

Appendix B: TOP LEVEL SCHEMATICS OF THE STC MAIN DATA PATH AND THE SIMULATION RESULTS

B.1: STC -- MAIN DATA PATH

B.2: STRIP READER AND CENTROID FINDER MODULES WITH MAIN MEMORY DECODER
AND MISCELLANEOUS PARAMETERS MEMORY SPACE

B.3: MISCELLANEOUS PARAMETERS MEMORY SPACE

B.4: PULSE THRESHOLD MEMORY SPACE

B.5: CLUSTERING THRESHOLD MEMORY SPACE

B.6: CHIP RANGE MEMORY SPACE

B.7: MISCELLANEOUS REGISTER MEMORY SPACE

B.8: STRIP READER AND THE CENTROID FINDER MODULES

B.9: STRIP READER MODULE

B.10: TEST MEMORY SPACE

B.11: BAD CHANNEL MEMORY SPACE

B.12: GAIN AND OFFSET MEMORY SPACE

B.13: CENTROID FINDER MODULE

B.14: HIT FILTER MODULE

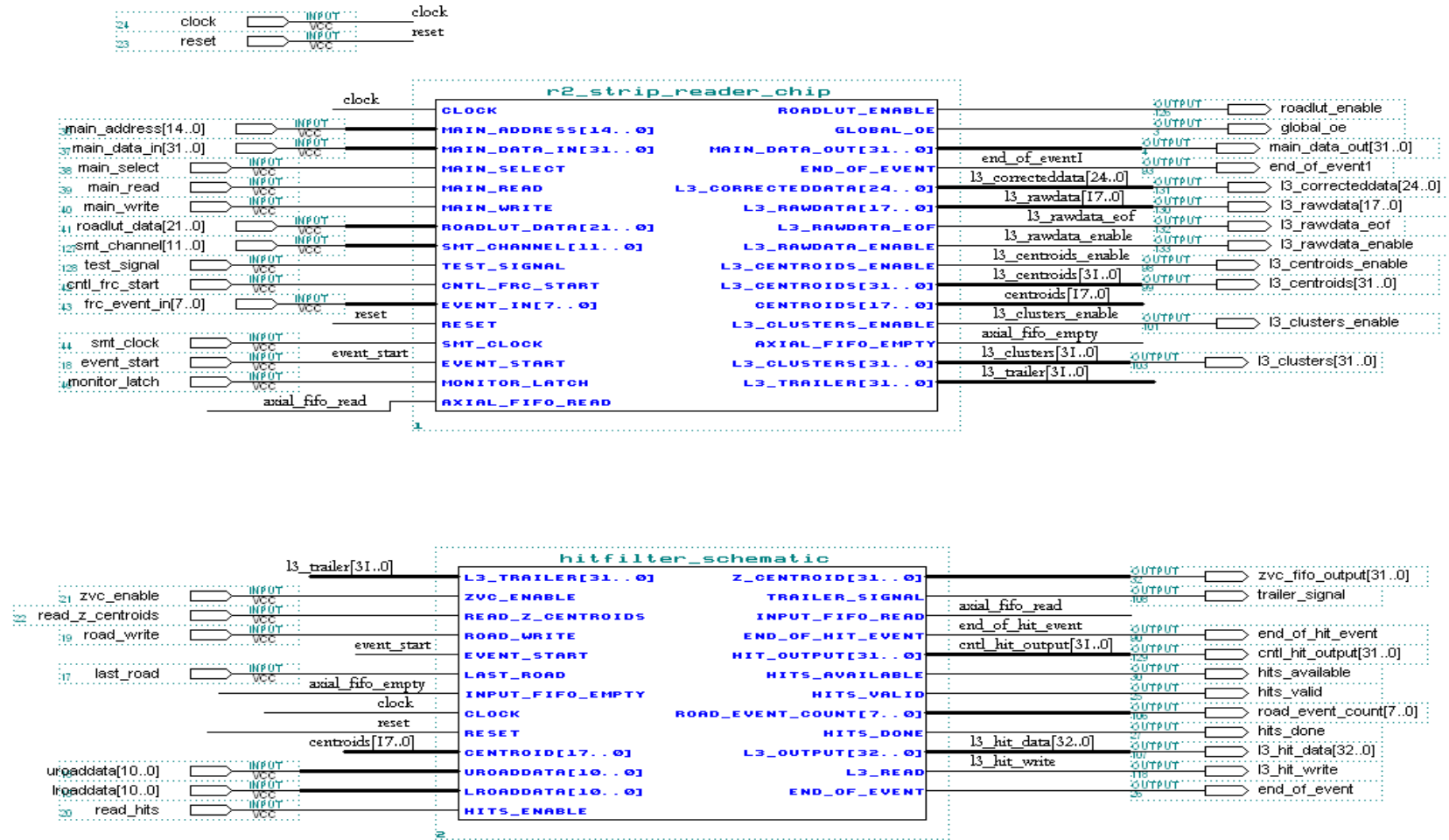
B.15: HIT FILTER CONTROL MODULE

B.16: COMPARATOR MODULE

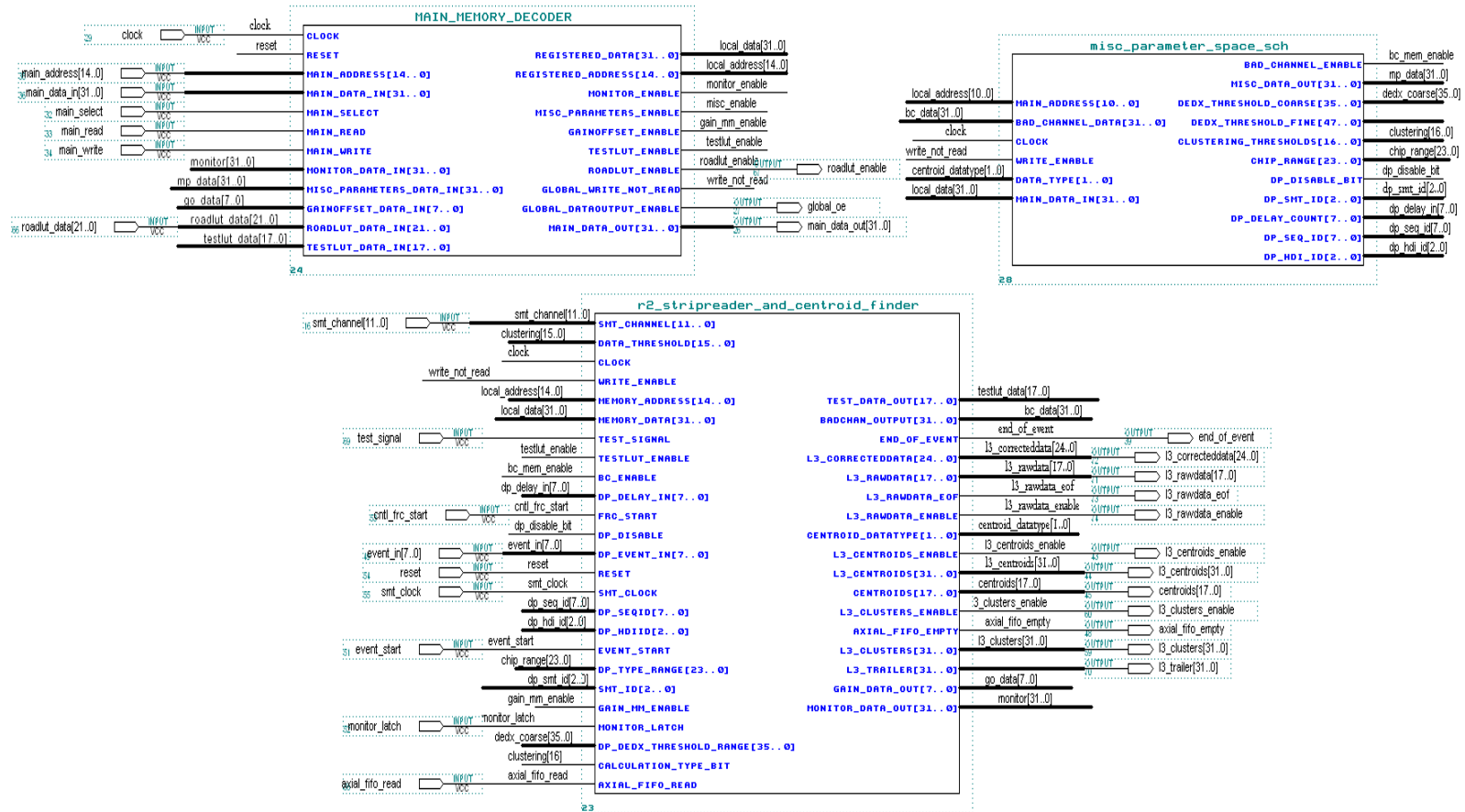
B.17: HIT READ OUT MODULE

B.18: FUNCTIONAL SIMULATION OF THE TEST DATA STREAM

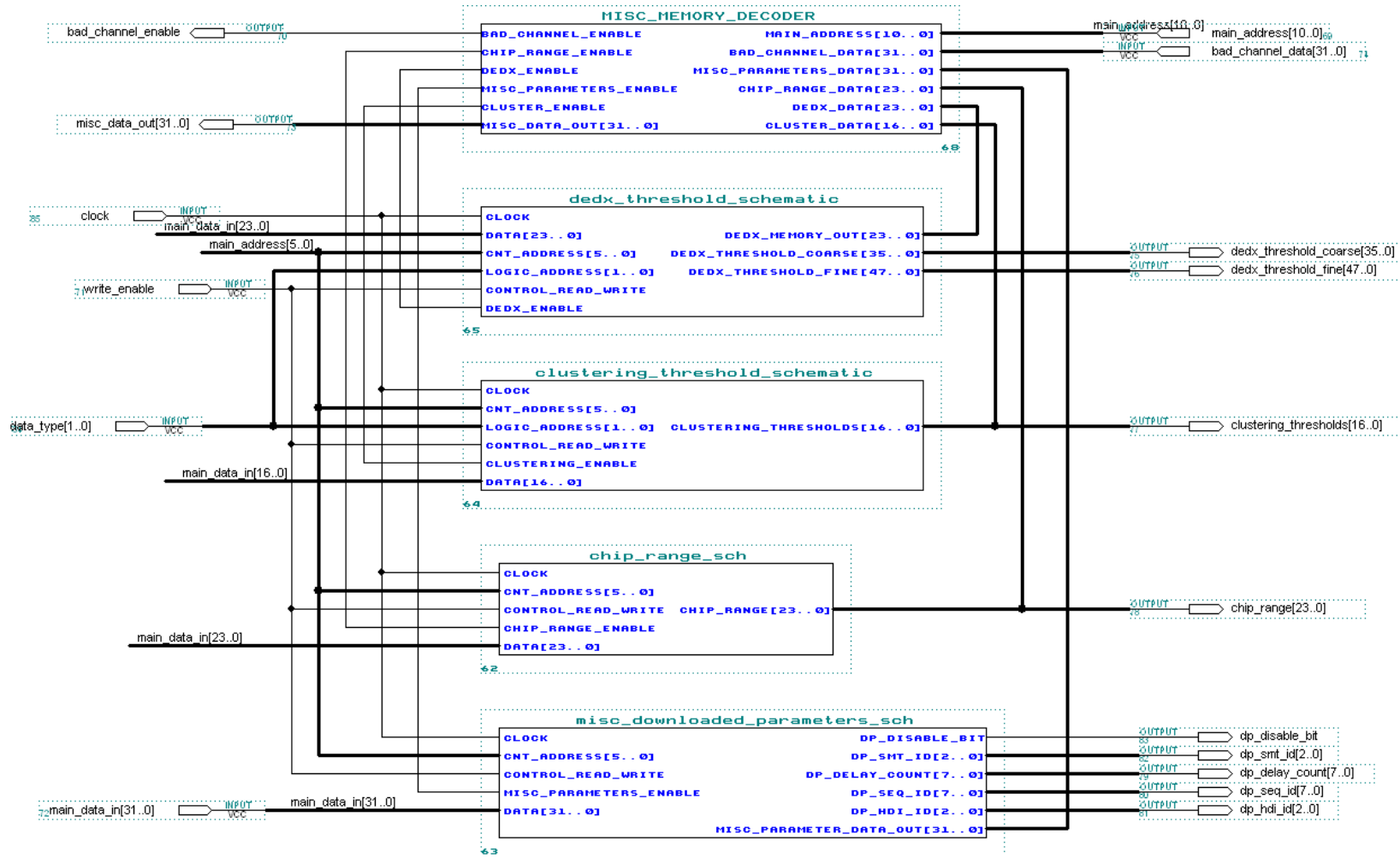
B.1: MAIN DATA PATH



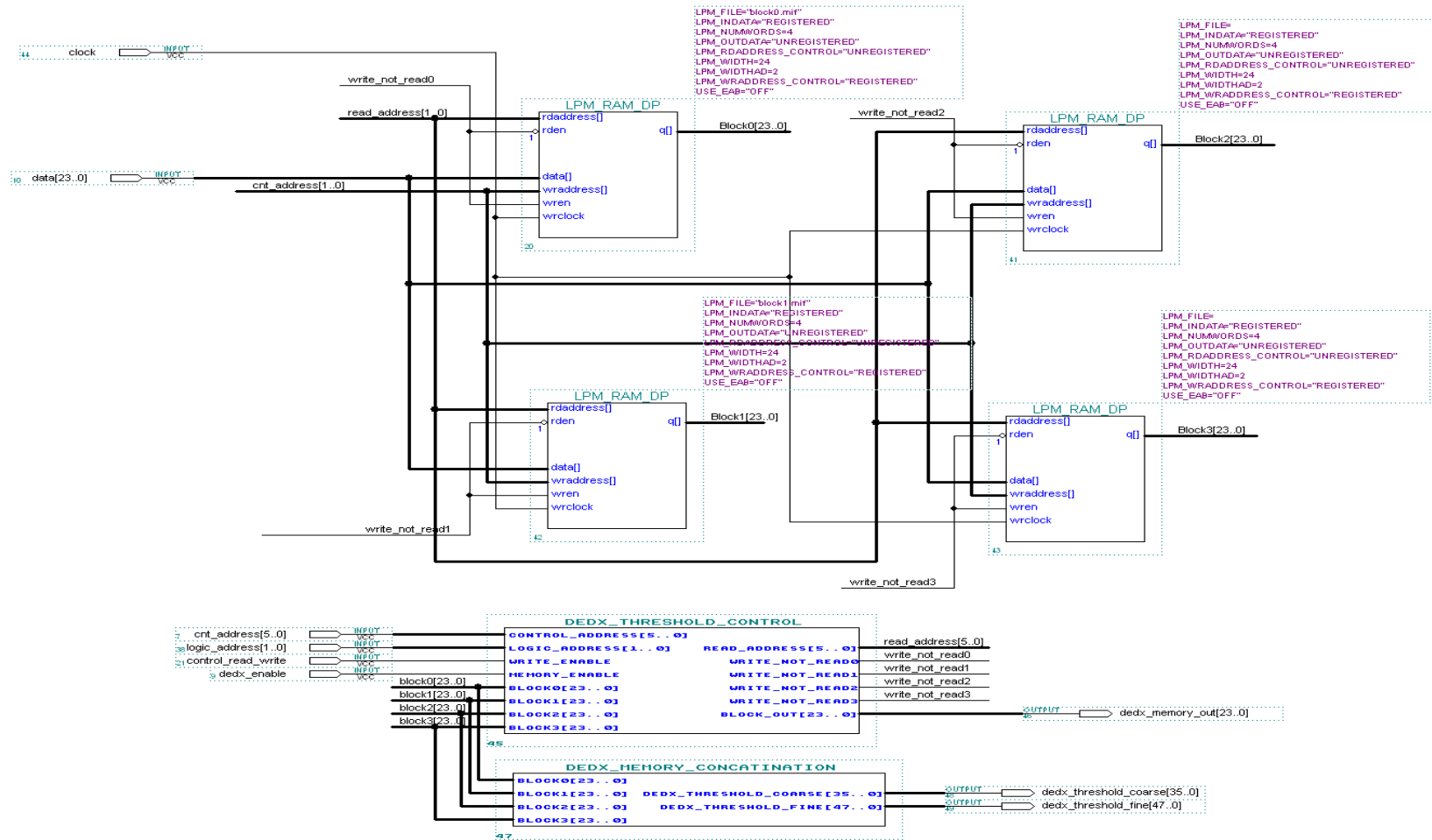
B.2: STRIP READER AND CENTROID FINDER MODULES WITH MAIN MEMORY DECODER AND MISCELLANEOUS PARAMETERS MEMORY SPACE



B.3: MISCELLANEOUS PARAMETERS MEMORY SPACE



B.4: PULSE THRESHOLD MEMORY SPACE

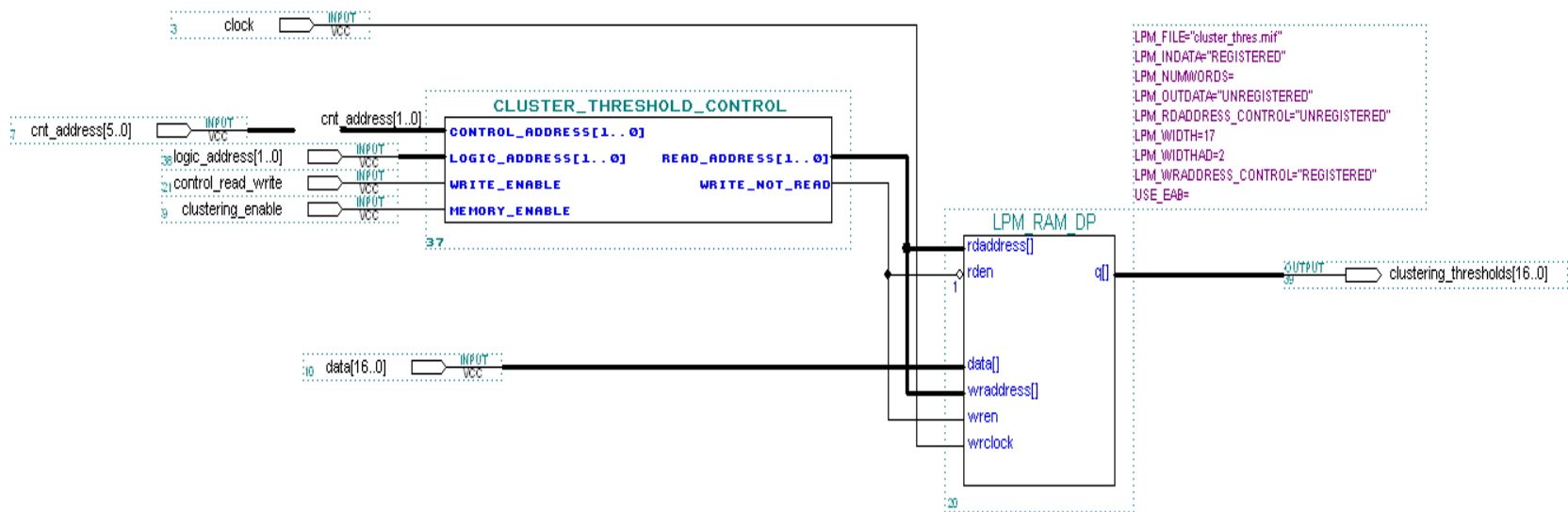


B.5: CLUSTERING THRESHOLD MEMORY SPACE

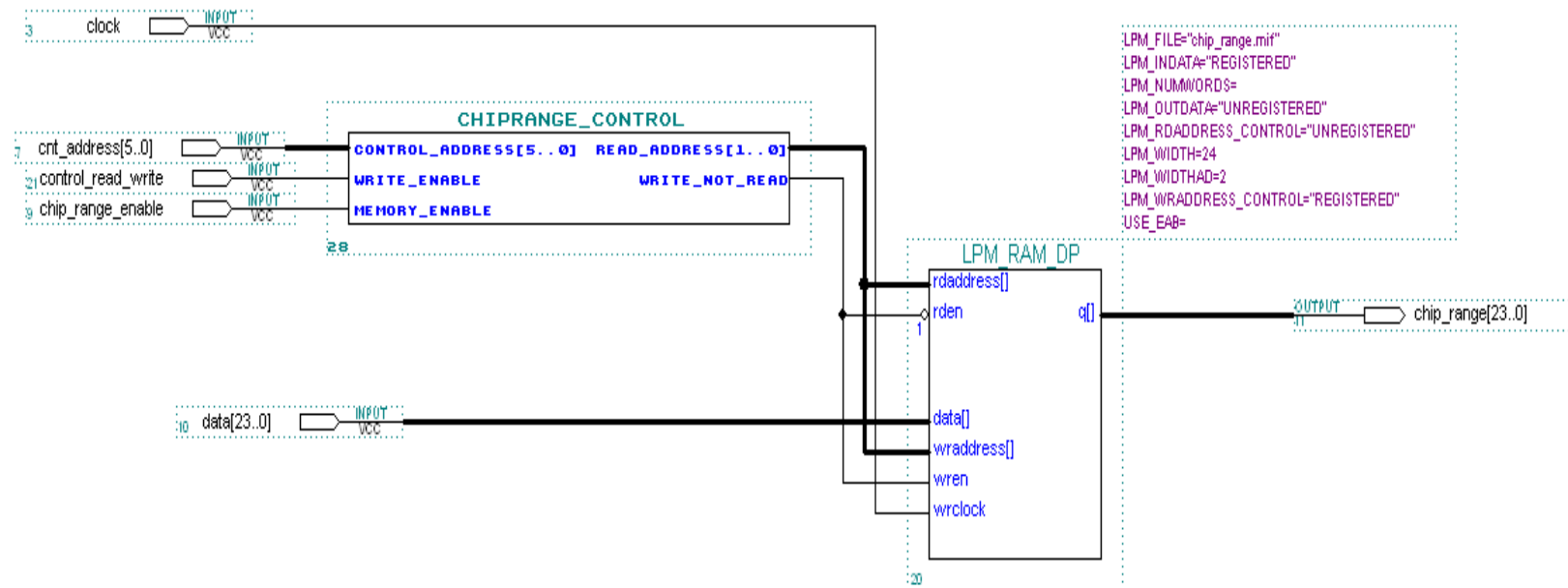
This block holds the Clustering Threshold Downloaded Parameters

Clustering Threshold Downloaded Parameter

Address	Description	Bit	Description
0	undefined	17	3/5 calculation type bit
1	axial	16-8	second threshold value
2	stereo	7-0	first threshold value
3	90 degree		



B.6: CHIP RANGE MEMORY SPACE

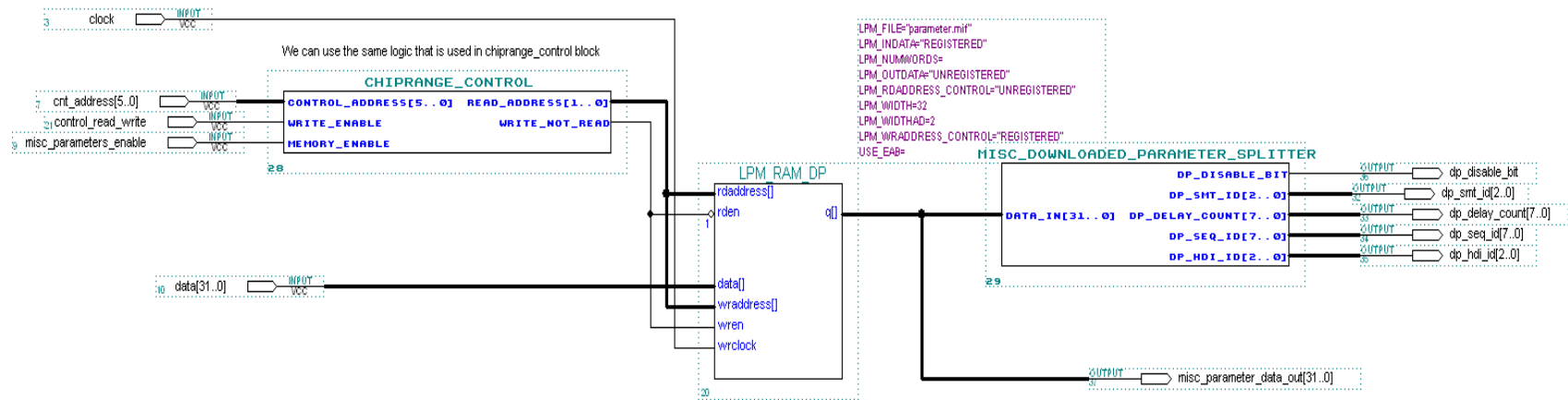


B.7: MISCELLANEOUS REGISTER MEMORY SPACE

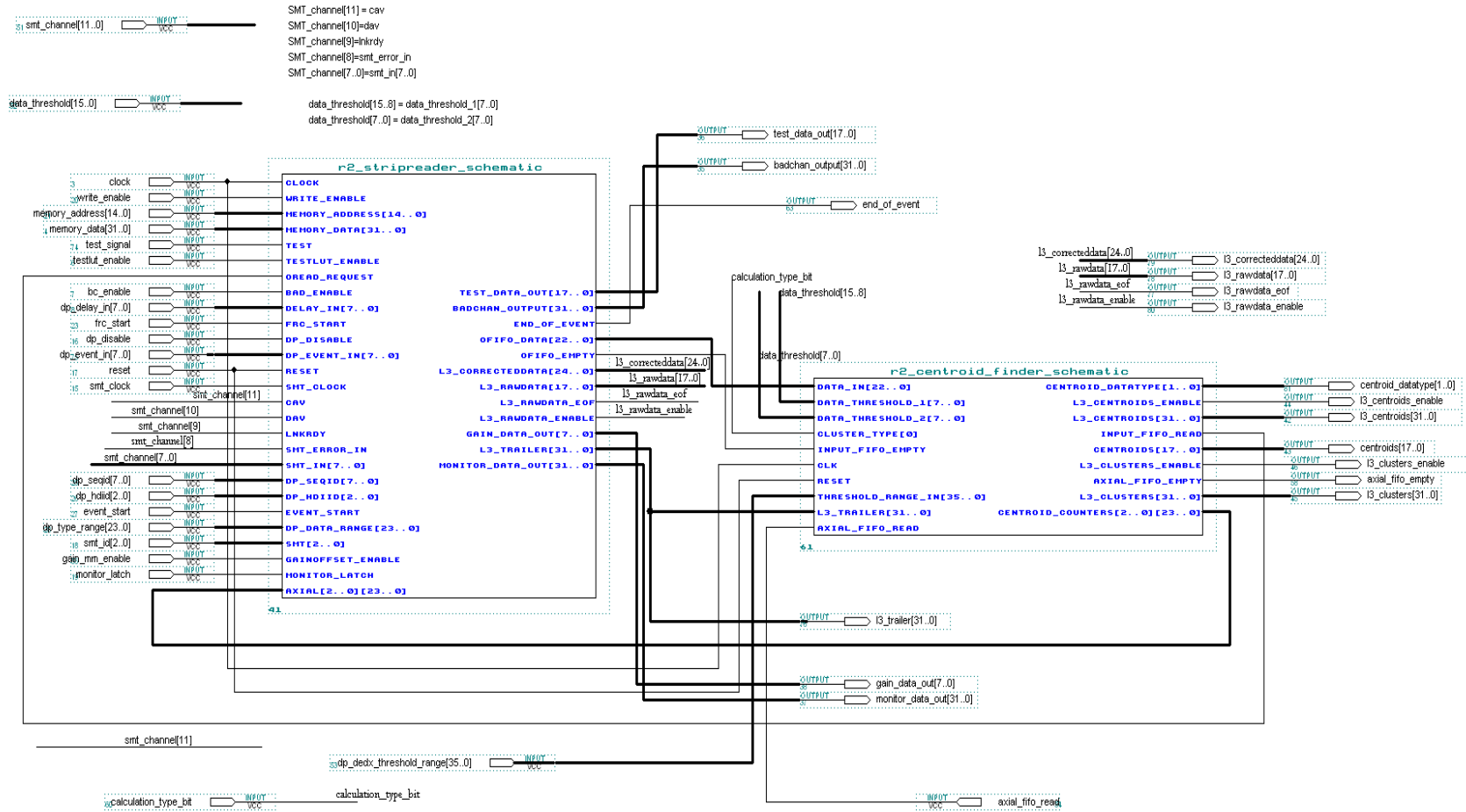
This memory block holds misc downloaded parameters in one 32 bit word

bit	description
31	empty
30	empty
29	empty
28	test bit
27	disable bit
26-24	smt id for this channel (not used)
23-16	delay count for smt data filter
15-8	seq_id
7-0	hdi_id (only last three bits used)

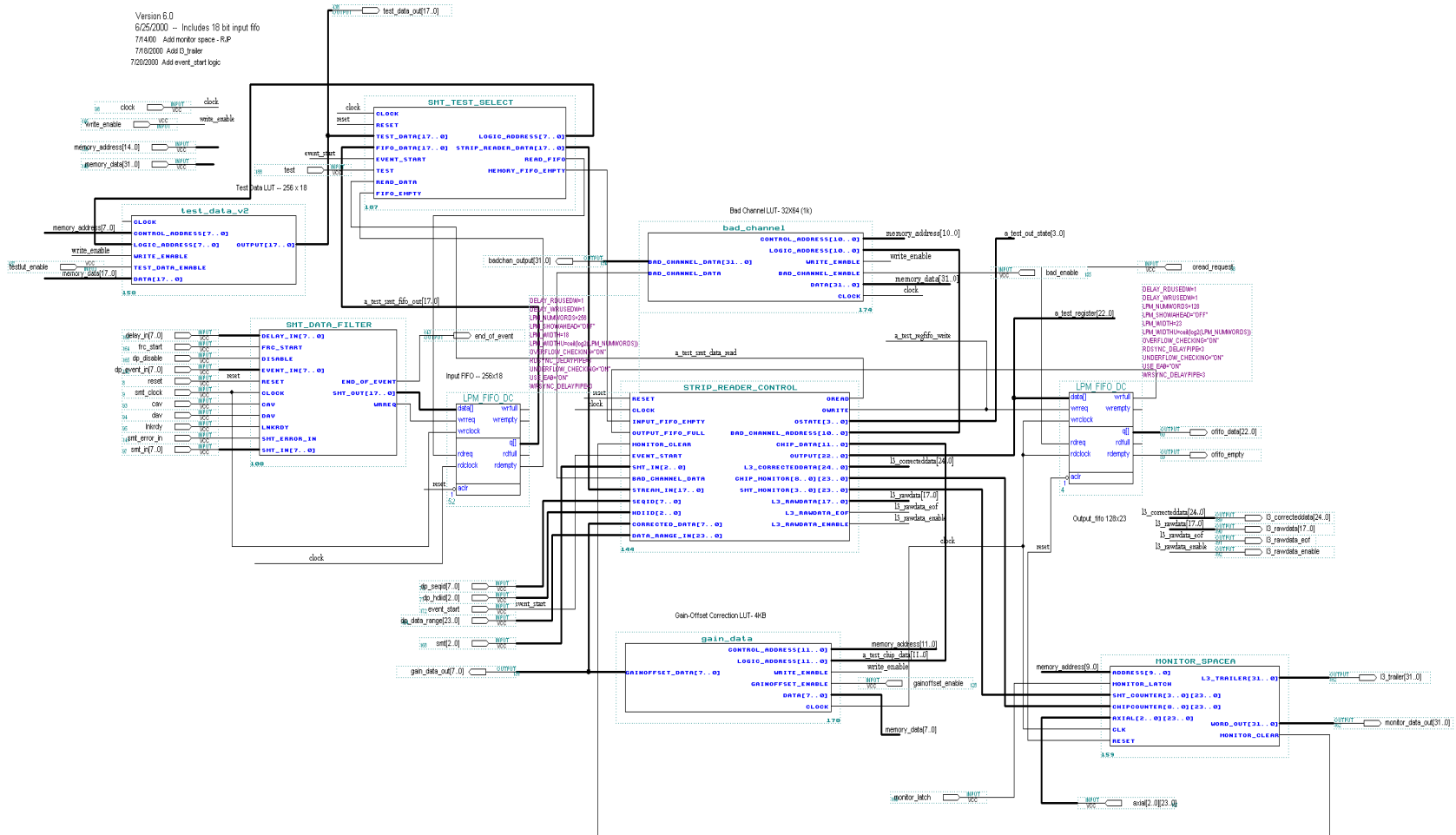
This information is always active to the SMT channel



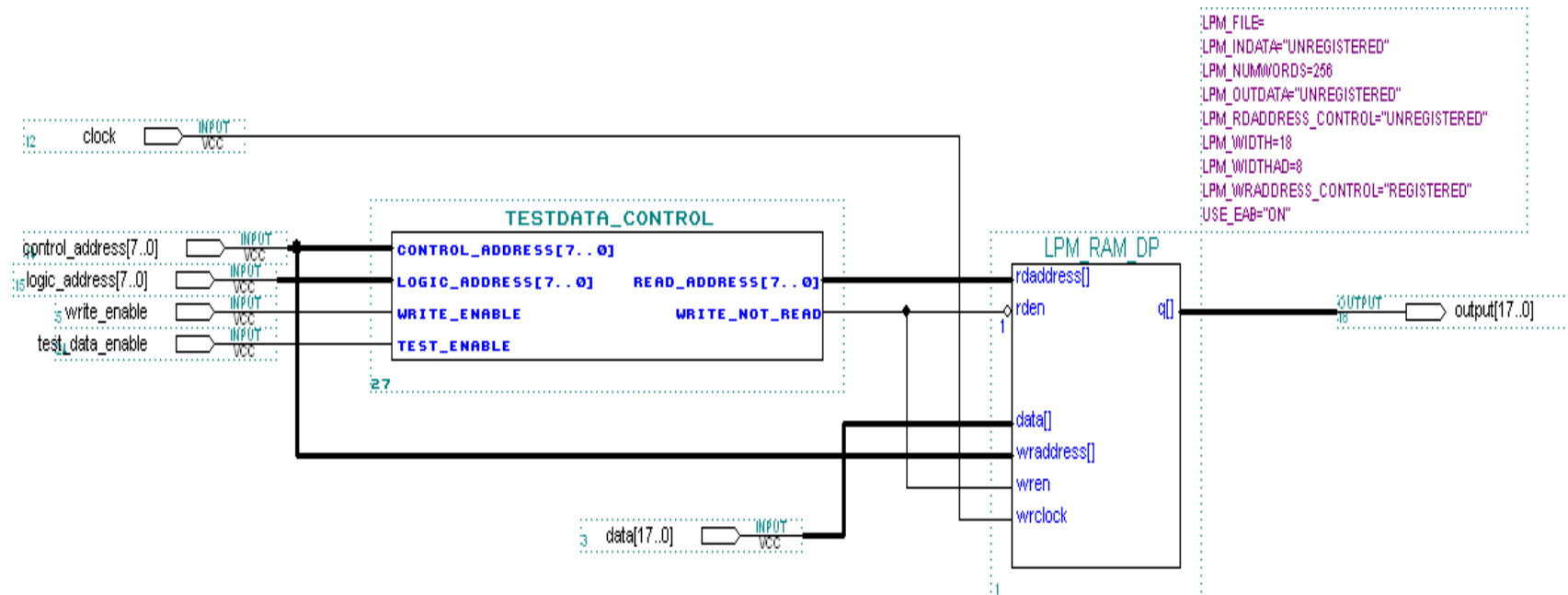
B.8: STRIP READER AND THE CENTROID FINDER MODULES



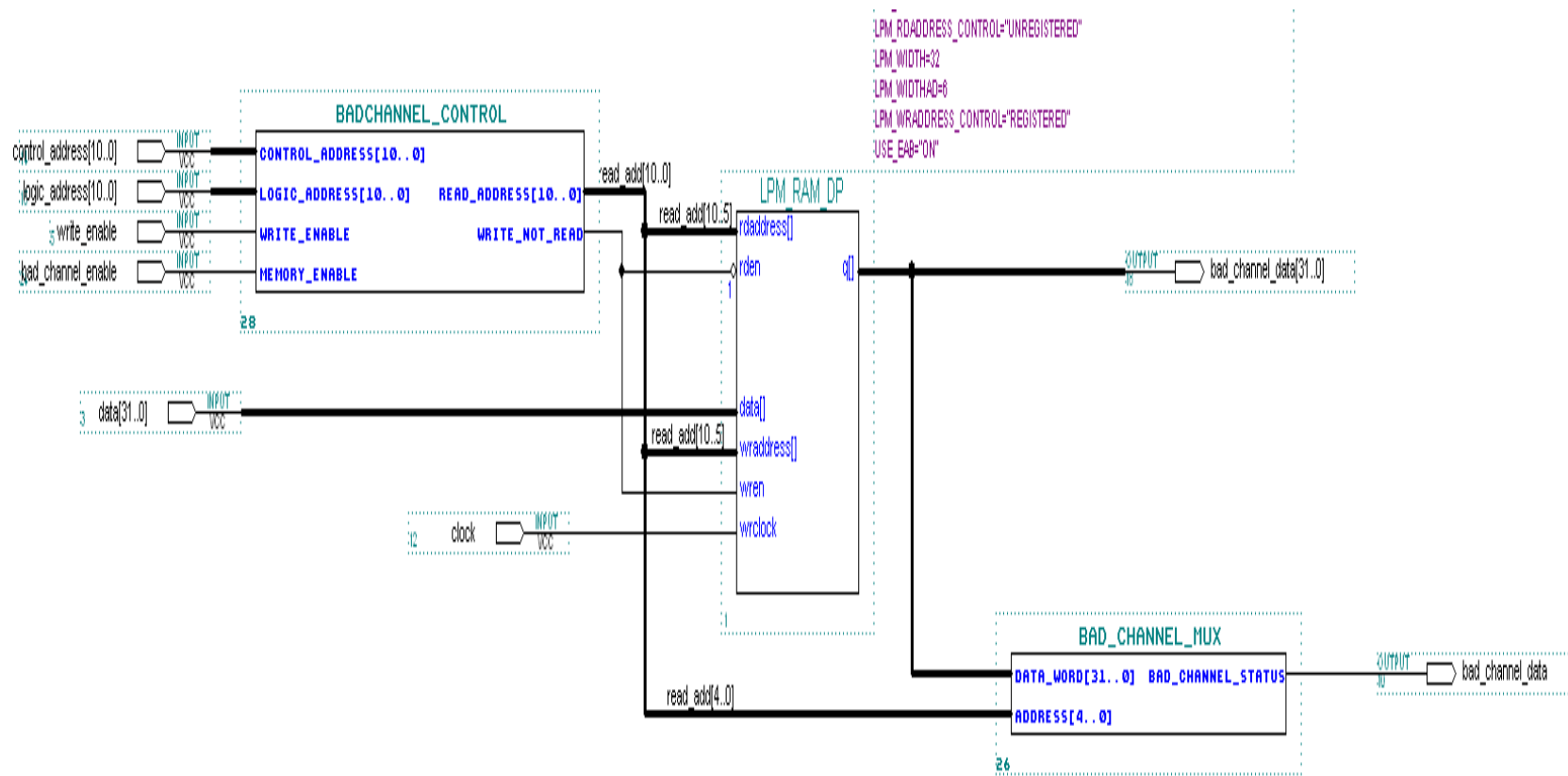
B.9: STRIP READER MODULE



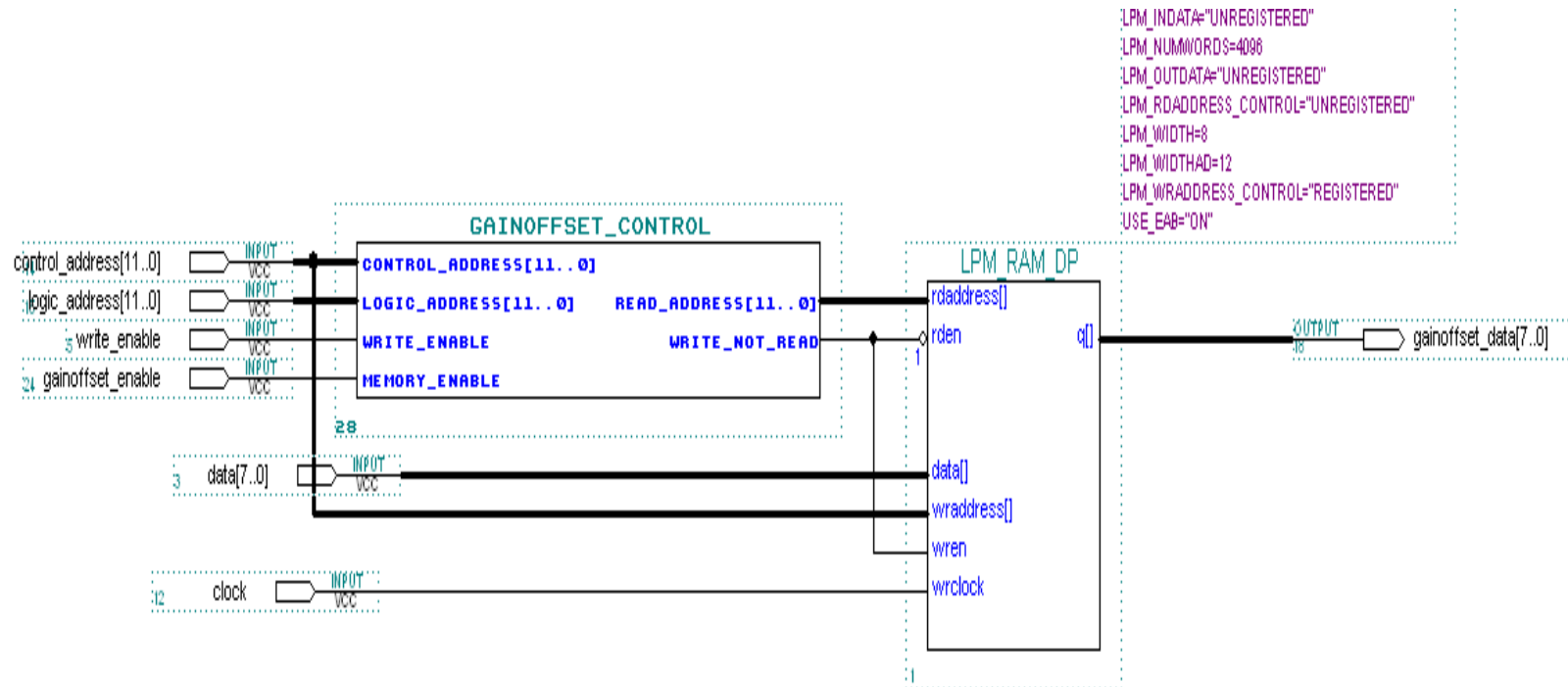
B.10: TEST MEMORY SPACE



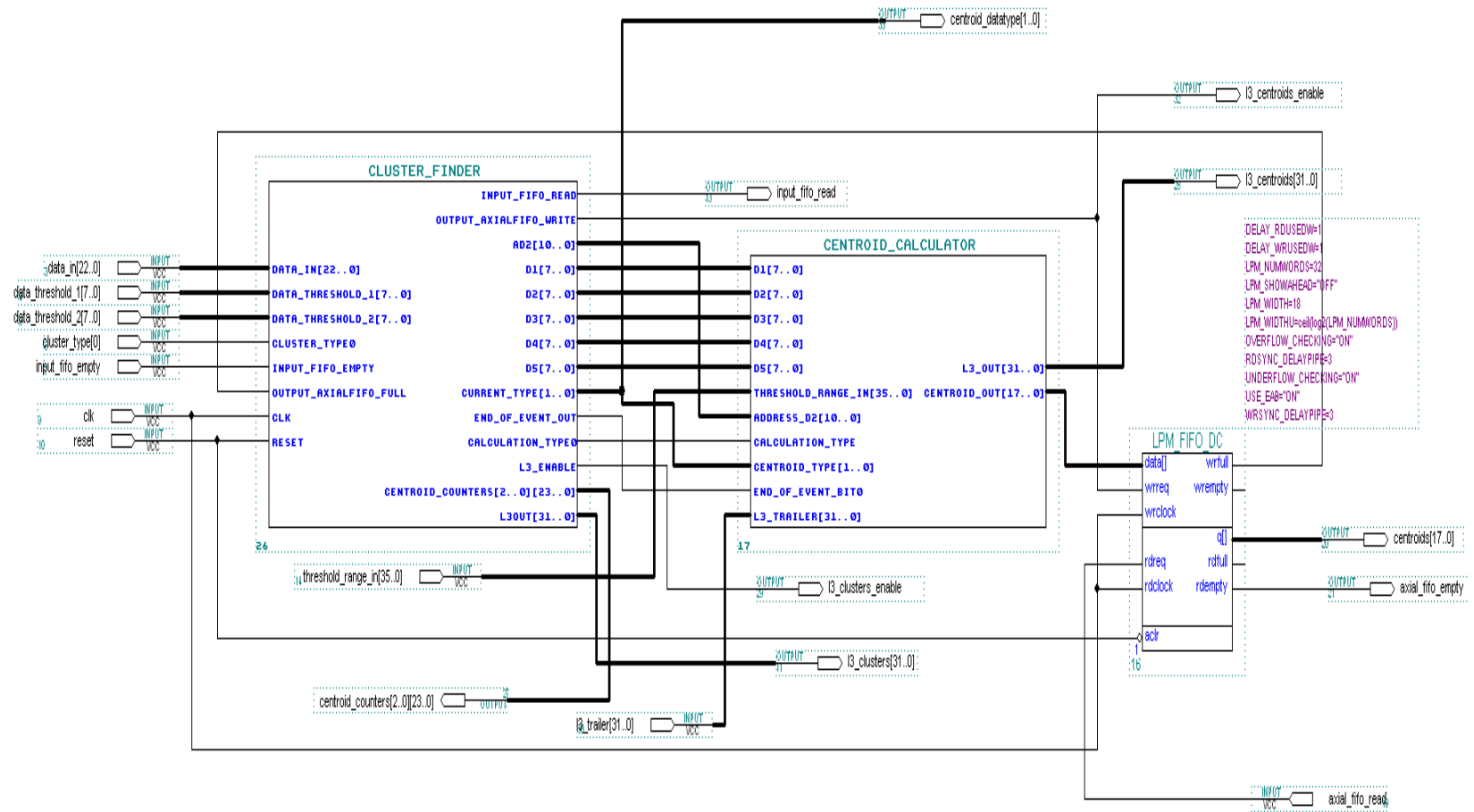
B.11: BAD CHANNEL MEMORY SPACE



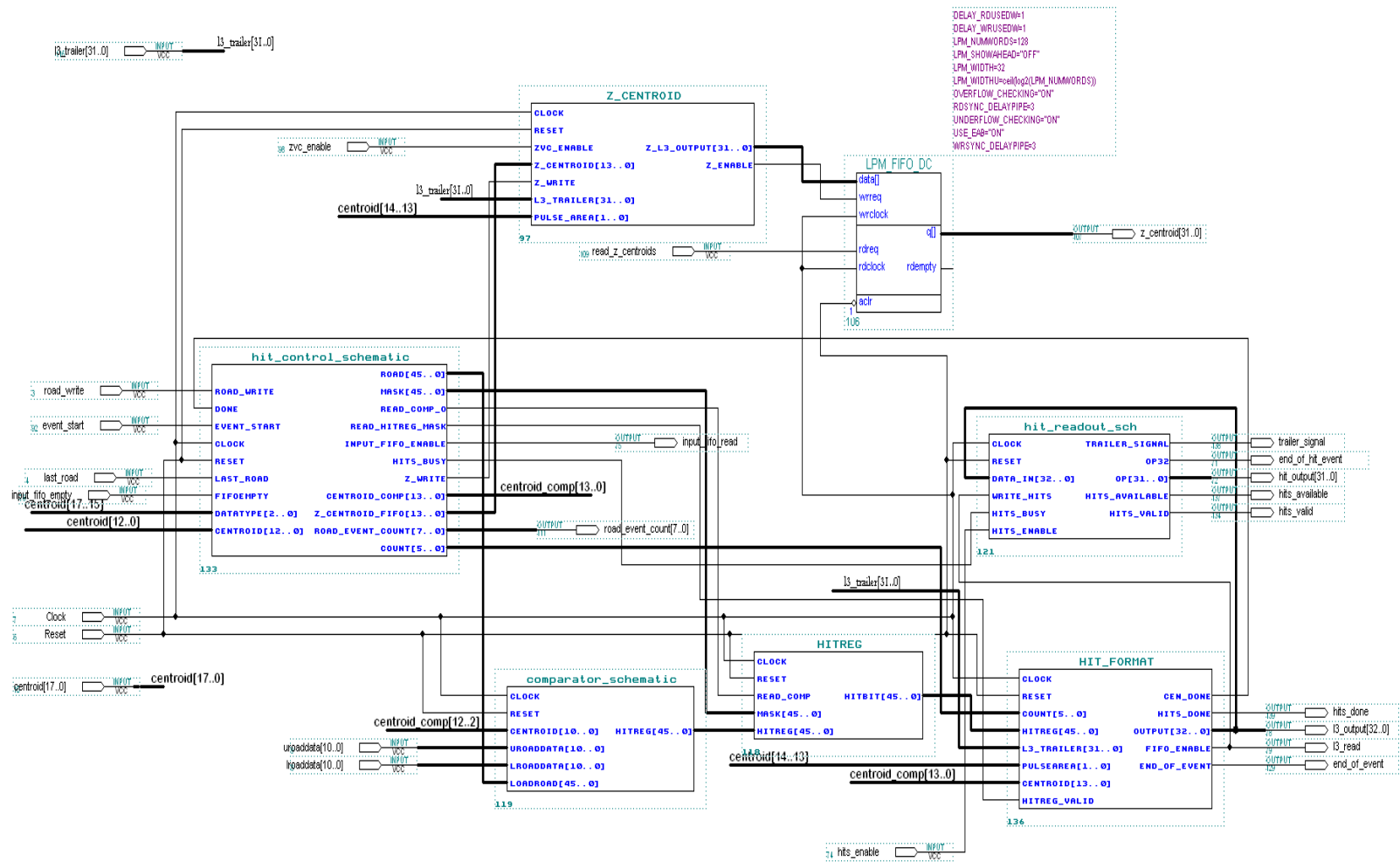
B.12: GAIN AND OFFSET MEMORY SPACE



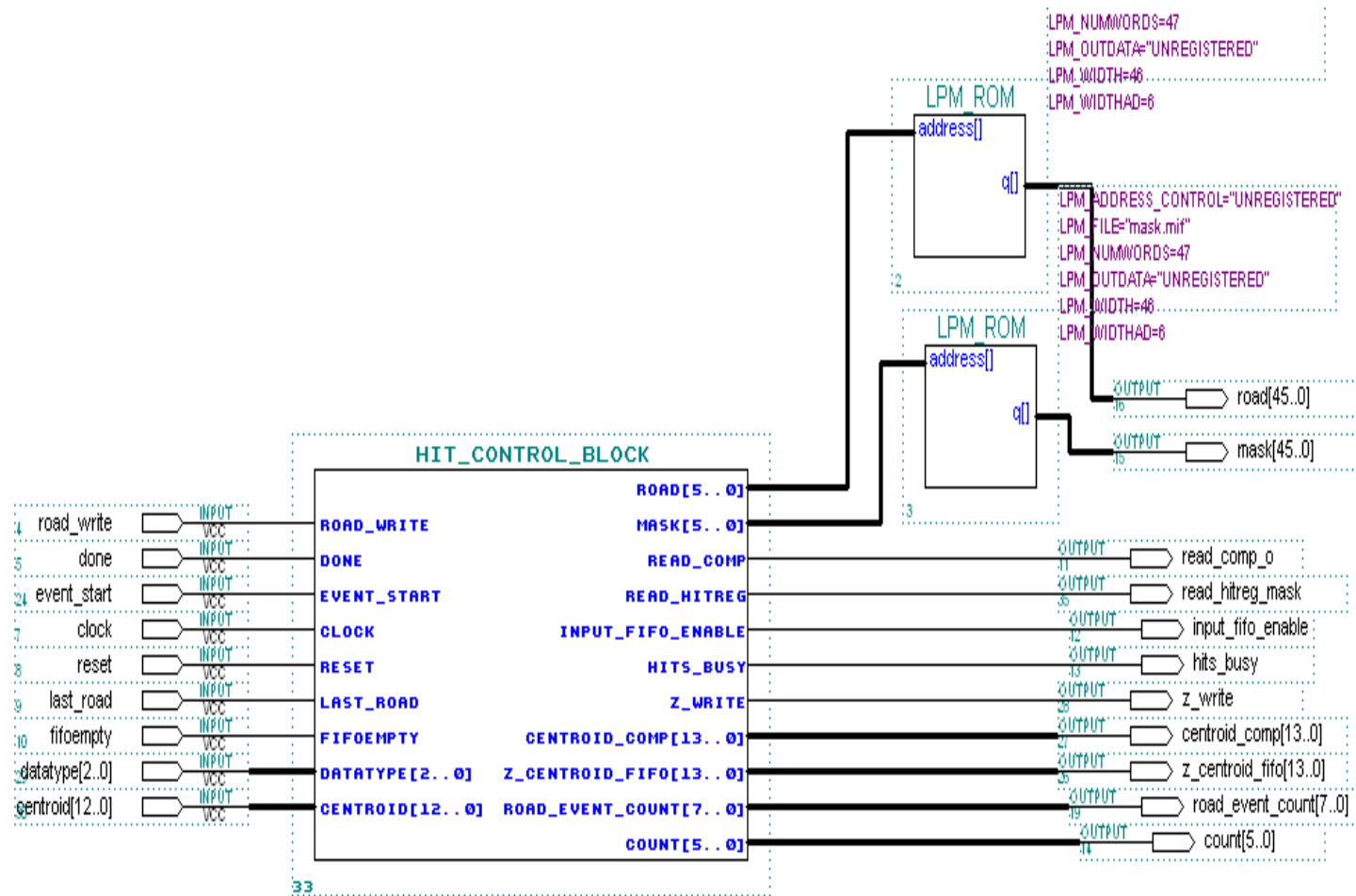
B.13: CENTROID FINDER MODULE



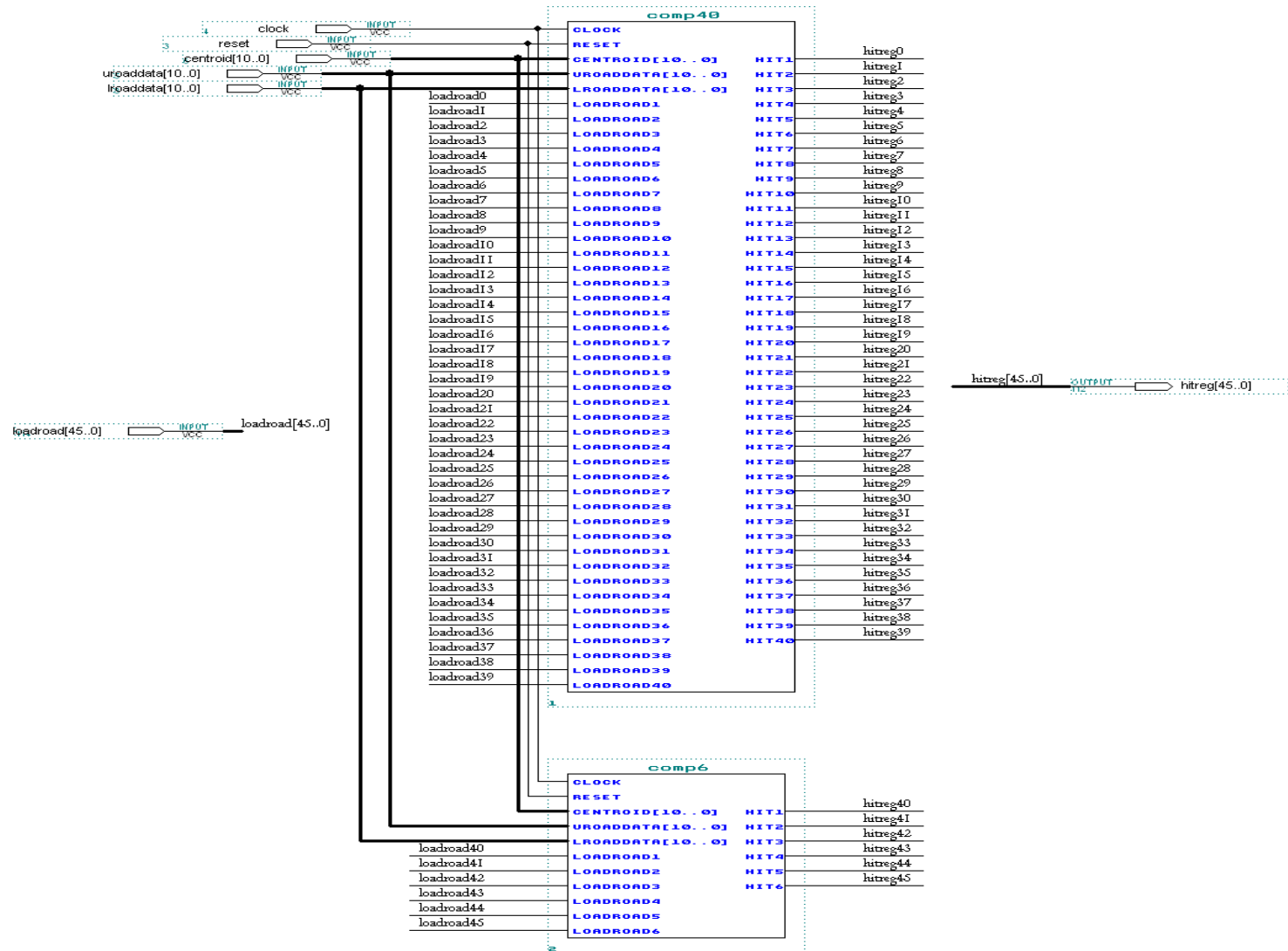
B.14: HIT FILTER MODULE



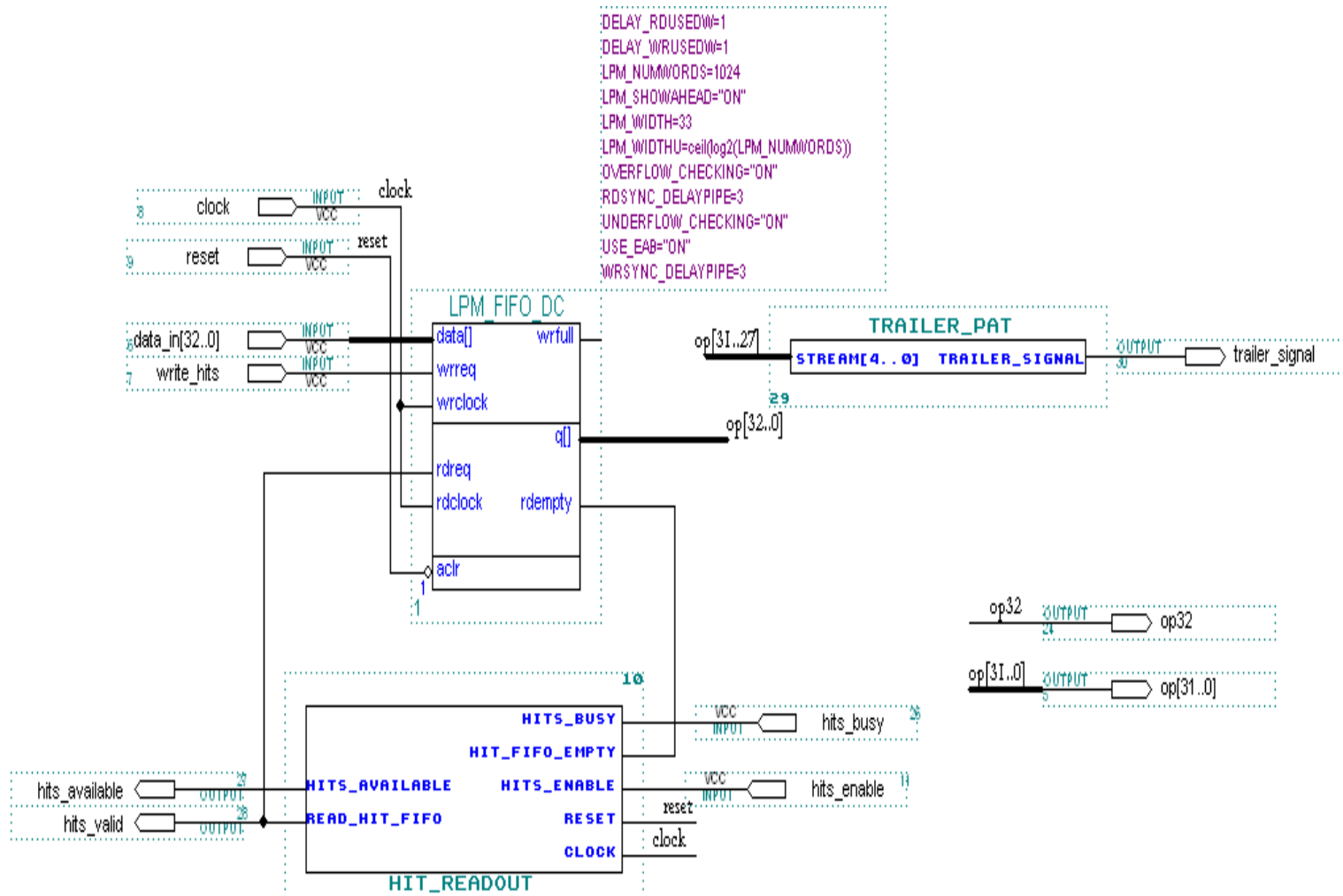
B.15: HIT FILTER CONTROL MODULE



B.16: COMPARATOR MODULE



B.17: HIT READ OUT MODULE



B.18: FUNCTIONAL SIMULATION OF THE TEST DATA STREAM

