## Programming Reference

Symbol Code Identifiers

## Symbol Code Identifiers

Table B-1. Symbol Code Characters

| Code Character | Code Type |
| :---: | :--- |
| A | UPC/EAN |
| B | Code 39, Code 39 Full ASCII, Code 32 |
| C | Codabar 128, ISBT 128 |
| D | Code 93 |
| E | Interleaved 2 of 5 |
| F | Discrete 2 of 5, or Discrete 2 of 5 IATA |
| G | Code 11 |
| H | MSI |
| J | UCC/EAN-128 |
| K | Coupon Code |
| L | GS1 DataBar Family EAN |
| N | Chinese 2 of 5 |
| R |  |
| U |  |

## AIM Code Identifiers

Each AIM Code Identifier contains the three-character string ]cm where:
] = Flag Character (ASCII 93)
c = Code Character (see Table B-2)
$\mathrm{m}=$ Modifier Character (see Table B-3)

Table B-2. Aim Code Characters

| Code Character | Code Type |
| :---: | :--- |
| A | Code 39, Code 39 Full ASCII, Code 32 |
| C | Code 128 (all variants), Coupon (Code 128 portion) |
| E | UPC/EAN, Coupon (UPC portion) |
| e | GS1 DataBar Family |
| F | Codabar |
| G | Code 11 |
| H | Interleaved 2 of 5 |
| I | MSI |
| M | D2 of 5, IATA 2 of 5 |
| S | Bookland EAN, Code 39 Trioptic, Chinese 2 of 5 |
| X |  |

The modifier character is the sum of the applicable option values based on Table B-3.
Table B-3. Modifier Characters

| Code Type | Option Value | Option |
| :---: | :---: | :---: |
| Code 39 | 0 | No check character or Full ASCII processing. |
|  | 1 | Reader has checked one check character. |
|  | 3 | Reader has checked and stripped check character. |
|  | 4 | Reader has performed Full ASClI character conversion. |
|  | 5 | Reader has performed Full ASCII character conversion and checked one check character. |
|  | 7 | Reader has performed Full ASCII character conversion and checked and stripped check character. |
|  | Example: A Full ASCII bar code with check character W, A+I+MI+DW, is transmitted as JA7Aimld where 7 = $(3+4)$. |  |
| Trioptic Code 39 | 0 | No option specified at this time. Always transmit 0 . |
|  | Example: A Trioptic bar code 412356 is transmitted as ]X0356412 |  |

Table B-3. Modifier Characters (Continued)

| Code Type | Option Value | Option |
| :---: | :---: | :---: |
| Chinese 2 of 5 | 0 | No option specified at this time. Always transmit 0. |
|  | Example: A Chinese 2 of 5 bar code 01234567890 is transmitted as ]X0001234567890 |  |
| Code 128 | 0 | Standard data packet, no Function code 1 in first symbol position. |
|  | 1 | Function code 1 in first symbol character position. |
|  | 2 | Function code 1 in second symbol character position. |
|  | Example: A Code (EAN) 128 bar code with Function 1 character $\mathbf{F N C 1}_{\text {in the first position, AIMID is transmitted as }}$ ]C1AIMID |  |
| 12 of 5 | 0 | No check digit processing. |
|  | 1 | Reader has validated check digit. |
|  | 3 | Reader has validated and stripped check digit. |
|  | Example: An I 2 of 5 bar code without check digit, 4123, is transmitted as $] 104123$ |  |
| Codabar | 0 | No check digit processing. |
|  | 1 | Reader has checked check digit. |
|  | 3 | Reader has stripped check digit before transmission. |
|  | Example: A Codabar bar code without check digit, 4123, is transmitted as ]F04123 |  |
| Code 93 | 0 | No options specified at this time. Always transmit 0. |
|  | Example: A Code 93 bar code 012345678905 is transmitted as JG0012345678905 |  |
| MSI | 0 | Check digits are sent. |
|  | 1 | No check digit is sent. |
|  | Example: An MSI bar code 4123, with a single check digit checked, is transmitted as ]M14123 |  |
| D 2 of 5 | 0 | No options specified at this time. Always transmit 0. |
|  | Example: A D 2 of 5 bar code 4123, is transmitted as ]S04123 |  |
| UPC/EAN | 0 | Standard packet in full EAN country code format, which is 13 digits for UPCA, UPC-E, and EAN-13 (not including supplemental data). |
|  | 1 | Two-digit supplement data only. |
|  | 2 | Five-digit supplement data only. |
|  | 3 | Combined data packet comprising 13 digits from a UPC-A, UPC-E, or EAN-13 symbol and 2 or 5 digits from a supplemental symbol. |
|  | 4 | EAN-8 data packet. |
|  | Example: A UPC-A bar code 012345678905 is transmitted as JEO0012345678905 |  |
| Bookland EAN | 0 | No options specified at this time. Always transmit 0 . |
|  | Example: A Bookland EAN bar code 123456789X is transmitted as ]X0123456789X |  |
| Code 11 | 0 | Single check digit |
|  | 1 | Two check digits |
|  | 3 | Check characters validated but not transmitted. |

Table B-3. Modifier Characters (Continued)

| Code Type | Option Value | Option |  |  |
| :---: | :--- | :--- | :---: | :---: |
| GS1 DataBar Family | No option specified at this time. Always transmit 0. DataBar-14 and DataBar <br> Limited transmit with an Application Identifier "01".Note: In UCC/EAN-128 <br> emulation mode, GS1 DataBar is transmitted using Code 128 rules (i.e., JC1). |  |  |  |
|  |  | Example: A DataBar-14 bar code 100123456788902 is transmitted as Je001100123456788902. |  |  |
|  |  |  |  |  |

