

## 1 High-Level Synthesis for FPGA, Part 3: Advanced

```
void memory_mapped_input_output(  
    unsigned short int *sw,  
    unsigned short int *led) {  
  
#pragma HLS INTERFACE mode=m_axi port=sw offset=off  
#pragma HLS INTERFACE mode=m_axi port=led offset=off  
#pragma HLS INTERFACE mode=ap_ctrl_hs port=return  
  
    *led = *(sw+0x010000/sizeof(unsigned short int));  
}
```