

# THE SUBGROUP LATTICE OF $L_2(23)$

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Nr.	Structure	Order	Length	Maximal Subgroups	Minimal Overgroups
1	$L_2(23)$	6072	1	2 (24), 3 (253), 4 (253), 5 (253), 7 (276)	
2	$23 : 11$	253	24	6, 13 (23)	1
3	$D_{24}$	24	253	8, 9, 10, 14 (3)	1
4	$2^2 : S_3$	24	253	11, 14 (3), 15 (4)	1
5	$2^2 : S_3$	24	253	12, 14 (3), 16 (4)	1
6	$23$	23	24	$23$	2
7	$D_{22}$	22	276	13, 22 (11)	1
8	$12$	12	253	17, 18	3
9	$D_{12}$	12	253	16 (2), 17, 19 (3)	3
10	$D_{12}$	12	253	15 (2), 17, 20 (3)	3
11	$A_4$	12	253	20, 21 (4)	4
12	$A_4$	12	253	19, 21 (4)	5
13	$11$	11	276	$23$	2 (2), 7
14	$D_8$	8	759	20, 18, 19	3, 4, 5
15	$S_3$	6	506	21, 22 (3)	4 (2), 10
16	$S_3$	6	506	21, 22 (3)	5 (2), 9
17	$6$	6	253	21, 22	8, 9, 10
18	$4$	4	253	$22$	8, 14 (3)
19	$2^2$	4	253	$22$ (3)	9 (3), 12, 14 (3)
20	$2^2$	4	253	$22$ (3)	10 (3), 11, 14 (3)
21	$3$	3	253	$23$	11 (4), 12 (4), 15 (2), 16 (2), 17
22	$2$	2	253	$23$	7 (12), 15 (6), 16 (6), 17, 18, 19 (3), 20 (3)
23	$1$	1	1		6 (24), 13 (276), 21 (253), 22 (253)

TABLE 1. Subgroup lattice of  $L_2(23)$

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