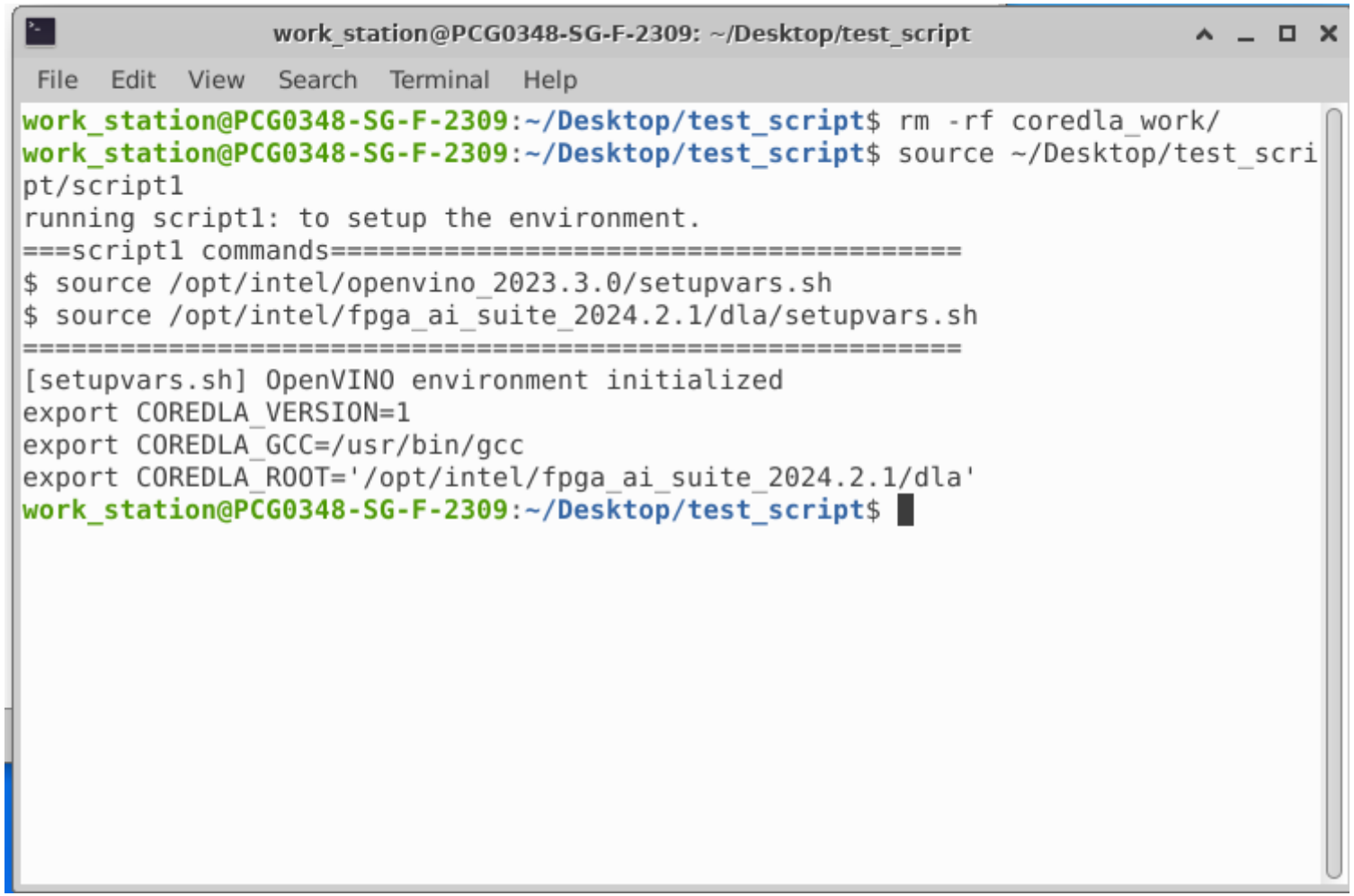
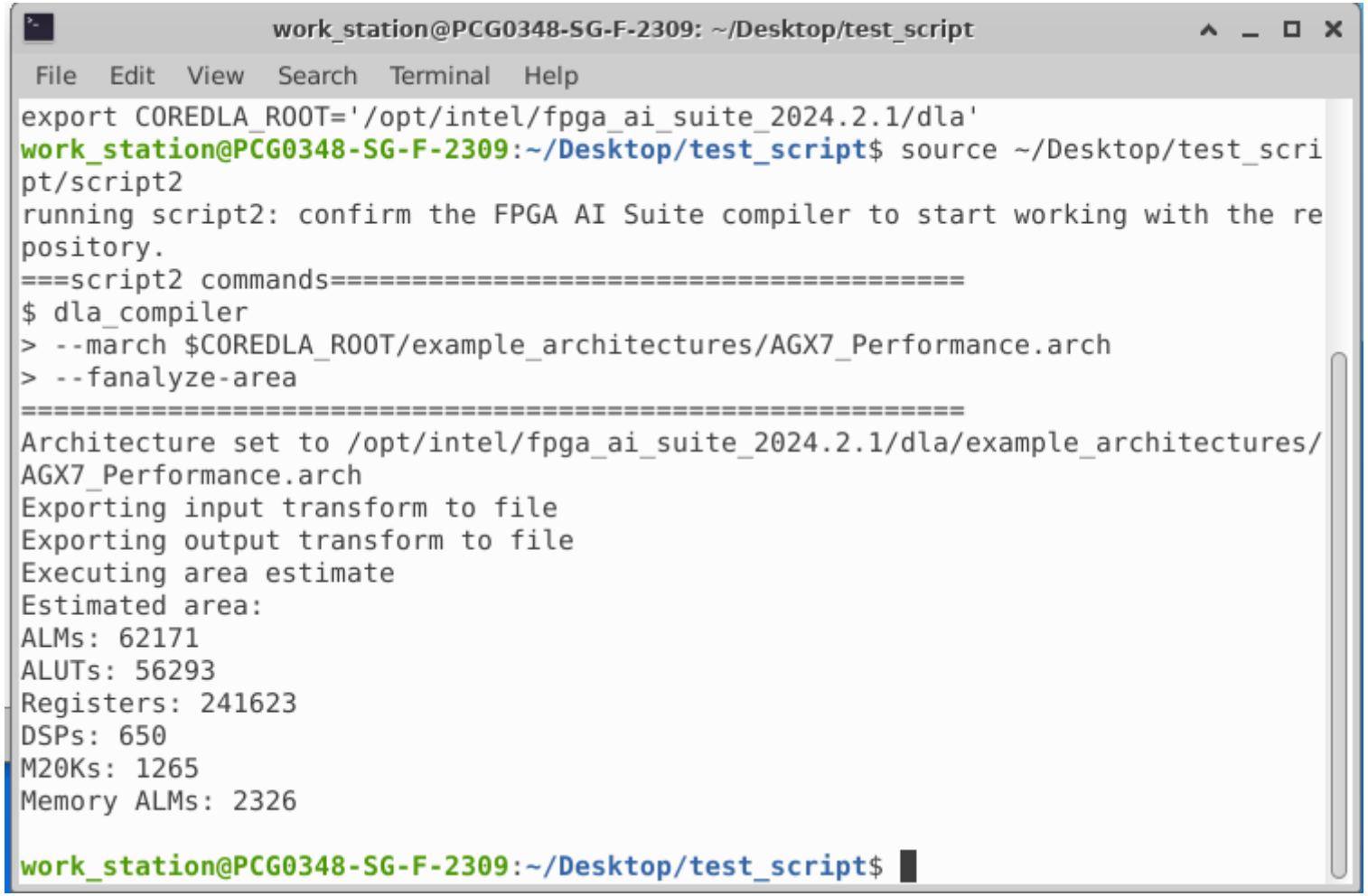
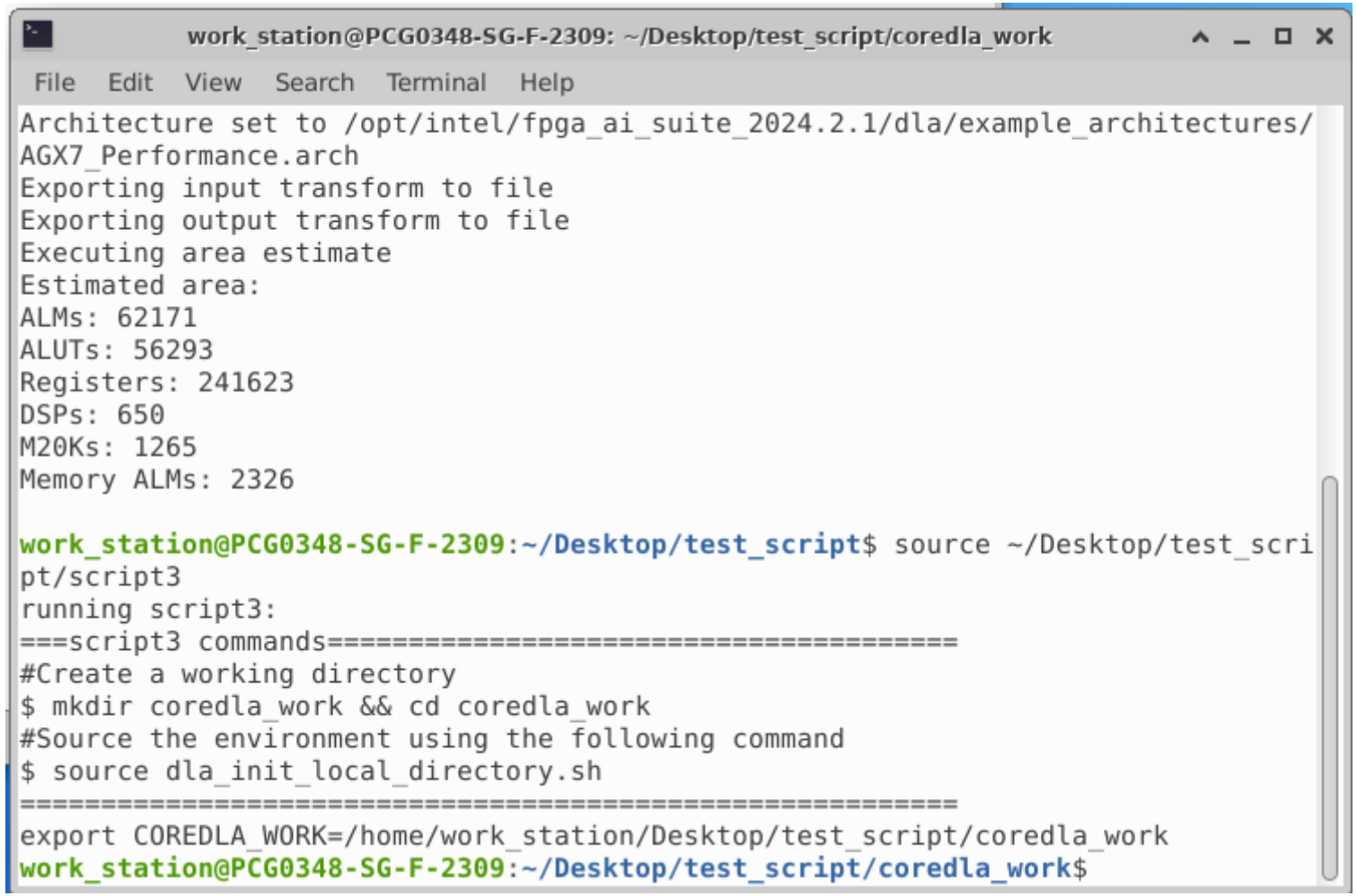
Script 1


work_station@PCG0348-SG-F-2309: ~/Desktop/test_script
File Edit View Search Terminal Help
work_station@PCG0348-SG-F-2309:~/Desktop/test_script$ rm -rf coredla_work/
work_station@PCG0348-SG-F-2309:~/Desktop/test_script$ source ~/Desktop/test_scri
pt/script1
running script1: to setup the environment.
===script1 commands==
$ source /opt/intel/openvino_2023.3.0/setupvars.sh
$ source /opt/intel/fpga_ai_suite_2024.2.1/dla/setupvars.sh
==
[setupvars.sh] OpenVINO environment initialized
export COREDLA_VERSION=1
export COREDLA_GCC=/usr/bin/gcc
export COREDLA_ROOT='/opt/intel/fpga_ai_suite_2024.2.1/dla'
work_station@PCG0348-SG-F-2309:~/Desktop/test_script$

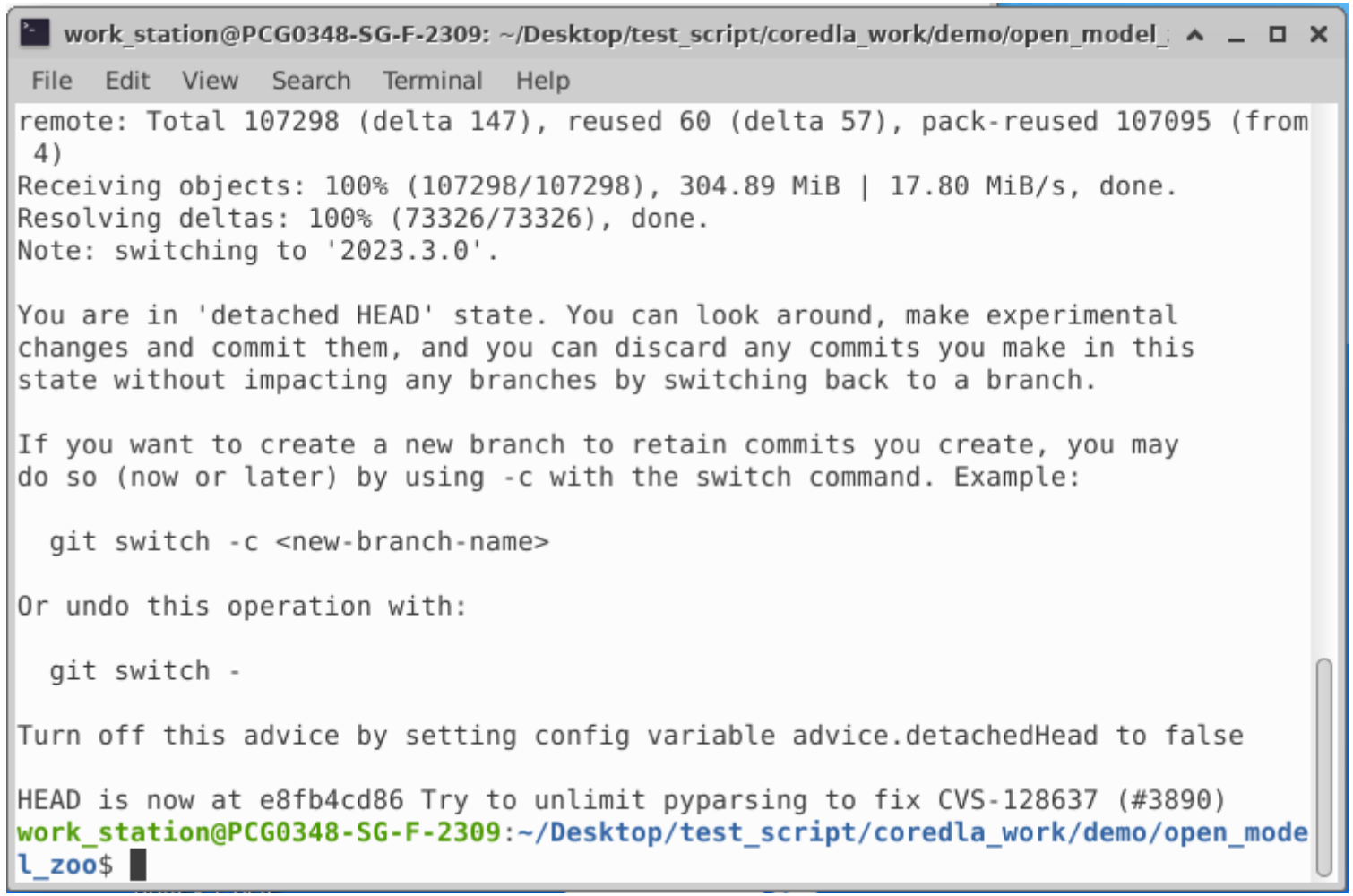
Script 2


work_station@PCG0348-SG-F-2309: ~/Desktop/test_script
File Edit View Search Terminal Help
export COREDLA_ROOT='/opt/intel/fpga_ai_suite_2024.2.1/dla'
work_station@PCG0348-SG-F-2309:~/Desktop/test_script$ source ~/Desktop/test_scri
pt/script2
running script2: confirm the FPGA AI Suite compiler to start working with the re
pository.
===script2 commands=====================================
$ dla_compiler
> --march $COREDLA_ROOT/example_architectures/AGX7_Performance.arch
> --fanalyze-area
==
Architecture set to /opt/intel/fpga_ai_suite_2024.2.1/dla/example_architectures/
AGX7_Performance.arch
Exporting input transform to file
Exporting output transform to file
Executing area estimate
Estimated area:
ALMs: 62171
ALUTs: 56293
Registers: 241623
DSPs: 650
M20Ks: 1265
Memory ALMs: 2326
work_station@PCG0348-SG-F-2309:~/Desktop/test_script$

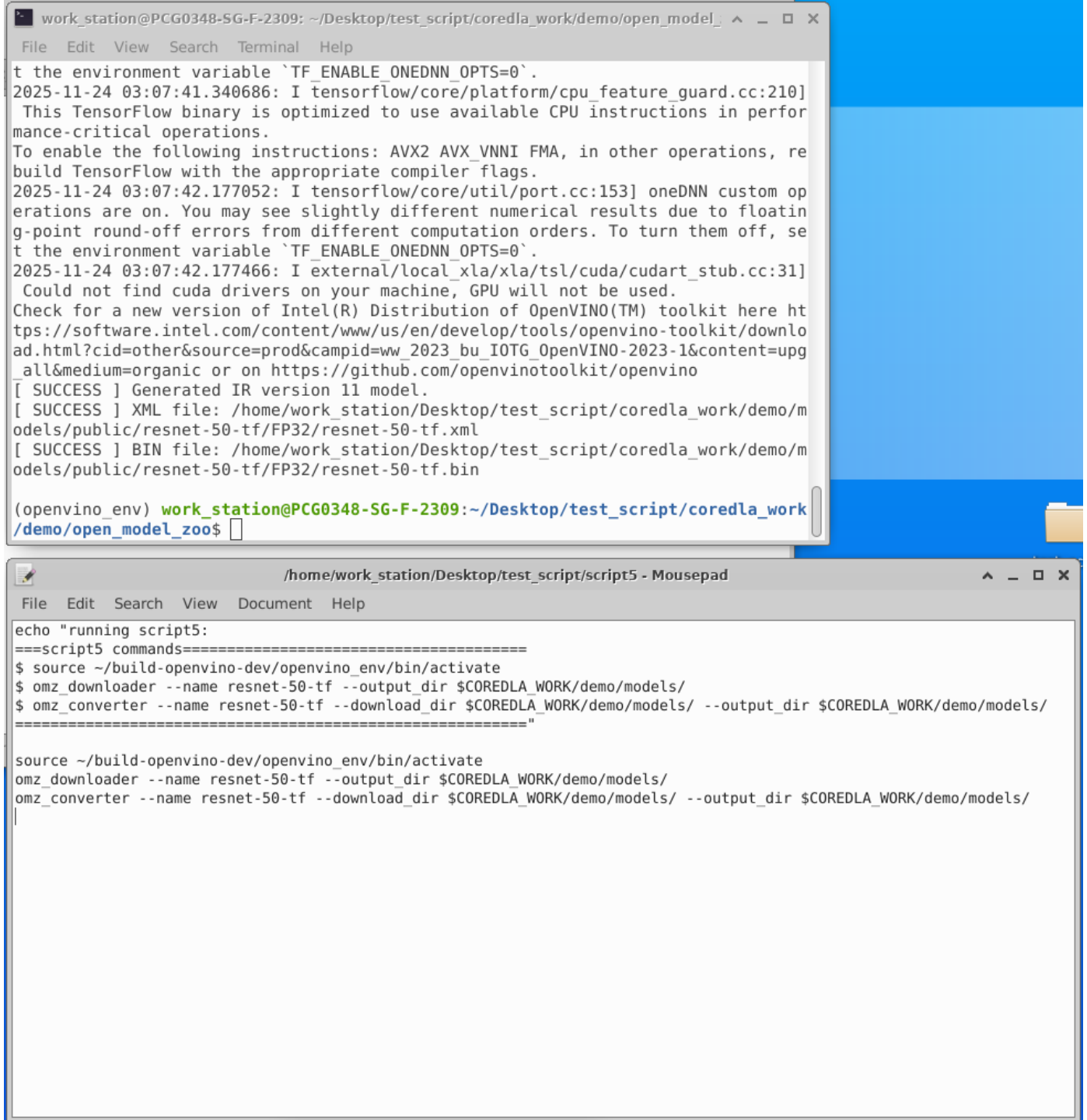
Script 3


work_station@PCG0348-SG-F-2309: ~/Desktop/test_script/coredla_work
File Edit View Search Terminal Help
Architecture set to /opt/intel/fpga_ai_suite_2024.2.1/dla/example_architectures/AGX7_Performance.arch
Exporting input transform to file
Exporting output transform to file
Executing area estimate
Estimated area:
ALMs: 62171
ALUTs: 56293
Registers: 241623
DSPs: 650
M20Ks: 1265
Memory ALMs: 2326
work_station@PCG0348-SG-F-2309:~/Desktop/test_script$ source ~/Desktop/test_script/script3
running script3:
===script3 commands=====================================
#Create a working directory
$ mkdir coredla_work && cd coredla_work
#Source the environment using the following command
$ source dla_init_local_directory.sh
===
export COREDLA_WORK=/home/work_station/Desktop/test_script/coredla_work
work_station@PCG0348-SG-F-2309:~/Desktop/test_script/coredla_work$

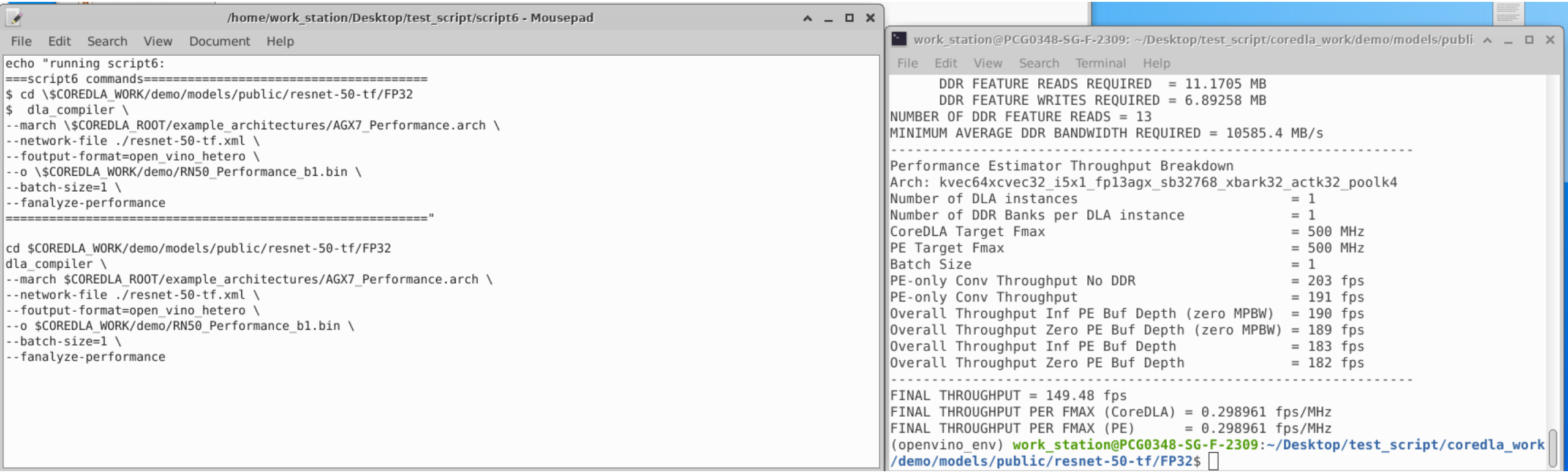
Script 4


work_station@PCG0348-SG-F-2309: ~/Desktop/test_script/coredla_work/demo/open_model_
File Edit View Search Terminal Help
remote: Total 107298 (delta 147), reused 60 (delta 57), pack-reused 107095 (from 4)
Receiving objects: 100% (107298/107298), 304.89 MiB | 17.80 MiB/s, done.
Resolving deltas: 100% (73326/73326), done.
Note: switching to '2023.3.0'.
You are in 'detached HEAD' state. You can look around, make experimental changes and commit them, and you can discard any commits you make in this state without impacting any branches by switching back to a branch.
If you want to create a new branch to retain commits you create, you may do so (now or later) by using -c with the switch command. Example:
git switch -c <new-branch-name>
Or undo this operation with:
git switch -
Turn off this advice by setting config variable advice.detachedHead to false
HEAD is now at e8fb4cd86 Try to unlimit pyparsing to fix CVS-128637 (#3890)
work_station@PCG0348-SG-F-2309:~/Desktop/test_script/coredla_work/demo/open_model_zoo$

Script 5


work_station@PCG0348-SG-F-2309: ~/Desktop/test_script/coredla_work/demo/open_model_
File Edit View Search Terminal Help
t the environment variable `TF_ENABLE_ONEDNN_OPTS=0`.
2025-11-24 03:07:41.340686: I tensorflow/core/platform/cpu_feature_guard.cc:210]
This TensorFlow binary is optimized to use available CPU instructions in perfor
mance-critical operations.
To enable the following instructions: AVX2 AVX_VNNI FMA, in other operations, re
build TensorFlow with the appropriate compiler flags.
2025-11-24 03:07:42.177052: I tensorflow/core/util/port.cc:153] oneDNN custom op
erations are on. You may see slightly different numerical results due to floatin
g-point round-off errors from different computation orders. To turn them off, se
t the environment variable `TF_ENABLE_ONEDNN_OPTS=0`.
2025-11-24 03:07:42.177466: I external/local_xla/xla/tsl/cuda/cudart_stub.cc:31]
Could not find cuda drivers on your machine, GPU will not be used.
Check for a new version of Intel(R) Distribution of OpenVINO(TM) toolkit here ht
tps://software.intel.com/content/www/us/en/develop/tools/openvino-toolkit/downlo
ad.html?cid=other&source=prod&campid=ww_2023_bu_IOTG_OpenVINO-2023-1&content=upg
_all&medium=organic or on https://github.com/openvinotoolkit/openvino
[SUCCESS] Generated IR version 11 model.
[SUCCESS] XML file: /home/work_station/Desktop/test_script/coredla_work/demo/m
odels/public/resnet-50-tf/FP32/resnet-50-tf.xml
[SUCCESS] BIN file: /home/work_station/Desktop/test_script/coredla_work/demo/m
odels/public/resnet-50-tf/FP32/resnet-50-tf.bin
(openvino_env) work_station@PCG0348-SG-F-2309:~/Desktop/test_script/coredla_work
/demo/open_model_zoo$
/home/work_station/Desktop/test_script/script5 - Mousepad
File Edit Search View Document Help
echo "running script5:
===script5 commands======================================
$ source ~/build-openvino-dev/openvino_env/bin/activate
$ omz_downloader --name resnet-50-tf --output_dir $COREDLA_WORK/demo/models/
$ omz_converter --name resnet-50-tf --download_dir $COREDLA_WORK/demo/models/ --output_dir $COREDLA_WORK/demo/models/
=="
source ~/build-openvino-dev/openvino_env/bin/activate
omz_downloader --name resnet-50-tf --output_dir $COREDLA_WORK/demo/models/
omz_converter --name resnet-50-tf --download_dir $COREDLA_WORK/demo/models/ --output_dir $COREDLA_WORK/demo/models/

Script 6


/home/work_station/Desktop/test_script/script6 - Mousepad
File Edit Search View Document Help
echo "running script6:
===script6 commands====================================
$ cd \$COREDLA_WORK/demo/models/public/resnet-50-tf/FP32
$ dla_compiler \
--march \$COREDLA_ROOT/example_architectures/AGX7_Performance.arch \
--network-file ./resnet-50-tf.xml \
--foutput-format=open_vino_hetero \
--o \$COREDLA_WORK/demo/RN50_Performance_b1.bin \
--batch-size=1 \
--fanalyze-performance
=="
cd $COREDLA_WORK/demo/models/public/resnet-50-tf/FP32
dla_compiler \
--march $COREDLA_ROOT/example_architectures/AGX7_Performance.arch \
--network-file ./resnet-50-tf.xml \
--foutput-format=open_vino_hetero \
--o $COREDLA_WORK/demo/RN50_Performance_b1.bin \
--batch-size=1 \
--fanalyze-performance
work_station@PCG0348-SG-F-2309: ~/Desktop/test_script/coredla_work/demo/models/publi
File Edit View Search Terminal Help
DDR FEATURE READS REQUIRED = 11.1705 MB
DDR FEATURE WRITES REQUIRED = 6.89258 MB
NUMBER OF DDR FEATURE READS = 13
MINIMUM AVERAGE DDR BANDWIDTH REQUIRED = 10585.4 MB/s
Performance Estimator Throughput Breakdown
Arch: kvec64xcvec32_i5x1_fp13agx_sb32768_xbark32_actk32_poolk4
Number of DLA instances = 1
Number of DDR Banks per DLA instance = 1
CoreDLA Target Fmax = 500 MHz
PE Target Fmax = 500 MHz
Batch Size = 1
PE-only Conv Throughput No DDR = 203 fps
PE-only Conv Throughput = 191 fps
Overall Throughput Inf PE Buf Depth (zero MPBW) = 190 fps
Overall Throughput Zero PE Buf Depth (zero MPBW) = 189 fps
Overall Throughput Inf PE Buf Depth = 183 fps
Overall Throughput Zero PE Buf Depth = 182 fps
FINAL THROUGHPUT = 149.48 fps
FINAL THROUGHPUT PER FMAX (CoreDLA) = 0.298961 fps/MHz
FINAL THROUGHPUT PER FMAX (PE) = 0.298961 fps/MHz
(openvino_env) work_station@PCG0348-SG-F-2309:~/Desktop/test_script/coredla_work
/demo/models/public/resnet-50-tf/FP32$

Script 7

/home/work_station/Desktop/test_script/script7 - Mousepad

File Edit Search View Document Help

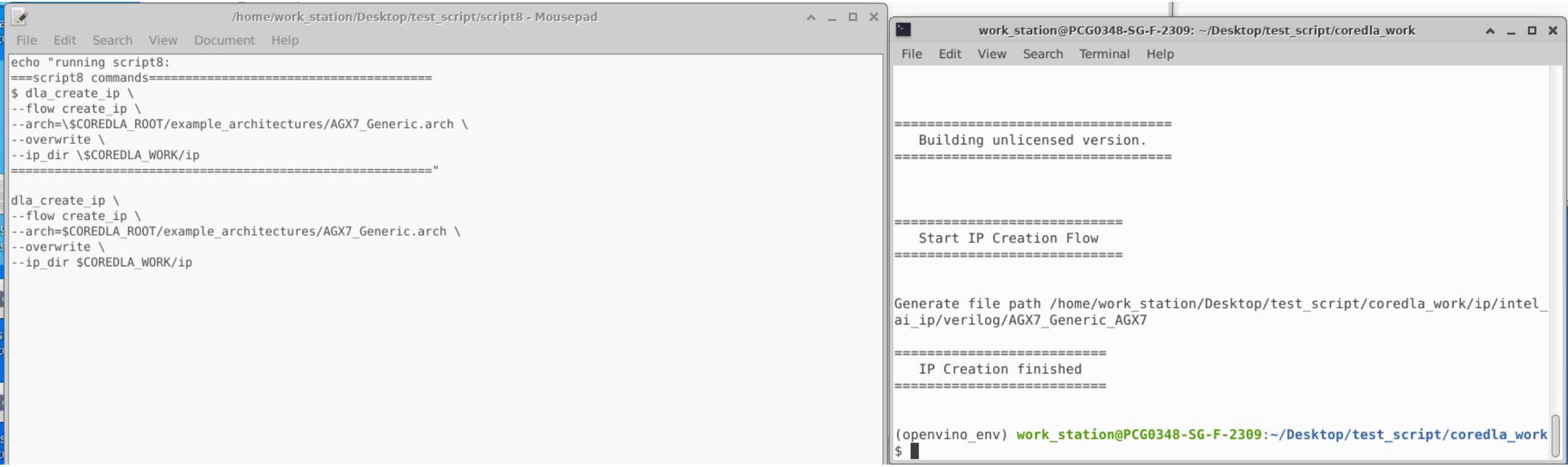
```
echo "running script7:
===script7 commands=====================================
$ cd \$COREDLA_WORK/demo/models/public/resnet-50-tf/FP32
$ dla_compiler \
--march \$COREDLA_ROOT/example_architectures/AGX7_Performance.arch \
--network-file ./resnet-50-tf.xml \
--foutput-format=open_vino_hetero \
--o \$COREDLA_WORK/demo/RN50_Performance_no_folding.bin \
--batch-size=1 \
--fanalyze-performance \
--ffolding-option=0
============================================================"

dla_compiler \
--march $COREDLA_ROOT/example_architectures/AGX7_Performance.arch \
--network-file ./resnet-50-tf.xml \
--foutput-format=open_vino_hetero \
--o $COREDLA_WORK/demo/RN50_Performance_no_folding.bin \
--batch-size=1 \
--fanalyze-performance \
--ffolding-option=0
```

work_station@PCG0348-SG-F-2309: ~/Desktop/test_script/coredla_work/demo/models/publi

File Edit View Search Terminal Help

```
      DDR FEATURE READS REQUIRED  = 14.7686 MB
      DDR FEATURE WRITES REQUIRED = 7.6582 MB
NUMBER OF DDR FEATURE READS = 18
MINIMUM AVERAGE DDR BANDWIDTH REQUIRED = 10116.1 MB/s
------------------------------------------------------------
Performance Estimator Throughput Breakdown
Arch: kvec64xcvec32_i5x1_fp13agx_sb32768_xbark32_actk32_poolk4
Number of DLA instances                          = 1
Number of DDR Banks per DLA instance             = 1
CoreDLA Target Fmax                              = 500 MHz
PE Target Fmax                                   = 500 MHz
Batch Size                                       = 1
PE-only Conv Throughput No DDR                   = 173 fps
PE-only Conv Throughput                          = 164 fps
Overall Throughput Inf PE Buf Depth (zero MPBW)  = 163 fps
Overall Throughput Zero PE Buf Depth (zero MPBW) = 163 fps
Overall Throughput Inf PE Buf Depth              = 157 fps
Overall Throughput Zero PE Buf Depth             = 156 fps
------------------------------------------------------------
FINAL THROUGHPUT = 133.304 fps
FINAL THROUGHPUT PER FMAX (CoreDLA) = 0.266609 fps/MHz
FINAL THROUGHPUT PER FMAX (PE)      = 0.266609 fps/MHz
(openvino_env) work_station@PCG0348-SG-F-2309:~/Desktop/test_script/coredla_work
/demo/models/public/resnet-50-tf/FP32$
```

Script 8


/home/work_station/Desktop/test_script/script8 - Mousepad
File Edit Search View Document Help
echo "running script8:
===script8 commands=====================================
$ dla_create_ip \
--flow create_ip \
--arch=\$COREDLA_ROOT/example_architectures/AGX7_Generic.arch \
--overwrite \
--ip_dir \$COREDLA_WORK/ip
=="
dla_create_ip \
--flow create_ip \
--arch=$COREDLA_ROOT/example_architectures/AGX7_Generic.arch \
--overwrite \
--ip_dir $COREDLA_WORK/ip
work_station@PCG0348-SG-F-2309: ~/Desktop/test_script/coredla_work
File Edit View Search Terminal Help
==================================
Building unlicensed version.
==================================
============================
Start IP Creation Flow
============================
Generate file path /home/work_station/Desktop/test_script/coredla_work/ip/intel_ai_ip/verilog/AGX7_Generic_AGX7
========================
IP Creation finished
========================
(openvino_env) work_station@PCG0348-SG-F-2309:~/Desktop/test_script/coredla_work
$