



Font Summary for AFP Font Collection



Font Summary for AFP Font Collection

Note!

Before using this information and the product it supports, be sure to read the general information in "Notices" on page 83.

Third Edition (June 2000)

This edition applies to the version, release, and modification levels of the products shown in Table 1 on page xiii and to all subsequent releases and modifications until otherwise indicated in new editions or technical newsletters. See the Summary of Changes for the changes made to this publication. Technical changes or additions to the text and illustrations are indicated by a vertical line to the left of the change. Be sure to use the correct edition for the level of the product.

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Preface

This publication summarizes the contents of the AFP Font Collection products: AFP Font Collection for MVS, OS/390, VM, and VSE (product number 5648-B33), and AFP Font Collection for Workstations and OS/400 (product number 5648-B45). Other IBM font products and AFP Font Collection Version 1.1, 5648-113, are summarized in *IBM AFP Fonts: Font Summary*, G544-3810.

This publication is organized as follows:

- “IBM Font Concepts” explains some basic font concepts, explains the difference between pitch and point size, identifies the languages supported by the various fonts, and provides figures that explain the naming conventions for fonts and code pages.
- “Font Summary Tables” contains tables that identify the operating systems, media shipped on, formats available, major font types, code page identifiers, coded font identifiers, character set identifiers, and available point or pitch size for the following:
 - Expanded Core Fonts (included with 5648-B33 and 5648-B45)
 - Compatibility Fonts (included with 5648-B45, but not included with 5648-B33)
 - DBCS Core Fonts (included with 5648-B45 and 5648-B33)
 - Simulation Fonts (included with 5648-B45 and 5648-B33)
- “Code Pages” contains tables identifying the code pages.

For more information about character sets, code pages, coded fonts, warranty, and usage information, refer to the following publications:

- *IBM AFP Font Collection for MVS, OS/390, VM, and VSE Licensed Program Specifications*, G544-5634, which provides an overview of the AFP Font Collection for MVS, OS/390, VM, and VSE and warranty information.
- *IBM AFP Font Collection for Workstations and OS/400 Licensed Information*, G544-5632, which provides warranty information for the AFP Font Collection for AIX, OS/400, and OS/2.
- *IBM AFP Fonts: Introduction to Typography*, G544-3122, which introduces the concepts of typography to help the user design documents and print them using Advanced Function Presentation (AFP) software.
- *IBM AFP Fonts: Font Summary*, G544-3810, which summarizes the contents of the AFP Font Collection, Version 1.1.0, and the IBM font licensed programs.
- *IBM AFP Fonts: Technical Reference for Code Pages*, S544-3802, which provides in depth Expanded Core font information including character set attributes, tables that show all AFP characters and the language complements that contain them.
- *IBM Technical Reference for AFP Font Collection Expanded Core Fonts*, S544-5228
- *ABOUT TYPE: IBM's Technical Reference for 240-Pel Digitized Type*, S544-3516, which provides technical details for the Compatibility fonts.

- *IBM AFP Fonts: Font Samples*, G544-3792, which provides printed samples of all AFP fonts.
- *IBM Technical Reference for AFP Font Collection Japanese Fonts*, S544-5685, which provides technical details for the Japanese character sets and code pages (available only as a PDF file at <http://www.printers.ibm.com/psc.nsf/support/manuals>).
- *IBM Technical Reference for AFP Font Collection Korean Fonts*, S544-5686, which provides technical details for the Korean character sets and code pages (available only as a PDF file at <http://www.printers.ibm.com/psc.nsf/support/manuals>).
- *IBM Technical Reference for AFP Font Collection Simplified Chinese Fonts*, S544-5687, which provides technical details for the Simplified Chinese character sets and code pages (available only as a PDF file at <http://www.printers.ibm.com/psc.nsf/support/manuals>).
- *IBM Technical Reference for AFP Font Collection Traditional Chinese Fonts*, S544-5688, which provides technical details for the Traditional Chinese character sets and code pages (available only as a PDF file at <http://www.printers.ibm.com>).
<http://www.printers.ibm.com/psc.nsf/support/manuals>).

For more information about Type Transformer, refer to *IBM AFP Fonts: Type Transformer for Windows User's Guide*, G544-5726.

For information about the font formats supported by IBM printers, refer to *Advanced Function Presentation: Printer Information*, G544-3290.

Summary of Changes

Third Edition (June 2000)

This publication is based on the *IBM Font Summary for AFP Font Collection*, S544-5633-01. Changes are marked with revision bars. This publication has:

- Revised information about DBCS simulation fonts
- Revised information about DBCS Core fonts
- Minor technical changes as marked by revision bars.

Second Edition (March 1999)

This publication is based on the *IBM Font Summary for AFP Font Collection*, S544-5633-00. Changes are marked with revision bars. This publication has:

- Added information about DBCS simulation fonts
- Revised information about DBCS Core fonts
- Minor technical changes as marked by revision bars.

First Edition (September 1998)

This publication is based on the *IBM AFP Fonts: Font Summary*, G544-3810-03. This publication has:

- Added information about the euro currency symbol
- Added information about support for the Thai language
- Added information about support for the Lao language
- Added information about new code pages added to the AFP Font Collection for Version 2.1.0
- Added a section covering what is provided in the IBM AFP Font Collection
- Added detailed information about DBCS fonts
- Removed information about the 4028 Font Metrics and IBM 240-pe1 Font Licensed Programs

Summary of Releases

This publication reflects the following licensed program releases:

Table 1. Summary of Font Releases

Licensed Program	Description	Release Level
5648-B33	IBM AFP Font Collection for MVS, OS/390, VM, and VSE (contains IBM Expanded Core Fonts)	2.1.0
5648-B45	IBM AFP Font Collection for Workstations and OS/400 (contains Expanded Core Fonts and features that provide Compatibility Fonts, Type Transformer plus other font utilities, and DBCS Core Fonts)	2.1.1

About the IBM AFP Font Collection

The IBM AFP Font Collection provides fonts and font utilities that can be used to create a robust AFP presentation environment. Version 2.1.1 of AFP Font Collection is similar to the first version (1.1.0), and it adds support for the euro currency symbol to the Latin1 fonts, the Thai language, and the Lao language, as well as some new code pages. However, Version 2.1.1 divides Version 1.1.0 into two separate products:

- IBM AFP Font Collection for MVS, OS/390, VM, and VSE (product number 5648-B33), provides font resources for the MVS, OS/390, VM, and VSE operating environments. Font data formats include 240-pel bitmaps, 300-pel bitmaps, and AFP outline fonts. No program code is offered in the AFP font collection for MVS, OS/390, VM, and VSE.
- IBM AFP Font Collection for Workstations and OS/400 (product number 5648-B45), provides font resources for the workstations, such as AIX and Windows, and OS/400 operating environments. In addition to the font resources, an orderable feature of this product also provides Windows font utilities that allow you to: edit outline fonts, create AFP font resources from Type 1 outline fonts, create and modify code pages, and create and modify coded fonts. DBCS CID-keyed outline fonts are also provided for the Chinese, Japanese, and Korean languages. The Chinese, Japanese, and Korean fonts can be used with Type Transformer to create 240-pel and AFP Outline Font resources.

The SBCS type families provided in the AFP Font Collection are called the Expanded Core Fonts and include:

- Boldface Latin1 (with euro)
- BookMaster Latin1 and Specials (with euro)
- Courier (with euro)
- Courier APL2
- Gothic Katakana
- Gothic Text Latin1 (with euro)
- Helvetica (with euro)
- IBM Logo (for BookMaster)
- Letter Gothic Latin1 (with euro)
- OCR-A
- OCR-B
- Prestige Latin1 (with euro)
- Times New Roman (with euro)

Language support includes the Latin1-5 language groups, along with Arabic, Cyrillic, Greek, Hebrew, Lao, and Thai for the Courier, Helvetica, and Times New Roman type families.

DBCS type families and languages provided in the AFP Font Collection for Outline Fonts and Programs include:

- Japanese
 - Heisei Kaku Gothic
 - Heisei Maru Gothic
 - Heisei Mincho
- Korean with Full Hangul Characters

About the IBM AFP Font Collection

- Gothic
- Myengjo
- Simplified Chinese
 - Fang Song (GB)
 - Hei (GB)
 - Kai (GB)
 - Song (GBK)
- Traditional Chinese
 - Kai
 - Sung

The AFP Font Collection Version 2.1.1 **does not contain** any of the following:

- Font licensed products, including the Sonoran fonts
- Font RPQs, including Postal Bar Codes and Bar Code/OCR
- 4028 Font Metrics
- Compatibility fonts in 5648-B33; however, they are included in 5648-B45
- DBCS 240 dpi raster fonts from the following previous program products:
 - Japanese
 - AFP Japanese Font V2 (5771-AGB)
 - AFP Japanese Heisei Font (5648-104)
 - Korean
 - AFP Korean Font (5771-AFW)
 - Simplified Chinese
 - AFP Simplified Chinese Font (5771-AEK)
 - Traditional Chinese
 - AFP Traditional Chinese Font (5771-AFZ)

IBM Font Concepts

This section introduces you to font terminology and how characters are represented in digitized type. The structure of IBM fonts is then presented along with the format of the fonts and spacing characteristics. In addition, the ways in which IBM supplies fonts are described, and the naming conventions for the fonts are included.

Font Definitions

To understand IBM font structure, you must first understand some definitions about fonts. Figure 1 shows the basic components of a type family, including typeface, style, weight, width, complement, type font, and type size. These terms are illustrated and defined in this section.

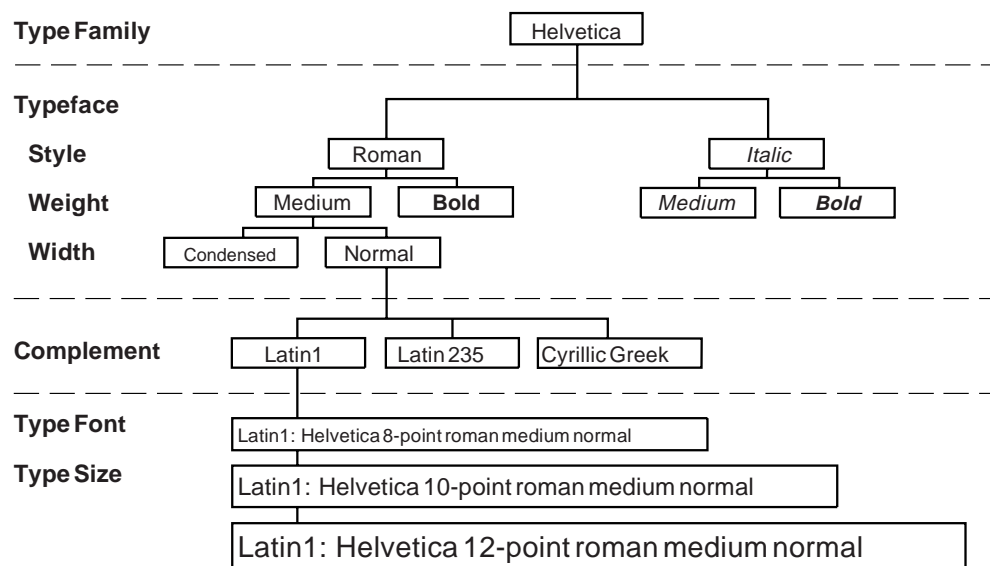


Figure 1. Helvetica Type Family

Type Family

A *type family* is a group of typefaces that share basic design characteristics and encompass many size and style variations. Examples of type families include:

- Courier
- Helvetica (Figure 1)
- Times New Roman

Typeface

A *typeface* is a collection of characters having the same style, weight, and width. Examples of these attributes are shown in Figure 1.

- *Style* is the inclination of a letter around a vertical axis; for example, roman (upright) or *italic* (slanted).
- *Weight* is the degree of boldness of a typeface; for example, medium or **bold**.
- *Width* is the horizontal variation in a character design; for example, normal or condensed.

Font Concepts

Type Font, Type Size, and Complement

A *type font*, or font, is a collection of characters sharing the same type family, typeface, and type size. Collections of characters for Expanded Core Fonts are referred to as *complements*.

Note: In IBM Type Transformer, complements are called *character lists*.

Representation of Characters

An important concept to understand is how fonts are represented. For the fonts printed by page printers using Advanced Function Presentation (AFP) licensed programs, characters are represented by mathematical formulas (outline fonts) or by data describing each dot to be printed (raster or bitmap fonts).

Pels and Print Resolution

A dot is called a *picture element* or pel. The sequence of dots forming a character is called a *raster pattern*. The number of dots per inch that a printer generates is called the *print resolution*, or density. A resolution of 240 pels means that a printer prints 240 pels per inch both vertically and horizontally, or 57 600 pels per square inch (240 × 240).

Figure 2 shows two images of different print resolutions. The image on the right has more pels per inch and greater print resolution than the image on the left.



Figure 2. Print Resolution Examples

The ability to print at a given pel density is determined by the type of printer. Because IBM fonts are provided for specific resolutions, different fonts are available for printers with different resolutions (for example, 240-pel and 300-pel printers).

Outline Fonts

Characters in outline fonts are described by mathematical formulas rather than by pels. These formulas are used by rasterizing software to create bitmap characters based on two variables: resolution and point size. This means that a single outline font can offer many print resolutions and point sizes. “Hints” are also contained in the outline fonts to ensure that typographic characteristics of the typeface are maintained in a consistent manner throughout all printed characters. Some of these characteristics include horizontal and vertical stroke widths, serifs, and curve radii.

Rotation of Characters

The ability to print in different directions and with different character rotations is also determined by the type of printer. *Print direction* shows the direction in which characters are added to a line of text. *Character rotation* is the clockwise rotation of a character with respect to the character baseline. The *character baseline* is a reference on which characters are aligned as they are added to the page in the print direction. The character baseline is always parallel to the print direction.

Figure 3 shows how print direction and character rotation can be combined to print in many orientations.

Print Direction	Character Rotation (in degrees)			
	0	90	180	270
Across (0)	ABCD	▷ DCBA	▷ DCBA	▷ DCBA
Down (90)	ABCD	▷ DCBA	▷ DCBA	▷ DCBA
Back (180)	ABCD	▷ DCBA	▷ DCBA	▷ DCBA
Up (270)	ABCD	▷ DCBA	▷ DCBA	▷ DCBA

Figure 3. Print Direction and Character Rotation Combinations (Print Orientations)

IBM Font Structure

In IBM AFP terminology, a font has three components (Figure 4). They are:

- Coded font
- Character set
- Code page

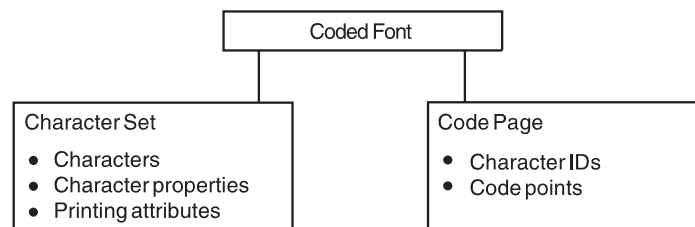


Figure 4. Font Components

Coded Font

In IBM font structure, a *coded font* translates your request for type (for example, text you previously entered at a computer terminal) into characters for printing. A raster coded font consists of two parts:

- References to specific character sets
- References to specific code pages

A character must be included in the specified character set and listed on the specified code page before it can be printed. A coded font pairs a specific code page with a specific character set.

An outline coded font consists of three parts:

- References to specific character sets
- References to specific code pages
- References to point size

Many coded fonts are shipped with the IBM AFP Font Collection for IBM Operating Systems and the IBM font licensed programs. Typically, a coded font is provided for each 10-point roman medium character set and code page combination. For certain primary code pages, such as code page 500, a coded font is provided for all character sets and code page combinations.

Note: BookMaster does not use coded fonts, so none are provided.

Character Set

In IBM font structure, a *character set* corresponds to the definition of a font; it contains the characters of a single type family, typeface, and type size. In addition, a character set specifies *character properties* and printing attributes (Figure 5).

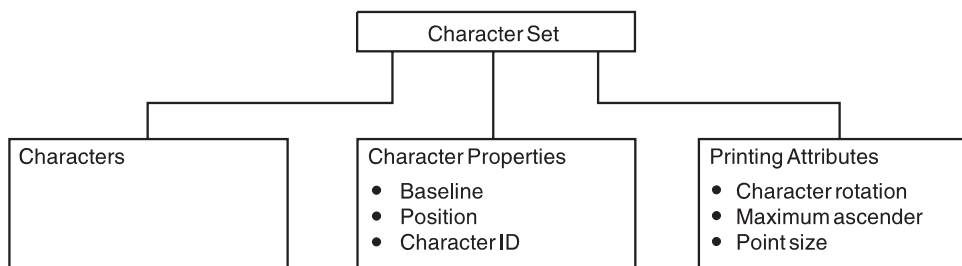


Figure 5. Composition of a Character Set

Characters

Characters are the letters, numerals, punctuation marks, or other symbols of a font.

Character Properties

Character properties detail how a character is positioned relative to the characters around it. Some character properties include the following:

- The baseline of a character showing its general alignment
- The dimensions of space in which the character is printed
- The position of the character within that space
- The identifier of the character (the character ID)

One of the character properties is the *character ID* (or graphic character ID). Each character is assigned a character ID; for example, the character A (uppercase A) is assigned the character ID LA020000.

The purpose of a character ID is to distinguish the character from similar characters. For example, the following characters look similar; however, they are different and are assigned different character IDs.

Minus sign (-)	Character ID SA000000
Hyphen (-)	Character ID SP100000
Em dash (—)	Character ID SM900000

For a list of character IDs, the character each represents, and the code pages where the characters are found, refer to *IBM AFP Fonts: Technical Reference for Code Pages*.

Printing Attributes

The printing attributes define how the character set will be printed. Some printing attributes include rotation of characters, maximum ascender, and point size.

Single- and Double-Byte Character Sets

A single-byte character set (SBCS) is a font character set intended for use with a single-byte code page (see page 9).

A double-byte character set (DBCS) is a font character set intended for use with a double-byte code page. Double-byte character sets contain some single-byte characters, usually romaji (Western characters) and katakana. Single-byte code pages are used with these characters.

Code Page

In IBM font structure, a *code page* maps each character of text to the characters in a character set (Figure 6). As you enter your text at a computer terminal, each keyboard character is translated into a *code point*. When the text is printed, each code point is matched to a character ID on the code page you specified. The character ID is then matched to the image (*raster pattern* or *outline pattern*) of the character in the character set you specified. The image in the character set is the image that is printed in your text. To be a valid code page for a particular character set, all character IDs in the code page must be included in that character set.

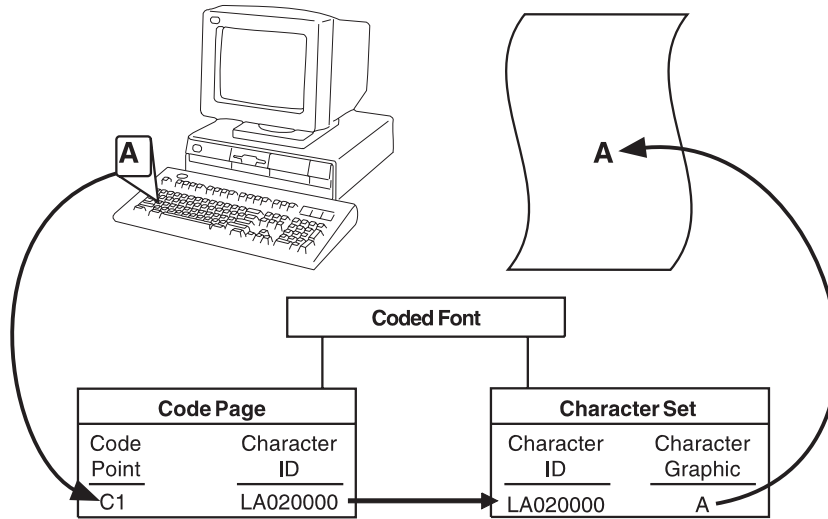


Figure 6. Translation of a Keyboard Character into a Printed Character

A character ID is an 8-byte character data string. A code point is an 8-bit binary number representing one of 256 potential characters (the maximum number of characters available on a code page). Code points are usually shown as hexadecimal representations of their binary values.

Binary	11000001
Decimal	193
Hexadecimal	C1

Figure 7 on page 9 shows an example of a code page. When the printer receives hexadecimal code point C1 for the code page shown (code page T1V10037), it prints an uppercase A (character ID LA020000).

T1V10037 Country Extended: United States, Canada

CPGID	GCSGID
37	697

Hex Codes 1st→ 2nd↓	4-	5-	6-	7-	8-	9-	A-	B-	C-	D-	E-	F-
-0	SP010000	& SM030000	- SP100000	ø LO610000	Ø LO620000	° SM190000	μ SM170000	^ SD150000	{ SM110000	} SM140000	\ SM070000	0 ND100000
-1	SP300000	é LE110000	/ SP120000	É LE120000	a LA010000	j LJ010000	˘ SD190000	£ SC020000	A LA020000	J LJ020000	÷ SA060000	1 ND010000
-2	â LA150000	ê LA150000	Â LA160000	Ê LE160000	b LB010000	k LK010000	s LS010000	¥ SC050000	B LB020000	K LK020000	S LS020000	2 ND020000
-3	ä LA170000	ë LE170000	Ä LA180000	Ë LE180000	c LC010000	l LL010000	t LT010000	· SD630000	C LC020000	L LL020000	T LT020000	3 ND030000
-4	à LA130000	è LE130000	À LA140000	È LE140000	d LD010000	m LM010000	u LU010000	© SM520000	D LD020000	M LM020000	U LU020000	4 ND040000
-5	á LA110000	í LI110000	Á LA120000	Í LI120000	e LE010000	n LN010000	v LV010000	§ SM240000	E LE020000	N LN020000	V LV020000	5 ND050000
-6	ã LA190000	î LI150000	Ã LA200000	Î LI160000	f LF010000	o LO010000	w LW010000	¶ SM250000	F LF020000	O LO020000	W LW020000	6 ND060000

Figure 7. IBM Code Page T1V10037

Different Code Pages

Code pages accommodate various national languages by using characters and special symbols appropriate to the language. Different code pages can have identical character IDs assigned to different code points.

For example, the character é (lowercase e accent acute, character ID LE110000) has the following code point assignments in two different code pages:

- Hexadecimal code point 51 in code page T1V10037 (Country Extended: United States, Canada)
- Hexadecimal code point 5A in code page T1V10280 (Country Extended: Italy)

Single- and Double-Byte Code Pages

A *single-byte code page* contains 256 or fewer one-byte code points. Single-byte code pages are large enough for languages with alphabetic writing systems, such as English, Greek, and Arabic.

A *double-byte code page* can contain as many as 65 536 two-byte code points. Languages with non-alphabetic writing systems, such as Chinese, Japanese, and Korean, require double-byte code pages.

Double-byte character sets contain some single-byte characters, usually romaji (Western characters) and katakana. Single-byte code pages are used with these characters. Because the characters are either half-width (see “Box Size” on page 13) or proportionally spaced, these code pages are sometimes called *half-width* code pages.

Font Concepts

Code Page Sections

If you think of a double-byte code page as a collection of single-byte code pages, a double-byte character code has two parts: the first byte indicating a section of the code page and the second byte a code point within the section.

Raster coded fonts treat double-byte code pages this way. The coded font is divided into sections, each with its own single-byte code page. Each character in the section has a single-byte code point.

Outline coded fonts treat double-byte code pages as single large code pages. Each character has a double-byte code point.

Format of IBM Character Sets

IBM supplies character sets in these formats:

- 240-pel Bounded-box raster format
- 300-pel raster format
- Type 1 outline format for IBM Type Transformer
- CID-keyed outline format for IBM Type Transformer
- AFP outline format

240-pel Raster

240-pel raster fonts are bounded-box fonts used on 240-pel printers. The resolution of these fonts is 240 dots per inch. All character positioning metrics in these fonts are expressed in whole-pel (fixed-metric) values.

300-pel Raster

300-pel raster fonts are used on printers where the resolution is 300 dots per inch. The character positioning values are expressed in *relative metrics* and the exact pel count is determined at print time.

Type 1 Outline

Type 1 outline is the format used with IBM Type Transformer for SBCS fonts. This format includes outlines of the various type families, which can be transformed for use by advanced function printers in sizes from 1–999 points (AFP outline fonts) or from 1–72 points (raster fonts). For more information, refer to *IBM AFP Fonts: Type Transformer for Windows User's Guide*.

CID-Keyed Outline

CID-keyed outline is the format used with IBM Type Transformer for DBCS fonts. This format includes outlines of the various type families, which can be transformed for use by advanced function printers in sizes from 1–999.9 points (AFP outline fonts) or from 1–72 points (raster fonts). For more information, refer to *IBM AFP Fonts: Type Transformer for Windows User's Guide*.

AFP Outline

AFP outline is the format by which PSF and other AFP applications can identify Type 1 outline fonts. The Type 1 or CID-keyed outlines are encapsulated in Font Object Content Architecture (FOCA) wrappers which allow them to be accessed as AFP resources. AFP outlines utilize *relative metrics* in exactly the same way as 300-pel fonts.

Fixed Metrics

Fixed-metric fonts have all character positioning metrics expressed in whole-pel values. All 240-pel fonts are fixed-metric fonts. For example, the character increment of the 'A' in 240-pel Helvetica Latin1 roman medium 10pt is 22 pels. When 240-pel fonts are created, any fractional pels encountered are eliminated by rounding up or down to whole-pel values.

Font Concepts

Relative Metrics

Relative metrics were developed for scaleable outline fonts where a single metric value could be used to determine a pel value given a desired resolution and point size. Relative metrics are based on 1000 units per “em space,” which means the fonts are designed for a hypothetical 1000 dpi, 72-point font where each side of the bounding box is 1000 pels. All AFP outlines and 300-dpi fonts contain relative metrics. The exact pel values are determined when the font is used, such as during document formatting or printing. For example, the character increment for ‘A’ in 300-pel Helvetica Latin1 roman medium is 667 relative units. In the hypothetical 1000 dpi, 72-point font, the ‘A’ would have a character increment of 667 pels, but at 10 points and 300-dpi resolution, the character increment of the ‘A’ is 27.8 pels. The fractional pel (.8 in this case) is accumulated by the printer and a whole white pel is inserted when the accumulator = 1. Constantly adjusting the character increments in this way ensures that the output text is as close to the original outline specification as possible.

Spacing Characteristics of IBM Fonts

Fonts can be classified according to their spacing characteristics as well as by their format.

Uniformly Spaced Fonts

Uniformly spaced fonts, or monospaced fonts, are similar to typewriter fonts, for which each character increment¹ is the same width. Thus, the lowercase “i” and the “.” each occupy as much space as the uppercase “M.” Examples of uniformly spaced fonts include Courier and Letter Gothic.

i.M.i.M.i.M.i.M.i.M.i.M.i.M.

Typographic Fonts

Typographic fonts are proportionally spaced fonts. The character increment¹ is part of the design and varies on a character-by-character basis. Thus, the lowercase “i” and the “.” occupy narrow spaces. The uppercase “M” occupies a wide space. Examples of typographic fonts include Helvetica and Times New Roman.

i.M.i.M.i.M.i.M.i.M.i.M.i.M.

Pitch

Uniformly spaced fonts are often described or referred to in *pitch*, or the number of characters printed in 1 horizontal inch (Figure 8).

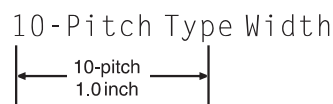


Figure 8. Type Size in Pitch

Points

All fonts are measured in *points*, the vertical size of the font. One inch is equal to approximately 72 points. Point size is a baseline-to-baseline measurement, which includes minimal white space. The *baseline* is the line upon which the characters rest. Thus, the actual height of the characters in an 18-point font is less than 18 points (Figure 9). The line spacing usually includes one or more additional points of white space between lines of type.



Figure 9. Type Size in Points

Box Size

DBCS raster fonts were formerly measured in *box size*, the number of pels in the character box. Box size can be either a horizontal or a vertical measurement. Usually both dimensions are given, the box width first. If only one dimension is given, it is the box height. In full-width fonts, the box width is usually equal to the box height. In half-width fonts, the box width is one-half the box height.

¹ A character increment is the distance that the current print position is increased for the particular character printed.

Point and Pitch Sizes

This section illustrates various point and pitch sizes. See the figures in “IBM Font Naming Conventions” on page 22 for the character position within the font naming conventions that represent the point or pitch size.

Uniformly spaced SBCS fonts are measured horizontally in pitch and specified as points in the coded font or character set name. Proportionally spaced and mixed-pitch fonts are measured vertically in points. Although the DBCS fonts are uniformly spaced, they are measured vertically in points.

Point Examples

Point size is a vertical measurement.

This is 6 points.

This is 7 points.

This is 8 points.

This is 9 points.

This is 10 points.

This is 11 points.

This is 12 points.

This is 14 points.

This is 16 points.

This is 18 points.

This is 20 points.

This is 24 points.

This is 30 points.

This is 36 points.

6 7 8 9 10 11 12 14 16 18 20 24 30 36

Pitch Examples

Pitch size is a horizontal measurement.

1234567890

This is 10 pitch or 10 characters per inch.

123456789012

This is 12 pitch or 12 characters per inch.

1234567890123

This is 13.3 pitch or 13.3 characters per inch.

123456789012345

This is 15 pitch or 15 characters per inch.

123456789012345678

This is 18 pitch or 18 characters per inch.

12345678901234567890

This is 20 pitch or 20 characters per inch.

123456789012345678901234567

This is 27 pitch or 27 characters per inch.

Box Size Examples

Box size is a 240-pel measurement.

Full-Width a b c d e アイウオツ 1 2 3 4 5 A B C D E Z アイウオツ

Half-Width abcdeアイウオツ12345ABCDEZアイウオツ
Box height of 48 or Point size of 14.4

Full-Width a b c d e アイウオツ 1 2 3 4 5 A B C D E Z アイウオツ

Half-Width abcdeアイウオツ12345ABCDEZアイウオツ
Box height of 40 or Point size of 12.0

Full-Width a b c d e アイウオツ 1 2 3 4 5 A B C D E Z アイウオツ

Half-Width abcdeアイウオツ12345ABCDEZアイウオツ
Box height of 32 or Point size of 9.6

Full-Width a b c d e アイウオツ 1 2 3 4 5 A B C D E Z アイウオツ

Half-Width abcdeアイウオツ12345ABCDEZアイウオツ
Box height of 24 or Point size of 7.2

How IBM Supplies Fonts

Four IBM font groups that can be used with advanced function printers are included in AFP Font Collection:

- Expanded Core Fonts
- Compatibility Fonts
- DBCS Core Fonts
- DBCS Simulation Fonts

Other fonts are available separately as licensed programs.

Expanded Core Fonts

The SBCS type families provided in the AFP Font Collection are called the Expanded Core Fonts and include:

- Boldface Latin1 (with euro)
- BookMaster Latin1 and Specials (with euro)
- Courier (with euro)
- Courier APL2
- Gothic Katakana
- Gothic Text Latin1 (with euro)
- Helvetica (with euro)
- IBM Logo (for BookMaster)
- Letter Gothic Latin1 (with euro)
- OCR-A
- OCR-B
- Prestige Latin1 (with euro)
- Times New Roman (with euro)

The Expanded Core Fonts are summarized in “Expanded Core Fonts” on page 37.

Compatibility Fonts

The Compatibility Fonts include the following font families; APL, Boldface, Courier, Document, Essay, Format, Gothic, Letter Gothic, Orator, Prestige, Roman, Script, Serif, Symbols, and Text.

The Compatibility Fonts are summarized in “Compatibility Fonts” on page 47.

DBCS Core Fonts

DBCS type families and languages provided in the AFP Font Collection for Outline Fonts and Programs include:

- Japanese
 - Heisei Kaku Gothic
 - Heisei Maru Gothic
 - Heisei Mincho
- Korean with Full Hangul Characters
 - Gothic
 - Myengjo
- Simplified Chinese
 - Fang Song (GB)
 - Hei (GB)
 - Kai (GB)
 - Song (GBK)
- Traditional Chinese
 - Kai
 - Sung

DBCS Simulation Fonts

DBCS Simulation Fonts include the following font families:

- Japanese
 - Heisei Kaku Gothic
 - Heisei Maru Gothic
 - Heisei Mincho
- Korean
 - Gothic
 - Myengjo
- Simplified Chinese
 - Hei
 - Song
- Traditional Chinese
 - Sung

The IBM DBCS Simulation Fonts are summarized in “DBCS Simulation Fonts” on page 59.

Distribution

The following table summarizes the packaging for AFP Font Collection:

<i>Table 2. Packaging for AFP Font Collection</i>						
Operating System	SBCS fonts		DBCS fonts		Outline fonts	
	Expanded Core	Comparts	DBCS Core	DBCS Simulation	CID-Keyed	Type 1
OS/390	Yes	No	Yes	Yes	No	No
OS/400	Yes	Yes	Yes	Yes	No	No
AIX and OS/2	Yes	Yes	Yes	Yes	Yes	Yes
OS/2 Programs	No	No	No	No	Yes	Yes

The following tables summarize the distribution numbers and media for AFP Font Collection:

Table 3. SBCS Fonts Distribution Information for MVS, OS/390, VSE, and VM

Operating System	Distribution Medium	Media Feature Number	OTC Feature Number	Material ID
MVS and OS/390	3480	5802	0001	N/A
	4mm	6200	0001	N/A
VSE	3480	5812	0001	N/A
	4mm	6203	0001	N/A
VM	3480	5822	0001	N/A
	4mm	6205	0001	N/A

Table 4. SBCS Fonts Distribution for OS/400, AIX, and OS/2

Operating System	OTC Feature Number	Medium Feature Number	Medium	Material ID
AIX Fonts	0004	5970	CD-ROM	LK2T-9269
OS/400 Fonts	0005	5832	3480 tape	N/A
		6206	4mm tape	N/A
		5902	8mm tape	N/A
		5824	1/4-inch tape	N/A
		5957	CD-ROM	LK2T-9270
OS/2 Fonts	0004	5974	CD-ROM	LK2T-9269
Outline Fonts and Programs for OS/2	0006	6208	CD-ROM	LCD4-0464

Language	Operating System	Distribution Medium	Media Feature Number	OTC Feature Number	Material ID
Japanese	MVS and OS/390	3480	5832	0002	N/A
	MVS and OS/390	4mm	6490	0002	N/A
	VSE	3480	5872	0002	N/A
	VSE	4mm	6204	0002	N/A
Korean	MVS and OS/390	3480	5842	0003	N/A
	MVS and OS/390	4mm	6491	0003	N/A
	VSE	3480	5882	0003	N/A
	VSE	4mm	6208	0003	N/A
Simplified Chinese	MVS and OS/390	3480	5852	0004	N/A
	MVS and OS/390	4mm	6492	0004	N/A
	VSE	3480	5892	0004	N/A
	VSE	4mm	6206	0004	N/A
Traditional Chinese	MVS and OS/390	3480	5862	0005	N/A
	MVS and OS/390	4mm	6493	0005	N/A
	VSE	3480	6002	0005	N/A
	VSE	4mm	6207	0005	N/A

Language	OTC Feature Number	Medium Feature Number	Material ID
Japanese	0007	5809	LK2T-9276
Korean	0008	5819	LK2T-9278
Simplified Chinese	0009	5829	LK2T-9280
Traditional Chinese	0010	5839	LK2T-9282

<i>Table 7. DBCS Font Feature for OS/400</i>				
Language	OTC Feature Number	Medium Feature Number	Medium	Material ID
Japanese	0011	5849	CD-ROM	LK2T-9275
	0011	5823	1/4 inch tape	N/A
Korean	0012	5859	CD-ROM	LK2T-9277
	0012	5833	1/4 inch tape	N/A
Simplified Chinese	0013	5869	CD-ROM	LK2T-9279
	0013	5843	1/4 inch tape	N/A
Traditional Chinese	0014	5879	CD-ROM	LK2T-9281
	0014	5853	1/4 inch tape	N/A

<i>Table 8. DBCS Font Feature for OS/2 on CD-ROM Medium</i>			
Language	OTC Feature Number	Medium Feature Number	Material ID
Japanese	0015	5889	LK2T-9286
Korean	0016	5899	LK2T-9285
Simplified Chinese	0017	6219	LK2T-9283
Traditional Chinese	0018	6229	LK2T-9284

Supported Languages

Language groups identified in items 1 through 9 are defined in the International Organization for Standardization (ISO) standard 8859.

Note: Not every font provides characters for every language listed.

1. The Latin1 language group (ISO 8859-1) includes Danish, Dutch, English, Faeroese, Finnish, French, German, Icelandic, Irish, Italian, Norwegian, Portuguese, Spanish, and Swedish. The Latin1 language group also provides the euro currency symbol and all Latin9 (ISO 8859-15) characters.
2. The Latin2 language group (ISO 8859-2) includes Albanian, Czech, English, German, Hungarian, Polish, Romanian, Serbocroatian, Slovak, and Slovenian.
3. The Latin3 language group (ISO 8859-3) includes Afrikaans, Catalan, Dutch, English, Esperanto, French, German, Italian, Maltese, Spanish, and Turkish.
4. The Latin4 language group (ISO 8859-4) includes Danish, English, Finnish, French, German, Greenlandic, Lap, Latvian, Lithuanian, Estonian, and Norwegian.
5. The Latin/Cyrillic language group (ISO 8859-5) includes Bulgarian, Byelorussian, English, Macedonian, Russian, Serbocroatian, and Ukrainian.
6. The Latin/Arabic language group (ISO 8859-6) includes Latin and Arabic scripts.
7. The Latin/Greek language group (ISO 8859-7) includes Latin and Greek scripts.
8. The Latin/Hebrew language group (ISO 8859-8) includes Latin and Hebrew scripts.
9. The Latin5 language group (ISO 8859-9) includes Danish, Dutch, English, Finnish, French, Irish, Italian, Norwegian, Portuguese, Spanish, Swedish, and Turkish.
10. The Latin/Lao language group provides support for the Lao language.
11. The Latin/Thai language group provides support for the Thai language.
12. Katakana/Gothic Katakana contains phonetic syllabic characters used for writing non-Japanese words, such as foreign names, borrowed words, or company names.
13. The DBCS Fonts contain characters for Simplified Chinese, Traditional Chinese, Japanese, and Korean.

IBM Font Naming Conventions

You can select a font from the tables in this publication without understanding the naming conventions. However, if you want to know how the IBM naming conventions identify a specific font and its characteristics, this section helps you.

Naming conventions for the code pages are described under “IBM Code Page Naming Conventions” on page 32.

First Character in the IBM Naming Convention

The following list shows the first letter of the naming convention and the type of font component that each letter represents.

First Character	Font Component
C	Character set
X	Coded font
T	Code page

Remaining Characters in the IBM Naming Convention

The remainder of each name has been assigned according to different conventions, for each of the following IBM font groups:

- Expanded Core Fonts (see Figure 10 on page 23)
- Compatibility Fonts (see Figure 11 on page 26)
- DBCS Core Fonts (see Figure 13 on page 28 and Figure 14 on page 29)
- DBCS Simulation Fonts (Figure 17 on page 31)

Character set and coded font names are usually distinctive and can be used to determine whether a font is an Expanded Core Font, a Compatibility Font, or DBCS Core Fonts.

Code page names are usually not distinctive enough to determine for which IBM font group the code page is supplied.

For character set, code page, and coded font names associated with AFP Font Collection, see:

- “Expanded Core Fonts” on page 37
- “Compatibility Fonts” on page 47
- “DBCS Core Fonts” on page 53
- “DBCS Simulation Fonts” on page 59

Note: For the naming conventions for fonts produced by IBM Type Transformer, refer to *IBM AFP Fonts: Type Transformer for Windows User's Guide*.

Expanded Core Fonts (240-pel, 300-pel, and AFP Outlines)

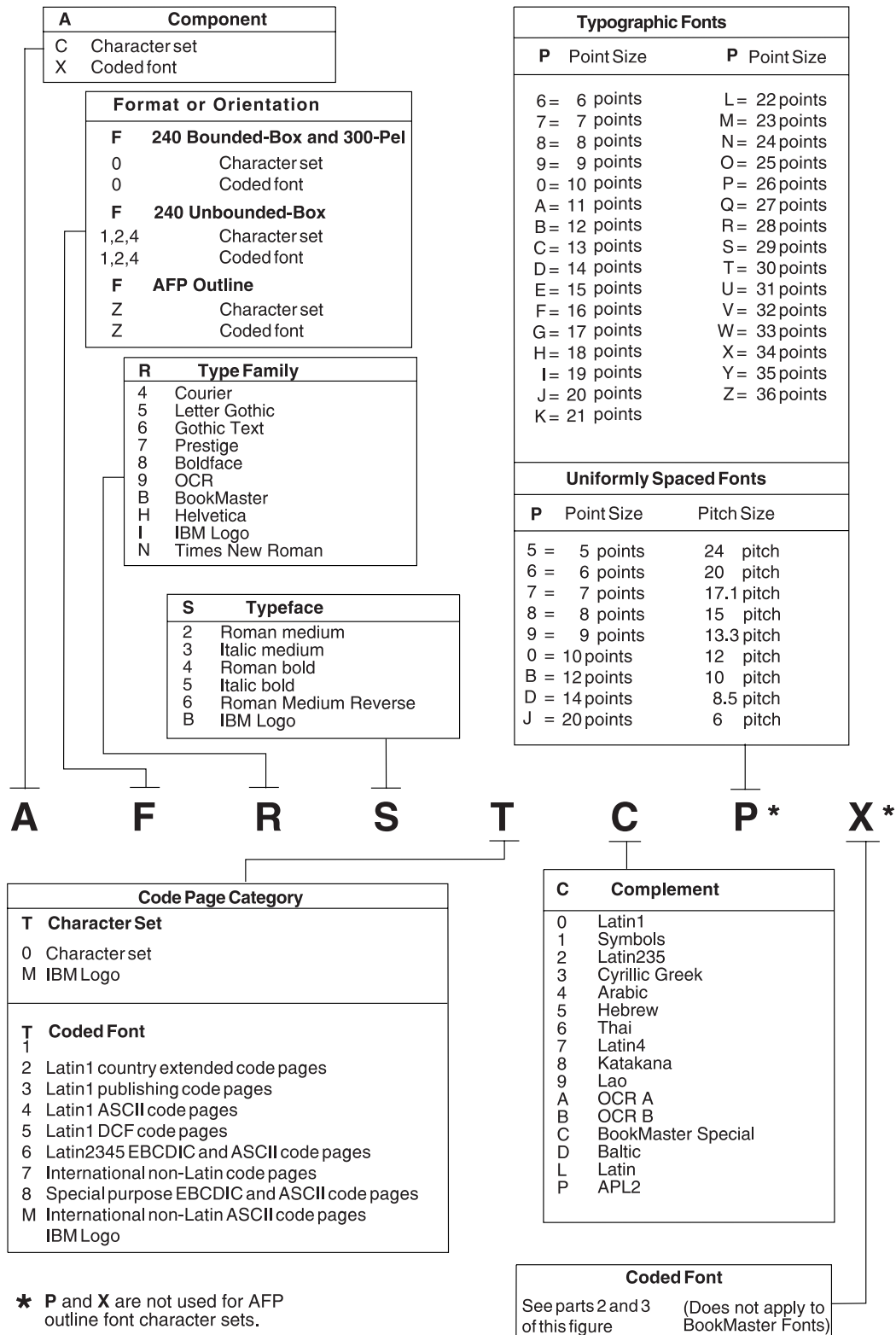


Figure 10 (Part 1 of 3). Expanded Core Fonts (240-pel, 300-pel, and AFP Outlines) Naming Convention Overview

Naming Summary

A F R S T C P X

Latin1 Country Extended Code Pages (T=1)	Latin1 DCF Code Pages (T=4)																																																																																																												
<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">X</th> <th style="text-align: left;">C</th> <th></th> </tr> </thead> <tbody> <tr><td>1</td><td>0</td><td>T1V10037 United States, Canada</td></tr> <tr><td>2</td><td>0</td><td>T1V10273 Austria, Germany</td></tr> <tr><td>3</td><td>0</td><td>T1V10274 Belgium</td></tr> <tr><td>4</td><td>0</td><td>T1V10275 Brazil</td></tr> <tr><td>5</td><td>0</td><td>T1V10277 Denmark, Norway</td></tr> <tr><td>6</td><td>0</td><td>T1V10278 Finland, Sweden</td></tr> <tr><td>7</td><td>0</td><td>T1V10280 Italy</td></tr> <tr><td>8</td><td>0</td><td>T1V10281 Japan (Latin)</td></tr> <tr><td>9</td><td>0</td><td>T1V10282 Portugal</td></tr> <tr><td>0</td><td>0</td><td>T1V10284 Spain, Latin America</td></tr> <tr><td>A</td><td>0</td><td>T1V10285 United Kingdom</td></tr> <tr><td>B</td><td>0</td><td>T1V10297 France</td></tr> <tr><td>C</td><td>0</td><td>T1V10500 International #5</td></tr> <tr><td>D</td><td>0</td><td>T1V10871 Iceland</td></tr> </tbody> </table>	X	C		1	0	T1V10037 United States, Canada	2	0	T1V10273 Austria, Germany	3	0	T1V10274 Belgium	4	0	T1V10275 Brazil	5	0	T1V10277 Denmark, Norway	6	0	T1V10278 Finland, Sweden	7	0	T1V10280 Italy	8	0	T1V10281 Japan (Latin)	9	0	T1V10282 Portugal	0	0	T1V10284 Spain, Latin America	A	0	T1V10285 United Kingdom	B	0	T1V10297 France	C	0	T1V10500 International #5	D	0	T1V10871 Iceland	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">X</th> <th style="text-align: left;">C</th> <th></th> </tr> </thead> <tbody> <tr><td>1</td><td>0</td><td>T1001002 DCF Release 2 Compatibility</td></tr> <tr><td>2</td><td>0</td><td>T1001003 U. S. Text Subset</td></tr> <tr><td>3</td><td>0</td><td>T1001068 Text with Numeric Spacing</td></tr> <tr><td>4</td><td>0-7</td><td>T1001039 GML List Symbols</td></tr> </tbody> </table>	X	C		1	0	T1001002 DCF Release 2 Compatibility	2	0	T1001003 U. S. Text Subset	3	0	T1001068 Text with Numeric Spacing	4	0-7	T1001039 GML List Symbols																																																
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Figure 10 (Part 2 of 3). Expanded Core Fonts (240-pel, 300-pel, and AFP Outlines) Naming Convention Overview

A F R S T C P X

Special Purpose EBCDIC and ASCII Code Pages (T=7)			
X	C		
1	1	T1000259	Symbols, Set 7
2	P	T1000293	APL (USA)
3	P	T1000310	Graphic Escape APL
4	A	T1000892	OCR A
5	B	T1000393	OCR B
6	1	T1000899	ASCII: Symbols, Set 7
7	1	T1001087	Symbols, Adobe
8	1	T1001038	ASCII: Symbols, Adobe
9	1	T1001091	Symbols, Set 7 Modified
0	1	T1001092	ASCII: Symbols, Set 7 Modified
A	1	T1000363	Symbols, Set 8
B	1	T1000829	Symbols, Math Symbols
C	P	T1000910	APL ASCII
D	A	T1000876	OCR-A ASCII
E	B	T1000877	OCR-B ASCII
International Non-Latin ASCII Code Pages (T=8)			
X	C		
1	3	T1000813	ISO/ASCII 8-Bit: Greece
2	3	T1000851	Personal Computer: Greek
3	3	T1000855	Personal Computer: Cyrillic
4	5	T1000856	Personal Computer: Hebrew
5	5	T1000862	Personal Computer: Hebrew
6	4	T1000864	Personal Computer: Arabic
7	3	T1000869	Personal Computer: Greece
8	6	T1000874	Personal Computer: Thailand
9	3	T1000915	ISO/ASCII 8-Bit: Cyrillic
0	5	T1000916	ISO/ASCII 8-Bit: Hebrew
A	4	T1001008	ISO/ASCII 8-Bit: Arabic
B	4	T1001029	ISO/ASCII 8-Bit: Arabic
C	4	T1001046	ISO/ASCII 8-Bit: Arabic Extended
D	3	T1000866	Personal Computer: Cyrillic #2
E	8	T1000897	Japan PC #1
F	8	T1001041	Japanese Extended-PC
G	9	T1001133	Lao ISO-8
J	5	T1000867	Israel - Personal Computer

Figure 10 (Part 3 of 3). Expanded Core Fonts (240-pel, 300-pel, and AFP Outlines) Naming Convention Overview

Compatibility Fonts (240-pel and 300-pel)

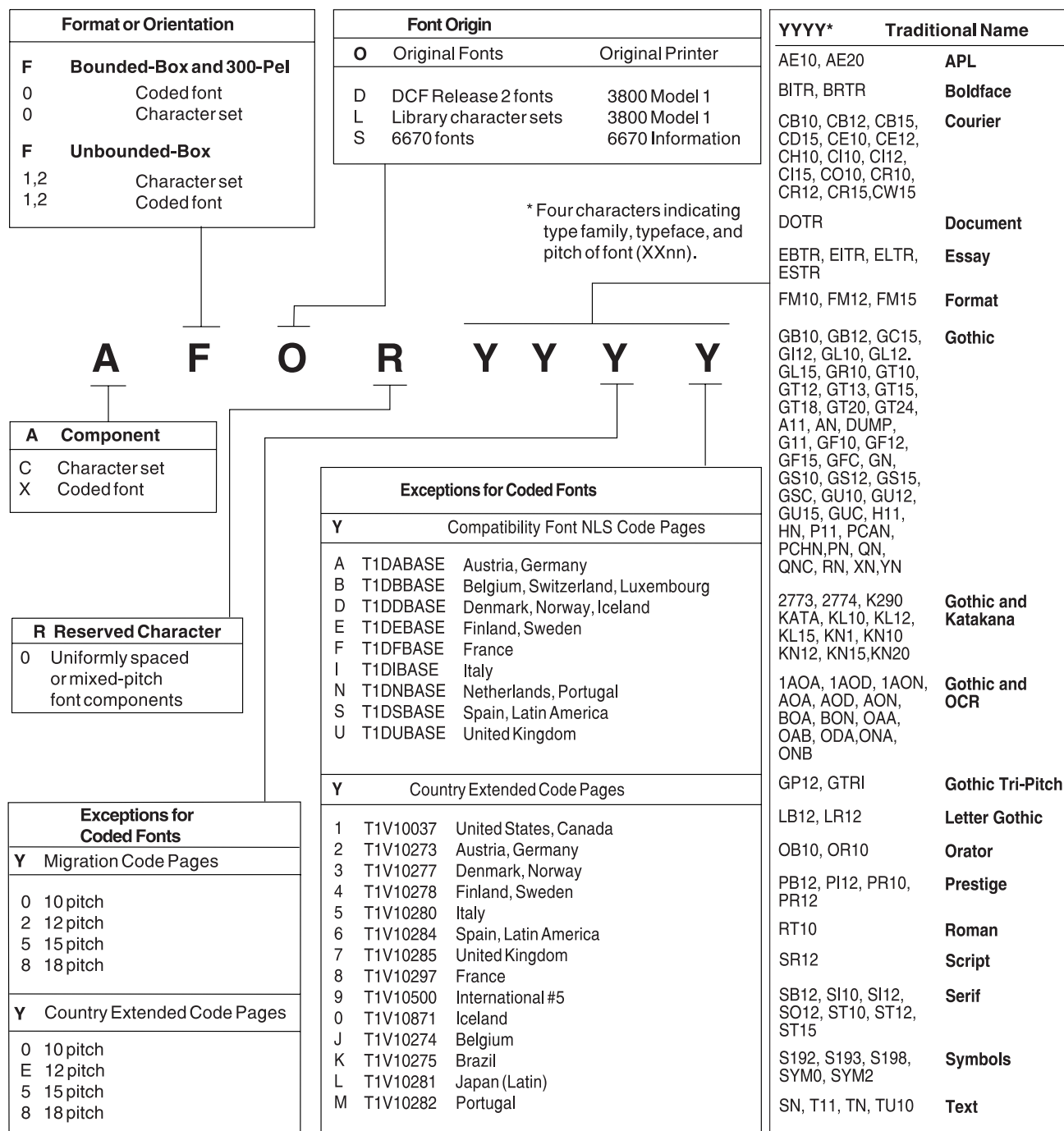


Figure 11. Compatibility Fonts Naming Convention Overview

DBCS Core Outline Fonts

PP

PP	Prefix
IB	CID outline
IK	CID outline (GBK)
CZ	AFP outline

XXXX

XXXX	Language and Typeface
JHKG	Japanese Heisei Kaku Gothic
JHMG	Japanese Heisei Maru Gothic
JHMN	Japanese Heisei Mincho
HKG2	Korean Gothic (Full Hangul)
HSM2	Korean Myengjo (Full Hangul)
KKG2	Korean Gothic (KS)
KSM2	Korean Mincho (KS)
SFSG	Simplified Chinese Fang Song
SHEI	Simplified Chinese Hei
SKAI	Simplified Chinese Kai
SSNG	Simplified Chinese Song (GBK)
PSNG	Simplified Chinese Song (GB)*
TKAI	Traditional Chinese Kai
TSNG	Traditional Chinese Sung

Wn

Wn	Weight (not used when PP is CZ)
W3	Light
W4	Semilight
W5	Medium
W6	Semibold

Figure 12. DBCS Core Outline Fonts Naming Convention Overview. This naming convention is used for CID-keyed outlines and AFP outline character sets. * indicates typeface only used by CZ. The following abbreviations are used in this figure:

GB	Code of Chinese Graphic Character Set for Information Interchange GB 2312-80.
GBK	Chinese Internal Code Specification.
KS	Korean Industrial Standards Association. Code for information interchange (Hangul and Hanja) KS C 5601-1987.

Naming Summary

DBCS Core Full-Width Naming

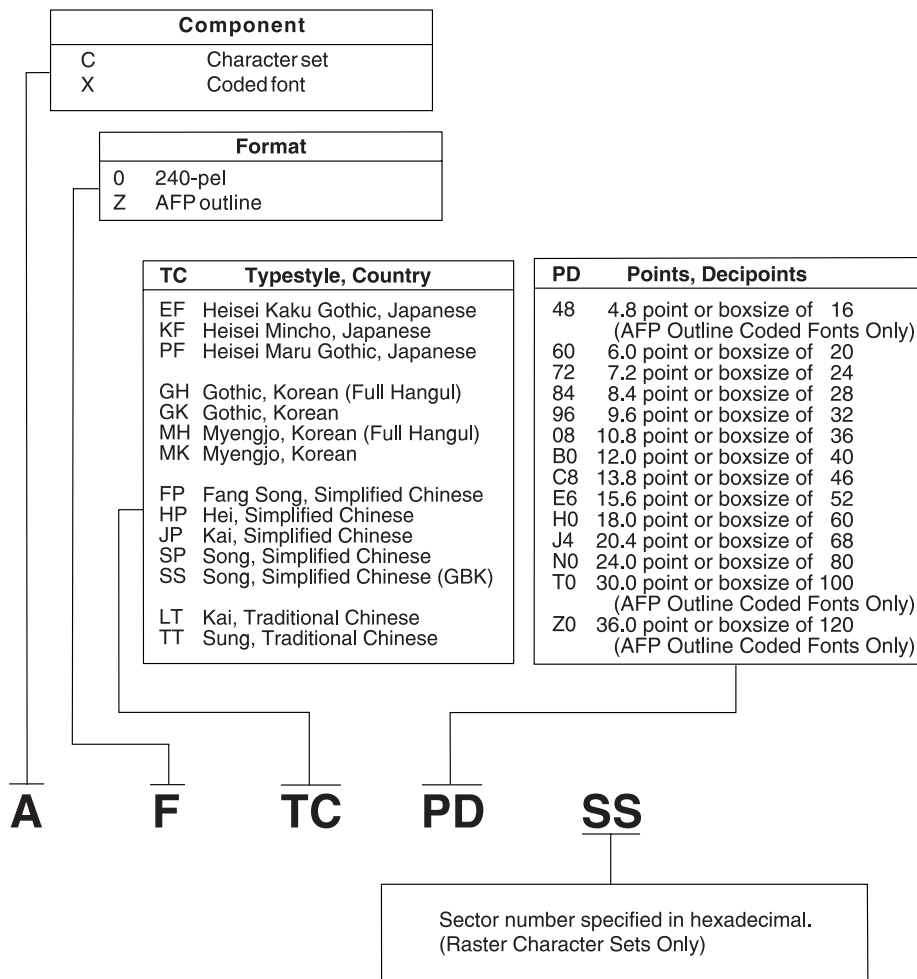


Figure 13. DBCS Core Full-Width Naming Convention Overview. This naming convention applies to Full-Width Raster Coded Fonts, Full-Width AFP Outline Coded Fonts, and Full-Width Raster Character Sets.

DBCS Core Half-Width Fonts

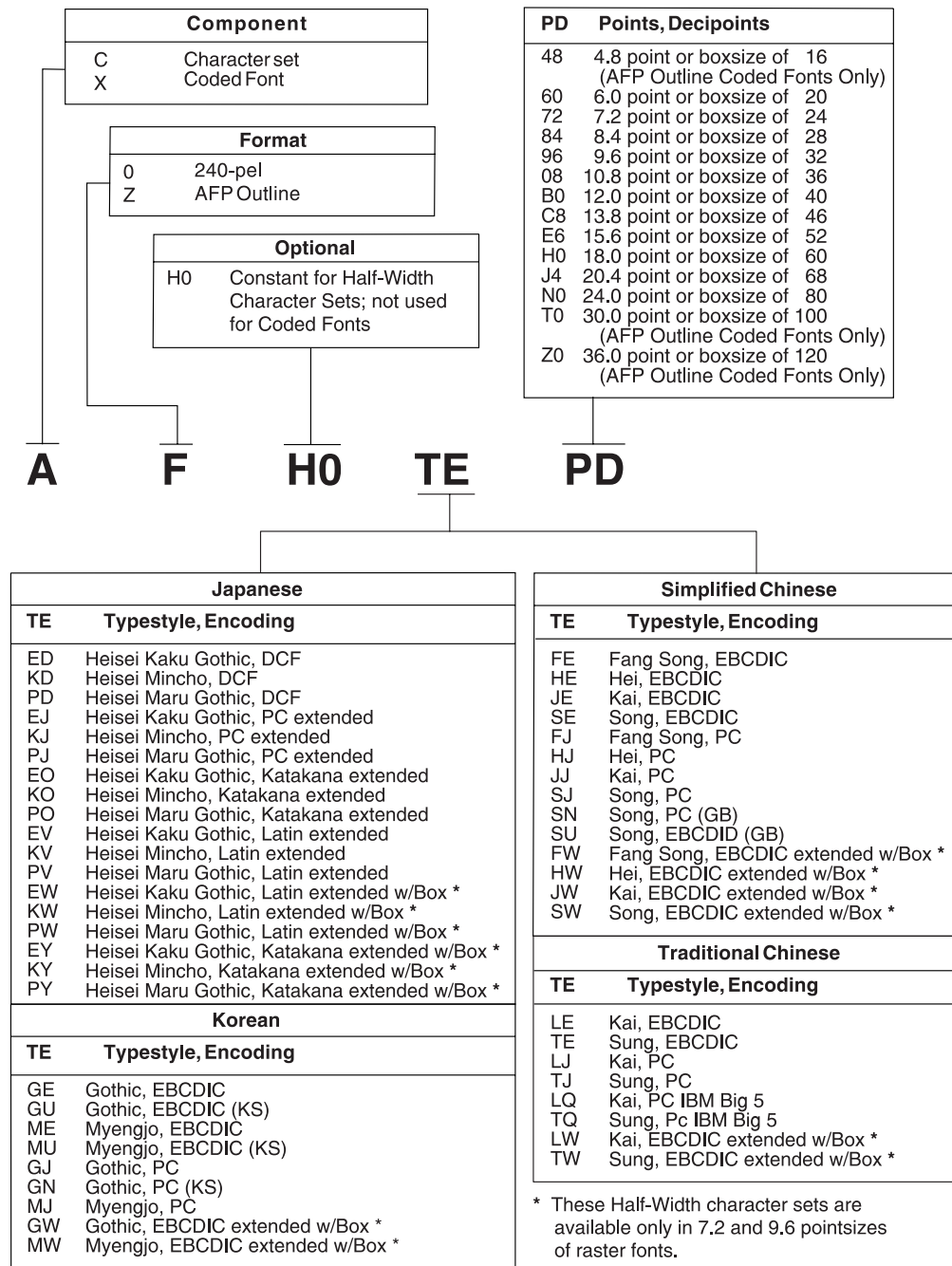


Figure 14. DBCS Half-Width Fonts Naming Convention Overview

Naming Summary

DBCS Simulation Fonts

Character Set

CZ

CZ

CZ AFP Outline Character Set

XXXX

XXXX Language and Typeface

JHKG Japanese Heisei Kaku Gothic

JJKG Japanese Gothic*

JJMG Japanese Round Gothic*

JHMN Japanese Heisei Mincho

JJMN Japanese Mincho*

KKG2 Korean Gothic* (KS)

KSM2 Korean Mincho* (KS)

SHEI Simplified Chinese Hei (GBK)

PSNG Simplified Chinese Song* (GB)

TSNG Traditional Chinese Song

Figure 15. DBCS Simulation Fonts Naming Convention Overview for Character Sets. * indicates typeface only used by CZ. The following abbreviations are used in this figure:

GB Code of Chinese Graphic Character Set for Information Interchange GB 2312-80.

GBK Chinese Internal Code Specification.

KS Korean Industrial Standards Association. Code for information interchange (Hangul and Hanja) KS C 5601-1987.

Coded Font

XZ

XZ

XZ AFP Outline Coded Font

XXXX

XXXX

T Typestyle

BX Box Size

E Encoding

Figure 16. DBCS Simulation Fonts Naming Convention Overview for Coded Fonts. See Figure 17 on page 31 for detailed information.

Japanese Full-Width						Korean Full-Width		
BX	Boxsize (HxV)					BX	Boxsize (HxV)	
		Heisei			Heisei	Gothic	Mincho	
		Kaku	Round		Mincho			
	Gothic	Gothic	Gothic		Mincho			
16	16x16	-	-	16x16	16x16	16	16x16	-
20	20x24	-	-	-	-	24	24x30	24x24
24	24x30	24x24	-	24x24	24x24	36	-	36x36
26	-	26x26	-	26x26	26x26	40	-	40x40
32	32x32	32x32	-	32x32	32x32	48	-	48x48
36	36x36	36x36	36x36	36x36	36x36	64	-	64x64
40	40x40	40x40	40x40	40x40	40x40	Korean Half-Width		
44	-	44x44	-	44x44	44x44	BX	Boxsize (HxV)	
48	48x48	48x48	48x48	48x48	48x48		Gothic	Mincho
52	-	52x52	-	52x52	52x52	08	8x16	-
64	64x64	64x64	64x64	64x64	64x64	12	12x30	12x24
						18	-	18x36
						20	-	20x40
						24	-	24x48
						32	-	32x64
Japanese Half-Width						Simplified Chinese Full-Width		
BX	Boxsize (HxV)					BX	Boxsize (HxV)	
		Heisei			Heisei		Gothic	Song
		Kaku	Round		Mincho			
	Gothic	Gothic	Gothic		Mincho	16	16x16	-
12	12x30	12x24	-	12x24	12x24	26	-	26x26
13	-	13x26	-	13x26	13x26	32	-	32x32
16	16x32	16x32	-	16x32	16x32	40	-	40x40
18	18x36	18x36	18x36	18x36	18x36	Traditional Chinese Full-Width		
20	20x40	20x40	20x40	20x40	20x40	BX	Boxsize (HxV)	
22	-	22x44	-	-	22x44		Gothic	Ming
24	24x48	24x48	24x48	24x48	24x48	16	16x16	-
26	-	26x52	-	26x52	26x52	24	-	24x24
32	32x64	32x64	32x64	32x64	32x64	32	-	32x32
						40	-	40x40

XZ	T	BX	E
-----------	----------	-----------	----------

Japanese	
T	T ypestyle
E	Heisei Kaku Gothic
F	Heisei Kaku Gothic Half-Width
G	Gothic
H	Gothic Half-Width
K	Heisei Mincho
L	Heisei Mincho Half-Width
M	Mincho
N	Mincho Half-Width
R	Round Gothic
S	Round Gothic Half-Width
Y	Mincho Half-Width
Z	Mincho
Korean	
T	T ypestyle
G	Gothic
H	Gothic Half-Width
M	Mincho
N	Mincho Half-Width
Simplified Chinese	
T	T ypestyle
G	Gothic
S	Song
Traditional Chinese	
T	T ypestyle
G	Gothic
M	Ming

Japanese	
E	Encoding
B	Base Set (Section 41-55)
D	DCF Set
F	Full Set
J	PC Set
N	Katakana Set
O	Extended Katakana Set
U	US English Set
V	Extended Latin Set
X	Extension Set (Section 56-68)
Korean	
E	Encoding
K	Full Set
K	EBCDIC Set (Half-Width)
L	Special and Hangul Set (Section 41-4B, 84-D3)
Simplified Chinese	
E	Encoding
P	PRC Host (GB)
Traditional Chinese	
E	Encoding
T	Taiwan Host

Figure 17. Simulation Fonts Naming Convention

IBM Code Page Naming Conventions

The name of an IBM code page makes it possible to recognize it as a code page. The resource names of all AFP code pages begin with "T1."

Single-Byte Code Pages

The name of a single-byte code page used with single-byte character sets makes it possible to identify its code page number or name. For more detailed information, refer to *IBM AFP Fonts: Technical Reference for Code Pages*.

The last 6 characters of the code page name are used to identify the code page. In all cases where the first two characters are "00," "V1," or "B0," the following 4 characters are the Code Page Global Identifier, a number registered by IBM to uniquely identify each code page. All future code pages provided by IBM will be named in this manner.

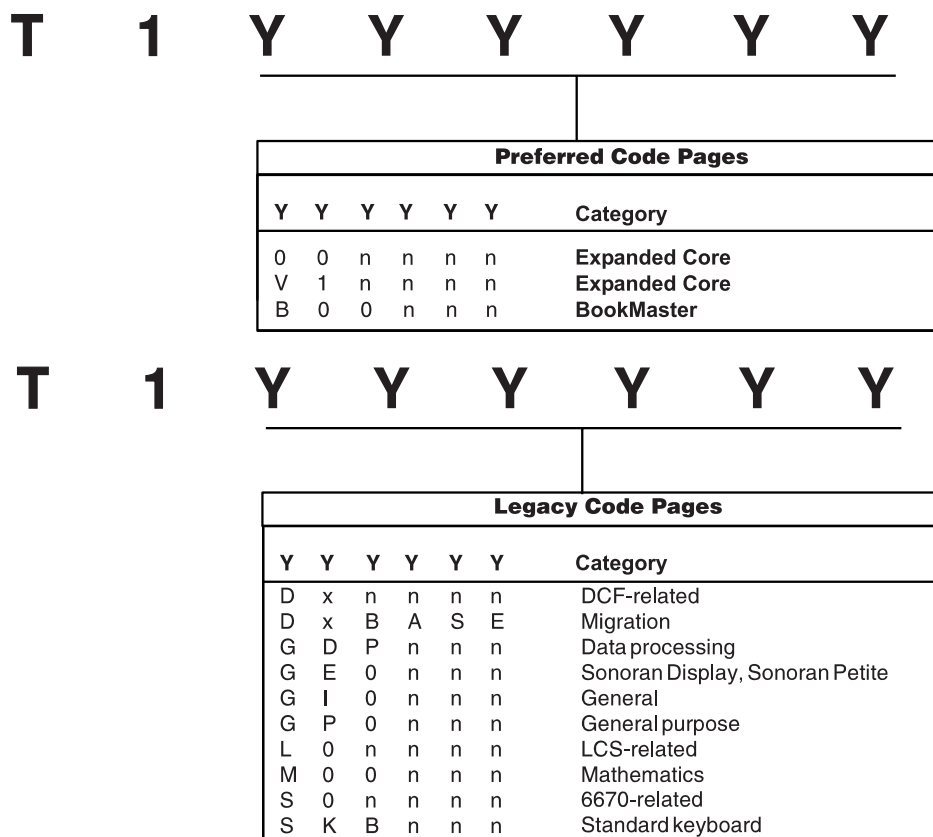


Figure 18. Code Page Name and Category or Version Level

DBCS Code Pages Using Half-Width Characters

You can recognize a new single-byte code page used with double-byte character sets because the third and fourth characters of its name are H0. Some older code pages follow a different naming convention.

T 1

H 0

X X X X

H0 Always H0

XXXX Code page global identifier (CPGID)

Exception: Japanese CPGID:0037 and Simplified Chinese CPGID:1114 take HK.

Figure 19. DBCS Code Pages Using Half-Width Characters Naming Convention Overview

DBCS Code Pages Using Full-Width Characters

The names of double-byte code pages supplied for use with IBM CJK fonts follow a new convention, so you may see some older double-byte code pages with different names.

You can recognize a double-byte code page used with an outline font because its name is only 6 characters long instead of the usual 8.

T 1

X X X X

S S

XXXX Code page global identifier (CPGID)

SS Section number

Exception: Korean and Full Hangul code page is K834 for CPGID:0834; Simplified Chinese GBK code page is K837 for CPGID:0837.

SS Code page used with a raster font

blank Code page used with an outline font

Figure 20. DBCS Code Pages Using Full-Width Characters Naming Convention Overview

Naming Summary

Font Summary Tables

The font summary tables provide the following information for AFP Font Collection font resources:

- **AFP Typeface Name.** This is the IBM name for the typeface.
- **Type 1 Typeface Name.** This is the Type 1 outline font name for the typeface. It is used in the **Typefaces** window of SBCS Type Transformer.
- **Style and Weight.** Possible values are:

RB	Roman Bold	IM	Italic Medium
RM	Roman Medium	IB	Italic Bold

- **Code Page.** Alphabetic script and symbol fonts (Expanded Core Fonts, and Compatibility Fonts) use only single-byte code pages. DBCS Core Fonts use both double-byte and single-byte code pages.
- **Character Set Identifier.** A 6- or 8-character name used to identify AFP character sets. The second character identifies the character set as raster or outline. When applicable to the figures contained in this publication, substitute the following values for n:

0	240-pel and 300-pel raster
Z	AFP outline

- **Type 1 File Name.** Extensions are AFM, INF, and PFB.
- **CID-Keyed File Name.** Extensions are CID and CMP.
- **Coded Font Identifier.** The n in the second position has the same values as in the character set identifier.
- **Alternate Coded Font Identifier.** Certain operating environments, such as JES, limit coded font identifiers (names) to 6 characters. (Sometimes you will be asked for only 4 characters: the other two, X0 and XZ, are supplied for you.)

An alternate coded font identifier is required to operate within these environments; all of the fonts within the Expanded Core Font group are provided with both a coded font and an alternate coded font identifier.

- **Graphic Character Set Global Identifier (GCSGID).** The GCSGID is a collection of characters registered with a unique number and sometimes used for font and code page selection.
- **Font Global Identifier (FGID).** The FGID is a number assigned to each typeface and is sometimes used for font selection.
- **Size in Pitch or Points.** The sizes of uniformly-spaced fonts are expressed in pitch, which is the number of characters that can be printed in one inch of text. The sizes of typographic and mixed-pitch (MP) fonts are expressed in points, a vertical measurement indicating the general size of the font. One point = 1/72 inch.

Not all information applies to all font groups. For example, alternate coded font identifiers are provided only for Expanded Core Fonts. Because all of the possible coded fonts are not shipped, additional coded fonts may need to be created. See *IBM Technical Reference for AFP Font Collection Expanded Core Fonts* for

Font Summary Tables

information on which coded fonts are provided and how to create additional coded fonts.

Expanded Core Fonts

This section describes the Expanded Core Fonts available for use with IBM Print Services Facility (PSF) licensed programs. These fonts contain various typefaces and font sizes (include typographic and uniformly spaced typeface families) suitable for printing a variety of documents. They are provided in the following formats:

Format	Operating Systems
240-pel bounded-box fonts	MVS, OS/390, VSE, VM, OS/400, AIX, OS/2
300-pel fonts	MVS, OS/390, VSE, VM, OS/400, AIX, OS/2
AFP outline fonts	MVS, OS/390, VSE, VM, OS/400, AIX, OS/2
Type 1 outline fonts	AIX, OS/2

Table 10 shows the values to be used in Table 11. Substitute the point size identifier (listed under the columns headed **p**) shown in Table 10 for the lowercase **p** shown in the seventh position of the **Character Set Identifier, Coded Font Identifier**, or the last position of the **Alternate Coded Font Identifier** in Table 11. The pitch or point sizes available for that font are identified in the column **Sizes in Points or Pitch**.

Typographic Fonts				Uniformly Spaced Fonts		
p	Point Size	p	Point Size	p	Point Size	Pitch Size
5	5 points	D	14 points	5	5 points	24 pitch
6	6 points	F	16 points	6	6 points	20 pitch
7	7 points	H	18 points	7	7 points	17.1 pitch
8	8 points	J	20 points	8	8 points	15 pitch
9	9 points	N	24 points	9	9 points	13.3 pitch
0	10 points	T	30 points	0	10 points	12 pitch
A	11 points	Z	36 points	B	12 points	10 pitch
B	12 points			D	14 points	8.5 pitch
				J	20 points	6 pitch

Certain operating environments, such as JES, limit coded font identifiers (names) to 6 characters (Xn plus four characters). An example is X0GT10. The Expanded Core Fonts include 6-character coded font identifiers for use in these environments. These 6-character code font identifiers are shown in Table 11 under the column heading **Alternate Coded Font Identifier**.

In Table 11 the lowercase **n** in the second position of the **Coded Font Identifier**, the **Alternate Coded Font Identifier**, and the **Character Set Identifier** identifies the font format or orientation; see Figure 10 on page 23 for details.

IBM BookMaster Fonts do not have a Coded Font Identifier because BookMaster does not use coded fonts.

Table 11 (Page 1 of 9). Expanded Core Fonts										
APL										
AFP Typeface Name	Type 1 Typeface Name	Style and Weight	Code Page	Character Set Identifier	Type 1 File Name	Coded Font Identifier	Alternate Coded Font Identifier	GCSGID	FGID	Size in Pitch or Points
Courier APL2	Courier APL2	RM	T1000293	Cn420PB0	APL	Xn427PB2	Xn480B	1364	307	10 pitch
	" Bold	RB	T1000293	Cn440PB0	APLB	Xn447PB2	Xn481B		322	
Arabic										
AFP Typeface Name	Type 1 Typeface Name	Style and Weight	Code Page	Character Set Identifier	Type 1 File Name	Coded Font Identifier	Alternate Coded Font Identifier	GCSGID	FGID	Size in Pitch or Points
Boutros Typing Arabic	Typing	RM	T1000420	Cn4204p0	COU_A	Xn4264p1	Xn427p	1264	416	6 8.5 10 12 15
	" Bold	RB	T1000420	Cn4404p0	COU_AB	Xn4464p1	Xn449p		420	17.1 pitch
	" Italic	IM	T1000420	Cn4304p0	COU_AI	Xn4364p1	Xn438p		424	
	" Bold Italic	IB	T1000420	Cn4504p0	COU_ABI	Xn4564p1	Xn45Ap		428	
ITC Boutros Modern Rokaa Arabic	Rokaa	RM	T1000420	CnH204p0	HEL_A	XnH264p1	XnH27p	1264	2304	6 7 8 9 10 11
	" Bold	RB	T1000420	CnH404p0	HEL_AB	XnH464p1	XnH49p		2305	12 14 16 18 20
	" Italic	IM	T1000420	CnH304p0	HEL_AI	XnH364p1	XnH38p		2306	24 30 36
	" Bold Italic	IB	T1000420	CnH504p0	HEL_ABI	XnH564p1	XnH5Ap		2307	points
ITC Boutros Setting Arabic	Setting	RM	T1000420	CnN204p0	TNR_A	XnN264p1	XnN27p	1264	2308	6 7 8 9 10 11
	" Bold	RB	T1000420	CnN404p0	TNR_AB	XnN464p1	XnN49p		2309	12 14 16 18 20
	" Italic	IM	T1000420	CnN304p0	TNR_AI	XnN364p1	XnN38p		2310	24 30 36
	" Bold Italic	IB	T1000420	CnN504p0	TNR_ABI	XnN564p1	XnN5Ap		2311	points
BookMaster Specials										
AFP Typeface Name	Type 1 Typeface Name	Style and Weight	Code Page	Character Set Identifier	Type 1 File Name	Coded Font Identifier	Alternate Coded Font Identifier	GCSGID	FGID	Size in Pitch or Points
BookMaster Specials	BookMaster Specials	RM	T1B00BGS	CnB20Cp0	EDFBS	N/A	N/A	1241	335	5 6 7 8 9 10
	" Bold	RB	T1B00BGS	CnB40Cp0	EDFBSB	N/A	N/A		336	11 12 14 16 18
	" Italic	IM	T1B00BGS	CnB30Cp0	EDFBSI	N/A	N/A		337	20 24 30 36
	" Bold Italic	IB	T1B00BGS	CnB50Cp0	EDFBSBI	N/A	N/A		338	points
BookMaster Specials Reverse	BookMaster Specials Reverse	RM	T1B00BGS	CnB60Cp0	EDFBSR	N/A	N/A	1241	339	5 6 7 8 9 10 11 12 14 16 18 20 24 30 36 points

Table 11 (Page 2 of 9). Expanded Core Fonts

Cyrillic										
AFP Typeface Name	Type 1 Typeface Name	Style and Weight	Code Page	Character Set Identifier	Type 1 File Name	Coded Font Identifier	Alternate Coded Font Identifier	GCSGID	FGID	Size in Pitch or Points
Courier Cyrillic Greek	Courier Cyr Grk	RM	T1001025	Cn4203p0	COU_CG	Xn4263p9	Xn45Cp	1300	416	6 8.5 10 12 15
	" Bold	RB	T1001025	Cn4403p0	COU_CGB	Xn4463p9	Xn45Ep		420	17.1 pitch
	" Italic	IM	T1001025	Cn4303p0	COU_CGI	Xn4363p9	Xn45Dp		424	
	" Bold Italic	IB	T1001025	Cn4503p0	COU_CGBI	Xn4563p9	Xn45Fp		428	
Helvetica Cyrillic Greek	Helvetica Cyr Grk	RM	T1001025	CnH203p0	HEL_CG	XnH263p9	XnH5Cp	1300	2304	6 7 8 9 10 11
	" Bold	RB	T1001025	CnH403p0	HEL_CGB	XnH463p9	XnH5Ep		2305	12 14 16 18 20
	" Italic	IM	T1001025	CnH303p0	HEL_CGI	XnH363p9	XnH5Dp		2306	24 30 36
	" Bold Italic	IB	T1001025	CnH503p0	HEL_CGBI	XnH563p9	XnH5Fp		2307	points
Times New Roman Cyrillic Greek	Times New Roman Cyr Grk	RM	T1001025	CnN203p0	TNR_CG	XnN263p9	XnN5Cp	1300	2308	6 7 8 9 10 11
	" Bold	RB	T1001025	CnN403p0	TNR_CGB	XnN463p9	XnN5Ep		2309	12 14 16 18 20
	" Italic	IM	T1001025	CnN303p0	TNR_CGI	XnN363p9	XnN5Dp		2310	24 30 36
	" Bld It	IB	T1001025	CnN503p0	TNR_CGBI	XnN563p9	XnN5Fp		2311	points
Greek										
AFP Typeface Name	Type 1 Typeface Name	Style and Weight	Code Page	Character Set Identifier	Type 1 File Name	Coded Font Identifier	Alternate Coded Font Identifier	GCSGID	FGID	Size in Pitch or Points
Courier Cyrillic Greek	Courier Cyr Grk	RM	T1000875	Cn4203p0	COU_CG	Xn4263p5	Xn448p	1300	416	6 8.5 10 12 15
	" Bold	RB	T1000875	Cn4403p0	COU_CGB	Xn4463p5	Xn44Ap		420	17.1 pitch
	" Italic	IM	T1000875	Cn4303p0	COU_CGI	Xn4363p5	Xn449p		424	
	" Bold Italic	IB	T1000875	Cn4503p0	COU_CGBI	Xn4563p5	Xn44Bp		428	
Helvetica Cyrillic Greek	Helvetica Cyr Grk	RM	T1000875	CnH203p0	HEL_CG	XnH263p5	XnH48p	1300	2304	6 7 8 9 10 11
	" Bold	RB	T1000875	CnH403p0	HEL_CGB	XnH463p5	XnH4Ap		2305	12 14 16 18 20
	" Italic	IM	T1000875	CnH303p0	HEL_CGI	XnH363p5	XnH49p		2306	24 30 36
	" Bold Italic	IB	T1000875	CnH503p0	HEL_CGBI	XnH563p5	XnH4Bp		2307	points
Times New Roman Cyrillic Greek	Times New Roman Cyr Grk	RM	T1000875	CnN203p0	TNR_CG	XnN263p5	XnN48p	1300	2308	6 7 8 9 10 11
	" Bold	RB	T1000875	CnN403p0	TNR_CGB	XnN463p5	XnN4Ap		2309	12 14 16 18 20
	" Italic	IM	T1000875	CnN303p0	TNR_CGI	XnN363p5	XnN49p		2310	24 30 36
	" Bld It	IB	T1000875	CnN503p0	TNR_CGBI	XnN563p5	XnN4Bp		2311	points

Table 11 (Page 3 of 9). Expanded Core Fonts

Hebrew										
AFP Typeface Name	Type 1 Typeface Name	Style and Weight	Code Page	Character Set Identifier	Type 1 File Name	Coded Font Identifier	Alternate Coded Font Identifier	GCSGID	FGID	Size in Pitch or Points
Shalom Hebrew	Shalom Hebrew	RM	T1000424	Cn4205p0	COU_H	Xn4265p3	Xn42Cp	1362	416	6 8.5 10 12 15
	" Bold	RB	T1000424	Cn4405p0	COU_HB	Xn4465p3	Xn42Ep		420	17.1 pitch
	" Italic	IM	T1000424	Cn4305p0	COU_HI	Xn4365p3	Xn42Dp		424	
	" Bold Italic	IB	T1000424	Cn4505p0	COU_HBI	Xn4565p3	Xn42Fp		428	
Narkiss Tam Hebrew	Narkiss Tam Hebrew	RM	T1000424	CnH205p0	HEL_H	XnH265p3	XnH2Cp	1362	2304	6 7 8 9 10 11
	" Bold	RB	T1000424	CnH405p0	HEL_HB	XnH465p3	XnH2Ep		2305	12 14 16 18 20
	" Italic	IM	T1000424	CnH305p0	HEL_HI	XnH365p3	XnH2Dp		2306	24 30 36
	" Bold Italic	IB	T1000424	CnH505p0	HEL_HBI	XnH565p3	XnH2Fp		2307	points
Narkissim Hebrew	Narkissim Hebrew	RM	T1000424	CnN205p0	TNR_H	XnN265p3	XnN2Cp	1362	2308	6 7 8 9 10 11
	" Bold	RB	T1000424	CnN405p0	TNR_HB	XnN465p3	XnN2Ep		2309	12 14 16 18 20
	" Italic	IM	T1000424	CnN305p0	TNR_HI	XnN365p3	XnN2Dp		2310	24 30 36
	" Bold Italic	IB	T1000424	CnN505p0	TNR_HBI	XnN565p3	XnN2Fp		2311	points
IBM Logo										
AFP Typeface Name	Type 1 Typeface Name	Style and Weight	Code Page	Character Set Identifier	Type 1 File Name	Coded Font Identifier	Alternate Coded Font Identifier	GCSGID	FGID	Size in Pitch or Points
IBM Logo	IBM Logo	RM	T1001093	CnIBM0p0	LOGOIBM	N/A	N/A	2040	51767	10 12 14 16 18 20 24 28 32 36 40 48 points
Katakana										
AFP Typeface Name	Type 1 Typeface Name	Style and Weight	Code Page	Character Set Identifier	Type 1 File Name	Coded Font Identifier	Alternate Coded Font Identifier	GCSGID	FGID	Size in Pitch or Points
Gothic Katakana	Gothic Katakana	RM	T1000897	Cn6208p0	GOT_K	Xn6288pE	Xn699p	1306	304	6 8.5 10 12 15
		RM	T1001027	Cn6208p0	GOT_K	Xn6268pA	Xn69Ap			17.1 20 pitch
		RM	T1001041	Cn6208p0	GOT_K	Xn6288pF	Xn69Bp			
		RM	T1V10290	Cn6208p0	GOT_K	Xn6268p6	Xn698p			

Table 11 (Page 4 of 9). Expanded Core Fonts

Latin1										
AFP Typeface Name	Type 1 Typeface Name	Style and Weight	Code Page	Character Set Identifier	Type 1 File Name	Coded Font Identifier	Alternate Coded Font Identifier	GCSGID	FGID	Size in Pitch or Points
Boldface Latin1	Boldface	RB	T1V15000	Cn8400p0	BFC	Xn8410pC	Xn80Fp	2039	20224	12 points
BookMaster Latin1	BookMaster	RM	T1B00500	CnB200p0	EDFBL	N/A	N/A	2039	335	5 6 7 8 9 10
	" Bold	RB	T1B00500	CnB400p0	EDFBLB	N/A	N/A		336	11 12 14 16 18
	" Italic	IM	T1B00500	CnB300p0	EDFBLI	N/A	N/A		337	20 24 30 36
	" Bold Italic	IB	T1B00500	CnB500p0	EDFBLBI	N/A	N/A		338	points
BookMaster Latin1 Reverse	BookMaster Reverse	RM	T1B00500	CnB600p0	EDFBLR	N/A	N/A	2039	339	5 6 7 8 9 10 11 12 14 16 18 20 24 30 36 points
Courier Latin1	Courier	RM	T1V10500	Cn4200p0	COU	Xn4210pC	Xn40Dp	2039	416	6 8.5 10 12 15
	" Bold	RB	T1V10500	Cn4400p0	COUB	Xn4410pC	Xn40Fp		420	17.1 pitch
	" Italic	IM	T1V10500	Cn4300p0	COUI	Xn4310pC	Xn40Ep		424	
	" Bold Italic	IB	T1V10500	Cn4500p0	COUBI	Xn4510pC	Xn410p		428	
Gothic Text Latin1	Gothic Text	RM	T1V15000	Cn6200p0	GOT	Xn6210pC	Xn60Dp	2039	304	6 8.5 10 12 13.3 15 17.1 20 24 pitch
Helvetica Latin1	Helvetica	RM	T1V10500	CnH200p0	HEL	XnH210pC	XnH0Dp	2039	2304	6 7 8 9 10 11
	" Bold	RB	T1V10500	CnH400p0	HELB	XnH410pC	XnH0Fp		2305	12 14 16 18 20
	" Italic	IM	T1V10500	CnH300p0	HELI	XnH310pC	XnH0Ep		2306	24 30 36
	" Bold Italic	IB	T1V10500	CnH500p0	HELBI	XnH510pC	XnH10p		2307	points
Letter Gothic Latin1	Letter Gothic	RM	T1V15000	Cn5200p0	LGO	Xn5210pC	Xn50Dp	2039	400	6 8.5 10 12 15
	" Bold	RB	T1V15000	Cn5400p0	LGOB	Xn5410pC	Xn50Fp		404	17.1 20 pitch
Prestige Latin1	Prestige	RM	T1V15000	Cn7200p0	PRS	Xn7210pC	Xn70Dp	2039	432	6 8.5 10 12 15
	" Bold	RB	T1V15000	Cn7400p0	PRSB	Xn7410pC	Xn70Fp		318	17.1 pitch
	" Italic	IM	T1V15000	Cn7300p0	PRSI	Xn7310pC	Xn70Ep		319	
Times New Roman Latin1	Times New Roman	RM	T1V10500	CnN200p0	TNR	XnN210pC	XnN0Dp	2039	2308	6 7 8 9 10 11
	" Bold	RB	T1V10500	CnN400p0	TNRB	XnN410pC	XnN0Fp		2309	12 14 16 18 20
	" Italic	IM	T1V10500	CnN300p0	TNRI	XnN310pC	XnN0Ep		2310	24 30 36
	" Bold Italic	IB	T1V10500	CnN500p0	TNRBI	XnN510pC	XnN10p		2311	points

Table 11 (Page 5 of 9). Expanded Core Fonts											
Latin1 euro											
AFP Typeface Name	Type 1 Typeface Name	Style and Weight	Code Page	Character Set Identifier	Type 1 File Name	Coded Font Identifier	Alternate Coded Font Identifier	GCSGID	FGID	Size in Pitch or Points	
Boldface Latin1	Boldface	RB	T1001148	Cn8400p0	BFC	Xn841EpC	Xn80Vp	2041	20224	12 points	
BookMaster Latin1	BookMaster	RM	T1B00500	CnB200p0	EDFBL	N/A	N/A	2041	335	5 6 7 8 9 10	
	" Bold	RB	T1B00500	CnB400p0	EDFBLB	N/A	N/A		336	11 12 14 16 18	
	" Italic	IM	T1B00500	CnB300p0	EDFBLI	N/A	N/A		337	20 24 30 36	
	" Bold Italic	IB	T1B00500	CnB500p0	EDFBLBI	N/A	N/A		338	points	
BookMaster Latin1 Reverse	BookMaster Reverse	RM	T1B00500	CnB600p0	EDFBLR	N/A	N/A	2041	339	5 6 7 8 9 10 11 12 14 16 18 20 24 30 36 points	
Courier Latin1	Courier	RM	T1001148	Cn4200p0	COU	Xn421EpC	Xn40Sp	2041	416	6 8.5 10 12 15	
	" Bold	RB	T1001148	Cn4400p0	COUB	Xn441EpC	Xn40Vp		420	17.1 pitch	
	" Italic	IM	T1001148	Cn4300p0	COUI	Xn431EpC	Xn40Up		424		
	" Bold Italic	IB	T1001148	Cn4500p0	COUBI	Xn451EpC	Xn40Wp		428		
Gothic Text Latin1	Gothic Text	RM	T1001148	Cn6200p0	GOT	Xn621EpC	Xn60Sp	2041	304	6 8.5 10 12 13.3 15 17.1 20 24 pitch	
Helvetica Latin1	Helvetica	RM	T1001148	CnH200p0	HEL	XnH21EpC	XnH0Sp	2041	2304	6 7 8 9 10 11	
	" Bold	RB	T1001148	CnH400p0	HELB	XnH41EpC	XnH0Vp		2305	12 14 16 18 20	
	" Italic	IM	T1001148	CnH300p0	HELI	XnH31EpC	XnH0Up		2306	24 30 36	
	" Bold Italic	IB	T1001148	CnH500p0	HELBI	XnH51EpC	XnH0Wp		2307	points	
Letter Gothic Latin1	Letter Gothic	RM	T1001148	Cn5200p0	LGO	Xn521EpC	Xn50Sp	2041	400	6 8.5 10 12 15	
	" Bold	RB	T1001148	Cn5400p0	LGOB	Xn541EpC	Xn50Vp		404	17.1 20 pitch	
Prestige Latin1	Prestige	RM	T1001148	Cn7200p0	PRS	Xn721EpC	Xn70Sp	2041	432	6 8.5 10 12 15	
	" Bold	RB	T1001148	Cn7400p0	PRSB	Xn741EpC	Xn70Vp		318	17.1 pitch	
	" Italic	IM	T1001148	Cn7300p0	PRSI	Xn731EpC	Xn70Up		319		
Times New Roman Latin1	Times New Roman	RM	T1001148	CnN200p0	TNR	XnN21EpC	XnN0Sp	2041	2308	6 7 8 9 10 11	
	" Bold	RB	T1001148	CnN400p0	TNRB	XnN41EpC	XnN0Vp		2309	12 14 16 18 20	
	" Italic	IM	T1001148	CnN300p0	TNRI	XnN31EpC	XnN0Up		2310	24 30 36	
	" Bold Italic	IB	T1001148	CnN500p0	TNRBI	XnN51EpC	XnN0Wp		2311	points	

Table 11 (Page 6 of 9). Expanded Core Fonts

Latin2										
AFP Typeface Name	Type 1 Typeface Name	Style and Weight	Code Page	Character Set Identifier	Type 1 File Name	Coded Font Identifier	Alternate Coded Font Identifier	GCSGID	FGID	Size in Pitch or Points
Courier Latin235	Courier	RM	T1000870	Cn4202p0	COU	Xn4252p1	Xn444p	1261	416	6 8.5 10 12 15
	" Bold	RB	T1000870	Cn4402p0	COUB	Xn4452p1	Xn446p		420	17.1 pitch
	" Italic	IM	T1008700	Cn4304p0	COUI	Xn4354p1	Xn445p		424	
	" Bold Italic	IB	T1008700	Cn4502p0	COUBI	Xn4552p1	Xn447p		428	
Helvetica Latin235	Helvetica	RM	T1000870	CnH202p0	HEL	XnH252p1	XnH44p	1261	2304	6 7 8 9 10 11
	" Bold	RB	T1000870	CnH402p0	HELB	XnH452p1	XnH46p		2305	12 14 16 18 20
	" Italic	IM	T1000870	CnH302p0	HELI	XnH352p1	XnH45p		2306	24 30 36
	" Bold Italic	IB	T1000870	CnH502p0	HELBI	XnH552p1	XnH47p		2307	points
Times New Roman Latin235	Times New Roman	RM	T1000870	CnN202p0	TNR	XnN252p1	XnN44p	1261	2308	6 7 8 9 10 11
	" Bold	RB	T1000870	CnN402p0	TNRB	XnN452p1	XnN46p		2309	12 14 16 18 20
	" Italic	IM	T1000870	CnN302p0	TNRI	XnN352p1	XnN45p		2310	24 30 36
	" Bold Italic	IB	T1000870	CnN502p0	TNRBI	XnN552p1	XnN47p		2311	points
Latin3										
AFP Typeface Name	Type 1 Typeface Name	Style and Weight	Code Page	Character Set Identifier	Type 1 File Name	Coded Font Identifier	Alternate Coded Font Identifier	GCSGID	FGID	Size in Pitch or Points
Courier Latin235	Courier	RM	T1000905	Cn4202p0	COU	Xn425202	Xn44E0	1261	416	6 8.5 10 12 15
	" Bold	RB	T1000905	Cn4402p0	COUB	N/A	N/A		420	17.1 pitch
	" Italic	IM	T1000905	Cn4302p0	COUI	N/A	N/A		424	
	" Bold Italic	IB	T1000905	Cn4502p0	COUBI	N/A	N/A		428	
Helvetica Latin235	Helvetica	RM	T1000905	CnH202p0	HEL	XnH25202	XnH4E0	1261	2304	6 7 8 9 10 11
	" Bold	RB	T1000905	CnH402p0	HELB	N/A	N/A		2305	12 14 16 18 20
	" Italic	IM	T1000905	CnH302p0	HELI	N/A	N/A		2306	24 30 36
	" Bold Italic	IB	T1000905	CnH502p0	HELBI	N/A	N/A		2307	points
Times New Roman Latin235	Times New Roman	RM	T1000905	CnN202p0	TNR	XnN25202	XnN4E0	1261	2308	6 7 8 9 10 11
	" Bold	RB	T1000905	CnN402p0	TNRB	N/A	N/A		2309	12 14 16 18 20
	" Italic	IM	T1000905	CnN302p0	TNRI	N/A	N/A		2310	24 30 36
	" Bold Italic	IB	T1000905	CnN502p0	TNRBI	N/A	N/A		2311	points

Table 11 (Page 7 of 9). Expanded Core Fonts

Latin4										
AFP Typeface Name	Type 1 Typeface Name	Style and Weight	Code Page	Character Set Identifier	Type 1 File Name	Coded Font Identifier	Alternate Coded Font Identifier	GCSGID	FGID	Size in Pitch or Points
Courier Latin4	Courier	RM	T1001069	Cn4207p0	COU	Xn4257p9	Xn473p	1261	416	6 8.5 10 12 15
	" Bold	RB	T1001069	Cn4407p0	COUB	Xn4457p9	Xn475p		420	17.1 pitch
	" Italic	IM	T1001069	Cn4307p0	COUI	Xn4357p9	Xn474p		424	
	" Bold Italic	IB	T1001069	Cn4507p0	COUBI	Xn4557p9	Xn476p		428	
Helvetica Latin4	Helvetica	RM	T1001069	CnH207p0	HEL	XnH257p9	XnH73p	1261	2304	6 7 8 9 10 11
	" Bold	RB	T1001069	CnH407p0	HELB	XnH457p9	XnH75p		2305	12 14 16 18 20
	" Italic	IM	T1001069	CnH307p0	HELI	XnH357p9	XnH74p		2306	24 30 36
	" Bold Italic	IB	T1001069	CnH507p0	HELBI	XnH557p9	XnH76p		2307	points
Times New Roman Latin4	Times New Roman	RM	T1001069	CnN207p0	TNR	XnN257p9	XnN73p	1261	2308	6 7 8 9 10 11
	" Bold	RB	T1001069	CnN407p0	TNRB	XnN457p9	XnN75p		2309	12 14 16 18 20
	" Italic	IM	T1001069	CnN307p0	TNRI	XnN357p9	XnN74p		2310	24 30 36
	" Bold Italic	IB	T1001069	CnN507p0	TNRBI	XnN557p9	XnN76p		2311	points
Latin5										
AFP Typeface Name	Type 1 Typeface Name	Style and Weight	Code Page	Character Set Identifier	Type 1 File Name	Coded Font Identifier	Alternate Coded Font Identifier	GCSGID	FGID	Size in Pitch or Points
Courier Latin235	Courier	RM	T1001026	Cn4202p0	COU	Xn4252p3	Xn460p	1261	416	6 8.5 10 12 15
	" Bold	RB	T1001026	Cn4402p0	COUB	Xn4452p3	Xn462p		420	17.1 pitch
	" Italic	IM	T1001026	Cn4302p0	COUI	Xn4352p3	Xn461p		424	
	" Bold Italic	IB	T1001026	Cn4502p0	COUBI	Xn4552p3	Xn463p		428	
Helvetica Latin235	Helvetica	RM	T1001026	CnH202p0	HEL	XnH252p3	XnH60p	1261	2304	6 7 8 9 10 11
	" Bold	RB	T1001026	CnH402p0	HELB	XnH452p3	XnH62p		2305	12 14 16 18 20
	" Italic	IM	T1001026	CnH302p0	HELI	XnH352p3	XnH61p		2306	24 30 36
	" Bold Italic	IB	T1001026	CnH502p0	HELBI	XnH552p3	XnH63p		2307	points
Times New Roman Latin235	Times New Roman	RM	T1001026	CnN202p0	TNR	XnN252p3	XnN60p	1261	2308	6 7 8 9 10 11
	" Bold	RB	T1001026	CnN402p0	TNRB	XnN452p3	XnN62p		2309	12 14 16 18 20
	" Italic	IM	T1001026	CnN302p0	TNRI	XnN352p3	XnN61p		2310	24 30 36
	" Bold Italic	IB	T1001026	CnN502p0	TNRBI	XnN552p3	XnN63p		2311	points

Table 11 (Page 8 of 9). Expanded Core Fonts

Optical Character Recognition (OCR)										
AFP Typeface Name	Type 1 Typeface Name	Style and Weight	Code Page	Character Set Identifier	Type 1 File Name	Coded Font Identifier	Alternate Coded Font Identifier	GCSGID	FGID	Size in Pitch or Points
OCRA	OCR A	RM	T1000892	Cn920AB0	OCR_A	Xn927AB4	Xn9B0B	968	305	10 pitch
OCRB	OCR B	RM	T1000893	Cn920BB0	OCR_B	Xn927BB5	Xn9B1B	969	306	10 pitch
Lao										
AFP Typeface Name	Type 1 Typeface Name	Style and Weight	Code Page	Character Set Identifier	Type 1 File Name	Coded Font Identifier	Alternate Coded Font Identifier	GCSGID	FGID	Size in Pitch or Points
Courier Lao	Courier Lao	RM	T1001132	Cn4209p0	COU_L	Xn4269pE	Xn41Op	1341	416	6 8.5 10 12 15
	" Bold	RB	T1001132	Cn4409p0	COU_LB	Xn4469pE	Xn41Qp		420	17.1 pitch
	" Italic	IM	T1001132	Cn4309p0	COU_LI	Xn4369pE	Xn41Pp		424	
	" Bold Italic	IB	T1001132	Cn4509p0	COU_LBI	Xn4569pE	Xn41Rp		428	
Pusuwan	Pusuwan	RM	T1001132	CnH209p0	HEL_L	XnH269pE	XnH1Op	1341	2304	6 7 8 9 10 11
	" Bold	RB	T1001132	CnH409p0	HEL_LB	XnH469pE	XnH1Qp		2305	12 14 16 18 20
	" Italic	IM	T1001132	CnH309p0	HEL_LI	XnH369pE	XnH1Pp		2306	24 30 36
	" Bold Italic	IB	T1001132	CnH509p0	HEL_LBI	XnH569pE	XnH1Rp		2307	points
Kaewfah	Kaewfah	RM	T1001132	CnN209p0	TNR_L	XnN269pE	XnN1Op	1341	2308	6 7 8 9 10 11
	" Bold	RB	T1001132	CnN409p0	TNR_LB	XnN469pE	XnN1Qp		2309	12 14 16 18 20
	" Italic	IM	T1001132	CnN309p0	TNR_LI	XnN369pE	XnN1Pp		2310	24 30 36
	" Bold Italic	IB	T1001132	CnN509p0	TNR_LBI	XnN569pE	XnN1Rp		2311	points
Symbols										
AFP Typeface Name	Type 1 Typeface Name	Style and Weight	Code Page	Character Set Identifier	Type 1 File Name	Coded Font Identifier	Alternate Coded Font Identifier	GCSGID	FGID	Size in Pitch or Points
Courier Symbols	Courier Symbols	RM	T1000259	Cn4201p0	COU_S	Xn4271p1	Xn412p	1275	416	6 8.5 10 12 15
	" Bold	RB	T1000259	Cn4401p0	COU_SB	Xn4471p1	Xn413p		420	17.1 pitch
Helvetica Symbols	Helvetica Symbols	RM	T1000259	CnH201p0	HEL_S	XnH271p1	XnH12p	1275	2304	6 7 8 9 10 11
	" Bold	RB	T1000259	CnH401p0	HEL_SB	XnH471p1	XnH13p		2305	12 14 16 18 20 24 30 36 points
Times New Roman Symbols	Times New Roman Symbols	RM	T1000259	CnN201p0	TNR_S	XnN271p1	XnN12p	1275	2308	6 7 8 9 10 11
	" Bold	RB	T1000259	CnN401p0	TNR_SB	XnN471p1	XnN13p		2309	12 14 16 18 20 24 30 36 points

Table 11 (Page 9 of 9). Expanded Core Fonts

Thai										
AFP Typeface Name	Type 1 Typeface Name	Style and Weight	Code Page	Character Set Identifier	Type 1 File Name	Coded Font Identifier	Alternate Coded Font Identifier	GCSGID	FGID	Size in Pitch or Points
Courier Thai	Courier Thai	RM	T1000838	Cn4206p0	COU_T	Xn4266p8	Xn47Bp	1279	416	6 8.5 10 12 15
	" Bold	RB	T1000838	Cn4406p0	COU_TB	Xn4466p8	Xn47Dp		420	17.1 pitch
	" Italic	IM	T1000838	Cn4306p0	COU_TI	Xn4366p8	Xn47Cp		424	
	" Bold Italic	IB	T1000838	Cn4506p0	COU_TBI	Xn4566p8	Xn41Vp		428	
Thonburi	Thonburi	RM	T1000838	CnH206p0	HEL_T	XnH266p8	XnH7Bp	1279	2304	6 7 8 9 10 11
	" Bold	RB	T1000838	CnH406p0	HEL_TB	XnH466p8	XnH7Dp		2305	12 14 16 18 20
	" Italic	IM	T1000838	CnH306p0	HEL_TI	XnH366p8	XnH7Pp		2306	24 30 36
	" Bold Italic	IB	T1000838	CnH506p0	HEL_TBI	XnH566p8	XnH1Vp		2307	points
Burirum	Burirum	RM	T1000838	CnN206p0	TNR_T	XnN266p8	XnN7Bp	1279	2308	6 7 8 9 10 11
	" Bold	RB	T1000838	CnN406p0	TNR_TB	XnN466p8	XnN7Dp		2309	12 14 16 18 20
	" Italic	IM	T1000838	CnN306p0	TNR_TI	XnN366p8	XnN7Cp		2310	24 30 36
	" Bold Italic	IB	T1000838	CnN506p0	TNR_TBI	XnN566p8	XnN1Vp		2311	points

Compatibility Fonts

This section describes the 240- and 300-pel Compatibility Fonts, which include uniformly spaced, mixed-pitch, and Proprinter Emulation fonts. Uniformly spaced fonts are measured horizontally in pitch. Proportionally spaced and mixed-pitch fonts are measured vertically in points.

Compatibility Fonts offer various typefaces and font sizes. They are provided in the following formats:

Format	Operating Systems with PSF	Operating Systems with 5648-B33
Bounded-box 240-pel fonts	MVS, VSE, VM	OS/400, AIX, OS/2
Unbounded-box 240-pel fonts	MVS, VSE	
300-pel fonts	MVS, VSE, VM	OS/400, AIX, OS/2

Table 13 lists the Compatibility Fonts. In Table 13 the lowercase n in the second position of the **Character Set Identifier** and the **Coded Font Identifier** identifies the font format or orientation; see Figure 11 on page 26 for details.

APL							
AFP Typeface Name	Style and Weight	Code Page	Character Set Identifier	Coded Font Identifier	GCSGID	FGID	Size in Pitch or Points
APL	RM	T1S0AE10	CnS0AE10	XnAE10	2029	45	10 pitch
	RM	T1S0AE10	CnS0AE20	XnAE20		280	20 pitch
Boldface							
AFP Typeface Name	Style and Weight	Code Page	Character Set Identifier	Coded Font Identifier	GCSGID	FGID	Size in Pitch or Points
Book	RB	T1D0BASE	CnS0BRTR	XnBRTR	2023	159	MP pitch
Book	IB	T1D0BASE	CnS0BITR	XnBITR	2023	155	MP pitch
Courier							
AFP Typeface Name	Style and Weight	Code Page	Character Set Identifier	Coded Font Identifier	GCSGID	FGID	Size in Pitch or Points
Courier	RM	T1D0BASE	CnS0CR10	XnCR10	2023	11	10 pitch
	RM	T1D0BASE	CnS0CR12	XnCR12		85	12 pitch
	RM	T1D0BASE	CnS0CR15	XnCR15		223	15 pitch
	RM	T1D0BASE	CnS0CE12	XnCE12		85	12 pitch
Courier	RB	T1D0BASE	CnS0CB10	XnCB10	2023	46	10 pitch
	RB	T1D0BASE	CnS0CB12	XnCB12		108	12 pitch
	RB	T1D0BASE	CnS0CB15	XnCB15		214	15 pitch
Courier	IM	T1D0BASE	CnS0CI10	XnCI10	2023	18	10 pitch
	IM	T1D0BASE	CnS0CI12	XnCI12		92	12 pitch
	IM	T1D0BASE	CnS0CI15	XnCI15		215	15 pitch
Courier (Double Wide)	RM	T1D0BASE	CnS0CD15	XnCD15	2023	417	15 pitch
Courier (Double Wide Italic)	IM	T1D0BASE	CnS0CW15	XnCW15	2023	425	15 pitch

Compatibility Fonts

<i>Table 13 (Page 2 of 6). Compatibility Fonts</i>								
Courier (Overstruck)	RM	T1D0BASE	CnS0CO10	XnCO10	2025	302	10	pitch
Courier (Overstruck) elongated	RM	T1D0BASE	CnS0CH10	XnCH10	2025	37	10	pitch
Courier extended	RM	T1D0BASE	CnS0CE10	XnCE10	2036	85	10	pitch
Document								
AFP Typeface Name	Style and Weight	Code Page	Character Set Identifier	Coded Font Identifier	GCSGID	FGID	Size in Pitch or Points	
Book	RM	T1D0BASE	CnS0DOTR	XnDOTR	2023	175	MP 10	pitch points
Essay								
AFP Typeface Name	Style and Weight	Code Page	Character Set Identifier	Coded Font Identifier	GCSGID	FGID	Size in Pitch or Points	
Essay	RB	T1D0BASE	CnS0EBTR	XnEBTR	2023	163	MP 10	pitch points
Essay (Italic)	IM	T1D0BASE	CnS0EITR	XnEITR	2023	162	MP 10	pitch points
Essay (Light)	RL	T1D0BASE	CnS0ELTR	XnELTR	2023	173	MP 10	pitch points
Essay (Overstruck)	RM	T1D0BASE	CnS0EOTR	XnEOTR	2028	196	MP 10	pitch points
Essay	RM	T1D0BASE	CnS0ESTR	XnESTR	2023	160	MP 10	pitch points
Format								
AFP Typeface Name	Style and Weight	Code Page	Character Set Identifier	Coded Font Identifier	GCSGID	FGID	Size in Pitch or Points	
Format	RM	T1L00FMT	CnL0FM10	XnFM10	2027	30	10	pitch
	RM	T1L00FMT	CnL0FM12	XnFM12		80	12	pitch
	RM	T1L00FMT	CnL0FM15	XnFM15		225	15	pitch
Gothic								
AFP Typeface Name	Style and Weight	Code Page	Character Set Identifier	Coded Font Identifier	GCSGID	FGID	Size in Pitch or Points	
Gothic (Bold)	RB	T1D0BASE	CnD0GB10	XnGB10	2023	39	10	pitch
	RB	T1D0BASE	CnD0GB12	XnGB12		69	12	pitch
Gothic Uppercase	RC	T1L038BA	CnL00GSC	XnGSC	2038	398	15	pitch
Gothic (Italic)	IM	T1D0BASE	CnD0GI12	XnGI12	2023	68	12	pitch
Gothic Reverse	RM	T1D0BASE	CnD0GR10	XnGR10	2023	310	10	pitch
Gothic	RSL	T1D0BASE	CnD0GL10	XnGL10	2023	303	10	pitch
	RSL	T1D0BASE	CnD0GL12	XnGL12		303	12	pitch
	RSL	T1D0BASE	CnD0GL15	XnGL15		303	15	pitch
Gothic	RM	T1D0BASE	CnD0GT10	XnGT10	2023	40	10	pitch
	RM	T1D0BASE	CnD0GT12	XnGT12		66	12	pitch
Gothic13	RM	T1D0BASE	CnD0GT13	XnGT13	2037	203	13.3	pitch
Gothic	RM	T1D0BASE	CnD0GC15	XnGC15	2037	231	15	pitch
Gothic	RM	T1D0BASE	CnD0GT15	XnGT15	2023	230	15	pitch
	RM	T1D0BASE	CnD0GT18	XnGT18		275	18	pitch
Gothic	RM	T1D0BASE	CnD0GT20	XnGT20	2037	281	20	pitch
	RM	T1D0BASE	CnD0GT24	XnGT24		290	27	pitch

<i>Table 13 (Page 3 of 6). Compatibility Fonts</i>								
Gothic Uppercase	RM	T1L038BA	CnL0GU10	XnGU10	2038	312	10	pitch
	RM	T1L038BA	CnL0GU12	XnGU12		312	12	pitch
	RM	T1L038BA	CnL0GU15	XnGU15		312	15	pitch
	RM	T1L038BA	CnL00GUC	XnGUC		311	15	pitch
DUMP	RM	T1L0DUMP	XnDUMP	CnL0DUMP	2022	230	15	pitch
Gothic and Katakana								
AFP Typeface Name	Style and Weight	Code Page	Character Set Identifier	Coded Font Identifier	GCSGID	FGID	Size in Pitch or Points	
Katakana	RM	T1000290	CnL0KN12	XnKN12	2031	433	12	pitch
	RM	T1000290	CnL0KN15	XnKN15		433	15	pitch
	RM	T1000290	CnL0KN20	XnKN20		433	20	pitch
	RM	T1000290	CnL0KATA	XnKATA		433	10	pitch
Katakana	RSL	T1000290	CnL0KL10	XnKL10	2031	521	10	pitch
	RSL	T1000290	CnL0KL12	XnKL12		521	12	pitch
	RSL	T1000290	CnL0KL15	XnKL15		521	15	pitch
Gothic and Optical Character Recognition-A (OCR-A)								
AFP Typeface Name	Style and Weight	Code Page	Character Set Identifier	Coded Font Identifier	GCSGID	FGID	Size in Pitch or Points	
OCR AOA1	RM	T1L0OCR1	CnL01AOA	Xn1AOA	2034	19	10	pitch
OCRA AOA	RM	T1L0OCR1	CnL00AOA	XnAOA	2034	19	10	pitch
OCR A AON1	RM	T1L0OCR1	CnL01AON	Xn1AOD	2035	19	10	pitch
OCRA AON	RM	T1L0OCR1	CnL00AON	XnAOD	2035	19	10	pitch
Gothic and Optical Character Recognition-B (OCR-B)								
AFP Typeface Name	Style and Weight	Code Page	Character Set Identifier	Coded Font Identifier	GCSGID	FGID	Size in Pitch or Points	
OCRB BOA	RM	T1L0OCRB	CnL00BOA	XnBOA	2032	3	10	pitch
OCRB BON	RM	T1L0OCR1	CnL00BON	XnBON	2032	3	10	pitch
OCRB OAB	RM	T1L0OCR1	CnL00OAB	XnOAB	2032	3	10	pitch
Gothic Tri-Pitch								
AFP Typeface Name	Style and Weight	Code Page	Character Set Identifier	Coded Font Identifier	GCSGID	FGID	Size in Pitch or Points	
Gothic Proportional	RM	T1D0GP12	CnD0GP12	XnGP12	2023	174	MP 9	pitch points
Letter Gothic								
AFP Typeface Name	Style and Weight	Code Page	Character Set Identifier	Coded Font Identifier	GCSGID	FGID	Size in Pitch or Points	
Letter Gothic	RM	T1D0BASE	CnS0LR12	XnLR12	2023	87	12	pitch
Letter Gothic (Bold)	RB	T1D0BASE	CnS0LB12	XnLB12	2023	110	12	pitch
Orator								
AFP Typeface Name	Style and Weight	Code Page	Character Set Identifier	Coded Font Identifier	GCSGID	FGID	Size in Pitch or Points	
Orator	RM	T1D0BASE	CnS0OR10	XnOR10	2025	5	10	pitch
Orator (Bold)	RB	T1D0BASE	CnS0OB10	XnOB10	2025	38	10	pitch

Compatibility Fonts

<i>Table 13 (Page 4 of 6). Compatibility Fonts</i>								
Prestige								
AFP Typeface Name	Style and Weight	Code Page	Character Set Identifier	Coded Font Identifier	GCSGID	FGID	Size in Pitch or Points	
Prestige	RM	T1D0BASE	CnS0PR10	XnPR10	2023	12	10	pitch
	RM	T1D0BASE	CnS0PR12	XnPR12		86	12	pitch
Prestige (Bold)	RB	T1D0BASE	CnS0PB12	XnPB12	2023	111	12	pitch
Prestige (Italic)	IM	T1D0BASE	CnS0PI12	XnPI12	2023	112	12	pitch
Proprinter Emulation								
AFP Typeface Name	Style and Weight	Code Page	Character Set Identifier	Coded Font Identifier	GCSGID	FGID	Size in Pitch or Points	
Proptr Emul 5 CPI Small	RM	T1000437	Cn2059L0	Xn2059LF	1262	443	5	pitch
Proptr Emul 6 CPI Small	RM	T1000437	Cn2058M0	Xn2059MF	1262	444	6	pitch
Proptr Emul 8.55 CPI Small	RM	T1000437	Cn2056N0	Xn2056NF	1262	445	8.55	pitch
Proptr Emul 10 CPI Small	RM	T1000437	Cn2055P0	Xn2055PF	1262	440	10	pitch
Proptr Emul 12 CPI Small	RM	T1000437	Cn2054Q0	Xn2054QF	1262	441	12	pitch
Proptr Emul 17.1 CPI Small	RM	T1000437	Cn2051R0	Xn2051RF	1262	442	17.1	pitch
Proptr Emul 5 CPI Small (Bold)	RM	T1000437	Cn2079L0	Xn2079LF	1262	448	5	pitch
Proptr Emul 6 CPI Small (Bold)	RM	T1000437	Cn2078M0	Xn2079MF	1262	449	6	pitch
Proptr Emul 10 CPI Small (Bold)	RM	T1000437	Cn2075P0	Xn2075PF	1262	446	10	pitch
Proptr Emul 12 CPI Small (Bold)	RM	T1000437	Cn2074Q0	Xn2074QF	1262	447	12	pitch
Proptr Emul 5 CPI	RM	T1000437	Cn2059A0	Xn2059AF	1262	453	5	pitch
Proptr Emul 6 CPI	RM	T1000437	Cn2059B0	Xn2059BF	1262	453	6	pitch
Proptr Emul 8.55 CPI	RM	T1000437	Cn2059C0	Xn2059CF	1262	453	8.55	pitch
Proptr Emul 10 CPI	RM	T1000437	Cn2055D0	Xn2055DF	1262	452	10	pitch
Proptr Emul 12 CPI	RM	T1000437	Cn2055E0	Xn2055EF	1262	452	12	pitch
Proptr Emul 17.1 CPI	RM	T1000437	Cn2055F0	Xn2055FF	1262	452	17.1	pitch
Proptr Emul 5 CPI (Bold)	RM	T1000437	Cn2079A0	Xn2079AF	1262	456	5	pitch
Proptr Emul 6 CPI (Bold)	RM	T1000437	Cn2079B0	Xn2079BF	1262	456	6	pitch
Proptr Emul 10 CPI (Bold)	RM	T1000437	Cn2075D0	Xn2075DF	1262	455	10	pitch
Proptr Emul 12 CPI (Bold)	RM	T1000437	Cn2075E0	Xn2075EF	1262	455	12	pitch
Proptr Emul 5 CPI Dbl High	RM	T1000437	Cn2055J0	Xn2055JF	1262	452	5	pitch
Proptr Emul 10 CPI Dbl High	RM	T1000437	Cn2051K0	Xn2051KF	1262	451	10	pitch
Proptr Emul 5 CPI Dbl High (Bold)	RB	T1000437	Cn2075J0	Xn2075JF	1262	455	5 18	pitch points
Proptr Emul 10 CPI Dbl High (Bold)	RB	T1000437	Cn2071K0	Xn2071KF	1262	454	10	pitch

<i>Table 13 (Page 5 of 6). Compatibility Fonts</i>								
Proptr Emul 9 PT	RM	T1000437	Cn2059G0	Xn2059GF	1262	24328	9	points
Proptr Emul 18 PT	RM	T1000437	Cn2055H0	Xn2055HF	1262	24320	18	points
Proptr Emul 9 PT (Bold)	RM	T1000437	Cn2079G0	Xn2079GF	1262	24329	9	points
Proptr Emul 18 PT (Bold)	RM	T1000437	Cn2075H0	Xn2075HF	1262	24322	18	points
Proptr Emul 9 PT Small	RM	T1000437	Cn2055S0	Xn2055SF	1262	24324	4	points
Proptr Emul 9 PT Small (Bold)	RB	T1000437	Cn2075S0	Xn2075SF	1262	24326	4	points
Proptr Emul 9 PT Expanded Small	RM	T1000437	Cn2057S0	Xn2057SF	1262	24325	4	points
Proptr Emul 9 PT Expanded Small (Bold)	RB	T1000437	Cn2077S0	Xn2077SF	1262	24327	4	points
Roman								
AFP Typeface Name	Style and Weight	Code Page	Character Set Identifier	Coded Font Identifier	GCSGID	FGID	Size in Pitch or Points	
Roman	RM	T1D0BASE	CnD0RT10	XnRT10	2023	41	10	pitch
Script								
AFP Typeface Name	Style and Weight	Code Page	Character Set Identifier	Coded Font Identifier	GCSGID	FGID	Size in Pitch or Points	
Script	RM	T1D0BASE	CnS0SR12	XnSR12	2025	84	12	pitch
Serif								
AFP Typeface Name	Style and Weight	Code Page	Character Set Identifier	Coded Font Identifier	GCSGID	FGID	Size in Pitch or Points	
Serif (Bold)	RB	T1D0BASE	CnD0SB12	XnSB12	2023	72	12	pitch
Serif (Italic)	IM	T1D0BASE	CnD0SI10	XnSI10	2023	43	10	pitch
	IM	T1D0BASE	CnD0SI12	XnSI12		71	12	pitch
Serif (Overstruck)	RM	T1D0BASE	CnD0SO12	XnSO12	2023	332	12	pitch
Serif	RM	T1D0BASE	CnD0ST10	XnST10	2023	42	10	pitch
	RM	T1D0BASE	CnD0ST12	XnST12		70	12	pitch
	RM	T1D0BASE	CnD0ST15	XnST15		229	15	pitch
Symbols								
AFP Typeface Name	Style and Weight	Code Page	Character Set Identifier	Coded Font Identifier	GCSGID	FGID	Size in Pitch or Points	
Symbols	RM	T1S0S198	CnS0S198	XnS198	2024	30	10	pitch
Symbols	RM	T1S0S193	CnS0S193	XnS193	2030	80	12	pitch
Symbols OS6	RM	T1S0S192	CnS0S192	XnS192	2026	80	12	pitch
Symbols7	RM	T1000259	CnS0SYM0	XnSYM0	340	49975	10	pitch
	RM	T1000259	CnS0SYM2	XnSYM2		49975	12	pitch

Compatibility Fonts

<i>Table 13 (Page 6 of 6). Compatibility Fonts</i>							
Text							
AFP Typeface Name	Style and Weight	Code Page	Character Set Identifier	Coded Font Identifier	GCSGID	FGID	Size in Pitch or Points
Text	RM	T1L038TE	CnL00T11	XnT11	2033	333	10 pitch
Text (Underscored)	RM	T1L038TE	CnL0TU10	XnTU10	2033	334	10 pitch

DBCS Core Fonts

This section describes the DBCS Core Fonts available for use with IBM Print Services Facility (PSF) licensed programs. These fonts contain various typefaces suitable for printing a variety of Chinese, Japanese, and Korean documents. They are provided with the Outline Fonts and Programs feature as PostScript CID-keyed fonts and with the DBCS Fonts feature as AFP fonts. These CID-keyed fonts can be used with example jobs provided with Type Transformer to create the fonts listed in Table 16 on page 55. The fonts can then be stored to the MVS, OS/390, VM, and VSE operating systems using Store Utilities that are also provided in the Outline Fonts and Programs feature. The CID-keyed fonts can be used directly by the AIX and Windows environments. Type Transformer, the CID fonts, and Store Utilities are all part of the Type Transformer and Utilities for Windows feature of IBM AFP Font Collection for AIX, OS/2, OS/400, and Windows (product number 5648-B45). AFP Fonts are all part of the DBCS Fonts feature of IBM AFP Font Collection for AIX, Windows, and OS/400 (product number 5648-B45) or IBM AFP Font Collection for MVS, OS/390, VSE, and VM (product number 5648-B33).

DBCS Core Fonts are provided in the following formats:

<i>Table 14. Format and Operating Systems for DBCS Core Fonts</i>	
Format	Operating Systems
240-pel bounded-box fonts	MVS, OS/390, VSE, OS/400, AIX, Windows
AFP outline fonts	MVS, OS/390, VSE, OS/400, AIX, Windows
CID-Keyed fonts	AIX, Windows

Table 15 on page 54 shows the values to be used in Table 16 on page 55. Substitute the value for **pd** shown in Table 15 on page 54 for the lowercase “pd” (point deci–point) used in the Coded Font and Character Set names in Table 16 on page 55. The point sizes available for that font are identified under the **Size Group** column.

DBCS Core Fonts

<i>Table 15. DBCS Core Font Point sizes and Box sizes</i>				
pd	Point size/Box size	Size Group 1	Size Group 2	Size Group 3
48	4.8 point size/box size of 16	X		
60	6.0 point size/box size of 20	X	X	
72	7.2 point size/box size of 24	X	X	X
84	8.4 point size/box size of 28	X	X	
96	9.6 point size/box size of 32	X	X	X
08	10.8 point size/box size of 36	X	X	
B0	12.0 point size/box size of 40	X	X	
C8	13.8 point size/box size of 46	X	X	
E6	15.6 point size/box size of 52	X	X	
H0	18.0 point size/box size of 60	X	X	
J4	20.4 point size/box size of 68	X	X	
N0	24.0 point size/box size of 80	X	X	
T0	30.0 point size/box size of 100	X		
Z0	36.0 point size/box size of 120	X		

Table 16 (Page 1 of 4). DBCS Core Fonts

AFP/CID Typeface Name	CID File Name	Weight	Width	Coded Font	Character Set	Code Page	GCSCID	FGID	Size Group	
Japanese Heisei Kaku Gothic										
Heisei Kaku Gothic	IBJHKGW5	Medium	Full	X0EFpd	C0EFpdss	T10300ss	2057	53249	Size Group 2	
				Half	X0EDpd	C0H0EDpd	T1H01002		1132	Size Group 2
				Half	X0EJpd	C0H0EJpd	T1H01041		1187	Size Group 2
				Half	X0EOpd	C0H0EOpd	T1H00290		1398	Size Group 2
				Half	X0EVpd	C0H0EVpd	T1H01027		1398	Size Group 2
				Half	X0EWpd	C0H0EWpd	T1H01031		1363	Size Group 3
				Half	X0EYpd	C0H0EYpd	T1H01030		1363	Size Group 3
				Full	XZEFpd	CZJHKG	T10300		2057	Size Group 1
				Half	XZEDpd	CZJHKG	T1H01002		1132	Size Group 1
				Half	XZEJpd	CZJHKG	T1H01041		1187	Size Group 1
				Half	XZEOpd	CZJHKG	T1H00290		1398	Size Group 1
				Half	XZEVpd	CZJHKG	T1H01027		1398	Size Group 1
				Japanese Heisei Maru Gothic						
Heisei Maru Gothic	IBJHMGW4	Semi-Light	Full	X0PFpd	C0PFpdss	T10300ss	2057	53250	Size Group 2	
				Half	X0PDpd	C0H0PDpd	T1H01002		1132	Size Group 2
				Half	X0PJpd	C0H0PJpd	T1H01041		1187	Size Group 2
				Half	X0POpd	C0H0POpd	T1H00290		1398	Size Group 2
				Half	X0PVpd	C0H0PVpd	T1H01027		1398	Size Group 2
				Half	X0PWpd	C0H0PWpd	T1H01031		1363	Size Group 3
				Half	X0PYpd	C0H0PYpd	T1H01030		1363	Size Group 3
				Full	XZPFpd	CZJHMG	T10300		2057	Size Group 1
				Half	XZPDpd	CZJHMG	T1H01002		1132	Size Group 1
				Half	XZPJpd	CZJHMG	T1H01041		1187	Size Group 1
				Half	XZPOpd	CZJHMG	T1H00290		1398	Size Group 1
				Half	XZPVpd	CZJHMG	T1H01027		1398	Size Group 1
				Japanese Heisei Mincho						
Heisei Mincho	IBJHMINW3	Light	Full	X0KFpd	C0KFpdss	T10300ss	2057	53248	Size Group 2	
				Half	X0KDpd	C0H0KDpd	T1H01002		1132	Size Group 2
				Half	X0KJpd	C0H0KJpd	T1H01041		1187	Size Group 2
				Half	X0KOpd	C0H0KOpd	T1H00290		1398	Size Group 2
				Half	X0KVpd	C0H0KVpd	T1H01027		1398	Size Group 2
				Half	X0KWpd	C0H0KWpd	T1H01031		1363	Size Group 3
				Half	X0KYpd	C0H0KYpd	T1H01030		1363	Size Group 3
				Full	XZKFpd	CZJHMN	T1H0300		2057	Size Group 1
				Half	XZKDpd	CZJHMN	T1H01002		1132	Size Group 1
				Half	XZKJpd	CZJHMN	T1H01041		1187	Size Group 1
				Half	XZKOpd	CZJHMN	T1H00290		1398	Size Group 1
				Half	XZKVpd	CZJHMN	T1H01027		1398	Size Group 1

Table 16 (Page 2 of 4). DBCS Core Fonts									
AFP/CID Typeface Name	CID File Name	Weight	Width	Coded Font	Character Set	Code Page	GCSCID	FGID	Size Group
Korean Gothic									
Gothic	IBHKG2W5	Medium	Full	X0GKpd	C0GKpdss	T10834ss	1010	53816	Size Group 2
				X0GHpd	C0GHpdss	T1K834ss	1094		Size Group 2
				X0GEpd	C0H0GEpd	T1H00833	1173		Size Group 2
				X0GJpd	C0H0GJpd	T1H01088	1267		Size Group 2
				X0GUpd	C0H0GUpd	T1H00833	1173		Size Group 2
				X0GNpd	C0H0GNpd	T1H01088	1267		Size Group 2
				X0GWpd	C0H0GWpd	T1H01150	1365		Size Group 3
				XZGKpd	CZKKG2	T10834	1010		Size Group 1
				XZGHpd	CZHKG2	T1K834	1094		Size Group 1
				XZGEpd	CZHKG2	T1H00833	1173		Size Group 1
				XZGJpd	CZHKG2	T1H01088	1267		Size Group 1
				XZGUpd	CZKKG2	T1H00833	1173		Size Group 1
				XZGNpd	CZKKG2	T1H01088	1267		Size Group 1
				Korean Myengjo					
Myengjo	IBHSM2W5	Medium	Full	X0MKpd	C0MKpdss	T10834ss	1010	53560	Size Group 2
				X0MHpd	C0MHpdss	T1K834ss	1094		Size Group 2
				X0MEpd	C0H0MEpd	T1H00833	1173		Size Group 2
				X0MJpd	C0H0MJpd	T1H01088	1267		Size Group 2
				X0MUpd	C0H0MUpd	T1H00833	1173		Size Group 2
				X0MNpd	C0H0MNpd	T1H01088	1267		Size Group 2
				X0MVpd	C0H0MVpd	T1H01150	1365		Size Group 3
				XZMKpd	CZKSM2	T1H0834	1010		Size Group 1
				XZMHpd	CZHSM2	T1K0834	1094		Size Group 1
				XZMEpd	CZHSM2	T1H00833	1173		Size Group 1
				XZMJpd	CZHSM2	T1H01088	1267		Size Group 1
				XZMUpd	CZKSM2	T1H00833	1173		Size Group 1
				XZMNpd	CZKSM2	T1H01088	1267		Size Group 1
				Simplified Chinese – GB Fang Song					
Fang Song	IBSFSGW4	Semi-Light	Full	X0FPpd	C0FPpdss	T10837ss	1020	54566	Size Group 2
				X0FEpd	C0H0FEpd	T1H00836	1174		Size Group 2
				X0FJpd	C0H0FJpd	T1H01115	1240		Size Group 2
				X0FWpd	C0H0FWpd	T1H01151	1366		Size Group 3
				X0FPpd	CZSFSG	T10837	1020		Size Group 1
				X0FEpd	CZSFSG	T1H00836	1174		Size Group 1
				X0FJpd	CZSFSG	T1H01115	1240		Size Group 1

Table 16 (Page 3 of 4). DBCS Core Fonts

AFP/CID Typeface Name	CID File Name	Weight	Width	Coded Font	Character Set	Code Page	GCSCID	FGID	Size Group
Simplified Chinese – GB Hei									
Hei	IBSHEIW6	Semi-Bold	Full	X0HPpd	C0HPpdss	T10837ss	1020	54565	Size Group 2
			Half	X0HEpd	C0H0HEpd	T1H00836	1174		Size Group 2
			Half	X0HJpd	C0H0HJpd	T1H01115	1240		Size Group 2
			Half	X0HWpd	C0H0HWpd	T1H01151	1366		Size Group 3
			Full	XZHPpd	CZSHEI	T10837	1020		Size Group 1
			Half	XZHEpd	CZSHEI	T1H00836	1174		Size Group 1
			Half	XZHJpd	CZSHEI	T1H01115	1240		Size Group 1
			Simplified Chinese – GB Kai						
Kai	IBSKAIW5	Medium	Full	X0JPpd	C0JPpdss	T10837ss	1020	54568	Size Group 2
			Half	X0JEpd	C0H0JEpd	T1H00836	1174		Size Group 2
			Half	X0JJpd	C0H0JJpd	T1H01115	1240		Size Group 2
			Half	X0JWpd	C0H0JWpd	T1H01151	1366		Size Group 3
			Full	XZJPpd	CZSKAI	T10837	1020		Size Group 1
			Half	XZJEpd	CZSKAI	T1H00836	1174		Size Group 1
			Half	XZJJpd	CZSKAI	T1H01115	1240		Size Group 1
			Simplified Chinese – GBK Song						
Song	IKSSNGW5	Medium	Full	X0SPpd	C0SPpdss	T10837ss	1020	54567	Size Group 2
			Full	X0SSpd	C0SSpdss	T1K837ss	1085		Size Group 2
			Half	X0SEpd	C0H0SEpd	T1H00836	1174		Size Group 2
			Half	X0SJpd	C0H0SJpd	T1H01115	1240		Size Group 2
			Half	X0SUpd	C0H0SUpd	T1H00836	1174		Size Group 2
			Half	X0SNpd	C0H0SNpd	T1H01115	1240		Size Group 2
			Half	X0SQpd	C0H0SQpd	T1HK1114	1238		Size Group 2
			Half	X0SWpd	C0H0SWpd	T1H01151	1366		Size Group 3
			Full	XZSPpd	CZPSNG	T10837	1020		Size Group 1
			Full	XZSSpd	CZSSNG	T1K837	1085		Size Group 1
			Half	XZSEpd	CZSSNG	T1H00836	1174		Size Group 1
			Half	XZSJpd	CZSSNG	T1H01115	1240		Size Group 1
			Half	XZSQpd	CZSSNG	T1HK1114	1238		Size Group 1
			Half	XZSUpd	CZPSNG	T1H00836	1174		Size Group 1
			Half	XZSNpd	CZPSNG	T1H01115	1240		Size Group 1

Table 16 (Page 4 of 4). DBCS Core Fonts

AFP/CID Typeface Name	CID File Name	Weight	Width	Coded Font	Character Set	Code Page	GCSCID	FGID	Size Group					
Traditional Chinese Kai														
Kai	IBTKAIW5	Medium	Full	X0LTpd	C0LTPdss	T10835ss	2074	54568	Size Group 2					
				Half	X0LEpd	C0H0LEpd	T1H00037		1175	Size Group 2				
				Half	X0LJpd	C0H0LJpd	T1H01043		1189	Size Group 2				
				Half	X0LQpd	C0H0LQpd	T1H01114		1500	Size Group 2				
				Half	X0LVpd	C0H0LVpd	T1H01159		1399	Size Group 2				
				Half	X0LWpd	C0H0LWpd	T1H01152		1367	Size Group 3				
				Full	XZLTpd	CZTKAI	T10835		2074	Size Group 1				
				Half	XZLEpd	CZTKAI	T1H00037		1175	Size Group 1				
				Half	XZLJpd	CZTKAI	T1H01043		1189	Size Group 1				
				Half	XZLQpd	CZTKAI	T1H01114		1500	Size Group 1				
				Half	XZLVpd	CZTKAI	T1H01159		1399	Size Group 1				
				Traditional Chinese Sung										
				Sung	IBTSNGW3	Light	Full		X0TTPd	C0TTPdss	T10835	2074	54563	Size Group 2
Half	X0TEpd	C0H0TEpd	T1H00037					1175	Size Group 2					
Half	X0TJpd	C0H0TJpd	T1H01043					1189	Size Group 2					
Half	X0TQpd	C0H0TQpd	T1H01114					1500	Size Group 2					
Half	X0TVpd	C0H0TVpd	T1H01159					1399	Size Group 2					
Half	X0TWpd	C0H0TWpd	T1H01152					1367	Size Group 3					
Full	XZTTPd	CZTSNG	T10835					2074	Size Group 1					
Half	XZTEpd	CZTSNG	T1H00037					1175	Size Group 1					
Half	XZTJpd	CZTSNG	T1H01043					1189	Size Group 1					
Half	XZTQpd	CZTSNG	T1H01114					1500	Size Group 1					
Half	XZTVpd	CZTSNG	T1H01159					1399	Size Group 1					

DBCS Simulation Fonts

This section describes the DBCS Simulation Fonts available for use with IBM Print Services Facility (PSF) licensed programs. The DBCS Simulation Fonts are provided in AFP Outline Font format that simulates the following raster font products:

- Japanese
 - AFP Japanese Font V2 (5771-AGB)
 - AFP Japanese Heisei Font (5648-104)
- Korean
 - AFP Korean Font (5771-AFW)
- Simplified Chinese
 - AFP Simplified Chinese Font (5771-AEK)
- Traditional Chinese
 - AFP Traditional Chinese Font (5771-AFZ)

DBCS Simulation Fonts are provided in the following formats:

Table 17. Format and Operating Systems for DBCS Simulation Fonts

Format	Operating Systems
AFP outline fonts	MVS, OS/390, VSE, OS/400, AIX, Windows
CID-Keyed fonts	AIX, Windows

See Table 18 on page 60 for the summary of the DBCS simulation fonts.

Table 18 (Page 1 of 3). DBCS Simulation Fonts

CID File Name	Weight	Width	Coded Font	Character Set	Code Page	GCSGID	FGID	Box Size 240 pel (HxV)
Japanese Gothic simulated by Heisei Kaku Gothic								
IBJHKGW5	Medium	Full	XZGbxB	CZJJKG	T10300	541	53249	16x16 20x24 24x30 32x32 36x36 40x40 48x48 64x64
		Full	XZGbxF		T10300	2057		16x16 20x24 24x30 32x32 36x36 40x40 48x48 64x64
		Full	XZGbxX		T10300	572		48x48 64x64
		Half	XZHbxD		T1H01002	1132		12x30 16x32 18x36 20x40 24x48 32x64
		Half	XZHbxJ		T1H01041	1187		12x30 16x32 18x36 20x40 24x48 32x64
		Half	XZHbxN		T1HK0290	332		12x30 16x32 18x36 20x40 24x48 32x64
		Half	XZHbxO		T1H00290	1398		12x30 16x32 18x36 20x40 24x48 32x64
		Half	XZHbxU		T1HK0037	101		12x30 16x32 18x36 20x40 24x48 32x64
Half	XZHbxV	T1H10027	1398	12x30 16x32 18x36 20x40 24x48 32x64				
Japanese Heisei Kaku Gothic simulated by Heisei Kaku Gothic								
IBJHKGW5	Medium	Full	XZEbxB	CZJHKG	T10300	541	53249	24x24 26x26 32x32 36x36 40x40 44x44 48x48 52x52 64x64
		Full	XZEbxF		T10300	2057		24x24 26x26 32x32 36x36 40x40 44x44 48x48 52x52 64x64
		Half	XZFbxD		T1H01002	1132		12x24 13x26 16x32 18x36 20x40 22x44 24x48 26x52 32x64
		Half	XZFbxJ		T1H01041	1187		12x24 13x26 16x32 18x36 20x40 22x44 24x48 26x52 32x64
		Half	XZFbxN		T1HK0290	332		12x24 13x26 16x32 18x36 20x40 22x44 24x48 26x52 32x64
		Half	XZFbxO		T1H00290	1398		12x24 13x26 16x32 18x36 20x40 22x44 24x48 26x52 32x64
		Half	XZFbxU		T1HK0037	101		12x24 13x26 16x32 18x36 20x40 22x44 24x48 26x52 32x64
		Half	XZFbxV		T1H01027	1398		12x24 13x26 16x32 18x36 20x40 22x44 24x48 26x52 32x64
Japanese Round Gothic simulated by Heisei Maru Gothic								
IBJHMGW4	Semi-light	Full	XZRbxB	CZJJMG	T10300	541	53250	36x36 40x40 48x48 64x64
		Full	XZRbxF		T10300	2057		36x36 40x40 48x48 64x64
		Full	XZRbxX		T10300	572		48x48 64x64
		Half	XZSbxD		T1H01002	1132		18x36 20x40 24x48 32x64
		Half	XZSbxJ		T1H01041	1187		18x36 20x40 24x48 32x64
		Half	XZSbxN		T1HK0290	332		18x36 20x40 24x48 32x64
		Half	XZSbxO		T1H00290	1398		18x36 20x40 24x48 32x64
		Half	XZSbxU		T1HK0037	101		18x36 20x40 24x48 32x64
Half	XZSbxV	T1H01027	1398	18x36 20x40 24x48 32x64				

Table 18 (Page 2 of 3). DBCS Simulation Fonts

CID File Name	Weight	Width	Coded Font	Character Set	Code Page	GCSGID	FGID	Box Size 240 pel (HxV)
Japanese Mincho simulated by Heisei Mincho								
IBJHMNW3	Light	Full	XZMbxB	CZJMMN	T10300	541	53248	16x16 24x24 26x26 32x32 36x36 40x40 44x44 48x48 52x52 64x64
		Full	XZMbxF		T10300	2057		16x16 24x24 26x26 32x32 36x36 40x40 44x44 48x48 52x52 64x64
		Full	XZMbxX		T10300	572		48x48 64x64
		Full	XZZbxB		T10300	541		24x24
		Full	XZZbxF		T10300	2057		24x24
		Half	XZNbxD		T1H01002	1132		12x24 13x26 16x32 18x36 20x40 24x48 26x52 32x64
		Half	XZNbxJ		T1H01041	1187		12x24 13x26 16x32 18x36 20x40 24x48 26x52 32x64
		Half	XZNbxN		T1HK0290	332		12x24 13x26 16x32 18x36 20x40 24x48 26x52 32x64
		Half	XZNbxO		T1H00290	1398		12x24 13x26 16x32 18x36 20x40 24x48 26x52 32x64
		Half	XZNbxU		T1H00037	101		12x24 13x26 16x32 18x36 20x40 24x48 26x52 32x64
		Half	XZNbxV		T1H01027	1398		12x24 13x26 16x32 18x36 20x40 24x48 26x52 32x64
		Half	XZYbxD		T1H01002	1132		12x24
		Half	XZYbxJ		T1H01041	1187		12x24
		Half	XZYbxN		T1HK0290	332		12x24
		Half	XZYbxO		T1H00290	1398		12x24
		Half	XZYbxU		T1H00037	101		12x24
		Half	XZYbxV		T1H01027	1398		12x24
Japanese Heisei Mincho simulated by Heisei Mincho								
IBJHMNW3	Light	Full	XZKbxB	CZJHMN	T10300	541	53248	16x16 24x24 26x26 32x32 36x36 40x40 44x44 48x48 52x52 64x64
		Full	XZKbxF		T10300	2057		16x16 24x24 26x26 32x32 36x36 40x40 44x44 48x48 52x52 64x64
		Half	XZLbxD		T1H01002	1132		12x24 13x26 16x32 18x36 20x40 22x44 24x48 26x52 32x64
		Half	XZLbxJ		T1H01041	1187		12x24 13x26 16x32 18x36 20x40 22x44 24x48 26x52 32x64
		Half	XZLbxN		T1H00290	332		12x24 13x26 16x32 18x36 20x40 22x44 24x48 26x52 32x64
		Half	XZLbxO		T1H00290	1398		12x24 13x26 16x32 18x36 20x40 22x44 24x48 26x52 32x64
		Half	XZLbxU		T1H00037	101		12x24 13x26 16x32 18x36 20x40 22x44 24x48 26x52 32x64
		Half	XZLbxV		T1H01027	1398		12x24 13x26 16x32 18x36 20x40 22x44 24x48 26x52 32x64
Korean Gothic simulated by Gothic								
IBHKG2W5	Medium	Full	XZGbxK	CZKKG2	T10834	1010	53816	16x16 24x30
		Full	XZGbxL		T10834	1012		16x16 24x30
		Half	XZHbxK		T1H00833	1173		8x16 12x30
Korean Mincho simulated by Myengjo								
IBHSM2W5	Medium	Full	XZMbxK	CZKSM2	T10834	1010	53560	24x24 32x32 36x36 40x40 48x48 64x64
		Full	XZMbxL		T10834	1012		24x24 32x32 36x36 40x40 48x48 64x64
		Half	XZNbxK		T1H00833	1173		12x30 16x32 18x36 20x40 24x48 32x64

<i>Table 18 (Page 3 of 3). DBCS Simulation Fonts</i>								
CID File Name	Weight	Width	Coded Font	Character Set	Code Page	GCSGID	FGID	Box Size 240 pel (HxV)
Simplified Chinese Gothic simulated by Hei								
IBSHEIW6	Semi-bold	Full	XZGbxP	CZSHEI	T10837	54565	1020	16x16
Simplified Chinese Song simulated by Song								
IKSSNGW5	Medium	Full	XZSbxP	CZPSNG	T10837	1020	54567	26x26 32x32 40x40
Traditional Chinese Gothic simulated by Sung								
IBTSNGW3	Light	Full	XZGbxT	CZTSNG	T10835	2074	54563	16x16
Traditional Chinese Ming simulated by Sung								
IBTSNGW3	Light	Full	XZMbxT	CZTSNG	T10835	2074	54563	24x24 32x32 40x40

Code Pages

The following table lists, in code page ID sequence, all the code pages defined in this chapter with a reference to the page where additional information is located. ss in a double-byte code page name is the section number (blanks for code pages used with outline coded fonts).

Code Page ID	Located On	Description
T1000259	Page 80	Symbols, Set 7
T1000290	Page 72	Gothic Katakana, Katakana 10, Katakana 12
T1000293	Page 68	APL (USA)
T10300ss	Page 69	Japanese DBCS—Host
T1000310	Page 68	APL Graphic Escape
T1000361	Page 76	Publishing: International #5
T1000363	Page 80	Symbols, Set 8
T1000382	Page 76	Publishing: Austria, Germany, Switzerland
T1000383	Page 76	Publishing: Belgium
T1000384	Page 76	Publishing: Brazil
T1000385	Page 76	Publishing: Canada (French)
T1000386	Page 76	Publishing: Denmark, Norway
T1000387	Page 76	Publishing: Finland, Sweden
T1000388	Page 76	Publishing: France, Switzerland
T1000389	Page 76	Publishing: Italy, Switzerland
T1000390	Page 76	Publishing: Japan (Latin)
T1000391	Page 76	Publishing: Portugal
T1000392	Page 76	Publishing: Spain, Philippines
T1000393	Page 76	Publishing: Latin America (Spanish)
T1000394	Page 76	Publishing: United Kingdom, Australia, Hong Kong, Ireland, New Zealand
T1000395	Page 76	Publishing: United States, Canada (English)
T1000420	Page 68	Arabic Bilingual
T1000423	Page 70	Greece 183
T1000424	Page 72	Hebrew
T1000437	Page 77	Personal Computer: ASCII
T1000803	Page 72	Hebrew Character Set A
T1000813	Page 70	ISO/ANSI 8-Bit Greek
T1000819	Page 77	ISO/ANSI 8-Bit Latin1
T1000829	Page 80	Math Symbols
T10834ss	Page 69	Korean DBCS—Host
T1K834ss	Page 69	Korean DBCS—Host (Full Hangul)
T10835ss	Page 69	Traditional Chinese DBCS—Host
T1000836	Page 78	People's Republic of China
T10837ss	Page 69	Simplified Chinese DBCS—Host
T1K837ss	Page 69	Simplified Chinese DBCS—Host (GBK)
T1000838	Page 81	Thailand
T1000850	Page 77	Personal Computer: Multilingual
T1000851	Page 70	Personal Computer: Greece
T1000852	Page 78	Personal Computer: Latin2
T1000853	Page 78	Personal Computer: Latin3
T1000855	Page 70	Personal Computer: Cyrillic
T1000856	Page 72	Personal Computer: Hebrew
T1000857	Page 78	Personal Computer: Latin5
T1000858	Page 74	PC – Multilingual with euro
T1000860	Page 77	Personal Computer: Portugal
T1000861	Page 77	Personal Computer: Iceland

Code Pages

Code Page ID	Located On	Description
T1000862	Page 72	Personal Computer: Hebrew (ASCII)
T1000863	Page 77	Personal Computer: France, Canada (French)
T1000864	Page 68	Personal Computer: Arabic
T1000865	Page 77	Personal Computer: Nordic—Denmark, Norway
T1000866	Page 70	Personal Computer: Cyrillic #2
T1000867	Page 72	Israel – Personal Computer
T1000869	Page 70	Personal Computer: Greece
T1000870	Page 78	Personal Computer: Latin2 Multilingual
T1000874	Page 81	Personal Computer: Thailand
T1000875	Page 70	Greece
T1000876	Page 80	OCR-A ASCII
T1000877	Page 80	OCR-B ASCII
T1000880	Page 70	Cyrillic Multilingual
T1000889	Page 81	Thailand
T1000892	Page 80	OCR-A
T1000893	Page 80	OCR-B
T1000897	Page 72	Katakana PC
T1000899	Page 80	ASCII Symbol Set 7
T1000903	Page 78	People's Republic of China (Latin)
T1000904	Page 78	Republic of China (Latin)
T1000905	Page 78	Latin3 Multilingual
T1000910	Page 68	APL ASCII
T1000912	Page 78	Latin2 ISO/ANSI 8-Bit
T1000913	Page 78	Latin3 ISO/ASCII
T1000914	Page 78	Latin4 ISO/ANSI
T1000915	Page 70	Cyrillic ISO/ANSI 8-Bit
T1000916	Page 72	Hebrew ISO/ANSI 8-Bit
T1000920	Page 78	Latin5 ISO/ANSI 8-Bit
T1000923	Page 74	Latin9
T1000924	Page 74	Latin9 EBCDIC
T1001002	Page 71	DCF
T1001003	Page 71	United States Text Subset
T1001004	Page 71	Personal Computer: Desktop Publishing
T1001008	Page 68	Arabic ISO/ASCII 8-Bit
T1001025	Page 70	Cyrillic Multilingual
T1001026	Page 78	Latin5
T1001027	Page 72	Katakana
T1001028	Page 72	Hebrew Publishing
T1001029	Page 68	Arabic ISO/ASCII 8-Bit
T1001038	Page 80	ASCII Symbols Abode
T1001039	Page 71	GML List Symbols
T1001041	Page 72	Katakana PC
T1001042	Page 78	Simplified Chinese Extended
T1001043	Page 78	Traditional Chinese Extended
T1001046	Page 68	Arabic Extended ISO/ASCII 8-Bit
T1001068	Page 71	Text with numeric spacing
T1001069	Page 78	Latin4
T1001087	Page 80	Symbols Abode
T1001091	Page 80	Symbols, Set 7 Modified
T1001092	Page 80	ASCII Symbols, Set 7 Modified
T1001093	Page 80	IBM Logo
T1001110	Page 78	Latin2 Multilingual
T1001111	Page 78	Latin3 Multilingual
T1001112	Page 79	Baltic – Multilingual EBCDIC

Code Page ID	Located On	Description
T1001122	Page 79	Estonia EBCDIC
T1001123	Page 70	Cyrillic, Ukraine EBCDIC
T1001124	Page 70	Cyrillic, Ukraine ISO-8
T1001132	Page 79	Lao EBCDIC
T1001133	Page 79	Lao ISO-8
T1001139	Page 72	Japan Alphanumeric Katakana
T1001140	Page 74	USA, Canada ECECP
T1001141	Page 74	Austria, Germany ECECP
T1001142	Page 74	Denmark, Norway ECECP
T1001143	Page 74	Finland, Sweden ECECP
T1001144	Page 74	Italy ECECP
T1001145	Page 74	Spain, Latin America ECECP
T1001146	Page 74	UK ECECP
T1001147	Page 74	France ECECP
T1001148	Page 75	International ECECP
T1001149	Page 75	Iceland ECECP
T1001252	Page 75	Windows Latin1
T1B00037	Page 73	BookMaster: United States, Canada
T1B00273	Page 73	BookMaster: Austria, Germany, Switzerland
T1B00274	Page 73	BookMaster: Belgium
T1B00275	Page 73	BookMaster: Brazil
T1B00277	Page 73	BookMaster: Denmark, Norway
T1B00278	Page 73	BookMaster: Finland, Sweden
T1B00280	Page 73	BookMaster: Italy, Switzerland
T1V00281	Page 73	BookMaster: Japan (Latin)
T1B00282	Page 73	BookMaster: Portugal
T1B00284	Page 73	BookMaster: Spain, Latin America
T1B00285	Page 73	BookMaster: United Kingdom
T1B00297	Page 73	BookMaster: France
T1B00382	Page 76	BookMaster: Austria, Germany, Switzerland
T1B00383	Page 76	BookMaster: Belgium
T1B00384	Page 76	BookMaster: Brazil
T1B00385	Page 76	BookMaster: Canada (French)
T1B00386	Page 76	BookMaster: Denmark, Norway
T1B00387	Page 76	BookMaster: Finland, Sweden
T1B00388	Page 76	BookMaster: France, Switzerland
T1B00389	Page 76	BookMaster: Italy, Switzerland
T1B00390	Page 76	BookMaster: Japan (Latin)
T1B00391	Page 76	BookMaster: Portugal
T1B00392	Page 76	BookMaster: Spain, Philippines
T1B00393	Page 76	BookMaster: Latin America (Spanish)
T1B00394	Page 76	BookMaster: United Kingdom, Australia, Hong Kong, Ireland, New Zealand
T1B00395	Page 76	BookMaster: United States, Canada (English)
T1B00500	Page 73	BookMaster: International #5
T1B00871	Page 73	BookMaster: Iceland
T1B00BGS	Page 80	BookMaster: Specials
T1DATABASE	Page 79	Migration: Austria, Germany
T1DDBASE	Page 79	Migration: Belgium, Luxemburg, Switzerland
T1DDBASE	Page 79	Migration: Denmark, Iceland, Norway
T1DEBASE	Page 79	Migration: Finland, Sweden
T1DFBASE	Page 79	Migration: France
T1DIBASE	Page 79	Migration: Italy
T1DNBASE	Page 79	Migration: Netherlands, Portugal
T1DSBASE	Page 79	Migration: Spain, Latin America

Code Pages

Code Page ID	Located On	Description
T1DUBASE	Page 79	Migration: United Kingdom
T1D0BASE	Page 79	Migration: DCF
T1D0GP12	Page 81	DCF Gothic Tri-Pitch
T1H00037	Page 69	Traditional Chinese EBCDIC
T1HK0037	Page 69	Japanese (US English)
T1HK0290	Page 69	Japanese (Katakana)
T1H00290	Page 69	Japanese (Katakana Extended)
T1H00833	Page 69	Korean EBCDIC
T1H00836	Page 69	Simplified Chinese EBCDIC
T1H01002	Page 69	Japanese DCF Release 2 Compatibility
T1H01027	Page 69	Japanese (Latin) Extended
T1H01041	Page 69	Japanese PC Extended
T1H01043	Page 69	Traditional Chinese PC
T1H01088	Page 69	Korean PC
T1H01114	Page 69	Traditional Chinese PC, IBM Big 5
T1HK1114	Page 69	Simplified Chinese PC, IBM GBK
T1H01115	Page 69	Simplified Chinese PB, IBM GB
T1H01030	Page 69	Japanese Extended Kana with Box
T1H01031	Page 69	Japanese Extended Latin with Box
T1H01150	Page 69	Korean EBCDIC with Box
T1H01151	Page 69	Simplified Chinese EBCDIC with Box
T1H01152	Page 69	Traditional Chinese EBCDIC with Box
T1H01159	Page 69	Traditional Chinese EBCDIC with Euro
T1L0DUMP	Page 81	LCS Dump Character Set
T1L0FOLD	Page 81	LCS Gothic Folded
T1L0OCRB	Page 80	LCS Gothic and OCR B
T1L0OCR1	Page 80	LCS OCR A
T1L0OCR2	Page 80	LCS Gothic and OCR A
T1L0OCR3	Page 80	LCS Gothic and OCR A
T1L0PCAN	Page 81	LCS Gothic
T1L0PCHN	Page 81	LCS Gothic
T1L00A11	Page 81	LCS Gothic
T1L00FMT	Page 71	LCS Format Characters
T1L00KN1	Page 72	LCS Gothic, Katakana (KN1)
T1L00QNC	Page 81	LCS Gothic
T1L000GN	Page 81	LCS Gothic
T1L000RN	Page 81	LCS Gothic
T1L000SN	Page 81	LCS Text-1 and Text-2
T1L000XN	Page 81	LCS Gothic
T1L038BA	Page 81	LCS Gothic
T1L038TE	Page 81	LCS Text-1 and Text-2
T1L000YN	Page 81	LCS Gothic
T1L02773	Page 72	LCS Gothic, Katakana (2773)
T1L02774	Page 72	LCS Gothic, Katakana (2774)
T1S0AE10	Page 68	APL (AE10)
T1S0S192	Page 80	6670 Symbol Set
T1S0S193	Page 80	6670 Symbol Set
T1S0S198	Page 80	6670 Symbol Set
T1V10037	Page 73	Country Extended: United States, Canada
T1V10273	Page 73	Country Extended: Austria, Germany, Switzerland
T1V10274	Page 73	Country Extended: Belgium
T1V10275	Page 73	Country Extended: Brazil
T1V10277	Page 73	Country Extended: Denmark, Norway
T1V10278	Page 73	Country Extended: Finland, Sweden

Code Page ID	Located On	Description
T1V10280	Page 73	Country Extended: Italy, Switzerland
T1V10281	Page 73	Country Extended: Japan (Latin)
T1V10282	Page 73	Country Extended: Portugal
T1V10284	Page 73	Country Extended: Spain, Latin America
T1V10285	Page 73	Country Extended: United Kingdom
T1V10290	Page 72	Japan (Katakana)
T1V10297	Page 73	Country Extended: France
T1V10500	Page 73	Country Extended: International #5
T1V10871	Page 73	Country Extended: Iceland

Arabic Code Pages

The following figures list the IDs (CPGID stands for code page global ID), descriptions of available code pages, and identifies which font groups (IBM Expanded Core Fonts or IBM Compatibility Fonts) the code page is supported within. In the column headed **Supported In**, the following legend is used:

ExpCore Expanded Core Fonts
Comp Compatibility Fonts (IBM Compatibility Fonts)
DBCS DBCS Core Fonts

For additional information about single-byte code pages, including Katakana code pages, refer to *IBM AFP Fonts: Technical Reference for Code Pages*.

For additional information about double-byte code pages, refer to *&CJKFC..*

APL Code Pages

Table 19. APL Code Pages

CPGID	Code Page ID	Description	Supported Languages	Supported In
293	T1000293	APL (USA)	APL	ExpCore
310	T1000310	APL Graphic Escape	APL	ExpCore
910	T1000910	APL ASCII	APL	ExpCore
2108	T1S0AE10	APL (AE10)	APL	Comp

Arabic Code Pages

Table 20. Arabic Code Pages

CPGID	Code Page ID	Description	Supported Languages	Supported In
420	T1000420	Arabic Bilingual	Arabic	ExpCore
864	T1000864	Personal Computer: Arabic	Arabic	ExpCore
1008	T1001008	ISO/ASCII 8-Bit: Arabic	Arabic	ExpCore
1029	T1001029	ISO/ASCII 8-Bit: Arabic Extended	Arabic	ExpCore
1046	T1001046	ISO/ASCII 8-Bit: Arabic Extended	Arabic	ExpCore

Chinese, Japanese, and Korean Code Pages

Table 21. Chinese, Japanese, and Korean Code Pages

CPGID	Code Page ID	Description	Supported Languages	Supported In
300	T10300ss	Japanese DBCS—Host	Japanese	DBCS
834	T10834ss	Korean DBCS—Host	Korean	DBCS
834	T1K834ss	Korean DBCS—Host (Full Hangul)	Korean	DBCS
835	T10835ss	Traditional Chinese DBCS—Host	Traditional Chinese	DBCS
837	T10837ss	Simplified Chinese DBCS—Host	Simplified Chinese	DBCS
837	T1K837ss	Simplified Chinese DBCS—Host GBK	Simplified Chinese	DBCS
37	T1H00037	Traditional Chinese EBCDIC	Traditional Chinese	DBCS
37	T1HK0037	Japanese (US English)	Japanese	DBCS
290	T1H00290	Japanese (Katakana) Extended	Japanese	DBCS
290	T1HK0290	Japanese (Katakana)	Japanese	DBCS
833	T1H00833	Korean EBCDIC	Korean	DBCS
836	T1H00836	Simplified Chinese EBCDIC	Simplified Chinese	DBCS
1002	T1H01002	Japanese DCF Release 2 Compatibility	Japanese	DBCS
1027	T1H01027	Japanese (Latin) Extended	Japanese	DBCS
1041	T1H01041	Japanese PC Extended	Japanese	DBCS
1043	T1H01043	Traditional Chinese PC	Traditional Chinese	DBCS
1088	T1H01088	Korean PC	Korean	DBCS
1114	T1H01114	Traditional Chinese PC, IBM Big 5	Traditional Chinese	DBCS
1114	T1HK1114	Simplified Chinese PC, IBM GBK	Simplified Chinese	DBCS
1115	T1H01115	Simplified Chinese PB, IBM GB	Simplified Chinese	DBCS
1130	T1H01130	Japanese Extended Kana with Box	Japanese	DBCS
1131	T1H01131	Japanese Extended Latin with Box	Japanese	DBCS
1150	T1H01150	Korean EBCDIC with Box	Korean	DBCS
1151	T1H01151	Simplified Chinese EBCDIC with Box	Simplified Chinese	DBCS
1152	T1H01152	Traditional Chinese EBCDIC with Box	Traditional Chinese	DBCS
1159	T1H01159	Traditional Chinese EBCDIC with Euro	Traditional Chinese	DBCS

Cyrillic Greek Code Pages

Table 22. Cyrillic Greek Code Pages

CPGID	Code Page ID	Description	Supported Languages	Supported In
423	T1000423	Greece 183 (EBCDIC) T1000875 is the preferred EBCDIC code page for Greece.	Greek	ExpCore
813	T1000813	ISO/ANSI 8-Bit: Greek T1000869 is the preferred ASCII code page for Greece.	Greek	ExpCore
851	T1000851	Personal Computer: Greece T1000869 is the preferred ASCII code page for Greece.	Greek	ExpCore
855	T1000855	Personal Computer: Cyrillic	Bulgarian, Byelorussian, Macedonian, Russian, Serbian, and Ukrainian	ExpCore
866	T1000866	Personal Computer: Cyrillic #2 (Microsoft version)	Bulgarian, Byelorussian, Macedonian, Russian, Serbian, and Ukrainian	ExpCore
869	T1000869	Personal Computer: Greece This is the preferred ASCII code page for Greece.	Greek	ExpCore
875	T1000875	Greece This is the preferred EBCDIC code page for Greece.	Greek	ExpCore
880	T1000880	Cyrillic Multilingual T1001025 is the preferred EBCDIC code page for Cyrillic.	Bulgarian, Byelorussian, Macedonian, Russian, Serbian, and Ukrainian	ExpCore
915	T1000915	ISO/ANSI 8-Bit: Cyrillic	Bulgarian, Byelorussian, Macedonian, Russian, Serbian, and Ukrainian	ExpCore
1025	T1001025	Cyrillic Multilingual This is the preferred EBCDIC code page for Cyrillic.	Bulgarian, Byelorussian, Macedonian, Russian, Serbian, and Ukrainian	ExpCore
1123	T1001123	Cyrillic, Ukraine EBCDIC	Ukrainian	ExpCore
1124	T1001124	Cyrillic, Ukraine ISO-8	Ukrainian	ExpCore

Document Composition Facility and Desktop Publishing Code Pages

<i>Table 23. Document Composition Facility and Desktop Publishing Code Pages</i>				
CPGID	Code Page ID	Description	Additional Information	Supported In
1002	T1001002	DCF	(Subset of T1D0BASE)	ExpCore
1003	T1001003	United States Text Subset	(Same as T1DCDCFS)	ExpCore Comp
1004	T1001004	Personal Computer: Desktop Publishing	N/A	ExpCore
1039	T1001039	GML List Symbols	N/A	ExpCore
1068	T1001068	Text with numeric spacing	(Same as T1D0BASE)	ExpCore Comp

Note: ASCII code pages cannot be used with Document Composition Facility (DCF), program number 5748-XX9.

Format Code Pages

<i>Table 24. Format Code Pages</i>				
CPGID	Code Page ID	Description	Additional Information	Supported In
2094	T1L00FMT	LCS Format Characters (FM10, FM12, FM15)	N/A	Comp

Hebrew Code Pages

Table 25. Hebrew Code Pages

CPGID	Code Page ID	Description	Supported Languages	Supported In
424	T1000424	Hebrew This is the preferred EBCDIC code page for Hebrew.	Hebrew	ExpCore
803	T1000803	Hebrew Character Set A T1000424 is the preferred EBCDIC code page for Hebrew.	Hebrew	ExpCore
856	T1000856	Personal Computer: Hebrew T1000862 is the preferred ASCII code page for Hebrew.	Hebrew	ExpCore
862	T1000862	Personal Computer: Hebrew This is the preferred ASCII code page for Hebrew.	Hebrew	ExpCore
867	T1000867	Israel – Personal Computer	Hebrew	ExpCore
916	T1000916	ISO/ASCII 8-Bit: Hebrew T1000862 is the preferred ASCII code page for Hebrew.	Hebrew	ExpCore
1028	T1001028	Hebrew Publishing T1000424 is the preferred EBCDIC code page for Hebrew.	Hebrew	ExpCore

Katakana Code Pages

Table 26. Katakana Code Pages

CPGID	Code Page ID	Description	Supported Languages	Supported In
290	T1000290	Gothic, Katakana, Katakana 10, Katakana 12	Japanese (Katakana)	ExpCore Comp
897	T1000897	Katakana PC	Japanese (Katakana)	ExpCore
1027	T1001027	Katakana	Japanese (Katakana)	ExpCore
1041	T1001041	Katakana PC	Japanese (Katakana)	ExpCore
1139	T1001139	Japan Alphanumeric Katakana	Japanese (Katakana)	ExpCore Comp
2095	T1L00KN1	LCS Gothic, Katakana (KN1)	Japanese (Katakana)	Comp
2102	T1L02773	LCS Gothic, Katakana (2773)	Japanese (Katakana)	Comp
2103	T1L02774	LCS Gothic, Katakana (2774)	Japanese (Katakana)	Comp
290	T1V10290	Gothic Katakana	Japanese (Katakana)	ExpCore

Latin1 EBCDIC Country Extended and BookMaster Code Pages

The **Code Page ID** in the following table starts with T1xx. Substitute a V1 for the xx for a Country Extended code page or a B0 for a BookMaster code page. All BookMaster code pages in Table 27 have the euro currency symbol assigned to code point X'34'.

CPGID	Code Page ID	Description	Supported Languages	Supported In
37	T1xx0037	United States, Canada	US English, Canadian French, Brazilian Portuguese, Dutch, and Portuguese	ExpCore
273	T1xx0273	Austria, Germany, Switzerland T1V10500 is the preferred CECP code page for Switzerland.	German and Swiss German	ExpCore
274	T1xx0274	Belgium T1V10500 is the preferred CECP code page for Belgium.	Belgian French and Belgian Dutch (Flemish)	ExpCore
275	T1xx0275	Brazil T1V10037 is the preferred CECP code page for Brazil.	Brazilian Portuguese	ExpCore
277	T1xx0277	Denmark, Norway	Danish and Norwegian	ExpCore
278	T1xx0278	Finland, Sweden	Finnish and Swedish	ExpCore
280	T1xx0280	Italy, Switzerland T1V10500 is the preferred CECP code page for Switzerland.	Italian and Swiss Italian	ExpCore
281	T1xx0281	Japan (Latin)	Japanese (Latin)	ExpCore
282	T1xx0282	Portugal T1V10037 is the preferred CECP code page for Portugal.	Portuguese	ExpCore
284	T1xx0284	Spain, Latin America	Spanish (Castillian) and Latin American Spanish	ExpCore
285	T1xx0285	United Kingdom	UK English	ExpCore
297	T1xx0297	France	French and Catalan	ExpCore
500	T1xx0500	International #5 This is the preferred Latin1 CECP code page for general use.	Belgian French, Belgian Dutch (Flemish), Swiss French, Swiss German, and Swiss Italian	ExpCore
871	T1xx0871	Iceland	Icelandic	ExpCore

Latin1 Euro Code Pages

Table 28 (Page 1 of 2). Latin1 Euro Code Pages

CPGID	Code Page ID	Description	Supported Languages	Supported In
858	T1000858	PC – Multilingual with euro	Belgian French, Belgian Dutch (Flemish), Dutch, Spanish, Norwegian, Portuguese, Brazilian Portuguese, Danish, Swiss French, Swiss German, Swiss Italian, Icelandic, and US English	ExpCore
923	T1000923	Latin9	Danish, Dutch, English, Faeroese, Finnish, French, German, Icelandic, Irish, Italian, Norwegian, Portuguese, Spanish, and Swedish	ExpCore
924	T1000924	Latin9 EBCDIC	Danish, Dutch, English, Faeroese, Finnish, French, German, Icelandic, Irish, Italian, Norwegian, Portuguese, Spanish, and Swedish	ExpCore
1140	T1001140	USA, Canada ECECP T1001140 is T1V10037 with the international currency symbol replaced by the euro.	US English, Canadian French, Brazilian Portuguese, Dutch, and Portuguese	ExpCore
1141	T1001141	Austria, Germany ECECP T1001141 is T1V10273 with the international currency symbol replaced by the euro.	German	ExpCore
1142	T1001142	Denmark, Norway ECECP T1001142 is T1V10277 with the international currency symbol replaced by the euro.	Danish and Norwegian	ExpCore
1143	T1001143	Finland, Sweden ECECP T1001143 is T1V10278 with the international currency symbol replaced by the euro.	Finnish and Swedish	ExpCore
1144	T1001144	Italy ECECP T1001144 is T1V10280 with the international currency symbol replaced by the euro.	Italian	ExpCore
1145	T1001145	Spain, Latin America ECECP T1001145 is T1V10284 with the international currency symbol replaced by the euro.	Spanish (Castillian) and Latin American Spanish	ExpCore
1146	T1001146	UK ECECP T1001146 is T1V10285 with the international currency symbol replaced by the euro.	UK English	ExpCore
1147	T1001147	France ECECP T1001147 is T1V10297 with the international currency symbol replaced by the euro.	French and Catalan	ExpCore

<i>Table 28 (Page 2 of 2). Latin1 Euro Code Pages</i>				
CPGID	Code Page ID	Description	Supported Languages	Supported In
1148	T1001148	International ECECP This is the preferred Latin1 ECECP code page for general use. T1001148 is T1V10500 with the international currency symbol replaced by the euro.	Belgian French, Belgian Dutch (Flemish), Swiss French, Swiss German, and Swiss Italian	ExpCore
1149	T1001149	Iceland ECECP T1001149 is T1V10871 with the international currency symbol replaced by the euro.	Icelandic	ExpCore
1252	T1001252	Windows, Latin1	Danish, Dutch, English, Faeroese, Finnish, French, German, Icelandic, Irish, Italian, Norwegian, Portuguese, Spanish, and Swedish	ExpCore
Note: Only the Latin1 fonts provided with AFP Font Collection, Version 2.1.0 can be used with these code pages.				

Latin1 EBCDIC Publishing and BookMaster Code Pages

The **Code Page ID** in the following table starts with T1x. Substitute a 0 for the x for a Publishing code page or a B for a BookMaster code page.

Table 29. Latin1 EBCDIC Publishing and BookMaster Code Pages

CPGID	Code Page ID	Description	Supported Languages	Supported In
361	T1x00361	International #5 This is the preferred Latin1 Publishing Code page for general use.	Belgian French, Belgian Dutch (Flemish), Swiss French, Swiss German, and Swiss Italian	ExpCore
382	T1x00382	Austria, Germany, Switzerland T1000361 is the preferred EBCDIC code page for Switzerland.	German and Swiss German	ExpCore
383	T1x00383	Belgium T1000361 is the preferred EBCDIC code page for Belgium.	Belgian French and Belgian Dutch (Flemish)	ExpCore
384	T1x00384	Brazil	Brazilian Portuguese	ExpCore
385	T1x00385	Canada (French)	Canadian French	ExpCore
386	T1x00386	Denmark, Norway	Danish and Norwegian	ExpCore
387	T1x00387	Finland, Sweden	Finnish and Swedish	ExpCore
388	T1x00388	France, Switzerland T1000361 is the preferred EBCDIC code page for Switzerland.	French, Catalan, and Swiss French	ExpCore
389	T1x00389	Italy, Switzerland T1000361 is the preferred EBCDIC code page for Switzerland.	Italian and Swiss Italian	ExpCore
390	T1x00390	Japan (Latin)	Japanese (Latin)	ExpCore
391	T1x00391	Portugal	Portuguese	ExpCore
392	T1x00392	Spain, Philippines	Spanish (Castillian)	ExpCore
393	T1x00393	Latin America (Spanish speaking)	Spanish	ExpCore
394	T1x00394	United Kingdom, Australia, Hong Kong, Ireland, New Zealand	UK English	ExpCore
395	T1x00395	United States, Canada (English)	US English	ExpCore

Latin1 ASCII Code Pages

<i>Table 30. Latin1 ASCII Code Pages</i>				
CPGID	Code Page ID	Description	Supported Languages	Supported In
437	T1000437	Personal Computer Austria, Finland, Italy, Germany, Sweden, South Africa, United Kingdom, and the United States	US English, UK English, German, Finnish, Italian, Spanish, and Swedish	ExpCore Comp
819	T1000819	ISO/ANSI 8-Bit: Latin 1	Danish, Dutch, English, Faeroese, Finnish, French, German, Icelandic, Irish, Italian, Norwegian, Portuguese, Spanish, and Swedish	ExpCore Comp
850	T1000850	Personal Computer: Multilingual This is the preferred ASCII code page for: Belgium, Brazil, Spain, Canada, Iceland, Latin America (Spanish), the Netherlands, Norway, Denmark, Portugal, and Switzerland.	Belgian French, Belgian Dutch (Flemish), Dutch, Spanish, Norwegian, Portuguese, Brazilian Portuguese, Danish, Swiss French, Swiss German, Swiss Italian, Icelandic, and US English	ExpCore Comp
860	T1000860	Personal Computer: Portugal T1000850 is the preferred ASCII code page for Portugal.	Portuguese	ExpCore Comp
861	T1000861	Personal Computer: Iceland T1000850 is the preferred ASCII code page for Iceland.	Icelandic	ExpCore Comp
863	T1000863	Personal Computer: France, Canada (French) T1000850 is the preferred ASCII code page for Canada.	French and Canadian French	ExpCore Comp
865	T1000865	Personal Computer: Nordic—Denmark, Norway T1000850 is the preferred ASCII code page for Denmark and Norway.	Danish and Norwegian	ExpCore Comp

Latin2345 EBCDIC and ASCII Code Pages

Table 31 (Page 1 of 2). Latin2345 Code Pages

CPGID	Code Page ID	Description	Supported Languages	Supported In
836	T1000836	People's Republic of China (PRC)	PRC (Latin)	For use with Latin Type 1 outlines only
852	T1000852	Personal Computer: Latin2	Croatian, Czech, Polish, German, Hungarian, Slovak, Romanian, and Slovenian	ExpCore
853	T1000853	Personal Computer: Latin3 T1000857 is the preferred ASCII code page for Turkish.	Esperanto, Maltese, and Turkish	ExpCore
857	T1000857	Personal Computer: Latin5 This is the preferred ASCII code page for Turkish.	Turkish	ExpCore
870	T1000870	Latin2 Multilingual (EBCDIC)	Croatian, Czech, Polish, German, Hungarian, Slovak, Romanian, and Slovenian	ExpCore
903	T1000903	People's Republic of China (PC)	PRC (Latin)	For use with Latin Type 1 outlines only
904	T1000904	Republic of China (ROC) (PC)	ROC (Latin)	For use with Latin Type 1 outlines only
905	T1000905	Latin3 Multilingual (EBCDIC) T1001026 is the preferred EBCDIC code page for Turkish.	Esperanto, Maltese, and Turkish	ExpCore
912	T1000912	ISO/ANSI 8-Bit: Latin2	Croatian, Czech, Polish, German, Hungarian, Slovak, Romanian, and Slovenian	ExpCore
913	T1000913	Latin 3, ISO/ASCII	Esperanto, Maltese, and Turkish	ExpCore
914	T1000914	ISO/ANSI: Latin4	Estonian, Greenlandic, Lappish, Latvian, and Lithuanian	ExpCore
920	T1000920	ISO/ANSI 8-Bit: Latin5 T1000857 is the preferred ASCII code page for Turkish.	Turkish	ExpCore
1026	T1001026	Latin5 (EBCDIC) This is the preferred EBCDIC code page for Turkish.	Turkish	ExpCore
1042	T1001042	Simplified Chinese Extended (PC)	Chinese (Latin)	For use with Latin Type 1 outlines only
1043	T1001043	Traditional Chinese Extended (PC)	Chinese (Latin)	For use with Latin Type 1 outlines only
1069	T1001069	Latin4 (EBCDIC)	Estonian, Greenlandic, Lappish, Latvian, and Lithuanian	ExpCore
1110	T1001110	Latin2 Multilingual (EBCDIC)	Croatian, Czech, Polish, German, Hungarian, Slovak, Romanian, and Slovenian	ExpCore

Table 31 (Page 2 of 2). Latin2345 Code Pages

CPGID	Code Page ID	Description	Supported Languages	Supported In
1111	T1001111	Latin3, Multilingual (EBCDIC)	Esperanto, Maltese, and Turkish	ExpCore
1112	T1001112	Baltic – Multilingual, EBCDIC	Baltic Rim Turkish	ExpCore
Note: There are no character sets or coded fonts provided that support the Baltic code page. To use T1001112, you must create character sets and coded fonts with Type Transformer using the Latin Type 1 outlines and filtering with the Baltic character list.				
1122	T1001122	Estonia EBCDIC	Estonia	ExpCore

Lao Code Pages

Table 32. Lao Code Pages

CPGID	Code Page ID	Description	Supported Languages	Supported In
1132	T1001132	Lao, EBCDIC	Lao	ExpCore
1133	T1001133	Lao ISO–8	Lao	ExpCore

Compatibility Font NLS Code Pages

Table 33. Compatibility Font NLS Code Pages

CPGID	Code Page ID	Description	Supported Languages	Supported In
2055	T1DABASE	Austria, Germany	German	Comp
2056	T1DBBASE	Belgium, Switzerland, Luxemburg	Belgian Dutch (Flemish), Swiss French, Swiss Italian, and Swiss German	Comp
2057	T1DDBASE	Denmark, Norway, Iceland	Danish, Norwegian, and Icelandic	Comp
2058	T1DEBASE	Finland, Sweden	Finnish and Swedish	Comp
2059	T1DFBASE	France	French	Comp
2060	T1DIBASE	Italy	Italian	Comp
2061	T1DNBASE	Netherlands, Portugal	UK English and Portuguese	Comp
2062	T1DSBASE	Spain, Latin America	Spanish (Castilian) and Latin American Spanish	Comp
2116	T1DUBASE	United Kingdom	UK English	Comp
2063	T1D0BASE	DCF	DCF Base Code Page	Comp

Symbols Code Pages

OCR Code Pages

Table 34. OCR Code Pages

CPGID	Code Page ID	Description	Additional Information	Supported In
876	T1000876	OCR-A ASCII	OCR	ExpCore
877	T1000877	OCR-B ASCII	OCR	ExpCore
892	T1000892	OCR-A	OCR	ExpCore
893	T1000893	OCR-B	OCR	ExpCore
2087	T1L0OCR1	LCS OCR A (AOA, OAA)	Gothic and OCR	ExpCore Comp
2088	T1L0OCR2	LCS Gothic and OCR A (AON, ONA)	Gothic and OCR	Comp
2089	T1L0OCR3	LCS Gothic and OCR A (ODA)	Gothic and OCR	ExpCore Comp
2086	T1L0OCRB	LCS Gothic and OCR B (BOA, BON, ONB, OAB)	Gothic and OCR	ExpCore Comp

Symbols Code Pages

Table 35. Symbols Code Pages

CPGID	Code Page ID	Description	Supported Languages	Supported In
259	T1000259	Symbols, Set 7	Symbols	ExpCore Comp
363	T1000363	Symbols, Set 8	Symbols	ExpCore
829	T1000829	Math Symbols	Symbols	ExpCore
899	T1000899	ASCII: Symbols, Set 7	Symbols	ExpCore
1038	T1001038	ASCII: Symbols, Adobe	Symbols	ExpCore
1087	T1001087	Symbols, Adobe	Symbols	ExpCore
1091	T1001091	Symbols, Set 7 Modified	Symbols	ExpCore
1092	T1001092	ASCII: Symbols, Set 7 Modified	Symbols	ExpCore
1093	T1001093	IBM Logo	Special Use	ExpCore
396	T1B00BGS	BookMaster Specials	Symbols	ExpCore
2091	T1S0S192	6670 Symbol Set (S192)	Symbols	ExpCore Comp
2092	T1S0S193	6670 Symbol Set (S193)	Symbols	ExpCore Comp
2093	T1S0S198	6670 Symbol Set (S198)	Symbols	ExpCore Comp

Text Code Pages

CPGID	Code Page ID	Description	Additional Information	Supported In
2085	T1D0GP12	DCF Gothic Tri-Pitch (GP12)	Special Use	Comp
2097	T1L000GN	LCS Gothic (GN, G11)	1403 Print Train	ExpCore Comp
2098	T1L000RN	LCS Gothic (RN)	1403 Print Train	ExpCore Comp
2099	T1L000SN	LCS Text-1 and Text-2 (SN)	1403 Print Train	ExpCore Comp
2100	T1L000XN	LCS Gothic (XN)	1403 Print Train	ExpCore Comp
2101	T1L000YN	LCS Gothic (YN)	1403 Print Train	ExpCore Comp
2087	T1L00A11	LCS Gothic (A11)	1403 Print Train	ExpCore Comp
2096	T1L00QNC	LCS Gothic (QNC, QN, PN, P11)	1403 Print Train	ExpCore Comp
2104	T1L038BA	LCS Gothic (GS10, GS12, GS15, GSC, GU10, GU12, GU15, GUC)	Special Use	ExpCore Comp
2105	T1L038TE	LCS Text-1 and Text-2 (T11, TN, TU10)	Special Use	ExpCore Comp
2083	T1L0DUMP	LCS Dump Character Set (DUMP)	Special Use	Comp
2084	T1L0FOLD	LCS Gothic Folded (GF10, GF12, GF15, GFC)	Special Use	ExpCore Comp
2089	T1L0PCAN	LCS Gothic (PCAN, AN)	1403 Print Train	ExpCore Comp
2090	T1L0PCHN	LCS Gothic (PCHN, HN, H11)	1403 Print Train	ExpCore Comp

Thai Code Pages

CPGID	Code Page ID	Description	Supported Languages	Supported In
838	T1000838	Thailand	Thai	ExpCore
874	T1000874	Personal Computer: Thailand	Thai	ExpCore
889	T1000889	Thailand	Thai	ExpCore

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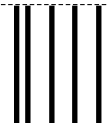


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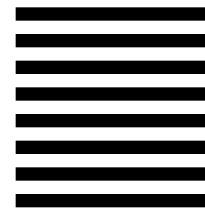
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