TCP Title	Verification of AXI-I2S TX
Trainee Name	Muhammad Junaid
Manager	Rubab Fatima
Next Manager	Nouman Akbar
Tech Lead	Hassan Ashraf
Peer Mentor	Junaid Ahmed
Estimated time to complete	1 month
Kickoff Date	

TCP Description:

This project involves verifying the AXI I2S Transmitter Vivado IP. The trainee will be responsible for verifying all the features outlined in the IP's specification documents. The IP should be generated in Vivado with default parameters.

Acceptance Criteria:

The trainee needs to develop a UVM based testbench for verifying this IP completely. Implement the RAL model for the registers. The other deliverables are follows:

- 1. Git repository for project
- 2. Detailed Verification Architecture Document
- 3. Testplan
- 4. Coverage Model and Scores

Reference Material / Research Papers:

Spec Document

■ How to use AMD Vivado's IP Catalog to create a Block RAM (generate your relevant IP similarly)

Enable UVM in vivado.

Verification Plan

VAD workshop

AXI Spec

AMBA AXI-Stream Protocol Specification

■ Coding Guidelines