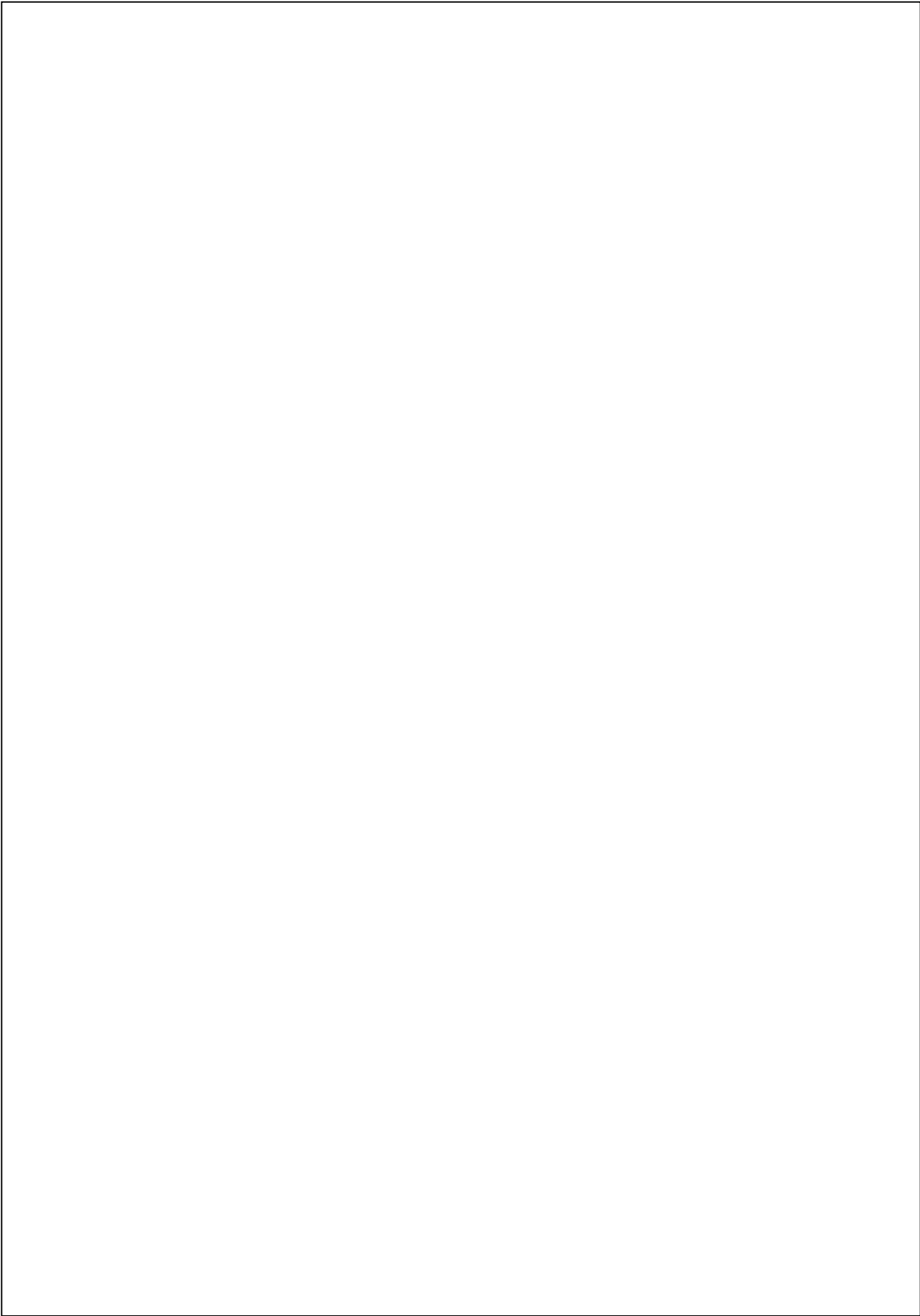


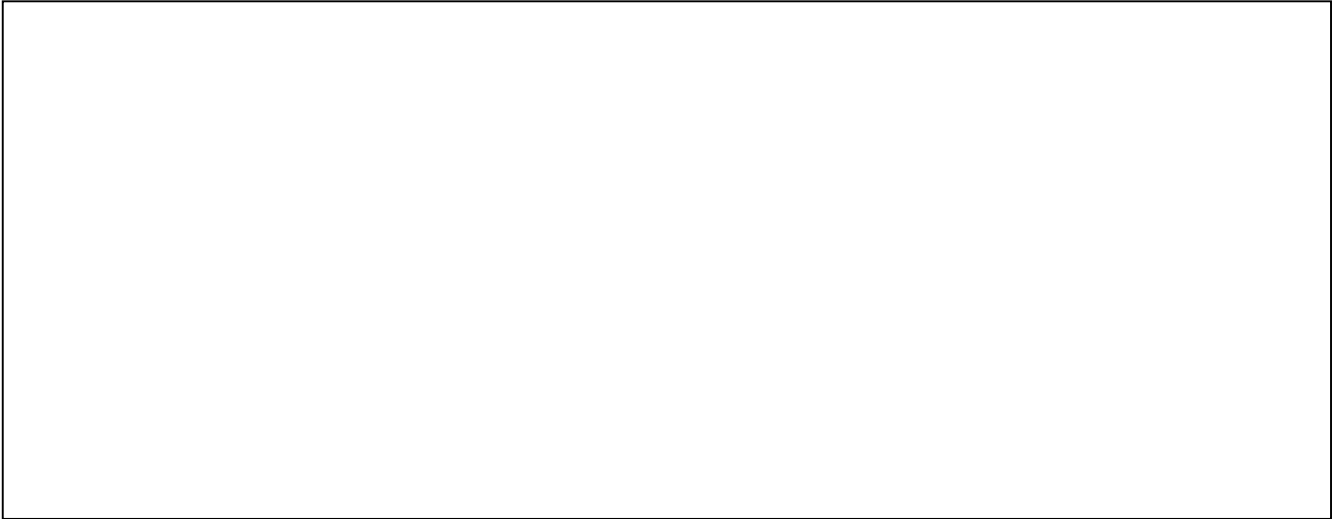
Tutorial 11: Bus Memory Interface

Problem 1: Processor Memory Interface with 16-bit Memory Module

The DSLMU board is augmented to a 256K × 16-bit read/write SRAM module that interfaces to the microcontroller through the external bus. This memory is where user instructions and data go. Draw a Picture of the interface between the memory module and the Processor.

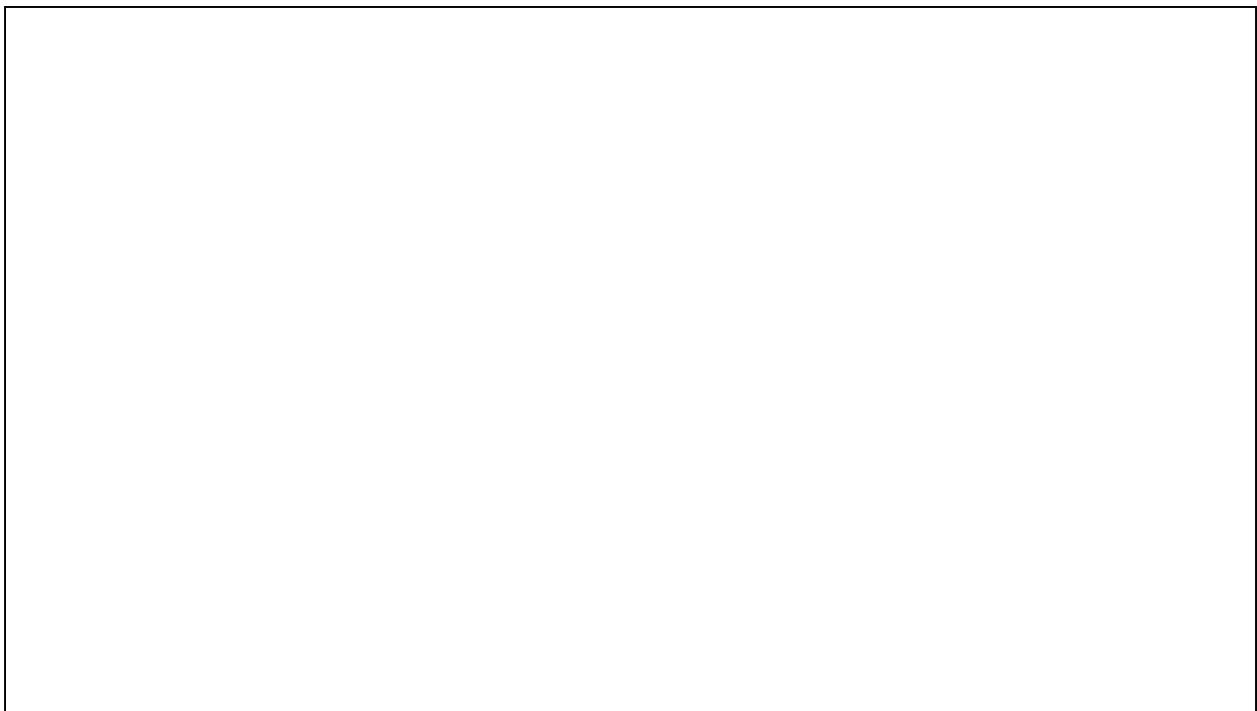






Problem 2: Processor Memory Interface with 8-bit Memory Module

The 256K × 16-bit read/write SRAM module on the DSLMU board is replaced with a 512K × 8-bit read/write SRAM module that interfaces to the microcontroller through the external bus. Draw a Picture of the interface between the memory module and the Processor.



Problem 3: Processor Memory Interface with Multiple 16-bit Memory Modules

The DSLMU Hardware Reference Manual states that “Connected to the Microcontroller Bus is the system memory in the form of Static RAM modules, U11-U14 and U21-U24 providing up to eight 256K × 16-bit memory modules for a total of up to 4 MB of read/write memory. Draw a Picture of the interface between the memory modules and the Processor.



