

Project Build Up ➔ Error

[*Reference*] ■

※ 오류 해결

- CustomIP 에 inout port 사용시
- Inout 포트가 output 포트로만 적용됨. (input x)

https://support.xilinx.com/s/question/0D54U00005ZMzumSAD/how-to-correctly-connect-packaged-ip-to-a-bidirectional-inout-port?language=en_US

diagram. This approach did NOT work when synthesized with the default values of "Generate Output Products"... by default that selects Synthesis Option "Out of context per IP". Using these defaults the top-level INOUT port/pin worked as an output only, and always read 0 for input. I had to change the Synthesis Option from the default to "Global" to get things working. No clue why, but that worked.



➤ 오류 해결을 위하여 Synthesis 옵션 Global로 수정

※ 오류 해결

- Linux가 아닌 Window 사용자
- *MyIp* 포함 *HW*를 *vitis*에서 *Project Build*시 오류 발생

```
12:39:10 **** Build of configuration Debug for project test1 ****
make all
'Building file: ../src/helloworld.c'
'Invoking: MicroBlaze gcc compiler'
mb-gcc -Wall -O0 -g3 -c -fmessage-length=0 -MT"src/helloworld.o" -IC:/Users/parkj/project_25/design_1_wrapper_1/export
../src/helloworld.c:50:10: fatal error: xil_printf.h: No such file or directory
  50 | #include "xil_printf.h"
      |          ^~~~~~
compilation terminated.
make: *** [src/subdir.mk:26: src/helloworld.o] Error 1

12:39:11 Build Finished (took 304ms)
```

- 오류 해결을 위하여 *MyIp Makefile* 수정
- *hw* , *microblaze_0* 모두 수정해야함.

Myip

Makefile 수정

```

1 COMPILER=
2 ARCHIVER=
3 CP=cp
4 COMPILER_FLAGS=
5 EXTRA_COMPILER_FLAGS=
6 LIB=libx11.a
7
8 RELEASEDIR=../../lib
9 INCLUDEDIR=../../include
10 INCLUDES=-I./ -I${INCLUDEDIR}
11
12 INCLUDEFILES=*.*h
13 LIBSOURCES=*.*c *.cpp
14 OUTS = *.o
15
16 libs:
17     echo "Compiling axi_led..."
18     ${COMPILER} ${COMPILER_FLAGS} ${EXTRA_COMPILER_FLAGS} ${INCLUDES} ${LIBSOURCES}
19     ${ARCHIVER} -r ${RELEASEDIR}/${LIB} ${OUTS}
20     make clean
21
22 include:
23     ${CP} ${INCLUDEFILES} ${INCLUDEDIR}
24
25 clean:
26     rm -rf ${OUTS}
27

```

⇒

```

INCLUDEFILES=$(wildcard *.h)
LIBSOURCES=$(wildcard *.c *.cpp)
OUTS = $(addsuffix .o, $(basename $(wildcard *.c)))

```

- `INCLUDEFILES=$(wildcard *.h)`
- `LIBSOURCES=$(wildcard *.c *.cpp)`
- `OUTS = $(addsuffix .o, $(basename $(wildcard *.c)))`

Makefile 수정

```

1 COMPILER=
2 ARCHIVER=
3 CP=cp
4 COMPILER_FLAGS=
5 EXTRA_COMPILER_FLAGS=
6 LIB=libxil.a
7
8 RELEASEDIR=../../lib
9 INCLUDEDIR=../../include
10 INCLUDES=-I./ -I${INCLUDEDIR}
11
12 INCLUDEFILES=*.*h
13 LIBSOURCES=*.*c
14 OUTS = *.o
15
16 libs:
17     echo "Compiling axi_led..."
18     $(COMPILER) $(COMPILER_FLAGS) $(EXTRA_COMPILER_FLAGS) $(INCLUDES) $(LIBSOURCES)
19     $(ARCHIVER) -r ${RELEASEDIR}/${LIB} ${OUTS}
20     make clean
21
22 include:
23     ${CP} $(INCLUDEFILES) $(INCLUDEDIR)
24
25 clean:
26     rm -rf ${OUTS}
27

```

Modified Makefile configuration (highlighted in red):

```

INCLUDEFILES=$(wildcard *.h)
LIBSOURCES=$(wildcard *.c *.cpp)
OUTS = $(addsuffix .o, $(basename $(wildcard *.c)))

```

- `INCLUDEFILES=$(wildcard *.h)`
- `LIBSOURCES=$(wildcard *.c *.cpp)`
- `OUTS = $(addsuffix .o, $(basename $(wildcard *.c)))`