

layer_num	layer	filter	size	input	output
0	conv	32	3 * 3 / 1	640 * 640 * 3	640 * 640 * 32
1	conv	64	3 * 3 / 2	640 * 640 * 32	320 * 320 * 64
2	conv	32	1 * 1 / 1	320 * 320 * 64	320 * 320 * 32
3	conv	64	3 * 3 / 1	320 * 320 * 32	320 * 320 * 64
4	shortcut		From layer 1		
5	conv	128	3 * 3 / 2	320 * 320 * 64	160 * 160 * 128
6	conv	64	1 * 1 / 1	160 * 160 * 128	160 * 160 * 64
7	conv	128	3 * 3 / 1	160 * 160 * 64	160 * 160 * 128
8	shortcut		From layer 5		
9	conv	64	1 * 1 / 1	160 * 160 * 128	160 * 160 * 64
10	conv	128	3 * 3 / 1	160 * 160 * 64	160 * 160 * 128
11	shortcut		From layer 8		
12	conv	256	3 * 3 / 2	160 * 160 * 128	80 * 80 * 256
13	conv	128	1 * 1 / 1	80 * 80 * 256	80 * 80 * 128
14	conv	256	3 * 3 / 1	80 * 80 * 128	80 * 80 * 256
15	shortcut		From layer 12		
16	conv	128	1 * 1 / 1	80 * 80 * 256	80 * 80 * 128
17	conv	256	3 * 3 / 1	80 * 80 * 128	80 * 80 * 256
18	shortcut		From layer 15		
19	conv	128	1 * 1 / 1	80 * 80 * 256	80 * 80 * 128
20	conv	256	3 * 3 / 1	80 * 80 * 128	80 * 80 * 256
21	shortcut		From layer 18		
22	conv	128	1 * 1 / 1	80 * 80 * 256	80 * 80 * 128
23	conv	256	3 * 3 / 1	80 * 80 * 128	80 * 80 * 256
24	shortcut		From layer 21		
25	conv	128	1 * 1 / 1	80 * 80 * 256	80 * 80 * 128
26	conv	256	3 * 3 / 1	80 * 80 * 128	80 * 80 * 256
27	shortcut		From layer 24		

28	conv	128	$1 * 1 / 1$	$80 * 80 * 256$	$80 * 80 * 128$
29	conv	256	$3 * 3 / 1$	$80 * 80 * 128$	$80 * 80 * 256$
30	shortcut		From layer 27		
31	conv	128	$1 * 1 / 1$	$80 * 80 * 256$	$80 * 80 * 128$
32	conv	256	$3 * 3 / 1$	$80 * 80 * 128$	$80 * 80 * 256$
33	shortcut		From layer 30		
34	conv	128	$1 * 1 / 1$	$80 * 80 * 256$	$80 * 80 * 128$
35	conv	256	$3 * 3 / 1$	$80 * 80 * 128$	$80 * 80 * 256$
36	shortcut		From layer 33		
37	conv	512	$3 * 3 / 2$	$80 * 80 * 256$	$40 * 40 * 512$
38	conv	256	$1 * 1 / 1$	$40 * 40 * 512$	$40 * 40 * 256$
39	conv	512	$3 * 3 / 1$	$40 * 40 * 256$	$40 * 40 * 512$
40	shortcut		From layer 37		
41	conv	256	$1 * 1 / 1$	$40 * 40 * 512$	$40 * 40 * 256$
42	conv	512	$3 * 3 / 1$	$40 * 40 * 256$	$40 * 40 * 512$
43	shortcut		From layer 40		
44	conv	256	$1 * 1 / 1$	$40 * 40 * 512$	$40 * 40 * 256$
45	conv	512	$3 * 3 / 1$	$40 * 40 * 256$	$40 * 40 * 512$
46	shortcut		From layer 43		
47	conv	256	$1 * 1 / 1$	$40 * 40 * 512$	$40 * 40 * 256$
48	conv	512	$3 * 3 / 1$	$40 * 40 * 256$	$40 * 40 * 512$
49	shortcut		From layer 46		
50	conv	256	$1 * 1 / 1$	$40 * 40 * 512$	$40 * 40 * 256$
51	conv	512	$3 * 3 / 1$	$40 * 40 * 256$	$40 * 40 * 512$
52	shortcut		From layer 49		
53	conv	1024	$3 * 3 / 2$	$40 * 40 * 512$	$20 * 20 * 1024$
54	conv	512	$1 * 1 / 1$	$20 * 20 * 1024$	$20 * 20 * 512$
55	conv	1024	$3 * 3 / 1$	$20 * 20 * 512$	$20 * 20 * 1024$
56	shortcut		From layer 53		

57	conv	512	$1 * 1 / 1$	$20 * 20 * 1024$	$20 * 20 * 512$
58	conv	1024	$3 * 3 / 1$	$20 * 20 * 512$	$20 * 20 * 1024$
59	shortcut		From layer 56		
60	conv	512	$1 * 1 / 1$	$20 * 20 * 1024$	$20 * 20 * 512$
61	conv	1024	$3 * 3 / 1$	$20 * 20 * 512$	$20 * 20 * 1024$
62	shortcut		From layer 59		
63	conv	512	$1 * 1 / 1$	$20 * 20 * 1024$	$20 * 20 * 512$
64	conv	1024	$3 * 3 / 1$	$20 * 20 * 512$	$20 * 20 * 1024$
65	shortcut		From layer 62		
66	conv	2048	$3 * 3 / 2$	$20 * 20 * 1024$	$10 * 10 * 2048$
67	conv	1024	$1 * 1 / 1$	$10 * 10 * 2048$	$10 * 10 * 1024$
68	conv	2048	$3 * 3 / 1$	$10 * 10 * 1024$	$10 * 10 * 2048$
69	shortcut		From layer 66		
70	conv	1024	$1 * 1 / 1$	$10 * 10 * 2048$	$10 * 10 * 1024$
71	conv	2048	$3 * 3 / 1$	$10 * 10 * 1024$	$10 * 10 * 2048$
72	shortcut		From layer 69		
73	conv	1024	$1 * 1 / 1$	$10 * 10 * 2048$	$10 * 10 * 1024$
74	conv	2048	$3 * 3 / 1$	$10 * 10 * 1024$	$10 * 10 * 2048$
75	shortcut		From layer 72		
76	conv	4096	$3 * 3 / 2$	$10 * 10 * 2048$	$5 * 5 * 4096$
77	conv	2048	$1 * 1 / 1$	$5 * 5 * 4096$	$5 * 5 * 2048$
78	conv	4096	$3 * 3 / 1$	$5 * 5 * 2048$	$5 * 5 * 4096$
79	shortcut		From layer 76		
80	conv	2048	$1 * 1 / 1$	$5 * 5 * 4096$	$5 * 5 * 2048$
81	conv	4096	$3 * 3 / 1$	$5 * 5 * 2048$	$5 * 5 * 4096$
82	shortcut		From layer 79		
83	conv	2048	$1 * 1 / 1$	$5 * 5 * 4096$	$5 * 5 * 2048$
84	conv	4096	$3 * 3 / 1$	$5 * 5 * 2048$	$5 * 5 * 4096$
85	shortcut		From layer 82		

86	conv	2048	$1 * 1 / 1$	$5 * 5 * 4096$	$5 * 5 * 2048$
87	conv	4096	$3 * 3 / 1$	$5 * 5 * 2048$	$5 * 5 * 4096$
88	conv	2048	$1 * 1 / 1$	$5 * 5 * 4096$	$5 * 5 * 2048$
89	conv	4096	$3 * 3 / 1$	$5 * 5 * 2048$	$5 * 5 * 4096$
90	conv	2048	$1 * 1 / 1$	$5 * 5 * 4096$	$5 * 5 * 2048$
91	conv	4096	$3 * 3 / 1$	$5 * 5 * 2048$	$5 * 5 * 4096$
92	conv	21	$1 * 1 / 1$	$5 * 5 * 4096$	$5 * 5 * 21$
93			detection		