

IPDS can print barcodes and, in most cases, the host application selects the barcode to print. That is, you have to have an application that can generate barcodes. (Very few customers "write their jobs" using IPDS commands.)

The following bar codes generated using IPDS can be automatically scaled and printed:

- 3 of 9 code
- MSI
- UPC/CGPC Version A
- UPC/CGPC Version E
- UPC Two-character Supplemental
- UPC Five-character Supplemental
- EAN-8
- EAN-13
- 2 of 5 Industrial
- 2 of 5 Matrix
- 2 of 5 Interleaved
- 2 of 7 Codabar
- Code 128
- EAN Two-Digit
- EAN Five-Digit
- POSTNET - US Postal bar code (use bitmap font with FGID 4094)

IPDS needs three IPDS commands to print one barcode. It is more involved than just selecting a font ID and sending the characters to print. (POSTNET is the exception.) See *pages two and three for examples*.

Here is an example of the three IPDS commands that are necessary to print a "UPC/CGPC-Version A" barcode with data "79626010120":

first command (this command has three sub parts):

003D D6 80 40 00 0E

'003D' Command Length = 61 bytes (in decimal)
 'D680' IPDS command = Write Bar Code Control (WBCC)
 '40' Flag byte
 '000E' Command Sequence ID (CID) = 000E

first command, sub part one:

00 0B AC 6B 00 00 00 00 00 00

'000B' Length of BCAP = 11 bytes (in decimal)
 'AC6B' Barcode Area Position (BCAP) self-defining field
 '0000' X Offset = 0 Inches
 '0000' Y Offset = 0 Inches
 '0000' Barcode block orientation: 0 degrees rotation
 '00' Absolute I, Absolute B

first command, sub part two:

00 10 A6 6B 00 38 40 4A 40 3D E0 30 00 00 00

'0010' Length of BCOC = 16 bytes (in decimal)
 'A66B' Barcode Output Control (BCOC) self-defining field
 '00' 10 Inches
 '3840' X and Y Units per Unit Base = 14400 ths
 '4A40' 13.2 inches = X extent of block in L-Units
 '3DE0' 11.0 inches = Y extent of block in L-Units
 '30' Mapping Option (position)
 '0000' X Offset = 0 Inches
 '0000' Y Offset = 0 Inches

first command, sub part three:

00 1B A6 EB 00 00 38 40 38 40 4A 40 3D E0 00 00
 03 00 FF 00 00 FF 02 D0 01 FF FF

'001B' Length of BCDD = 27 bytes (in decimal)
 'A6EB' Barcode Data Descriptor (BCDD) self-defining field

'00'	10 Inches
'00'	Reserved
'3840'	X Units per Unit Base = 14400 ths
'3840'	Y Units per Unit Base = 14400 ths
'4A40'	13.2 inches = X extent of presentation space
'3DE0'	11.0 inches = Y extent of presentation space
'0000'	Reserved
'03'	Bar Code Type: 03 = UPC/CGPC-Version A
'FF'	Printer Default
'0000'	Color
'FF'	Printer Default
'02D0'	0.5 inches = Element height in L-Units
'01'	Height Multiplier
'FFFF'	Printer Default

second command:

0017 D6 81 40 00 0F 00 2C 70 08 2E F7 F9 F6 F2
F6 F0 F1 F0 F1 F2 F0

'0017'	Command Length = 23 bytes (in decimal)
'D681'	IPDS command = Write Bar Code (WBC)
'40'	Flag byte
'000F'	Command Sequence ID (CID) = 000F
'00'	Flag byte
'2C70'	7.9 inches = X origin coordinate in the presentation space
'082E'	1.5 inches = Y origin coordinate in the presentation space
'F7'...'F0'	79626010120 = Barcode data (in EBCDIC character codes)

third command:

0007 D6 5D 40 00 10

'0007'	Command Length = 7 bytes (in decimal)
'D65D'	IPDS command = End
'40'	Flag byte
'0010'	Command Sequence ID (CID) = 0010