Multi LABELIST V5 Training Manual - Function Descriptions -Version 11

SATO CORPORATION

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1: Using the Tax Calculator Function

Let's try to calculate consumption tax, using the tax calculator function.

1. What Is the Tax Calculator Function?

The tax calculator function calculates the tax for the amount entered, and outputs "Including tax", "Net of tax", "Tax excluded", or "Tax included".

"Tax included" and "Tax excluded" indicates whether the price includes tax or not.

For example, for something priced at ¥100 which includes tax, tax is ¥7 (tax included) and the actual product price is ¥93. For something priced at ¥100 that doesn't include tax (tax excluded), it will be sold at ¥108, the product price of ¥100 and the tax of ¥8.

*This example is based on an 8% tax rate, rounding down figures less than ¥1.

2. Processing Different Types of Taxes and Tax Calculations

Types of Tax setting

Including tax: add tax excluded for the specified tax rate to the input price. Net of tax: subtract tax included for the specified tax rate from the input price. Tax excluded: the tax excluded for the specified tax rate. Tax included: the tax included for the specified tax rate.

Tax Processing

• Unit

0.1s place: processes the value in the 0.1s place.1s place: processes the value in the 1s place.10s place: processes the value in the 10s place.100s place: processes the value in the 100s place.1,000s place: processes the value in the 1,000s place.

Fraction calculation

Round down: rounds down the number in the processing place. Round up: rounds up the number in the processing place. Round off (1): rounds off the number in the processing place. Round off (2): rounds up for 6 or more in the processing place or rounds down for 5 or less.

*It is a fractional treatment of the tax amount, not a fractional treatment of the results required by the tax edit.

Specification method of tax rate

User's tax rate: Uses the tax rate set in MLMaintenance.

Fixed value: Uses the value directly entered on the Edit variable screen as the tax rate.

Variable value: Uses the specified value for the input variable as the tax rate.

Examples of consumption tax setting

Settings	for Tax Editing	Input	Тах	Value after editing Tax	Final Output
Type Fraction Tax rate	: <u>Outside</u> : <u>0.1s place, round down</u> : <u>8%</u>	19899	1591.92	1591	1591
Type Fraction Tax rate	: <u>Included</u> : <u>The second decimal place, round up</u> : <u>8%</u>	19899	1591.92	1591.92	21490.92
Type Fraction Tax rate	: <u>Inside</u> : 0.1s place, round off : <u>10%</u>	2955	268.63	269	269
Type Fraction Tax rate	: <u>Excluded</u> : <u>10s place, rounds up for 6 or more or</u> <u>rounds down for 5 or les</u> s : <u>10%</u>	2955	268.63	270	2655

3. Tax Rate Setting Method

First make settings for the user's tax rate.

Select Windows Start Menu > Multi LABELIST V5



The displayed location of "Multi LABELIST V5" may differ depending on your OS.

Enter "user" as the password.

This is displayed as black circles (\bullet) on the screen.

Select "OK". The MLMaintenance screen will be displayed.

M Password	Confirmation	?	×
Starting MLM Enter the adm	aintenance. ninistrator password.		
Password:	••••		
	ОК	Canc	el

Startup	N	Display name	Tax rate (%)	Specify when print
	•	1	0 🗘	
anguage		2	0 👙	
Default setting		3	0 🗘	
Seruare Secting		4	0 🗘	
Tax Rate		5	0 🌲	
Print History		6	0 🗘	
		7	0 🌲	
Natching Settings		8	0 🗘	
Base date		9	0 🗘	
	1	0	0 🗘	
nformation	1	1	0 🗘	
	1	2	0 🗘	
icense activation	1	3	0 🗘	
	1	4	0 🗘	
	1	5	0 🗘	
	1	6	0 🗘	
		7	0 🗘	
		8	0 🗘	

Click "Tax Rate" to display the consumption tax setting screen.

Up to 20 patterns of tax rate can be registered.

Enter the Display name and Tax rate (%) and click "OK".

M SATO Multi LABE	LIST	V5 Sta	andard [MLMaintenance]		?	×
Set up to 20 user set	ting	tax ra	tes.			
Startup		N	Display name	Tax rate (%)	Specify when p	print
ounup	۲	1	Consumption tax 8%	8 🗘		*
Language		2	Consumption tax 10%	10 🗘		
Default setting		3		0 🗘		
		4		0 🗍		
Tax Rate		5		0 🗘		
Print History		6		0 🗘		
		7		0 ‡		
Watching Settings		8		0 🗘		Ξ
Base date		9		0 ‡		
		10		0 🗘		
Information		11		0 ‡		
		12		0 🗘		
License activation		13		0 🗘		
		14		0 🗘		
		15		0 ‡		
		16		0 🗘		
		17		0 🗘		
		18		0 Ĵ		Ŧ
				OK	Can	cel

This completes the tax rate setting.

4. Settings for Tax Editing

Create a new layout in MLDesign and add a local variable. Display the local variable screen.

Select "Input" on the Variable Settings screen and set the Tax editing items on the "Edit parameter" tab as shown below.

Variable Settings	?	\times
Set the variable setting	S.	
Input Fixed Copy Join	Input variable type: Character Edit parameters Order Edit items Setting items Setting details 1 Table conversion No 2 Delete line feed No	-
Sequence number Date Calculation Condition Symbol System	3 Remove specified char No Image: Second second	
	Target character: OK Cancel Variable name: Input-1 Input-1	

Enter the Variable name and No. of digits and register the variable. Then place it on the layout screen.

The Tax editing set in variable will be reflected in print result.

5. Edit/Display Function

In this section, it is described how to make settings for the display on the print screen.

The screen is switched on the '	"Input Definitions" tab.
---------------------------------	--------------------------

D 🗁 • 🖶 🏷 • 🥙 - 🖘 = I	Layout(Layout)* - SATO Multi LABELIST V5 Trial[MLDesign]	– 0 ×
File Home Input Defini	tions	۵
DIndo - X Cut	All Position Order To To To To N Header Layout Zoom Zoom Zoom Streen	
🔀 Objects 🛛 🕂	Desig Input Definitions Table Format	Properties #
Select	Protice pres	Canvas
A Text		Basic settings
Image		Grid Grid Display grid
XX Button		Grid spacing:
Line		(pixels)
Rectangle		Background
🛆 Triangle	No. Print quantity	#FFD3D3D3 ·
Circle	1 XXXXXX 4	Image
Ŭ		Paste image File name:
		Layout: Stretch to fit screen
		Input order: 🔛 Auto Set
	Unselected Distandard (100%) 100% 🗩 🕀	
🚰 Local Variable List		
Add Edit Insert Cut Copy Pa		
Variable name Type	No. of digits Details	
Product price Input	8 Input type: Character	
Local Variable List	ve List 🗳 Local Check Table List 🚍 Local Graphic List	Canvas Set Canvas.
		Set Canvas.

Click "Product price" item to make the settings for "Edit display" on the "Basic settings" pane on the right.

ا ج - 🖑 😓 - 🕲 ا	Layout(Layout)* - SATO Multi LABELIST V5 Trial[MLDesign]	– 0 ×
File Home Input Definit	ions	۵
♥ Undo ▼	NI Position Order To To Row Header In Out Size*	
Edit	Layout Zoom	_
🔆 Objects 🛛 👎	Design Input Definitions Table Format	Properties 7
Select		Input item
A Text		Basic settings
Image		Item name: Product price
XX Button		Type: Header Target: Local variable
Line		Input item
		Item name display: Display at top of inp 🔻
Rectangle	No. Print quantity	Table display: No ···
Triangle	1 XXXXXX *	Edit display: No ····
Circle	2 2	Input check: No ····
		Input digit limit: No 🔹
		Font
		Meinyo 🔹
	Product price 8 digits	Size (pt): 9 -
Local Variable List		BIU ABC Advanced
D n o 🗙 o i	Search: Enter part of a variable name	Color settings
Add Edit Insert Cut Copy Pas		Text color: Black -
Variable name Type	No. of digits Details	Background color: #00FFFFFF •
Product price Input	8 Input type: Character	Defaults

The "Edit Display" screen opens. Enable "Display editing".

Make settings for "Tax editing", "Comma editing", "Currency editing", and "Justification editing" on the "Editing settings" block.

D Edit Display	? ×
First select whether to display editing. If editing will be displayed, set the display settings an	d editing settings.
Display <u>e</u> diting	
Display settings Edit display position Image: Display within input field Imag	Advanced
5 Leading space editing 6 Leading zero editing Calculation method: Round down Unit: Less than one yen Tax rate Consumption tax 8% 0K Cancel	.:: OK Cancel

ditir	ng type	Currency comma justif	ication editing 🔹	-		
Adv	/anced	settings	_			
	Order	Edit items	Setting items		Setting details	
۲	1	Tax editing	Yes	•	Type: Included, Calculation: [Round down, Les	
I	2	Comma editing	Single-byte	•		
I	3	Currency editing	Yes	•	Character: Zero blank: Disable	
L	4	Justification editing	Right	•		
1	5	Leading space editing	No	•		
	6	Leading zero editing	No	•		

When settings are complete, save the layout and exit MLDesign.

Open the layout created before in MLPrint and enter data in "Product price". Then the display shows the value after Editing settings.

Number of digits for the input variable

When Edit Display is used, a money symbol "¥" or comma "," is treated as one character so that you have to create an input item considering the number of digits after editing.

For example, to display the price with tax included "¥21,384" by entering the product price "19800", set the number of digits for the variable to 7 digits or more.

Layout(Layout)[Reference mode] -	ATO Multi LABELIST V5 Trial[MLPrint] - 🗇 🗙
File Home Edit View	۵
Output Destination Image: The second secon	Print Print Sequence Number Action Settings Settings
Product price ¥21,384	Base date 4 ×
1980d	Base date: 2019/12/25
🔀 Filter 🤯 Clear	D Print Preview * ×
T (All)	
No. Print quantity	
	14 44 4 D DD DI
Search: Enter a search string.	Page: 0/0
Data List Dutput Log CFrror List	
F1: Help F2: Open F3: Find Next F4: Print F5: Preview F6: Access data	F7: Access file F8: List input F9: Next page F10: Sequence n F11: Operation s F12: Exit
	Sato printer CL4NX-J 12 Driver name 0

Display position of editing results

To display the editing results not in the input field but as separate items, open the Edit Display screen on the "Input Definitions" tab in MLDesign and disable "Display within input field" in "Edit display position".

D Edit Display		Product price
First select whether to display editing. If editing will be displayed, se	et the display setting	¥21,384
Display <u>e</u> diting		
Display settings		
- Edit display position	Font	
Display within input <u>field</u>	Arial	Product price
	Size (pt):	19800 \21,384
Left Input field Input field Right Bottom	BI	

This completes "1: Using the Tax Calculator Function".

2: Creating GS1-128 Barcode

1. What Is the GS1-128 Create Function?

"GS1-128" is a CODE128 barcode comprising various management data with Application Identifiers (AI) added in a business transaction system (product, distribution, and business management, etc.).

The "GS1-128 Create Function" enables you to create GS1-128 easily by selecting Application Identifiers (AI) on the list and connecting them to variables to be printed. This function has many useful features such as "automatically writing parenthesis to Application Identifiers (AI) of description", "automatic switching to the shortest type of barcode", and "function to check the number of digits and values of input".

2. Creating Variables

First let's create data to be incorporated into barcode.

In this section, we will explain how to create GS1-128 barcode that includes "Product code", "Quality Preservation Period", "Quantity", and "Lot No.", as an example.

First create variables to be incorporated into GS1-128 in MLDesign.

🚰 Local Variable List		4
🗋 🎢 🗂 🔀 🖒 Add Edit Insert Cut Copy P	Paste Delete Batch Searc	h: Enter part of a variable name
Variable name	Type No. of dig	its Details
Roduct code	Input	14 Input type: Character
Reality Preservation Period	Input	6 Input type: Character
@ Quantity	Input	8 Input type: Character
Interpretation of the second secon	Input	3 Input type: Character

Then create GS1-128 variables incorporating the variables. Select "Symbol" on the Variable Settings screen.

Input	Symbol type: Al (appl	ication identifier)		
Сору	AI (application identi	fier)		
Join	Configuration:	•		
Sequence number	No. Al	Type Data	No. of digits	Add <u>N</u> ew
Date	* *			Add
Calculation				Delete
	Application identifie			Move Up
	AI:	Format:		
	Classification:			
	Description:			

Select the "Configuration" for GS1-128.

The "Configuration" has several types such as "Custom", which enables editing the configuration freely, and standard configurations that are used in the medical and food fields.

When you select "Custom", go to "Custom configuration" on the next page. When you select the other configuration, go to "Standardized configuration".

Input	Symbol type: Al	application identifier)		
Сору	AI (application is	lentifier)		
Join	Configuration			
Sequence number	No. Al	Custom	No. of digits	Add New
Date	* *	医療-ロットNo. 医療-シリアル番号		Add
Calculation		食肉標準-基本バーコード 食肉標準-補助バーコード		Delete
				Move Up
	Application ide	ntifier(Jun 2019)		
	AI:	Format:		
	Classification:			
	Description:			
	Variable name:	Symbol-1	No. of a	digits: 0

■Custom configuration

First incorporate the AI of the product code.

Click an item "AI" and the AI list will be displayed.

Input	Symbol type: A	Al (application ident	tifier)		
Сору	AI (application	identifier)			
Join	Configuration	: Custom	•		
equence number	No. Al	Туре	Data	No. of digits	Add New
Date	* *	-	•		Add
Calculation	00				Delete
Symbol	01 02 10 11 12 13 15 Al: 16 Classif 17 20 Descri 21	un 2019)	Format:		Move Up
	Variable name	Symbol-1		No. o	of digits: 0 🔅

The Format, Classification, and Description of the selected AI will be displayed.

	Symbol type: Al	(application identi	ifier)		
Сору	AI (application i	dentifier)			
Join	Configuration:	Custom	-		
Sequence number	No. Al	Туре	Data	No. of digits	Add New
Date	I 1 01	 Fixed 	•	0	Add
Calculation	*	•	•		Delete
	Application ide	entifier(Jun 2019) -			Move <u>Up</u> ✓ Move Do <u>wn</u>
	Al:	01	Format: n2+n14		
	Classification:	商品識別コード(G	TIN)		
	Description:	Number)。長さは		に一意に識別するための番号(GTIN:Glot ある。14桁未満のGTIN をAI (01) により表	

The follow	ring rules apply to the AI format.
Format:	n3+an30
The "n" of	the input character indicates numeric, "a" for alphabet, and "an" for alphanumeric.
A numeric	value after the symbol indicates the number of digits that can be entered and ""indicates that
the numbe	er of digits is variable.

After selecting AI, select "Variable" for "Type" and "Product code" for "Data".

D Variable Settings		?	×
Set the variable setting	5.		
Input Copy Join Sequence number	Symbol type: Al (application identifier) Al (application identifier) Configuration: Custom No. Al Type Data No. of digits	Add <u>N</u> ew	
Date Calculation Symbol	I 01 • Variable • Product code • 14 • • • • • •	<u>A</u> dd Delete	

Make settings for all AI and data required in the same manner.

When you finish settings, set "GS1-128" in Variable name and click "OK" to register the variable. The combination of each variable and AI is as shown below.

AI	Variable
17	Quality Preservation Period
20	Quantity
10	Lot No.

		Туре		Data		Mar of distant		
	01					No. of digits		Add <u>N</u> ew
	01	 Variable 	•	Product code	•	14	*	
2	17	 Variable 	•	Quality Preservation Period	•	6		Add
3	20	 Variable 	•	Quantity	•	8		Delete
4	10	 Variable 	•	Lot No.	•	3		
*		•	•					

This completes "Custom Configuration:".

■Standardized configuration

If you select "Meat Standard – Assistant" in Configuration, the screen shown below will appear.

Add check marks to the items that you wish to print. The order can be changed.

		anced settings for the A	Al. Select the Al to print	from the list.			
_	ovanci Sele	ed settings Al	Fixed/variable length	No. of digits		Move	Up
I	\checkmark	(10)パッチ/ロットNo	Variable length	Up to 20 digits	~		
I	\checkmark	(7002)枝肉番号·カ	Variable length	Up to 30 digits		Move D	o <u>w</u> n
	\checkmark	(251)原材料参照番号	Variable length	Up to 10 digits			
I	\checkmark	(240)連続番号	Variable length	Up to 30 digits			

This mode automatically generates the required AI and variables for the selected standardized configuration.

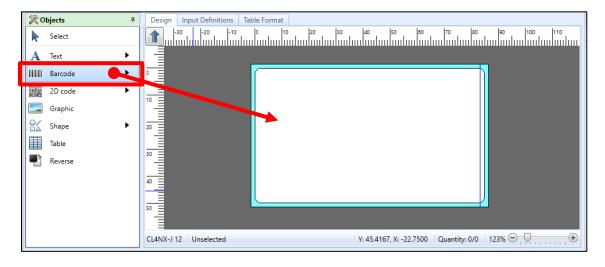
Variables created automatically can be changed to the existing variables.

D Variable Settings											? ×
Set the variable setting:	s.										
Input	Sy	mbol	type: Al (applica	ation ident	ifier)					
Сору	AI	l (app	lication id	lentifie	er)						
Join	с	onfig	uration:	食肉植	■ 事準-補助バ	-2-	- ×			_	
Sequence number		No	AI		Туре		Data		No. of digits		Add <u>N</u> ew
Date	٠		10		Variable		パッチ/ロットNo	•	20	*	Add
Calculation			7002		Variable		枝肉番号・カット規格番号	•	30		Add
Calculation			251	•	Variable		原材料参照番号	•	10		<u>D</u> elete
Symbol		1	240	•	Variable	•	連続番号	•	30		
				•		-					
											Move <u>U</u> p
										Ψ.	Move Do <u>w</u> n
		Applic	ation ider	ntifier(J	Jun 2019) -						

This completes "Standardized configuration".

3. Creating a GS1-128 Layout

Let's create a barcode on the layout for the registered GS1-128 data. Click "Barcode" and place the barcode on the Design screen.



Set "Data" in "Basic settings" on the Properties pane to "Variable" and click "Name" to select the variable for GS1-128 created before. Set "Type" to "GS1-128(UCC/EAN128)", "H.Readable" to "Yes", and "Level" to "2" or higher.

Design Input Definitions Table Format	Properties 📮
	Barcode
	Basic settings
	Item name: Barcode-1
	Data
	Variable 🔹
	Name: (Local) GS1-128 ····
	Fill Pref.: Suffix:
	Barcode settings
(01)00000000000000(17)0000000(21)00000000(10)000	Type: GS1-128(UCC/EAN128) -
	H.Readable: Yes 🔹 🛄
	Height: 12 🗘 (mm)
50 E	Level: 2 🗘 (x)
	Advanced settings ×
CL4NX-J 12 GS1-128(UCC/EAN128) Y: 49.0833, X: 20.0000 Quantity: 1/1 123% 😑 💭 🕀	Attribute settings

Now the GS1-128 can be created on the layout.

Make sure that the printed barcode can be read by a scanner.

*If the barcode cannot be read, the issue may be resolved by enlarging the barcode.

This completes "2: Creating GS1-128 Barcode".

3: History Files

1. What Are History Files?

History files store accumulated history data of the layout print history, sort print history, and count history of the counter item values. The accumulated data are in text format, so they can be exported to Excel and other programs for editing.

2. Specifying the Destination to Save History Files

First specify the destination to save print history.

Select Windows Start Menu > Multi LABELIST V5

The displayed location of "Multi LABELIST V5" may differ depending on your OS.

Enter "user" as the password. This is displayed as black circles (•) on the screen. Select "OK". The MLMaintenance screen will be displayed.

MLMaintenance

Select Print History and change the output folder for each print history as required. Existing history files can be saved using the "Save As ..." button. The "Clear" button clears the saved print history.

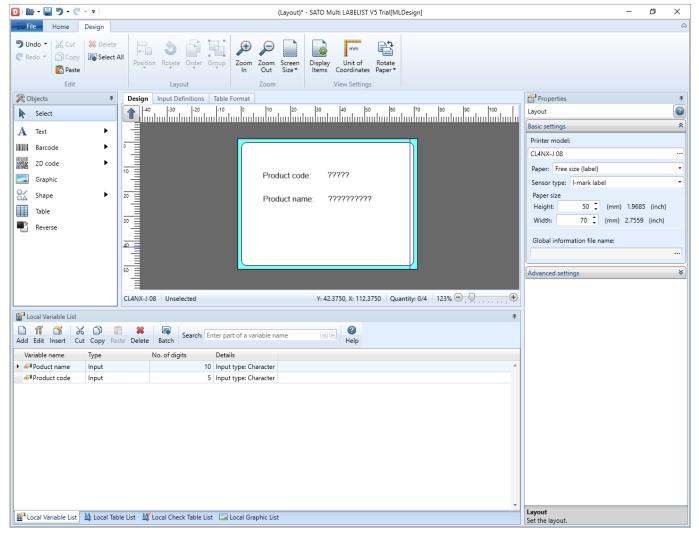
M SATO Multi LABEL	IST V5 Standard [MLMa	intenance]	?	×
Perform print history	maintenance.			
Startup	Layout print history			
Language	Output folder: History file:	C:\ProgramData\SATO\MLV5\HistoryFiles		
Default setting	Retention period:	Specify retention period 1 Day		
Tax Rate	· · · · · · · · · · · · · · · · · · ·	jopenny retention period		
Print History	Sort print history — Output folder:	C:\ProgramData\SATO\MLV5\HistoryFiles		
Watching Settings	History file:	Save As Clear		
Base date	Retention period:	Specify retention period 1 🗍 Day		
Information	Sequence number hi	story		
License activation	Output folder:	C:\ProgramData\SATO\MLV5\HistoryFiles		
	History file:	Save As Clear		
	Retention period:	Specify retention period 1 🗘 Day		
		ОК	Canc	el

3. Creating a History File

Using the layout shown below, create a history file for storing the product code by print layout

Open the layout you wish to get history with "MLDesign".

(This layout uses the product code and product name as input items.)



Then display the Input Definitions screen and click the input item to display the Properties pane.

D 🖻 • 🖶 🤊 • 🤆 - 🕫	Layout(Layout)*[Reference dedicated mode] - SATO Multi LABELIST V5 Trial[MLDesign]	– 0 ×
File Home Input Definit	tions	۵
⑦ Undo ▼ X Cut Selete ⑦ Redo ▼ Ô Copy Select A Edit	Position Order To Zoom Zoom Screen Row Header In Out Size*	
😤 Objects 🛛 👎	Design Input Definitions Table Format	Properties # Input item
Select	·····	Input item
A Text		Item name display: Display at top of inp *
Image		Table display: No ····
XX Button		Edit display: No ····
Line		
		Input check: No ····
Rectangle	No. Product code Puduct name Print quantity	Input digit limit: No •
A Triangle	xxxxx xxxxxxx xxxx *	Font
Circle	1 3	Arial
		Size (pt): 9 👻
		BIU +BC Advanced
		Color settings
		Text color: Black •
	Product code 5 digits	Background color: #00FFFFFF +
Hariable List	4	
- - - - - - - - - - - - - - - - - - -		Defaults
Add Edit Insert Cut Copy Pas		
Variable name Type	No. of digits Details	
Poduct name Input	10 Input type: Character	Advanced settings
Product code Input	5 Input type: Character	Operation settings
		Delete after printing
		Save to history
		Start kanji conversion
		Set to sort/cut and header/tail operation key
		Guide settings
		Input guide: No 🔹
		Tool tips: No 🔹
		Attribute settings
	*	
Local Variable List 💾 Local Tab	le List 🕌 Local Check Table List 🗔 Local Graphic List	Font name
		Set the font name of Input item.

Check "Save to history" in "Advanced settings" to save the layout.

(The item is checked as default.)

Whether or not to save data as history must be set for each input item.

Advanced setting	gs 🔦
Operation sett	-
🔽 Save to hist	tory
📃 Start kanji d	conversion
Set to sort/	cut and header/tail operation key
Guide settings	
Input guide:	No 🝷
Tool tips:	No 🔹

Next, open the layout saved in the previous step with "MLPrint" and click "Print Action".

-		-		·	· · · · · · · · · · · · · · · · · · ·		
3 🖿 • 🖀 🗟 • 🚔 •	• • •		Layout	(Layout)[Reference mode] -	SATO Multi LABELIST V5 Trial[MLPrint] -	٥	\times
File Home E	Edit View						~
Output Destination Print	Cancel Preview	Data File	ODBC First Previous	Next Last Page:	Print Sequence Number etings Settings		
		Data		Fage			
🔀 Filter 💀 Clear					Base date		# ×
T (All)	(All)	(All)			Base date: 2019/12/25	-	
No. Product code		Print quantity				(_
1 11111	aaaaa	1		A			
2 22222	bbbbb	2					
I 3 33333	CCCCC	3					
*							
					Print Preview		Ψ×
				-			0
Search: Enter a search st			Standard (100%) 1	100% 😑 📃 🕀	Page: 0/0		
🔊 Data List 📄 Output							
F1: Help F2: O	pen F3: Fi	nd Next F4:	Print F5: Previe	ew F6: Access data	F7: Access file F8: List input F9: Next page F10: Sequence F11: Operation F	12: Exit	
					Sato printer CL4NX-J 08 Dri	iver name	3

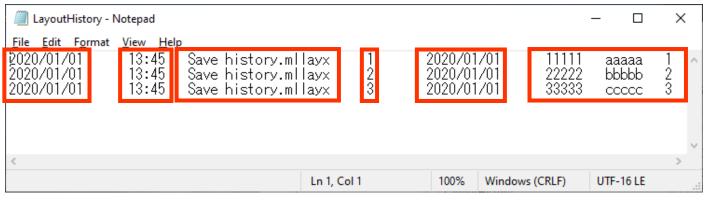
Select "Other" on the Layout Print Action Settings screen.

Check "Output the print history" or "Output the sequence number history" and click "OK". (The item is checked as default.)

Layout Print Action Settir	ngs			?	×
Set other action for layout pr	inting.				
Print action Input settings	Display the <u>F</u> ile dia	-	inting(V) g input data from a file when closing the print applic	ation	
Header/tail label output	✓ Output the print h ✓ Output the sequence				
Error processing	Use form overlay				
Other		s to printer command	when saving a layout (fast pr	ocessing) (<u>L</u>)	
	Use <u>ej</u> ect cut				
	Focus position after	issuing label			_
	Focus position	Set to the first item			•
	· · · · · · · · · · · · · · · · · · ·				
			ОК	Cance	:I

Then let's print the layout.

After printing, check that the history file is created on the pass specified by MLMaintenance.



"Print date", "Time", "Layout (Sort) name", "Print quantity", "Base date", and the values for the items specified to be stored in a history on the Input Definitions screen are written.

Sequence number history is configured with data of 2 rows, header section and data section for one print.

Туре	Content (Tab-sepa	Content (Tab-separated)						
Header	Header type (H)	Date	Layout name	Variable type Local/Global	Counter variable name			
Data	Data type (D)	Counter va	alue 1/Counter valu	ie 2//Counter value r	1			

This completes "<u>3: History Files</u>".

4: MLConvert

1. What is MLConvert?

MLConvert is to convert the layout and sort information used with Multi LABELIST V4 so that it can be used with Multi LABELIST V5. If an option is enabled, the internal data connected to the layout can be converted.

MLConvert

2. Specifying the Layout

How to convert the data is described here.

Select Windows Start Menu > Multi LABELIST V5

The displayed location of "Multi LABELIST V5" may differ depending on your OS.

Enter "user" as the password. This is displayed as black circles (\bullet) on the screen. Click "OK" to display the MLConvert screen.

C Password	?	×	
Starting MLCo Enter the adm	onvert. ninistrator password.		
Password:			
	ОК	Cance	el 🚽

First search for the layout file and sort file of Multi LABELIST V4.

Specify the type of the folder and file to be searched for and click the [Start Search] button.

SATO Multi LABELIST V5 Standard [MLConvert]					- 🗆	×	
<u>F</u> ile <u>H</u> elp							
Reference folder: C:\					Search sub	folders	
Reference folder: C:\ Search target: 🗹 Layout file (*.mllay)	✓ Sort file (*.mlden)(D)			Sta <u>r</u> t Search	Stop Sea	rch(<u>X</u>)	
No. Select File name	File format	Created	Last modified	Status			
No. Select File name						÷	
	IT					- F	

Data that matches the search conditions will be displayed.

<u>H</u> elp					
rence folde	c:\MLV4-label				
ch target: [✓ Layout file (*.mllay)	(*.mlden)(<u>D</u>)			
No. Sele	File name	File format	Created	Last modified	Status
1	🇐 01-Rice ball(50x35).mllay	Layout	2020/03/05 16:48:06	2020/03/05 15:04:34	
2	🧐 02-Roll cake(40x70).mllay	Layout	2020/03/05 16:48:06	2020/03/05 15:04:34	
3	🧐 03-Boiled shellfish(40x60).mllay	Layout	2020/03/05 16:48:06	2020/03/05 15:04:34	
4	🧐 04-Pasta(45x60).mllay	Layout	2020/03/05 16:48:06	2020/03/05 15:04:34	
5	🍏 05-Lunch(60x60).mllay	Layout	2020/03/05 16:48:06	2020/03/05 15:04:34	
6	🧐 06-Processed meat(38x55).mllay	Layout	2020/03/05 16:48:06	2020/03/05 15:04:34	
7	🧐 Concentration test.mllay	Layout	2020/03/05 16:48:06	2020/03/05 15:04:34	
8	🧐 Layout(01-24 13-48).mllay	Layout	2020/03/05 16:48:06	2020/03/05 15:04:34	
				2020/03/05 15:04:34	

3. Option Settings

Option settings enable you to assign the layout set on an old printer model to the successive model and to change the method for changing the shape object and Windows fonts.

Display method

Select "Option" from the "File" menu.

G SATO Multi LABELIST V5 Standard [MLConvert]									
<u>File</u> <u>H</u> elp									
		Options(<u>A</u>)		LV4-label					
Ż		E <u>x</u> it	Alt+F4	file (*.mllay)		🔽 Sort file (*.mlde	n)(<u>D</u>)		
1	No.	Sele	File nam	1e			File forma		
	1		🍏 01-I	Rice ball(50x35).mll;	ау		Layout		
	2		🍏 02-1	Roll cake(40x70).mllay La			Layout		
	3		🍏 03-I	Boiled shellfish(40x	60).mllay	У	Layout		
4 🔲 🧐 04-Pasta(45x60).mllay				Layout					
	5		🍏 05-I	Lunch(60x60).mllay			Layout		
	6		🍏 06-1	Processed meat(38»	c55).mlla	зу	Layout		

Basic settings

The creator is recorded in the file's revision history. It is used to identify the author who performed the conversion.

The log changes what is displayed in the log output window at the log level. You can set this to "Warning/Error" to focus on only the information that needs to be checked in the layout.

C Options	? >	<
Set the basic options.		
Basic settings Creator Printer Creator: Design Log Input Definitions Log level: Information / Warning / Error]
	OK Cancel	

Printer

Select a printer to which the layout is to be assigned on the New printer model list. To convert the print speed/density, check the check box.

When printer assignment is complete, click "OK" to exit the option screen.

Options						?	×
et the printer assig	nme	ent.					
Basic settings		No.	Old printer model	New printer model	Print speed/density		
g-		1	TR400	Unselected	Convert		4
Printer		2	TR410	Unselected	Convert		
Design		3	TR410BT	Unselected	Convert		
besign		4	MR400	Unselected	Convert		
Input Definitions		5	MR410	Unselected	Convert		
	I	6	MR600	CL6NX-J 08	Convert		
		7	MR610	SCANTRONICS MT410e	4		
		8	M-4800RV	CL6NX-J 08			
		9	MT400	CL6NX-J 12			
		10	MT410	SCANTRONICS SG112T/R			
				SCANTRONICS GN412T			
				SATOC ST308R		Cance	
				SATOC ST312R		Cance	
				FLEOVEND LV			_

Design settings

Shape object conversion method enables a shape object to convert to graphic.

Windows font conversion method adjusts the font size depending on the version of MLV4 you are using, version 4.4 or lower or version 4.5 or higher.

C Options		?	×
Set the design conv	ersion method.		
Basic settings Printer	Shape object conversion method: Convert to shape Windows fonts conversion method:		•
Design	Print with MLV4 version 4.5 or above		•
Input Definitions	Windows font information output method: WPF Stretch mode (Graphic object): GDI-compatible		•
	ОК	Cance	I

Input Definitions

Save history of input items enables the setting to output the data entered in the input items to the print history.

The output of print history and sequential number history can be changed to output history or not. In Error processing, you can adjust the behavior of displaying the message as an error when printing.

CI Options		?	×
Set the input definit	ion conversion method.		
Basic settings Printer Design Input Definitions	Save history of input items: Enable Output the print history: Enable Output the sequence number history: Enable Error processing: According to MLV4 layout file		•
	ОК	Cancel	

4. Converting

Once settings for the tax rate and printer assignment are complete, set the conversion options. Specify whether to convert the output destination and internal data, select the target data from the search file, then perform the conversion.

3 Image: Solution of the state of the	
5 Image: Solution of the state	
6 Image: Second sec	
7 📝 🔇 Concentration test.mllay Layout 2020/03/05 16:48:06 2020/03/05 15:04:34	
8 📝 🖏 Layout(01-24 13-48).mllay Layout 2020/03/05 15:48:06 2020/03/05 15:04:34	
9 📝 🖏 Layout(01-28 15-14).mllay Layout 2020/03/05 16:48:06 2020/03/05 15:04:34	
10 📝 🏷 TEST.mllay Layout 2020/03/05 16:48:06 2020/03/05 15:04:34	

The conversion results are shown in Status.

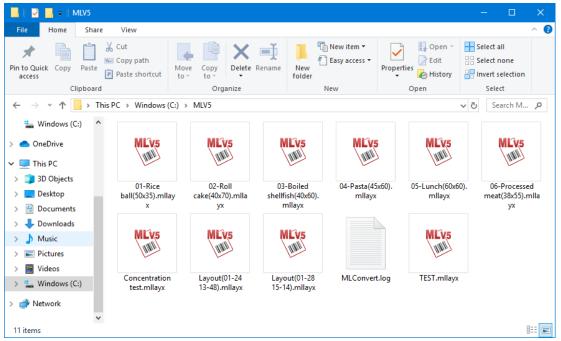
If "Warning" is displayed, check the details on the output log.

lelp					
ence folder: C:\MLV4-label					
h target: 🔽 Layout file (*.mllay) 🔽 Sort	file (*.mlden)(D)				
o. Sele File name	File format	Created	Last modified	Status	
3 📝 🧐 03-Boiled shellfish(40x60).mllay	Layout	2020/03/05 16:48:06	2020/03/05 15:04:34	Conversion complete	
4 📝 🐝 04-Pasta(45x60).mllay	Layout	2020/03/05 16:48:06	2020/03/05 15:04:34	Conversion complete	
5 📝 🧐 05-Lunch(60x60).mllay	Layout	2020/03/05 16:48:06	2020/03/05 15:04:34	Conversion complete	
6 📝 🧐 06-Processed meat(38x55).mllay	Layout	2020/03/05 16:48:06	2020/03/05 15:04:34	Conversion complete	
7 📝 🧐 Concentration test.mllay	Layout	2020/03/05 16:48:06	2020/03/05 15:04:34	Conversion complete	
8 🔽 🧐 Layout(01-24 13-48).mllay	Layout	2020/03/05 16:48:06	2020/03/05 15:04:34	Conversion complete	
9 🔽 🧐 Layout(01-28 15-14).mllay	Layout	2020/03/05 16:48:06	2020/03/05 15:04:34	Conversion complete	
10 📝 🧐 TEST.mllay	Layout	2020/03/05 16:48:06	2020/03/05 15:04:34	Conversion complete	
ersion complete					
version options	Chiller - Challer				
rersion options put destination: Output to specified output destinatio	n folder C:\MLV5				
version options	n folder • C:\MLV5				
rersion options put destination: Output to specified output destinatio	n folder • C:\MLV5				
rersion options put destination: Output to specified output destination Convert internal data	n folder • C:\MLV5			Colora All	
rersion options put destination: Output to specified output destination Convert internal data	n folder • C:\MLV5			Select <u>A</u> ll	
rersion options put destination: Output to specified output destination Convert internal data	n folder CAMLV5			Select All	
rersion options put destination: Output to specified output destination Convert internal data Convert Preset Data		5		Select All	
rersion options put destination: Output to specified output destination Convert internal data Convert Preset Data Itput Log ge Search: Enter a search string,				Select <u>A</u> ll	
rersion options put destination: Output to specified output destination Convert internal data Convert Preset Data itput Log ge Search: Enter a search string. 13/05 17:00:24 C:\MLV4-label\Concentration test.mllay G	tart conversion Conversion Completed [C:\]		ayx]	Select <u>A</u> ll	
rersion options put destination: Output to specified output destination Convert internal data Convert Preset Data Itput Log ge Search: Enter a search string. 33/05 17:00:25 C:MLV4-label\Concentration test.mllay (33/05 17:00:25 C:MLV4-label\Concentration test.mllay (33/05 17:00:25 C:MLV4-label\Concentration test.mllay (tart conversion Conversion completed [C:\! Start conversion	MLV5\Concentration test.mll		Select <u>A</u> ll	
rersion options put destination: Output to specified output destination Convert internal data Convert Preset Data itput Log ge Search: Enter a search string. 03/05 17:00:25 C:\MLV4-label\Concentration test.mllay (03/05 17:00:25 C:\MLV4-label\Concentration test.mllay (03/05 17:00:25 C:\MLV4-label\Layout(01-24 13-48).mllay 03/05 17:00:26 C:\MLV4-label\Layout(01-24 13-48).mllay 03/05 17:00:26 C:\MLV4-label\Layout(01-24 13-48).mllay	tart conversion .onversion completed [C:\/ .Start conversion completed [C:	MLV5\Concentration test.mll		Select <u>A</u> ll	
rersion options put destination: Output to specified output destination Convert internal data Convert Preset Data itput Log ge Search: Enter a search string. 33/05 17:00:25 C:/MLV4-label/Concentration test.mllay (33/05 17:00:25 C:/MLV4-label/Concentration test.mllay (tart conversion onversion completed [C:\ Start conversion completed [C: Conversion completed [C: Start conversion	VLV5\Concentration test.mll :\MLV5\Layout(01-24 13-48)	.mllayx]	Select <u>A</u> ll	

When conversion is complete, a new folder is created at the location designated as the output destination.

The folder configuration is the same as with the original Multi LABELIST V4 files, and the layout converted for V5 is created.

The folder whose layout name includes ".data" stores the internal data.

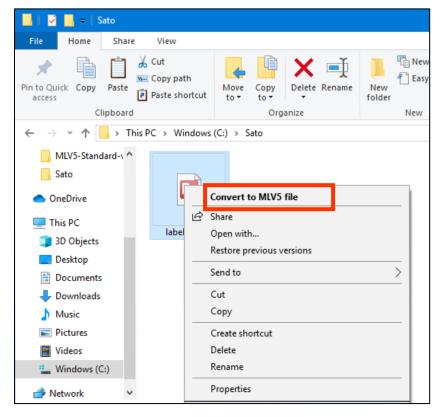


Check the print.

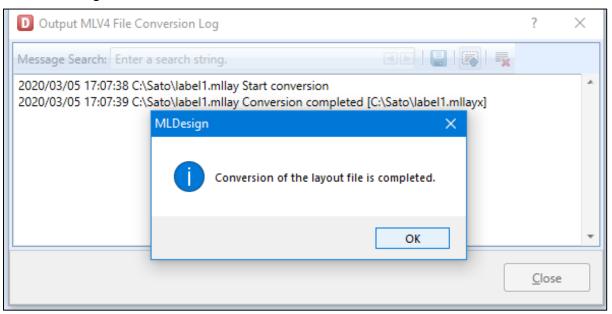
5. Converting (Context Menu)

Once the tax rate and printer assignment are complete, conversion can easily be done using the context menu (right-click menu) of the layout file or sort file of Multi LABELIST V4. (Designation of file output destination or internal data conversion is not available.)

Click [Convert to MLV5 file] on the context menu of the file.



The ML Design starts and the conversion is done.



The file after conversion is stored with the same name in the same folder as the original file.

📙 🛃 📕 🖛 Sato		
File Home Share Vie	2W	
Pin to Quick Copy Paste	y path se shortcut Nove Copy to • to • to • to •	New item ▼ 1 Easy access ▼ 1 folder
Clipboard	Organize	New
$\leftarrow \rightarrow \land \uparrow \square$ > This PC >	Windows (C:) > Sato	
MLV5-Standard-\ ^	DE MLV5	
This PC	label1.mllay	
📃 Desktop		
Documents		
🖶 Downloads		
b Music		
Pictures		
Videos		
indows (C:)		
Network v 2 items 1 item selected 33.3 KB	1	

This completes "<u>4: MLConvert</u>".

5: Saving the Sequence Number Every Time Judgment Value

1. What is Saving the Sequence Number Every Time Judgment

Value?

This function saves the sequence number value judged by the value of the input data (variable item). For example, sequence number values can be saved for each store name.

Up to three judgment items can be registered. When multiple items are registered, judgment is done based on AND conditions. If the value cannot be judged because it does not match the key, the sequential number values are saved in the common part as outside settings. The saved sequence number values can be edited on the MLPrint screen.

2. Setting the Sequential Number Variables

Create the input variable used as the judge key.

Variable name: Judge key Number of digits: 10

Then select "Sequence number" with Add of Local Variable, input the conditions, specify "Save every time judgment value" in "Seq. no. save method", and click the "Judgment" button.

Variable Settings	? ×
Set the variable setting	IS.
Input	Sequence number type: Numeric (layout)
Сору	Numeric (layout) Edit parameters
Join	Base n: Base 10 •
Sequence number	Sequence number range: 1 to 99 t
Date	Increment/decrement value: 1
Calculation	Sequence number details
Symbol	Count condition: Count every time specified number of prints Specify quantity: 1 sheets
	Seq. no. save method: Save every time judgment value 🔹 Judgment V
	Initialize save value: None 🔻
	Variable name: Sequence number-1 No. of digits: 1
	OK Cancel

In Item 1, specify "Judge key" created in the previous step, and select "Character" as the value type.

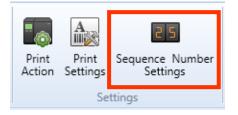
When you complete entering the judgment value, click "OK".

The file data can be used as the judgment value with the "Import from File" button.

D Judgn	nent Value Settings					?	×
	dgment value settings. udgment item.	First select a judgmen	t item and t	hen enter the	judgment	value for the	
Judgme	nt items						_
Item 1:	Judge key		•	Judgment co	ondition 1:	Character	•
Item 2:			•	Judgment co	ondition 2:	Numeric	•
Item 3:			•	Judgment co	ondition 3:	Numeric	•
Judgme	nt value settings						
	Judgment value 1	Judgment value 2	Judgmen	t value 3		<u>A</u> dd	
▶ 1	Shibuya					Delete	=
2	Ebisu					Delete	
3	Meguro						
4	Tamachi						
*							
						Move <u>U</u> p	
							5
					-	Move Do <u>w</u> r	ו
	<u>I</u> n	nport from File	<u>E</u> xport to Fi	le	ок	Cancel	

3. Modifying Method of Saved Sequence Number

Click "Sequence Number Settings" on the MLPrint screen.



Sequence number save value that do not match the Judge key will be displayed.

To modify the sequence number save value for each Judge key, click "Judgment sequence number setting".

e start value for the /ariable name	Туре	Start value	Type						
		Start value	Type						
equence number-1	I success a second second second second		ope	Details					
	Layout sequence number	1	Local	Input: No	Base 10	1-99	Save met	hod: Sav	e ev
				-	(
					Judgmo	ent seq	uence nun	nber sett	ng
				-	_				
						0	к 🔤	Canc	el
					"		Ju <u>d</u> gment seq		Judgment sequence number setti

The value for the set Judge key is displayed and the start value of the sequence number can be modified.

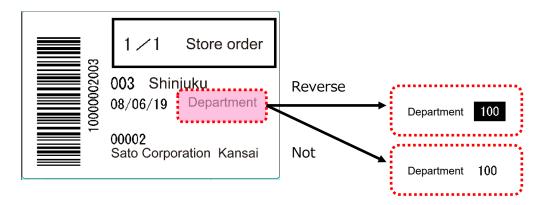
P _{en} J	udgment Sequence	Number Settings			?	×				
Set t	he start value of the	judgment sequence	e numbers.							
۲Ju	dgment items									
lt	em 1: Judge key	Numeric								
lt	tem 2:		Type:							
lt	tem 3:		Type:							
Ju	dgment sequence n	umber								
	Judgment value 1	Judgment value 2	Judgment value 3	Start value						
*	Shibuya			5		*				
	Ebisu			3						
	Megro			4						
	Tamachi			1						
						*				
	OK Cancel									
						,tł				

This completes "5: Saving the Sequence Number Every Time Judgment Value".

6: Print Condition Settings for Objects

1. What are Print Condition Settings for Objects?

This function is to control printing objects configuring the label design such as reverse, line, etc. For example, if a part of the label is to be reversed or not reversed depending on the value of the input item, it can be switched between reversed and not reversed by setting conditions.



Here we will explain how to reverse the department code (variable character) when the conditions below are met, using the existing layout file.

Condition: Department code is from 1 to 99. $\rightarrow \text{Reversed}$ (not reversed in other cases). (1) (2) (3)

(1) Register as "Variable".

(2) Set the conditions for printing in the "Input Check Table".

(3) Set the conditions for printing or not printing on reverse objects ((1), (2)).

2. Advanced Settings Required for Print Condition Settings of Objects

To set switching between printing and not printing, conditions, "Variable" and "Check table", should be created on the MLDesign screen.

MLDesign

In this manual, "Variable" and "Check table" are used as conditions.

Select Windows Start Menu > Multi LABELIST V5

The displayed location of "Multi LABELIST V5" may differ depending on your OS.

Set the variables used for conditions as shown below.

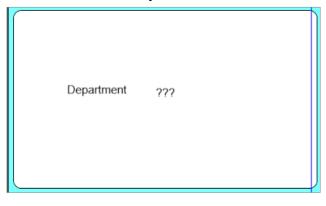
🚰 Local Variable List		4
□ 11 □ ↓ □ □ ↓ Add Edit Insert Cut Copy Paste Delete	Batch Search: Enter part of a variable name Help	
Variable name Type	No. of digits Details	
Department code Input	3 Input type: Character	~
		*
Local Variable List 🛓 Local Table List	🖇 Local Check Table List 🛛 🗔 Local Graphic List	

Set the check table used for conditions as shown below.

D Register Check Table	?	×		
<u>E</u> dit <u>V</u> iew <u>D</u> ata <u>T</u> ools				
Image: Search intermediate Image: Search intermediate Image: Search intermediate Image: Search intermediate Image: Search intermediate Image: Search intermediate Image: Search intermediate Image: Search intermediate Image: Search intermediate Image: Search intermediate Image: Search intermediate Image: Search intermediate Image: Search intermediate Image: Search intermediate Image: Search intermediate Image: Search intermediate Image: Search intermediate Image: Search intermediate Image: Search intermediate Image: Search intermediate Image: Search intermediate Image: Search intermediate Image: Search intermediate Image: Search intermediate Image: Search intermediate Image: Search intermediate Image: Search intermediate Image: Search intermediate Image: Search intermediate Image: Search intermediate Image: Search intermediate Image: Search intermediate Image: Search intermediate Image: Search intermediate Image: Search intermediate Image: Search intermediate Image: Search intermediate Image: Search intermediate Image: Search intermediate Image: Search intermediate Image: Search intermedintermediate Image: Search intermediate </td <td></td> <td></td>				
Input Permission Item Type: Numeric Delete all trailing space characters				
Table name: Department range				
No. Value 1 Range 1 Condition 1				
▶ 1 1 99 = ▼		*		
*		_		
		*		
Test				
Check condition: 1 • Data:				
ОК	Cance			

3. Condition Settings for Printing or Not Printing Objects

On the "MLDesign screen", place the variable of department code and fixed characters created in Section "2" on the layout as shown below.



Place the object that sets the conditions for printing or not printing on the layout. (In this manual, place "Reverse Object" on the Department code.)

Department 222	
----------------	--

Click the reverse object in section "2" and click the "Print" icon in "Attribute settings" on the Properties pane.

D 🗁 + 📳 🄊 + 🖱 - 💌 Layout(Layout)* - SATO Multi LABEL!:	ST V5 Trial[MLDesign] — 🗗 🗙
File Home Design	۵
	# Properties # 60 [70 [80 [100 [110 Text @
	Hard und und und und und und und und und un
A Text	Item name: Text-2
Barcode	Data
2D code ►	Variable
Graphic Graphic	Name: (Local) Department code ····
Chapme → 20 Department	Fill Pref.: Suffix:
Table	Font
Reverse 30	Type: Windows fonts
	Course of the second se
	Attribute settings
A Text Image: Barcode Image: Barcode Image: Barcode Image: Barcode	Drint position (mm)
	Print position (mm)
CL4NX-J 12 Text (Arial) Y: 57.2500, X: 117.50	000 Quantity: 1/2 V: 17.4167 C H: 45 C
날 Local Check Table List	
Add Edit Copy Paste Delete Import Export	
Add Edit Copy Paste Delete Import Export Control of the part of a dole name Help Table name Input permission it No. or registered r	Rotate: 0° 🔹
Department range Numeric	
	Color: Reverse 🔹
	COIDE: Neverse
	Print: Print 🔻 Settings

On the Print Condition Settings screen, specify "Department code" in "Variable name" and select "Meets specified local check table conditions" in Judgment content.

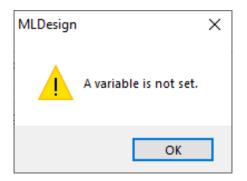
On the specified screen of the local check table, select "Department range" created in advance, and select the Check table Conditions to be used (No. 1 to 5)

Last click "OK" and the settings are registered.

Print Conditi	on Settings	?	\times
Specify the print	condition.		
Data Type:	Variable 🔻		
Variable name	(Local) Department code		
Condition Judgment con			·
Table name: Condition:	Department range	<u>N</u> ew	•
	OK	Cance	2

If you click "OK" before setting "Variable" or "Condition", error messages shown below will be displayed.

Make settings and click "OK" again.





This is the end of settings. Save the layout with a name, and check it using the print or preview screen.

4. Checking the Print Results

Start a layout file created in the previous step in MLPrint.

Print the layout and check whether it is printed according to the set conditions.

In this example, as the condition is the check table of "1 to 99", the print result will be reversed if "88" is entered in Department code,

Department 88

If "100" is entered in Department code, the print result will not be reversed.

Department 100	
----------------	--

Judgment of printing is made based on the value after editing variables.

So it is recommended to use input variables that do not use edit parameters as reference variables for condition settings.

For example, if table conversion editing is enabled for the reference variable in condition settings, the values after conversion are compared with those in the check table.

Input value	Value after table conv	ersion	
001	Meguro		
002	Shinagawa		Used as the judgment value for conditions
003	Shinjuku		

This completes "6. Print Condition Settings for Objects".

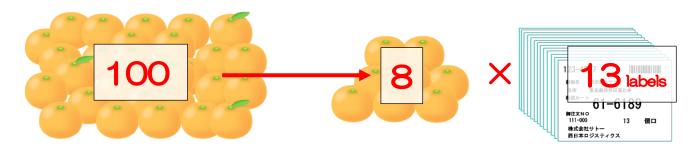
7: Print Quantity Calculation Function

1. What Is the Print Quantity Calculation Function?

This function can set any calculation expression using variable values and fixed values as calculation items and calculate the print quantity.

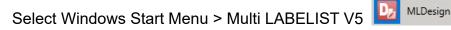
For example, the number of labels attached to the box that are required for packing 100 products in a fixed number can be calculated.

To pack 100 products in boxes of 8 each and to print the label required for the boxes, the labels for 13 boxes are required as a result of calculation, 100/8=12 remainder 4. When the Print Quantity Calculation Function is used, the number of labels required can be obtained automatically.



2. Creating a Variable

To use "Input value" for the Calculation Target items of Print Quantity Calculation, it is necessary to create "Variable" on the "MLDesign" screen and to place it on the layout as "Variable Character". In this manual, "Variables" shown below are used for conditions of Print Quantity Calculation.



The displayed location of "Multi LABELIST V5" may differ depending on your OS.

Set the variables used for conditions as shown below.

🚰 Local Variable List			д
Add Edit Insert Cut	Copy Paste Delete	Batch Search: En	ter part of a variable name
Variable name	Туре	No. of digits	Details
«Quantity	Input	6	Input type: Character
Q'ty per carton	Input	3	Input type: Character

The variables used for print quantity calculation must be placed on the layout as "Variable Character" even if the value will not be printed on labels or tags because the value is input and calculated on printing.

If printing is not necessary, place the variable and specify "Do not print" on the character setting screen.

Design Input Definitions Table Format	Properties #
	Text
	Basic settings 😽
	Advanced settings 🛛 🕹
	Attribute settings
20 The first state of the first	Print position (mm) V: 11.5 H: 11.8333
20	Rotate: 0° 🔹
30	Color: Black •
	Print: Do not print 💌 Settings 📰
	Save to history
	Mouse operation:
CL4NX-J 12 Text (Arial) Y: 51.5000, X: 118.5000 Quantity: 1/2 123%	

For the layout of this manual, only the "Q'ty per carton" variable is printed. As "Quantity" is not printed on labels or tags, it will be set to "Do not print".

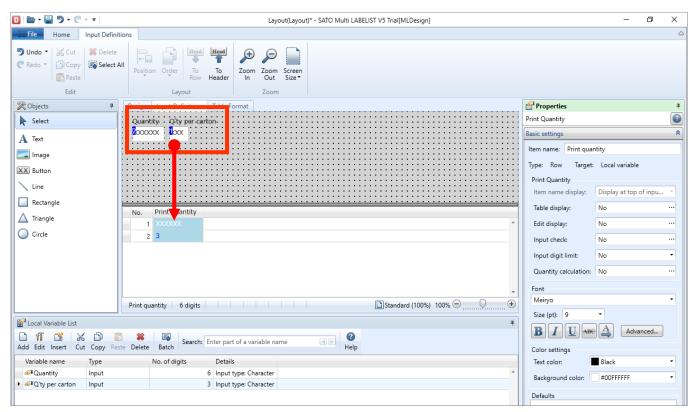
When "Do not print" is set, the characters are displayed in gray.

???????	???	

3. Setting Condition for Print Quantity Calculation

Display the "Input Definition" screen of the layout created in section "2".

Move "Quantity" and "Q'ty per carton" on the header section to the row section and change the order of the items.



Click "Print quantity" item then "Quantity calculation" in "Basic settings" on the Properties pane.

D 🗁 • 🖶 "D • C • =	Layout(Layout)* - SATO Multi LABELIST VS Trial[MLDesign]		Basic settings	*
File Home Input Defin Undo Undo Cut Delete Redo Copy Select			Item name: Print quar	ntity
Paste Edit	Medition Order To To Zoom Zoom Screen Row Header In Out Size* Layout Zoom		Type: Row Target:	Local variable
Cobjects #	Design Input Definitions Table Format	Print Quan	Print Quantity	
A Text		Item nam Type: Rc	ltem name display:	Display at top of inpu 🔻
Line		Print Qui Item nai	Table disalary	No
Rectangle Triangle	No. Quantity Qty per carto Print quantity 1 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	Table di Edit dist	Edit display:	No
Circle	2 1 2 3	Input ch	input checki	No
		Quantity	Input digit limit:	Yes] 6 digits 🔹
Local Variable List	Print quantity 6 digits	Meiryo Size (pt)	Quantity calculation:	No
_	te Delete Batch Search: Enter part of a variable name	Color set	Font	
Variable name Type Quantity Input Quantity Input Quantity Input	No. of digits Details 6 Input type: Character 3 Input type: Character	Text cole Backgro		•
		Defaults	Size (pt): 9	
			BIU ABC	Advanced

The "Quantity Calculation" screen opens. Check the check box of "Calculate print quantity" and enable input to the items below.

D Quantity Calculation		?	×
First select whether to calculate the print quantity. If the print quantity wi	I be calculated, set the calculation expression.		
Calculate print quantity			
Calculation expression:		<u>T</u> est	
Input item	Function		
Insert Item	Insert <u>F</u> unction		•
Start position: 0 📮 End position: 0 🗘	Format:		
Calculation type + - × ÷ \	Description:		
Brackets (
	ОК	Cance	

Set the expression in "Calculation expression" item. Calculation expression can be created from Input item on the screen. In this manual, as the value obtained by rounding up the result of "Quantity" ÷ "Q'ty per carton" is required, calculation expression is written using the "ROUNDUP function".

For "ROUNDUP function", specify the value to be rounded up as an "Parameter". In this example, as the result of the calculation "Quantity" ÷ "Q'ty per carton" is to be rounded up, set this calculation expression "Quantity" ÷ "Q'ty per carton", as "Parameter".

If calculation expression is manually set as "Parameter", mistakes may occur in description. To reduce such mistakes, select a variable in "Input item" of the "Calculation expression" item, set the calculation expression "Quantity" ÷ "Q'ty per carton", and copy the calculation expression.

First select a variable "Quantity" in Input item and set the value in calculation expression in "Insert Item"

D Quantity Calcu	lation	?	×		
First select whethe	to calculate the print quantity. If the print quantity will be calculated, set the calculation expression.				
Calculate pri	nt quantity				
Calculation expre	ssion:	Test			
Input item	Function				
Insert Item	Insert Function		•		
Start position:	Print quantity Quantity Format:				
Calculation typ	Q'ty per carton Description:				
+ -	× ÷ \				
Brackets	D Quantity Calculation			?	\times
()	First select whether to calculate the print quantity. If the print quantity will be calculated, set the calculation exp	pression.			
	Calculate print quantity				
	Calculation expression: [Quantity,1,6]			<u>T</u> est	
	[Input item				
	Insert Item Quantity Insert <u>F</u> unction				•
	Start position: 1 Carl End position: 6 Format:				
	Calculation type Description:				
	+ - x ÷ \				
	Brackets				
		C	К	Cance	21

Then Click "+" in "Calculation type".

Calculation expression: [Quantity,1,6]/

Then select a variable "Q'ty per carton" to make the calculation expression shown below.

Calculation expression: [Quantity,1,6]/[Q'ty per carton,1,3]

The calculation expression for entering the value in parameter of "ROUNDUP function" is made. Cut this calculation expression, select "Roundup" from the "Function" list, and click "Insert Function".

Quantity Calculation		?	×
First select whether to calculate the print quantity. If the print quantity will	e calculated, set the calculation expression.		
Calculate print quantity Calculation expression: [Quantity,1,6]/[Q'ty per carton,1,3] Input item [Insert Item Q'ty per carton Insert Item Q'ty per carton • Start position: 1 • End position: 3 • Calculation type • • • # - × • • Brackets () • •	Function Insert <u>F</u> unction Format: Description: This function rounds up the number argument to the number of digits of argument. If the number of digits is g the number is rounded up to the spe of decimal places, and if the number than 0, the number is rounded up to number on the left of the decimal po	of the first the second ireater than cified numb of digits is I the specifie int.	0, ber ess d
	If the third argument is "0," the decim after the rounded digit are not filled if "1," they are filled with zeros.		
	ОК	Cance	el

The "Insert Function" screen is displayed. Set the calculation expression cut in the previous step in "Numeric".

Set "0" in "No. of digits" and click "OK".

D Inse	rt Function	?	×
ROUND	JP関数の引数を入力してください。		
数值:	[Quantity,1,6]/[Q'ty per carton,1,3]		
桁数:	d		
フラグ:			
	ОК	Cance	el

Is the Calculation expression shown below set in "Calculation expression"? Click "Test" to check the calculation result.

Quantity Calculation			?	×
First select whether to calculate the print quantity. If the print quantity w	ill be calculated,	set the calculation expression.		
Imposed to the print quantity Calculate print quantity Calculation expression ROUNDUP([Quantity, 1,6]/[Q'ty per carton, 1,3]) Input item Insert Item Q'ty per carton Start position: 1 End position: 3 Calculation type + - Starkets (_		し、負の(上げます。 ます。「フ 1」の場合	▼ ま 直の 。 ラ は
		ОК	Cance	

Enter "100" in "Quantity" and "8" in "Parameter:" then click "Test".

Is "13" displayed in "Calculation result"? When the result is checked, click "Close".

D Calculation Expressio	n Test	?	×			
Test the calculation expression. If you enter the Input item value to use in the calculation expression and start the test, the calculation result will be displayed.						
Calculation expression: ROUNDUP([Quantity,1,6]/[Q'ty per carton,1,3],0)						
No. Input item	Data					
1 Quantity	100					
 2 Q'ty per carton 	8					
			Ŧ			
Calculation result: 13						
	Test	<u>C</u> lose				

When the Quantity Calculation screen is returned, click "OK" to finish the registration.

Quantity Calco	ulation							?	×
st select whethe	er to cal	culate the print quantity. If the pri	nt quantity wi	ill be calculated,	set ti	he calculation expression.			
Calculate pri	int quar	ntîty							
alculation expre	ession:	ROUNDUP([Quantity,1,6]/[Q'ty p	er carton,1,3]	,0)				<u>]</u> est	
put item				Function					
Insert Item	Q'ty p	er carton		Insert <u>F</u> unct	ion	切上げ			
tart position:		1 Cnd position:	з 🗘	Format:	ROU	- UNDUP(数値,桁数,フラグ)			
alculation type + - rackets ()	×) + \		Description:	す。 「フリオ 構記 ジョオ	値」を指定された小数点以下の 「桁数」が「0」の場合は整致とし 会は小数点の左側の指定した桁 50」は小数点以下の「桁数」ます が「0」または省略された場合は補 真ありとなります。 生例「ROUNDUP(123.45,-1,0)」 130」となります。	て切り上げし 数まで切り上 で0を補填しま I填なし、「1」	、負の(こげます ます。「フ の場合	値の
						ОК		Cance	sl

If "Print Quantity" item is not used in calculation, the message shown below is displayed. Select "Yes".

MLDesign		\times
?	Input of the print quantity is not a required setting. Disable input of the print quantity?	
	Yes No	

When settings are complete, "Actual Print Quantity" item is displayed on the right of "Print quantity" of the input item.

0 🗁 • 🗒 🤊 • (° • • •	Layout(Layout)* - SATO Multi LABELIST V5 Trial[MLDesign]	– 0 ×
File Home Input Defini	tions	۵
⑦ Undo ▼ ※ Cut ※ Delete @ Redo ▼ ◎ Copy ※ Select Edit Edit	All Position Order To To To Now Header In Out Size*	
🔆 Objects 🛛 🖣	Design Input Definitions Table Format	Properties 🕴
Select		Print Quantity 3
		Basic settings
A Text		Item name: Print quantity
Image		Type: Row Target: Local variable
XX Button		Print Quantity
Line		Item name display: Display at top of inpu
Rectangle		Table display: No ····
🛆 Triangle	No. Quantity Q'ty per carton Print quantity Actual Print Quantity 1 XXXXXX XXXXX XXXXXXX XXXXXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	Edit display: No ····
Circle		Input check: No ····
		input algre mine incogre algree
		Quantity calculation: Yes ····
	v	Font
	Print quantity 6 digits	Arial
🚰 Local Variable List	100	
	Cha	nge the display size. HBC Advanced
Add Edit Insert Cut Copy Pa	te Delete Batch Help	Color settings
Variable name Type	No. of digits Details	Text color: Black •
Quantity Input Q'ty per carton Input	6 Input type: Character 6 Input type: Character 6	Background color: #00FFFFFF •
	- other Alexandree	Defaults
		Advanced settings
		Attribute settings ¥
	· .	Font name
🖀 Local Variable List 🛓 Local Tal		Set the font name of Input item.

This is the end of settings.

In the next item, enter the value on the Print screen and check the actual print quantity (calculation result).

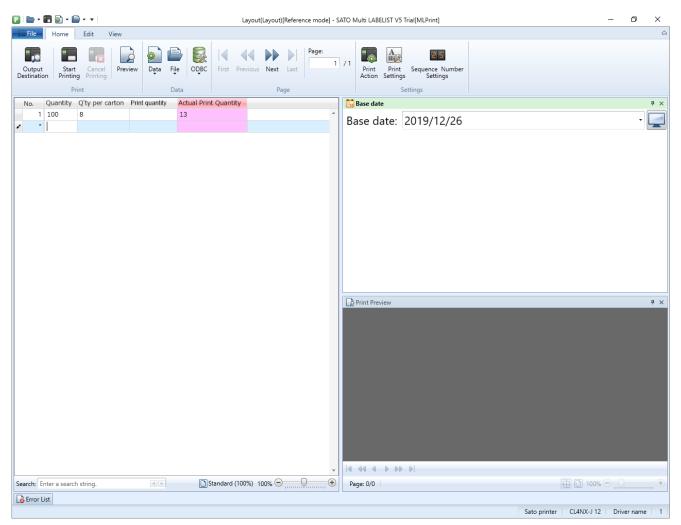
4. Checking the Calculation Result of Print Quantity

Enter the value in Input item on the Print Layout screen and check that the correct calculation result is set in "Actual Print Quantity" item.

In this manual, the calculation is done under the conditions below so that the calculation result will be 13.

<Condition>

To pack 100 products in boxes of 8 each and to print the label required for the boxes



This completes "7: Print Quantity Calculation Function".

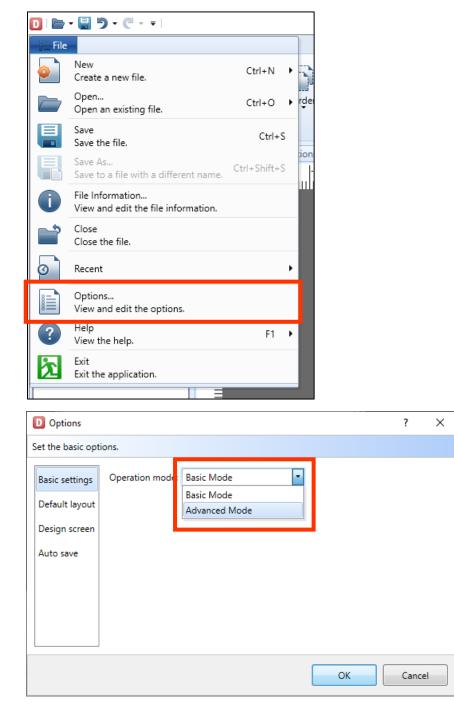
8: Operating in Advanced Mode

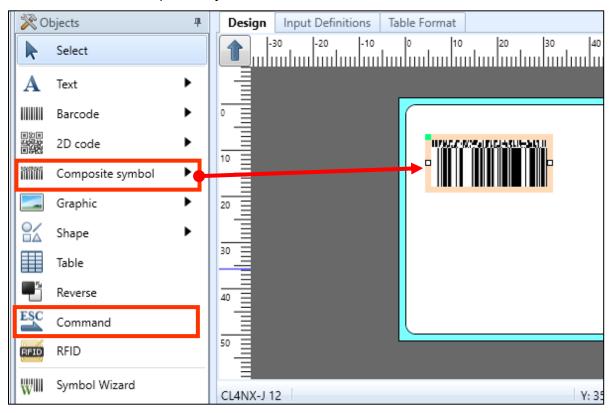
1. What is the Advanced Mode?

The Advanced Mode is an operation mode that enables you to use the advanced functions such as reverse, composite symbol, etc.

2. Setting Method of the Advanced Mode

Select "Options" from the File menu in MLDesign and select "Advanced Mode" in Operation mode.





You can use the Composite symbol or Command function.

3. Function of the Advanced Mode

Basic Mode and Advanced Mode differ in the available design objects and variables.

Design object

Destaurable		SATO printe	r	Color printe	r
Design obje	9CT	Basic	Advanced	Basic	Advanced
Select		Yes	Yes	Yes	Yes
Character	(1) Paste	Yes	Yes	Yes	Yes
	(2) Input	Yes	Yes	Yes	Yes
	(3) Sequential number	Yes	Yes	Yes	Yes
	(4) Date	Yes	Yes	Yes	Yes
Barcode	(1) Paste	Yes	Yes	Yes	Yes
	(2) Input	Yes	Yes	Yes	Yes
	(3) GS1 Databar	No	Yes	No	Yes
	(4) GS1-128	No	Yes	No	Yes
	(5) CODE128	No	Yes	No	Yes
2D	(1) Paste	Yes	Yes	Yes	Yes
Code	(2) Input	Yes	Yes	Yes	Yes
Composite	(1) Paste	No	Yes	No	Yes
Symbol	(2) Input	No	Yes	No	Yes
	(1) Paste	Yes	Yes	Yes	Yes
Graphics	(2) Call	No	Yes	No	Yes
	(3) Input	No	Yes	No	Yes
Shape	(1) Line	Yes	Yes	Yes	Yes
	(2) Rectangle	Yes	Yes	Yes	Yes
	(3) Triangle	Yes	Yes	Yes	Yes
	(4) Circle	Yes	Yes	Yes	Yes
Table		Yes	Yes	Yes	Yes
Reverse		Yes	Yes	No	No
Red area		No	Yes	No	No
Command		No	Yes	No	No
RFID		No	Yes	No	No
Symbol Wizard		No	Yes	No	Yes

variable		
Variable	Setting Item	Items available in Advanced Mode
Input	Calculation variable type	[Hexadecimal code], [Graphic]
	Edit parameters	Refer to the table below.
Fixed	All	(Not displayed in Basic Mode)
Сору	Edit parameters	Refer to the table below.
Join	Edit	Cross check
Sequential	Sequential number type	[Numeric (printer)], [Characters]
number	Numeric (layout)	[Inherit increment/decrement value when loop]
	Numoria (lavout)	[Count every time specified number of prints],
	Numeric (layout) -Count condition	[Count every time design object], [Count every time
		another variable value loops]
	Edit parameters	Refer to the table below.
Date	Date type	[System date]
	Character type	[Double-byte]
	Edit parameters	Refer to the table below.
Calculation	Calculation variable type	[Price C/D], [Price rounding]
	Edit parameters	Refer to the table below.
Condition	All	(Not displayed in Basic Mode)
Symbol	All	(Not displayed in Basic Mode)
System	All	(Not displayed in Basic Mode)

Variable

• Edit parameters

In Advanced Mode, every function is available.

	Limit in Basic Mode						
Edit parameters	Input	Copy (before editing)	Sequential number	Date	Calculation		
Table conversion	Yes	Yes	No	Yes	Yes		
Delete line feed	No	No	No	No	No		
Remove specified character	No	No	No	No	No		
Tax editing	Yes	Yes	No	No	Yes		
Comma editing	Yes	Yes	Yes	No	Yes		
Currency editing	Yes	Yes	No	No	Yes		
One character filling	No	No	No	No	No		
Justification editing	Yes	Yes	Yes	Yes	Yes		
Replace	No	No	No	No	No		
Leading zero filling	Yes	Yes	Yes	No	Yes		

This completes "8: Operating in Advanced Mode".

9: Print Function of GS1 DataBar and GS1 Composite Symbol

1. What is the Print Function of GS1 DataBar and GS1 Composite Symbol?

This is the function to print GS1 DataBar and GS1 composite symbol.

To use the GS1 DataBar and GS1 composite symbol, change the operation mode to Advanced Mode.

2. How to Set Up the Layout

Specifying the GS1 DataBar

1. In MLDesign, barcode type that can be created as GS1 DataBar is listed on the Properties pane of the Barcode Object with the name "GS1 DataBar ...".

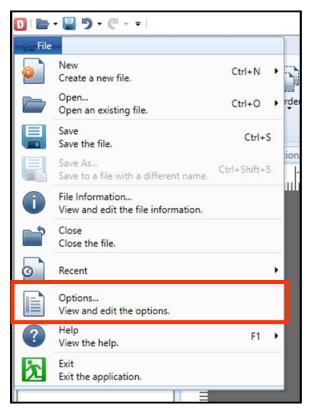
🚰 Prop	erties	д		
Barcode		?		
Basic set	tings	*		
ltem na	me: Barcode-1	٦		
- Data -				
Paste	•			
00000	0000000	-		
Barcod	e settings			
Type:	GS1 DataBar Omnidirectional	1		
H.Read	UPC-E	*		
Level:	Standard Carton ID GS1-128 (UCC/EAN128)			
	UPC-A [According to Printer]			
Attribute				
- Print n	GS1-128(UCC/EAN128)			
V:	GS1 DataBar Omnidirectional			
v:	GS1 DataBar Truncated			
GS1 DataBar Stacked				
notate.	GS1 DataBar Stacked Omnidirectional	Ξ		
Print:	GS1 DataBar Limited			
📃 Save				
Mouse	GS1 DataBar Expanded Stacked	+		
		~		

2. Select a barcode type to be printed and specify the character code and number of digits according to the specifications of 1D barcode. Then GS1 DataBar will be displayed.

Design Input Definitions	able Format	Properties 4
-30 -20 -10	0 10 20 30 40 50 60	Barcode
		Basic settings
		Item name: Barcode-1
		Data
10		Paste -
		00000000000
20		
		Barcode settings
40		Type: GS1 DataBar Stacked •
		H.Readable: No 🔻
50		Level: 3 🗘 (x)

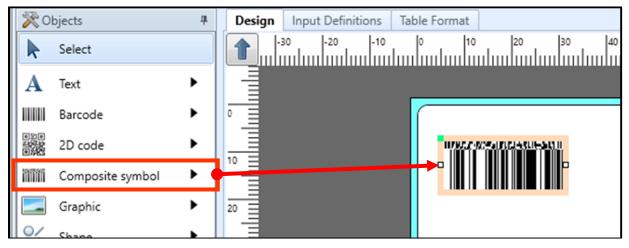
Specifying GS1 composite symbol

1. Select "Options" from the File menu in MLDesign and select "Advanced Mode" in Operation mode.



D Options				?	×
Set the basic opt	ions.				
Basic settings Default layout Design screen Auto save	Operation mode	Basic Mode Basic Mode Advanced Mode			
			ОК	Cance	el

2. Place a composite symbol object on the Design screen.

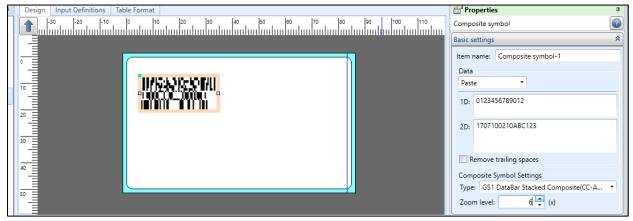


3. Select a composite symbol object and select a barcode type from the pulldown menu on the properties pane.

	Properties 4								
0	Composite symbol								
	Basic settings								
	Item name: Composite symbol-1								
	Data								
	Paste •								
	1D: 00000000000								
	2D: 0								
	Remove trailing spaces								
	Composite Symbol Settings								
	Type: GS1 DataBar Omnidirectional Composi 💿								
GS1 Da	taBar Omnidirectional Composite(CC-A/CC-B)								
GS1 Da	taBar Truncated Composite(CC-A/CC-B)								
1	taBar Stacked Composite(CC-A/CC-B)								
	taBar Stacked Omnidirectional Composite(CC-A/CC-B)								
	taBar Limited Composite(CC-A/CC-B)								
	taBar Expanded Composite(CC-A/CC-B)								
	taBar Expanded Stacked Composite(CC-A/CC-B)								
	Composite(CC-A/CC-B)								
	Composite(CC-A/CC-B)								
	Composite(CC-A/CC-B)								
	Composite(CC-A/CC-B)								
	8 Composite(CC-A/CC-B)								
GS1-12	8 Composite(CC-C)								

4. To print the GS1 composite symbol, specify the data for 1D barcode section and for 2D code section respectively.

Example) 1D barcode: 0123456789012, 2D code: 1707100210ABC123



3. Description

Specifying FNC1 for the GS1 composite symbol

• To specify FNC1 (GS) as data, specify '#' (23h).

■ Specifying the bar height of GS1-128 Composite (CC-A/CC-B) and (CC-C)

The bar height of 1D barcode section only for GS1-128 Composite (CC-A/CC-B) and (CC-C) can be specified. The barcode height is that when Zoom level is set to "1".

The maximum value that can be set depends on the head density.

Head density	Height	Printer model					
8 lines/mm	62.5 mm	CL4NX-J 08, T/R408v-ex, etc.					
12 lines/mm	41.7 mm	CL4NX-J 12, T/R412v-ex, etc.					
24 lines/mm	20.85mm	CL4NX-J 24, HA224R, etc.					

Select a composite symbol object and specify it in Basic settings on the Properties pane.

Example) When the height is set to "5" and zoom level to "2", the height of the 1D barcode section will be "10 mm".

Format	Properties	4
	Composite symbol	3
	Basic settings	*
	Item name: Composite symbol-1	
	Data Paste -	
	1D: 0123456789012	
	2D: 1707100210ABC123	
	Remove trailing spaces	
	Composite Symbol Settings Type: GS1-128 Composite(CC-A/CC-B)	•
	Height: 5, ; (mm)	
C-A/CC-B) Y: 11.0000, X: 118.3333 Quantity: 1/1 123% 🗩 🕀 🕀	Zoom level: 2 🗘 (x)	

About the use of variables

- Symbol variables are only available in the 1D data section of GS1-128/GS1 DataBar/GS1 DataBar Conposite. Other GS1 composite symbols must be used with a concatenated variable.
- The symbol variable automatically adds FNC1 to the beginning and the end of the variable data, and switches to the optimum code set according to the AI to generate the data.

Limitation for data

Data type that can be specified depends on the barcode type.

Characters that can be specified
1D barcode section
Barcode type: GS1 DataBar Expanded, GS1-128 Composite
Alphanumeric, single-byte space, symbol 29 characters* * "!" """ "\$" "%" "&" """ "(" ")" "*" "+" "," "-" "." "/" ":" ";" "<" "=" ">" "?"
"@" "[" "¥" "]" "_" "`" "{" "}" "~"
Barcode type: GS1 DataBar and GS1 composite symbol other than above
Numeric only
2D code section (all common)
Alphanumeric, single-byte space, symbol 21 characters* * "!" """ "%" "&" """ "(" ")" "*" "+" "," "-" "." "/" ":" ";" "<" "=" ">" "?" "_" "#" (# is FNC1.)

- For GS1-128 Composite (CC-A/CC-B), it is automatically judged that 2D Code section of 56 digits or less is CC-A and that of 57 to 338 is CC-B.
- Al (application identifier) required at the top of 1D barcode section of GS1 DataBar "01" is added and output by the scanner. However, for GS1 DataBar Expanded, it should be specified as data.
- Check digit for 1D barcode section of GS1 DataBar is automatically filled. However, for GS1 DataBar Expanded only, check digit should be specified as data.

Request for reading confirmation

• As there are many types of GS1 composite symbols and data configuration is complicated, be sure to check the data using the scanner.

This completes "9: Print Function of GS1 DataBar and GS1 Composite Symbol".

10: Binary Information Setup Function (2D Code)

1. What Is the Binary Information Setup Function?

The binary information indicates characters that cannot be expressed in alphabetic. 2D code enables these characters to be expressed and used. The binary information setup function enables various symbols with the binary information attached to be printed.

To use the binary information setup, change the operation mode to Advanced Mode.

For example, a raw-material manufacturer adds binary information to a QR code which results in construction of the traceability system. An example of QR code is shown below. The following pages cover the specific setup method based on the QR code specifications below.

Displayed symbol: QR code Stored data: [)> [RS] 05 [GS] 01 [GTIN] [GS] 17 [Guarantee date] [GS] 11 [Production date] [GS] 10 [Lot No.] [GS] 412 [GLN] [RS] [EOT]

* The followings are binary information.

[RS] Record separator ("1E"h)
[GS] Group separator ("1D"h)
[EOT] Message trailer ("04"h)

2. How to Set Up the Layout

Creating using the Join variable

1. Create a variable to input the data.

Using the settings shown below, create input variables.

M	🔐 Local Variable List											
A	dd	1 Edit	ゴ Insert		_		🞇 Delete	₿ atch	Search:	En	ter part of a variable na	ame 🔄
	Var	riable	name		Туре			No. of dig	gits		Details	
	a	GTIN			Input				1	14	Input type: Character	
•	æ	Warra	anty dat	e	Input					6	Input type: Character	
	a	Manu	ufacture	date	Input					б	Input type: Character	
	a	Lot N	lo.		Input				2	20	Input type: Character	
	a	GLN			Input				1	13	Input type: Character	
												-

To use with QR code, put the items together with the Join variable.
 To input binary information, select "Character" in Type and click ". . ." in Data.

۵	D Variable Settings											
Se	Set the variable settings.											
	Input	S	elect Cl	hild Items	Edit							
	Fixed		No.	Туре		Data		No. of	Attribute			
	<u> </u>		1	Fixed	•	[)>	_	3	Fixed character: [)>			
	Сору	I	2	Character	•			0				
	Join		*		•							
	Sequence number											
	Date											

3. Select the character of a Binary Information and click "OK".

D	Select Chara	cter		?	×
	lect a characte st select a cod		ct the character to set from the list.		
с	ode type: AS	CII code 🔻			
	Character	Hexadecimal c	Description		
	DC2	12			
	DC3	13			
	DC4	14			
	NAC	15	否定応答		
	SYN	16	同期文字		
	ETB	17	伝送ブロック終了		
	CAN	18	取り消し		
	EM	19	媒体終端		
	SUB	1A			
	ESC	1B	エスケープ		
	FS	1C	ファイル・セパレータ		
	GS	1D	グループ・セパレータ		
•	RS	1E	レコード・セパレータ		Ξ
	US	1F	ユニット・セパレータ		
	SP	20	空白、ブランク、スペース		
	DEL	7F	抹消		
					*
	When spec	ifying a character, b	e careful to ensure the join format is appropriate.		
			ОК	Cance	el 📄

۵	D Variable Settings											
S	Set the variable settings.											
	Input Select Child Items Edit											
	Fixed		No.	Туре		Data		No. of	Attribute			
			1	Fixed	•	[)>		3	Fixed character: [)>			
	Сору)	τ 2	Character	•	RS		1	ASCII code			
	Join	*			-							
	Sequence number											
	Date											

Sequence number 5 Fixe	d • racter •			Attribute Fixed character: [)>	[
Copy 2 Cha Join 3 Fixe Sequence number 5 Fixe	racter • d •	RS		5	
Join 3 Fixe Sequence number 5 Fixe	d •		1		
Sequence number 5 Fixe	-	05		ASCII code	<u>D</u> elete
Sequence number 5 Fixe	racter 🔹		2	Fixed character: 05	
5 Fixe		GS	1	ASCII code	
Date 6 Var	d 🔹	01	2	Fixed character: 01	
	able 🔹	GTIN -	14	Variable type: Input, Input type: Character	
Calculation 7 Cha	racter 🔹	GS	1	ASCII code	
8 Fixe	d 🔹	17	2	Fixed character: 17	
Condition 9 Var	able 🔹	Guarantee d 🔹	6	Variable type: Input, Input type: Character	
Symbol 10 Cha	racter 🔹	GS	1	ASCII code	
11 Fixe	d •	11	2	Fixed character: 11	
System 12 Var	able 🔹	Production •	6	Variable type: Input, Input type: Character	
13 Cha	racter 🔹	GS	1	ASCII code	
14 Fixe	d •	10	2	Fixed character: 10	
15 Var	able 🔹	Lot No. 🔹	20	Variable type: Input, Input type: Character	
16 Cha	racter •	GS	1	ASCII code	
17 Fixe	d •	412	3	Fixed character: 412	
18 Var	able 🔹	GLN •	13	Variable type: Input, Input type: Character	
19 Cha	racter •	RS	1	ASCII code	
20 Cha	racter •	EOT ···	1	ASCII code	Move <u>U</u> p
*	-				Move Do <u>w</u> n
		to reduce the numb	er of digits		Move Do <u>w</u> n

4. In the same way, combine the binary information and input item to create data.

5. Set the Join variable created in QR code on the Design screen. This is the end of settings.

Design Input Definitions Table Format	Properties	Д
-30 -20 -10 0 10 20 30 40	2D code	3
	Basic settings	*
	Item name: 2D code-1	
	Data	
10	Variable •	
	Name: (Local) QR code	
20	Fill Pref.: Suffix:	
30	Remove trailing spaces	
	2D code settings	
	Type: QR Code (Model 2)	-
	Advanced settings	*
50	Attribute settings	*
	Print position (mm)	
CL4NX-J 12 QR Code (Model 2) Y: 19.166	V: 7.3333 H: 11.1667 C	

Creating using the fixed variable

1. Create a variable to input the data.

Using the settings shown below, create input variables.

I	Local V	ariable l	List								
A	dd Edit	🗂 Insert		_	Paste	🗱 Delete	Batch	Search:	Ent	ter part of a variable na	ame 🔄
	Variable	name		Туре			No. of dig	gits		Details	
	🛹 GTIN			Input				1	4	Input type: Character	
•	🛹 Warra	anty date	2	Input				(6	Input type: Character	
	🖉 Manu	ufacture	date	Input					6	Input type: Character	
	쟫 Lot N	lo.		Input				2	0	Input type: Character	
	🖉 GLN			Input				1	3	Input type: Character	

2. Create binary information using the fixed variable.

Select "Hexadecimal code" in Type and enter hexadecimal character string in data. Enter "1E" for Record separator.

Variable Settings		?	Х
Set the variable setting	js.		
Input	Type: 🔘 Text 💿 Hexadecimal code		
Fixed	Enter the data: Current [1] digits Maximum of 1024 digits		
Сору	1E		
Join			
Sequence number			
Date			
Calculation			
Condition			
Symbol			
System			
	Normally, use the [Text] type. Use the [Hexadecimal code] type when specifying TAB, GS and other binary info that cannot be displayed with text.	rmation	
	Enter data in ASCII code for the [Text] type.		
	Enter the data in hexadecimals for the [Hexadecimal code] type. Line feeds are invalid. Example: To specify a TAB, enter "09"		
	Variable name: Record separator (RS) No. of digits:	1 (
	ОК	Cance	:I

3. When variable creation is completed, it is displayed in a Local variable list.

I	🚰 Local Variable List								
[A/	dd Edit Insert Cut Copy P	aste Delete Bar	r part of a variable name						
	Variable name	Туре	No. of digits	Details					
	<i>G</i>TIN	Input 14		Input type: Character					
	쟫 Warranty date	Input	6	Input type: Character					
	쟫 Manufacture date	Input	6	Input type: Character					
	쟫 Lot No.	Input	20	Input type: Character					
	🖉 GLN	Input	13	Input type: Character					
•	Record separator (RS)	Fixed	1	1 Table type: Hexadecimal code, Fixed character: 1E					

Continue the creation of the necessary variables in the same way.

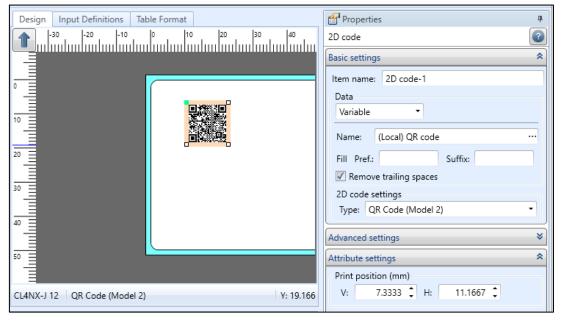
🚰 Local Variable List							
Add Edit Insert Cut Copy		Search: Ente	er part of a variable name				
Variable name	Туре	No. of digits	Details				
<i>W</i> ■GTIN	Input	14	Input type: Character				
🖉 Warranty date	Input 6		Input type: Character				
쟫 Manufacture date	Input		5 Input type: Character				
쟫 Lot No.	Input	20	Input type: Character				
<i>W</i> ■GLN	Input	13	Input type: Character				
Record separator (RS)	Fixed		1 Table type: Hexadecimal code, Fixed character: 1E				
Group separator (GS)	Fixed	1	1 Table type: Hexadecimal code, Fixed character: 1E				
Message trailer (EOT)	Fixed	1	1 Table type: Hexadecimal code, Fixed character: 1E				
Message header ([)>)	Fixed	3	Table type: Character, Fixed character: [)>				

4. To use with QR code, put the items together with the Join variable.

Select the created variables in order.

	Se	elect Cl	hild Items Edit				
Fixed		No.	Туре	Data	No. of	Attribute	Add
Conv	•	1	Fixed •	[)>	3	Fixed character: [)>	*
Сору		2	Character •	RS	1	ASCII code	Delete
Join		3	Fixed •	05	2	Fixed character: 05	
equence number		4	Character •	GS	1	ASCII code	
equence number		5	Fixed •	01	2	Fixed character: 01	
Date		6	Variable •	GTIN -	14	Variable type: Input, Input type: Character	
Calculation		7	Character •	GS	1	ASCII code	
		8	Fixed •	17	2	Fixed character: 17	
Condition		9	Variable 🔹	Guarantee d 🔹	6	Variable type: Input, Input type: Character	
Symbol		10	Character •	GS	1	ASCII code	
Curtan		11	Fixed •	11	2	Fixed character: 11	
System		12	Variable •	Production •	6	Variable type: Input, Input type: Character	
		13	Character •	GS	1	ASCII code	
		14	Fixed •	10	2	Fixed character: 10	
		15	Variable 🔹	Lot No. 🔹	20	Variable type: Input, Input type: Character	
		16	Character •	GS	1	ASCII code	
		17	Fixed •	412	3	Fixed character: 412	
		18	Variable 🔹	GLN -	13	Variable type: Input, Input type: Character	
		19	Character •	RS	1	ASCII code	
1		20	Character •	EOT ···	1	ASCII code	Move <u>U</u> p
							_ Move Down

5. Set the Join variable created in QR code in the Design screen. This is the end of settings.



This completes "10: Binary Information Setup Function (2D Code)".

11: Using the RFID Write Function

Let's write data to IC tags using the RFID write function.

1. What Is the RFID Write Function?

The RFID write function is to write data to IC tags.

To use the RFID write function, change the operation mode to Advanced Mode.

Printers supporting this function are CL4NX-J series, L'esprit R412v-RFID, and RFID model of EtVie Ev212R-RFID.

2. Types and Capacities of IC Tags

The manufacturers and capacity of various types of IC tags are listed below.

If the capacity of the specified information exceeds the limit, the excessed data will not be written.

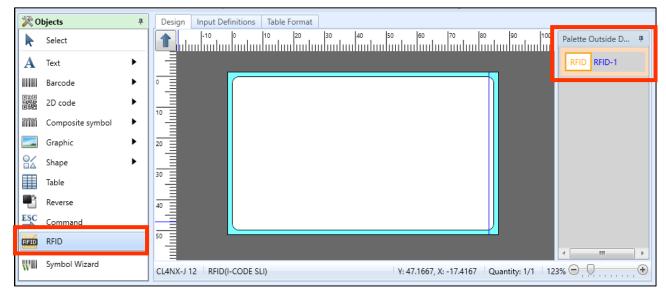
IC Tag Type	Manufacturer	Capacity (bytes)
I-CODE SLI	Philips Semiconductors	112
Tag-it HF-I	Texas Instruments	256
my-d *	Infineon	1000

* my-d has two types of inlets whose maximum capacity is 232 bytes and 1,000 bytes.

If data exceeding the maximum capacity is to be written on the 232-byte tag, an RFID tag error occurs.

3. Writing in RFID Data

Select "RFID" on the Object pane and place it on the Design screen. The Palette Outside Design is displayed and the RFID icon id added.



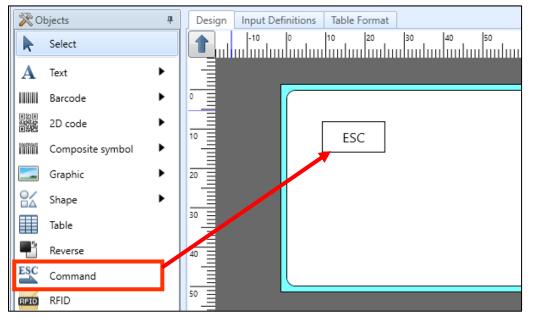
Enter the data to be written on the Properties pane and select the "Inlet type" to be used.

Properties 4						
RFID						
Basic settings						
Item name: RFID-1						
Data to write	1					
Paste 🔹						
http://www.sato.co.jp/						
Tag Inlet type: I-CODE SLI •						
Ignore tag error specification:	Ignore tag error specification:					
No specification •						
Attribute settings						
Write: Write						
Save to history						

4. Writing in Other IC Tag

To use IC tags other than I-CODE SLI, Tag-it HF-I, and my-d, describe the printer command (SBPL) with the command object and write it.

Select "Command" on the Object pane and place it on the Design screen and the ESC icon is added.



Set the printer command (SBPL)* to be written on the Properties pane. *For creating method of SBPL, please contact our sales office.

Example: Specify the command to write data with any length in EPC area on the IC chip manufacturer advanced specification tag.

🚰 Properties		щ				
Command 💿						
Basic settings						
Item name: Cor	nmand-1					
Command						
Paste	•					
Represent an escape with "^", and define the printer command as is.						
^IP0e:h,epc:303132333435363738393031						
Place in design area						
Send timing:	Include with print data	-				
Attribute settings		\$				

As the RFID command does not require the position information, remove the check of "Place in design area". The ESC icon moves from the Design screen to Palette Outside Design.

Design Input Definitions Table Format	Properties 4
-10 0 10 20 30 40 50 60 70 80 90 100 Palette Outside D 4	Command
	Basic settings
	Item name: Command-1
ESC Command-1	Command
10	Paste •
	Represent an escape with "^", and define the printer command as is.
	>
Command-1	
40	Place in design area
	Send aming. Include with print data
	Attribute settings

When printing, the set contents will be written to the IC tag.

This completes "<u>11: Using the RFID Write Function</u>".

12: Using the Condition Variable

The condition variable enables you to change print content according to complicated conditions such as changing the font size according to the input number of digits, or changing characters to be joined according to the number of input items.

1. What is the Condition Variable?

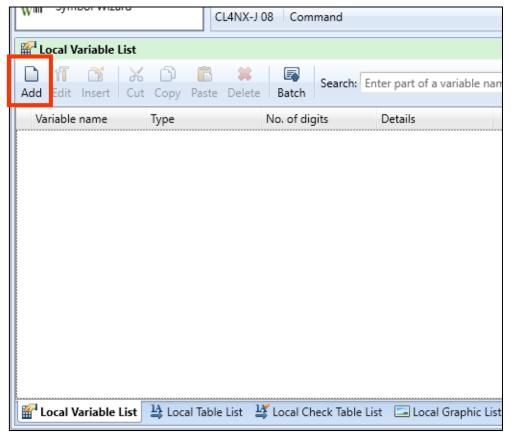
The condition variable is a function to judge True or False by setting a conditional expression. It can be used to print the value according to the conditions or used as print conditions for objects.

To use the condition variable, change the operation mode to Advanced Mode.

2. Creating a Condition Variable

Create "Condition Variable" and "Print Condition for Variable" to make the font size smaller when the input number of digits is more than 5 digits.

1. Select "Add" on the Local Variable List.



2. Set "Product name" in Variable name and "10" in No. of digits.

D Variable Settings							?	×
Set the variable setting	s.							
Input	Inp	out varia	ble type: Character	•				
Fixed	Ed	lit paran	neters					
Сору		Order	Edit items	Setting items	Setting details			
Join	•	1	Table conversion	No ··				•
Commenter and the		2	Delete line feed	No •				
Sequence number		3	Remove specified char	No •				
Date		4	Tax editing	No •				
Calculation		5	Comma editing	None •				
		6	Currency editing	No •				
Condition		7	One character filling	No •				
Symbol		8	Justification editing	None •				
		9	Replace	No ··				
System		10	Leading zero filling	No •				
								Ŧ
	T	arget ch	naracter:		Preview After editing:			
	Va	riable n	ame: Product name			No. of digits:	10]
					[ОК	Cance	el 🛛

3. Then create a condition variable.

Variable Settings Set the variable setting.	5.	? ×
Input Fixed Copy Join Sequence number Date Calculation Condition Symbol System	Insert Variable • Start position: 0 \$ End position: 0 \$	Insert Function
	Specify value of judgment result Select to switch variable expression.	value depending on the judgment result of conditional
	Variable name: Condition-1	No. of digits: 1 🛟
		OK Cancel

4. On the function list, select No. of digits and click "Insert Variable".



5. Click "OK".

D Insert Function	I		?	×
LEN関数の引数を入	カしてください。			
数値または文字:				
		OK	Cance	!

6. Place the cursor between "(" and ")" of "LEN()".

۵	D Variable Settings			
S	et the variable settin	gs.		
Input		Comparison target: 🔘 Numeric 🔘 Alphabet		
	Fixed	Conditional expression: LEN()		
		Variable		
	Сору			

7. Select the input variable created in step 2 on the Variable list and click "Insert Variable".

C	D Variable Settings				
Se	Set the variable settings.				
	Input	Comparison target: Numeric Alphabet			
	Fixed	Conditional expression: LEN()			
		Variable			
	Сору	Insert <u>V</u> ariable Product name			
	Join	Start position: 1 C End position: 10 C			
	Sequence number				

8. Click the end of Conditional expression and press " \leq ".

۵	D Variable Settings					
S	Set the variable settings.					
	Input	Comparison target: 🔘 Numeric 🔵 Alphabet				
	Fixed	Conditional expression: LEN([Product name,1,10])				
	Сору	Variable Insert Variable Product name				
	Join	Start position: 1 CEnd position:				
	Sequence number	Calculation type				
	Date	+ - × ÷ \				
	Calculation	= <> < > ≤ ≥				

9. Enter "5" at the end of Conditional expression.

۵	D Variable Settings			
S	Set the variable settings.			
	Input	Comparison target: 🔘 Numeric 🔘 Alphabet		
	Fixed	Conditional expression: LEN([Product name,1,10])<=5		

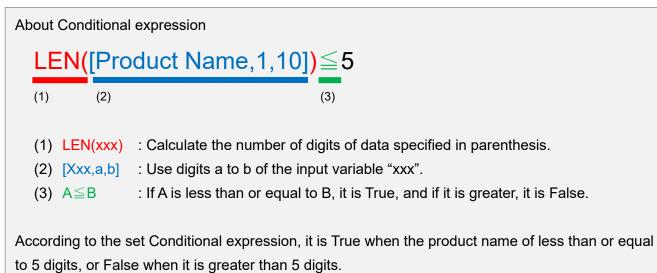
10. Enter "Less than 5 digits" in Variable name and click "OK".

Input	Comparison target: Numeric Alphabet Conditional expression: LEN([Product name,1,10])<=5			Test
Fixed	Variable	Function		1
Сору	Insert Variable Product name	Insert <u>F</u> uncti	ion 桁数	-
Join	Start position: 1 C End position: 10 C	Format:	 LEN(数値または文字)	
Sequence number Date Calculation Condition Symbol System	Calculation type $+$ $ \times$ \div \setminus $=$ $<>> \leq \geq \geq$ Brackets ())	Description:	「数値」または「文字列」の は2桁、半角は1桁となりま	
	Specify value of judgment result A Select to switch varia	ble value depen	ding on the judgment re	sult of conditional
	Create a conditional expression by combining variables, ca	alculation types,	brackets, and functions.	
	Variable name: Less than 5 digits		No. of d	igits: 1 🗘

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This completes creating Variable.

Then combine Condition Variable and Print Condition for the items below.



3. Creating an Object

If the input number of digits is greater than 5, set the print condition so that the characters with different font size are placed in the same position.

D 🖻 • 🖶 🤊 • 🦱 • 🖬	(Layo	ut)* - SATO Multi LABELIST V5 Trial[MLDesign]	– 0 ×
File Home Design			
⑦ Undo ▼ X Cut (Redo ▼) Copy		en Diplay Unit of Rotate Items Coordinates Paper*	
🔆 Objects 🕴	Design Input Definitions Table Format		Properties
Select		30 40 50 60 70 80 90 100 110	
			Basic settings
2.			Item name: Text-1
Barcode			Data
Diale 2D code			Variable •
Composite symbol 🕨			Name: (Local) Product name ····
🔙 Graphic 🕨 🕨	20 27?	<mark>??????</mark>	Fill Pref.: Suffix:
Shape 🕨			Font
Table	30		Type: Windows fonts -
Reverse			Arial
ESC Command	~- <u>-</u>		Size (pt)
RFID RFID	50	²	H: 9 • W: Auto •
			B I U \clubsuit B Advanced
Symbol Wizard	CL4NX-J 12 Text (Arial)	Y: -5.3333, X: 113.1667 Quantity: 1/1 123% 😑 💭 🕂 🛨	Specify the area
Placal Variable List		4	Advanced settings
ិត ា 🗂 🗶 🗅 🛛	🖹 🗰 Search: Enter part of a variable name		Attribute settings
Add Edit Insert Cut Copy Pa	iste Delete Batch	Help	Print position (mm)
			V: 18.75 H: 22.8333 C
GP Product name Input	10 Input type: Character		Rotate: 0° •
			Color: Black
			Print: Print • Settings
			Mouse operation:
			Font name
🖀 Local Variable List 😫 Local Ta	ble List 🛛 🕌 Local Check Table List 🛛 🗔 Local Graphic List		Set the font name.

1. Drag and drop the input variables from the Local Variable List to the Design screen.

2. Set the Font Size to "20" and select "Conditional" in Print.

	Properties 4
50 60 70 80 90 100 110	Text
	Basic settings
	Item name: Text-1
	Data Variable
	Name: (Local) Product name ····
?????	Fill Pref.: Suffix:
	Font
	Type: Windows fonts 🔹
	Arial
	H: 20 • W: Auto •
333, X: 113.1667 Quantity: 1/1 123% 🕞 - 💭	Specify the area
	Advanced settings ×
	Attribute settings
Help	Print position (mm)
	V: 18.75 CH: 22.8333 C
	Rotate: 0° 🔹
	Color: Black -
	Print: Print Settings
	Save
	Mouse o Conditional

3. Specify the condition variable in Variable name, select "Result of conditional expression is true." in Judgment content, and click "OK".

D Print Condition Se	tings		?	×		
Specify the print condi	Specify the print condition.					
Data Type: Va	riable 🔻					
Variable name: (Lo	ical) Less than 5 digits					
Condition						
Judgment content:	Judgment content: Data			-		
	Data					
	No data					
	Result of conditional expression is true					
	Result of conditional expression is false					
	Meets specified local check table conditions					
Meets specified global check table conditions						
		ОК	Cance	el		

4. Drag & drop the input variables from the Local Variable List to the Design screen.

🔟 🍉 - 🎚 🆻 - 🦿 - 🔹	– 0 ×
File Home Design	۵
Undo * % Cut % Detet % Detet	
Cobjects 4 Design Input Definitions Table Format	Properties 4
Select 1-30 1-20 1-10 10	
	Basic settings *
Barcode	Item name: Text-2
A Text IIII Barcode iiiii Barcode iiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiii	Data Variable
Composite symbol	Name: (Local) Product name ····
Graphic + 20	Fill Pref.: Suffix:
Shape	Font
	Type: Windows fonts
Reverse 40	Arial •
ESC Command	Size (pt) H: 9 • W: Auto •
Will Symbol Wizard	BIUA Advanced
₽ ¹ Local Variable List 4	Advanced settings ×
D 11 D K D E 🗰 🥵 Search: Enter part of a variable me	Attribute settings
Add Edit Insert Cut Copy Paste Delete Batch Help	Print position (mm)
Variable name Type No. of digits Details	V: 31 CH: 24.0833 C
🖉 5 digits or less Input 5 Input type: Character	Rotate: 0° 👻
	Color: Black 🔻
	Print: Print - Settings
	Save to history
	Mouse operation:
	1
Iccal Variable List 월 Local Table List 별 Local Check Table List 🖂 Local Graphic List	Print specification Switch the print specification.

5. Set the Font Size to "10" and select "Conditional" in Print.

	Properties #
	Text 💽
	Basic settings *
	Item name: Text-2
	Data Variable -
	Name: (Local) Product name ····
	Fill Pref.: Suffix:
	Font
	Type: Windows fonts
	Arial •
	H: 10 V: Auto V
	BIUA Advanced
2 123% 🔿 , 💭	Specify the area
4	Advanced settings ×
	Attribute settings
	Print position (mm)
	V: 31 CH: 24.0833 C
	Rotate: 0° 🔹
	Color: Black •
	Print: Print Settings
	San Divisional
	Mouse o Conditional
	· · · · · · · · · · · · · · · · · · ·

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6. Specify the condition variable in Variable name, select "Result of conditional expression is false." in Judgment content, and click "OK".

D Print Condition Set	tings	?	×	
Specify the print condition.				
	riable 🔻			
Condition Judgment content:	Data		•	
	Data No data			
	Result of conditional expression is true			
	Result of conditional expression is false Meets specified local check table conditions Meets specified global check table conditions			
		Cancel		

7. Place both items at the same position.

Design Input Definitions Table Format	🚰 Pi
	Text
	Basic Iten
	Da
	Na
20 20 20 20 20 20 20 20 20 20 20 20 20 2	Fill
30	For Ty
	A
	Siz H
50	R
CL4NX-J 12 Text (Arial) Y: 58.1667, X: 90.3333 Quantity: 1/2 123% ,	

This completes creating an Object. Assign a name to the layout and save it and check it on the print or preview screen.

4. Checking the Print Results

Start a layout file created in MLPrint.

Print the layout and check that it is printed according to the set conditions.

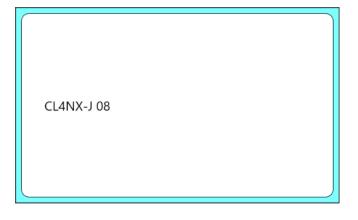
Enter "PW208" in Product name.

The name matches the condition of 5 characters or less, so it is printed with the Font size "20".



Enter "CL4NX-J08" in Product name and print it.

The name matches the condition of more than 5 characters, so it is printed with the Font size "10".



This completes "12: Using the Condition Variable".

13: Using GS1 DataMatrix

1. What is GS1 DataMatrix?

GS1 DataMatrix is a symbol that the data created according to the specified format is printed with DataMatarix, using AI (Application Identifier).

2. Creating a Join Variable

Create a join variable of GTIN, expiry date, and lot No.

1. Create variables to input the data.

Using the settings shown below, create input variables.

🚰 Local Variable List										
Add Edit Insert Cut	t Copy Paste Delete	Batch Search: Er	ter part of a variable name							
Variable name	Туре	No. of digits	Details							
🕨 🛷 GTIN	Input	14	Input type: Character							
🛹 Expiry date	Input	6	Input type: Character							
🛹 Lot No.	Input	20	Input type: Character							

2. Enter "01" for "Fixed" of Type of Joint variable.

۵	D Variable Settings							
S	Set the variable settings.							
	Input	Select C	hild Items Ed	dit				
	Fixed	No.	Туре	Data	No. of digits	Attribute		
	Сору	1		• 01	2	Fixed character: 01		
	Join	*						
	Sequence number							
	Date							
	Calculation							
	Condition							
	Symbol							
	System							

3. Select "Variables" in Type and "GTIN" in Data for the next item.

D Variable Settings										
Set the variable setting	Set the variable settings.									
Input	Select C	hild Items	Edit							
Fixed	No.	Туре	Data	No. of digits	Attribute					
Contra	1	Fixed	▼ 01	2	Fixed character: 01					
Сору		Variable	 GTIN 	• 14	Variable type: Input, Input type: Character					
Join	×		•							
Sequence number										
Date										
Calculation										
Condition										
Symbol										
System										

4. In the same way, set "Expiry date" for AI17 and "Lot No." for AI10.

D Variable Settings										
Set the variable setting	Set the variable settings.									
Input	Sel	ect Cl	hild Items	Edit						
Fixed		No.	Туре		Data		No. of digits	Attribute		
Canu		1	Fixed	•	01		2	Fixed character: 01		
Сору		2	Variable	•	GTIN	•	14	Variable type: Input, Input type: Ch		
Join		3	Fixed	•	17		2	Fixed character: 17		
Sequence number		4	Variable	•	Expiry date	-	6	Variable type: Input, Input type: Ch		
bequence number		5	Fixed	•	10		2	Fixed character: 10		
Date	I	6	Variable	•	Lot No.	-	20	Variable type: Input, Input type: Ch		
Calculation		*		•						
Condition										
Condition										
Symbol										
System										

5. Enable "Remove trailing spaces to reduce the number of digits", enter "GS1 DataMatrix" in Variable name, and click "OK".

		elect C	hild Items Ec	dit			
Fixed		No.	Туре	Data	No. of digits	Attribute	Add
Camu		1	Fixed •	• 01	2	Fixed character: 01	A
Сору		2	Variable •	GTIN	• 14	Variable type: Input, Input type: Character	Delete
Join		3	Fixed •	• 17	2	Fixed character: 17	
equence number		4	Variable 🔹	Guarantee date	• 6	Variable type: Input, Input type: Character	
		5	Fixed	• 10	2	Fixed character: 10	
Date	•	6	Variable 🔹	Lot No.	- 20	Variable type: Input, Input type: Character	
Calculation		*		•			
Condition							
Condition							
Symbol							
System							
.,							
							Move Up
							*
							Move Down
						*	
	· •	R <u>e</u> mo	ove trailing spa	aces to reduce the nu	mber of digits		

This completes creating Variable.

Then set the variable for an Object and print it.

■ When you set FNC1 at the end of a variable digit.

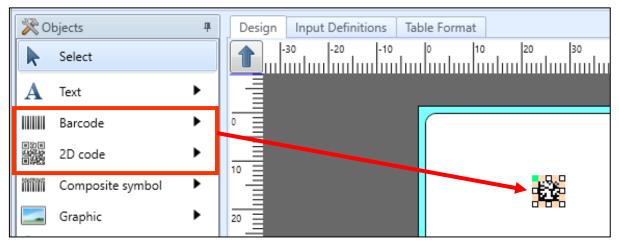
To add another AI after the variable digit AI, data separator FNC1 should be specified. Select "Character" for Type in Join variable and select "GS1 DataMatrix-FNC1" on the Symbol list of a code type.

	Se	elect C	hild Items	Edit	t				
		No.	Туре		Data	No. of digits	Attribute		
1	I	1	Character	•		1	ASCII code		
I		*		•	Select Character			?	×
					Select a character. First select a code type an	d then select the ch	aracter to set from the	e list.	
					Code type: Symbol	• Identifier:	🛕 Enter th	is when you selected an identifier from the list.	
					Туре	Character	Data	Description	
					合成シンボル	FNC	#		
					合成シンボル	区切り	1	1次元データと2次元データの区切り。	
					DataMatrix	~	7E,7E		
					GS1 DataMatrix	~	7E,7E		
					GS1 DataMatrix	ESC	1B,1B	エスケープ	
					GS1 DataMatrix	FNC1	1B,31		
					識別子	識別子(AI/DI)	(nnnn)	バーコードオブジェクトでは()が省略されます。	

3. Creating an Object

Set the Symbol Variable to 2D Code Object and print GS1 DataMatrix.

1. Place a 2D Code object on the Design screen.



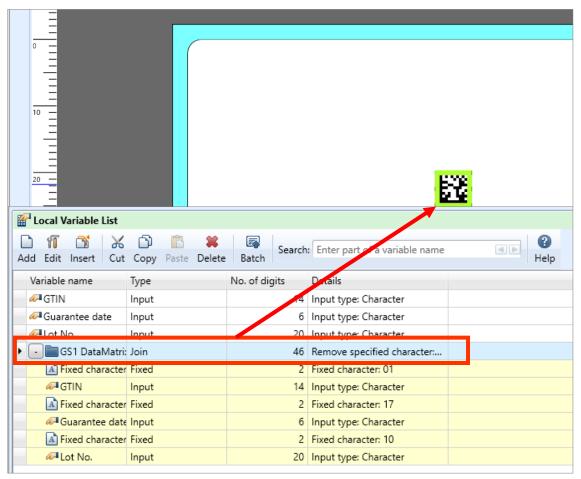
2. Select "GS1 Data Matrix (ECC200)" on the Properties pane

🚰 Propert	ies 4								
2D code									
Basic settings									
ltem name	: 2D code-1								
Data									
Variable	•								
Name:	(Local) GS1 DataMatrix ····								
Fill Pref.:	Suffix:								
🔽 Remov	ve trailing spaces								
2D code s	ettings								
Type: G	S1 Data Matrix (ECC200)								
/	DF417								
Advancec N	1icro PDF								
Cell wide	ata Matrix (ECC200)								
Gall hai	S1 Data Matrix (ECC200)								
	R Code (Model 1)								
Cell conf Q	R Code (Model 2)								
Sper	ecurity QR								
<u> </u>	Aicro QR								
Attribute N	1AXI Code								

3. Open the Advanced settings on the Properties pane, set "5" (dot) in Cell width and Cell height.

Properties		щ						
2D code								
Basic settings								
Item name:	2D code-1							
Data								
Paste	•							
0								
Remove 2D code set	trl+Enter keys to add LF. trailing spaces tings Data Matrix (ECC200)							
Advanced set	tings	*						
Cell width:	5 🗘 (dot)							
Cell height:	Cell height: 5 🗘 (dot)							
Cell config.:	Auto	•						
Special								
Attribute setti	ngs	*						

4. Drag and drop the Join variable.



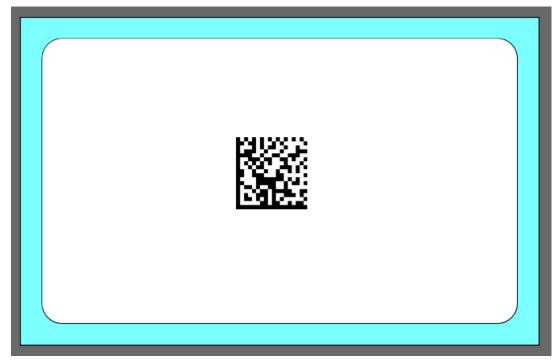
Multi LABELIST V5

This completes creating a 2D Code Object.

Lastly, open the layout in MLPrint, print and check whether the GS1 DataMatrix that saves GTIN, the expiry date, quantity, and lot No.

It is easily checked by "GS1 Japan Scan" whether it conforms to GS1 specifications. http://www.dsri.jp/application/js1japanscan/

(Example) When GTIN "04993191000002", guarantee data "201231", Lot No. "A0123" are entered



This completes "13: Using GS1 DataMatrix".