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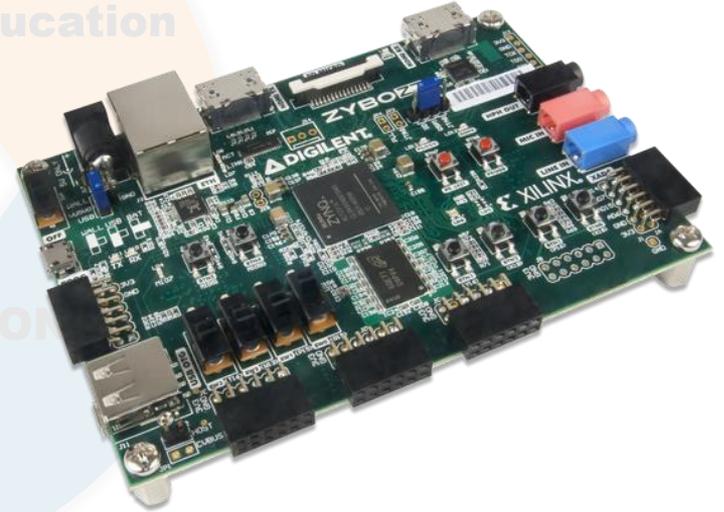
Project type: thesis project

Topic: Neural network framework on FPGA

Supervisors: Dr. Zoltán Kincses, Dr. Balázs Bánhelyi

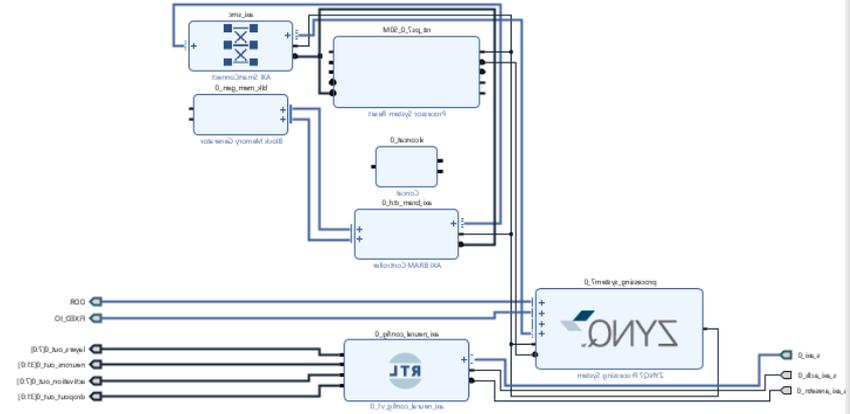
Why FPGAs for Neural Networks?

- High Parallelism: Execute multiple operations simultaneously
- Low Latency: Reduced inference time for real-time applications
- Energy Efficiency: Lower power consumption than GPUs
- Reconfigurability: Adapt to different network architectures



Research

- **Goal:** make a neural network framework for FPGA
- **FGPA Board:** Xilinx Zybo Z7
- **Written moduls in VHDL:** json parser, neural_config, neural_weight_generator



Future work

- Writing further moduls
 - Training modul
 - Inference modul
 - Evaluation modul
- Create some networks to train and evaulate the framework

