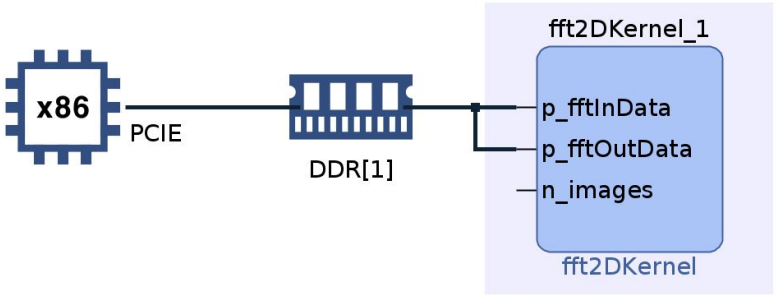
2-Dimensional FFT, Sami Ben Ali & Seungah Lee, Université de Rennes 1, https://github.com/SeungahLEE0820/xacc_2022/tree/master

- Summary
  - Plan – Use 2D FFT (2-dimensional Fast Fourier Transform), a filter for image processing and use a Inverse 2D FFT
  - Final project – Apply 2D FFT with impulse as input
- Block diagram



Profile

Calls: 1
Utilization: 76.408 %
Total: 0.007 ms
Average: 0.007 ms

- Use L2 library - DSP
- Optimize library to run on Vitis (library path, xclbin path, memory bank)
- Reduce repeating time (4096 ->1)

- Results

Summary

Name	BRAM_18K	DSP	FF	LUT	URAM
DSP	-	-	-	-	-
Expression	-	-	0	24	-
FIFO	0	-	3245	1786	-
Instance	0	84	89972	99836	96
Memory	-	-	-	-	-
Multiplexer	-	-	-	18	-
Register	-	-	2	-	-
Total	0	84	93219	101664	96
Available	4320	6840	2364480	1182240	960
Available SLR	1440	2280	788160	394080	320
Utilization (%)	0	1	3	8	10
Utilization SLR (%)	0	3	11	25	30