

# CSU22022 Computer Architecture I

Prof. Michael Manzke

Assignment: Milestone Function Unit

## Checklist

14<sup>th</sup> October 2024

Version 1.0

All files must be submitted to Blackboard as individual files, no zipfiles. **With one exception: the “Processor\_XXXXXXXXX.srscs” must be a zip-file.** Submit only entities that are working and are fully tested. You must follow the entity order on the checklist. You cannot skip entities.

The entities must be programmed and tested in the following order. Please confirm by ticking all the boxes, next to the items, that all required files are available on Blackboard and that the entity is fully working. You must print this checklist, tick the boxes, sign it, and submit it with your milestone assignment to Blackboard.

**All files must be submitted in the checklist order:**

DP\_FullAdder\_XXXXXXXX.vhd  
DP\_FullAdder\_XXXXXXXX\_TB.vhd  
DP\_FullAdder\_XXXXXXXX\_SchematicXX.pdf  
DP\_FullAdder\_XXXXXXXX\_TDXX.png  
DP\_FullAdder\_XXXXXXXX\_Doc. txt (can be any file format)  
DP\_RippleCarryAdder32Bit\_XXXXXXXX.vhd  
DP\_RippleCarryAdder32Bit\_XXXXXXXX\_TB.vhd  
DP\_RippleCarryAdder32Bit\_XXXXXXXX\_SchematicXX.pdf  
DP\_RippleCarryAdder32Bit\_XXXXXXXX\_TDXX.png  
DP\_RippleCarryAdder32Bit\_XXXXXXXX\_Doc.txt (can be any file format)

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00	My submission complies with the “Instructions for the Blackboard Submission of the Assignment” (CSU22022 Milestone Function Unit 2024-2025 Instruction V1.0.pdf)	Yes
01	DP_FullAdder_XXXXXXX.vhd	Yes
	DP_FullAdder_XXXXXXX_TB.vhd	Yes
	DP_FullAdder_XXXXXXX_SchematicXX.pdf	Yes
	DP_FullAdder_XXXXXXX_TDXX.png	Yes
	DP_FullAdder_XXXXXXX_Doc.txt (can be any file format)	Yes
	Is working	Yes
02	DP_RippleCarryAdder32Bit_XXXXXXX.vhd	Yes
	DP_RippleCarryAdder32Bit_XXXXXXX_TB.vhd	Yes
	DP_RippleCarryAdder32Bit_XXXXXXX_SchematicXX.pdf	Yes
	DP_RippleCarryAdder32Bit_XXXXXXX_TDXX.png	Yes
	DP_RippleCarryAdder32Bit_XXXXXXX_Doc.txt (can be any file format)	Yes
	Is working	Yes
03	DP_SingleBit_B_Logic_XXXXXXX.vhd	Yes
	DP_SingleBit_B_Logic_XXXXXXX_TB.vhd	Yes
	DP_SingleBit_B_Logic_XXXXXXX_SchematicXX.pdf	Yes
	DP_SingleBit_B_Logic_XXXXXXX_TDXX.png	Yes
	DP_SingleBit_B_Logic_XXXXXXX_Doc.txt (can be any file format)	Yes
	Is working	Yes

04	DP_32Bit_B_Logic_XXXXXXX.vhd	Yes
	DP_32Bit_B_Logic_XXXXXXX_TB.vhd	Yes
	DP_32Bit_B_Logic_XXXXXXX_SchematicXX.pdf	Yes
	DP_32Bit_B_Logic_XXXXXXX_TDXX.png	Yes
	DP_32Bit_B_Logic_XXXXXXX_Doc.txt (can be any file format)	Yes
	Is working	Yes

05	DP_SingleBit_LogicCircuit_XXXXXXX.vhd	Yes
	DP_SingleBit_LogicCircuit_XXXXXXX_TB.vhd	Yes
	DP_SingleBit_LogicCircuit_XXXXXXX_SchematicXX.pdf	Yes
	DP_SingleBit_LogicCircuit_XXXXXXX_TDXX.png	Yes
	DP_SingleBit_LogicCircuit_XXXXXXX_Doc.txt (can be any file format)	Yes
	Is working	Yes

06	DP_32Bit_LogicCircuit_XXXXXXX.vhd	Yes
	DP_32Bit_LogicCircuit_XXXXXXX_TB.vhd	Yes
	DP_32Bit_LogicCircuit_XXXXXXX_SchematicXX.pdf	Yes
	DP_32Bit_LogicCircuit_XXXXXXX_TDXX.png	Yes
	DP_32Bit_LogicCircuit_XXXXXXX_Doc.txt (can be any file format)	Yes
	Is working	Yes

07	CPU_Mux2_32Bit_XXXXXXX.vhd	Yes
	CPU_Mux2_32Bit_XXXXXXX_TB.vhd	Yes
	CPU_Mux2_32Bit_XXXXXXX_SchematicXX.pdf	Yes
	CPU_Mux2_32Bit_XXXXXXX_TDXX.png	Yes
	CPU_Mux2_32Bit_XXXXXXX_Doc.txt (can be any file format)	Yes
	Is working	Yes

08	DP_ArithmeticLogicUnit_XXXXXXX.vhd	Yes
	DP_ArithmeticLogicUnit_XXXXXXX_TB.vhd	Yes
	DP_ArithmeticLogicUnit_XXXXXXX_SchematicXX.pdf	Yes
	DP_ArithmeticLogicUnit_XXXXXXX_TDXX.png	Yes
	DP_ArithmeticLogicUnit_XXXXXXX_Doc.txt (can be any file format)	Yes
	Is working	Yes

09	DP_Mux3_1Bit_XXXXXXX.vhd	Yes
	DP_Mux3_1Bit_XXXXXXX_TB.vhd	Yes
	DP_Mux3_1Bit_XXXXXXX_SchematicXX.pdf	Yes
	DP_Mux3_1Bit_XXXXXXX_TDXX.png	Yes
	DP_Mux3_1Bit_XXXXXXX_Doc.txt (can be any file format)	Yes
	Is working	Yes

10	DP_ShifterCFlagMux2_1Bit_XXXXXXX.vhd	Yes
	DP_ShifterCFlagMux2_1Bit_XXXXXXX_TB.vhd	Yes
	DP_ShifterCFlagMux2_1Bit_XXXXXXX_SchematicXX. pdf	Yes
	DP_ShifterCFlagMux2_1Bit_XXXXXXX_TDXX.png	Yes
	DP_ShifterCFlagMux2_1Bit_XXXXXXX_Doc.txt (can be any file format)	Yes
	Is working	Yes

11	DP_Shifter_XXXXXXX.vhd	Yes
	DP_Shifter_XXXXXXX_TB.vhd	Yes
	DP_Shifter_XXXXXXX_SchematicXX. pdf	Yes
	DP_Shifter_XXXXXXX_TDXX.png	Yes
	DP_Shifter_XXXXXXX_Doc.txt (can be any file format)	Yes
	Is working	Yes

12	DP_CFlagMux2_1Bit_XXXXXXX.vhd	Yes
	DP_CFlagMux2_1Bit_XXXXXXX_TB.vhd	Yes
	DP_CFlagMux2_1Bit_XXXXXXX_SchematicXX. pdf	Yes
	DP_CFlagMux2_1Bit_XXXXXXX_TDXX.png	Yes
	DP_CFlagMux2_1Bit_XXXXXXX_Doc.txt (can be any file format)	Yes
	Is working	Yes

13	DP_ZeroDetection_XXXXXXX.vhd	Yes
	DP_ZeroDetection_XXXXXXX_TB.vhd	Yes
	DP_ZeroDetection_XXXXXXX_SchematicXX.pdf	Yes
	DP_ZeroDetection_XXXXXXX_TDXX.png	Yes
	DP_ZeroDetection_XXXXXXX_Doc.txt (can be any file format)	Yes
	Is working	Yes

14	DP_FunctionalUnit_XXXXXXX.vhd	Yes
	DP_FunctionalUnit_XXXXXXX_TB.vhd	Yes
	DP_FunctionalUnit_XXXXXXX_SchematicXX.pdf	Yes
	DP_FunctionalUnit_XXXXXXX_TDXX.png	Yes
	DP_FunctionalUnit_XXXXXXX_Doc.txt (can be any file format)	Yes
	Is working	Yes

15	Processor_XXXXXXX.srcs (including all subdirectories and files)	Yes
	Processor_XXXXXXX.xpr	Yes

Student Name: Kyara McWilliam

Student ID: 23375183



Signature

25.10.24 Date