

Platform	Core-i7 5930K	GeForce Titan X	Tegra K1	A-Eye [14]	Da- DianNao [11]	True- North [40]	EIE (ours, 64PE)	EIE (28nm, 256PE)
Year	2014	2015	2014	2015	2014	2014	2016	2016
Platform Type	CPU	GPU	mGPU	FPGA	ASIC	ASIC	ASIC	ASIC
Technology	22nm	28nm	28nm	28nm	28nm	28nm	45nm	28nm
Clock (<i>MHz</i>)	3500	1075	852	150	606	Async	800	1200
Memory type	DRAM	DRAM	DRAM	DRAM	eDRAM	SRAM	SRAM	SRAM
Max DNN model size (<i>#Params</i>)	<16G	<3G	<500M	<500M	18M	256M	84M	336M
Quantization Strategy	32-bit float	32-bit float	32-bit float	16-bit fixed	16-bit fixed	1-bit fixed	4-bit fixed	4-bit fixed
Area (<i>mm²</i>)	356	601	-	-	67.7	430	40.8	63.8
Power (<i>W</i>)	73	159	5.1	9.63	15.97	0.18	0.59	2.36
$M \times V$ Throughput (<i>Frames/s</i>)	162	4,115	173	33	147,938	1,989	81,967	426,230
Area Efficiency (<i>Frames/s/mm²</i>)	0.46	6.85	-	-	2,185	4.63	2,009	6,681
Energy Efficiency (<i>Frames/J</i>)	2.22	25.9	33.9	3.43	9,263	10,839	138,927	180,606