INFO: [SCHED 204-61] Option 'relax\_ii\_for\_timing' is enabled, will increase II to preserve clock frequency constraints.

INFO: [HLS 200-10] Analyzing design file 'net\_hls.cc' ...

INFO: [HLS 200-10] Analyzing design file 'dwconv3x3.cc' ...

INFO: [HLS 200-10] Analyzing design file 'conv1x1.cc' ...

INFO: [HLS 200-111] Finished Linking Time (s): cpu = 00:00:04 ; elapsed = 00:01:18 . Memory (MB): peak = 992.355 ; gain = 898.562

INFO: [HLS 200-111] Finished Checking Pragmas Time (s): cpu = 00:00:04 ; elapsed = 00:01:18 . Memory (MB): peak = 992.355 ; gain = 898.562

INFO: [HLS 200-10] Starting code transformations ...

INFO: [HLS 200-111] Finished Standard Transforms Time (s): cpu = 00:00:07 ; elapsed = 00:01:24 . Memory (MB): peak = 992.355 ; gain = 898.562

INFO: [HLS 200-10] Checking synthesizability ...

INFO: [XFORM 203-602] Inlining function 'relu\_single' into 'DW\_CONV\_3x3' (dwconv3x3.cc:54) automatically.

INFO: [XFORM 203-602] Inlining function 'load\_weights136' into 'CONV\_1x1' (conv1x1.cc:109) automatically.

INFO: [XFORM 203-602] Inlining function 'relu\_single' into 'relu\_max' (net\_hls.cc:570) automatically.

INFO: [XFORM 203-602] Inlining function 'relu\_single' into 'relu\_copy\_buf\_to\_DDR\_acc' (net\_hls.cc:319) automatically.

INFO: [XFORM 203-602] Inlining function 'relu\_single' into 'relu\_copy\_buf\_to\_DDR' (net\_hls.cc:294) automatically.

WARNING: [SYNCHK 200-23] net\_hls.cc:320: variable-indexed range selection may cause suboptimal QoR.

INFO: [SYNCHK 200-10] 0 error(s), 1 warning(s).

INFO: [HLS 200-111] Finished Checking Synthesizability Time (s): cpu = 00:00:10 ; elapsed = 00:01:29 . Memory (MB): peak = 992.355 ; gain = 898.562

INFO: [XFORM 203-502] Unrolling small iteration loop 'Loop-11' (net\_hls.cc:1217) in function 'SkyNet' automatically.

INFO: [XFORM 203-502] Unrolling all sub-loops inside loop 'Loop-1.1' (net\_hls.cc:480) in function 'clear\_buffer' for pipelining.

INFO: [XFORM 203-502] Unrolling all sub-loops inside loop 'Loop-1.1' (net\_hls.cc:764) in function 'local\_buf\_copy' for pipelining.

INFO: [XFORM 203-502] Unrolling all sub-loops inside loop 'Loop-1.1' (net\_hls.cc:288) in function 'relu\_copy\_buf\_to\_DDR' for pipelining.

INFO: [XFORM 203-502] Unrolling all sub-loops inside loop 'Loop-1.1' (net\_hls.cc:337) in function 'load\_buf\_from\_DDR' for pipelining.

INFO: [XFORM 203-502] Unrolling all sub-loops inside loop 'Loop-1.1' (net\_hls.cc:313) in function 'relu\_copy\_buf\_to\_DDR\_acc' for pipelining.

INFO: [XFORM 203-502] Unrolling all sub-loops inside loop 'Loop-1.1' (net\_hls.cc:460) in function 'load\_dw2\_pool\_from\_DDR' for pipelining.

INFO: [XFORM 203-502] Unrolling all sub-loops inside loop 'Loop-1.1' (net\_hls.cc:437) in function 'load\_dw1\_pool\_from\_DDR' for pipelining.

INFO: [XFORM 203-502] Unrolling all sub-loops inside loop 'Loop-1.1' (net\_hls.cc:598) in function 'Relu\_Max\_Pooling' for pipelining.

INFO: [XFORM 203-502] Unrolling all sub-loops inside loop 'Loop-1.1.1' (conv1x1.cc:113) in function 'CONV\_1x1' for pipelining.

INFO: [XFORM 203-502] Unrolling all sub-loops inside loop 'Loop-1.1' (net\_hls.cc:399) in function 'set\_bias\_1x1' for pipelining.

INFO: [XFORM 203-502] Unrolling all sub-loops inside loop 'Loop-1.1.1.1' (dwconv3x3.cc:38) in function 'DW\_CONV\_3x3' for pipelining.

INFO: [XFORM 203-502] Unrolling all sub-loops inside loop 'Loop-2.1' (dwconv3x3.cc:51) in function 'DW\_CONV\_3x3' for pipelining.

INFO: [XFORM 203-502] Unrolling all sub-loops inside loop 'Loop-1.1' (net\_hls.cc:414) in function 'set\_bias\_3x3' for pipelining.

INFO: [XFORM 203-502] Unrolling all sub-loops inside loop 'Loop-1' (net\_hls.cc:356) in function 'load\_weight\_1x1\_from\_axi' for pipelining.

INFO: [XFORM 203-502] Unrolling all sub-loops inside loop 'Loop-1.1' (net\_hls.cc:372) in function 'load\_weight\_3x3\_from\_axi' for pipelining.

INFO: [HLS 200-489] Unrolling loop 'Loop-11' (net\_hls.cc:1217) in function 'SkyNet' completely with a factor of 1.

INFO: [HLS 200-489] Unrolling loop 'Loop-1.1.1' (net\_hls.cc:482) in function 'clear\_buffer' completely with a factor of 32.

INFO: [HLS 200-489] Unrolling loop 'Loop-1.1.1' (net\_hls.cc:766) in function 'local\_buf\_copy' completely with a factor of 32.

INFO: [HLS 200-489] Unrolling loop 'Loop-1.1.1' (net\_hls.cc:292) in function 'relu\_copy\_buf\_to\_DDR' completely with a factor of 32.

INFO: [HLS 200-489] Unrolling loop 'Loop-1.1.1' (net\_hls.cc:341) in function 'load\_buf\_from\_DDR' completely with a factor of 32.

INFO: [HLS 200-489] Unrolling loop 'Loop-1.1.1' (net\_hls.cc:317) in function 'relu\_copy\_buf\_to\_DDR\_acc' completely with a factor of 32.

INFO: [HLS 200-489] Unrolling loop 'Loop-1.1.1' (net\_hls.cc:464) in function 'load\_dw2\_pool\_from\_DDR' completely with a factor of 32.

INFO: [HLS 200-489] Unrolling loop 'Loop-1.1.1' (net\_hls.cc:441) in function 'load\_dw1\_pool\_from\_DDR' completely with a factor of 32.

INFO: [HLS 200-489] Unrolling loop 'Loop-1.1.1' (net\_hls.cc:601) in function 'Relu\_Max\_Pooling' completely with a factor of 32.

INFO: [HLS 200-489] Unrolling loop 'Loop-1.1.1.1' (conv1x1.cc:116) in function 'CONV\_1x1' completely with a factor of 32.

INFO: [HLS 200-489] Unrolling loop 'Loop-1.1.1' (net\_hls.cc:401) in function 'set\_bias\_1x1' completely with a factor of 32.

INFO: [HLS 200-489] Unrolling loop 'Loop-1.1.1.1.1' (dwconv3x3.cc:40) in function 'DW\_CONV\_3x3' completely with a factor of 32.

INFO: [HLS 200-489] Unrolling loop 'Loop-2.1.1' (dwconv3x3.cc:53) in function 'DW\_CONV\_3x3' completely with a factor of 16.

INFO: [HLS 200-489] Unrolling loop 'Loop-1.1.1' (net\_hls.cc:416) in function 'set\_bias\_3x3' completely with a factor of 16.

INFO: [HLS 200-489] Unrolling loop 'Loop-1.1' (net\_hls.cc:360) in function 'load\_weight\_1x1\_from\_axi' completely with a factor of 32.

INFO: [HLS 200-489] Unrolling loop 'Loop-1' (net\_hls.cc:389) in function 'load\_bias\_from\_axi' completely with a factor of 32.

INFO: [HLS 200-489] Unrolling loop 'Loop-1.1.1' (net\_hls.cc:376) in function 'load\_weight\_3x3\_from\_axi' completely with a factor of 32.

INFO: [XFORM 203-102] Partitioning array 'DATA.V' (net\_hls.cc:639) automatically.

INFO: [XFORM 203-101] Partitioning array 'FM\_buf\_acc.V' in dimension 1 completely.

INFO: [XFORM 203-101] Partitioning array 'FM\_buf2.V' (net\_hls.cc:793) in dimension 1 completely.

INFO: [XFORM 203-101] Partitioning array 'FM\_buf1.V' (net\_hls.cc:792) in dimension 1 completely.

INFO: [XFORM 203-101] Partitioning array 'FM\_buf4.V' (net\_hls.cc:795) in dimension 1 completely.

INFO: [XFORM 203-101] Partitioning array 'FM\_buf3.V' (net\_hls.cc:794) in dimension 1 completely.

INFO: [XFORM 203-101] Partitioning array 'weight\_buf\_1x1.V' in dimension 2 completely.

INFO: [XFORM 203-101] Partitioning array 'weight\_buf' in dimension 1 completely.

INFO: [XFORM 203-101] Partitioning array 'weight\_buf\_3x3.V' in dimension 2 completely.

INFO: [XFORM 203-101] Partitioning array 'bias\_buf.V' in dimension 2 completely.

INFO: [XFORM 203-101] Partitioning array 'FM\_buf2.V' (net\_hls.cc:793) in dimension 2 with a cyclic factor 2.

INFO: [XFORM 203-101] Partitioning array 'FM\_buf1.V' (net\_hls.cc:792) in dimension 2 with a cyclic factor 2.

INFO: [XFORM 203-101] Partitioning array 'FM\_buf4.V' (net\_hls.cc:795) in dimension 2 with a cyclic factor 2.

INFO: [XFORM 203-101] Partitioning array 'FM\_buf3.V' (net\_hls.cc:794) in dimension 2 with a cyclic factor 2.

INFO: [XFORM 203-101] Partitioning array 'weight\_buf' in dimension 2 completely.

INFO: [XFORM 203-602] Inlining function 'relu\_single' into 'relu\_max' (net\_hls.cc:570) automatically.

INFO: [XFORM 203-602] Inlining function 'relu\_single' into 'relu\_copy\_buf\_to\_DDR\_acc' (net\_hls.cc:319) automatically.

INFO: [XFORM 203-602] Inlining function 'relu\_single' into 'relu\_copy\_buf\_to\_DDR' (net\_hls.cc:294) automatically.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (net\_hls.cc:414:33) to (net\_hls.cc:414:27) in function 'set\_bias\_3x3'... converting 193 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (net\_hls.cc:570:5) to (net\_hls.cc:578:1) in function 'relu\_max'... converting 7 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (net\_hls.cc:313:32) to (net\_hls.cc:313:26) in function 'relu\_copy\_buf\_to\_DDR\_acc'... converting 65 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (net\_hls.cc:288:32) to (net\_hls.cc:288:26) in function 'relu\_copy\_buf\_to\_DDR'... converting 97 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (net\_hls.cc:721:81) to (net\_hls.cc:721:81) in function 'load\_and\_reorg\_part'... converting 10 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (net\_hls.cc:722:83) to (net\_hls.cc:722:83) in function 'load\_and\_reorg\_part'... converting 10 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (net\_hls.cc:723:83) to (net\_hls.cc:723:83) in function 'load\_and\_reorg\_part'... converting 10 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (net\_hls.cc:724:85) to (net\_hls.cc:724:85) in function 'load\_and\_reorg\_part'... converting 10 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (net\_hls.cc:726:83) to (net\_hls.cc:726:83) in function 'load\_and\_reorg\_part'... converting 10 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (net\_hls.cc:727:85) to (net\_hls.cc:727:85) in function 'load\_and\_reorg\_part'... converting 10 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (net\_hls.cc:728:85) to (net\_hls.cc:728:85) in function 'load\_and\_reorg\_part'... converting 10 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (net\_hls.cc:729:87) to (net\_hls.cc:729:87) in function 'load\_and\_reorg\_part'... converting 10 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (net\_hls.cc:731:83) to (net\_hls.cc:731:83) in function 'load\_and\_reorg\_part'... converting 10 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (net\_hls.cc:732:85) to (net\_hls.cc:732:85) in function 'load\_and\_reorg\_part'... converting 10 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (net\_hls.cc:733:85) to (net\_hls.cc:733:85) in function 'load\_and\_reorg\_part'... converting 10 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (net\_hls.cc:734:87) to (net\_hls.cc:734:87) in function 'load\_and\_reorg\_part'... converting 10 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (net\_hls.cc:736:83) to (net\_hls.cc:736:83) in function 'load\_and\_reorg\_part'... converting 10 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (net\_hls.cc:737:85) to (net\_hls.cc:737:85) in function 'load\_and\_reorg\_part'... converting 10 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (net\_hls.cc:738:85) to (net\_hls.cc:738:85) in function 'load\_and\_reorg\_part'... converting 10 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (net\_hls.cc:739:87) to (net\_hls.cc:739:87) in function 'load\_and\_reorg\_part'... converting 10 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (conv1x1.cc:33:9) to (conv1x1.cc:69:2) in function 'compute\_engine\_16'... converting 11 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (net\_hls.cc:64:23) to (net\_hls.cc:70:2) in function 'compute\_bounding\_box'... converting 46 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (net\_hls.cc:73:23) to (net\_hls.cc:78:2) in function 'compute\_bounding\_box'... converting 46 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (net\_hls.cc:125:23) to (net\_hls.cc:131:2) in function 'compute\_bounding\_box'... converting 46 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (net\_hls.cc:134:23) to (net\_hls.cc:139:2) in function 'compute\_bounding\_box'... converting 46 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (net\_hls.cc:185:23) to (net\_hls.cc:191:2) in function 'compute\_bounding\_box'... converting 46 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (net\_hls.cc:194:23) to (net\_hls.cc:199:2) in function 'compute\_bounding\_box'... converting 46 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (net\_hls.cc:246:23) to (net\_hls.cc:252:2) in function 'compute\_bounding\_box'... converting 46 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (net\_hls.cc:255:23) to (net\_hls.cc:260:2) in function 'compute\_bounding\_box'... converting 46 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (net\_hls.cc:598:33) to (net\_hls.cc:609:4) in function 'Relu\_Max\_Pooling'... converting 257 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (dwconv3x3.cc:38:34) to (dwconv3x3.cc:42:20) in function 'DW\_CONV\_3x3'... converting 7 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (dwconv3x3.cc:42:20) to (dwconv3x3.cc:42:20) in function 'DW\_CONV\_3x3'... converting 5 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (dwconv3x3.cc:42:20) to (dwconv3x3.cc:42:20) in function 'DW\_CONV\_3x3'... converting 7 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (dwconv3x3.cc:42:20) to (dwconv3x3.cc:42:20) in function 'DW\_CONV\_3x3'... converting 5 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (dwconv3x3.cc:42:20) to (dwconv3x3.cc:42:20) in function 'DW\_CONV\_3x3'... converting 7 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (dwconv3x3.cc:42:20) to (dwconv3x3.cc:42:20) in function 'DW\_CONV\_3x3'... converting 5 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (dwconv3x3.cc:42:20) to (dwconv3x3.cc:42:20) in function 'DW\_CONV\_3x3'... converting 7 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (dwconv3x3.cc:42:20) to (dwconv3x3.cc:42:20) in function 'DW\_CONV\_3x3'... converting 5 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (dwconv3x3.cc:42:20) to (dwconv3x3.cc:42:20) in function 'DW\_CONV\_3x3'... converting 7 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (dwconv3x3.cc:42:20) to (dwconv3x3.cc:42:20) in function 'DW\_CONV\_3x3'... converting 5 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (dwconv3x3.cc:42:20) to (dwconv3x3.cc:42:20) in function 'DW\_CONV\_3x3'... converting 7 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (dwconv3x3.cc:42:20) to (dwconv3x3.cc:42:20) in function 'DW\_CONV\_3x3'... converting 5 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (dwconv3x3.cc:42:20) to (dwconv3x3.cc:42:20) in function 'DW\_CONV\_3x3'... converting 7 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (dwconv3x3.cc:42:20) to (dwconv3x3.cc:42:20) in function 'DW\_CONV\_3x3'... converting 5 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (dwconv3x3.cc:42:20) to (dwconv3x3.cc:42:20) in function 'DW\_CONV\_3x3'... converting 7 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (dwconv3x3.cc:42:20) to (dwconv3x3.cc:42:20) in function 'DW\_CONV\_3x3'... converting 5 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (dwconv3x3.cc:42:20) to (dwconv3x3.cc:42:20) in function 'DW\_CONV\_3x3'... converting 7 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (dwconv3x3.cc:42:20) to (dwconv3x3.cc:42:20) in function 'DW\_CONV\_3x3'... converting 5 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (dwconv3x3.cc:42:20) to (dwconv3x3.cc:42:20) in function 'DW\_CONV\_3x3'... converting 7 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (dwconv3x3.cc:42:20) to (dwconv3x3.cc:42:20) in function 'DW\_CONV\_3x3'... converting 5 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (dwconv3x3.cc:42:20) to (dwconv3x3.cc:42:20) in function 'DW\_CONV\_3x3'... converting 7 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (dwconv3x3.cc:42:20) to (dwconv3x3.cc:42:20) in function 'DW\_CONV\_3x3'... converting 5 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (dwconv3x3.cc:42:20) to (dwconv3x3.cc:42:20) in function 'DW\_CONV\_3x3'... converting 7 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (dwconv3x3.cc:42:20) to (dwconv3x3.cc:42:20) in function 'DW\_CONV\_3x3'... converting 5 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (dwconv3x3.cc:42:20) to (dwconv3x3.cc:42:20) in function 'DW\_CONV\_3x3'... converting 7 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (dwconv3x3.cc:42:20) to (dwconv3x3.cc:42:20) in function 'DW\_CONV\_3x3'... converting 5 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (dwconv3x3.cc:42:20) to (dwconv3x3.cc:42:20) in function 'DW\_CONV\_3x3'... converting 7 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (dwconv3x3.cc:42:20) to (dwconv3x3.cc:42:20) in function 'DW\_CONV\_3x3'... converting 5 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (dwconv3x3.cc:42:20) to (dwconv3x3.cc:42:20) in function 'DW\_CONV\_3x3'... converting 7 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (dwconv3x3.cc:42:20) to (dwconv3x3.cc:42:20) in function 'DW\_CONV\_3x3'... converting 5 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (dwconv3x3.cc:42:20) to (dwconv3x3.cc:42:20) in function 'DW\_CONV\_3x3'... converting 7 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (dwconv3x3.cc:42:20) to (dwconv3x3.cc:42:20) in function 'DW\_CONV\_3x3'... converting 5 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (dwconv3x3.cc:42:20) to (dwconv3x3.cc:42:20) in function 'DW\_CONV\_3x3'... converting 7 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (dwconv3x3.cc:42:20) to (dwconv3x3.cc:42:20) in function 'DW\_CONV\_3x3'... converting 5 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (dwconv3x3.cc:42:20) to (dwconv3x3.cc:42:20) in function 'DW\_CONV\_3x3'... converting 7 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (dwconv3x3.cc:42:20) to (dwconv3x3.cc:42:20) in function 'DW\_CONV\_3x3'... converting 5 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (dwconv3x3.cc:42:20) to (dwconv3x3.cc:42:20) in function 'DW\_CONV\_3x3'... converting 7 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (dwconv3x3.cc:42:20) to (dwconv3x3.cc:42:20) in function 'DW\_CONV\_3x3'... converting 5 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (dwconv3x3.cc:42:20) to (dwconv3x3.cc:42:20) in function 'DW\_CONV\_3x3'... converting 7 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (dwconv3x3.cc:42:20) to (dwconv3x3.cc:42:20) in function 'DW\_CONV\_3x3'... converting 5 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (dwconv3x3.cc:42:20) to (dwconv3x3.cc:42:20) in function 'DW\_CONV\_3x3'... converting 7 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (dwconv3x3.cc:42:20) to (dwconv3x3.cc:42:20) in function 'DW\_CONV\_3x3'... converting 5 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (dwconv3x3.cc:42:20) to (dwconv3x3.cc:42:20) in function 'DW\_CONV\_3x3'... converting 7 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (dwconv3x3.cc:42:20) to (dwconv3x3.cc:42:20) in function 'DW\_CONV\_3x3'... converting 5 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (dwconv3x3.cc:42:20) to (dwconv3x3.cc:42:20) in function 'DW\_CONV\_3x3'... converting 7 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (dwconv3x3.cc:42:20) to (dwconv3x3.cc:42:20) in function 'DW\_CONV\_3x3'... converting 5 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (dwconv3x3.cc:42:20) to (dwconv3x3.cc:42:20) in function 'DW\_CONV\_3x3'... converting 7 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (dwconv3x3.cc:42:20) to (dwconv3x3.cc:42:20) in function 'DW\_CONV\_3x3'... converting 5 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (dwconv3x3.cc:42:20) to (dwconv3x3.cc:42:20) in function 'DW\_CONV\_3x3'... converting 7 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (dwconv3x3.cc:42:20) to (dwconv3x3.cc:42:20) in function 'DW\_CONV\_3x3'... converting 5 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (dwconv3x3.cc:42:20) to (dwconv3x3.cc:42:20) in function 'DW\_CONV\_3x3'... converting 7 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (dwconv3x3.cc:42:20) to (dwconv3x3.cc:42:20) in function 'DW\_CONV\_3x3'... converting 5 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (dwconv3x3.cc:42:20) to (dwconv3x3.cc:42:20) in function 'DW\_CONV\_3x3'... converting 7 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (dwconv3x3.cc:42:20) to (dwconv3x3.cc:42:20) in function 'DW\_CONV\_3x3'... converting 5 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (dwconv3x3.cc:42:20) to (dwconv3x3.cc:42:20) in function 'DW\_CONV\_3x3'... converting 7 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (dwconv3x3.cc:42:20) to (dwconv3x3.cc:42:20) in function 'DW\_CONV\_3x3'... converting 5 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (dwconv3x3.cc:42:20) to (dwconv3x3.cc:42:20) in function 'DW\_CONV\_3x3'... converting 7 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (dwconv3x3.cc:42:20) to (dwconv3x3.cc:42:20) in function 'DW\_CONV\_3x3'... converting 5 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (dwconv3x3.cc:42:20) to (dwconv3x3.cc:42:20) in function 'DW\_CONV\_3x3'... converting 7 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (dwconv3x3.cc:42:20) to (dwconv3x3.cc:42:20) in function 'DW\_CONV\_3x3'... converting 5 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (dwconv3x3.cc:42:20) to (dwconv3x3.cc:42:20) in function 'DW\_CONV\_3x3'... converting 7 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (dwconv3x3.cc:42:20) to (dwconv3x3.cc:42:20) in function 'DW\_CONV\_3x3'... converting 5 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (dwconv3x3.cc:42:20) to (dwconv3x3.cc:42:20) in function 'DW\_CONV\_3x3'... converting 7 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (dwconv3x3.cc:42:20) to (dwconv3x3.cc:42:20) in function 'DW\_CONV\_3x3'... converting 5 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (conv1x1.cc:113:34) to (conv1x1.cc:118:20) in function 'CONV\_1x1'... converting 115 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (conv1x1.cc:118:20) to (conv1x1.cc:118:20) in function 'CONV\_1x1'... converting 115 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (conv1x1.cc:118:20) to (conv1x1.cc:118:20) in function 'CONV\_1x1'... converting 115 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (conv1x1.cc:118:20) to (conv1x1.cc:118:20) in function 'CONV\_1x1'... converting 115 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (conv1x1.cc:118:20) to (conv1x1.cc:118:20) in function 'CONV\_1x1'... converting 115 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (conv1x1.cc:118:20) to (conv1x1.cc:118:20) in function 'CONV\_1x1'... converting 115 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (conv1x1.cc:118:20) to (conv1x1.cc:118:20) in function 'CONV\_1x1'... converting 115 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (conv1x1.cc:118:20) to (conv1x1.cc:118:20) in function 'CONV\_1x1'... converting 115 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (conv1x1.cc:118:20) to (conv1x1.cc:118:20) in function 'CONV\_1x1'... converting 115 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (conv1x1.cc:118:20) to (conv1x1.cc:118:20) in function 'CONV\_1x1'... converting 115 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (conv1x1.cc:118:20) to (conv1x1.cc:118:20) in function 'CONV\_1x1'... converting 115 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (conv1x1.cc:118:20) to (conv1x1.cc:118:20) in function 'CONV\_1x1'... converting 115 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (conv1x1.cc:118:20) to (conv1x1.cc:118:20) in function 'CONV\_1x1'... converting 115 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (conv1x1.cc:118:20) to (conv1x1.cc:118:20) in function 'CONV\_1x1'... converting 115 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (conv1x1.cc:118:20) to (conv1x1.cc:118:20) in function 'CONV\_1x1'... converting 115 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (conv1x1.cc:118:20) to (conv1x1.cc:118:20) in function 'CONV\_1x1'... converting 115 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (conv1x1.cc:118:20) to (conv1x1.cc:118:20) in function 'CONV\_1x1'... converting 115 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (conv1x1.cc:118:20) to (conv1x1.cc:118:20) in function 'CONV\_1x1'... converting 115 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (conv1x1.cc:118:20) to (conv1x1.cc:118:20) in function 'CONV\_1x1'... converting 115 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (conv1x1.cc:118:20) to (conv1x1.cc:118:20) in function 'CONV\_1x1'... converting 115 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (conv1x1.cc:118:20) to (conv1x1.cc:118:20) in function 'CONV\_1x1'... converting 115 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (conv1x1.cc:118:20) to (conv1x1.cc:118:20) in function 'CONV\_1x1'... converting 115 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (conv1x1.cc:118:20) to (conv1x1.cc:118:20) in function 'CONV\_1x1'... converting 115 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (conv1x1.cc:118:20) to (conv1x1.cc:118:20) in function 'CONV\_1x1'... converting 115 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (conv1x1.cc:118:20) to (conv1x1.cc:118:20) in function 'CONV\_1x1'... converting 115 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (conv1x1.cc:118:20) to (conv1x1.cc:118:20) in function 'CONV\_1x1'... converting 115 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (conv1x1.cc:118:20) to (conv1x1.cc:118:20) in function 'CONV\_1x1'... converting 115 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (conv1x1.cc:118:20) to (conv1x1.cc:118:20) in function 'CONV\_1x1'... converting 115 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (conv1x1.cc:118:20) to (conv1x1.cc:118:20) in function 'CONV\_1x1'... converting 115 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (conv1x1.cc:118:20) to (conv1x1.cc:118:20) in function 'CONV\_1x1'... converting 115 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (conv1x1.cc:118:20) to (conv1x1.cc:118:20) in function 'CONV\_1x1'... converting 115 basic blocks.

INFO: [XFORM 203-401] Performing if-conversion on hyperblock from (conv1x1.cc:118:20) to (conv1x1.cc:118:20) in function 'CONV\_1x1'... converting 115 basic blocks.

INFO: [XFORM 203-11] Balancing expressions in function 'load\_image\_chunk\_norm' (net\_hls.cc:513)...14 expression(s) balanced.

INFO: [XFORM 203-11] Balancing expressions in function 'load\_dw2\_pool\_from\_DDR' (net\_hls.cc:453)...4 expression(s) balanced.

INFO: [XFORM 203-11] Balancing expressions in function 'load\_dw1\_pool\_from\_DDR' (net\_hls.cc:430)...4 expression(s) balanced.

INFO: [XFORM 203-11] Balancing expressions in function 'compute\_engine\_16' (conv1x1.cc:33:2)...14 expression(s) balanced.

INFO: [XFORM 203-11] Balancing expressions in function 'SkyNet' (net\_hls.cc:774)...3 expression(s) balanced.

INFO: [XFORM 203-11] Balancing expressions in function 'Relu\_Max\_Pooling' (net\_hls.cc:584)...12 expression(s) balanced.

INFO: [HLS 200-111] Finished Pre-synthesis Time (s): cpu = 00:04:21 ; elapsed = 00:06:42 . Memory (MB): peak = 992.355 ; gain = 898.562

INFO: [XFORM 203-541] Flattening a loop nest 'Loop-1' (net\_hls.cc:413:15) in function 'set\_bias\_3x3'.

INFO: [XFORM 203-541] Flattening a loop nest 'Loop-1' (net\_hls.cc:398:15) in function 'set\_bias\_1x1'.

INFO: [XFORM 203-541] Flattening a loop nest 'Loop-1' (net\_hls.cc:311:15) in function 'relu\_copy\_buf\_to\_DDR\_acc'.

INFO: [XFORM 203-541] Flattening a loop nest 'Loop-1' (net\_hls.cc:285:15) in function 'relu\_copy\_buf\_to\_DDR'.

INFO: [XFORM 203-541] Flattening a loop nest 'Loop-1' (net\_hls.cc:763:15) in function 'local\_buf\_copy'.

INFO: [XFORM 203-541] Flattening a loop nest 'Loop-1' (conv1x1.cc:78:16) in function 'load\_weights'.

INFO: [XFORM 203-541] Flattening a loop nest 'Loop-1' (net\_hls.cc:371:15) in function 'load\_weight\_3x3\_from\_axi'.

INFO: [XFORM 203-541] Flattening a loop nest 'Loop-1' (net\_hls.cc:520:15) in function 'load\_image\_chunk\_norm'.

INFO: [XFORM 203-541] Flattening a loop nest 'Loop-2' (net\_hls.cc:529:15) in function 'load\_image\_chunk\_norm'.

INFO: [XFORM 203-541] Flattening a loop nest 'Loop-3' (net\_hls.cc:538:15) in function 'load\_image\_chunk\_norm'.

INFO: [XFORM 203-541] Flattening a loop nest 'Loop-1' (net\_hls.cc:459:15) in function 'load\_dw2\_pool\_from\_DDR'.

INFO: [XFORM 203-541] Flattening a loop nest 'Loop-1' (net\_hls.cc:436:15) in function 'load\_dw1\_pool\_from\_DDR'.

INFO: [XFORM 203-541] Flattening a loop nest 'Loop-1' (net\_hls.cc:335:15) in function 'load\_buf\_from\_DDR'.

INFO: [XFORM 203-541] Flattening a loop nest 'Loop-1' (net\_hls.cc:479:15) in function 'clear\_buffer'.

INFO: [XFORM 203-541] Flattening a loop nest 'Loop-1' (net\_hls.cc:597:15) in function 'Relu\_Max\_Pooling'.

INFO: [XFORM 203-541] Flattening a loop nest 'Loop-1.1.1' (dwconv3x3.cc:37:17) in function 'DW\_CONV\_3x3'.

INFO: [XFORM 203-541] Flattening a loop nest 'Loop-1.1' (dwconv3x3.cc:36:16) in function 'DW\_CONV\_3x3'.

INFO: [XFORM 203-541] Flattening a loop nest 'Loop-1' (dwconv3x3.cc:35:15) in function 'DW\_CONV\_3x3'.

INFO: [XFORM 203-541] Flattening a loop nest 'Loop-2' (dwconv3x3.cc:50:16) in function 'DW\_CONV\_3x3'.

INFO: [XFORM 203-541] Flattening a loop nest 'Loop-1.1' (conv1x1.cc:112:16) in function 'CONV\_1x1'.

WARNING: [XFORM 203-542] Cannot flatten a loop nest 'Loop-1' (conv1x1.cc:106:16) in function 'CONV\_1x1' :

the outer loop is not a perfect loop.

WARNING: [HLS 200-451] Automatic burst inferencing is disabled for port 'image\_in\_raw\_pad\_burst.V' as a bitwidth mismatch was detected between port 'image\_in\_raw\_pad\_burst.V' and its bundle 'INPUT' (8 vs. 512)(net\_hls.cc:541:33). To allow bursting all ports sharing a bundle must have the same bitwidth.

WARNING: [HLS 200-451] Automatic burst inferencing is disabled for port 'image\_in\_raw\_pad\_burst.V' as a bitwidth mismatch was detected between port 'image\_in\_raw\_pad\_burst.V' and its bundle 'INPUT' (8 vs. 512)(net\_hls.cc:532:33). To allow bursting all ports sharing a bundle must have the same bitwidth.

WARNING: [HLS 200-451] Automatic burst inferencing is disabled for port 'image\_in\_raw\_pad\_burst.V' as a bitwidth mismatch was detected between port 'image\_in\_raw\_pad\_burst.V' and its bundle 'INPUT' (8 vs. 512)(net\_hls.cc:541:33). To allow bursting all ports sharing a bundle must have the same bitwidth.

WARNING: [HLS 200-451] Automatic burst inferencing is disabled for port 'image\_in\_raw\_pad\_burst.V' as a bitwidth mismatch was detected between port 'image\_in\_raw\_pad\_burst.V' and its bundle 'INPUT' (8 vs. 512)(net\_hls.cc:532:33). To allow bursting all ports sharing a bundle must have the same bitwidth.

WARNING: [HLS 200-451] Automatic burst inferencing is disabled for port 'image\_in\_raw\_pad\_burst.V' as a bitwidth mismatch was detected between port 'image\_in\_raw\_pad\_burst.V' and its bundle 'INPUT' (8 vs. 512)(net\_hls.cc:532:33). To allow bursting all ports sharing a bundle must have the same bitwidth.

WARNING: [HLS 200-451] Automatic burst inferencing is disabled for port 'image\_in\_raw\_pad\_burst.V' as a bitwidth mismatch was detected between port 'image\_in\_raw\_pad\_burst.V' and its bundle 'INPUT' (8 vs. 512)(net\_hls.cc:541:33). To allow bursting all ports sharing a bundle must have the same bitwidth.

WARNING: [HLS 200-466] Port 'conv\_weight\_1x1\_all.V'() has different latency/depth on the same m\_axi bundle:'INPUT'

WARNING: [HLS 200-466] Port 'conv\_weight\_3x3\_all.V'() has different latency/depth on the same m\_axi bundle:'INPUT'

WARNING: [HLS 200-466] Port 'bias\_all.V'() has different latency/depth on the same m\_axi bundle:'INPUT'

WARNING: [HLS 200-466] Port 'DDR\_dw1\_pool\_out\_PL\_burst.V'() has different latency/depth on the same m\_axi bundle:'INPUT'

WARNING: [HLS 200-466] Port 'DDR\_dw2\_pool\_out\_PL\_burst.V'() has different latency/depth on the same m\_axi bundle:'INPUT'

WARNING: [HLS 200-466] Port 'DDR\_buf\_burst.V'() has different latency/depth on the same m\_axi bundle:'INPUT'

WARNING: [HLS 200-466] Port 'predict\_boxes'() has different latency/depth on the same m\_axi bundle:'OUTPUT'

WARNING: [HLS 200-466] Port 'constant'() has different latency/depth on the same m\_axi bundle:'OUTPUT'

WARNING: [XFORM 203-631] Renaming function 'relu\_copy\_buf\_to\_DDR\_acc' to 'relu\_copy\_buf\_to\_DDR.1' (net\_hls.cc:274:13)

WARNING: [XFORM 203-631] Renaming function 'relu\_copy\_buf\_to\_DDR' to 'relu\_copy\_buf\_to\_DDR.1.1' (net\_hls.cc:274:26)

WARNING: [XFORM 203-631] Renaming function 'load\_weight\_3x3\_from\_axi' to 'load\_weight\_3x3\_from' (net\_hls.cc:371:25)

WARNING: [XFORM 203-631] Renaming function 'load\_weight\_1x1\_from\_axi' to 'load\_weight\_1x1\_from' (net\_hls.cc:356:27)

WARNING: [XFORM 203-631] Renaming function 'load\_image\_chunk\_norm4647' to 'load\_image\_chunk\_nor' (net\_hls.cc:518:26)

WARNING: [XFORM 203-631] Renaming function 'load\_image\_chunk\_norm46' to 'load\_image\_chunk\_nor.1' (net\_hls.cc:518:26)

WARNING: [XFORM 203-631] Renaming function 'load\_image\_chunk\_norm' to 'load\_image\_chunk\_nor.2' (net\_hls.cc:518:26)

WARNING: [XFORM 203-631] Renaming function 'load\_dw2\_pool\_from\_DDR' to 'load\_dw2\_pool\_from\_D' (net\_hls.cc:457:26)

WARNING: [XFORM 203-631] Renaming function 'load\_dw1\_pool\_from\_DDR' to 'load\_dw1\_pool\_from\_D' (net\_hls.cc:434:26)

INFO: [XFORM 203-811] Inferring bus burst read of length 3 on port 'INPUT' (net\_hls.cc:837:2).

INFO: [XFORM 203-811] Inferring bus burst read of length 2 on port 'INPUT' (net\_hls.cc:880:2).

INFO: [XFORM 203-811] Inferring bus burst read of length 3 on port 'INPUT' (net\_hls.cc:930:2).

INFO: [XFORM 203-811] Inferring bus burst write of length 5 on port 'predict\_box' (net\_hls.cc:64:23).

INFO: [XFORM 203-811] Inferring bus burst write of length 5 on port 'predict\_box' (net\_hls.cc:73:23).

INFO: [XFORM 203-811] Inferring bus burst write of length 3 on port 'predict\_box' (net\_hls.cc:80:5).

INFO: [XFORM 203-811] Inferring bus burst write of length 5 on port 'predict\_box' (net\_hls.cc:125:23).

INFO: [XFORM 203-811] Inferring bus burst write of length 5 on port 'predict\_box' (net\_hls.cc:134:23).

INFO: [XFORM 203-811] Inferring bus burst write of length 3 on port 'predict\_box' (net\_hls.cc:141:5).

INFO: [XFORM 203-811] Inferring bus burst write of length 5 on port 'predict\_box' (net\_hls.cc:185:23).

INFO: [XFORM 203-811] Inferring bus burst write of length 5 on port 'predict\_box' (net\_hls.cc:194:23).

INFO: [XFORM 203-811] Inferring bus burst write of length 3 on port 'predict\_box' (net\_hls.cc:201:5).

INFO: [XFORM 203-811] Inferring bus burst write of length 5 on port 'predict\_box' (net\_hls.cc:246:23).

INFO: [XFORM 203-811] Inferring bus burst write of length 5 on port 'predict\_box' (net\_hls.cc:255:23).

INFO: [XFORM 203-811] Inferring bus burst write of length 3 on port 'predict\_box' (net\_hls.cc:262:5).

INFO: [HLS 200-444] Inferring multiple bus burst write of a total cumulative length 84 on port 'dest.V' (net\_hls.cc:297:32). These data requests might be further partitioned to multiple requests during RTL generation, based on max\_read\_burst\_length or max\_write\_burst\_length settings.

INFO: [HLS 200-444] Inferring multiple bus burst read of a total cumulative length 84 on port 'src.V' (net\_hls.cc:340:26). These data requests might be further partitioned to multiple requests during RTL generation, based on max\_read\_burst\_length or max\_write\_burst\_length settings.

INFO: [HLS 200-444] Inferring multiple bus burst write of a total cumulative length 84 on port 'dest.V' (net\_hls.cc:322:32). These data requests might be further partitioned to multiple requests during RTL generation, based on max\_read\_burst\_length or max\_write\_burst\_length settings.

INFO: [HLS 200-444] Inferring multiple bus burst read of a total cumulative length 82 on port 'ddr\_dw2\_pool\_burst.V' (net\_hls.cc:463:25). These data requests might be further partitioned to multiple requests during RTL generation, based on max\_read\_burst\_length or max\_write\_burst\_length settings.

INFO: [HLS 200-444] Inferring multiple bus burst read of a total cumulative length 82 on port 'ddr\_dw1\_pool\_burst.V' (net\_hls.cc:440:25). These data requests might be further partitioned to multiple requests during RTL generation, based on max\_read\_burst\_length or max\_write\_burst\_length settings.

INFO: [HLS 200-444] Inferring multiple bus burst read of a total cumulative length 32 on port 'src.V' (net\_hls.cc:359:24). These data requests might be further partitioned to multiple requests during RTL generation, based on max\_read\_burst\_length or max\_write\_burst\_length settings.

INFO: [HLS 200-472] Inferring partial write operation for 'buf[0][1].V' (net\_hls.cc:418:2)

INFO: [HLS 200-472] Inferring partial write operation for 'buf[0][0].V' (net\_hls.cc:419:5)

INFO: [HLS 200-472] Inferring partial write operation for 'buf[1][1].V' (net\_hls.cc:421:5)

INFO: [HLS 200-472] Inferring partial write operation for 'buf[1][0].V' (net\_hls.cc:422:5)

INFO: [HLS 200-472] Inferring partial write operation for 'buf[0].V' (net\_hls.cc:403:2)

INFO: [HLS 200-472] Inferring partial write operation for 'buf[0].V' (net\_hls.cc:404:5)

INFO: [HLS 200-472] Inferring partial write operation for 'dest[0][0].V' (net\_hls.cc:767:34)

INFO: [HLS 200-472] Inferring partial write operation for 'dest[0][1].V' (net\_hls.cc:768:35)

INFO: [HLS 200-472] Inferring partial write operation for 'bias\_buf.V.0' (net\_hls.cc:391:25)

INFO: [HLS 200-472] Inferring partial write operation for 'buf[0].V' (net\_hls.cc:484:2)

INFO: [HLS 200-472] Inferring partial write operation for 'buf[0].V' (net\_hls.cc:485:5)

INFO: [HLS 200-472] Inferring partial write operation for 'top[0][1].V' (dwconv3x3.cc:54:23)

INFO: [HLS 200-472] Inferring partial write operation for 'top[0][0].V' (dwconv3x3.cc:55:24)

INFO: [HLS 200-472] Inferring partial write operation for 'top[1][1].V' (dwconv3x3.cc:58:27)

INFO: [HLS 200-472] Inferring partial write operation for 'top[1][0].V' (dwconv3x3.cc:59:31)

INFO: [HLS 200-472] Inferring partial write operation for 'top[0][0].V' (dwconv3x3.cc:42:20)

INFO: [HLS 200-472] Inferring partial write operation for 'top[0][0].V' (dwconv3x3.cc:42:20)

INFO: [HLS 200-472] Inferring partial write operation for 'top[0][0].V' (dwconv3x3.cc:42:20)

INFO: [HLS 200-472] Inferring partial write operation for 'top[1].V' (conv1x1.cc:118:20)

INFO: [HLS 200-472] Inferring partial write operation for 'top[0].V' (conv1x1.cc:118:20)

INFO: [HLS 200-472] Inferring partial write operation for 'top[0].V' (conv1x1.cc:118:20)

INFO: [HLS 200-472] Inferring partial write operation for 'weight\_buf\_3x3.V.0' (net\_hls.cc:379:31)

INFO: [HLS 200-472] Inferring partial write operation for 'weight\_buf\_1x1.V.0' (net\_hls.cc:362:30)

INFO: [HLS 200-472] Inferring partial write operation for 'img\_buf[0][0].V' (net\_hls.cc:523:33)

INFO: [HLS 200-472] Inferring partial write operation for 'img\_buf[1][0].V' (net\_hls.cc:532:33)

INFO: [HLS 200-472] Inferring partial write operation for 'img\_buf[2][0].V' (net\_hls.cc:541:33)

INFO: [HLS 200-472] Inferring partial write operation for 'buf[0][0].V' (net\_hls.cc:467:29)

INFO: [HLS 200-472] Inferring partial write operation for 'buf[0][0].V' (net\_hls.cc:444:29)

INFO: [HLS 200-472] Inferring partial write operation for 'dest[0][0].V' (net\_hls.cc:343:30)

INFO: [HLS 200-472] Inferring partial write operation for 'buf\_out\_4[3].V' (net\_hls.cc:739:87)

INFO: [HLS 200-472] Inferring partial write operation for 'buf\_out\_4[3].V' (net\_hls.cc:738:85)

INFO: [HLS 200-472] Inferring partial write operation for 'buf\_out\_4[3].V' (net\_hls.cc:737:85)

INFO: [HLS 200-472] Inferring partial write operation for 'buf\_out\_4[3].V' (net\_hls.cc:736:83)

INFO: [HLS 200-472] Inferring partial write operation for 'buf\_out\_4[2].V' (net\_hls.cc:734:87)

INFO: [HLS 200-472] Inferring partial write operation for 'buf\_out\_4[2].V' (net\_hls.cc:733:85)

INFO: [HLS 200-472] Inferring partial write operation for 'buf\_out\_4[2].V' (net\_hls.cc:732:85)

INFO: [HLS 200-472] Inferring partial write operation for 'buf\_out\_4[2].V' (net\_hls.cc:731:83)

INFO: [HLS 200-472] Inferring partial write operation for 'buf\_out\_4[1].V' (net\_hls.cc:729:87)

INFO: [HLS 200-472] Inferring partial write operation for 'buf\_out\_4[1].V' (net\_hls.cc:728:85)

INFO: [HLS 200-472] Inferring partial write operation for 'buf\_out\_4[1].V' (net\_hls.cc:727:85)

INFO: [HLS 200-472] Inferring partial write operation for 'buf\_out\_4[1].V' (net\_hls.cc:726:83)

INFO: [HLS 200-472] Inferring partial write operation for 'buf\_out\_4[0].V' (net\_hls.cc:724:85)

INFO: [HLS 200-472] Inferring partial write operation for 'buf\_out\_4[0].V' (net\_hls.cc:723:83)

INFO: [HLS 200-472] Inferring partial write operation for 'buf\_out\_4[0].V' (net\_hls.cc:722:83)

INFO: [HLS 200-472] Inferring partial write operation for 'buf\_out\_4[0].V' (net\_hls.cc:721:81)

INFO: [HLS 200-472] Inferring partial write operation for 'buf\_out\_1[0][0].V' (net\_hls.cc:662:84)

INFO: [HLS 200-472] Inferring partial write operation for 'buf\_out\_1[0][0].V' (net\_hls.cc:661:82)

INFO: [HLS 200-472] Inferring partial write operation for 'buf\_out\_1[0][0].V' (net\_hls.cc:660:82)

INFO: [HLS 200-472] Inferring partial write operation for 'buf\_out\_1[0][0].V' (net\_hls.cc:659:80)

INFO: [HLS 200-472] Inferring partial write operation for 'buf\_out\_1[1][0].V' (net\_hls.cc:667:86)

INFO: [HLS 200-472] Inferring partial write operation for 'buf\_out\_1[1][0].V' (net\_hls.cc:666:84)

INFO: [HLS 200-472] Inferring partial write operation for 'buf\_out\_1[1][0].V' (net\_hls.cc:665:84)

INFO: [HLS 200-472] Inferring partial write operation for 'buf\_out\_1[1][0].V' (net\_hls.cc:664:82)

INFO: [HLS 200-472] Inferring partial write operation for 'buf\_out\_1[2][0].V' (net\_hls.cc:672:86)

INFO: [HLS 200-472] Inferring partial write operation for 'buf\_out\_1[2][0].V' (net\_hls.cc:671:84)

INFO: [HLS 200-472] Inferring partial write operation for 'buf\_out\_1[2][0].V' (net\_hls.cc:670:84)

INFO: [HLS 200-472] Inferring partial write operation for 'buf\_out\_1[2][0].V' (net\_hls.cc:669:82)

INFO: [HLS 200-472] Inferring partial write operation for 'buf\_out\_1[3][0].V' (net\_hls.cc:677:86)

INFO: [HLS 200-472] Inferring partial write operation for 'buf\_out\_1[3][0].V' (net\_hls.cc:676:84)

INFO: [HLS 200-472] Inferring partial write operation for 'buf\_out\_1[3][0].V' (net\_hls.cc:675:84)

INFO: [HLS 200-472] Inferring partial write operation for 'buf\_out\_1[3][0].V' (net\_hls.cc:674:82)

INFO: [HLS 200-472] Inferring partial write operation for 'buf\_out\_2[0][0].V' (net\_hls.cc:683:84)

INFO: [HLS 200-472] Inferring partial write operation for 'buf\_out\_2[0][0].V' (net\_hls.cc:682:82)

INFO: [HLS 200-472] Inferring partial write operation for 'buf\_out\_2[0][0].V' (net\_hls.cc:681:82)

INFO: [HLS 200-472] Inferring partial write operation for 'buf\_out\_2[0][0].V' (net\_hls.cc:680:80)

INFO: [HLS 200-472] Inferring partial write operation for 'buf\_out\_2[1][0].V' (net\_hls.cc:688:86)

INFO: [HLS 200-472] Inferring partial write operation for 'buf\_out\_2[1][0].V' (net\_hls.cc:687:84)

INFO: [HLS 200-472] Inferring partial write operation for 'buf\_out\_2[1][0].V' (net\_hls.cc:686:84)

INFO: [HLS 200-472] Inferring partial write operation for 'buf\_out\_2[1][0].V' (net\_hls.cc:685:82)

INFO: [HLS 200-472] Inferring partial write operation for 'buf\_out\_2[2][0].V' (net\_hls.cc:693:86)

INFO: [HLS 200-472] Inferring partial write operation for 'buf\_out\_2[2][0].V' (net\_hls.cc:692:84)

INFO: [HLS 200-472] Inferring partial write operation for 'buf\_out\_2[2][0].V' (net\_hls.cc:691:84)

INFO: [HLS 200-472] Inferring partial write operation for 'buf\_out\_2[2][0].V' (net\_hls.cc:690:82)

INFO: [HLS 200-472] Inferring partial write operation for 'buf\_out\_2[3][0].V' (net\_hls.cc:698:86)

INFO: [HLS 200-472] Inferring partial write operation for 'buf\_out\_2[3][0].V' (net\_hls.cc:697:84)

INFO: [HLS 200-472] Inferring partial write operation for 'buf\_out\_2[3][0].V' (net\_hls.cc:696:84)

INFO: [HLS 200-472] Inferring partial write operation for 'buf\_out\_2[3][0].V' (net\_hls.cc:695:82)

INFO: [HLS 200-472] Inferring partial write operation for 'buf\_out\_3[0][0].V' (net\_hls.cc:703:84)

INFO: [HLS 200-472] Inferring partial write operation for 'buf\_out\_3[0][0].V' (net\_hls.cc:702:82)

INFO: [HLS 200-472] Inferring partial write operation for 'buf\_out\_3[0][0].V' (net\_hls.cc:701:82)

INFO: [HLS 200-472] Inferring partial write operation for 'buf\_out\_3[0][0].V' (net\_hls.cc:700:80)

INFO: [HLS 200-472] Inferring partial write operation for 'buf\_out\_3[1][0].V' (net\_hls.cc:708:86)

INFO: [HLS 200-472] Inferring partial write operation for 'buf\_out\_3[1][0].V' (net\_hls.cc:707:84)

INFO: [HLS 200-472] Inferring partial write operation for 'buf\_out\_3[1][0].V' (net\_hls.cc:706:84)

INFO: [HLS 200-472] Inferring partial write operation for 'buf\_out\_3[1][0].V' (net\_hls.cc:705:82)

INFO: [HLS 200-472] Inferring partial write operation for 'buf\_out\_3[2][0].V' (net\_hls.cc:713:86)

INFO: [HLS 200-472] Inferring partial write operation for 'buf\_out\_3[2][0].V' (net\_hls.cc:712:84)

INFO: [HLS 200-472] Inferring partial write operation for 'buf\_out\_3[2][0].V' (net\_hls.cc:711:84)

INFO: [HLS 200-472] Inferring partial write operation for 'buf\_out\_3[2][0].V' (net\_hls.cc:710:82)

INFO: [HLS 200-472] Inferring partial write operation for 'buf\_out\_3[3][0].V' (net\_hls.cc:718:86)

INFO: [HLS 200-472] Inferring partial write operation for 'buf\_out\_3[3][0].V' (net\_hls.cc:717:84)

INFO: [HLS 200-472] Inferring partial write operation for 'buf\_out\_3[3][0].V' (net\_hls.cc:716:84)

INFO: [HLS 200-472] Inferring partial write operation for 'buf\_out\_3[3][0].V' (net\_hls.cc:715:82)

WARNING: [XFORM 203-631] Renaming function 'relu\_copy\_buf\_to\_DDR.1.1' to 'relu\_copy\_buf\_to\_DDR' (net\_hls.cc:281)

WARNING: [HLS 200-463] Ignoring allocation pragma because function 'load\_image\_chunk\_nor\_2' is missing or was optimized away (net\_hls.cc:820:1)

INFO: [HLS 200-111] Finished Architecture Synthesis Time (s): cpu = 00:08:51 ; elapsed = 00:12:05 . Memory (MB): peak = 1030.910 ; gain = 937.117

INFO: [HLS 200-10] Starting hardware synthesis ...

INFO: [HLS 200-10] Synthesizing 'SkyNet' ...

WARNING: [SYN 201-103] Legalizing function name 'load\_image\_chunk\_nor.2' to 'load\_image\_chunk\_nor\_2'.

WARNING: [SYN 201-103] Legalizing function name 'load\_image\_chunk\_nor.1' to 'load\_image\_chunk\_nor\_1'.

WARNING: [SYN 201-103] Legalizing function name 'relu\_copy\_buf\_to\_DDR.1' to 'relu\_copy\_buf\_to\_DDR\_1'.

WARNING: [SYN 201-107] Renaming port name 'SkyNet/INPUT' to 'SkyNet/INPUT\_r' to avoid the conflict with HDL keywords or other object names.

WARNING: [SYN 201-107] Renaming port name 'SkyNet/OUTPUT' to 'SkyNet/OUTPUT\_r' to avoid the conflict with HDL keywords or other object names.

WARNING: [SYN 201-107] Renaming port name 'SkyNet/constant' to 'SkyNet/constant\_r' to avoid the conflict with HDL keywords or other object names.

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [HLS 200-42] -- Implementing module 'load\_weight\_3x3\_from'

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [SCHED 204-11] Starting scheduling ...

INFO: [SCHED 204-61] Pipelining loop 'Loop 1'.

INFO: [SCHED 204-61] Pipelining result : Target II = 1, Final II = 1, Depth = 10.

INFO: [SCHED 204-11] Finished scheduling.

INFO: [HLS 200-111] Elapsed time: 751.18 seconds; current allocated memory: 940.356 MB.

INFO: [BIND 205-100] Starting micro-architecture generation ...

INFO: [BIND 205-101] Performing variable lifetime analysis.

INFO: [BIND 205-101] Exploring resource sharing.

INFO: [BIND 205-101] Binding ...

INFO: [BIND 205-100] Finished micro-architecture generation.

INFO: [HLS 200-111] Elapsed time: 1.119 seconds; current allocated memory: 941.134 MB.

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [HLS 200-42] -- Implementing module 'load\_bias\_from\_axi'

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [SCHED 204-11] Starting scheduling ...

INFO: [SCHED 204-11] Finished scheduling.

INFO: [HLS 200-111] Elapsed time: 1.142 seconds; current allocated memory: 941.441 MB.

INFO: [BIND 205-100] Starting micro-architecture generation ...

INFO: [BIND 205-101] Performing variable lifetime analysis.

INFO: [BIND 205-101] Exploring resource sharing.

INFO: [BIND 205-101] Binding ...

INFO: [BIND 205-100] Finished micro-architecture generation.

INFO: [HLS 200-111] Elapsed time: 0.873 seconds; current allocated memory: 941.843 MB.

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [HLS 200-42] -- Implementing module 'load\_weight\_1x1\_from'

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [SCHED 204-11] Starting scheduling ...

INFO: [SCHED 204-61] Pipelining loop 'Loop 1'.

INFO: [SCHED 204-61] Pipelining result : Target II = 1, Final II = 1, Depth = 3.

INFO: [SCHED 204-11] Finished scheduling.

INFO: [HLS 200-111] Elapsed time: 0.965 seconds; current allocated memory: 942.264 MB.

INFO: [BIND 205-100] Starting micro-architecture generation ...

INFO: [BIND 205-101] Performing variable lifetime analysis.

INFO: [BIND 205-101] Exploring resource sharing.

INFO: [BIND 205-101] Binding ...

INFO: [BIND 205-100] Finished micro-architecture generation.

INFO: [HLS 200-111] Elapsed time: 1.017 seconds; current allocated memory: 942.925 MB.

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [HLS 200-42] -- Implementing module 'load\_image\_chunk\_nor'

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [SCHED 204-11] Starting scheduling ...

INFO: [SCHED 204-61] Pipelining loop 'Loop 1'.

INFO: [SCHED 204-61] Pipelining result : Target II = 1, Final II = 1, Depth = 11.

INFO: [SCHED 204-61] Pipelining loop 'Loop 2'.

INFO: [SCHED 204-61] Pipelining result : Target II = 1, Final II = 1, Depth = 11.

INFO: [SCHED 204-61] Pipelining loop 'Loop 3'.

INFO: [SCHED 204-61] Pipelining result : Target II = 1, Final II = 1, Depth = 11.

INFO: [SCHED 204-11] Finished scheduling.

INFO: [HLS 200-111] Elapsed time: 1.405 seconds; current allocated memory: 943.544 MB.

INFO: [BIND 205-100] Starting micro-architecture generation ...

INFO: [BIND 205-101] Performing variable lifetime analysis.

INFO: [BIND 205-101] Exploring resource sharing.

INFO: [BIND 205-101] Binding ...

INFO: [BIND 205-100] Finished micro-architecture generation.

INFO: [HLS 200-111] Elapsed time: 1.417 seconds; current allocated memory: 944.468 MB.

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [HLS 200-42] -- Implementing module 'set\_bias\_3x3'

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [SCHED 204-11] Starting scheduling ...

INFO: [SCHED 204-61] Pipelining loop 'Loop 1'.

INFO: [SCHED 204-61] Pipelining result : Target II = 1, Final II = 1, Depth = 2.

INFO: [SCHED 204-11] Finished scheduling.

INFO: [HLS 200-111] Elapsed time: 2.211 seconds; current allocated memory: 946.938 MB.

INFO: [BIND 205-100] Starting micro-architecture generation ...

INFO: [BIND 205-101] Performing variable lifetime analysis.

INFO: [BIND 205-101] Exploring resource sharing.

INFO: [BIND 205-101] Binding ...

INFO: [BIND 205-100] Finished micro-architecture generation.

INFO: [HLS 200-111] Elapsed time: 4.176 seconds; current allocated memory: 950.214 MB.

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [HLS 200-42] -- Implementing module 'relu\_single'

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [SCHED 204-11] Starting scheduling ...

INFO: [SCHED 204-61] Pipelining function 'relu\_single'.

INFO: [SCHED 204-61] Pipelining result : Target II = 1, Final II = 1, Depth = 1.

INFO: [SCHED 204-11] Finished scheduling.

INFO: [HLS 200-111] Elapsed time: 4.606 seconds; current allocated memory: 950.934 MB.

INFO: [BIND 205-100] Starting micro-architecture generation ...

INFO: [BIND 205-101] Performing variable lifetime analysis.

INFO: [BIND 205-101] Exploring resource sharing.

INFO: [BIND 205-101] Binding ...

INFO: [BIND 205-100] Finished micro-architecture generation.

INFO: [HLS 200-111] Elapsed time: 0.658 seconds; current allocated memory: 950.976 MB.

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [HLS 200-42] -- Implementing module 'DW\_CONV\_3x3'

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [SCHED 204-11] Starting scheduling ...

INFO: [SCHED 204-61] Pipelining loop 'Loop 1'.

WARNING: [SCHED 204-69] Unable to schedule 'store' operation ('top\_0\_0\_V\_addr\_1\_write\_ln42', dwconv3x3.cc:42) of constant 256 on array 'top\_0\_0\_V' due to limited memory ports. Please consider using a memory core with more ports or partitioning the array 'top\_0\_0\_V'.

INFO: [SCHED 204-61] Pipelining result : Target II = 1, Final II = 2, Depth = 4.

INFO: [SCHED 204-61] Pipelining loop 'Loop 2'.

INFO: [SCHED 204-61] Pipelining result : Target II = 1, Final II = 1, Depth = 2.

INFO: [SCHED 204-11] Finished scheduling.

INFO: [HLS 200-111] Elapsed time: 8.731 seconds; current allocated memory: 957.939 MB.

INFO: [BIND 205-100] Starting micro-architecture generation ...

INFO: [BIND 205-101] Performing variable lifetime analysis.

INFO: [BIND 205-101] Exploring resource sharing.

INFO: [BIND 205-101] Binding ...

INFO: [BIND 205-100] Finished micro-architecture generation.

INFO: [HLS 200-111] Elapsed time: 10.595 seconds; current allocated memory: 965.372 MB.

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [HLS 200-42] -- Implementing module 'load\_image\_chunk\_nor\_2'

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [SCHED 204-11] Starting scheduling ...

INFO: [SCHED 204-61] Pipelining loop 'Loop 1'.

INFO: [SCHED 204-61] Pipelining result : Target II = 1, Final II = 1, Depth = 11.

INFO: [SCHED 204-61] Pipelining loop 'Loop 2'.

INFO: [SCHED 204-61] Pipelining result : Target II = 1, Final II = 1, Depth = 11.

INFO: [SCHED 204-61] Pipelining loop 'Loop 3'.

INFO: [SCHED 204-61] Pipelining result : Target II = 1, Final II = 1, Depth = 11.

INFO: [SCHED 204-11] Finished scheduling.

INFO: [HLS 200-111] Elapsed time: 11.255 seconds; current allocated memory: 966.981 MB.

INFO: [BIND 205-100] Starting micro-architecture generation ...

INFO: [BIND 205-101] Performing variable lifetime analysis.

INFO: [BIND 205-101] Exploring resource sharing.

INFO: [BIND 205-101] Binding ...

INFO: [BIND 205-100] Finished micro-architecture generation.

INFO: [HLS 200-111] Elapsed time: 1.462 seconds; current allocated memory: 967.942 MB.

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [HLS 200-42] -- Implementing module 'load\_image\_chunk\_nor\_1'

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [SCHED 204-11] Starting scheduling ...

INFO: [SCHED 204-61] Pipelining loop 'Loop 1'.

INFO: [SCHED 204-61] Pipelining result : Target II = 1, Final II = 1, Depth = 11.

INFO: [SCHED 204-61] Pipelining loop 'Loop 2'.

INFO: [SCHED 204-61] Pipelining result : Target II = 1, Final II = 1, Depth = 11.

INFO: [SCHED 204-61] Pipelining loop 'Loop 3'.

INFO: [SCHED 204-61] Pipelining result : Target II = 1, Final II = 1, Depth = 11.

INFO: [SCHED 204-11] Finished scheduling.

INFO: [HLS 200-111] Elapsed time: 1.727 seconds; current allocated memory: 968.637 MB.

INFO: [BIND 205-100] Starting micro-architecture generation ...

INFO: [BIND 205-101] Performing variable lifetime analysis.

INFO: [BIND 205-101] Exploring resource sharing.

INFO: [BIND 205-101] Binding ...

INFO: [BIND 205-100] Finished micro-architecture generation.

INFO: [HLS 200-111] Elapsed time: 1.482 seconds; current allocated memory: 969.599 MB.

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [HLS 200-42] -- Implementing module 'set\_bias\_1x1'

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [SCHED 204-11] Starting scheduling ...

INFO: [SCHED 204-61] Pipelining loop 'Loop 1'.

WARNING: [SCHED 204-69] Unable to schedule 'store' operation ('buf\_0\_V\_addr\_1\_write\_ln404', net\_hls.cc:404) of variable 'shl\_ln', net\_hls.cc:403 on array 'buf\_0\_V' due to limited memory ports. Please consider using a memory core with more ports or partitioning the array 'buf\_0\_V'.

INFO: [SCHED 204-61] Pipelining result : Target II = 1, Final II = 2, Depth = 3.

INFO: [SCHED 204-11] Finished scheduling.

INFO: [HLS 200-111] Elapsed time: 1.726 seconds; current allocated memory: 970.338 MB.

INFO: [BIND 205-100] Starting micro-architecture generation ...

INFO: [BIND 205-101] Performing variable lifetime analysis.

INFO: [BIND 205-101] Exploring resource sharing.

INFO: [BIND 205-101] Binding ...

INFO: [BIND 205-100] Finished micro-architecture generation.

INFO: [HLS 200-111] Elapsed time: 1.653 seconds; current allocated memory: 971.328 MB.

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [HLS 200-42] -- Implementing module 'load\_weights'

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [SCHED 204-11] Starting scheduling ...

INFO: [SCHED 204-61] Pipelining loop 'Loop 1'.

INFO: [SCHED 204-61] Pipelining result : Target II = 1, Final II = 1, Depth = 2.

INFO: [SCHED 204-11] Finished scheduling.

INFO: [HLS 200-111] Elapsed time: 7.386 seconds; current allocated memory: 983.359 MB.

INFO: [BIND 205-100] Starting micro-architecture generation ...

INFO: [BIND 205-101] Performing variable lifetime analysis.

INFO: [BIND 205-101] Exploring resource sharing.

INFO: [BIND 205-101] Binding ...

INFO: [BIND 205-100] Finished micro-architecture generation.

INFO: [HLS 200-111] Elapsed time: 20.312 seconds; current allocated memory: 1000.862 MB.

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [HLS 200-42] -- Implementing module 'compute\_engine\_16'

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [SCHED 204-11] Starting scheduling ...

INFO: [SCHED 204-61] Pipelining function 'compute\_engine\_16'.

INFO: [SCHED 204-61] Pipelining result : Target II = 1, Final II = 1, Depth = 2.

INFO: [SCHED 204-11] Finished scheduling.

INFO: [HLS 200-111] Elapsed time: 18.949 seconds; current allocated memory: 1002.100 MB.

INFO: [BIND 205-100] Starting micro-architecture generation ...

INFO: [BIND 205-101] Performing variable lifetime analysis.

INFO: [BIND 205-101] Exploring resource sharing.

INFO: [BIND 205-101] Binding ...

INFO: [BIND 205-100] Finished micro-architecture generation.

INFO: [HLS 200-111] Elapsed time: 1.165 seconds; current allocated memory: 1002.552 MB.

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [HLS 200-42] -- Implementing module 'CONV\_1x1'

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [SCHED 204-11] Starting scheduling ...

INFO: [SCHED 204-61] Pipelining loop 'Loop 1.1'.

INFO: [SCHED 204-61] Pipelining result : Target II = 2, Final II = 2, Depth = 6.

INFO: [SCHED 204-11] Finished scheduling.

INFO: [HLS 200-111] Elapsed time: 5.358 seconds; current allocated memory: 1009.083 MB.

INFO: [BIND 205-100] Starting micro-architecture generation ...

INFO: [BIND 205-101] Performing variable lifetime analysis.

INFO: [BIND 205-101] Exploring resource sharing.

INFO: [BIND 205-101] Binding ...

INFO: [BIND 205-100] Finished micro-architecture generation.

INFO: [HLS 200-111] Elapsed time: 12.356 seconds; current allocated memory: 1021.288 MB.

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [HLS 200-42] -- Implementing module 'relu\_max'

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [SCHED 204-11] Starting scheduling ...

INFO: [SCHED 204-61] Pipelining function 'relu\_max'.

INFO: [SCHED 204-61] Pipelining result : Target II = 1, Final II = 1, Depth = 1.

INFO: [SCHED 204-11] Finished scheduling.

INFO: [HLS 200-111] Elapsed time: 12.709 seconds; current allocated memory: 1023.184 MB.

INFO: [BIND 205-100] Starting micro-architecture generation ...

INFO: [BIND 205-101] Performing variable lifetime analysis.

INFO: [BIND 205-101] Exploring resource sharing.

INFO: [BIND 205-101] Binding ...

INFO: [BIND 205-100] Finished micro-architecture generation.

INFO: [HLS 200-111] Elapsed time: 0.801 seconds; current allocated memory: 1023.295 MB.

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [HLS 200-42] -- Implementing module 'Relu\_Max\_Pooling'

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [SCHED 204-11] Starting scheduling ...

INFO: [SCHED 204-61] Pipelining loop 'Loop 1'.

INFO: [SCHED 204-61] Pipelining result : Target II = 2, Final II = 2, Depth = 10.

INFO: [SCHED 204-11] Finished scheduling.

INFO: [HLS 200-111] Elapsed time: 4.776 seconds; current allocated memory: 1.008 GB.

INFO: [BIND 205-100] Starting micro-architecture generation ...

INFO: [BIND 205-101] Performing variable lifetime analysis.

INFO: [BIND 205-101] Exploring resource sharing.

INFO: [BIND 205-101] Binding ...

INFO: [BIND 205-100] Finished micro-architecture generation.

INFO: [HLS 200-111] Elapsed time: 14.195 seconds; current allocated memory: 1.019 GB.

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [HLS 200-42] -- Implementing module 'load\_dw1\_pool\_from\_D'

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [SCHED 204-11] Starting scheduling ...

INFO: [SCHED 204-61] Pipelining loop 'Loop 1'.

INFO: [SCHED 204-61] Pipelining result : Target II = 1, Final II = 1, Depth = 25.

INFO: [SCHED 204-11] Finished scheduling.

INFO: [HLS 200-111] Elapsed time: 15.463 seconds; current allocated memory: 1.023 GB.

INFO: [BIND 205-100] Starting micro-architecture generation ...

INFO: [BIND 205-101] Performing variable lifetime analysis.

INFO: [BIND 205-101] Exploring resource sharing.

INFO: [BIND 205-101] Binding ...

INFO: [BIND 205-100] Finished micro-architecture generation.

INFO: [HLS 200-111] Elapsed time: 1.819 seconds; current allocated memory: 1.024 GB.

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [HLS 200-42] -- Implementing module 'load\_dw2\_pool\_from\_D'

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [SCHED 204-11] Starting scheduling ...

INFO: [SCHED 204-61] Pipelining loop 'Loop 1'.

INFO: [SCHED 204-61] Pipelining result : Target II = 1, Final II = 1, Depth = 25.

INFO: [SCHED 204-11] Finished scheduling.

INFO: [HLS 200-111] Elapsed time: 2.038 seconds; current allocated memory: 1.025 GB.

INFO: [BIND 205-100] Starting micro-architecture generation ...

INFO: [BIND 205-101] Performing variable lifetime analysis.

INFO: [BIND 205-101] Exploring resource sharing.

INFO: [BIND 205-101] Binding ...

INFO: [BIND 205-100] Finished micro-architecture generation.

INFO: [HLS 200-111] Elapsed time: 1.81 seconds; current allocated memory: 1.026 GB.

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [HLS 200-42] -- Implementing module 'relu\_copy\_buf\_to\_DDR\_1'

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [SCHED 204-11] Starting scheduling ...

INFO: [SCHED 204-61] Pipelining loop 'Loop 1'.

INFO: [SCHED 204-61] Pipelining result : Target II = 1, Final II = 1, Depth = 23.

INFO: [SCHED 204-11] Finished scheduling.

INFO: [HLS 200-111] Elapsed time: 2.266 seconds; current allocated memory: 1.029 GB.

INFO: [BIND 205-100] Starting micro-architecture generation ...

INFO: [BIND 205-101] Performing variable lifetime analysis.

INFO: [BIND 205-101] Exploring resource sharing.

INFO: [BIND 205-101] Binding ...

INFO: [BIND 205-100] Finished micro-architecture generation.

INFO: [HLS 200-111] Elapsed time: 4.504 seconds; current allocated memory: 1.032 GB.

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [HLS 200-42] -- Implementing module 'load\_buf\_from\_DDR'

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [SCHED 204-11] Starting scheduling ...

INFO: [SCHED 204-61] Pipelining loop 'Loop 1'.

INFO: [SCHED 204-61] Pipelining result : Target II = 1, Final II = 1, Depth = 25.

INFO: [SCHED 204-11] Finished scheduling.

INFO: [HLS 200-111] Elapsed time: 5.095 seconds; current allocated memory: 1.034 GB.

INFO: [BIND 205-100] Starting micro-architecture generation ...

INFO: [BIND 205-101] Performing variable lifetime analysis.

INFO: [BIND 205-101] Exploring resource sharing.

INFO: [BIND 205-101] Binding ...

INFO: [BIND 205-100] Finished micro-architecture generation.

INFO: [HLS 200-111] Elapsed time: 1.729 seconds; current allocated memory: 1.035 GB.

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [HLS 200-42] -- Implementing module 'relu\_copy\_buf\_to\_DDR'

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [SCHED 204-11] Starting scheduling ...

INFO: [SCHED 204-61] Pipelining loop 'Loop 1'.

INFO: [SCHED 204-61] Pipelining result : Target II = 1, Final II = 1, Depth = 23.

INFO: [SCHED 204-11] Finished scheduling.

INFO: [HLS 200-111] Elapsed time: 1.931 seconds; current allocated memory: 1.036 GB.

INFO: [BIND 205-100] Starting micro-architecture generation ...

INFO: [BIND 205-101] Performing variable lifetime analysis.

INFO: [BIND 205-101] Exploring resource sharing.

INFO: [BIND 205-101] Binding ...

INFO: [BIND 205-100] Finished micro-architecture generation.

INFO: [HLS 200-111] Elapsed time: 2.296 seconds; current allocated memory: 1.038 GB.

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [HLS 200-42] -- Implementing module 'load\_and\_reorg\_part'

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [SCHED 204-11] Starting scheduling ...

INFO: [SCHED 204-11] Finished scheduling.

INFO: [HLS 200-111] Elapsed time: 140.072 seconds; current allocated memory: 1.050 GB.

INFO: [BIND 205-100] Starting micro-architecture generation ...

INFO: [BIND 205-101] Performing variable lifetime analysis.

INFO: [BIND 205-101] Exploring resource sharing.

INFO: [BIND 205-101] Binding ...

INFO: [BIND 205-100] Finished micro-architecture generation.

INFO: [HLS 200-111] Elapsed time: 19.046 seconds; current allocated memory: 1.062 GB.

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [HLS 200-42] -- Implementing module 'load\_and\_reorg'

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [SCHED 204-11] Starting scheduling ...

INFO: [SCHED 204-11] Finished scheduling.

INFO: [HLS 200-111] Elapsed time: 20.129 seconds; current allocated memory: 1.063 GB.

INFO: [BIND 205-100] Starting micro-architecture generation ...

INFO: [BIND 205-101] Performing variable lifetime analysis.

INFO: [BIND 205-101] Exploring resource sharing.

INFO: [BIND 205-101] Binding ...

INFO: [BIND 205-100] Finished micro-architecture generation.

INFO: [HLS 200-111] Elapsed time: 2.19 seconds; current allocated memory: 1.065 GB.

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [HLS 200-42] -- Implementing module 'local\_buf\_copy'

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [SCHED 204-11] Starting scheduling ...

INFO: [SCHED 204-61] Pipelining loop 'Loop 1'.

INFO: [SCHED 204-61] Pipelining result : Target II = 1, Final II = 1, Depth = 2.

INFO: [SCHED 204-11] Finished scheduling.

INFO: [HLS 200-111] Elapsed time: 2.21 seconds; current allocated memory: 1.066 GB.

INFO: [BIND 205-100] Starting micro-architecture generation ...

INFO: [BIND 205-101] Performing variable lifetime analysis.

INFO: [BIND 205-101] Exploring resource sharing.

INFO: [BIND 205-101] Binding ...

INFO: [BIND 205-100] Finished micro-architecture generation.

INFO: [HLS 200-111] Elapsed time: 2.168 seconds; current allocated memory: 1.068 GB.

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [HLS 200-42] -- Implementing module 'clear\_buffer'

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [SCHED 204-11] Starting scheduling ...

INFO: [SCHED 204-61] Pipelining loop 'Loop 1'.

WARNING: [SCHED 204-69] Unable to schedule 'store' operation ('buf\_0\_V\_addr\_2\_write\_ln485', net\_hls.cc:485) of constant 0 on array 'buf\_0\_V' due to limited memory ports. Please consider using a memory core with more ports or partitioning the array 'buf\_0\_V'.

INFO: [SCHED 204-61] Pipelining result : Target II = 1, Final II = 2, Depth = 2.

INFO: [SCHED 204-11] Finished scheduling.

INFO: [HLS 200-111] Elapsed time: 2.392 seconds; current allocated memory: 1.068 GB.

INFO: [BIND 205-100] Starting micro-architecture generation ...

INFO: [BIND 205-101] Performing variable lifetime analysis.

INFO: [BIND 205-101] Exploring resource sharing.

INFO: [BIND 205-101] Binding ...

INFO: [BIND 205-100] Finished micro-architecture generation.

INFO: [HLS 200-111] Elapsed time: 1.436 seconds; current allocated memory: 1.069 GB.

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [HLS 200-42] -- Implementing module 'compute\_bounding\_box'

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [SCHED 204-11] Starting scheduling ...

INFO: [SCHED 204-11] Finished scheduling.

INFO: [HLS 200-111] Elapsed time: 3.071 seconds; current allocated memory: 1.074 GB.

INFO: [BIND 205-100] Starting micro-architecture generation ...

INFO: [BIND 205-101] Performing variable lifetime analysis.

INFO: [BIND 205-101] Exploring resource sharing.

INFO: [BIND 205-101] Binding ...

INFO: [BIND 205-100] Finished micro-architecture generation.

INFO: [HLS 200-111] Elapsed time: 9.628 seconds; current allocated memory: 1.082 GB.

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [HLS 200-42] -- Implementing module 'SkyNet'

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [SCHED 204-11] Starting scheduling ...

INFO: [SCHED 204-11] Finished scheduling.

INFO: [HLS 200-111] Elapsed time: 10.584 seconds; current allocated memory: 1.085 GB.

INFO: [BIND 205-100] Starting micro-architecture generation ...

INFO: [BIND 205-101] Performing variable lifetime analysis.

INFO: [BIND 205-101] Exploring resource sharing.

INFO: [BIND 205-101] Binding ...

INFO: [BIND 205-100] Starting global binding ...

INFO: [BIND 205-100] Starting global binding ...

INFO: [BIND 205-100] Starting global binding ...

INFO: [BIND 205-100] Finished micro-architecture generation.

INFO: [HLS 200-111] Elapsed time: 29.71 seconds; current allocated memory: 1.112 GB.

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [HLS 200-10] -- Generating RTL for module 'load\_weight\_3x3\_from'

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [RTGEN 206-100] Finished creating RTL model for 'load\_weight\_3x3\_from'.

INFO: [HLS 200-111] Elapsed time: 13.212 seconds; current allocated memory: 1.122 GB.

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [HLS 200-10] -- Generating RTL for module 'load\_bias\_from\_axi'

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [RTGEN 206-100] Finished creating RTL model for 'load\_bias\_from\_axi'.

INFO: [HLS 200-111] Elapsed time: 1.673 seconds; current allocated memory: 1.125 GB.

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [HLS 200-10] -- Generating RTL for module 'load\_weight\_1x1\_from'

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [RTGEN 206-100] Finished creating RTL model for 'load\_weight\_1x1\_from'.

INFO: [HLS 200-111] Elapsed time: 1.304 seconds; current allocated memory: 1.127 GB.

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [HLS 200-10] -- Generating RTL for module 'load\_image\_chunk\_nor'

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [SYN 201-210] Renamed object name 'load\_image\_chunk\_nor\_img\_norm\_ch\_V' to 'load\_image\_chunk\_bkb' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_mac\_muladd\_8ns\_5ns\_7ns\_12\_1\_1' to 'SkyNet\_mac\_muladdcud' due to the length limit 20

INFO: [RTGEN 206-100] Generating core module 'SkyNet\_mac\_muladdcud': 3 instance(s).

INFO: [RTGEN 206-100] Finished creating RTL model for 'load\_image\_chunk\_nor'.

INFO: [HLS 200-111] Elapsed time: 1.815 seconds; current allocated memory: 1.130 GB.

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [HLS 200-10] -- Generating RTL for module 'set\_bias\_3x3'

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [RTGEN 206-100] Generating core module 'SkyNet\_mac\_muladdcud': 2 instance(s).

INFO: [RTGEN 206-100] Finished creating RTL model for 'set\_bias\_3x3'.

INFO: [HLS 200-111] Elapsed time: 2.389 seconds; current allocated memory: 1.138 GB.

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [HLS 200-10] -- Generating RTL for module 'relu\_single'

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [RTGEN 206-100] Finished creating RTL model for 'relu\_single'.

INFO: [HLS 200-111] Elapsed time: 7.006 seconds; current allocated memory: 1.152 GB.

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [HLS 200-10] -- Generating RTL for module 'DW\_CONV\_3x3'

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [SYN 201-210] Renamed object name 'SkyNet\_mac\_muladd\_11s\_9s\_16s\_20\_1\_1' to 'SkyNet\_mac\_muladddEe' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_mac\_muladd\_5ns\_8ns\_7ns\_12\_1\_1' to 'SkyNet\_mac\_muladdeOg' due to the length limit 20

INFO: [RTGEN 206-100] Generating core module 'SkyNet\_mac\_muladdcud': 2 instance(s).

INFO: [RTGEN 206-100] Generating core module 'SkyNet\_mac\_muladddEe': 32 instance(s).

INFO: [RTGEN 206-100] Generating core module 'SkyNet\_mac\_muladdeOg': 2 instance(s).

INFO: [RTGEN 206-100] Finished creating RTL model for 'DW\_CONV\_3x3'.

INFO: [HLS 200-111] Elapsed time: 2.159 seconds; current allocated memory: 1.164 GB.

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [HLS 200-10] -- Generating RTL for module 'load\_image\_chunk\_nor\_2'

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [SYN 201-210] Renamed object name 'load\_image\_chunk\_nor\_2\_img\_norm\_ch\_V' to 'load\_image\_chunk\_fYi' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_mul\_mul\_11ns\_9ns\_20\_1\_1' to 'SkyNet\_mul\_mul\_11g8j' due to the length limit 20

INFO: [RTGEN 206-100] Generating core module 'SkyNet\_mac\_muladdcud': 3 instance(s).

INFO: [RTGEN 206-100] Generating core module 'SkyNet\_mul\_mul\_11g8j': 1 instance(s).

INFO: [RTGEN 206-100] Finished creating RTL model for 'load\_image\_chunk\_nor\_2'.

INFO: [HLS 200-111] Elapsed time: 16.998 seconds; current allocated memory: 1.199 GB.

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [HLS 200-10] -- Generating RTL for module 'load\_image\_chunk\_nor\_1'

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [SYN 201-210] Renamed object name 'load\_image\_chunk\_nor\_1\_img\_norm\_ch\_V' to 'load\_image\_chunk\_hbi' due to the length limit 20

INFO: [RTGEN 206-100] Generating core module 'SkyNet\_mac\_muladdcud': 3 instance(s).

INFO: [RTGEN 206-100] Generating core module 'SkyNet\_mul\_mul\_11g8j': 1 instance(s).

INFO: [RTGEN 206-100] Finished creating RTL model for 'load\_image\_chunk\_nor\_1'.

INFO: [HLS 200-111] Elapsed time: 2.633 seconds; current allocated memory: 1.203 GB.

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [HLS 200-10] -- Generating RTL for module 'set\_bias\_1x1'

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [SYN 201-210] Renamed object name 'SkyNet\_mac\_muladd\_6ns\_8ns\_7ns\_13\_1\_1' to 'SkyNet\_mac\_muladdibs' due to the length limit 20

INFO: [RTGEN 206-100] Generating core module 'SkyNet\_mac\_muladdibs': 2 instance(s).

INFO: [RTGEN 206-100] Finished creating RTL model for 'set\_bias\_1x1'.

INFO: [HLS 200-111] Elapsed time: 2.652 seconds; current allocated memory: 1.207 GB.

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [HLS 200-10] -- Generating RTL for module 'load\_weights'

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [SYN 201-210] Renamed object name 'SkyNet\_mux\_325\_11\_1\_1' to 'SkyNet\_mux\_325\_11jbC' due to the length limit 20

INFO: [RTGEN 206-104] Estimated max fanout for 'load\_weights' is 5633 from HDL expression: (1'b1 == ap\_CS\_fsm\_state4)

INFO: [RTGEN 206-100] Generating core module 'SkyNet\_mux\_325\_11jbC': 1 instance(s).

INFO: [RTGEN 206-100] Finished creating RTL model for 'load\_weights'.

INFO: [HLS 200-111] Elapsed time: 32.001 seconds; current allocated memory: 1.794 GB.

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [HLS 200-10] -- Generating RTL for module 'compute\_engine\_16'

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [SYN 201-210] Renamed object name 'SkyNet\_mul\_mul\_11s\_9s\_20\_1\_0' to 'SkyNet\_mul\_mul\_11kbM' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_mac\_muladd\_11s\_9s\_20s\_21\_1\_0' to 'SkyNet\_mac\_muladdlbW' due to the length limit 20

INFO: [RTGEN 206-100] Generating core module 'SkyNet\_mac\_muladdlbW': 8 instance(s).

INFO: [RTGEN 206-100] Generating core module 'SkyNet\_mul\_mul\_11kbM': 8 instance(s).

INFO: [RTGEN 206-100] Finished creating RTL model for 'compute\_engine\_16'.

INFO: [HLS 200-111] Elapsed time: 27.12 seconds; current allocated memory: 1.842 GB.

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [HLS 200-10] -- Generating RTL for module 'CONV\_1x1'

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [SYN 201-210] Renamed object name 'SkyNet\_mac\_muladd\_8ns\_6ns\_7ns\_13\_1\_1' to 'SkyNet\_mac\_muladdmb6' due to the length limit 20

INFO: [RTGEN 206-104] Estimated max fanout for 'CONV\_1x1' is 11339 from HDL expression: ((1'b1 == ap\_CS\_fsm\_state3) & (grp\_load\_weights\_fu\_3909\_ap\_done == 1'b1))

INFO: [RTGEN 206-100] Generating core module 'SkyNet\_mac\_muladdcud': 1 instance(s).

INFO: [RTGEN 206-100] Generating core module 'SkyNet\_mac\_muladdmb6': 1 instance(s).

INFO: [RTGEN 206-100] Finished creating RTL model for 'CONV\_1x1'.

INFO: [HLS 200-111] Elapsed time: 22.588 seconds; current allocated memory: 2.159 GB.

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [HLS 200-10] -- Generating RTL for module 'relu\_max'

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [RTGEN 206-100] Finished creating RTL model for 'relu\_max'.

INFO: [HLS 200-111] Elapsed time: 18.892 seconds; current allocated memory: 2.190 GB.

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [HLS 200-10] -- Generating RTL for module 'Relu\_Max\_Pooling'

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [RTGEN 206-100] Finished creating RTL model for 'Relu\_Max\_Pooling'.

INFO: [HLS 200-111] Elapsed time: 3.452 seconds; current allocated memory: 2.208 GB.

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [HLS 200-10] -- Generating RTL for module 'load\_dw1\_pool\_from\_D'

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [SYN 201-210] Renamed object name 'SkyNet\_urem\_12ns\_8ns\_12\_16\_1' to 'SkyNet\_urem\_12ns\_ncg' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_mac\_muladd\_10ns\_7ns\_9ns\_16\_1\_1' to 'SkyNet\_mac\_muladdocq' due to the length limit 20

INFO: [RTGEN 206-100] Generating core module 'SkyNet\_mac\_muladdcud': 1 instance(s).

INFO: [RTGEN 206-100] Generating core module 'SkyNet\_mac\_muladdocq': 1 instance(s).

INFO: [RTGEN 206-100] Generating core module 'SkyNet\_urem\_12ns\_ncg': 1 instance(s).

INFO: [RTGEN 206-100] Finished creating RTL model for 'load\_dw1\_pool\_from\_D'.

INFO: [HLS 200-111] Elapsed time: 30.464 seconds; current allocated memory: 2.259 GB.

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [HLS 200-10] -- Generating RTL for module 'load\_dw2\_pool\_from\_D'

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [SYN 201-210] Renamed object name 'SkyNet\_mac\_muladd\_9ns\_6ns\_8ns\_13\_1\_1' to 'SkyNet\_mac\_muladdpcA' due to the length limit 20

INFO: [RTGEN 206-100] Generating core module 'SkyNet\_mac\_muladdcud': 1 instance(s).

INFO: [RTGEN 206-100] Generating core module 'SkyNet\_mac\_muladdpcA': 1 instance(s).

INFO: [RTGEN 206-100] Generating core module 'SkyNet\_urem\_12ns\_ncg': 1 instance(s).

INFO: [RTGEN 206-100] Finished creating RTL model for 'load\_dw2\_pool\_from\_D'.

INFO: [HLS 200-111] Elapsed time: 4.743 seconds; current allocated memory: 2.265 GB.

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [HLS 200-10] -- Generating RTL for module 'relu\_copy\_buf\_to\_DDR\_1'

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [SYN 201-210] Renamed object name 'SkyNet\_mul\_mul\_8ns\_13ns\_19\_1\_1' to 'SkyNet\_mul\_mul\_8nqcK' due to the length limit 20

INFO: [RTGEN 206-100] Generating core module 'SkyNet\_mac\_muladdmb6': 1 instance(s).

INFO: [RTGEN 206-100] Generating core module 'SkyNet\_mul\_mul\_8nqcK': 1 instance(s).

INFO: [RTGEN 206-100] Generating core module 'SkyNet\_urem\_12ns\_ncg': 2 instance(s).

INFO: [RTGEN 206-100] Finished creating RTL model for 'relu\_copy\_buf\_to\_DDR\_1'.

INFO: [HLS 200-111] Elapsed time: 5.785 seconds; current allocated memory: 2.275 GB.

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [HLS 200-10] -- Generating RTL for module 'load\_buf\_from\_DDR'

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [RTGEN 206-100] Generating core module 'SkyNet\_mac\_muladdcud': 1 instance(s).

INFO: [RTGEN 206-100] Generating core module 'SkyNet\_mul\_mul\_8nqcK': 1 instance(s).

INFO: [RTGEN 206-100] Generating core module 'SkyNet\_urem\_12ns\_ncg': 1 instance(s).

INFO: [RTGEN 206-100] Finished creating RTL model for 'load\_buf\_from\_DDR'.

INFO: [HLS 200-111] Elapsed time: 12.37 seconds; current allocated memory: 2.291 GB.

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [HLS 200-10] -- Generating RTL for module 'relu\_copy\_buf\_to\_DDR'

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [SYN 201-210] Renamed object name 'SkyNet\_mul\_mul\_7ns\_13ns\_19\_1\_1' to 'SkyNet\_mul\_mul\_7nrcU' due to the length limit 20

INFO: [RTGEN 206-100] Generating core module 'SkyNet\_mac\_muladdcud': 1 instance(s).

INFO: [RTGEN 206-100] Generating core module 'SkyNet\_mul\_mul\_7nrcU': 1 instance(s).

INFO: [RTGEN 206-100] Generating core module 'SkyNet\_urem\_12ns\_ncg': 2 instance(s).

INFO: [RTGEN 206-100] Finished creating RTL model for 'relu\_copy\_buf\_to\_DDR'.

INFO: [HLS 200-111] Elapsed time: 5.584 seconds; current allocated memory: 2.297 GB.

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [HLS 200-10] -- Generating RTL for module 'load\_and\_reorg\_part'

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [RTGEN 206-104] Estimated max fanout for 'load\_and\_reorg\_part' is 10500 from HDL expression: ((m\_axi\_buf\_in\_V\_RVALID == 1'b1) & (1'b1 == ap\_CS\_fsm\_state26))

INFO: [RTGEN 206-100] Generating core module 'SkyNet\_mul\_mul\_7nrcU': 1 instance(s).

INFO: [RTGEN 206-100] Finished creating RTL model for 'load\_and\_reorg\_part'.

INFO: [HLS 200-111] Elapsed time: 8.32 seconds; current allocated memory: 2.318 GB.

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [HLS 200-10] -- Generating RTL for module 'load\_and\_reorg'

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [RTGEN 206-104] Estimated max fanout for 'load\_and\_reorg' is 5472 from HDL expression: ((1'b1 == ap\_CS\_fsm\_state8) | (1'b1 == ap\_CS\_fsm\_state6) | (1'b1 == ap\_CS\_fsm\_state4) | (1'b1 == ap\_CS\_fsm\_state2))

INFO: [RTGEN 206-100] Finished creating RTL model for 'load\_and\_reorg'.

INFO: [HLS 200-111] Elapsed time: 32.41 seconds; current allocated memory: 2.388 GB.

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [HLS 200-10] -- Generating RTL for module 'local\_buf\_copy'

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [RTGEN 206-100] Generating core module 'SkyNet\_mac\_muladdcud': 1 instance(s).

INFO: [RTGEN 206-100] Generating core module 'SkyNet\_mac\_muladdmb6': 2 instance(s).

INFO: [RTGEN 206-100] Finished creating RTL model for 'local\_buf\_copy'.

INFO: [HLS 200-111] Elapsed time: 5.252 seconds; current allocated memory: 2.394 GB.

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [HLS 200-10] -- Generating RTL for module 'clear\_buffer'

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [RTGEN 206-100] Generating core module 'SkyNet\_mac\_muladdibs': 2 instance(s).

INFO: [RTGEN 206-100] Finished creating RTL model for 'clear\_buffer'.

INFO: [HLS 200-111] Elapsed time: 5.269 seconds; current allocated memory: 2.399 GB.

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [HLS 200-10] -- Generating RTL for module 'compute\_bounding\_box'

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [SYN 201-210] Renamed object name 'SkyNet\_mac\_muladd\_8ns\_13s\_13ns\_13\_1\_1' to 'SkyNet\_mac\_muladdsc4' due to the length limit 20

INFO: [RTGEN 206-100] Generating core module 'SkyNet\_mac\_muladdsc4': 8 instance(s).

INFO: [RTGEN 206-100] Finished creating RTL model for 'compute\_bounding\_box'.

INFO: [HLS 200-111] Elapsed time: 4.718 seconds; current allocated memory: 2.413 GB.

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [HLS 200-10] -- Generating RTL for module 'SkyNet'

INFO: [HLS 200-10] ----------------------------------------------------------------

INFO: [RTGEN 206-500] Setting interface mode on port 'SkyNet/INPUT\_r' to 'm\_axi'.

INFO: [RTGEN 206-500] Setting interface mode on port 'SkyNet/OUTPUT\_r' to 'm\_axi'.

INFO: [RTGEN 206-500] Setting interface mode on port 'SkyNet/image\_in\_raw\_pad\_V' to 's\_axilite & ap\_none'.

INFO: [RTGEN 206-500] Setting interface mode on port 'SkyNet/conv\_weight\_1x1\_all\_V' to 's\_axilite & ap\_none'.

INFO: [RTGEN 206-500] Setting interface mode on port 'SkyNet/conv\_weight\_3x3\_all\_V' to 's\_axilite & ap\_none'.

INFO: [RTGEN 206-500] Setting interface mode on port 'SkyNet/bias\_all\_V' to 's\_axilite & ap\_none'.

INFO: [RTGEN 206-500] Setting interface mode on port 'SkyNet/DDR\_dw1\_pool\_out\_PL\_burst\_V' to 's\_axilite & ap\_none'.

INFO: [RTGEN 206-500] Setting interface mode on port 'SkyNet/DDR\_dw2\_pool\_out\_PL\_burst\_V' to 's\_axilite & ap\_none'.

INFO: [RTGEN 206-500] Setting interface mode on port 'SkyNet/DDR\_buf\_burst\_V' to 's\_axilite & ap\_none'.

INFO: [RTGEN 206-500] Setting interface mode on port 'SkyNet/debug' to 's\_axilite & ap\_none'.

INFO: [RTGEN 206-500] Setting interface mode on port 'SkyNet/predict\_boxes' to 's\_axilite & ap\_none'.

INFO: [RTGEN 206-500] Setting interface mode on port 'SkyNet/constant\_r' to 's\_axilite & ap\_none'.

INFO: [RTGEN 206-500] Setting interface mode on function 'SkyNet' to 's\_axilite & ap\_ctrl\_hs' (register).

WARNING: [RTGEN 206-101] Global array 'weight\_buf\_3x3\_V\_0' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_weight\_buf\_3x3\_V\_0' to 'SkyNet\_weight\_buftde' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'weight\_buf\_3x3\_V\_1' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_weight\_buf\_3x3\_V\_1' to 'SkyNet\_weight\_bufudo' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'weight\_buf\_3x3\_V\_2' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_weight\_buf\_3x3\_V\_2' to 'SkyNet\_weight\_bufvdy' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'weight\_buf\_3x3\_V\_3' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_weight\_buf\_3x3\_V\_3' to 'SkyNet\_weight\_bufwdI' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'weight\_buf\_3x3\_V\_4' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_weight\_buf\_3x3\_V\_4' to 'SkyNet\_weight\_bufxdS' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'weight\_buf\_3x3\_V\_5' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_weight\_buf\_3x3\_V\_5' to 'SkyNet\_weight\_bufyd2' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'weight\_buf\_3x3\_V\_6' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_weight\_buf\_3x3\_V\_6' to 'SkyNet\_weight\_bufzec' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'weight\_buf\_3x3\_V\_7' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_weight\_buf\_3x3\_V\_7' to 'SkyNet\_weight\_bufAem' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'weight\_buf\_3x3\_V\_8' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_weight\_buf\_3x3\_V\_8' to 'SkyNet\_weight\_bufBew' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'weight\_buf\_3x3\_V\_9' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_weight\_buf\_3x3\_V\_9' to 'SkyNet\_weight\_bufCeG' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'weight\_buf\_3x3\_V\_10' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_weight\_buf\_3x3\_V\_10' to 'SkyNet\_weight\_bufDeQ' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'weight\_buf\_3x3\_V\_11' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_weight\_buf\_3x3\_V\_11' to 'SkyNet\_weight\_bufEe0' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'weight\_buf\_3x3\_V\_12' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_weight\_buf\_3x3\_V\_12' to 'SkyNet\_weight\_bufFfa' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'weight\_buf\_3x3\_V\_13' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_weight\_buf\_3x3\_V\_13' to 'SkyNet\_weight\_bufGfk' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'weight\_buf\_3x3\_V\_14' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_weight\_buf\_3x3\_V\_14' to 'SkyNet\_weight\_bufHfu' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'weight\_buf\_3x3\_V\_15' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_weight\_buf\_3x3\_V\_15' to 'SkyNet\_weight\_bufIfE' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'weight\_buf\_3x3\_V\_16' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_weight\_buf\_3x3\_V\_16' to 'SkyNet\_weight\_bufJfO' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'weight\_buf\_3x3\_V\_17' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_weight\_buf\_3x3\_V\_17' to 'SkyNet\_weight\_bufKfY' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'weight\_buf\_3x3\_V\_18' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_weight\_buf\_3x3\_V\_18' to 'SkyNet\_weight\_bufLf8' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'weight\_buf\_3x3\_V\_19' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_weight\_buf\_3x3\_V\_19' to 'SkyNet\_weight\_bufMgi' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'weight\_buf\_3x3\_V\_20' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_weight\_buf\_3x3\_V\_20' to 'SkyNet\_weight\_bufNgs' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'weight\_buf\_3x3\_V\_21' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_weight\_buf\_3x3\_V\_21' to 'SkyNet\_weight\_bufOgC' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'weight\_buf\_3x3\_V\_22' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_weight\_buf\_3x3\_V\_22' to 'SkyNet\_weight\_bufPgM' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'weight\_buf\_3x3\_V\_23' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_weight\_buf\_3x3\_V\_23' to 'SkyNet\_weight\_bufQgW' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'weight\_buf\_3x3\_V\_24' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_weight\_buf\_3x3\_V\_24' to 'SkyNet\_weight\_bufRg6' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'weight\_buf\_3x3\_V\_25' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_weight\_buf\_3x3\_V\_25' to 'SkyNet\_weight\_bufShg' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'weight\_buf\_3x3\_V\_26' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_weight\_buf\_3x3\_V\_26' to 'SkyNet\_weight\_bufThq' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'weight\_buf\_3x3\_V\_27' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_weight\_buf\_3x3\_V\_27' to 'SkyNet\_weight\_bufUhA' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'weight\_buf\_3x3\_V\_28' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_weight\_buf\_3x3\_V\_28' to 'SkyNet\_weight\_bufVhK' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'weight\_buf\_3x3\_V\_29' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_weight\_buf\_3x3\_V\_29' to 'SkyNet\_weight\_bufWhU' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'weight\_buf\_3x3\_V\_30' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_weight\_buf\_3x3\_V\_30' to 'SkyNet\_weight\_bufXh4' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'weight\_buf\_3x3\_V\_31' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_weight\_buf\_3x3\_V\_31' to 'SkyNet\_weight\_bufYie' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'bias\_buf\_V\_0' will not be exposed as RTL port.

WARNING: [RTGEN 206-101] Global array 'bias\_buf\_V\_1' will not be exposed as RTL port.

WARNING: [RTGEN 206-101] Global array 'bias\_buf\_V\_2' will not be exposed as RTL port.

WARNING: [RTGEN 206-101] Global array 'bias\_buf\_V\_3' will not be exposed as RTL port.

WARNING: [RTGEN 206-101] Global array 'bias\_buf\_V\_4' will not be exposed as RTL port.

WARNING: [RTGEN 206-101] Global array 'bias\_buf\_V\_5' will not be exposed as RTL port.

WARNING: [RTGEN 206-101] Global array 'bias\_buf\_V\_6' will not be exposed as RTL port.

WARNING: [RTGEN 206-101] Global array 'bias\_buf\_V\_7' will not be exposed as RTL port.

WARNING: [RTGEN 206-101] Global array 'bias\_buf\_V\_8' will not be exposed as RTL port.

WARNING: [RTGEN 206-101] Global array 'bias\_buf\_V\_9' will not be exposed as RTL port.

WARNING: [RTGEN 206-101] Global array 'bias\_buf\_V\_10' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_bias\_buf\_V\_10' to 'SkyNet\_bias\_buf\_VZio' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'bias\_buf\_V\_11' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_bias\_buf\_V\_11' to 'SkyNet\_bias\_buf\_V0iy' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'bias\_buf\_V\_12' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_bias\_buf\_V\_12' to 'SkyNet\_bias\_buf\_V1iI' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'bias\_buf\_V\_13' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_bias\_buf\_V\_13' to 'SkyNet\_bias\_buf\_V2iS' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'bias\_buf\_V\_14' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_bias\_buf\_V\_14' to 'SkyNet\_bias\_buf\_V3i2' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'bias\_buf\_V\_15' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_bias\_buf\_V\_15' to 'SkyNet\_bias\_buf\_V4jc' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'bias\_buf\_V\_16' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_bias\_buf\_V\_16' to 'SkyNet\_bias\_buf\_V5jm' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'bias\_buf\_V\_17' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_bias\_buf\_V\_17' to 'SkyNet\_bias\_buf\_V6jw' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'bias\_buf\_V\_18' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_bias\_buf\_V\_18' to 'SkyNet\_bias\_buf\_V7jG' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'bias\_buf\_V\_19' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_bias\_buf\_V\_19' to 'SkyNet\_bias\_buf\_V8jQ' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'bias\_buf\_V\_20' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_bias\_buf\_V\_20' to 'SkyNet\_bias\_buf\_V9j0' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'bias\_buf\_V\_21' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_bias\_buf\_V\_21' to 'SkyNet\_bias\_buf\_Vbak' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'bias\_buf\_V\_22' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_bias\_buf\_V\_22' to 'SkyNet\_bias\_buf\_Vbbk' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'bias\_buf\_V\_23' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_bias\_buf\_V\_23' to 'SkyNet\_bias\_buf\_Vbck' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'bias\_buf\_V\_24' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_bias\_buf\_V\_24' to 'SkyNet\_bias\_buf\_Vbdk' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'bias\_buf\_V\_25' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_bias\_buf\_V\_25' to 'SkyNet\_bias\_buf\_Vbek' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'bias\_buf\_V\_26' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_bias\_buf\_V\_26' to 'SkyNet\_bias\_buf\_Vbfk' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'bias\_buf\_V\_27' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_bias\_buf\_V\_27' to 'SkyNet\_bias\_buf\_Vbgk' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'bias\_buf\_V\_28' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_bias\_buf\_V\_28' to 'SkyNet\_bias\_buf\_Vbhl' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'bias\_buf\_V\_29' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_bias\_buf\_V\_29' to 'SkyNet\_bias\_buf\_Vbil' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'bias\_buf\_V\_30' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_bias\_buf\_V\_30' to 'SkyNet\_bias\_buf\_Vbjl' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'bias\_buf\_V\_31' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_bias\_buf\_V\_31' to 'SkyNet\_bias\_buf\_Vbkl' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'weight\_buf\_1x1\_V\_0' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_weight\_buf\_1x1\_V\_0' to 'SkyNet\_weight\_bufbll' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'weight\_buf\_1x1\_V\_1' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_weight\_buf\_1x1\_V\_1' to 'SkyNet\_weight\_bufbml' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'weight\_buf\_1x1\_V\_2' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_weight\_buf\_1x1\_V\_2' to 'SkyNet\_weight\_bufbnm' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'weight\_buf\_1x1\_V\_3' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_weight\_buf\_1x1\_V\_3' to 'SkyNet\_weight\_bufbom' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'weight\_buf\_1x1\_V\_4' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_weight\_buf\_1x1\_V\_4' to 'SkyNet\_weight\_bufbpm' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'weight\_buf\_1x1\_V\_5' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_weight\_buf\_1x1\_V\_5' to 'SkyNet\_weight\_bufbqm' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'weight\_buf\_1x1\_V\_6' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_weight\_buf\_1x1\_V\_6' to 'SkyNet\_weight\_bufbrm' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'weight\_buf\_1x1\_V\_7' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_weight\_buf\_1x1\_V\_7' to 'SkyNet\_weight\_bufbsm' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'weight\_buf\_1x1\_V\_8' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_weight\_buf\_1x1\_V\_8' to 'SkyNet\_weight\_bufbtn' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'weight\_buf\_1x1\_V\_9' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_weight\_buf\_1x1\_V\_9' to 'SkyNet\_weight\_bufbun' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'weight\_buf\_1x1\_V\_10' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_weight\_buf\_1x1\_V\_10' to 'SkyNet\_weight\_bufbvn' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'weight\_buf\_1x1\_V\_11' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_weight\_buf\_1x1\_V\_11' to 'SkyNet\_weight\_bufbwn' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'weight\_buf\_1x1\_V\_12' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_weight\_buf\_1x1\_V\_12' to 'SkyNet\_weight\_bufbxn' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'weight\_buf\_1x1\_V\_13' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_weight\_buf\_1x1\_V\_13' to 'SkyNet\_weight\_bufbyn' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'weight\_buf\_1x1\_V\_14' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_weight\_buf\_1x1\_V\_14' to 'SkyNet\_weight\_bufbzo' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'weight\_buf\_1x1\_V\_15' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_weight\_buf\_1x1\_V\_15' to 'SkyNet\_weight\_bufbAo' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'weight\_buf\_1x1\_V\_16' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_weight\_buf\_1x1\_V\_16' to 'SkyNet\_weight\_bufbBo' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'weight\_buf\_1x1\_V\_17' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_weight\_buf\_1x1\_V\_17' to 'SkyNet\_weight\_bufbCo' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'weight\_buf\_1x1\_V\_18' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_weight\_buf\_1x1\_V\_18' to 'SkyNet\_weight\_bufbDo' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'weight\_buf\_1x1\_V\_19' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_weight\_buf\_1x1\_V\_19' to 'SkyNet\_weight\_bufbEo' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'weight\_buf\_1x1\_V\_20' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_weight\_buf\_1x1\_V\_20' to 'SkyNet\_weight\_bufbFp' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'weight\_buf\_1x1\_V\_21' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_weight\_buf\_1x1\_V\_21' to 'SkyNet\_weight\_bufbGp' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'weight\_buf\_1x1\_V\_22' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_weight\_buf\_1x1\_V\_22' to 'SkyNet\_weight\_bufbHp' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'weight\_buf\_1x1\_V\_23' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_weight\_buf\_1x1\_V\_23' to 'SkyNet\_weight\_bufbIp' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'weight\_buf\_1x1\_V\_24' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_weight\_buf\_1x1\_V\_24' to 'SkyNet\_weight\_bufbJp' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'weight\_buf\_1x1\_V\_25' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_weight\_buf\_1x1\_V\_25' to 'SkyNet\_weight\_bufbKp' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'weight\_buf\_1x1\_V\_26' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_weight\_buf\_1x1\_V\_26' to 'SkyNet\_weight\_bufbLp' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'weight\_buf\_1x1\_V\_27' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_weight\_buf\_1x1\_V\_27' to 'SkyNet\_weight\_bufbMq' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'weight\_buf\_1x1\_V\_28' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_weight\_buf\_1x1\_V\_28' to 'SkyNet\_weight\_bufbNq' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'weight\_buf\_1x1\_V\_29' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_weight\_buf\_1x1\_V\_29' to 'SkyNet\_weight\_bufbOq' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'weight\_buf\_1x1\_V\_30' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_weight\_buf\_1x1\_V\_30' to 'SkyNet\_weight\_bufbPq' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'weight\_buf\_1x1\_V\_31' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_weight\_buf\_1x1\_V\_31' to 'SkyNet\_weight\_bufbQq' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'FM\_buf\_acc\_V\_0' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf\_acc\_V\_0' to 'SkyNet\_FM\_buf\_accbRq' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'FM\_buf\_acc\_V\_1' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf\_acc\_V\_1' to 'SkyNet\_FM\_buf\_accbSr' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'FM\_buf\_acc\_V\_2' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf\_acc\_V\_2' to 'SkyNet\_FM\_buf\_accbTr' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'FM\_buf\_acc\_V\_3' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf\_acc\_V\_3' to 'SkyNet\_FM\_buf\_accbUr' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'FM\_buf\_acc\_V\_4' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf\_acc\_V\_4' to 'SkyNet\_FM\_buf\_accbVr' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'FM\_buf\_acc\_V\_5' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf\_acc\_V\_5' to 'SkyNet\_FM\_buf\_accbWr' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'FM\_buf\_acc\_V\_6' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf\_acc\_V\_6' to 'SkyNet\_FM\_buf\_accbXr' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'FM\_buf\_acc\_V\_7' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf\_acc\_V\_7' to 'SkyNet\_FM\_buf\_accbYs' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'FM\_buf\_acc\_V\_8' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf\_acc\_V\_8' to 'SkyNet\_FM\_buf\_accbZs' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'FM\_buf\_acc\_V\_9' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf\_acc\_V\_9' to 'SkyNet\_FM\_buf\_accb0s' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'FM\_buf\_acc\_V\_10' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf\_acc\_V\_10' to 'SkyNet\_FM\_buf\_accb1s' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'FM\_buf\_acc\_V\_11' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf\_acc\_V\_11' to 'SkyNet\_FM\_buf\_accb2s' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'FM\_buf\_acc\_V\_12' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf\_acc\_V\_12' to 'SkyNet\_FM\_buf\_accb3s' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'FM\_buf\_acc\_V\_13' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf\_acc\_V\_13' to 'SkyNet\_FM\_buf\_accb4t' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'FM\_buf\_acc\_V\_14' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf\_acc\_V\_14' to 'SkyNet\_FM\_buf\_accb5t' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'FM\_buf\_acc\_V\_15' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf\_acc\_V\_15' to 'SkyNet\_FM\_buf\_accb6t' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'FM\_buf\_acc\_V\_16' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf\_acc\_V\_16' to 'SkyNet\_FM\_buf\_accb7t' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'FM\_buf\_acc\_V\_17' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf\_acc\_V\_17' to 'SkyNet\_FM\_buf\_accb8t' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'FM\_buf\_acc\_V\_18' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf\_acc\_V\_18' to 'SkyNet\_FM\_buf\_accb9t' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'FM\_buf\_acc\_V\_19' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf\_acc\_V\_19' to 'SkyNet\_FM\_buf\_acccau' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'FM\_buf\_acc\_V\_20' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf\_acc\_V\_20' to 'SkyNet\_FM\_buf\_acccbu' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'FM\_buf\_acc\_V\_21' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf\_acc\_V\_21' to 'SkyNet\_FM\_buf\_accccu' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'FM\_buf\_acc\_V\_22' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf\_acc\_V\_22' to 'SkyNet\_FM\_buf\_acccdu' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'FM\_buf\_acc\_V\_23' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf\_acc\_V\_23' to 'SkyNet\_FM\_buf\_accceu' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'FM\_buf\_acc\_V\_24' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf\_acc\_V\_24' to 'SkyNet\_FM\_buf\_acccfu' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'FM\_buf\_acc\_V\_25' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf\_acc\_V\_25' to 'SkyNet\_FM\_buf\_acccgu' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'FM\_buf\_acc\_V\_26' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf\_acc\_V\_26' to 'SkyNet\_FM\_buf\_accchv' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'FM\_buf\_acc\_V\_27' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf\_acc\_V\_27' to 'SkyNet\_FM\_buf\_accciv' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'FM\_buf\_acc\_V\_28' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf\_acc\_V\_28' to 'SkyNet\_FM\_buf\_acccjv' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'FM\_buf\_acc\_V\_29' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf\_acc\_V\_29' to 'SkyNet\_FM\_buf\_accckv' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'FM\_buf\_acc\_V\_30' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf\_acc\_V\_30' to 'SkyNet\_FM\_buf\_accclv' due to the length limit 20

WARNING: [RTGEN 206-101] Global array 'FM\_buf\_acc\_V\_31' will not be exposed as RTL port.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf\_acc\_V\_31' to 'SkyNet\_FM\_buf\_acccmv' due to the length limit 20

INFO: [RTGEN 206-100] Bundling port 'return', 'image\_in\_raw\_pad\_V', 'conv\_weight\_1x1\_all\_V', 'conv\_weight\_3x3\_all\_V', 'bias\_all\_V', 'DDR\_dw1\_pool\_out\_PL\_burst\_V', 'DDR\_dw2\_pool\_out\_PL\_burst\_V', 'DDR\_buf\_burst\_V', 'debug', 'predict\_boxes' and 'constant\_r' to AXI-Lite port AXILiteS.

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf1\_0\_0\_V' to 'SkyNet\_FM\_buf1\_0\_cnw' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf1\_0\_1\_V' to 'SkyNet\_FM\_buf1\_0\_cow' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf1\_1\_0\_V' to 'SkyNet\_FM\_buf1\_1\_cpw' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf1\_1\_1\_V' to 'SkyNet\_FM\_buf1\_1\_cqw' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf1\_2\_0\_V' to 'SkyNet\_FM\_buf1\_2\_crw' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf1\_2\_1\_V' to 'SkyNet\_FM\_buf1\_2\_csw' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf1\_3\_0\_V' to 'SkyNet\_FM\_buf1\_3\_ctx' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf1\_3\_1\_V' to 'SkyNet\_FM\_buf1\_3\_cux' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf1\_4\_0\_V' to 'SkyNet\_FM\_buf1\_4\_cvx' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf1\_4\_1\_V' to 'SkyNet\_FM\_buf1\_4\_cwx' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf1\_5\_0\_V' to 'SkyNet\_FM\_buf1\_5\_cxx' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf1\_5\_1\_V' to 'SkyNet\_FM\_buf1\_5\_cyx' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf1\_6\_0\_V' to 'SkyNet\_FM\_buf1\_6\_czy' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf1\_6\_1\_V' to 'SkyNet\_FM\_buf1\_6\_cAy' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf1\_7\_0\_V' to 'SkyNet\_FM\_buf1\_7\_cBy' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf1\_7\_1\_V' to 'SkyNet\_FM\_buf1\_7\_cCy' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf1\_8\_0\_V' to 'SkyNet\_FM\_buf1\_8\_cDy' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf1\_8\_1\_V' to 'SkyNet\_FM\_buf1\_8\_cEy' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf1\_9\_0\_V' to 'SkyNet\_FM\_buf1\_9\_cFz' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf1\_9\_1\_V' to 'SkyNet\_FM\_buf1\_9\_cGz' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf1\_10\_0\_V' to 'SkyNet\_FM\_buf1\_10cHz' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf1\_10\_1\_V' to 'SkyNet\_FM\_buf1\_10cIz' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf1\_11\_0\_V' to 'SkyNet\_FM\_buf1\_11cJz' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf1\_11\_1\_V' to 'SkyNet\_FM\_buf1\_11cKz' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf1\_12\_0\_V' to 'SkyNet\_FM\_buf1\_12cLz' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf1\_12\_1\_V' to 'SkyNet\_FM\_buf1\_12cMA' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf1\_13\_0\_V' to 'SkyNet\_FM\_buf1\_13cNA' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf1\_13\_1\_V' to 'SkyNet\_FM\_buf1\_13cOA' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf1\_14\_0\_V' to 'SkyNet\_FM\_buf1\_14cPA' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf1\_14\_1\_V' to 'SkyNet\_FM\_buf1\_14cQA' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf1\_15\_0\_V' to 'SkyNet\_FM\_buf1\_15cRA' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf1\_15\_1\_V' to 'SkyNet\_FM\_buf1\_15cSB' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf1\_16\_0\_V' to 'SkyNet\_FM\_buf1\_16cTB' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf1\_16\_1\_V' to 'SkyNet\_FM\_buf1\_16cUB' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf1\_17\_0\_V' to 'SkyNet\_FM\_buf1\_17cVB' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf1\_17\_1\_V' to 'SkyNet\_FM\_buf1\_17cWB' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf1\_18\_0\_V' to 'SkyNet\_FM\_buf1\_18cXB' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf1\_18\_1\_V' to 'SkyNet\_FM\_buf1\_18cYC' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf1\_19\_0\_V' to 'SkyNet\_FM\_buf1\_19cZC' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf1\_19\_1\_V' to 'SkyNet\_FM\_buf1\_19c0C' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf1\_20\_0\_V' to 'SkyNet\_FM\_buf1\_20c1C' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf1\_20\_1\_V' to 'SkyNet\_FM\_buf1\_20c2C' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf1\_21\_0\_V' to 'SkyNet\_FM\_buf1\_21c3C' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf1\_21\_1\_V' to 'SkyNet\_FM\_buf1\_21c4D' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf1\_22\_0\_V' to 'SkyNet\_FM\_buf1\_22c5D' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf1\_22\_1\_V' to 'SkyNet\_FM\_buf1\_22c6D' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf1\_23\_0\_V' to 'SkyNet\_FM\_buf1\_23c7D' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf1\_23\_1\_V' to 'SkyNet\_FM\_buf1\_23c8D' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf1\_24\_0\_V' to 'SkyNet\_FM\_buf1\_24c9D' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf1\_24\_1\_V' to 'SkyNet\_FM\_buf1\_24daE' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf1\_25\_0\_V' to 'SkyNet\_FM\_buf1\_25dbE' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf1\_25\_1\_V' to 'SkyNet\_FM\_buf1\_25dcE' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf1\_26\_0\_V' to 'SkyNet\_FM\_buf1\_26ddE' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf1\_26\_1\_V' to 'SkyNet\_FM\_buf1\_26deE' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf1\_27\_0\_V' to 'SkyNet\_FM\_buf1\_27dfE' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf1\_27\_1\_V' to 'SkyNet\_FM\_buf1\_27dgE' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf1\_28\_0\_V' to 'SkyNet\_FM\_buf1\_28dhF' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf1\_28\_1\_V' to 'SkyNet\_FM\_buf1\_28diF' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf1\_29\_0\_V' to 'SkyNet\_FM\_buf1\_29djF' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf1\_29\_1\_V' to 'SkyNet\_FM\_buf1\_29dkF' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf1\_30\_0\_V' to 'SkyNet\_FM\_buf1\_30dlF' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf1\_30\_1\_V' to 'SkyNet\_FM\_buf1\_30dmF' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf1\_31\_0\_V' to 'SkyNet\_FM\_buf1\_31dnG' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf1\_31\_1\_V' to 'SkyNet\_FM\_buf1\_31doG' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf2\_0\_0\_V' to 'SkyNet\_FM\_buf2\_0\_dpG' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf2\_0\_1\_V' to 'SkyNet\_FM\_buf2\_0\_dqG' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf2\_1\_0\_V' to 'SkyNet\_FM\_buf2\_1\_drG' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf2\_1\_1\_V' to 'SkyNet\_FM\_buf2\_1\_dsG' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf2\_2\_0\_V' to 'SkyNet\_FM\_buf2\_2\_dtH' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf2\_2\_1\_V' to 'SkyNet\_FM\_buf2\_2\_duH' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf2\_3\_0\_V' to 'SkyNet\_FM\_buf2\_3\_dvH' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf2\_3\_1\_V' to 'SkyNet\_FM\_buf2\_3\_dwH' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf2\_4\_0\_V' to 'SkyNet\_FM\_buf2\_4\_dxH' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf2\_4\_1\_V' to 'SkyNet\_FM\_buf2\_4\_dyH' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf2\_5\_0\_V' to 'SkyNet\_FM\_buf2\_5\_dzI' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf2\_5\_1\_V' to 'SkyNet\_FM\_buf2\_5\_dAI' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf2\_6\_0\_V' to 'SkyNet\_FM\_buf2\_6\_dBI' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf2\_6\_1\_V' to 'SkyNet\_FM\_buf2\_6\_dCI' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf2\_7\_0\_V' to 'SkyNet\_FM\_buf2\_7\_dDI' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf2\_7\_1\_V' to 'SkyNet\_FM\_buf2\_7\_dEI' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf2\_8\_0\_V' to 'SkyNet\_FM\_buf2\_8\_dFJ' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf2\_8\_1\_V' to 'SkyNet\_FM\_buf2\_8\_dGJ' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf2\_9\_0\_V' to 'SkyNet\_FM\_buf2\_9\_dHJ' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf2\_9\_1\_V' to 'SkyNet\_FM\_buf2\_9\_dIJ' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf2\_10\_0\_V' to 'SkyNet\_FM\_buf2\_10dJJ' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf2\_10\_1\_V' to 'SkyNet\_FM\_buf2\_10dKJ' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf2\_11\_0\_V' to 'SkyNet\_FM\_buf2\_11dLJ' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf2\_11\_1\_V' to 'SkyNet\_FM\_buf2\_11dMK' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf2\_12\_0\_V' to 'SkyNet\_FM\_buf2\_12dNK' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf2\_12\_1\_V' to 'SkyNet\_FM\_buf2\_12dOK' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf2\_13\_0\_V' to 'SkyNet\_FM\_buf2\_13dPK' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf2\_13\_1\_V' to 'SkyNet\_FM\_buf2\_13dQK' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf2\_14\_0\_V' to 'SkyNet\_FM\_buf2\_14dRK' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf2\_14\_1\_V' to 'SkyNet\_FM\_buf2\_14dSL' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf2\_15\_0\_V' to 'SkyNet\_FM\_buf2\_15dTL' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf2\_15\_1\_V' to 'SkyNet\_FM\_buf2\_15dUL' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf2\_16\_0\_V' to 'SkyNet\_FM\_buf2\_16dVL' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf2\_16\_1\_V' to 'SkyNet\_FM\_buf2\_16dWL' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf2\_17\_0\_V' to 'SkyNet\_FM\_buf2\_17dXL' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf2\_17\_1\_V' to 'SkyNet\_FM\_buf2\_17dYM' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf2\_18\_0\_V' to 'SkyNet\_FM\_buf2\_18dZM' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf2\_18\_1\_V' to 'SkyNet\_FM\_buf2\_18d0M' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf2\_19\_0\_V' to 'SkyNet\_FM\_buf2\_19d1M' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf2\_19\_1\_V' to 'SkyNet\_FM\_buf2\_19d2M' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf2\_20\_0\_V' to 'SkyNet\_FM\_buf2\_20d3M' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf2\_20\_1\_V' to 'SkyNet\_FM\_buf2\_20d4N' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf2\_21\_0\_V' to 'SkyNet\_FM\_buf2\_21d5N' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf2\_21\_1\_V' to 'SkyNet\_FM\_buf2\_21d6N' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf2\_22\_0\_V' to 'SkyNet\_FM\_buf2\_22d7N' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf2\_22\_1\_V' to 'SkyNet\_FM\_buf2\_22d8N' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf2\_23\_0\_V' to 'SkyNet\_FM\_buf2\_23d9N' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf2\_23\_1\_V' to 'SkyNet\_FM\_buf2\_23eaO' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf2\_24\_0\_V' to 'SkyNet\_FM\_buf2\_24ebO' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf2\_24\_1\_V' to 'SkyNet\_FM\_buf2\_24ecO' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf2\_25\_0\_V' to 'SkyNet\_FM\_buf2\_25edO' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf2\_25\_1\_V' to 'SkyNet\_FM\_buf2\_25eeO' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf2\_26\_0\_V' to 'SkyNet\_FM\_buf2\_26efO' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf2\_26\_1\_V' to 'SkyNet\_FM\_buf2\_26egO' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf2\_27\_0\_V' to 'SkyNet\_FM\_buf2\_27ehP' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf2\_27\_1\_V' to 'SkyNet\_FM\_buf2\_27eiP' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf2\_28\_0\_V' to 'SkyNet\_FM\_buf2\_28ejP' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf2\_28\_1\_V' to 'SkyNet\_FM\_buf2\_28ekP' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf2\_29\_0\_V' to 'SkyNet\_FM\_buf2\_29elP' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf2\_29\_1\_V' to 'SkyNet\_FM\_buf2\_29emP' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf2\_30\_0\_V' to 'SkyNet\_FM\_buf2\_30enQ' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf2\_30\_1\_V' to 'SkyNet\_FM\_buf2\_30eoQ' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf2\_31\_0\_V' to 'SkyNet\_FM\_buf2\_31epQ' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf2\_31\_1\_V' to 'SkyNet\_FM\_buf2\_31eqQ' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf3\_0\_0\_V' to 'SkyNet\_FM\_buf3\_0\_erQ' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf3\_0\_1\_V' to 'SkyNet\_FM\_buf3\_0\_esQ' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf3\_1\_0\_V' to 'SkyNet\_FM\_buf3\_1\_etR' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf3\_1\_1\_V' to 'SkyNet\_FM\_buf3\_1\_euR' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf3\_2\_0\_V' to 'SkyNet\_FM\_buf3\_2\_evR' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf3\_2\_1\_V' to 'SkyNet\_FM\_buf3\_2\_ewR' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf3\_3\_0\_V' to 'SkyNet\_FM\_buf3\_3\_exR' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf3\_3\_1\_V' to 'SkyNet\_FM\_buf3\_3\_eyR' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf3\_4\_0\_V' to 'SkyNet\_FM\_buf3\_4\_ezS' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf3\_4\_1\_V' to 'SkyNet\_FM\_buf3\_4\_eAS' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf3\_5\_0\_V' to 'SkyNet\_FM\_buf3\_5\_eBS' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf3\_5\_1\_V' to 'SkyNet\_FM\_buf3\_5\_eCS' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf3\_6\_0\_V' to 'SkyNet\_FM\_buf3\_6\_eDS' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf3\_6\_1\_V' to 'SkyNet\_FM\_buf3\_6\_eES' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf3\_7\_0\_V' to 'SkyNet\_FM\_buf3\_7\_eFT' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf3\_7\_1\_V' to 'SkyNet\_FM\_buf3\_7\_eGT' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf3\_8\_0\_V' to 'SkyNet\_FM\_buf3\_8\_eHT' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf3\_8\_1\_V' to 'SkyNet\_FM\_buf3\_8\_eIT' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf3\_9\_0\_V' to 'SkyNet\_FM\_buf3\_9\_eJT' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf3\_9\_1\_V' to 'SkyNet\_FM\_buf3\_9\_eKT' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf3\_10\_0\_V' to 'SkyNet\_FM\_buf3\_10eLT' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf3\_10\_1\_V' to 'SkyNet\_FM\_buf3\_10eMU' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf3\_11\_0\_V' to 'SkyNet\_FM\_buf3\_11eNU' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf3\_11\_1\_V' to 'SkyNet\_FM\_buf3\_11eOU' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf3\_12\_0\_V' to 'SkyNet\_FM\_buf3\_12ePU' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf3\_12\_1\_V' to 'SkyNet\_FM\_buf3\_12eQU' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf3\_13\_0\_V' to 'SkyNet\_FM\_buf3\_13eRU' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf3\_13\_1\_V' to 'SkyNet\_FM\_buf3\_13eSV' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf3\_14\_0\_V' to 'SkyNet\_FM\_buf3\_14eTV' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf3\_14\_1\_V' to 'SkyNet\_FM\_buf3\_14eUV' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf3\_15\_0\_V' to 'SkyNet\_FM\_buf3\_15eVV' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf3\_15\_1\_V' to 'SkyNet\_FM\_buf3\_15eWV' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf3\_16\_0\_V' to 'SkyNet\_FM\_buf3\_16eXV' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf3\_16\_1\_V' to 'SkyNet\_FM\_buf3\_16eYW' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf3\_17\_0\_V' to 'SkyNet\_FM\_buf3\_17eZW' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf3\_17\_1\_V' to 'SkyNet\_FM\_buf3\_17e0W' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf3\_18\_0\_V' to 'SkyNet\_FM\_buf3\_18e1W' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf3\_18\_1\_V' to 'SkyNet\_FM\_buf3\_18e2W' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf3\_19\_0\_V' to 'SkyNet\_FM\_buf3\_19e3W' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf3\_19\_1\_V' to 'SkyNet\_FM\_buf3\_19e4X' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf3\_20\_0\_V' to 'SkyNet\_FM\_buf3\_20e5X' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf3\_20\_1\_V' to 'SkyNet\_FM\_buf3\_20e6X' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf3\_21\_0\_V' to 'SkyNet\_FM\_buf3\_21e7X' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf3\_21\_1\_V' to 'SkyNet\_FM\_buf3\_21e8X' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf3\_22\_0\_V' to 'SkyNet\_FM\_buf3\_22e9X' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf3\_22\_1\_V' to 'SkyNet\_FM\_buf3\_22faY' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf3\_23\_0\_V' to 'SkyNet\_FM\_buf3\_23fbY' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf3\_23\_1\_V' to 'SkyNet\_FM\_buf3\_23fcY' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf3\_24\_0\_V' to 'SkyNet\_FM\_buf3\_24fdY' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf3\_24\_1\_V' to 'SkyNet\_FM\_buf3\_24feY' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf3\_25\_0\_V' to 'SkyNet\_FM\_buf3\_25ffY' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf3\_25\_1\_V' to 'SkyNet\_FM\_buf3\_25fgY' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf3\_26\_0\_V' to 'SkyNet\_FM\_buf3\_26fhZ' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf3\_26\_1\_V' to 'SkyNet\_FM\_buf3\_26fiZ' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf3\_27\_0\_V' to 'SkyNet\_FM\_buf3\_27fjZ' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf3\_27\_1\_V' to 'SkyNet\_FM\_buf3\_27fkZ' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf3\_28\_0\_V' to 'SkyNet\_FM\_buf3\_28flZ' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf3\_28\_1\_V' to 'SkyNet\_FM\_buf3\_28fmZ' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf3\_29\_0\_V' to 'SkyNet\_FM\_buf3\_29fn0' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf3\_29\_1\_V' to 'SkyNet\_FM\_buf3\_29fo0' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf3\_30\_0\_V' to 'SkyNet\_FM\_buf3\_30fp0' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf3\_30\_1\_V' to 'SkyNet\_FM\_buf3\_30fq0' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf3\_31\_0\_V' to 'SkyNet\_FM\_buf3\_31fr0' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf3\_31\_1\_V' to 'SkyNet\_FM\_buf3\_31fs0' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf4\_0\_0\_V' to 'SkyNet\_FM\_buf4\_0\_ft1' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf4\_0\_1\_V' to 'SkyNet\_FM\_buf4\_0\_fu1' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf4\_1\_0\_V' to 'SkyNet\_FM\_buf4\_1\_fv1' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf4\_1\_1\_V' to 'SkyNet\_FM\_buf4\_1\_fw1' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf4\_2\_0\_V' to 'SkyNet\_FM\_buf4\_2\_fx1' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf4\_2\_1\_V' to 'SkyNet\_FM\_buf4\_2\_fy1' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf4\_3\_0\_V' to 'SkyNet\_FM\_buf4\_3\_fz2' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf4\_3\_1\_V' to 'SkyNet\_FM\_buf4\_3\_fA2' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf4\_4\_0\_V' to 'SkyNet\_FM\_buf4\_4\_fB2' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf4\_4\_1\_V' to 'SkyNet\_FM\_buf4\_4\_fC2' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf4\_5\_0\_V' to 'SkyNet\_FM\_buf4\_5\_fD2' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf4\_5\_1\_V' to 'SkyNet\_FM\_buf4\_5\_fE2' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf4\_6\_0\_V' to 'SkyNet\_FM\_buf4\_6\_fF3' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf4\_6\_1\_V' to 'SkyNet\_FM\_buf4\_6\_fG3' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf4\_7\_0\_V' to 'SkyNet\_FM\_buf4\_7\_fH3' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf4\_7\_1\_V' to 'SkyNet\_FM\_buf4\_7\_fI3' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf4\_8\_0\_V' to 'SkyNet\_FM\_buf4\_8\_fJ3' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf4\_8\_1\_V' to 'SkyNet\_FM\_buf4\_8\_fK3' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf4\_9\_0\_V' to 'SkyNet\_FM\_buf4\_9\_fL3' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf4\_9\_1\_V' to 'SkyNet\_FM\_buf4\_9\_fM4' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf4\_10\_0\_V' to 'SkyNet\_FM\_buf4\_10fN4' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf4\_10\_1\_V' to 'SkyNet\_FM\_buf4\_10fO4' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf4\_11\_0\_V' to 'SkyNet\_FM\_buf4\_11fP4' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf4\_11\_1\_V' to 'SkyNet\_FM\_buf4\_11fQ4' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf4\_12\_0\_V' to 'SkyNet\_FM\_buf4\_12fR4' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf4\_12\_1\_V' to 'SkyNet\_FM\_buf4\_12fS5' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf4\_13\_0\_V' to 'SkyNet\_FM\_buf4\_13fT5' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf4\_13\_1\_V' to 'SkyNet\_FM\_buf4\_13fU5' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf4\_14\_0\_V' to 'SkyNet\_FM\_buf4\_14fV5' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf4\_14\_1\_V' to 'SkyNet\_FM\_buf4\_14fW5' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf4\_15\_0\_V' to 'SkyNet\_FM\_buf4\_15fX5' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf4\_15\_1\_V' to 'SkyNet\_FM\_buf4\_15fY6' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf4\_16\_0\_V' to 'SkyNet\_FM\_buf4\_16fZ6' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf4\_16\_1\_V' to 'SkyNet\_FM\_buf4\_16f06' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf4\_17\_0\_V' to 'SkyNet\_FM\_buf4\_17f16' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf4\_17\_1\_V' to 'SkyNet\_FM\_buf4\_17f26' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf4\_18\_0\_V' to 'SkyNet\_FM\_buf4\_18f36' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf4\_18\_1\_V' to 'SkyNet\_FM\_buf4\_18f47' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf4\_19\_0\_V' to 'SkyNet\_FM\_buf4\_19f57' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf4\_19\_1\_V' to 'SkyNet\_FM\_buf4\_19f67' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf4\_20\_0\_V' to 'SkyNet\_FM\_buf4\_20f77' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf4\_20\_1\_V' to 'SkyNet\_FM\_buf4\_20f87' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf4\_21\_0\_V' to 'SkyNet\_FM\_buf4\_21f97' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf4\_21\_1\_V' to 'SkyNet\_FM\_buf4\_21ga8' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf4\_22\_0\_V' to 'SkyNet\_FM\_buf4\_22gb8' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf4\_22\_1\_V' to 'SkyNet\_FM\_buf4\_22gc8' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf4\_23\_0\_V' to 'SkyNet\_FM\_buf4\_23gd8' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf4\_23\_1\_V' to 'SkyNet\_FM\_buf4\_23ge8' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf4\_24\_0\_V' to 'SkyNet\_FM\_buf4\_24gf8' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf4\_24\_1\_V' to 'SkyNet\_FM\_buf4\_24gg8' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf4\_25\_0\_V' to 'SkyNet\_FM\_buf4\_25gh9' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf4\_25\_1\_V' to 'SkyNet\_FM\_buf4\_25gi9' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf4\_26\_0\_V' to 'SkyNet\_FM\_buf4\_26gj9' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf4\_26\_1\_V' to 'SkyNet\_FM\_buf4\_26gk9' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf4\_27\_0\_V' to 'SkyNet\_FM\_buf4\_27gl9' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf4\_27\_1\_V' to 'SkyNet\_FM\_buf4\_27gm9' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf4\_28\_0\_V' to 'SkyNet\_FM\_buf4\_28gnb' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf4\_28\_1\_V' to 'SkyNet\_FM\_buf4\_28gob' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf4\_29\_0\_V' to 'SkyNet\_FM\_buf4\_29gpb' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf4\_29\_1\_V' to 'SkyNet\_FM\_buf4\_29gqb' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf4\_30\_0\_V' to 'SkyNet\_FM\_buf4\_30grb' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf4\_30\_1\_V' to 'SkyNet\_FM\_buf4\_30gsb' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf4\_31\_0\_V' to 'SkyNet\_FM\_buf4\_31gtb' due to the length limit 20

INFO: [SYN 201-210] Renamed object name 'SkyNet\_FM\_buf4\_31\_1\_V' to 'SkyNet\_FM\_buf4\_31gub' due to the length limit 20

INFO: [RTGEN 206-104] Estimated max fanout for 'SkyNet' is 5472 from HDL expression: (1'b1 == ap\_CS\_fsm\_state200)

INFO: [RTGEN 206-100] Finished creating RTL model for 'SkyNet'.

INFO: [HLS 200-111] Elapsed time: 70.845 seconds; current allocated memory: 2.478 GB.

INFO: [HLS 200-790] \*\*\*\* Loop Constraint Status: All loop constraints were NOT satisfied.

INFO: [HLS 200-789] \*\*\*\* Estimated Fmax: 114.29 MHz

INFO: [RTMG 210-279] Implementing memory 'load\_image\_chunk\_bkb\_rom' using auto ROMs.

INFO: [RTMG 210-282] Generating pipelined core: 'SkyNet\_urem\_12ns\_ncg\_div'

INFO: [RTMG 210-278] Implementing memory 'SkyNet\_weight\_buftde\_ram (RAM\_2P\_LUTRAM)' using distributed RAMs with power-on initialization.

INFO: [RTMG 210-278] Implementing memory 'SkyNet\_bias\_buf\_V\_0\_ram (RAM)' using distributed RAMs with power-on initialization.

INFO: [RTMG 210-278] Implementing memory 'SkyNet\_weight\_bufbll\_ram (RAM\_2P\_LUTRAM)' using distributed RAMs with power-on initialization.

INFO: [RTMG 210-278] Implementing memory 'SkyNet\_FM\_buf1\_0\_cnw\_ram (RAM\_2P\_BRAM)' using block RAMs.

INFO: [HLS 200-111] Finished generating all RTL models Time (s): cpu = 00:19:53 ; elapsed = 00:26:11 . Memory (MB): peak = 3144.941 ; gain = 3051.148

INFO: [VHDL 208-304] Generating VHDL RTL for SkyNet.

INFO: [VLOG 209-307] Generating Verilog RTL for SkyNet.

INFO: [HLS 200-112] Total elapsed time: 1574.58 seconds; peak allocated memory: 2.478 GB.

Finished C synthesis.