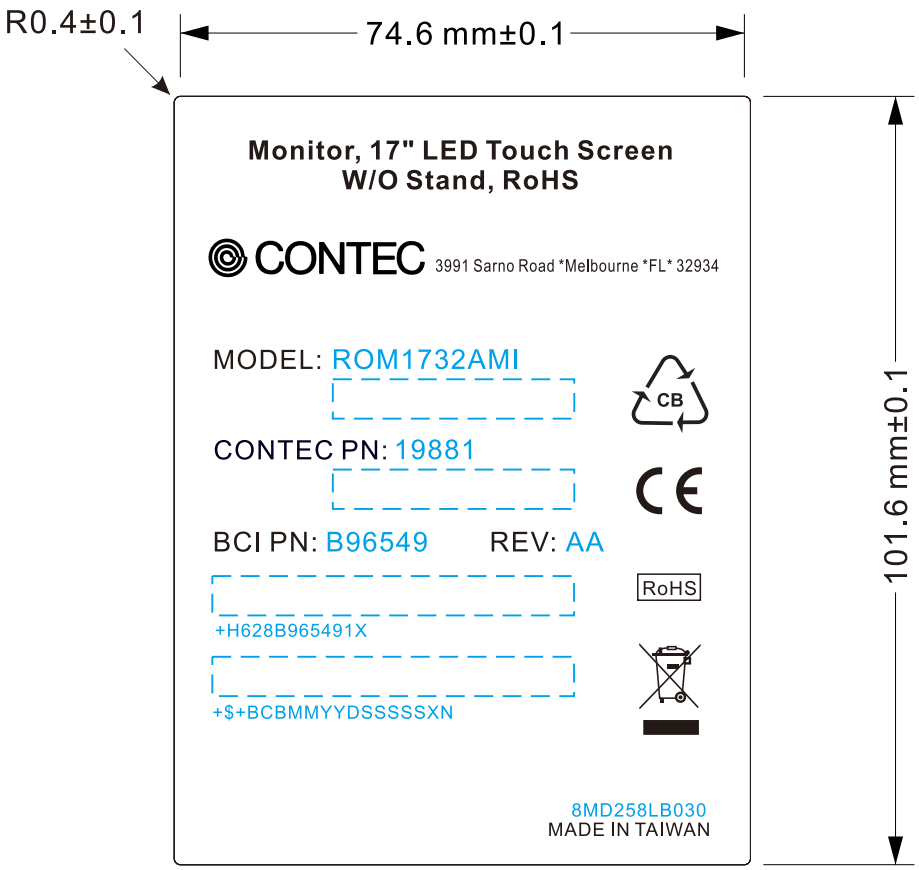
REV.	DATE	DESCRIPTION	BY	APVD
0	20250512	1. 因關稅修改Made in Taiwan, China的則移除, China 2.料號更新	killy	



Note:
1.Use 3MDL4XLB380 Blank label.
2.Use Ricoh #B110A ribbon.
3. Barcode encoding: Code 128
4.Product serial number shall be formatted as BCBmmyyDssssss. BCB is the product ID; mmyy is the month and year of manufacture; D is the location code (D = DIVA); and sssss is the 5 digit serial number.
5.Primary UPN code is made up of the following elements: BCI corporate code: +H628, BCI part number: B96549, Packaging level: 1, Modulo 43 calculation (Modulo 43 calculation from Primary UPN code becomes the Linker Character for the Secondary UPN code).
Secondary UPN code is made up of the following elements: Preamble: +$+, Serial number: BCBmmyyDssssss, Linker Character from Primary UPN code, Modulo 43 calculation.

SALES					
	THIRD ANGLE PROJECTION	UNITS:mm	SCALE : 1 / 1	SHEET: 1 / 1	MODEL NO.: DTx#19881
		MATERIAL: See notes		TREATMENT: See notes	
PE	PCD	DSGD by killy	2025/5/13	PART NAME: CARTON LABEL	
		APVD by		PART NO.: 8MD258LB030	VER. 0
		APVD No.:	FILE NAME: DTx#19881.cdr	DIVA Laboratories,Ltd.	

Modulo 43 – Check Digit Calculations

for use with Health Industry Barcode (HIBC) and for general use.
(Excerpt of ANS HIBC 2.2, 2006)

Check Digit Character Calculations

Each of the HIBC LIC Standard data structures employs a Modulus 43 Check Digit for additional data security. The Check Digit is the Modulus 43 sum of all the character values in a given message, and is printed as the last character in a given message, preceding the Stop Character.
Leading and trailing asterisk "*" characters in the human-readable interpretation are not used in calculating the Check Digit and are only represented in the human-readable interpretation. Check Digit generation is illustrated by the following example with the table below:

Supplier Labelling Data Structure: + A 1 2 3 B J C 5 D 6 E 7 1
Sum of values: 41+10+1+2+3+11+19+12+5+13+6+14+7+1 = 145

Divide 145 by 43. The quotient is 3 with a remainder of 16. The Check Digit is the character corresponding to the value of the remainder (see table below), which in this example is 16, or "G". The complete Supplier Labelling Data Structure, including the Check Digit, would therefore be:

A 1 2 3 B J C 5 D 6 E 7 1 G

Table of numerical value assignments for computing the HIBC LIC data format Check Digit

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

Space Character Caution

The HIBC-LIC Check/Link character is **not** part of the **data message.** As such it should not normally be stored in a database or transmitted via EDI. It should be stripped away after the check and link functions have been executed. One of the possible values of the Check/Link Character is a space character (value 38). Although not recommended, if the link character must be stored or transmitted, the space character should be stored or transmitted explicitly as ASCII decimal 32 (ASCII Hex '20'). Note that some legacy systems and or software are unable to receive and or interpret trailing spaces as part of a data message.