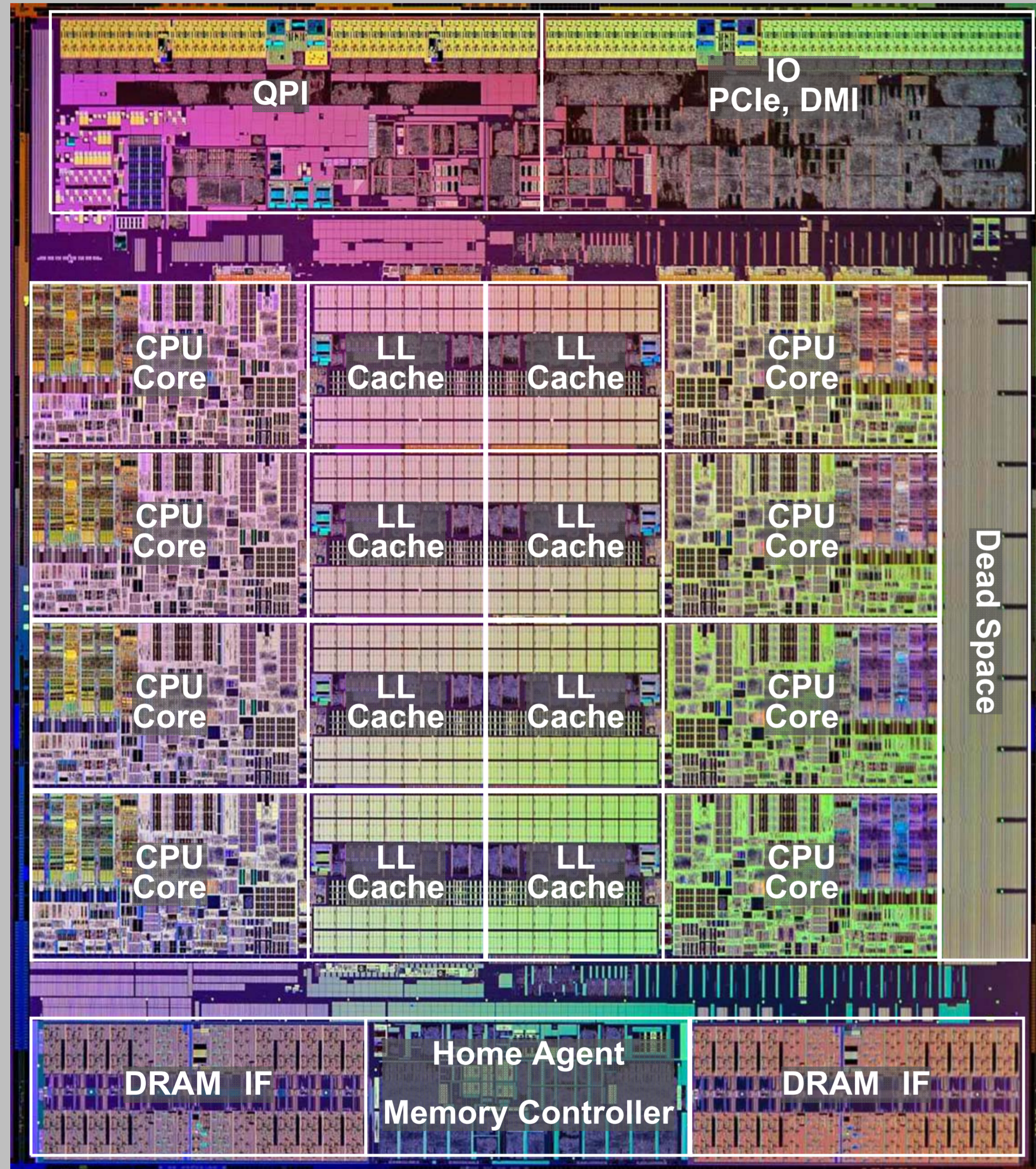


Haswell-E Family 8Cores vs 18Cores Die Layout

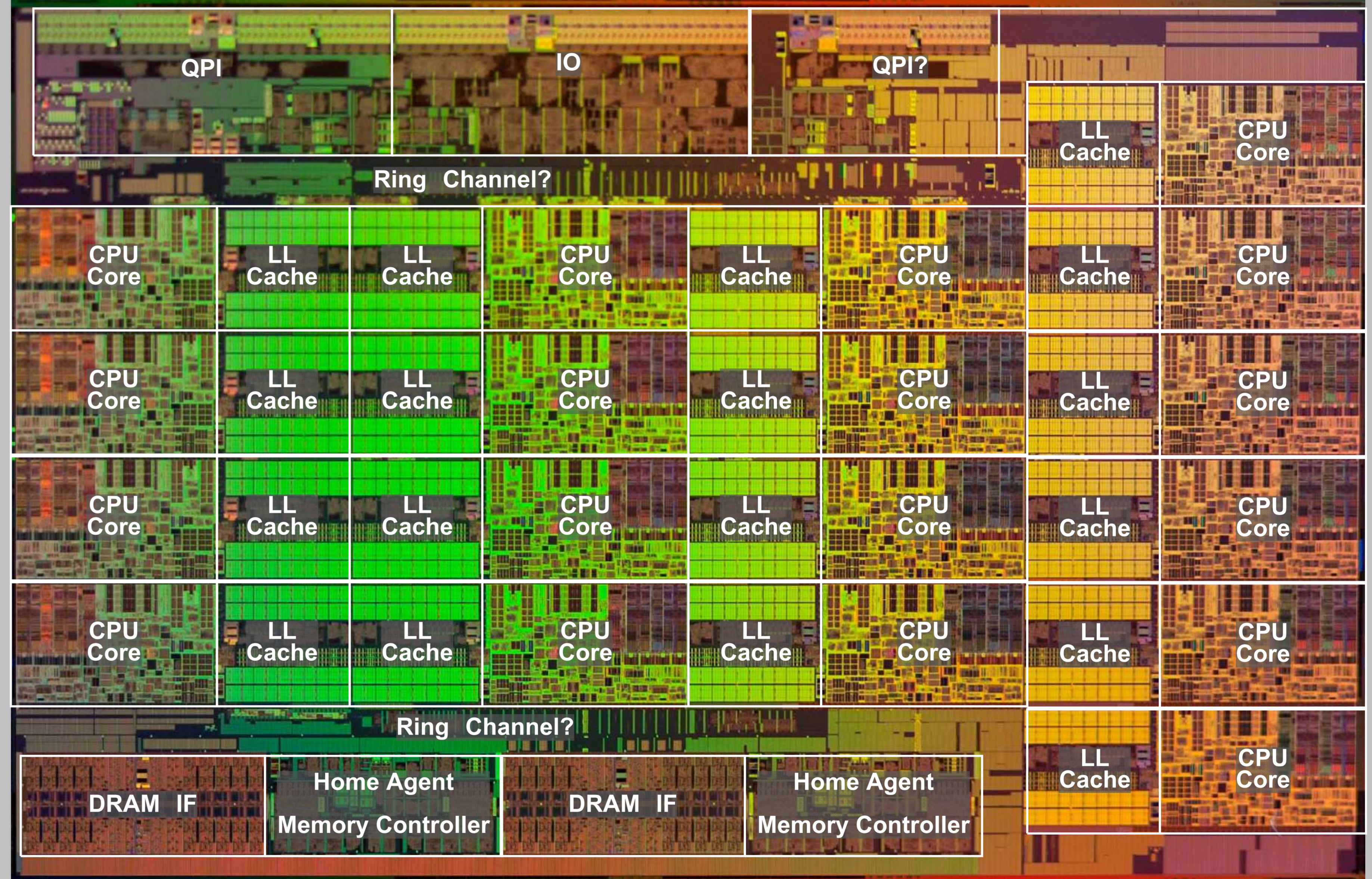
Haswell-E Desktop 8Cores



8 Haswell CPU cores  
20 MB LL Cache  
22nm Bulk FinFET Process  
354 mm<sup>2</sup>  
2.6B Transistors  
-140W

4-Channel DDR4 DRAM IF  
40 lanes QPI  
(2 links)  
40 lanes PCI Express 3.0  
4 lanes DMI

Haswell-E Family(EP/EX) 18Cores



18 Haswell CPU cores  
45 MB LL Cache  
22nm Bulk FinFET Process  
662 mm<sup>2</sup>  
5.69B Transistors  
-145W

4-Channel DDR4 DRAM IF  
(8 DDR4 Channels /w Memory Buffer?)  
60 lanes QPI  
(3 links)  
40 lanes PCI Express 3.0  
4 lanes DMI