

Layer (type)	Output Shape	Params	FLOPs	Madds
ZeroPad2d-1	[1, 3, 737, 1281]	0	0	0
BatchNorm2d-2	[1, 32, 368, 640]	64	7,536,640	30,146,560
MemoryEfficientSwish-3	[1, 32, 368, 640]	0	0	0
ZeroPad2d-4	[1, 32, 370, 642]	0	0	0
BatchNorm2d-5	[1, 32, 368, 640]	64	7,536,640	30,146,560

MemoryEfficientSwish-6	[1, 32, 368, 640]	0	0	0
Identity-7	[1, 32, 1, 1]	0	0	0
MemoryEfficientSwish-8	[1, 8, 1, 1]	0	0	0
Identity-9	[1, 8, 1, 1]	0	0	0
Identity-10	[1, 32, 368, 640]	0	0	0
BatchNorm2d-11	[1, 16, 368, 640]	32	3,768,320	15,073,280

Identity-12	[1, 16, 368, 640]	0	0	0
BatchNorm2d-13	[1, 96, 368, 640]	192	22,609,920	90,439,680
MemoryEfficientSwish-14	[1, 96, 368, 640]	0	0	0
ZeroPad2d-15	[1, 96, 369, 641]	0	0	0
BatchNorm2d-16	[1, 96, 184, 320]	192	5,652,480	22,609,920
MemoryEfficientSwish-17	[1, 96, 184, 320]	0	0	0

Identity-18	[1, 96, 1, 1]	0	0	0
MemoryEfficientSwish-19	[1, 4, 1, 1]	0	0	0
Identity-20	[1, 4, 1, 1]	0	0	0
Identity-21	[1, 96, 184, 320]	0	0	0
BatchNorm2d-22	[1, 24, 184, 320]	48	1,413,120	5,652,480
Identity-23	[1, 24, 184, 320]	0	0	0

BatchNorm2d-24	[1, 144, 184, 320]	288	8,478,720	33,914,880
MemoryEfficientSwish-25	[1, 144, 184, 320]	0	0	0
ZeroPad2d-26	[1, 144, 186, 322]	0	0	0
BatchNorm2d-27	[1, 144, 184, 320]	288	8,478,720	33,914,880
MemoryEfficientSwish-28	[1, 144, 184, 320]	0	0	0
Identity-29	[1, 144, 1, 1]	0	0	0

MemoryEfficientSwish-30	[1, 6, 1, 1]	0	0	0
Identity-31	[1, 6, 1, 1]	0	0	0
Identity-32	[1, 144, 184, 320]	0	0	0
BatchNorm2d-33	[1, 24, 184, 320]	48	1,413,120	5,652,480
Identity-34	[1, 24, 184, 320]	0	0	0
BatchNorm2d-35	[1, 144, 184, 320]	288	8,478,720	33,914,880

MemoryEfficientSwish-36	[1, 144, 184, 320]	0	0	0
ZeroPad2d-37	[1, 144, 187, 323]	0	0	0
BatchNorm2d-38	[1, 144, 92, 160]	288	2,119,680	8,478,720
MemoryEfficientSwish-39	[1, 144, 92, 160]	0	0	0
Identity-40	[1, 144, 1, 1]	0	0	0
MemoryEfficientSwish-41	[1, 6, 1, 1]	0	0	0

Identity-42	[1, 6, 1, 1]	0	0	0
Identity-43	[1, 144, 92, 160]	0	0	0
BatchNorm2d-44	[1, 40, 92, 160]	80	588,800	2,355,200
Identity-45	[1, 40, 92, 160]	0	0	0
BatchNorm2d-46	[1, 240, 92, 160]	480	3,532,800	14,131,200
MemoryEfficientSwish-47	[1, 240, 92, 160]	0	0	0

ZeroPad2d-48	[1, 240, 96, 164]	0	0	0
BatchNorm2d-49	[1, 240, 92, 160]	480	3,532,800	14,131,200
MemoryEfficientSwish-50	[1, 240, 92, 160]	0	0	0
Identity-51	[1, 240, 1, 1]	0	0	0
MemoryEfficientSwish-52	[1, 10, 1, 1]	0	0	0
Identity-53	[1, 10, 1, 1]	0	0	0

Identity-54	[1, 240, 92, 160]	0	0	0
BatchNorm2d-55	[1, 40, 92, 160]	80	588,800	2,355,200
Identity-56	[1, 40, 92, 160]	0	0	0
BatchNorm2d-57	[1, 240, 92, 160]	480	3,532,800	14,131,200
MemoryEfficientSwish-58	[1, 240, 92, 160]	0	0	0
ZeroPad2d-59	[1, 240, 93, 161]	0	0	0

BatchNorm2d-60	[1, 240, 46, 80]	480	883,200	3,532,800
MemoryEfficientSwish-61	[1, 240, 46, 80]	0	0	0
Identity-62	[1, 240, 1, 1]	0	0	0
MemoryEfficientSwish-63	[1, 10, 1, 1]	0	0	0
Identity-64	[1, 10, 1, 1]	0	0	0
Identity-65	[1, 240, 46, 80]	0	0	0

BatchNorm2d-66	[1, 80, 46, 80]	160	294,400	1,177,600
Identity-67	[1, 80, 46, 80]	0	0	0
BatchNorm2d-68	[1, 480, 46, 80]	960	1,766,400	7,065,600
MemoryEfficientSwish-69	[1, 480, 46, 80]	0	0	0
ZeroPad2d-70	[1, 480, 48, 82]	0	0	0
BatchNorm2d-71	[1, 480, 46, 80]	960	1,766,400	7,065,600

MemoryEfficientSwish-72	[1, 480, 46, 80]	0	0	0
Identity-73	[1, 480, 1, 1]	0	0	0
MemoryEfficientSwish-74	[1, 20, 1, 1]	0	0	0
Identity-75	[1, 20, 1, 1]	0	0	0
Identity-76	[1, 480, 46, 80]	0	0	0
BatchNorm2d-77	[1, 80, 46, 80]	160	294,400	1,177,600

Identity-78	[1, 80, 46, 80]	0	0	0
BatchNorm2d-79	[1, 480, 46, 80]	960	1,766,400	7,065,600
MemoryEfficientSwish-80	[1, 480, 46, 80]	0	0	0
ZeroPad2d-81	[1, 480, 48, 82]	0	0	0
BatchNorm2d-82	[1, 480, 46, 80]	960	1,766,400	7,065,600
MemoryEfficientSwish-83	[1, 480, 46, 80]	0	0	0

Identity-84	[1, 480, 1, 1]	0	0	0
MemoryEfficientSwish-85	[1, 20, 1, 1]	0	0	0
Identity-86	[1, 20, 1, 1]	0	0	0
Identity-87	[1, 480, 46, 80]	0	0	0
BatchNorm2d-88	[1, 80, 46, 80]	160	294,400	1,177,600
Identity-89	[1, 80, 46, 80]	0	0	0

BatchNorm2d-90	[1, 480, 46, 80]	960	1,766,400	7,065,600
MemoryEfficientSwish-91	[1, 480, 46, 80]	0	0	0
ZeroPad2d-92	[1, 480, 50, 84]	0	0	0
BatchNorm2d-93	[1, 480, 46, 80]	960	1,766,400	7,065,600
MemoryEfficientSwish-94	[1, 480, 46, 80]	0	0	0
Identity-95	[1, 480, 1, 1]	0	0	0

MemoryEfficientSwish-96	[1, 20, 1, 1]	0	0	0
Identity-97	[1, 20, 1, 1]	0	0	0
Identity-98	[1, 480, 46, 80]	0	0	0
BatchNorm2d-99	[1, 112, 46, 80]	224	412,160	1,648,640
Identity-100	[1, 112, 46, 80]	0	0	0
BatchNorm2d-101	[1, 672, 46, 80]	1,344	2,472,960	9,891,840

MemoryEfficientSwish-102	[1, 672, 46, 80]	0	0	0
ZeroPad2d-103	[1, 672, 50, 84]	0	0	0
BatchNorm2d-104	[1, 672, 46, 80]	1,344	2,472,960	9,891,840
MemoryEfficientSwish-105	[1, 672, 46, 80]	0	0	0
Identity-106	[1, 672, 1, 1]	0	0	0
MemoryEfficientSwish-107	[1, 28, 1, 1]	0	0	0

Identity-108	[1, 28, 1, 1]	0	0	0
Identity-109	[1, 672, 46, 80]	0	0	0
BatchNorm2d-110	[1, 112, 46, 80]	224	412,160	1,648,640
Identity-111	[1, 112, 46, 80]	0	0	0
BatchNorm2d-112	[1, 672, 46, 80]	1,344	2,472,960	9,891,840
MemoryEfficientSwish-113	[1, 672, 46, 80]	0	0	0

ZeroPad2d-114	[1, 672, 50, 84]	0	0	0
BatchNorm2d-115	[1, 672, 46, 80]	1,344	2,472,960	9,891,840
MemoryEfficientSwish-116	[1, 672, 46, 80]	0	0	0
Identity-117	[1, 672, 1, 1]	0	0	0
MemoryEfficientSwish-118	[1, 28, 1, 1]	0	0	0
Identity-119	[1, 28, 1, 1]	0	0	0

Identity-120	[1, 672, 46, 80]	0	0	0
BatchNorm2d-121	[1, 112, 46, 80]	224	412,160	1,648,640
Identity-122	[1, 112, 46, 80]	0	0	0
BatchNorm2d-123	[1, 672, 46, 80]	1,344	2,472,960	9,891,840
MemoryEfficientSwish-124	[1, 672, 46, 80]	0	0	0
ZeroPad2d-125	[1, 672, 49, 83]	0	0	0

BatchNorm2d-126	[1, 672, 23, 40]	1,344	618,240	2,472,960
MemoryEfficientSwish-127	[1, 672, 23, 40]	0	0	0
Identity-128	[1, 672, 1, 1]	0	0	0
MemoryEfficientSwish-129	[1, 28, 1, 1]	0	0	0
Identity-130	[1, 28, 1, 1]	0	0	0
Identity-131	[1, 672, 23, 40]	0	0	0

BatchNorm2d-132	[1, 192, 23, 40]	384	176,640	706,560
Identity-133	[1, 192, 23, 40]	0	0	0
BatchNorm2d-134	[1, 1152, 23, 40]	2,304	1,059,840	4,239,360
MemoryEfficientSwish-135	[1, 1152, 23, 40]	0	0	0
ZeroPad2d-136	[1, 1152, 27, 44]	0	0	0
BatchNorm2d-137	[1, 1152, 23, 40]	2,304	1,059,840	4,239,360

MemoryEfficientSwish-138	[1, 1152, 23, 40]	0	0	0
Identity-139	[1, 1152, 1, 1]	0	0	0
MemoryEfficientSwish-140	[1, 48, 1, 1]	0	0	0
Identity-141	[1, 48, 1, 1]	0	0	0
Identity-142	[1, 1152, 23, 40]	0	0	0
BatchNorm2d-143	[1, 192, 23, 40]	384	176,640	706,560

Identity-144	[1, 192, 23, 40]	0	0	0
BatchNorm2d-145	[1, 1152, 23, 40]	2,304	1,059,840	4,239,360
MemoryEfficientSwish-146	[1, 1152, 23, 40]	0	0	0
ZeroPad2d-147	[1, 1152, 27, 44]	0	0	0
BatchNorm2d-148	[1, 1152, 23, 40]	2,304	1,059,840	4,239,360
MemoryEfficientSwish-149	[1, 1152, 23, 40]	0	0	0

Identity-150	[1, 1152, 1, 1]	0	0	0
MemoryEfficientSwish-151	[1, 48, 1, 1]	0	0	0
Identity-152	[1, 48, 1, 1]	0	0	0
Identity-153	[1, 1152, 23, 40]	0	0	0
BatchNorm2d-154	[1, 192, 23, 40]	384	176,640	706,560
Identity-155	[1, 192, 23, 40]	0	0	0

BatchNorm2d-156	[1, 1152, 23, 40]	2,304	1,059,840	4,239,360
MemoryEfficientSwish-157	[1, 1152, 23, 40]	0	0	0
ZeroPad2d-158	[1, 1152, 27, 44]	0	0	0
BatchNorm2d-159	[1, 1152, 23, 40]	2,304	1,059,840	4,239,360
MemoryEfficientSwish-160	[1, 1152, 23, 40]	0	0	0
Identity-161	[1, 1152, 1, 1]	0	0	0

MemoryEfficientSwish-162	[1, 48, 1, 1]	0	0	0
Identity-163	[1, 48, 1, 1]	0	0	0
Identity-164	[1, 1152, 23, 40]	0	0	0
BatchNorm2d-165	[1, 192, 23, 40]	384	176,640	706,560
Identity-166	[1, 192, 23, 40]	0	0	0
BatchNorm2d-167	[1, 1152, 23, 40]	2,304	1,059,840	4,239,360

MemoryEfficientSwish-168	[1, 1152, 23, 40]	0	0	0
ZeroPad2d-169	[1, 1152, 25, 42]	0	0	0
BatchNorm2d-170	[1, 1152, 23, 40]	2,304	1,059,840	4,239,360
MemoryEfficientSwish-171	[1, 1152, 23, 40]	0	0	0
Identity-172	[1, 1152, 1, 1]	0	0	0
MemoryEfficientSwish-173	[1, 48, 1, 1]	0	0	0

Identity-174	[1, 48, 1, 1]	0	0	0
Identity-175	[1, 1152, 23, 40]	0	0	0
BatchNorm2d-176	[1, 320, 23, 40]	640	294,400	1,177,600
Identity-177	[1, 320, 23, 40]	0	0	0
BatchNorm2d-178	[1, 1280, 23, 40]	2,560	1,177,600	4,710,400
MemoryEfficientSwish-179	[1, 1280, 23, 40]		0	0

Conv2d-180	[1, 256, 184, 320]	6,400	188,416,000	723,517,440
Conv2d-181	[1, 256, 92, 160]	10,496	77,250,560	301,465,600
Conv2d-182	[1, 256, 46, 80]	28,928	53,227,520	211,025,920
Conv2d-183	[1, 256, 23, 40]	327,936	150,850,560	602,931,200
Conv2d-184	[1, 256, 184, 320]	590,080	17,371,955,200	69,457,674,560
Conv2d-185	[1, 256, 92, 160]	590,080	4,342,988,800	17,364,418,560

Conv2d-186	[1, 256, 46, 80]	590,080	1,085,747,200	4,341,104,640
Conv2d-187	[1, 256, 23, 40]	590,080	271,436,800	1,085,276,160
Conv2d-188	[1, 256, 184, 320]	590,080	17,371,955,200	69,457,674,400
Conv2d-189	[1, 3, 184, 320]	771	22,698,240	90,439,680
Conv2d-190	[1, 12, 184, 320]	3,084	90,792,960	361,758,720
Conv2d-191	[1, 256, 92, 160]	590,080	4,342,988,800	17,364,418,400

Conv2d-192	[1, 3, 92, 160]	771	5,674,560	22,609,920
Conv2d-193	[1, 12, 92, 160]	3,084	22,698,240	90,439,680
Conv2d-194	[1, 256, 46, 80]	590,080	1,085,747,200	4,341,104,640
Conv2d-195	[1, 3, 46, 80]	771	1,418,640	5,652,480
Conv2d-196	[1, 12, 46, 80]	3,084	5,674,560	22,609,920
Conv2d-197	[1, 256, 23, 40]	590,080	271,436,800	1,085,276,160

Conv2d-198	[1, 3, 23, 40]	771	354,660	1,413,120
Conv2d-199	[1, 12, 23, 40]	3,084	1,418,640	5,652,480
Conv2d-200	[1, 256, 12, 20]	590,080	70,809,600	283,115,520
Conv2d-201	[1, 3, 12, 20]	771	92,520	368,640
Conv2d-202	[1, 12, 12, 20]	3,084	370,080	1,474,560
FocalLoss-203	[]	0	0	0

SmoothL1Loss-204	[]	0	0	0
FocalLoss-205	[]	0	0	0
SmoothL1Loss-206	[]	0	0	0
FocalLoss-207	[]	0	0	0
SmoothL1Loss-208	[]	0	0	0
FocalLoss-209	[]	0	0	0

SmoothL1Loss-210	[]	0	0	0
FocalLoss-211	[]	0	0	0
SmoothL1Loss-212	[]	0	0	0
RoIAlign-213	[448, 256, 7, 7]	0	0	0
RoIAlign-214	[38, 256, 7, 7]	0	0	0
RoIAlign-215	[25, 256, 7, 7]	0	0	0

RoIAlign-216	[1, 256, 7, 7]	0	0	0
Linear-217	[512, 1024]	12,846,080	3,288,334,336	25,689,088
ReLU-218	[512, 1024]	0	262,144	1,024
Linear-219	[512, 1024]	1,049,600	268,435,456	2,096,128
ReLU-220	[512, 1024]	0	262,144	1,024
Linear-221	[512, 5]	5,125	1,310,720	10,235

Linear-222	[512, 4]	4,100	1,048,576	8,188
CrossEntropyLoss-223	[]	0	0	0
BalancedL1Loss-224	[]	0	0	0
RoIAlign-225	[439, 256, 7, 7]	0	0	0
RoIAlign-226	[35, 256, 7, 7]	0	0	0
RoIAlign-227	[37, 256, 7, 7]	0	0	0

RoIAlign-228	[1, 256, 7, 7]	0	0	0
Linear-229	[512, 1024]	12,846,080	3,288,334,336	25,689,088
ReLU-230	[512, 1024]	0	262,144	1,024
Linear-231	[512, 1024]	1,049,600	268,435,456	2,096,128
ReLU-232	[512, 1024]	0	262,144	1,024
Linear-233	[512, 5]	5,125	1,310,720	10,235

Linear-234	[512, 4]	4,100	1,048,576	8,188
CrossEntropyLoss-235	[]	0	0	0
BalancedL1Loss-236	[]	0	0	0
RoIAlign-237	[432, 256, 7, 7]	0	0	0
RoIAlign-238	[41, 256, 7, 7]	0	0	0
RoIAlign-239	[37, 256, 7, 7]	0	0	0

RoIAlign-240	[2, 256, 7, 7]	0	0	0
Linear-241	[512, 1024]	12,846,080	3,288,334,336	25,689,088
ReLU-242	[512, 1024]	0	262,144	1,024
Linear-243	[512, 1024]	1,049,600	268,435,456	2,096,128
ReLU-244	[512, 1024]	0	262,144	1,024
Linear-245	[512, 5]	5,125	1,310,720	10,235

Linear-246	[512, 4]	4,100	1,048,576	8,188
CrossEntropyLoss-247	[]	0	0	0
BalancedL1Loss-248	[]	0	0	0
=====				
Total params: 47,460,486				
Trainable params: 47,460,486				

Non-trainable params: 0

Total FLOPs: 57,641,467,148

Total Madds: 187,810,853,861

Input size (MB): 2.64

Forward/backward pass size (MB): 878.36

Params size (MB): 45.26

Estimated Total Size (MB): 926.26

FLOPs size (GB): 57.64

Madds size (GB): 187.81

Loaded pretrained weights for efficientnet-b0

Layer (type)	Filter Size	Input Shape	Output Shape
ZeroPad2d-1	(0, 0)	[1, 3, 736, 1280]	[1, 3, 737, 1281]
BatchNorm2d-2	(0, 0)	[1, 32, 368, 640]	[1, 32, 368, 640]
MemoryEfficientSwish-3	(0, 0)	[1, 32, 368, 640]	[1, 32, 368, 640]

ZeroPad2d-4	(0, 0)	[1, 32, 368, 640]	[1, 32, 370, 642]
BatchNorm2d-5	(0, 0)	[1, 32, 368, 640]	[1, 32, 368, 640]
MemoryEfficientSwish-6	(0, 0)	[1, 32, 368, 640]	[1, 32, 368, 640]
Identity-7	(0, 0)	[1, 32, 1, 1]	[1, 32, 1, 1]
MemoryEfficientSwish-8	(0, 0)	[1, 8, 1, 1]	[1, 8, 1, 1]
Identity-9	(0, 0)	[1, 8, 1, 1]	[1, 8, 1, 1]

Identity-10	(0, 0)	[1, 32, 368, 640]	[1, 32, 368, 640]
BatchNorm2d-11	(0, 0)	[1, 16, 368, 640]	[1, 16, 368, 640]
Identity-12	(0, 0)	[1, 16, 368, 640]	[1, 16, 368, 640]
BatchNorm2d-13	(0, 0)	[1, 96, 368, 640]	[1, 96, 368, 640]
MemoryEfficientSwish-14	(0, 0)	[1, 96, 368, 640]	[1, 96, 368, 640]
ZeroPad2d-15	(0, 0)	[1, 96, 368, 640]	[1, 96, 369, 641]

BatchNorm2d-16	(0, 0)	[1, 96, 184, 320]	[1, 96, 184, 320]	
MemoryEfficientSwish-17	(0, 0)	[1, 96, 184, 320]	[1, 96, 184, 320]	
Identity-18	(0, 0)	[1, 96, 1, 1]	[1, 96, 1, 1]	0
MemoryEfficientSwish-19	(0, 0)	[1, 4, 1, 1]	[1, 4, 1, 1]	
Identity-20	(0, 0)	[1, 4, 1, 1]	[1, 4, 1, 1]	0
Identity-21	(0, 0)	[1, 96, 184, 320]	[1, 96, 184, 320]	

BatchNorm2d-22	(0, 0)	[1, 24, 184, 320]	[1, 24, 184, 320]
Identity-23	(0, 0)	[1, 24, 184, 320]	[1, 24, 184, 320]
BatchNorm2d-24	(0, 0)	[1, 144, 184, 320]	[1, 144, 184, 320]
MemoryEfficientSwish-25	(0, 0)	[1, 144, 184, 320]	[1, 144, 184, 320]
ZeroPad2d-26	(0, 0)	[1, 144, 184, 320]	[1, 144, 186, 322]
BatchNorm2d-27	(0, 0)	[1, 144, 184, 320]	[1, 144, 184, 320]

MemoryEfficientSwish-28	(0, 0)	[1, 144, 184, 320]	[1, 144, 184, 320]	
Identity-29	(0, 0)	[1, 144, 1, 1]	[1, 144, 1, 1]	0
MemoryEfficientSwish-30	(0, 0)	[1, 6, 1, 1]	[1, 6, 1, 1]	
Identity-31	(0, 0)	[1, 6, 1, 1]	[1, 6, 1, 1]	0
Identity-32	(0, 0)	[1, 144, 184, 320]	[1, 144, 184, 320]	
BatchNorm2d-33	(0, 0)	[1, 24, 184, 320]	[1, 24, 184, 320]	

Identity-34	(0, 0)	[1, 24, 184, 320]	[1, 24, 184, 320]
BatchNorm2d-35	(0, 0)	[1, 144, 184, 320]	[1, 144, 184, 320]
MemoryEfficientSwish-36	(0, 0)	[1, 144, 184, 320]	[1, 144, 184, 320]
ZeroPad2d-37	(0, 0)	[1, 144, 184, 320]	[1, 144, 187, 323]
BatchNorm2d-38	(0, 0)	[1, 144, 92, 160]	[1, 144, 92, 160]
MemoryEfficientSwish-39	(0, 0)	[1, 144, 92, 160]	[1, 144, 92, 160]

Identity-40	(0, 0)	[1, 144, 1, 1]	[1, 144, 1, 1]	0
MemoryEfficientSwish-41	(0, 0)	[1, 6, 1, 1]	[1, 6, 1, 1]	
Identity-42	(0, 0)	[1, 6, 1, 1]	[1, 6, 1, 1]	0
Identity-43	(0, 0)	[1, 144, 92, 160]	[1, 144, 92, 160]	
BatchNorm2d-44	(0, 0)	[1, 40, 92, 160]	[1, 40, 92, 160]	
Identity-45	(0, 0)	[1, 40, 92, 160]	[1, 40, 92, 160]	

BatchNorm2d-46	(0, 0)	[1, 240, 92, 160]	[1, 240, 92, 160]
MemoryEfficientSwish-47	(0, 0)	[1, 240, 92, 160]	[1, 240, 92, 160]
ZeroPad2d-48	(0, 0)	[1, 240, 92, 160]	[1, 240, 96, 164]
BatchNorm2d-49	(0, 0)	[1, 240, 92, 160]	[1, 240, 92, 160]
MemoryEfficientSwish-50	(0, 0)	[1, 240, 92, 160]	[1, 240, 92, 160]
Identity-51	(0, 0)	[1, 240, 1, 1]	[1, 240, 1, 1]

MemoryEfficientSwish-52	(0, 0)	[1, 10, 1, 1]	[1, 10, 1, 1]
Identity-53	(0, 0)	[1, 10, 1, 1]	[1, 10, 1, 1]
Identity-54	(0, 0)	[1, 240, 92, 160]	[1, 240, 92, 160]
BatchNorm2d-55	(0, 0)	[1, 40, 92, 160]	[1, 40, 92, 160]
Identity-56	(0, 0)	[1, 40, 92, 160]	[1, 40, 92, 160]
BatchNorm2d-57	(0, 0)	[1, 240, 92, 160]	[1, 240, 92, 160]

MemoryEfficientSwish-58	(0, 0)	[1, 240, 92, 160]	[1, 240, 92, 160]
ZeroPad2d-59	(0, 0)	[1, 240, 92, 160]	[1, 240, 93, 161]
BatchNorm2d-60	(0, 0)	[1, 240, 46, 80]	[1, 240, 46, 80]
MemoryEfficientSwish-61	(0, 0)	[1, 240, 46, 80]	[1, 240, 46, 80]
Identity-62	(0, 0)	[1, 240, 1, 1]	[1, 240, 1, 1]
MemoryEfficientSwish-63	(0, 0)	[1, 10, 1, 1]	[1, 10, 1, 1]

Identity-64	(0, 0)	[1, 10, 1, 1]	[1, 10, 1, 1]	0
Identity-65	(0, 0)	[1, 240, 46, 80]	[1, 240, 46, 80]	
BatchNorm2d-66	(0, 0)	[1, 80, 46, 80]	[1, 80, 46, 80]	
Identity-67	(0, 0)	[1, 80, 46, 80]	[1, 80, 46, 80]	
BatchNorm2d-68	(0, 0)	[1, 480, 46, 80]	[1, 480, 46, 80]	
MemoryEfficientSwish-69	(0, 0)	[1, 480, 46, 80]	[1, 480, 46, 80]	

ZeroPad2d-70	(0, 0)	[1, 480, 46, 80]	[1, 480, 48, 82]
BatchNorm2d-71	(0, 0)	[1, 480, 46, 80]	[1, 480, 46, 80]
MemoryEfficientSwish-72	(0, 0)	[1, 480, 46, 80]	[1, 480, 46, 80]
Identity-73	(0, 0)	[1, 480, 1, 1]	[1, 480, 1, 1]
MemoryEfficientSwish-74	(0, 0)	[1, 20, 1, 1]	[1, 20, 1, 1]
Identity-75	(0, 0)	[1, 20, 1, 1]	[1, 20, 1, 1]

Identity-76	(0, 0)	[1, 480, 46, 80]	[1, 480, 46, 80]
BatchNorm2d-77	(0, 0)	[1, 80, 46, 80]	[1, 80, 46, 80]
Identity-78	(0, 0)	[1, 80, 46, 80]	[1, 80, 46, 80]
BatchNorm2d-79	(0, 0)	[1, 480, 46, 80]	[1, 480, 46, 80]
MemoryEfficientSwish-80	(0, 0)	[1, 480, 46, 80]	[1, 480, 46, 80]
ZeroPad2d-81	(0, 0)	[1, 480, 46, 80]	[1, 480, 48, 82]

BatchNorm2d-82	(0, 0)	[1, 480, 46, 80]	[1, 480, 46, 80]	
MemoryEfficientSwish-83	(0, 0)	[1, 480, 46, 80]	[1, 480, 46, 80]	
Identity-84	(0, 0)	[1, 480, 1, 1]	[1, 480, 1, 1]	0
MemoryEfficientSwish-85	(0, 0)	[1, 20, 1, 1]	[1, 20, 1, 1]	
Identity-86	(0, 0)	[1, 20, 1, 1]	[1, 20, 1, 1]	0
Identity-87	(0, 0)	[1, 480, 46, 80]	[1, 480, 46, 80]	

BatchNorm2d-88	(0, 0)	[1, 80, 46, 80]	[1, 80, 46, 80]
Identity-89	(0, 0)	[1, 80, 46, 80]	[1, 80, 46, 80]
BatchNorm2d-90	(0, 0)	[1, 480, 46, 80]	[1, 480, 46, 80]
MemoryEfficientSwish-91	(0, 0)	[1, 480, 46, 80]	[1, 480, 46, 80]
ZeroPad2d-92	(0, 0)	[1, 480, 46, 80]	[1, 480, 50, 84]
BatchNorm2d-93	(0, 0)	[1, 480, 46, 80]	[1, 480, 46, 80]

MemoryEfficientSwish-94	(0, 0)	[1, 480, 46, 80]	[1, 480, 46, 80]	0
Identity-95	(0, 0)	[1, 480, 1, 1]	[1, 480, 1, 1]	0
MemoryEfficientSwish-96	(0, 0)	[1, 20, 1, 1]	[1, 20, 1, 1]	0
Identity-97	(0, 0)	[1, 20, 1, 1]	[1, 20, 1, 1]	0
Identity-98	(0, 0)	[1, 480, 46, 80]	[1, 480, 46, 80]	0
BatchNorm2d-99	(0, 0)	[1, 112, 46, 80]	[1, 112, 46, 80]	0

Identity-100	(0, 0)	[1, 112, 46, 80]	[1, 112, 46, 80]
BatchNorm2d-101	(0, 0)	[1, 672, 46, 80]	[1, 672, 46, 80]
MemoryEfficientSwish-102	(0, 0)	[1, 672, 46, 80]	[1, 672, 46, 80]
ZeroPad2d-103	(0, 0)	[1, 672, 46, 80]	[1, 672, 50, 84]
BatchNorm2d-104	(0, 0)	[1, 672, 46, 80]	[1, 672, 46, 80]
MemoryEfficientSwish-105	(0, 0)	[1, 672, 46, 80]	[1, 672, 46, 80]

Identity-106	(0, 0)	[1, 672, 1, 1]	[1, 672, 1, 1]
MemoryEfficientSwish-107	(0, 0)	[1, 28, 1, 1]	[1, 28, 1, 1]
Identity-108	(0, 0)	[1, 28, 1, 1]	[1, 28, 1, 1]
Identity-109	(0, 0)	[1, 672, 46, 80]	[1, 672, 46, 80]
BatchNorm2d-110	(0, 0)	[1, 112, 46, 80]	[1, 112, 46, 80]
Identity-111	(0, 0)	[1, 112, 46, 80]	[1, 112, 46, 80]

BatchNorm2d-112	(0, 0)	[1, 672, 46, 80]	[1, 672, 46, 80]
MemoryEfficientSwish-113	(0, 0)	[1, 672, 46, 80]	[1, 672, 46, 80]
ZeroPad2d-114	(0, 0)	[1, 672, 46, 80]	[1, 672, 50, 84]
BatchNorm2d-115	(0, 0)	[1, 672, 46, 80]	[1, 672, 46, 80]
MemoryEfficientSwish-116	(0, 0)	[1, 672, 46, 80]	[1, 672, 46, 80]
Identity-117	(0, 0)	[1, 672, 1, 1]	[1, 672, 1, 1]

MemoryEfficientSwish-118	(0, 0)	[1, 28, 1, 1]	[1, 28, 1, 1]
Identity-119	(0, 0)	[1, 28, 1, 1]	[1, 28, 1, 1]
Identity-120	(0, 0)	[1, 672, 46, 80]	[1, 672, 46, 80]
BatchNorm2d-121	(0, 0)	[1, 112, 46, 80]	[1, 112, 46, 80]
Identity-122	(0, 0)	[1, 112, 46, 80]	[1, 112, 46, 80]
BatchNorm2d-123	(0, 0)	[1, 672, 46, 80]	[1, 672, 46, 80]

MemoryEfficientSwish-124	(0, 0)	[1, 672, 46, 80]	[1, 672, 46, 80]
ZeroPad2d-125	(0, 0)	[1, 672, 46, 80]	[1, 672, 49, 83]
BatchNorm2d-126	(0, 0)	[1, 672, 23, 40]	[1, 672, 23, 40]
MemoryEfficientSwish-127	(0, 0)	[1, 672, 23, 40]	[1, 672, 23, 40]
Identity-128	(0, 0)	[1, 672, 1, 1]	[1, 672, 1, 1]
MemoryEfficientSwish-129	(0, 0)	[1, 28, 1, 1]	[1, 28, 1, 1]

Identity-130	(0, 0)	[1, 28, 1, 1]	[1, 28, 1, 1]	0
Identity-131	(0, 0)	[1, 672, 23, 40]	[1, 672, 23, 40]	
BatchNorm2d-132	(0, 0)	[1, 192, 23, 40]	[1, 192, 23, 40]	
Identity-133	(0, 0)	[1, 192, 23, 40]	[1, 192, 23, 40]	
BatchNorm2d-134	(0, 0)	[1, 1152, 23, 40]	[1, 1152, 23, 40]	
MemoryEfficientSwish-135	(0, 0)	[1, 1152, 23, 40]	[1, 1152, 23, 40]	

ZeroPad2d-136	(0, 0)	[1, 1152, 23, 40]	[1, 1152, 27, 44]
BatchNorm2d-137	(0, 0)	[1, 1152, 23, 40]	[1, 1152, 23, 40]
MemoryEfficientSwish-138	(0, 0)	[1, 1152, 23, 40]	[1, 1152, 23, 40]
Identity-139	(0, 0)	[1, 1152, 1, 1]	[1, 1152, 1, 1]
MemoryEfficientSwish-140	(0, 0)	[1, 48, 1, 1]	[1, 48, 1, 1]
Identity-141	(0, 0)	[1, 48, 1, 1]	[1, 48, 1, 1]

Identity-142	(0, 0)	[1, 1152, 23, 40]	[1, 1152, 23, 40]
BatchNorm2d-143	(0, 0)	[1, 192, 23, 40]	[1, 192, 23, 40]
Identity-144	(0, 0)	[1, 192, 23, 40]	[1, 192, 23, 40]
BatchNorm2d-145	(0, 0)	[1, 1152, 23, 40]	[1, 1152, 23, 40]
MemoryEfficientSwish-146	(0, 0)	[1, 1152, 23, 40]	[1, 1152, 23, 40]
ZeroPad2d-147	(0, 0)	[1, 1152, 23, 40]	[1, 1152, 27, 44]

BatchNorm2d-148	(0, 0)	[1, 1152, 23, 40]	[1, 1152, 23, 40]
MemoryEfficientSwish-149	(0, 0)	[1, 1152, 23, 40]	[1, 1152, 23, 40]
Identity-150	(0, 0)	[1, 1152, 1, 1]	[1, 1152, 1, 1]
MemoryEfficientSwish-151	(0, 0)	[1, 48, 1, 1]	[1, 48, 1, 1]
Identity-152	(0, 0)	[1, 48, 1, 1]	[1, 48, 1, 1]
Identity-153	(0, 0)	[1, 1152, 23, 40]	[1, 1152, 23, 40]

BatchNorm2d-154	(0, 0)	[1, 192, 23, 40]	[1, 192, 23, 40]
Identity-155	(0, 0)	[1, 192, 23, 40]	[1, 192, 23, 40]
BatchNorm2d-156	(0, 0)	[1, 1152, 23, 40]	[1, 1152, 23, 40]
MemoryEfficientSwish-157	(0, 0)	[1, 1152, 23, 40]	[1, 1152, 23, 40]
ZeroPad2d-158	(0, 0)	[1, 1152, 23, 40]	[1, 1152, 27, 44]
BatchNorm2d-159	(0, 0)	[1, 1152, 23, 40]	[1, 1152, 23, 40]

MemoryEfficientSwish-160	(0, 0)	[1, 1152, 23, 40]	[1, 1152, 23, 40]
Identity-161	(0, 0)	[1, 1152, 1, 1]	[1, 1152, 1, 1]
MemoryEfficientSwish-162	(0, 0)	[1, 48, 1, 1]	[1, 48, 1, 1]
Identity-163	(0, 0)	[1, 48, 1, 1]	[1, 48, 1, 1]
Identity-164	(0, 0)	[1, 1152, 23, 40]	[1, 1152, 23, 40]
BatchNorm2d-165	(0, 0)	[1, 192, 23, 40]	[1, 192, 23, 40]

Identity-166	(0, 0)	[1, 192, 23, 40]	[1, 192, 23, 40]
BatchNorm2d-167	(0, 0)	[1, 1152, 23, 40]	[1, 1152, 23, 40]
MemoryEfficientSwish-168	(0, 0)	[1, 1152, 23, 40]	[1, 1152, 23, 40]
ZeroPad2d-169	(0, 0)	[1, 1152, 23, 40]	[1, 1152, 25, 42]
BatchNorm2d-170	(0, 0)	[1, 1152, 23, 40]	[1, 1152, 23, 40]
MemoryEfficientSwish-171	(0, 0)	[1, 1152, 23, 40]	[1, 1152, 23, 40]

Identity-172	(0, 0)	[1, 1152, 1, 1]	[1, 1152, 1, 1]
MemoryEfficientSwish-173	(0, 0)	[1, 48, 1, 1]	[1, 48, 1, 1]
Identity-174	(0, 0)	[1, 48, 1, 1]	[1, 48, 1, 1]
Identity-175	(0, 0)	[1, 1152, 23, 40]	[1, 1152, 23, 40]
BatchNorm2d-176	(0, 0)	[1, 320, 23, 40]	[1, 320, 23, 40]
Identity-177	(0, 0)	[1, 320, 23, 40]	[1, 320, 23, 40]

BatchNorm2d-178	(0, 0)	[1, 1280, 23, 40]	[1, 1280, 23, 40]
MemoryEfficientSwish-179	(0, 0)	[1, 1280, 23, 40]	[1, 1280, 23, 40]
Conv2d-180	(1,1)	[1, 24, 184, 320]	[1, 256, 184, 320]
Conv2d-181	(1,1)	[1, 40, 92, 160]	[1, 256, 92, 160]
Conv2d-182	(1,1)	[1, 112, 46, 80]	[1, 256, 46, 80]
Conv2d-183	(1,1)	[1, 1280, 23, 40]	[1, 256, 23, 40]

Conv2d-184	(3,3)	[1, 256, 184, 320]	[1, 256, 184, 320]
Conv2d-185	(3,3)	[1, 256, 92, 160]	[1, 256, 92, 160]
Conv2d-186	(3,3)	[1, 256, 46, 80]	[1, 256, 46, 80]
Conv2d-187	(3,3)	[1, 256, 23, 40]	[1, 256, 23, 40]
Conv2d-188	(3,3)	[1, 256, 184, 320]	[1, 256, 184, 320]
Conv2d-189	(1,1)	[1, 256, 184, 320]	[1, 3, 184, 320]

Conv2d-190	(1,1)	[1, 256, 184, 320]	[1, 12, 184, 320]
Conv2d-191	(3,3)	[1, 256, 92, 160]	[1, 256, 92, 160]
Conv2d-192	(1,1)	[1, 256, 92, 160]	[1, 3, 92, 160]
Conv2d-193	(1,1)	[1, 256, 92, 160]	[1, 12, 92, 160]
Conv2d-194	(3,3)	[1, 256, 46, 80]	[1, 256, 46, 80]
Conv2d-195	(1,1)	[1, 256, 46, 80]	[1, 3, 46, 80]

Conv2d-196	(1,1)	[1, 256, 46, 80]	[1, 12, 46, 80]
Conv2d-197	(3,3)	[1, 256, 23, 40]	[1, 256, 23, 40]
Conv2d-198	(1,1)	[1, 256, 23, 40]	[1, 3, 23, 40]
Conv2d-199	(1,1)	[1, 256, 23, 40]	[1, 12, 23, 40]
Conv2d-200	(3,3)	[1, 256, 12, 20]	[1, 256, 12, 20]
Conv2d-201	(1,1)	[1, 256, 12, 20]	[1, 3, 12, 20]

Conv2d-202	(1,1)	[1, 256, 12, 20]	[1, 12, 12, 20]
FocalLoss-203	(0, 0)	[176640, 1]	[]
SmoothL1Loss-204	(0, 0)	[176640, 4]	[]
FocalLoss-205	(0, 0)	[44160, 1]	[]
SmoothL1Loss-206	(0, 0)	[44160, 4]	[]
FocalLoss-207	(0, 0)	[11040, 1]	[]

SmoothL1Loss-208	(0, 0)	[11040, 4]	[]
FocalLoss-209	(0, 0)	[2760, 1]	[]
SmoothL1Loss-210	(0, 0)	[2760, 4]	[]
FocalLoss-211	(0, 0)	[720, 1]	[]
SmoothL1Loss-212	(0, 0)	[720, 4]	[]
RoIAlign-213	(0, 0)	[1, 256, 184, 320]	[501, 256, 7, 7]

RoIAlign-214	(0, 0)	[1, 256, 92, 160]	[9, 256, 7, 7]
RoIAlign-215	(0, 0)	[1, 256, 46, 80]	[2, 256, 7, 7]
Linear-216	(0, 0)	[512, 12544]	[512, 1024]
ReLU-217	(0, 0)	[512, 1024]	[512, 1024]
Linear-218	(0, 0)	[512, 1024]	[512, 1024]
ReLU-219	(0, 0)	[512, 1024]	[512, 1024]

12,8

1,04

Linear-220	(0, 0)	[512, 1024]	[512, 5]	5,12
Linear-221	(0, 0)	[512, 1024]	[512, 4]	4,10
CrossEntropyLoss-222	(0, 0)	[512, 5]	[]	
BalancedL1Loss-223	(0, 0)	[8, 4]	[]	0
RoIAlign-224	(0, 0)	[1, 256, 184, 320]	[495, 256, 7, 7]	
RoIAlign-225	(0, 0)	[1, 256, 92, 160]	[15, 256, 7, 7]	

RoIAlign-226	(0, 0)	[1, 256, 46, 80]	[2, 256, 7, 7]	
Linear-227	(0, 0)	[512, 12544]	[512, 1024]	12,8
ReLU-228	(0, 0)	[512, 1024]	[512, 1024]	
Linear-229	(0, 0)	[512, 1024]	[512, 1024]	1,04
ReLU-230	(0, 0)	[512, 1024]	[512, 1024]	
Linear-231	(0, 0)	[512, 1024]	[512, 5]	5,12

Linear-232	(0, 0)	[512, 1024]	[512, 4]	4,10
CrossEntropyLoss-233	(0, 0)	[512, 5]	[]	
BalancedL1Loss-234	(0, 0)	[8, 4]	[]	0
RoIAlign-235	(0, 0)	[1, 256, 184, 320]	[479, 256, 7, 7]	
RoIAlign-236	(0, 0)	[1, 256, 92, 160]	[31, 256, 7, 7]	
RoIAlign-237	(0, 0)	[1, 256, 46, 80]	[2, 256, 7, 7]	

Linear-238	(0, 0)	[512, 12544]	[512, 1024]	12,8
ReLU-239	(0, 0)	[512, 1024]	[512, 1024]	
Linear-240	(0, 0)	[512, 1024]	[512, 1024]	1,04
ReLU-241	(0, 0)	[512, 1024]	[512, 1024]	
Linear-242	(0, 0)	[512, 1024]	[512, 5]	5,12
Linear-243	(0, 0)	[512, 1024]	[512, 4]	4,10

CrossEntropyLoss-244	(0, 0)	[512, 5]	[]
BalancedL1Loss-245	(0, 0)	[8, 4]	[]
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Total params: 47,460,486			
Trainable params: 47,460,486			
Non-trainable params: 0			

Total FLOPs: 57,641,467,148

Input size (MB): 2.64

Forward/backward pass size (MB): 878.36

Params size (MB): 45.26

Estimated Total Size (MB): 926.26

FLOPs size (GB): 57.64
