EfficientNet style complexity
Arthur Redfern

	Level 1	Level 2	Level 3	Level 4	Level 5a	Level 5b	Decoder	Classes		MACs	Filter Cx
Blocks	1	2	3	4	5	1				193770304	1874512
Channels	16	24	40	80	160	320	1280	100			
Residual expansion	4	4	4	4	4	4					
Filter	3	3	3	3	3	3					
Stride	1	1	2	2	2	1					
SE reduction	4	4	4	4	4	4					
SE present	0	0	0	0	0	0					

	Blocks	Out H	Out W	No	Ni	Fr	Fc	S	G	MACs	Filter Cx
Input		56	56	3							
Level 1 stem											
Conv, BN, ReLU	1	56	56	16	3	3	3	1	1	1354752	432
Level 1 block											
Conv, BN, ReLU	1	56	56	64	16	1	1	1	1	3211264	1024
Conv, BN, ReLU	1	56	56	64	64	3	3	1	64	1806336	576
SE											
Global avg pool	0	1	1	64	64						
Linear, bias, ReLU	0	1	1	16	64						
Linear, bias, sigmoid	0	1	1	64	16						
Conv, BN	1	56	56	16	64	1	1	1	1	3211264	1024
Level 2 transition											
Conv, BN, ReLU	1	56	56	64	16	1	1	1	1	3211264	1024
Conv, BN, ReLU	1	56	56	64	64	3	3	1	64	1806336	576
SE											
Global avg pool	0	1	1	64	64						
Linear, bias, ReLU	0	1	1	16	64						
Linear, bias, sigmoid	0	1	1	64	16						
Conv, BN	1	56	56	24	64	1	1	1	1	4816896	1536
Level 2 block											
Conv, BN, ReLU	1	56	56	96	24	1	1	1	1	7225344	2304
Conv, BN, ReLU	1	56	56	96	96	3	3	1	96	2709504	864
SE											
Global avg pool	0	1	1	96	96						
Linear, bias, ReLU	0	1	1	24	96						
Linear, bias, sigmoid	0	1	1	96	24						
Conv, BN	1	56	56	24	96	1	1	1	1	7225344	2304
Level 3 transition											
Conv, BN, ReLU	1	56	56	96	24	1	1	1	1	7225344	2304
Conv, BN, ReLU	1	28	28	96	96	3	3	2	96	677376	864
SE											
Global avg pool	0	1	1	96	96						
Linear, bias, ReLU	0	1	1	24	96						
Linear, bias, sigmoid	0	1	1	96	24						
Conv, BN	1	28	28	40	96	1	1	1	1	3010560	3840
Level 3 block											
Conv, BN, ReLU	2	28	28	160	40	1	1	1	1	10035200	12800
Conv, BN, ReLU	2	28	28	160	160	3	3	1	160	2257920	2880
SE											
Global avg pool	0	1	1	160	160						
Linear, bias, ReLU	0	1	1	40	160						
Linear, bias, sigmoid	0	1	1	160	40						
Conv, BN	2	28	28	40	160	1	1	1	1	10035200	12800
Level 4 transition											
Conv, BN, ReLU	1	28	28	160	40	1	1	1	1	5017600	6400
Conv, BN, ReLU	1	14	14	160	160	3	3	2	160	282240	1440
SE											
Global avg pool	0	1	1	160	160						
Linear, bias, ReLU	0	1	1	40	160						
Linear, bias, sigmoid	0	1	1	160	40						
Conv, BN	1	14	14	80	160	1	1	1	1	2508800	12800
Level 4 block											
Conv, BN, ReLU	3	14	14	320	80	1	1	1	1	15052800	76800
Conv, BN, ReLU	3	14	14	320	320	3	3	1	320	1693440	8640
SE											
Global avg pool	0	1	1	320	320						
Linear, bias, ReLU	0	1	1	80	320						
Linear, bias, sigmoid	0	1	1	320	80						
Conv, BN	3	14	14	80	320	1	1	1	1	15052800	76800
Level 5a transition											
Conv, BN, ReLU	1	14	14	320	80	1	1	1	1	5017600	25600
Conv, BN, ReLU	1	7	7	320	320	3	3	2	320	141120	2880
SE											
Global avg pool	0	1	1	320	320						
Linear, bias, ReLU	0	1	1	80	320						
Linear, bias, sigmoid	0	1	1	320	80						
Conv, BN	1	7	7	160	320	1	1	1	1	2508800	51200
Level 5a block											
Conv, BN, ReLU	4	7	7	640	160	1	1	1	1	20070400	409600
Conv, BN, ReLU	4	7	7	640	640	3	3	1	640	1128960	23040
SE											
Global avg pool	0	1	1	640	640						
Linear, bias, ReLU	0	1	1	160	640						
Linear, bias, sigmoid	0	1	1	640	160						
Conv, BN	4	7	7	160	640	1	1	1	1	20070400	409600
Level 5b transition											
Conv, BN, ReLU	1	7	7	640	160	1	1	1	1	5017600	102400
Conv, BN, ReLU	1	7	7	640	640	3	3	1	640	282240	5760
SE											
Global avg pool	0	1	1	640	640						
Linear, bias, ReLU	0	1	1	160	640						
Linear, bias, sigmoid	0	1	1	640	160						
Conv, BN	1	7	7	320	640	1	1	1	1	10035200	204800
Level 5b block											
Conv, BN, ReLU	0	7	7	1280	320	1	1	1	1	0	0
Conv, BN, ReLU	0	7	7	1280	1280	3	3	1	1280	0	0
SE											
Global avg pool	0	1	1	1280	1280						
Linear, bias, ReLU	0	1	1	320	1280						
Linear, bias, sigmoid	0	1	1	1280	320						
Conv, BN	0	7	7	320	1280	1	1	1	1	0	0
Decoder											
Conv, BN, ReLU	1	7	7	1280	320	1	1	1	1	20070400	409600
Global avg pool	1	1	1	1280	1280						
Linear	1	1	1	100	1280						
Total										193770304	1874512