

# Sensitivity workload for NOVELLA

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Table 1: Sensitivity Workloads for Parameter Selection

Mix No.	Type	Core-1	Core-2	Core-3	Core-4	Core-5	Core-6	Core-7	Core-8
mix1	LA	gromacs	hmmer	GemsFDTD	wrf	bzip2	wrf	GemsFDTD	GemsFDTD
mix2	LA	gromacs	wrf	sjeng	sjeng	astar	gobmk	GemsFDTD	hmmer
mix3	LA	wrf	dealII	GemsFDTD	namd	gromacs	sjeng	hmmer	sphinx3
mix4	LA	GemsFDTD	hmmer	astar	sphinx3	bzip2	dealII	astar	gromacs
mix5	LH	gamess	gamess	omnetpp	gamess	gamess	soplex	gamess	soplex
mix6	LH	omnetpp	soplex	gamess	gamess	gamess	omnetpp	soplex	soplex
mix7	LH	gamess	soplex	omnetpp	gamess	omnetpp	soplex	gamess	omnetpp
mix8	LH	gamess	soplex	omnetpp	soplex	omnetpp	gamess	gamess	omnetpp
mix9	LH	gamess	gamess	omnetpp	soplex	omnetpp	omnetpp	gamess	omnetpp
mix10	LH	soplex	omnetpp	soplex	omnetpp	gamess	soplex	soplex	soplex
mix11	MH	mcf	leslie3d	bwaves	lbm	lbm	libquantum	lbm	bwaves
mix12	MH	mcf	leslie3d	libquantum	lbm	bwaves	libquantum	lbm	bwaves
mix13	MH	lbm	libquantum	milc	mcf	bwaves	zeusmp	leslie3d	libquantum
mix14	MH	mcf	zeusmp	lbm	libquantum	lbm	milc	bwaves	libquantum
mix15	MH	libquantum	mcf	leslie3d	lbm	bwaves	mcf	zeusmp	libquantum
mix16	MH	lbm	mcf	milc	zeusmp	bwaves	libquantum	leslie3d	bwaves
mix17	MH	libquantum	mcf	libquantum	bwaves	bwaves	zeusmp	leslie3d	milc
mix18	MH	bwaves	libquantum	leslie3d	milc	lbm	mcf	lbm	zeusmp
mix19	LA+LH	sjeng	dealII	namd	wrf	omnetpp	soplex	soplex	gamess
mix20	LA+LH	hmmer	wrf	hmmer	gobmk	soplex	gamess	gamess	omnetpp
mix21	LA+LH	gobmk	namd	bzip2	astar	dealII	dealII	gamess	omnetpp
mix22	LA+LH	namd	wrf	wrf	dealII	sjeng	gromacs	GemsFDTD	gamess
mix23	LA+MH	wrf	libquantum	zeusmp	leslie3d	bwaves	mcf	leslie3d	milc
mix24	LA+MH	dealII	gromacs	hmmer	sjeng	gobmk	namd	astar	libquantum
mix25	LH+MH	omnetpp	mcf	milc	leslie3d	libquantum	zeusmp	leslie3d	zeusmp
mix26	LH+MH	soplex	gamess	omnetpp	libquantum	bwaves	lbm	zeusmp	libquantum
mix27	LH+MH	omnetpp	gamess	omnetpp	gamess	libquantum	zeusmp	zeusmp	lbm
mix28	LH+MH	soplex	gamess	omnetpp	gamess	gamess	zeusmp	milc	milc
mix29	LH+MH	omnetpp	soplex	omnetpp	soplex	omnetpp	gamess	leslie3d	lbm
mix30	LH+MH	soplex	soplex	gamess	omnetpp	soplex	gamess	soplex	leslie3d
mix31	LA+LH+MH	zeusmp	milc	dealII	hmmer	sjeng	omnetpp	omnetpp	gamess
mix32	LA+LH+MH	bwaves	milc	hmmer	astar	hmmer	omnetpp	omnetpp	gamess

Due to space constraints, details of the sensitivity workloads couldn't be provided in the manuscript, but we show them here in Table 1. This set is randomly created, with an emphasis on representatives from L3 Heavy (LH) and Memory Heavy (MH) applications (similar to the evaluation set detailed in Table III of the manuscript). As can be seen, this set is independent from the evaluation workload set, demonstrating that the threshold parameters of our policy are meaningful beyond a specific workload set.