COMIG eq.#	COST			
	COMIG	PREVIOUS SOTA	SPLIT-REDUC	
monomials				
3	2	2(BCR,Tin)	4	
4	4	4(BCR)	64	
binomials				
7	3	4(BCR,Tin,S-R)	4	
8	4	4(BCR,Tin,S-R)	4	
9	3	4(BCR,Tin)	8	
13	6	8(S-R,Combo*)	8	*combo of pairwise covers with S-R/BCR/Tin
17	**4**	**16(BCR,S-R,Combos*)**	**16**	***combo of pairwise covers with S-R/BCR/Tin**
27	7	8(Combo*)	16	*combo of pairwise covers and Tin
32	8	16(BCR,S-R,Combos*)	16	*combo of pairwise covers with S-R/BCR/Tin or S-R with BCR/Tin
38	8	16(BCR)	32	
44	8	4(BCR/Tin)	16	
49	16	16(BCR)	64	
58	12	16(Combo*)	64	*combo of S-R and BCR/Tin
65	11	16(BCR)	64	
73	14	16(BCR)	64	
81	12	13(Combo*)	128	*Combo of S-R and BCR (split on b1,b10 then quad the deg-8 term with 2-aux) we have 3 runs of 2-aux and 1 run of 0-aux
trinomials				
89	3	4(S-R)	4	
93	5	8(BCR,Tin,Combo*)	16	*Combo of S-R and BCR/Tin
99	9*	8(S-R)	8	*same thing with the aux's
106	10	16(S-R,Combo*)	16	*Combo of pairwise covers with S-R
114	10	64(BCR,S-R,Combo*)	64	*Combo of pariwise covers with S-R
123	18**	11(Combo*)	64	*Combo of S-R with BCR/Tin (split on b5,b6), we have 3 runs with 0-aux and 1 run with 3-aux
133	17**	8(BCR,Tin)	16	
143	7	16(S-R,Combo*)	16	*Combo of S-R with BCR/Tin
Quadrinomials				
149	2	2(Tin)	4	
152	18**	64(S-R)	64	**incomplete (preserve > 99.6% of the states), used to have a restriction on number of runs so it didn't finish to get the whole spectrum. But again same issue with the useless aux's that just add to the cost, 9-runs/1-aux, it can definitely be done with no aux's for less than 17/18 runs! Can we match the SOTA though? maybe we need some more improvements on the RL first.
162	2	2(Tin)	4	
165	2	2(Tin)	4	
168	2	2(Tin)	4	