

# Environment Configuration File

Team\_82

Inter IIT Tech Meet 14.0 — ISRO-VLSI

## Development Environment Specifications

### 1. Operating System

Component	Specification
OS Name	<i>Windows 11 Home Single Language (26200.7309)</i>
Kernel Version	<i>Microsoft Windows [Version 10.0.26200.7309]</i>
Architecture	<i>OSArchitecture 64-bit</i>

### 2. MATLAB/Simulink Environment

Component	Specification
MATLAB Version	<i>R2024a, R2024b</i>
Simulink Version	<i>24.1, 24.2</i>
Required Toolboxes	<i>DSP System Toolbox, Delta Sigma Toolbox, Mixed-Signal Blockset</i>

### 3. HDL Simulation Tools

Component	Specification
Simulator Name	<i>Vivado</i>
Simulator Version	<i>Vivado 2024.1</i>
HDL Language Support	<i>Verilog 2001</i>
Waveform Viewer	<i>Vivado</i>

### 4. Synthesis Tools

Component	Specification
Synthesis Tool	<i>Cadence Genus</i>
Tool Version	<i>23.1</i>
Optimization Settings	<i>Area and Speed optimized</i>
Clock Frequency Target	<i>8.192MHz</i>

## 5. Place & Route (Backend) Tools

Component	Specification
P&R Tool	<i>Cadence Innovus</i>
Tool Version	<i>Innovus 21.1</i>
Layout Format	<i>GDSII</i>

## 6. Process Design Kit (PDK)

Component	Specification
PDK Name	<i>UMC 90nm</i>
Technology Node	<i>90nm CMOS</i>

---

*Document prepared for: Inter IIT Tech Meet 14.0 - ISRO VLSI Mid-Prep*

*Last Updated: December 7, 2025*