

Page 128 of the UG1399 (v2022.2) December 7, 2022, explains the pointers in HLS.

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```
... = (Aint[i] + Aint[Nhalf + i]);
```

Pointers

Pointers are used extensively in C/C++ code and are supported for synthesis, but it is generally recommended to avoid the use of pointers in your code. This is especially true when using pointers in the following cases:

- When pointers are accessed (read or written) multiple times in the same function.
- When using arrays of pointers, each pointer must point to a scalar or a scalar array (not another pointer).
- Pointer casting is supported only when casting between standard C/C++ types, as shown.

Note: Pointer to pointer is not supported.

The following code example shows synthesis support for pointers that point to multiple objects.

```
#include "pointer_multi.h"

dout_t pointer_multi (sel_t sel, din_t pos) {
  static const dout_t a[8] = {1, 2, 3, 4, 5, 6, 7, 8};
  static const dout_t b[8] = {8, 7, 6, 5, 4, 3, 2, 1};

  dout_t* ptr;
  (sel)
```