

# Error Correction Code Words and Block Information

The following table lists the number of error correction code words that you are required to generate for each version and error correction level of QR code. These values can be used to determine how many data bytes and error correction bytes are required for a given Reed-Solomon block.

Version and EC Level	Total Number of Data Codewords for this Version and EC Level	EC Codewords Per Block	Number of Blocks in Group 1	Number of Data Codewords in Each of Group 1's Blocks	Number of Blocks in Group 2	Number of Data Codewords in Each of Group 2's Blocks	Total D Codew
1-L	19	7	1	19			(19*1) =
1-M	16	10	1	16			(16*1) =
1-Q	13	13	1	13			(13*1) =
1-H	9	17	1	9			(9*1) = 9
2-L	34	10	1	34			(34*1) =
2-M	28	16	1	28			(28*1) =
2-Q	22	22	1	22			(22*1) =
2-H	16	28	1	16			(16*1) =
3-L	55	15	1	55			(55*1) =
3-M	44	26	1	44			(44*1) =
3-Q	34	18	2	17			(17*2) =
3-H	26	22	2	13			(13*2) =
4-L	80	20	1	80			(80*1) =
4-M	64	18	2	32			(32*2) =
4-Q	48	26	2	24			(24*2) =

4-H	36	16	4	9			$(9*4) = 36$
5-L	108	26	1	108			$(108*1) = 108$
5-M	86	24	2	43			$(43*2) = 86$
5-Q	62	18	2	15	2	16	$(15*2) + (16*2) = 62$
5-H	46	22	2	11	2	12	$(11*2) + (12*2) = 46$
6-L	136	18	2	68			$(68*2) = 136$
6-M	108	16	4	27			$(27*4) = 108$
6-Q	76	24	4	19			$(19*4) = 76$
6-H	60	28	4	15			$(15*4) = 60$
7-L	156	20	2	78			$(78*2) = 156$
7-M	124	18	4	31			$(31*4) = 124$
7-Q	88	18	2	14	4	15	$(14*2) + (15*4) = 88$
7-H	66	26	4	13	1	14	$(13*4) + (14*1) = 66$
8-L	194	24	2	97			$(97*2) = 194$
8-M	154	22	2	38	2	39	$(38*2) + (39*2) = 154$
8-Q	110	22	4	18	2	19	$(18*4) + (19*2) = 110$
8-H	86	26	4	14	2	15	$(14*4) + (15*2) = 86$
9-L	232	30	2	116			$(116*2) = 232$
9-M	182	22	3	36	2	37	$(36*3) + (37*2) = 182$
9-Q	132	20	4	16	4	17	$(16*4) + (17*4) = 132$

9-H	100	24	4	12	4	13	$(12*4) + (13*4) =$
10-L	274	18	2	68	2	69	$(68*2) + (69*2) =$
10-M	216	26	4	43	1	44	$(43*4) + (44*1) =$
10-Q	154	24	6	19	2	20	$(19*6) + (20*2) =$
10-H	122	28	6	15	2	16	$(15*6) + (16*2) =$
11-L	324	20	4	81			$(81*4) =$
11-M	254	30	1	50	4	51	$(50*1) + (51*4) =$
11-Q	180	28	4	22	4	23	$(22*4) + (23*4) =$
11-H	140	24	3	12	8	13	$(12*3) + (13*8) =$
12-L	370	24	2	92	2	93	$(92*2) + (93*2) =$
12-M	290	22	6	36	2	37	$(36*6) + (37*2) =$
12-Q	206	26	4	20	6	21	$(20*4) + (21*6) =$
12-H	158	28	7	14	4	15	$(14*7) + (15*4) =$
13-L	428	26	4	107			$(107*4)$ 428
13-M	334	22	8	37	1	38	$(37*8) + (38*1) =$
13-Q	244	24	8	20	4	21	$(20*8) + (21*4) =$
13-H	180	22	12	11	4	12	$(11*12)$ $(12*4) =$

14-L	461	30	3	115	1	116	(115*3) (116*1) 461
14-M	365	24	4	40	5	41	(40*4) + (41*5) =
14-Q	261	20	11	16	5	17	(16*11) (17*5) =
14-H	197	24	11	12	5	13	(12*11) (13*5) =
15-L	523	22	5	87	1	88	(87*5) + (88*1) =
15-M	415	24	5	41	5	42	(41*5) + (42*5) =
15-Q	295	30	5	24	7	25	(24*5) + (25*7) =
15-H	223	24	11	12	7	13	(12*11) (13*7) =
16-L	589	24	5	98	1	99	(98*5) + (99*1) =
16-M	453	28	7	45	3	46	(45*7) + (46*3) =
16-Q	325	24	15	19	2	20	(19*15) (20*2) =
16-H	253	30	3	15	13	16	(15*3) + (16*13) 253
17-L	647	28	1	107	5	108	(107*1) (108*5) 647
17-M	507	28	10	46	1	47	(46*10) (47*1) =
17-Q	367	28	1	22	15	23	(22*1) + (23*15) 367
17-H	283	28	2	14	17	15	(14*2) +

							(15*17) 283
18-L	721	30	5	120	1	121	(120*5) (121*1) 721
18-M	563	26	9	43	4	44	(43*9) + (44*4) =
18-Q	397	28	17	22	1	23	(22*17) (23*1) =
18-H	313	28	2	14	19	15	(14*2) + (15*19) 313
19-L	795	28	3	113	4	114	(113*3) (114*4) 795
19-M	627	26	3	44	11	45	(44*3) + (45*11) 627
19-Q	445	26	17	21	4	22	(21*17) (22*4) =
19-H	341	26	9	13	16	14	(13*9) + (14*16) 341
20-L	861	28	3	107	5	108	(107*3) (108*5) 861
20-M	669	26	3	41	13	42	(41*3) + (42*13) 669
20-Q	485	30	15	24	5	25	(24*15) (25*5) =
20-H	385	28	15	15	10	16	(15*15) (16*10) 385
21-L	932	28	4	116	4	117	(116*4) (117*4) 932

21-M	714	26	17	42			(42*17) 714
21-Q	512	28	17	22	6	23	(22*17) (23*6) =
21-H	406	30	19	16	6	17	(16*19) (17*6) =
22-L	1006	28	2	111	7	112	(111*2) (112*7) 1006
22-M	782	28	17	46			(46*17) 782
22-Q	568	30	7	24	16	25	(24*7) + (25*16) 568
22-H	442	24	34	13			(13*34) 442
23-L	1094	30	4	121	5	122	(121*4) (122*5) 1094
23-M	860	28	4	47	14	48	(47*4) + (48*14) 860
23-Q	614	30	11	24	14	25	(24*11) (25*14) 614
23-H	464	30	16	15	14	16	(15*16) (16*14) 464
24-L	1174	30	6	117	4	118	(117*6) (118*4) 1174
24-M	914	28	6	45	14	46	(45*6) + (46*14) 914
24-Q	664	30	11	24	16	25	(24*11) (25*16)

							664
24-H	514	30	30	16	2	17	(16*30) (17*2) =
25-L	1276	26	8	106	4	107	(106*8) (107*4) 1276
25-M	1000	28	8	47	13	48	(47*8) + (48*13) 1000
25-Q	718	30	7	24	22	25	(24*7) + (25*22) 718
25-H	538	30	22	15	13	16	(15*22) (16*13) 538
26-L	1370	28	10	114	2	115	(114*10 (115*2) 1370
26-M	1062	28	19	46	4	47	(46*19) (47*4) = 1062
26-Q	754	28	28	22	6	23	(22*28) (23*6) =
26-H	596	30	33	16	4	17	(16*33) (17*4) =
27-L	1468	30	8	122	4	123	(122*8) (123*4) 1468
27-M	1128	28	22	45	3	46	(45*22) (46*3) = 1128
27-Q	808	30	8	23	26	24	(23*8) + (24*26) 808
27-H	628	30	12	15	28	16	(15*12) (16*28) 628

28-L	1531	30	3	117	10	118	(117*3) (118*10 1531
28-M	1193	28	3	45	23	46	(45*3) + (46*23) 1193
28-Q	871	30	4	24	31	25	(24*4) + (25*31) 871
28-H	661	30	11	15	31	16	(15*11) (16*31) 661
29-L	1631	30	7	116	7	117	(116*7) (117*7) 1631
29-M	1267	28	21	45	7	46	(45*21) (46*7) = 1267
29-Q	911	30	1	23	37	24	(23*1) + (24*37) 911
29-H	701	30	19	15	26	16	(15*19) (16*26) 701
30-L	1735	30	5	115	10	116	(115*5) (116*10 1735
30-M	1373	28	19	47	10	48	(47*19) (48*10) 1373
30-Q	985	30	15	24	25	25	(24*15) (25*25) 985
30-H	745	30	23	15	25	16	(15*23) (16*25) 745
31-L	1843	30	13	115	3	116	(115*13



							(116*3) 1843
31-M	1455	28	2	46	29	47	(46*2) + (47*29) 1455
31-Q	1033	30	42	24	1	25	(24*42) (25*1) = 1033
31-H	793	30	23	15	28	16	(15*23) (16*28) 793
32-L	1955	30	17	115			(115*17 1955
32-M	1541	28	10	46	23	47	(46*10) (47*23) 1541
32-Q	1115	30	10	24	35	25	(24*10) (25*35) 1115
32-H	845	30	19	15	35	16	(15*19) (16*35) 845
33-L	2071	30	17	115	1	116	(115*17 (116*1) 2071
33-M	1631	28	14	46	21	47	(46*14) (47*21) 1631
33-Q	1171	30	29	24	19	25	(24*29) (25*19) 1171
33-H	901	30	11	15	46	16	(15*11) (16*46) 901
34-L	2191	30	13	115	6	116	(115*13 (116*6) 2191

34-M	1725	28	14	46	23	47	(46*14) (47*23) 1725
34-Q	1231	30	44	24	7	25	(24*44) (25*7) = 1231
34-H	961	30	59	16	1	17	(16*59) (17*1) =
35-L	2306	30	12	121	7	122	(121*12 (122*7) 2306
35-M	1812	28	12	47	26	48	(47*12) (48*26) 1812
35-Q	1286	30	39	24	14	25	(24*39) (25*14) 1286
35-H	986	30	22	15	41	16	(15*22) (16*41) 986
36-L	2434	30	6	121	14	122	(121*6) (122*14 2434
36-M	1914	28	6	47	34	48	(47*6) + (48*34) 1914
36-Q	1354	30	46	24	10	25	(24*46) (25*10) 1354
36-H	1054	30	2	15	64	16	(15*2) + (16*64) 1054
37-L	2566	30	17	122	4	123	(122*17 (123*4) 2566
37-M	1992	28	29	46	14	47	(46*29) (47*14)

							1992
37-Q	1426	30	49	24	10	25	(24*49) (25*10) 1426
37-H	1096	30	24	15	46	16	(15*24) (16*46) 1096
38-L	2702	30	4	122	18	123	(122*4) (123*18) 2702
38-M	2102	28	13	46	32	47	(46*13) (47*32) 2102
38-Q	1502	30	48	24	14	25	(24*48) (25*14) 1502
38-H	1142	30	42	15	32	16	(15*42) (16*32) 1142
39-L	2812	30	20	117	4	118	(117*20) (118*4) 2812
39-M	2216	28	40	47	7	48	(47*40) (48*7) = 2216
39-Q	1582	30	43	24	22	25	(24*43) (25*22) 1582
39-H	1222	30	10	15	67	16	(15*10) (16*67) 1222
40-L	2956	30	19	118	6	119	(118*19) (119*6) 2956
40-M	2334	28	18	47	31	48	(47*18) (48*31) 2334

40-Q	1666	30	34	24	34	25	(24*34) (25*34) 1666
40-H	1276	30	20	15	61	16	(15*20) (16*61) 1276



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