COMPUTER SCIENCE TRIPOS Part II – 2015 – Paper 7

5   Comparative Architectures (RDM)

(a) Why do modern processors typically exploit multiple cores rather than a single multithreaded processor?   [5 marks]

(b) What does support for vector chaining and tailgating allow in a vector processor?   [5 marks]

(c) How might recent advances in die stacking help to improve microprocessor performance and reduce costs?   [5 marks]

(d) In what ways might parallelism be exploited to reduce the power consumption of a microprocessor?   [5 marks]