A picture containing text, electronics, computer, display

Description automatically generated

Trigger Continue to go back to the 1st Pause state

The program goes into 3rd Pause state result is displayed on HEX Units

Wait for Continue to be triggered to start another Multiplication Test

Trigger Continue to go into the 3rd Pause state

The value of Multiplier A is set by SW

10’b 00 0010 0011 (16’h0023) (16’d35)

The value of Multiplicand B is set by SW

10’b 00 0000 1010 (16’h000A) (16’d10)

Trigger Continue to go into the 2nd Pause state

Switches are first set to 10’b 00 0000 0000

Final result of = = 16’d350 = 16’h015E

The program goes into 2nd Pause state

Wait for user to set the value of Multiplicand from SW

Wait for Continue to be triggered to start Execution

The program goes into 1st Pause state

Wait for user to set the value of Multiplier from SW

Wait for Continue to be triggered

Switches are set to 10’b 00 0011 0001

(16’h0031) to jump to the start address x0031 of the Multiplication Test program

Reset the entire SLC-3 processor

All registers are cleared

FSM is set to Halted state