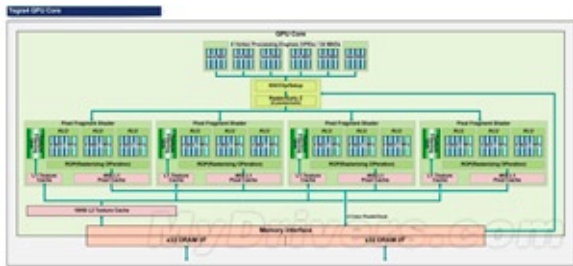


### Tegra 4 GPU Architecture Efficiency

	Tegra 4	8064	5250	A5x	A6x
GPU Area mm <sup>2</sup>	10.5	19.2	18.5	26.2	37.3
Fill Rate	2688	3200	2132	2000	2200
Fill / mm <sup>2</sup>	256	167	115	76	59
GFLOPS	97	51	34	32	70
GFLOPS / mm <sup>2</sup>	9.2	2.7	1.8	1.2	1.9
GLBench 2.5	54	30	29	25	52
GLBench 2.5 / mm <sup>2</sup>	5.1	1.6	1.6	1.0	1.4

Area normalized to 28nm

T4 GPU架构图

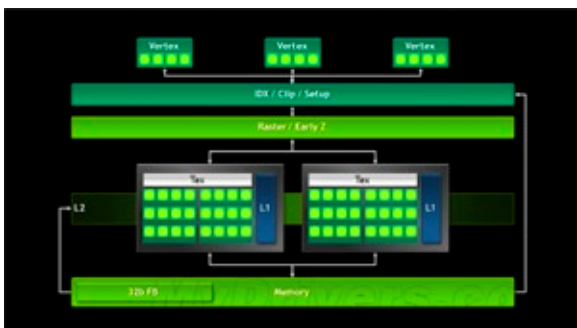


T4 GPU架构效率对比

#### NVIDIA Tegra 4i GPU



T4i GPU像素、顶点单元分布



T4i GPU架构图



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T2/3/4架构图

### Tegra 4 vs Tegra 3 GPU stats

Tegra 4/ Tegra 3	
Vertex Shader	8x
Fragment ALU	8x
Pixel Rate	2.4x
Texture Rate	2.4x
Memory Rate	2.3x
Z-Kill Rate	1.3x
Triangle Rate	1.3x

**Tegra 4 - 72 Core GPU @ 672 MHz**  
 4 pixel pipes \* 3 ALLU/pipe \* 4 MADs/ALU + 6 VPEs \* 4 MADs/VPE

**Tegra 3 - 12 Core GPU @ 520 MHz**  
 2 pixel pipes \* 1 ALLU/pipe \* 4 MADs/ALU + 1 VPE \* 4 MADs/VPE

T4 VS. T3

### Tegra 4i vs Tegra 3 GPU stats

Tegra 4i/ Tegra 3	
Vertex Shader	4.5x
Fragment ALU	9x
Pixel Rate	1.3x
Texture Rate	1.3x
Memory Rate	1.5x
Z-Kill Rate	1.5x
Triangle Rate	1.3x

**Tegra 4i - 60 Core GPU @ 660 MHz**  
 4 pixel pipes \* 6 ALLU/pipe \* 4 MADs/ALU + 3 VPEs \* 4 MADs/VPE

**Tegra 3 - 12 Core GPU @ 416 MHz**  
 2 pixel pipes \* 1 ALLU/pipe \* 4 MADs/ALU + 1 VPE \* 4 MADs/VPE

T4i VS. T3