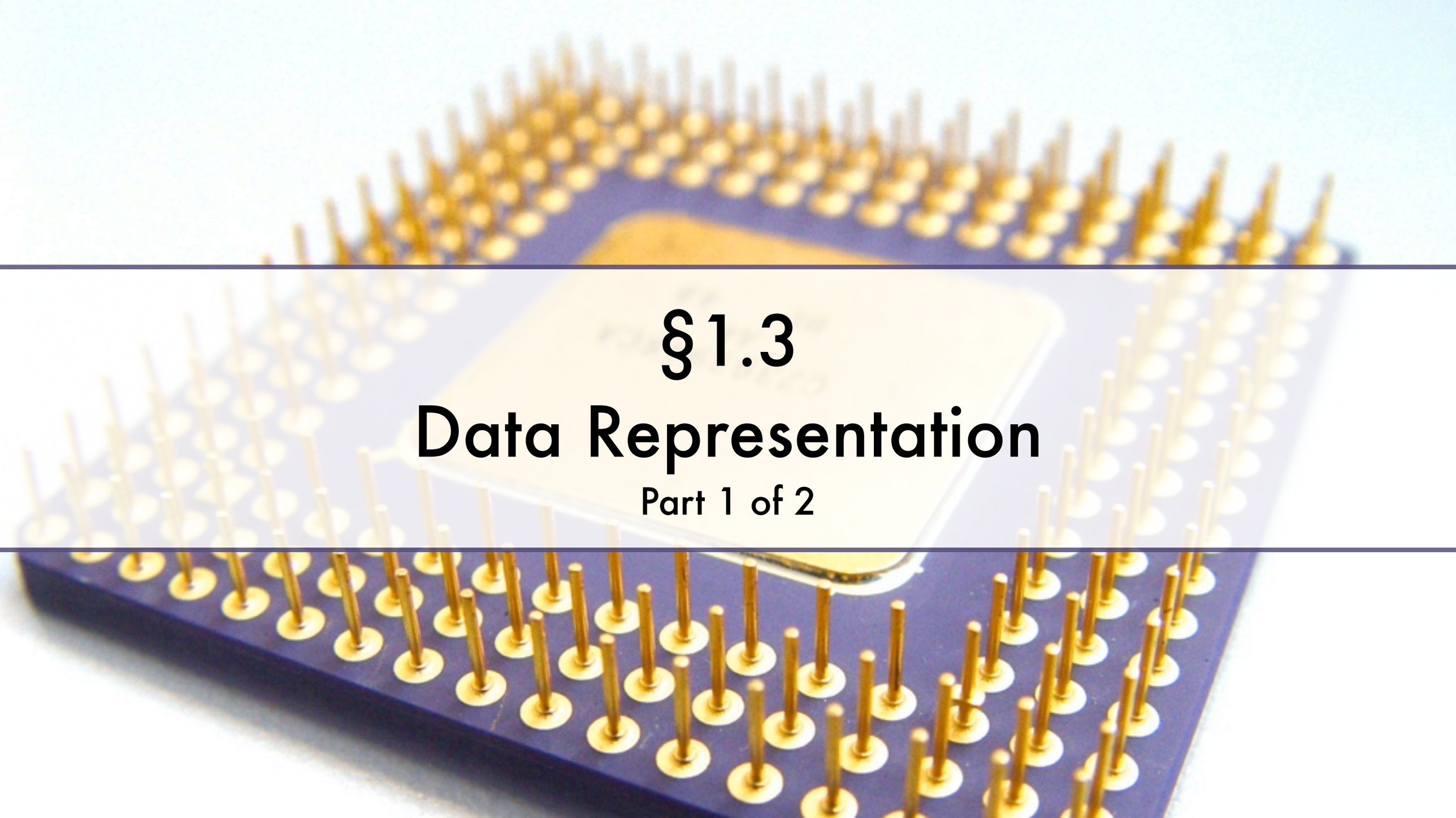
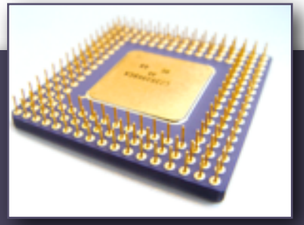


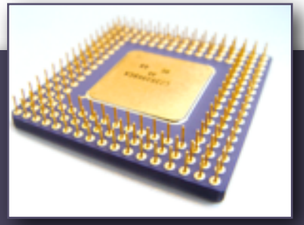
§1.3
Data Representation
Part 1 of 2

Reading Questions: §1.1.3



- 3. What is the *one-to-many relationship* between high-level languages and machine language?
- 4. Explain the concept of *portability* as it applies to programming languages.
- 5. Is the assembly language for x86 processors the same as for the Vax or Motorola 68x00?
- 7. What is a device driver?
- 11. Why is assembly language not usually used when writing large application programs?

Topics Covered in Whiteboard Notes:



- Radix/base, notated via subscripts; place values
- Unsigned integers
  - Binary representation: bits, LSB, MSB, addition
  - Hexadecimal representation; notation with h suffix
- Signed integers
  - Two’s complement representation
- Storage sizes: byte, word, doubleword, quadword
- Maximum and minimum representable values