Princeton University COS 217: Introduction to Programming Systems x86-64 Architecture

Memory Chip

CPU Chip 0000000000000000 Control Unit TEXT Arithmetic Logic Unit (ALU) RODATA Registers DATA rax rbx rcx BSS rdx rsi HEAP rdi Program rbp Break rsp r8 r9 r10 argc r11 argv r12 STACK r13 argv array r14 env var array r15 argv strings eflags env var strings rip FFFFFFFFFFFFFF