- Open Vivado

- Add source code, create constraint.xdc

- Choose board zcu104

- Paste constraint:

|  |
| --- |
| ## ========= CLOCK CONSTRAINT =========  create\_clock -period 10.00 [get\_ports clk] -name clk100MHz  ## ========= FIFO BLOCK RAM CONSTRAINT =========  set\_property RAM\_STYLE block [get\_cells -hierarchical -filter {REF\_NAME == FIFO}]  ## ========= PREVENT OPTIMIZATION =========  set\_property DONT\_TOUCH true [get\_cells -hierarchical -filter {REF\_NAME == ifm\_addr\_controller}]  set\_property DONT\_TOUCH true [get\_cells -hierarchical -filter {REF\_NAME == wgt\_addr\_controller}]  set\_property DONT\_TOUCH true [get\_cells -hierarchical -filter {REF\_NAME == ofm\_write\_addr\_controller\_1}]  set\_property DONT\_TOUCH true [get\_cells -hierarchical -filter {REF\_NAME == ofm\_write\_addr\_controller\_2}]  set\_property DONT\_TOUCH true [get\_cells -hierarchical -filter {REF\_NAME == ofm\_read\_addr\_controller}]  set\_property DONT\_TOUCH true [get\_cells -hierarchical -filter {REF\_NAME == FIFO}]  set\_property DONT\_TOUCH true [get\_cells -hierarchical -filter {REF\_NAME == ifm\_FIFO}]  set\_property DONT\_TOUCH true [get\_cells -hierarchical -filter {REF\_NAME == ifm\_FIFO\_array}]  set\_property DONT\_TOUCH true [get\_cells -hierarchical -filter {REF\_NAME == wgt\_FIFO\_array}]  set\_property DONT\_TOUCH true [get\_cells -hierarchical -filter {REF\_NAME == PE}]  set\_property DONT\_TOUCH true [get\_cells -hierarchical -filter {REF\_NAME == PE\_array}]  set\_property DONT\_TOUCH true [get\_cells -hierarchical -filter {REF\_NAME == MAXPOOL}]  set\_property DONT\_TOUCH true [get\_cells -hierarchical -filter {REF\_NAME == PE\_MAXPOOL\_array}]  set\_property DONT\_TOUCH true [get\_cells -hierarchical -filter {REF\_NAME == FIFO\_MAXPOOL\_array}]  set\_property DONT\_TOUCH true [get\_cells -hierarchical -filter {REF\_NAME == MAXPOOL\_FIFO\_array}]  set\_property DONT\_TOUCH true [get\_cells -hierarchical -filter {REF\_NAME == controller}]  set\_property DONT\_TOUCH true [get\_cells -hierarchical -filter {REF\_NAME == Functional\_Unit}]  set\_property DONT\_TOUCH true [get\_cells -hierarchical -filter {REF\_NAME == Control\_Unit}]  set\_property DONT\_TOUCH true [get\_cells -hierarchical -filter {REF\_NAME == yolov3\_tiny}] |

- Run synthesis

-> Report timing sumary (check setup slack)

-> Report utilization (LUT, FF, DSP, BRAM, IO - %)

-> Report power