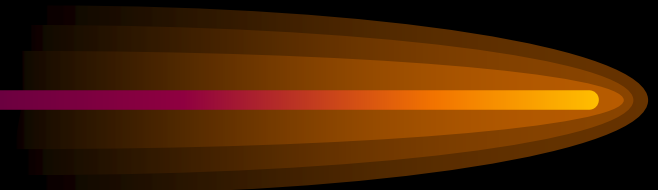
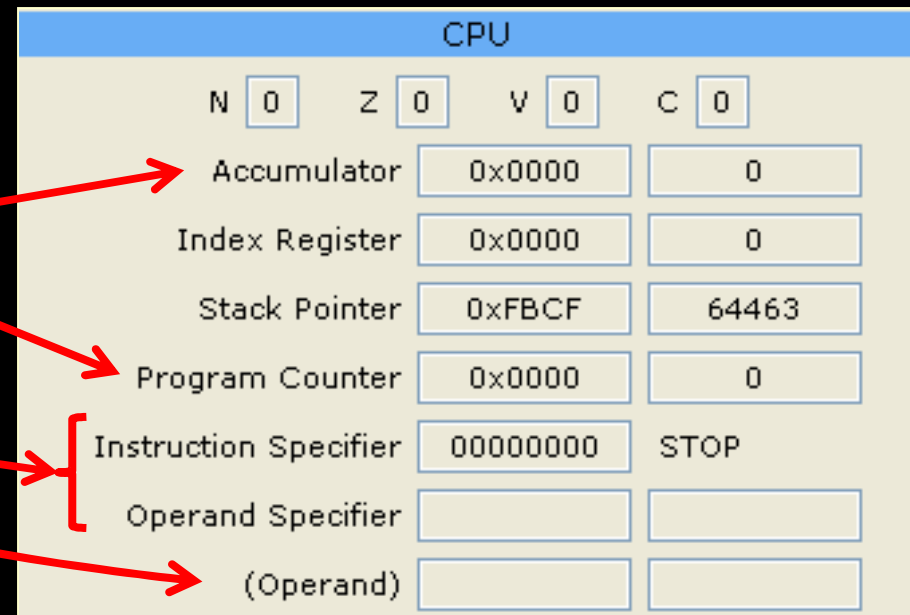
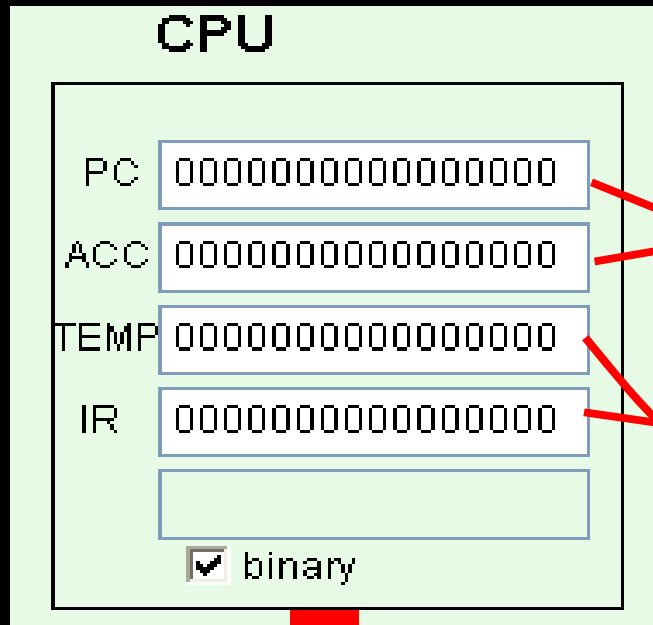


Unit 3 Summary

- Key concepts:
 - Stored Program Computer
 - Fetch / Decode / Execute Cycle
 - Direct vs. Immediate Addressing
 - Jump / Branch instructions to control program
- Architecture
 - Accumulator, Program Counter, Instruction Register
 - Memory addressing
 - Instructions
 - Pep/8 vs. SSC



SSC vs. Pep/8

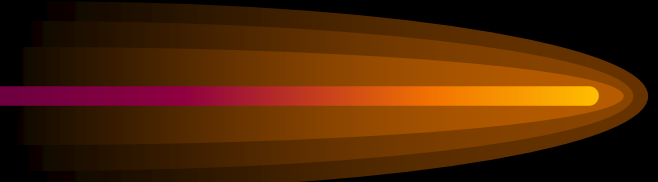


- 16 bit (1 word) instructions
- Address 16 words

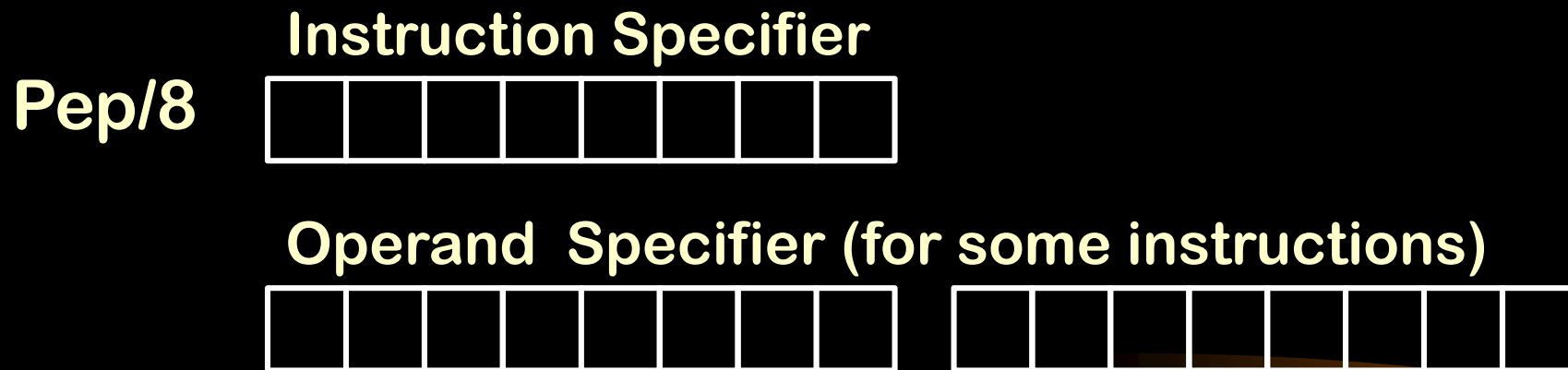
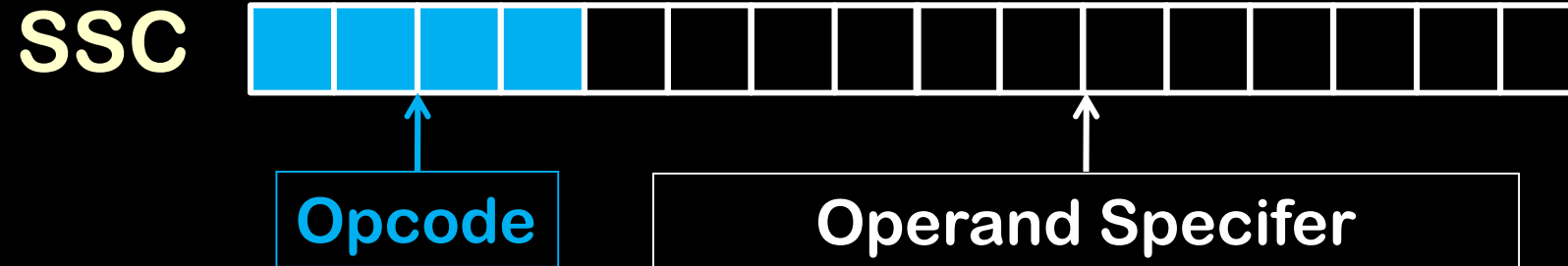
- 8 or 24 bit (1 or 3 byte) instructions
- Address 2^{16} bytes

Unit 3 Summary, cont'd

- Assembly Language (SSC, PEP/8)
 - Read and understand simple programs
 - Modify simple programs
 - Convert SSC instructions to binary machine code and vice versa
 - Convert Pep/8 programs, including addresses, to object (machine) code (L1)
 - Write more complex programs (L1)
- Provided:
 - SSC opcode documentation and screen shot
 - Pep/8 opcode and addressing summary

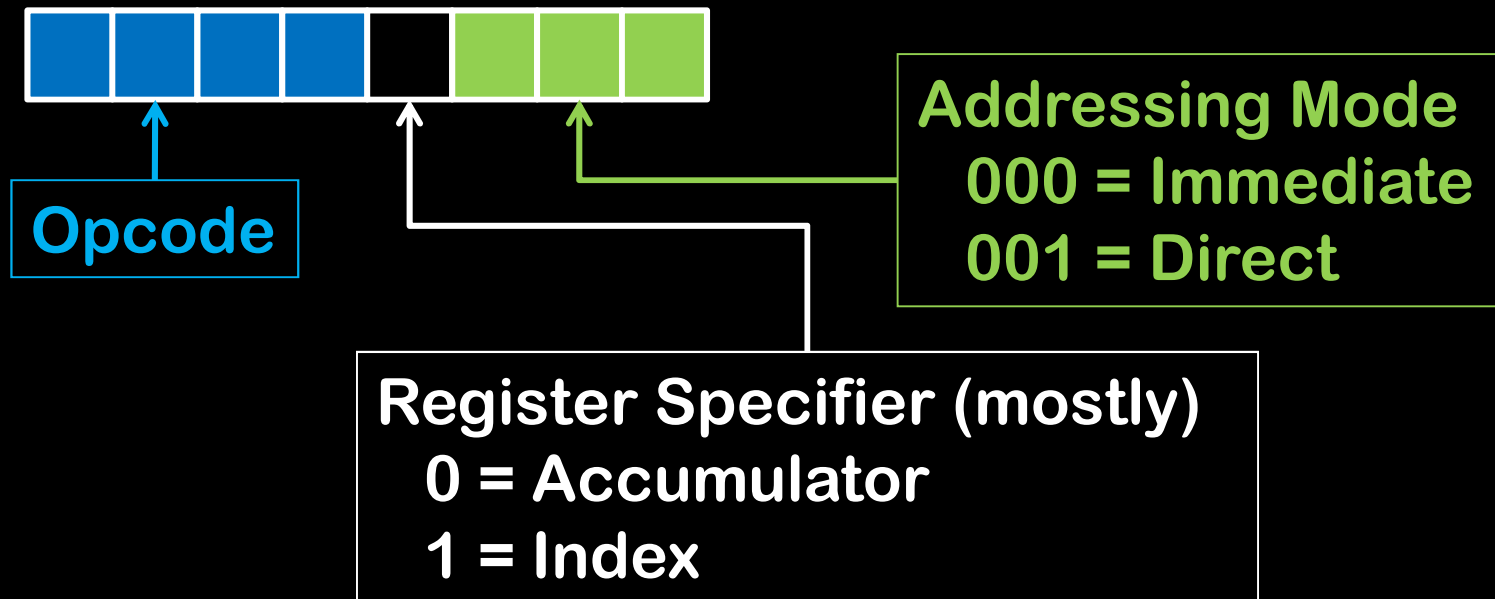


SSC vs. Pep/8 Instructions



Pep/8 Instructions

Instruction Specifier



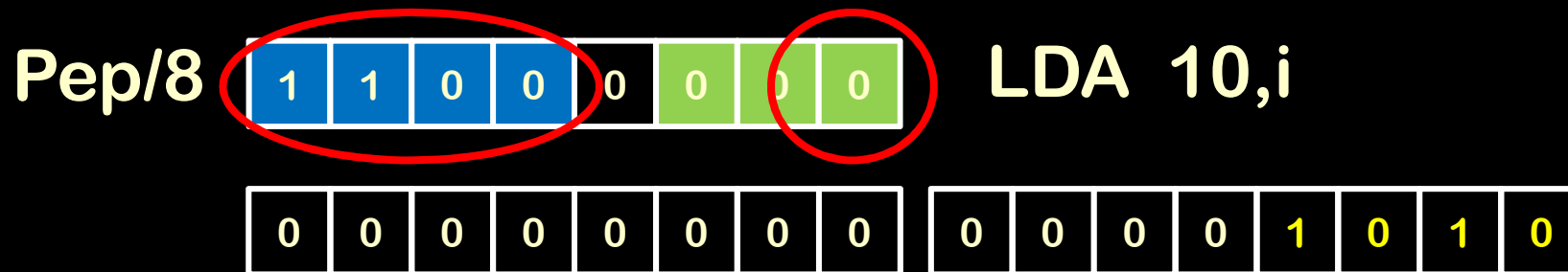
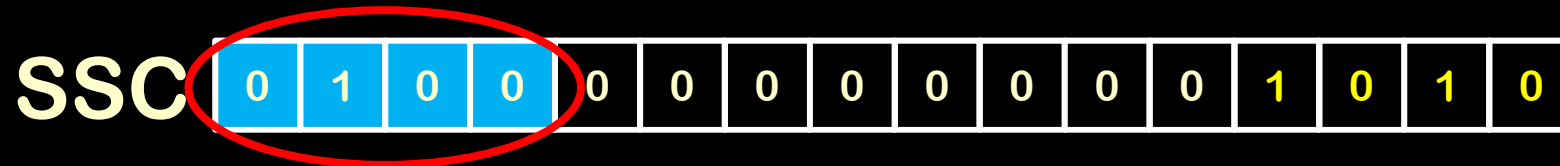
Operand Specifier (for most instructions)



Pep/8 Instructions

Load the number 10 (immediate)

LDI 10



Pep/8 Instructions

Load from memory location 10 (direct)

LOD 10

SSC



Pep/8



LDA 10,d

