

Success: Compilation successful / execution produced expected result

Fail: Compilation failed / execution produced wrong result

Crash: Compilation leads to ICE / test runtime error

block_ptr: Array of derived type containing pointers.

Test v1: *block_ptr* on GPU, pointer assignment on GPU, *present(block_ptr)*

Test v2: *block_ptr* on CPU, pointer assignment on CPU

Test v3: *block_ptr* on CPU, pointer assignment on CPU, *present(block_ptr(1)%ptr, ...)*.
While it runs successfully, this version is not applicable where the array *block_ptr* is large.

Test v4: *block_ptr* on GPU, pointer assignment on CPU, *present(block_ptr(1)%ptr, ...)*.
While it runs successfully, this version is not applicable where the array *block_ptr* is large.

Test v5: *block_ptr* on GPU, pointer assignment on CPU, *present(block_ptr(k)%ptr)* in *k* loop.
This version is able to deal with the array in a flexible manner, but might lead to a loss of parallelism in a more complicated case as the outer loop needs to be outside of the parallel region.

Kesch

	GNU 7.1		PGI 16.7		Cray CCE 8.4.0	
	Build	Run	Build	Run	Build	Run
v1 CPU	Success	Success	Success	Success	Success	Success
v2 CPU	Success	Success	Success	Success	Success	Success
v3 CPU	Success	Success	Success	Success	Success	Success
v4 CPU	Success	Success	Success	Success	Success	Success
v5 CPU	Success	Success	Success	Success	Success	Success
v1 GPU	N/A	N/A	Fail	N/A	Success	Success
v2 GPU	N/A	N/A	Success	Crash	Fail	N/A
v3 GPU	N/A	N/A	Success	Success	Fail	N/A
v4 GPU	N/A	N/A	Success	Success	Fail	N/A
v5 GPU	N/A	N/A	Success	Success	Success	Crash

Kesch-TDS

	GNU 4.9.3		PGI 17.7		Cray CCE 8.6.0	
	Build	Run	Build	Run	Build	Run
v1 CPU	Success	Success	Success	Success	Success	Success
v2 CPU	Success	Success	Success	Success	Success	Success
v3 CPU	Success	Success	Success	Success	Success	Success
v4 CPU	Success	Success	Success	Success	Success	Success
v5 CPU	Success	Success	Success	Success	Success	Success
v1 GPU	N/A	N/A	Success	Fail	Success	Success
v2 GPU	N/A	N/A	Success	Crash	Fail	N/A
v3 GPU	N/A	N/A	Success	Success	Fail	N/A
v4 GPU	N/A	N/A	Success	Success	Fail	N/A
v5 GPU	N/A	N/A	Success	Success	Success	Success

Daint

	GNU 5.4.0		PGI 17.7		Cray CCE 8.6.1	
	Build	Run	Build	Run	Build	Run
v1 CPU	Success	Success	Success	Success	Success	Success
v2 CPU	Success	Success	Success	Success	Success	Success
v3 CPU	Success	Success	Success	Success	Success	Success
v4 CPU	Success	Success	Success	Success	Success	Success
v5 CPU	Success	Success	Success	Success	Success	Success
v1 GPU	Fail	N/A	Success	Fail	Success	Success
v2 GPU	Success ¹	Fail	Success	Crash	Fail	N/A
v3 GPU	Fail	N/A	Success	Success	Fail	N/A
v4 GPU	Fail	N/A	Success	Success	Fail	N/A
v5 GPU	Fail	N/A	Success	Success	Success	Success

Laptop

	GNU 5.4.0		PGI 17.10		Cray	
	Build	Run	Build	Run	Build	Run
v1 CPU	Success	Success	Success	Success	N/A	N/A
v2 CPU	Success	Success	Success	Success	N/A	N/A
v3 CPU	Success	Success	Success	Success	N/A	N/A
v4 CPU	Success	Success	Success	Success	N/A	N/A
v5 CPU	Success	Success	Success	Success	N/A	N/A
v1 GPU	N/A	N/A	Success	Fail	N/A	N/A
v2 GPU	N/A	N/A	Success	Crash	N/A	N/A
v3 GPU	N/A	N/A	Success	Success	N/A	N/A
v4 GPU	N/A	N/A	Success	Success	N/A	N/A
v5 GPU	N/A	N/A	Success	Success	N/A	N/A

¹Only without C.LOC output