Table 1: Comparisons with previous works.

	ASU	ours
Model	Res-50	-
FPGA	Stratix V GXA7	Stratix V GSMD8
Freq (MHz)	150	160
Precision	16bit fixed	16bit fixed
Mul	1,176	576
DSP	256	576
LUT/ALM	176K	86.2K
BRAM	1,950	261
Latency (ms)	31.82	**7.23** (Res-18)
		3.78 (MoblieNetV2)
		27.26 (Res-50)
Throughput (GOP/s)	121.6	**233.6** (Res-18)
		76.3 (MoblieNetV2)
		142.0 (Res-50)
Efficiency (GOP/s/Mul)	0.103	**0.405** (Res-18)
		0.132 (MoblieNetV2)
		0.247 (Res-50)
Normalized Efficiency	1	**3.94** (Res-18)
		1.28 (MoblieNetV2)
		2.39 (Res-50)