

Table 5.1 The UP3core Functions.

UP3core Name	Description
LCD_Display	Displays ASCII Characters and Hex Data on the UP3's LCD Panel
Debounce	Pushbutton Debounce Circuit
OnePulse	Pushbutton Single Pulse Circuit
Clk_Div	48MHz Clock Prescaler with 7 frequency outputs (1MHz to 1hz)
VGA_Sync	VGA Sync signal generator for UP 3 that outputs pixel addresses
Video_PLL	Used by VGA Sync to generate the video pixel clock using a PLL
Char_ROM	Small Character Font ROM for video character generation
Keyboard	Reads keyboard scan codes from the UP 3's PS/2 connector
Mouse	Reads PS/2 mouse data and outputs cursor row and column address

LCD_Display

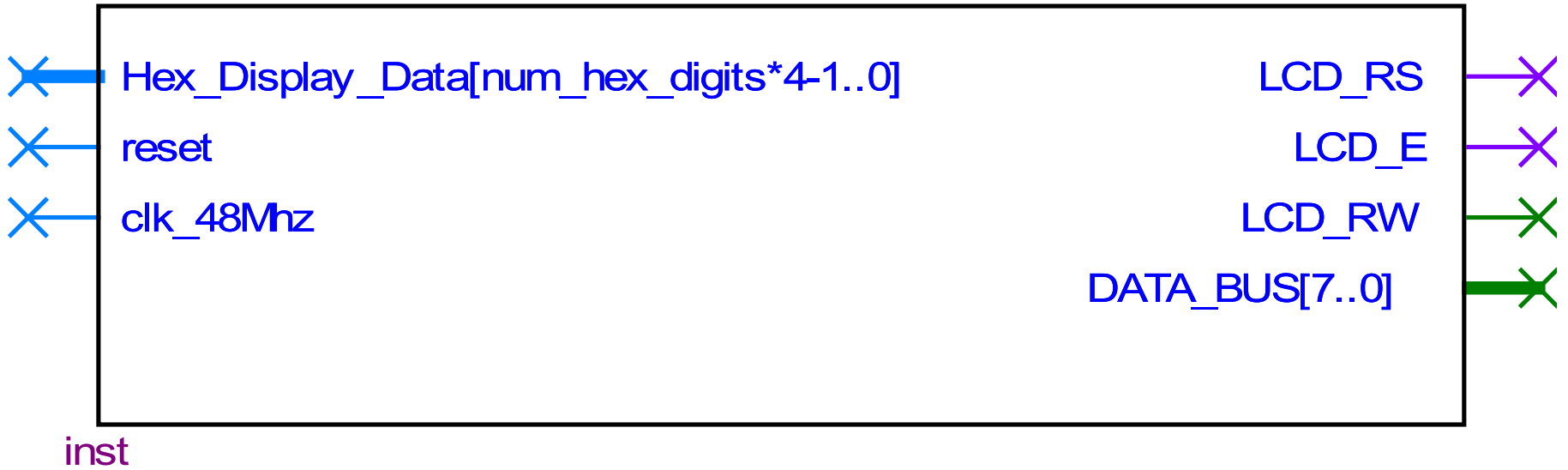
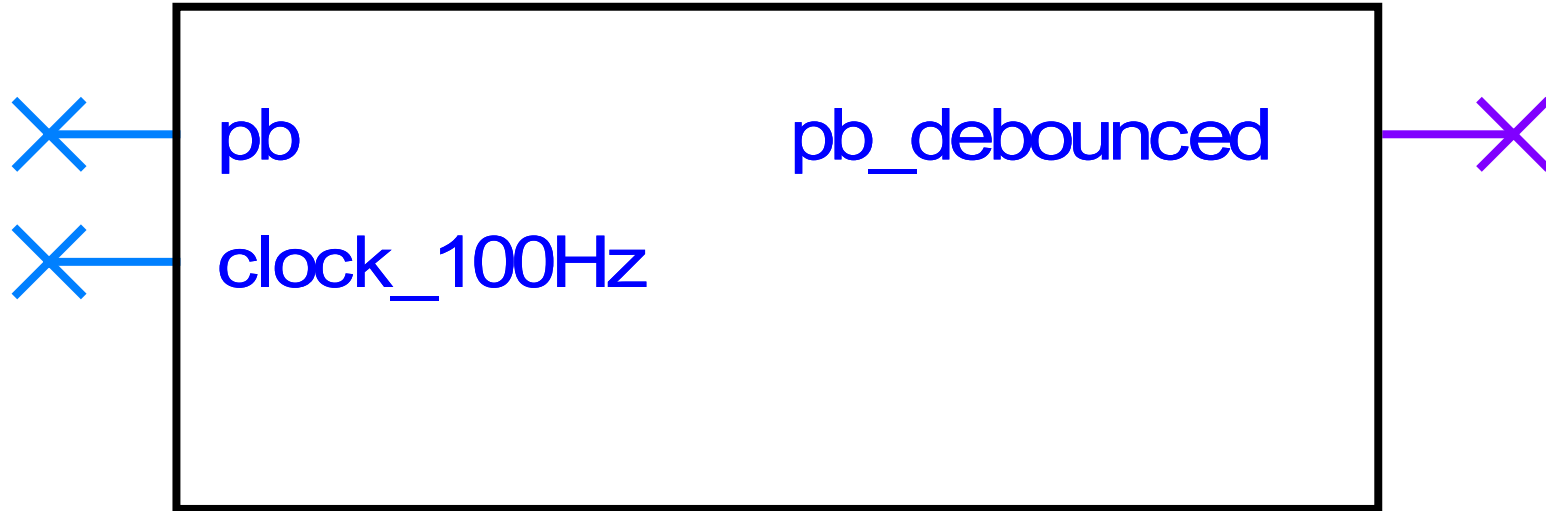


Figure 5.1 Symbol for LCD_Display UP3core.

debounce



inst

Figure 5.2 Symbol for DEBOUNCE UP3core.

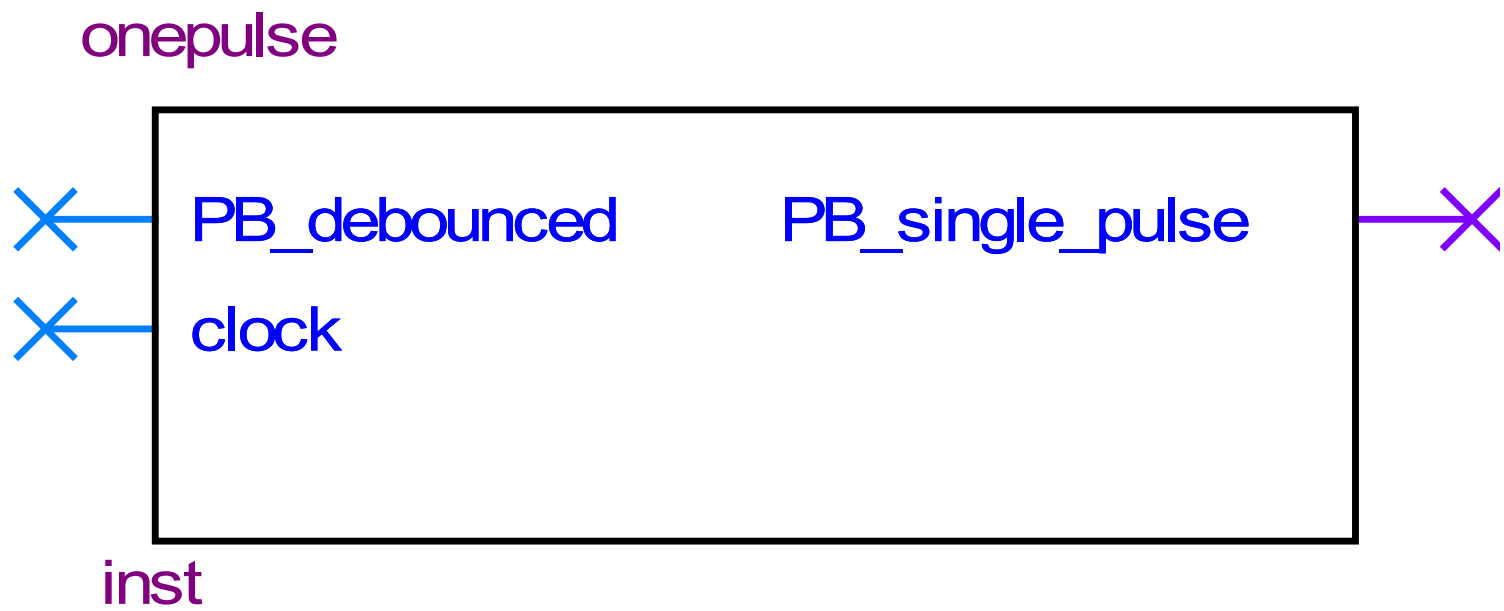


Figure 5.3 Symbol for ONEPULSE UP3core.

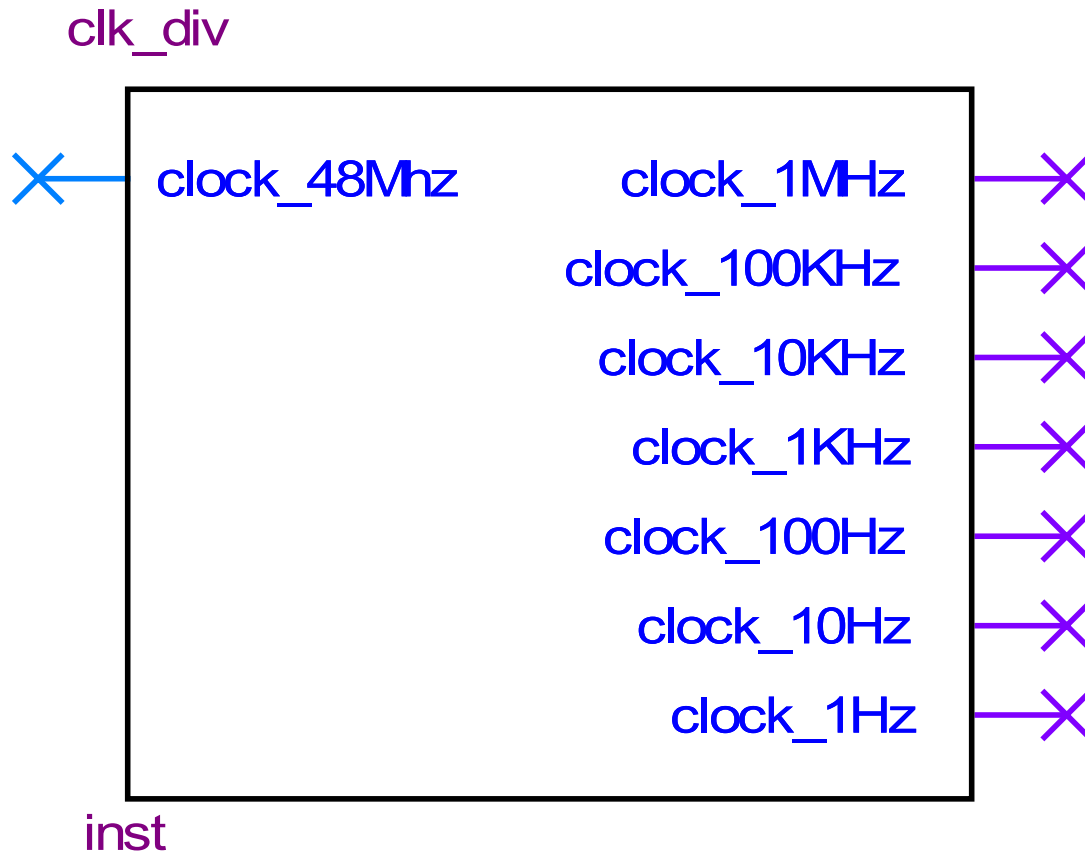


Figure 5.4 Symbol for CLK_DIV UP3core.

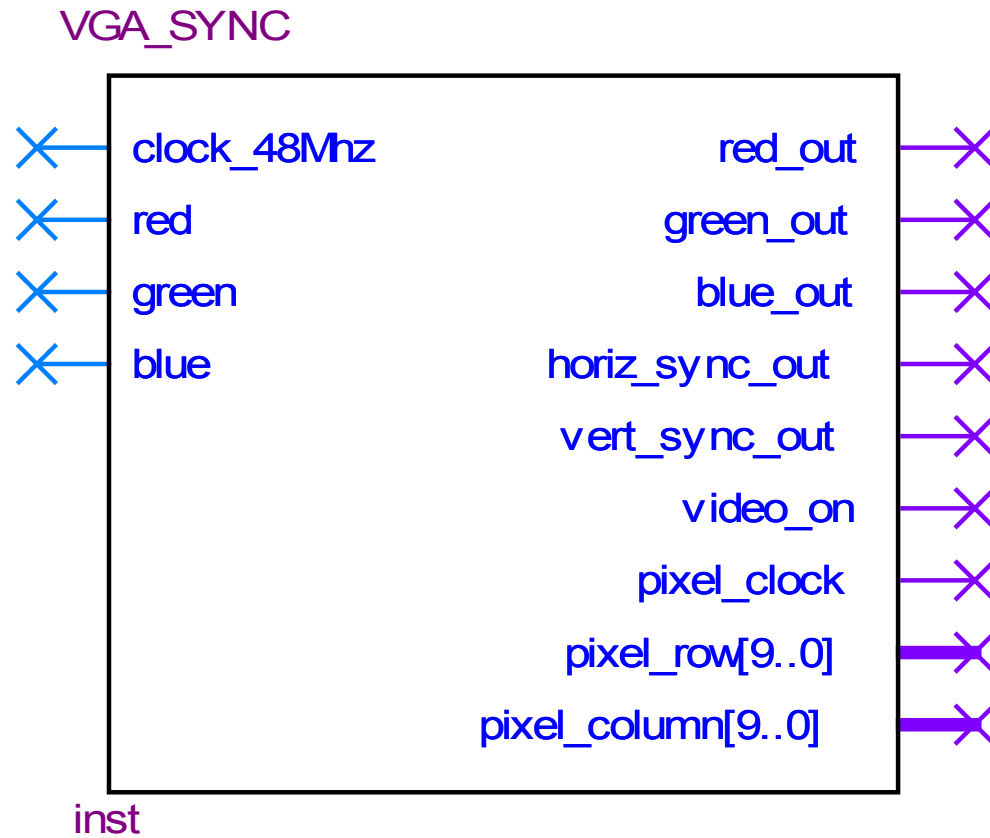


Figure 5.5 Symbol for VGA_SYNC UP3core.

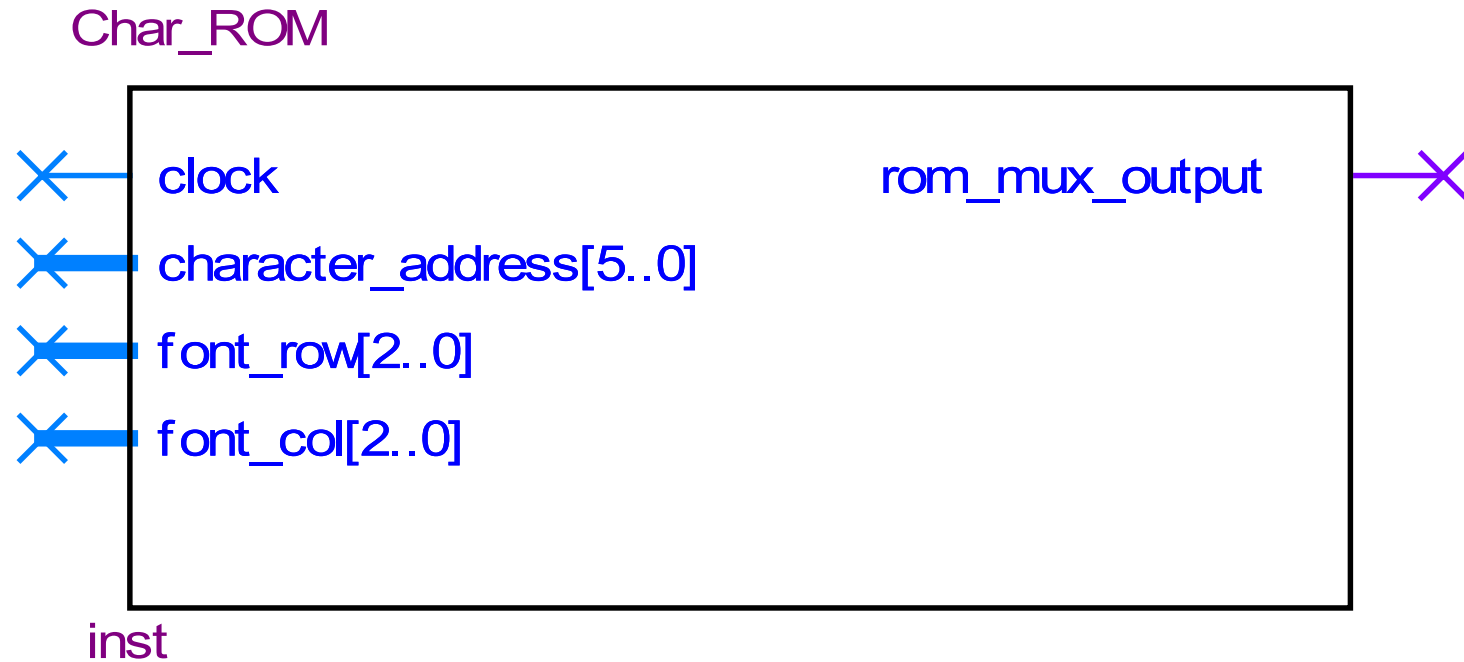


Figure 5.6 Symbol for CHAR_ROM UP3core.

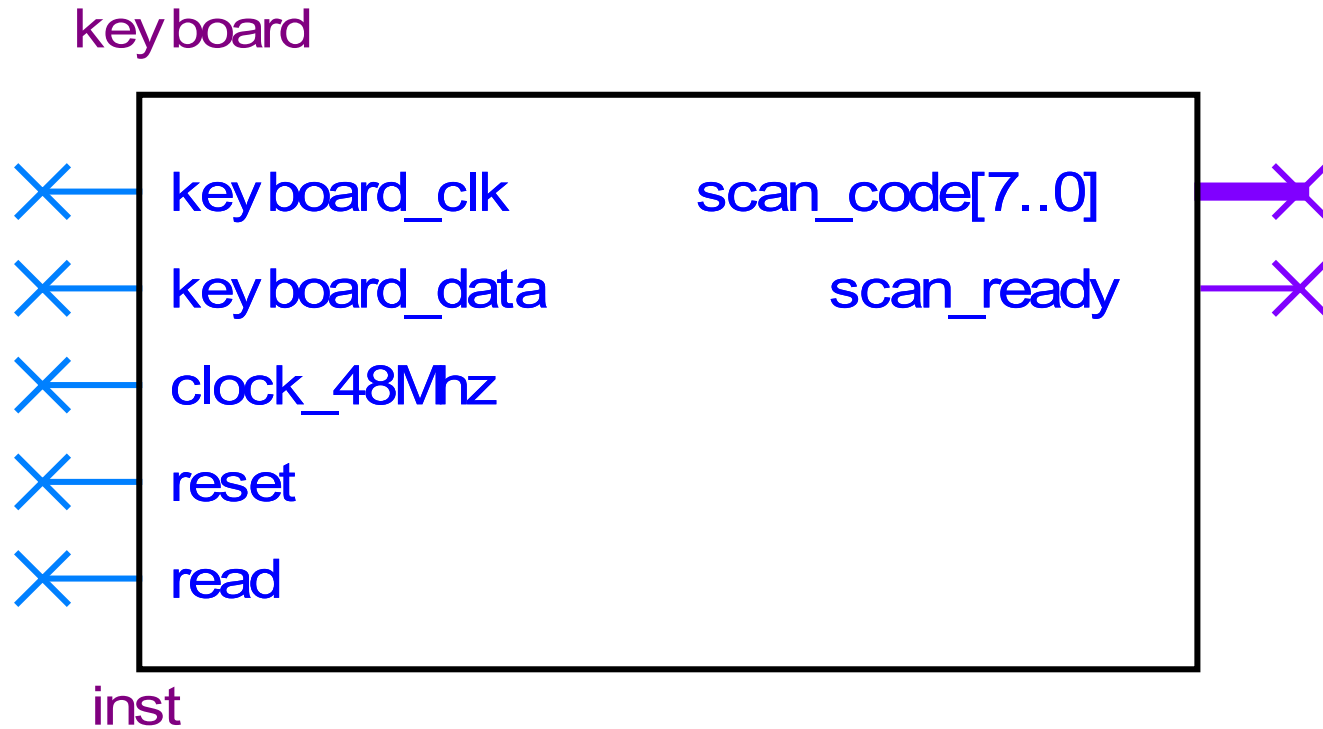


Figure 5.7 Symbol for KEYBOARD UP3core.

MOUSE

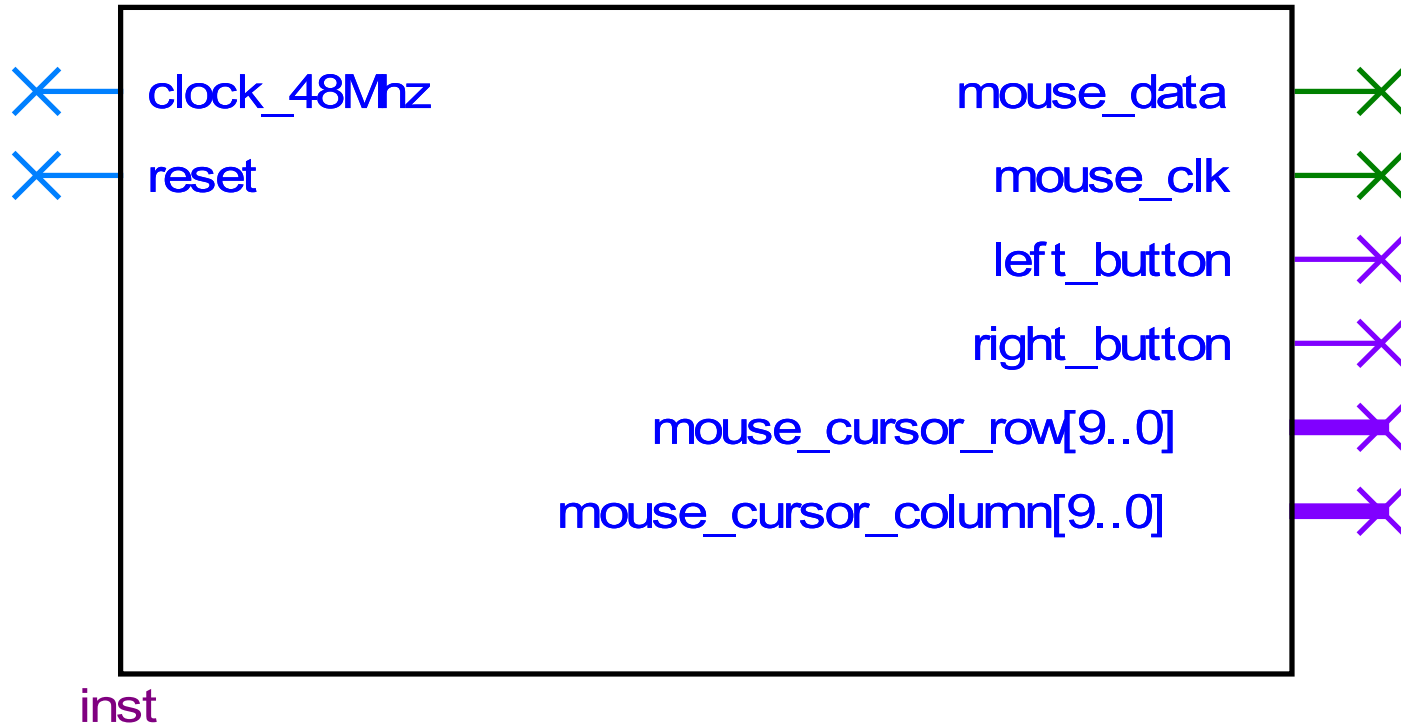


Figure 5.8 Symbol for MOUSE UP3core.