UCC/EAN-128 BAR CODE ELEMENT DETAILS

Extension Digit

Effective January of 2001, Packaging Type will be replaced by Extension Digit. The extension digit has no defined logic and is available to member companies to increase the capacity of the Serial number. As an extension digit, this number can be anything from 0-9 depending on the preference of the supplier.

Suppliers who previously used a "1" or a "3" for packaging type can continue to use that number for the Extension Digit

Modulo 10 Calculation

1. Sum all the digits in the odd positions.
2. Multiple the sum by (3).
3. Sum all the digits in the even positions.
4. Add the sum of the even positions to three times the sum of the odd positions.
5. The check digit is the number which, when added to the overall sum, yields the next multiple of 10.

Modulo 103 Calculation

1. Sum the products of each character times its weighting factor.
2. Divide the sum by 103. The remainder is the check character

Weighting factor is determined by the following:

Code 128 Character	Weight
Start Character and FNC1	1
Data	2....n

Character Values for Code 128 in Code C Format

Value	Code C	Value	Code C	Value	Code C
0	00	36	36	68	68
1	01	37	37	69	69
2	02	38	38	70	70
3	03	39	39	71	71
4	04	40	40	72	72
5	05	41	41	73	73
6	06	42	42	74	74
7	07	43	43	75	75
8	08	44	44	76	76
9	09	45	45	77	77
10	10	46	46	78	78
11	11	47	47	79	79
12	12	48	48	80	80
13	13	49	49	81	81
14	14	50	50	82	82
15	15	51	51	83	83
16	16	52	52	84	84
17	17	53	53	85	85
18	18	54	54	86	86
19	19	55	55	87	87
20	20	56	56	88	88
23	23	57	57	89	89
24	24	58	58	90	90
25	25	59	59	91	91
26	26	60	60	92	92
27	27	61	61	93	93
28	28	62	62	94	94
29	29	63	63	95	95
30	30	64	64	96	96
31	31	65	65	97	97
32	32	66	66	98	98
33	33	67	67	99	99
34	34			102	FNC 1
35	35			105	START (CODE C)