Method	data	pre-train	backbone network	speed (*fps*)	GPU	#proposals	input size	mAP
Faster RCNN [27]	07+12	✓	VGGNet	7	Titan X	6000	~ 600 × 1000	73.2
Faster RCNN [27]	07+12	✓	ResNet-101	2.4	K40	300	~ 600 × 1000	76.4
R-FCN [3]	07+12	✓	ResNet-50	-	-	300	~ 600 × 1000	77.0
R-FCN [3]	07+12	✓	ResNet-101	5.8	K40	300	~ 600 × 1000	79.5
YOLOv2 [26]	07+12	✓	Darknet-19	81	Titan X	-	352 × 352	73.7
SSD300S† [30]	07+12	✗	VGGNet	46	Titan X	8732	300 × 300	69.6
SSD300* [20]	07+12+COCO	✓	VGGNet	46	Titan X	8732	300 × 300	81.2
SSD300 [20]	07+12	✓	VGGNet	46	Titan X	8732	300 × 300	77.2
SSD300 [20]	07+12	✓	VGGNet	85	1080Ti	8732	300 × 300	77.2
SSD512 [20]	07+12	✓	VGGNet	19	Titan X	24564	512 × 512	78.5
SSD512* [20]	07+12+COCO	✓	VGGNet	19	Titan X	24564	512 × 512	83.2
DSOD300 [30]	07+12	✗	DS/64-192-48-1	17.4	Titan X	-	300 × 300	77.7
DSOD300* [30]	07+12+COCO	✗	DS/64-192-48-1	17.4	Titan X	-	300 × 300	81.7
DSSD321 [7]	07+12	✓	ResNet-101	9.5	Titan X	17080	321 × 321	78.6
DSSD513 [7]	07+12	✓	ResNet-101	5.5	Titan X	43688	321 × 321	81.5
RSSD300 [15]	07+12	✓	VGGNet	35	Titan X	8732	300 × 300	78.5
RSSD512 [15]	07+12	✓	VGGNet	16.6	Titan X	24564	512 × 512	80.8
FSSD300S†	07+12	✗	VGGNet	65.8	1080Ti	8732	300 × 300	72.7
FSSD300	07+12	✓	VGGNet	65.8	1080Ti	8732	300 × 300	78.8
FSSD300*	07+12+COCO	✓	VGGNet	65.8	1080Ti	8732	300 × 300	**82.7**
FSSD512	07+12	✓	VGGNet	35.7	1080Ti	24564	512 × 512	80.9
FSSD512*	07+12+COCO	✓	VGGNet	35.7	1080Ti	24564	512 × 512	**84.5**

Table 3. **PASCAL VOC 2007 `test` detection results.** SSDs' results we cited here are the updated version by the author after the paper publication with more data argumentation. SSD300S† indicates training SSD300 from scratch VGGNet, which is tested in DSOD[30]. FSSD300S† is also trained from scratch VGGNet. The speed of FSSDs is tested on a single Nvidia 1080Ti GPU. For fair comparison, we also test the SSD's speed on the same single Nvidia 1080Ti GPU.