Symptom

The Carl Valentin GmbH is a silver-level member of the SAP Printer Vendor Program and provides support for the printer model/device type combinations listed in Appendix 2 during the course of this program.

General information about the SAP Printer Vendor Program can be found in SAP Note 1130927.

The printer model/device type combinations are listed in the newest version of the "Device Type Wizard". SAP Note 1036961 describes how the device type wizard is used and how a combination listed in Appendix 2 can be selected.

The device types listed use the ABAP-PDL driver made by Carl Valentin. This must be installed. SAP Note 1103422 describes the installation of device types and ABAP-PDL drivers.

The device types and the ABAP-PDL drivers are made available to Carl Valentin on the website http://www.carl-valentin.de/downloads/druckertreiber/. An installation description can also be found here.

Further terms

SPAD, device type, SAP Printer Vendor Program

Note

Certain functions of device types are only available if you use the following releases or support package levels:

Supported releases:

SAP_BASIS 620, all Support Packages
SAP_BASIS 640, all Support Packages
SAP_BASIS 700, all Support Packages
SAP_BASIS 710, all Support Packages

Contact:
Carl Valentin Technical Support
(7720) 9712-97
support@carl-valentin.de

Properties:
Thermo transfer printer, print module, direct printing mechanism

Solution

Supported printer models/device type combinations:

All current Carl Valentin GmbH printers are supported. The basis is formed by device types YCVPRINT or YCVPRT-U (Unicode) and YCVPRT-I (ISO 8859-1), which can be copied by the user and adapted according to the required printer model.

Available device types are listed in Appendix 2.

A complete overview of the printer models and suitable device types is available in Appendix 3.

Adapting device type - details:

The printer models differ only in the printing head width and resolution. In the device type Argument field, and appropriate selection/definition can be carried out following the sequence below.

Printing head width:

A	104 mm
B	106 mm
C	107 mm
D	108 mm
E	160 mm
F	162 mm
G	216 mm
H	53 mm
I	54 mm
J	56 mm
K	80 mm
L	81 mm
M	128 mm
other	148 mm (DIN A5)

Resolution:

20	200 dpi
23	203 dpi
30	300 dpi
35	305 dpi
60	600 dpi

Version (optional):

A	reserved
B	reserved
C	reserved
D	DuoPrint

Example: in other words, value C35D means: 107 mm PH width, 305 dpi, DuoPrint 107/12

Further labels on request.

As soon as a customer requires help in the creation of a printer model and device type, he is welcome to contact Carl Valentin GmbH (Note 1103826). Available device types are listed in Appendix 2.

Features:

- support of landscape printing - can be switched off
- dual-colour printing with full colour and rendered black/white content
- code-free printer commands
- 2-D barcodes: Datamatrix, QR Code, PDF417

Non-supported functions/options/features:

- Print Controls (cf. SAP Note 1049778), POSS print options
- ABAP list preparations which bypass the driver
- Duplex
- Tray selection
- SAP icons and symbols
- Filled fields (boxes) with various greyscales
- Underlined text
- Arbitrary TrueType fonts
- RFID, USPS POSTNET and MSI barcodes
- SNMP
- Datamatrix (manual switchover of coding)

Printer codepage:

Codepage 4110 (Unicode UTF-8) or 1100 (ISO 8859-1 West European) is used as standard. UTF-8 covers all European variations including Cyrillic, Greek and Turkish.

One device type -I (1100) can, however be switched over to Unicode (4110) at any time, but in this case support for Asian fonts is no longer available. Unicode is obligatory for Asian fonts (see section: supported font types).

Tests carried out:

All the necessary tests (SAP Note 1280910) were carried out using the combination of ZCV-Printer and YCVPRINT device type.

However, if errors should occur the customer is welcome to contact Carl Valentin GmbH (SAP Note 1098371).

Supported page formats:

The following SAP page formats are supported: DINA4, DINA5, EXECUTIV, LETTER, LEGAL, LINE_21, LINE_22, INCH3, INCH4, INCH4C, INCH5, INCH6, INCH7, INCH8, INCH11 and INCH12.

Formats which are wider as the print head width defined in the device type are automatically limited. Furthermore, further (own) formats can be created and incorporated in the device type. In this case, however, limitation is deactivated.

You should also note that the content to be printed has a maximum width equivalent to that of the printer used.

Supported barcodes:

All SAP barcodes with the exception of USPS POSTNET, MSI and Gen2 RFID are supported. QR barcodes are only supported on the newer printers.

Supported font types:

Non-directly supported SAP font types such as COUR_17 are automatically switched over to the superordinate font type such as COURIER. Courier itself is replaced by a serif-less printer font.

Times can only process characters from the simple ASCII character set.

The customer will have to provide a TrueType font (e.g. ANDALE) in order to support Asian font types. This font type is converted into a font package and installed on the printer memory card. Special firmware is required in addition. Further details of the above will be provided on request.

Printer commands:

Printer commands can be defined in the SAP Smartforms which activate a range of functions in the driver, i.e. switch on cutter.

Printer command descriptions can be found further down this document in Appendix 1.

Graphics and logos:

The driver can process bitmaps with up to 8 bits per pixel. The driver converts coloured contents into greyscales and then renders them in a black/white image. The print preview in SAP Smartforms sometimes shows the images used in accordance with their resolution at 2 or 6-fold magnification compared with the printout. This effect can be switched off by specifying the printer resolution for the image. Please note this during positioning.

Two-colour printing:

The processing of coloured logos and lettering is automatically activated with the device type for the DuoPrint, but can be manually activated or deactivated using a printer command. The colour of the colour ribbon to be used can also be defined to match this. The colour ribbon and the adjacent colour tones are extracted and processed separately. All other image information is rendered as a greyscale image and processed as a black/white image.

Print preview:

You should generally note that the print preview only provides an approximately matching preview. It is therefore essential to check the printout. This applies especially to rotated barcodes. Fine adjustment of the printed font size can take place using a printer command.

Other device types and alternative print processes:

It was possible to print on Valentin printers from SAP even before the Valentin driver was made available (see SAP Note 135894 and 643743).

Version history:

28 August 2017   first version

Appendix 1: Printer commands

Commands can be created, for example, in the main window in the Flow Logic context menu in the SAP Smartforms. It is then possible to switch between various functions using this.

Attribute name	Value range	Unit - note
SPEED	50 … 600	mm/s (speed)
CONTRAST	10 … 200	% (print contrast)
GAP	10 … 9999	1/10 mm (gap length)
ROTATE	0, 1	0: Off (normal, 180 ° rotate)
MIRROR	0, 1	0: Off (normal, mirrored)
CONTINUOUS	0, 1	0: Off (single labels)
XOFFSET	-999 … +999	1/10 mm
YOFFSET	-999 … +999	1/10 mm
CUTTER	0 … 6	0: Off (cutter)
CUTTER_OFFSET	0 … 500	1/10 mm
CUTTER_INTERVA	0 … 99	
DISPENSER	0 … 6	0: Off (dispenser)
SCANNER	0 … 2	0: Off (scanner)

Fitting variations:

The adjustable values depend on the printer used and can, for example, be found on the Carl Valentin homepage under technical data.

Please refer to the printer manual for more detailed descriptions.

Other parameters can be implemented on request.

Further printer commands for controlling the printout:

Attribute name	Value range	Unit - note
FONT_SIZE	… 735 …	zoom factor for font size
RENDERER	1 … 4	type of renderer
COLOR_SEP	0, 1	0: Off - dual-colour printing
COLOR_TOL	25 … 125	Colour catch range (90)
RGB_VALUE	000000 … FFFFFF	RGB in hex format #EF4136
DISABLE_LANDSC	0, 1	0: Off

Fine adjustment can be carried out using FONT_SIZE. I.e. the width and height of the text is changed accordingly.

The RENDERER command can be used to select between three different dither processes (1 … 3) and black/white (4, threshold value medium).

The COLOR_SEP command is used to switch on colour separation. The usable colour of the colour ribbon is set using RGB_VALUE. A red colour of #EF4136 is specified as a default value. A tolerance value can be specified using COLOR_TOL. This value determines the catch range of similar colours.

Automatic switchover and rotating through 90° can be switched off using DISABLE_LANDSCAPE. This can be useful if a landscape form should later be printed out as a portrait form on a wider printer.

Further printer commands for controlling barcodes:

Attribute name	Value range	Unit - note
BC_SC	1 …	e.g. EAN13
BC_THICK	2 …	e.g. Code 39 5:2, in other words 5 – 2D: Width
BC_THIN	1 …	e.g. Code 39 5:2, in other words 2 – 2D: Height
BC_MOD_WIDTH	1 …	e.g. Code 128
BC_SYMBOL_SIZE	3 … 24	e.g. PDF417 - symbol size
BC_HUMAN_READ	0, 1	0: Off
BC_SECURITY_LE	0 … 8	PDF417 security level
BC_NUM_ROW	0, 1 … 30	PDF417
BC_NUM_COL	0, 3 … 90	PDF417

These commands can be used since barcodes cannot be allocated a unique attribute in transaction /o SE73.

Note: a command relates to the entire form. This makes it impossible to print out a Code 128 barcode with a plain text line and then a second without one.

Appendix 2: Device types

The following device types are used as a basis for printout devices (printers) and can be used appropriately (Unicode).

Device type - file	PH width - resolution argument	Device designation (usable for)
YCVP-A23.PRI	104 mm, 203 DPI A23	all devices with designations 103/8 or 104/8
YCVP-B30.PRI	106 mm, 300 DPI B30	all devices with designations 106/12
YCVP-B60.PRI	106 mm, 600 DPI B60	all devices with designations 106/24

YCVP-C35.PRI	107 mm, 305 DPI C35	all devices with designations 107/12
YCVP-C60.PRI	107 mm, 600 DPI C60	all devices with designations 107/24
YCVP-D30.PRI	108 mm, 300 DPI D30	all devices with designations 108/12
YCVP-E35.PRI	160 mm, 305 DPI E35	all devices with designations 160/12
YCVP-F30.PRI	162 mm, 300 DPI F30	all devices with designations 162/12
YCVP-G30.PRI	216 mm, 300 DPI G30	all devices with designations 216/12
YCVPC35D.PRI	107 mm, 305 DPI C35D	DuoPrint 107/12
YCVPE35D.PRI	160 mm, 305 DPI E35D	DuoPrint 160/12
YCVP-H35.PRI	53 mm, 305 DPI H35	all devices with designations 53/12
YCVP-M35.PRI	128 mm, 305 DPI M35	all devices with designations 128/12
YCVP-I30.PRI	54 mm, 300 DPI I30	ILX 54/12
YCVP-J23.PRI	56 mm, 203 DPI J23	ILX 56/8
YCVP-K23.PRI	80 mm, 203 DPI K23	ILX 80/8
YCVP-L30.PRI	81 mm, 300 DPI L30	ILX 81/12

The device types listed in this table are also available for ISO-8859-1. They differ due to designation I, in other words YCVI instead of YCVP.

Note: If the output device Wizard is used, the version YCVI- (ISO8859-1, Codepage 1100) is used for device series SPE, Spectra, DPM III and Micra. YCVU- (UTF-8, Codepage 4110) is exclusively used for device series Compa II, DuoPrint, Dynacode II, Flexicode, ILX, Pica II, Spectra II, SPX II, Vario III and Vita II.

Appendix 3: printer models and device types

printer model	device type
Compa 104/8	YCVI-A23.PRI
Compa 106/12	YCVI-B30.PRI
Compa 162/12	YCVP-F30.PRI
Compa II 103/8 T	YCVP-A23.PRI
Compa II 104/8	YCVP-A23.PRI
Compa II 106/12	YCVP-B30.PRI
Compa II 106/24	YCVP-B60.PRI
Compa II 108/12 T	YCVP-D30.PRI

Compa II 162/12	YCVP-F30.PRI
Compa II 162/12 T	YCVP-F30.PRI
DPM III i107/12	YCVI-C35.PRI
DPM III i53/12	YCVI-H35.PRI
DPM III i128/12	YCVI-M35.PRI
DPM III c107/12	YCVI-C35.PRI
DPM III c53/12	YCVI-H35.PRI
DPM III xi53/12	YCVI-H35.PRI
DPM III xi107/12	YCVI-C35.PRI
DPM III xi128/12	YCVI-M35.PRI
DuoPrint 107/12	YCVPC35D.PRI
DuoPrint 160/12	YCVPE35D.PRI
Dynacode 107/12	YCVP-C35.PRI
Dynacode 53/12	YCVP-H35.PRI
Dynacode 128/12	YCVP-M35.PRI
Dynacode II 107/12	YCVP-C35.PRI
Dynacode II 53/12	YCVP-H35.PRI
Dynacode II 128/12	YCVP-M35.PRI
Flexicode 53/12	YCVP-H35.PRI
ILX 54/12	YCVP-I30.PRI
ILX 56/8	YCVP-J23.PRI
ILX 81/12	YCVP-L30.PRI
ILX 80/8	YCVP-K23.PRI
ILX 103/8	YCVP-A23.PRI
ILX 104/8	YCVP-A23.PRI
ILX 106/12	YCVP-B30.PRI
ILX 108/12	YCVP-D30.PRI
Micra 104/8	YCVI-A23.PRI
Micra 106/12	YCVI-B30.PRI
Pica 104/8	YCVI-A23.PRI
Pica 108/12	YCVI-D30.PRI
Pica II 104/8	YCVP-A23.PRI
Pica II 106/12	YCVP-B30.PRI
Pica II 103/8	YCVP-A23.PRI
Pica II 103/8 T	YCVP-A23.PRI
Pica II 108/12	YCVP-D30.PRI
Pica II 108/12 T	YCVP-D30.PRI
SPE 104/8	YCVI-A23.PRI
SPE 106/12	YCVI-B30.PRI
SPE 107/12	YCVI-C35.PRI
SPE 108/12	YCVI-D30.PRI
SPE 160/12	YCVI-E35.PRI
SPE 162/12	YCVP-F30.PRI
Spectra 104/8	YCVI-A23.PRI
Spectra 107/12	YCVI-C35.PRI
Spectra 108/12	YCVI-D30.PRI
Spectra 160/12	YCVI-E35.PRI
Spectra 162/12	YCVP-F30.PRI
Spectra 216/12	YCVP-G30.PRI
Spectra II 103/8	YCVP-A23.PRI
Spectra II 104/8	YCVP-A23.PRI

Spectra II 106/12	YCVP-B30.PRI
Spectra II 106/24	YCVP-B60.PRI
Spectra II 107/12	YCVP-C35.PRI
Spectra II 108/12	YCVP-D30.PRI
Spectra II 160/12	YCVP-E35.PRI
Spectra II 161/12	YCVP-E35.PRI
Spectra II 162/12	YCVP-F30.PRI
Spectra II 216/12	YCVP-G30.PRI
SPX 104/8	YCVI-A23.PRI
SPX 106/12	YCVI-B30.PRI
SPX 108/12	YCVI-D30.PRI
SPX 162/12	YCVP-F30.PRI
SPX II 103/8	YCVP-A23.PRI
SPX II 104/8	YCVP-A23.PRI
SPX II 106/12	YCVP-B30.PRI
SPX II 106/24	YCVP-B60.PRI
SPX II 108/12	YCVP-D30.PRI
SPX II 162/12	YCVP-F30.PRI
Vario II 104/8	YCVI-A23.PRI
Vario II 107/12	YCVI-C35.PRI
Vario III 103/8	YCVP-A23.PRI
Vario III 103/8 T	YCVP-A23.PRI
Vario III 104/8	YCVP-A23.PRI
Vario III 107/12	YCVP-C35.PRI
Vario III 107/24	YCVP-C60.PRI
Vario III 108/12	YCVP-D30.PRI
Vario III 108/12 T	YCVP-D30.PRI
Vita 104/8	YCVI-A23.PRI
Vita 106/12	YCVI-B30.PRI
Vita II 103/8 T	YCVP-A23.PRI
Vita II 104/8	YCVP-A23.PRI
Vita II 106/12	YCVP-B30.PRI
Vita II 106/24	YCVP-B60.PRI
Vita II 108/12 T	YCVP-D30.PRI