8	MPI::REAL8	REAL*8
[ticket57.] <b>MPI_REAL16</b>		[ticket57.] <b>REAL*16</b>
[ticket57.] <b>MPI_COMPLEX4</b>		[ticket57.] <b>COMPLEX*4</b>
[ticket57.] <b>MPI_COMPLEX8</b>		[ticket57.] <b>COMPLEX*8</b>
[ticket57.] <b>MPI_COMPLEX16</b>		[ticket57.] <b>COMPLEX*16</b>
[ticket57.] <b>MPI_COMPLEX32</b>		[ticket57.] <b>COMPLEX*32</b>