

Code 39 MOD43 Check Character Calculation Examples

Perform the following to calculate the optional modulus 43 check character manually:

1. Using the table below, obtain the number value of each data character.
2. Add all of these values together.
3. Divide the total by 43 and obtain the remainder.
4. The check character is the value of the remainder.

Code 39 Character Values:

Character	Value	Character	Value
0	0	M	22
I	1	N	23
2	2	O	24
3	3	P	25
4	4	Q	26
5	5	R	27
6	6	S	28
7	7	T	29
8	8	U	30
9	9	V	31
A	10	W	32
B	11	X	33
C	12	Y	34
D	13	Z	35
E	14	-	36
F	15	.	37
G	16	space	38
H	17	\$	39
I	18	/	40
J	19	+	41
K	20	%	42
L	21		43

The Extended Code39 ASCII Character Set

Note: the space character cannot be represented in a font at the ASCII location for that character. To get around this problem in the Code 39 fonts, we moved the symbol representing the space character to the "≡" character. In our extended Code 39 fonts, we moved it to the "≡".

ASCII	Code 39	ASCII	Code 39	ASCII	Code 39	ASCII	Code 39	ASCII	Code 39
A	A	a	†A	0	0	ESC (Escape)	%A	SH (Start of Heading)	\$A
B	B	b	‡B	1	1	FS (File Separator)	%B	SB (Start of Text)	\$B
C	C	c	+C	2	2	GS (Group Separator)	%C	SC (End of Text)	\$C
D	D	d	+D	3	3	RS (Record Separator)	%D	SD (End of Transmission)	\$D
E	E	e	+E	4	4	US (Unit Separator)	%E	SE (Equity)	\$E
F	F	f	+F	5	5	AK (Acknowledge)	%F	SF (Bell-Audible of Attention Signal)	\$F
G	G	g	+G	6	6	BL (Bell-Audible of Attention Signal)	%G	SG (Space)	\$G
H	H	h	+H	7	7	BS (Backspace)	%H	SH (Horizontal Tabulation)	\$H
I	I	i	+I	8	8	HT (Horizontal Tabulation)	%I	SI (Shift Out)	\$I
J	J	j	+J	9	9	ET (End of Text)	%J	SJ (Shift In)	\$J
K	K	k	+K	1	1	LF (Line Feed)	%K	SK (Vertical Tabulation)	\$K
L	L	l	+L	“	“	VT (Vertical Tabulation)	%L	FF (Form Feed)	\$L
M	M	m	+M	#	#	FF (Form Feed)	%M	SM (Carriage Return)	\$M
N	N	n	+N	\$	\$	CR (Carriage Return)	%N	SN (Shift In)	\$N
O	O	o	+O	%	%	SO (Shift Out)	%O	SO (Shift In)	\$O
P	P	p	+P	‐	‐	SI (Shift In)	%P	DL (Data Link Escape)	\$P
Q	Q	q	+Q	{	{	DL (Data Link Escape)	%Q	D1 (Device Control 1 XON)	\$Q
R	R	r	+R	((D1 (Device Control 1 XON)	%R	D2 (Device Control 2)	\$R
S	S	s	+S))	D2 (Device Control 2)	%S	D3 (Device Control 3-XOFF)	\$S
T	T	t	+T	*	*	D3 (Device Control 3-XOFF)	%T	D4 (Device Control 4)	\$T
U	U	u	+U	‐	‐	D4 (Device Control 4)	%U	NK (Negative Acknowledge)	\$U
V	V	v	+V	‐	‐	NK (Negative Acknowledge)	%V	SY (Synchronous Idle)	\$V
W	W	w	+W	‐	‐	SY (Synchronous Idle)	%W	EB (End of Block)	\$W
X	X	x	+X	‐	‐	EB (End of Block)	%X	CN (Cancel)	\$X
Y	Y	y	+Y	/	/	CN (Cancel)	%Y	SY (End of Medium)	\$Y
Z	Z	z	+Z	:	:	SY (End of Medium)	%Z	SB (Substitute)	\$Z
						SB (Substitute)			
						SP (= or - in our fonts)			