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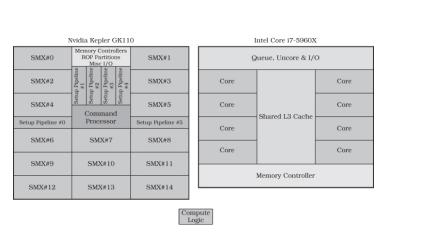


Figure 1.3: Block diagrams of the Nvidia Kepler GK110 GPU and the Intel i7-5960X octa-core CPU, derived from silicon die photographs. The diagrams are not scaled relative to each other. They are only supposed to show the relative real-estate devoted to compute logic. Each SMX SIMD block contains 64 KB of cache/shared memory. Each i7 core also contains its own private32 KB data and 32 KB instruction L1 caches, and 256 KB L2 cache. The shared L3 cache in i7-5960X is 20 MB.

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32 LD/ST: load/store units
32 SFU: Special Function Units

Figure 1.5: Block diagram of Kepler's streaming multiprocessor (SMX) building block. A GTX Titan GPU has 14 SMXs enabled.

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