

	Time (s)	Instructions	Rel to Start	Rel to Prev	Improvement			
Small Midmark	4.65	29,195,756,822	1	1	No improvement (starting point)			
Medium Partial Solution	40.84	-	1	1				
Large Sandmark	114.61	-	1	1				
Small Midmark	3.22	22,035,205,957	0.692	0.692	Compiled with optimization turned on and linked against -lcii-O1			
Medium Partial Solution	28.95	-	0.709	0.709				
Large Sandmark	84.33	-	0.736	0.736				
Small Midmark	2.83	22,043,393,896	0.609	0.879	Compiled with optimization turned on and linked against -lcii-O2			
Medium Partial Solution	28.81	-	0.705	0.995				
Large Sandmark	80.19	-	0.700	0.951				
Small Midmark	2.37	12,342,279,868	0.510	0.837	Simplified bitpack_getu function. Removed assert statements, and eliminated function calls.			
Medium Partial Solution	21.88	-	0.536	0.759				
Large Sandmark	60.98	-	0.532	0.760				
Small Midmark	1.9	9,960,315,043	0.409	0.802	Eliminated multiple calls to get the first segment. The first segment is found once at the beginning rather than for every command			
Medium Partial Solution	15.94	-	0.390	0.729				
Large Sandmark	47.99	-	0.419	0.787				
Small Midmark	1.82	9,745,897,610	0.391	0.958	Reduces bit unpacking by only unpacking neccesary register codes			
Medium Partial Solution	15.4	-	0.377	0.966				
Large Sandmark	46.41	-	0.405	0.967				
Small Midmark	1.1	5,884,982,424	0.237	0.604	Moved bitpack functions into program files. Made the command functions inline			
Medium Partial Solution	9.05	-	0.222	0.588				
Large Sandmark	27.92	-	0.244	0.602				
Small Midmark	0.61	3,987,182,335	0.131	0.555	Moved getWord, setWord, getRegister, and setRegister into the files that use them and made them inline functions.			
Medium Partial Solution	4.76	-	0.117	0.526				
Large Sandmark	15.57	-	0.136	0.558				
Small Midmark	0.54	3,685,846,102	0.116	0.885	Moved getNextCommand into commands.c and made it an inline function			
Medium Partial Solution	3.81	-	0.093	0.800				
Large Sandmark	13.93	-	0.122	0.895				