ModelSim-Intel FPGA Starter Edition Installation Guide

Requirements: Windows 10/11 (64bit) or Linux (64bit), 1.2GB disc space

1. Download **ModelSim-Intel FPGA Starter Edition**
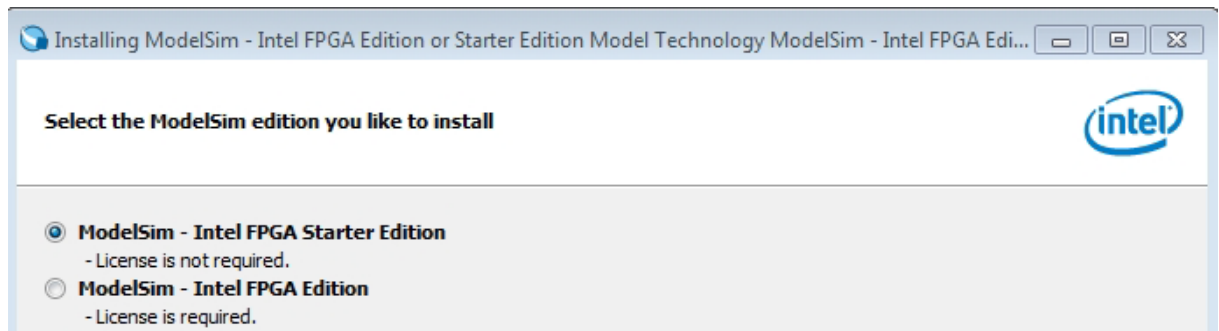
Windows: https://cloud.h-da.de/s/a7SW5RcfWHY2GHG

   ModelSimSetup-20.1.1.720-windows.exe.zip (1.2 GB)

Linux: https://cloud.h-da.de/s/Qq9SpaMz7ZfZxPH

   ModelSimSetup-20.1.1.720-linux.run.zip (1.4 GB)

2. Install ModelSim-Intel FPGA Starter Edition

3. Run Simulation on ModelSim:
    - Create new project
    - Add VHDL file to project
    - Compile design
    - Run simulation

    using VHDL-model of XOR-gate from slide 18:

```vhdl
ENTITY xor_gate IS
PORT ( a, b : IN  BIT ;
       c : OUT BIT ) ;
END xor_gate;

ARCHITECTURE conditional OF xor_gate IS
BEGIN
c <= '0' WHEN a = '0' AND b = '0' ELSE
     '1' WHEN a = '0' AND b = '1' ELSE
     '1' WHEN a = '1' AND b = '0' ELSE
     '0' WHEN a = '1' AND b = '1' ELSE
     '0';
END conditional;
```