Table 1: The five best runs according to accuracy.

	Run Number	Mean GPU Power Draw (in W/hr)	Accuracy (in %)	Number of Parameters	Efficiency (acc/gpu)
B	*1*	*117.845*	*1.2*	*23792612*	*0.0*
1.	*78*	*1.003*	*95.954*	*23792612*	*0.957*
2.	*52*	*0.485*	*94.792*	*23792612*	*1.953*
3.	*47*	*0.729*	*92.838*	*23846055*	*1.273*
4.	*14*	*2.494*	*91.066*	*23792612*	*0.365*
5.	*93*	*1.457*	*91.026*	*23846055*	*0.625*

Table 2: The five best runs according to GPU.

	Run Number	Mean GPU Power Draw (in W/hr)	Accuracy (in %)	Number of Parameters	Efficiency (acc/gpu)
B	*1*	*117.845*	*1.2*	*23792612*	*0.0*
1.	*60*	*0.324*	*86.739*	*23792612*	*2.674*
2.	*58*	*0.331*	*39.076*	*23792612*	*1.181*
3.	*54*	*0.412*	*21.494*	*23792612*	*0.522*
4.	*61*	*0.437*	*0.835*	*23792612*	*0.019*
5.	*88*	*0.442*	*8.014*	*23792612*	*0.181*

Table 3: The five best runs according to efficiency (acc/gpu).

	Run Number	Mean GPU Power Draw (in W/hr)	Accuracy (in %)	Number of Parameters	Efficiency (acc/gpu)
B	*1*	*117.845*	*1.2*	*23792612*	*0.0*
1.	*60*	*0.324*	*86.739*	*23792612*	*2.674*
2.	*52*	*0.485*	*94.792*	*23792612*	*1.953*
3.	*43*	*0.512*	*82.301*	*23792612*	*1.608*
4.	*57*	*0.47*	*75.02*	*23792612*	*1.597*
5.	*66*	*0.489*	*77.549*	*23792612*	*1.586*

Table 4: Parameter values for the winning run in accuracy (run number 78).

Parameter	Value
model	resnet50
preprocessing	standardization
augmentation	None
precision	float16
batch_size	64
partitioning	80-10-10
lr	0.0008
lr_schedule	exponential
optimizer_momentum	0.5
optimizer	RMSProp
internal	jit_compilation
seed	22
n_parameters	23792612

Table 5: Parameter values for the winning run in GPU (run number 60).

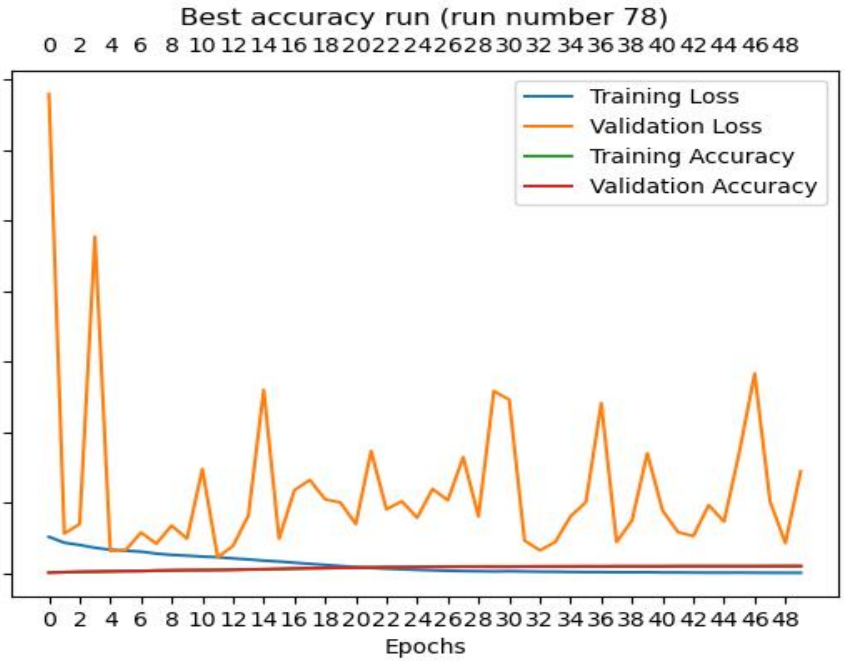
Parameter	Value
model	resnet50
preprocessing	standardization
augmentation	mixup
precision	global_policy_float16
batch_size	128
partitioning	80-10-10
lr	0.00625
lr_schedule	exponential
optimizer_momentum	0.9
optimizer	SGD
internal	jit_compilation
seed	22
n_parameters	23792612

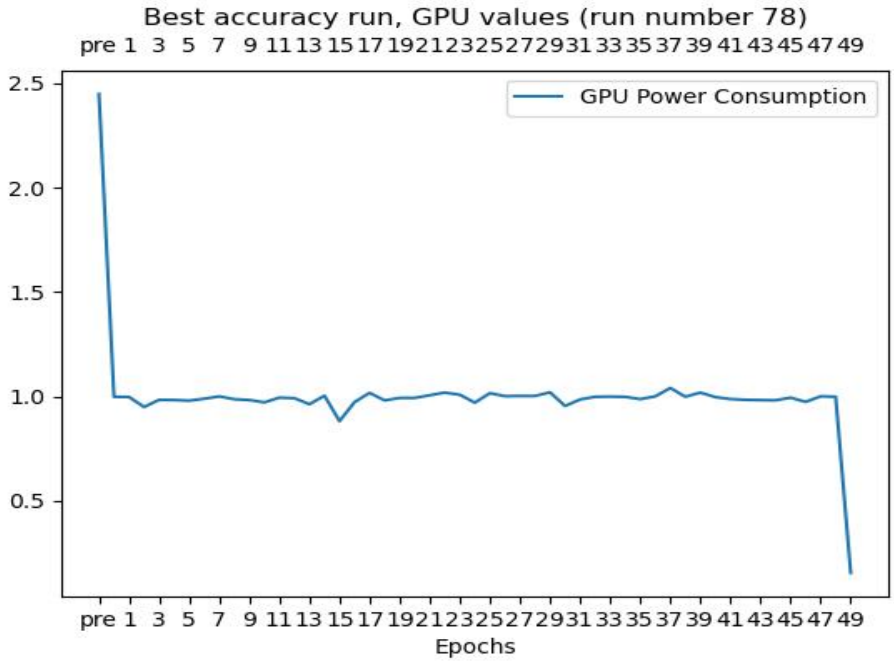
Table 6: Parameter values for the winning run in efficiency (run number 60).

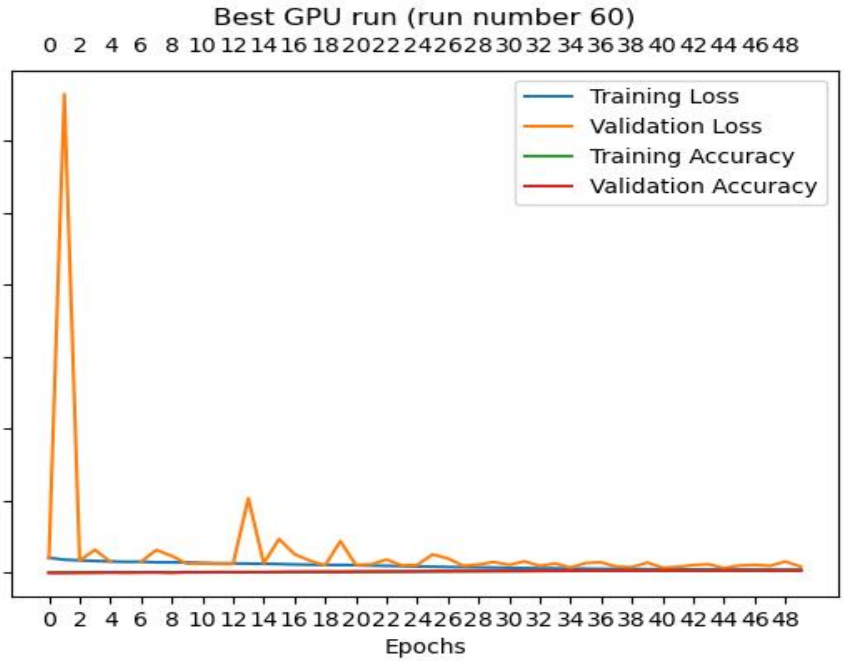
Parameter	Value
model	resnet50
preprocessing	standardization
augmentation	mixup
precision	global_policy_float16
batch_size	128
partitioning	80-10-10
lr	0.00625
lr_schedule	exponential
optimizer_momentum	0.9
optimizer	SGD
internal	jit_compilation
seed	22
n_parameters	23792612

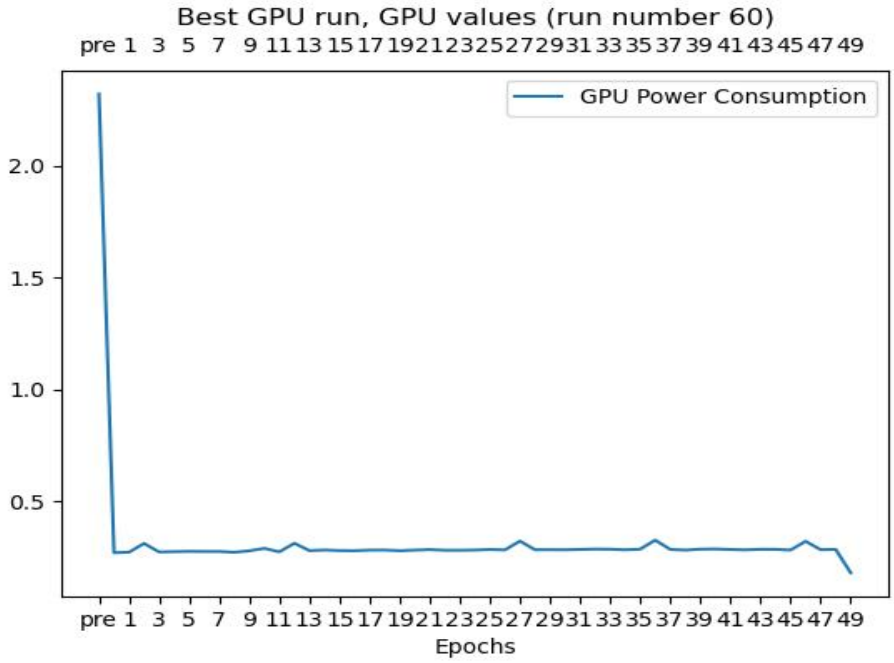
Table 7: Parameter values for the baseline run.

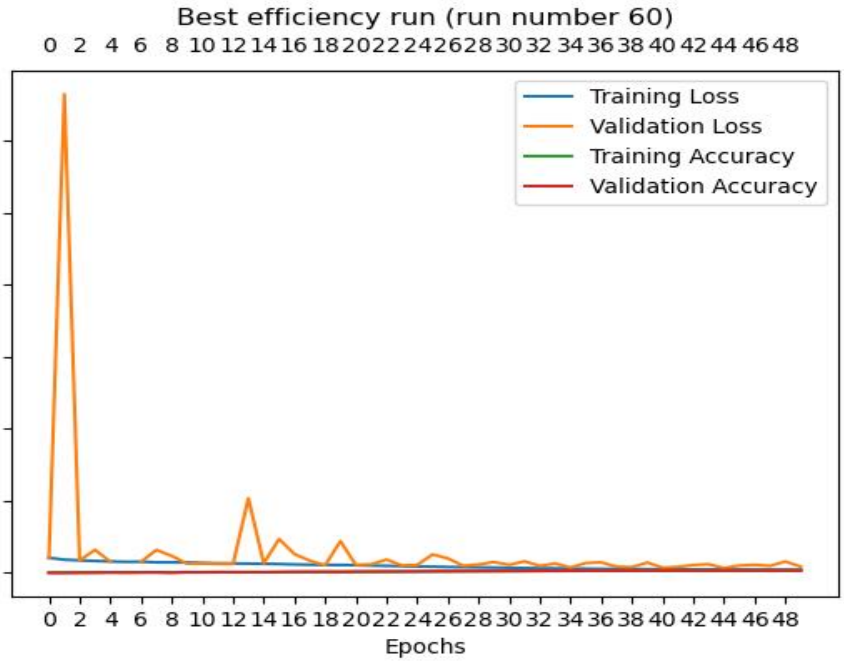
Parameter	Value
model	resnet50
preprocessing	None
augmentation	None
precision	float16
batch_size	1
partitioning	60-20-20
lr	0.01
lr_schedule	constant
optimizer_momentum	0.0
optimizer	RMSProp
internal	None
seed	22
n_parameters	23792612

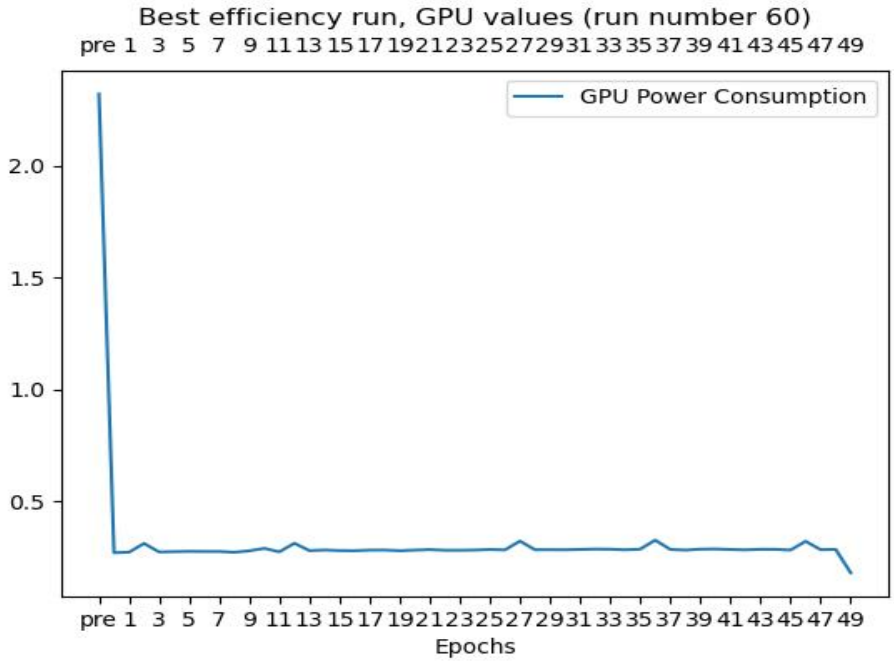

Best accuracy run (run number 78)
0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48
Training Loss
Validation Loss
Training Accuracy
Validation Accuracy
0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48
Epochs


Best accuracy run, GPU values (run number 78)
pre 1 3 5 7 9 11 13 15 17 19 21 23 25 27 29 31 33 35 37 39 41 43 45 47 49
GPU Power Consumption
2.5
2.0
1.5
1.0
0.5
pre 1 3 5 7 9 11 13 15 17 19 21 23 25 27 29 31 33 35 37 39 41 43 45 47 49
Epochs


Best GPU run (run number 60)
0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48
Training Loss
Validation Loss
Training Accuracy
Validation Accuracy
0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48
Epochs


Best GPU run, GPU values (run number 60)
pre 1 3 5 7 9 11 13 15 17 19 21 23 25 27 29 31 33 35 37 39 41 43 45 47 49
GPU Power Consumption
2.0
1.5
1.0
0.5
pre 1 3 5 7 9 11 13 15 17 19 21 23 25 27 29 31 33 35 37 39 41 43 45 47 49
Epochs


Best efficiency run (run number 60)
0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48
Training Loss
Validation Loss
Training Accuracy
Validation Accuracy
0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48
Epochs


Best efficiency run, GPU values (run number 60)
pre 1 3 5 7 9 11 13 15 17 19 21 23 25 27 29 31 33 35 37 39 41 43 45 47 49
GPU Power Consumption
2.0
1.5
1.0
0.5
pre 1 3 5 7 9 11 13 15 17 19 21 23 25 27 29 31 33 35 37 39 41 43 45 47 49
Epochs