

# Interchangeability Guide

## TTL INTERCHANGEABILITY GUIDE

**Direct Replacements** were selected as pin-for-pin equivalent circuits based on similarity of electrical and mechanical characteristics as shown in currently published data. Interchangeability in any particular application is not necessarily guaranteed. Before using a substitute, the user should compare the specifications of the substitute device with the detailed specifications of the original device.

TI makes no warranty as to the information furnished and buyer assumes all risk in the use thereof. No liability is assumed for damages resulting from the use of the information contained in this list.

**Recommendation for New Designs** lists devices performing a similar (sometimes identical) function. Most are pin-for-pin equivalents for the competitor's part. However, the recommended part may have different pin-outs or organizations, as later technologies are listed in some cases to ensure that current high-performance components are recommended.

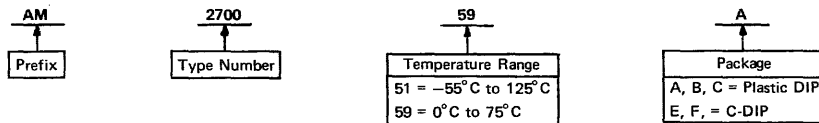
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Only the basic circuit numbers are cross referenced. As the pin-out sometimes varies between a flat-package part and the equivalent DIP part, it is recommended that the manufacturer's specifications be consulted prior to specifying a direct replacement. Other than parts offered only in a flat package, the dual-in-line pin-outs were used as a guide in preparing the following cross references.

This list is intended to give TI replacements for competitors' parts not using the 54/74 numbering system. For a complete listing of parts in the 54 and 74 families, see the functional index, pages 1-9 through 1-28.

### ADVANCED MICRO DEVICES

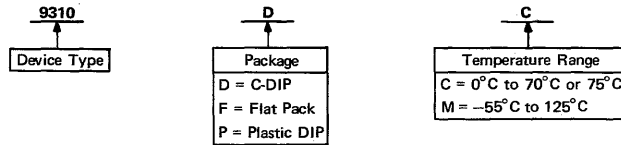
Example of AMD ordering code:



| AMD TYPE | TI DIRECT REPLACEMENT | RECOMMENDED FOR NEW DESIGN | AMD TYPE | TI DIRECT REPLACEMENT | RECOMMENDED FOR NEW DESIGN |
|----------|-----------------------|----------------------------|----------|-----------------------|----------------------------|
| 2501     |                       | SN54192/SN74191            | 27S09    | SN54S288/SN74S288     | SN54S288/SN74S288          |
| 2505     |                       | SN54284/SN74284            | 27S10    | SN54S387/SN74S387     | SN54S387/SN74S387          |
| 2506     |                       | SN54285/SN74285            | 27S11    | SN54S287/SN74S287     | SN54S287/SN74S287          |
| 25LS07   | SN54LS378/SN74LS378   | SN54S181/SN74S181          | 3101     | SN7489                | SN7489                     |
| 25LS08   | SN54LS379/SN74LS379   | SN54LS378/SN74LS378        | 3101A    | SN54S289/SN74S289     | SN54S289/SN74S289          |
| 25LS09   | SN54LS399/SN74LS399   | SN54LS379/SN74LS379        | 9300     | SN54195/SN74195       | SN54195/SN74195            |
| 25LS22   | SN54LS322/SN74LS322   | SN54LS399/SN74LS399        | 9301     | SN29301/SN39301       | SN5442A/SN7442A            |
| 25LS23   | SN54LS323/SN74LS323   | SN54LS322/SN74LS322        | 9308     | SN29308/SN39308       | SN54116/SN74116            |
| 2600     |                       | SN54LS323/SN74LS323        | 9309     | SN29309/SN39309       | SN54153/SN74153            |
| 2602     |                       | SN54121/SN74121            | 9310     | SN54160/SN74160       | SN54160/SN74160            |
| 26123    | SN54123/SN74123       | SN54123/SN74123            | 9311     | SN54154/SN74154       | SN54154/SN74154            |
| 2700     | SN54S200A/SN74S200A   | SN54123/SN74123            | 9312     | SN29312/SN39312       | SN54151A/SN74151A          |
| 27LS00   | SN54LS200A/SN74LS200A | SN54S201/SN74S201          | 9316     | SN54161/SN74161       | SN54161/SN74161            |
| 2701     | SN54S300A/SN74S300A   | SN54S201/SN74S201          | 9318     | SN54148/SN74148       | SN54148/SN74148            |
| 27S02    | SN54S289/SN74S289     | SN54LS200A/SN74LS200A      | 9322     | SN54157/SN74157       | SN54157/SN74157            |
| 27S03    | SN54S189/SN74S189     | SN54S300A/SN74S300A        | 9334     | SN54259/SN74259       | SN54259/SN74259            |
| 27S08    | SN54S188/SN74S188     | SN54S301/SN74S301          | 9341     | SN54181/SN74181       | SN54181/SN74181            |
|          |                       | SN54S289/SN74S289          | 9342     | SN54182/SN74182       | SN54182/SN74182            |
|          |                       | SN54S189/SN74S189          | 9601     | SN29601               |                            |
|          |                       | SN54S188/SN74S188          | 93415    | SN54S314/SN74S314     | SN54S314/SN74S314          |

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Example of order code:



| FSC TYPE | TI DIRECT REPLACEMENT  | RECOMMENDED FOR NEW DESIGN | FSC TYPE | TI DIRECT REPLACEMENT    | RECOMMENDED FOR NEW DESIGN |
|----------|------------------------|----------------------------|----------|--------------------------|----------------------------|
| 9000     | SN29000                | SN54276/SN74276            | 9014     |                          | SN54S135/SN74S135          |
| 9H00     | SN54H00/SN74H00        | SN54S00/SN74S00            | 9N14     | SN5414/SN7414            | SN5414/SN7414              |
| 9L00     | SN54LS00/SN74LS00      | SN54LS00/SN74LS00          | 9015     |                          | SN5402/SN7402              |
| 9N00     | SN5400/SN7400          | SN5400/SN7400              | 9S15     | SN54S15/SN74S15          | SN54S15/SN74S15            |
| 9S00     | SN54S00/SN74S00        | SN54S00/SN74S00            | 9016     | SN29016/SN7404, SN5404   | SN54S240/SN74S240          |
| 9001     | SN29001                | SN54276/SN74276            | 9N16     | SN5416/SN7416            | SN5416/SN7416              |
| 9H01     | SN54H01/SN74H01        | SN54376/SN74376            | 9017     | SN5405/SN7405            | SN54S241/SN74S241          |
| 9N01     | SN5401/SN7401          | SN54S03/SN74S03            | 9N17     | SN5417/SN7417            | SN5417/SN7417              |
| 9002     | SN29002/SN7400, SN5400 | SN5403/SN7403              | 9020     |                          | SN74276                    |
| 9N02     | SN5402/SN7402          | SN5400/SN7400              | 9H20     | SN54H20/SN74H20          | SN54S20/SN74S20            |
| 9S02     | SN54S02/SN74S02        | SN5402/SN7402              | 9N20     | SN5420/SN7420            | SN5420/SN7420              |
| 9003     | SN29003/SN7410, SN5410 | SN5402/SN7402              | 9S20     | SN54S20/SN74S20          | SN54S20/SN74S20            |
| 9N03     | SN5403/SN7403          | SN5410/SN7410              | 9H21     | SN54H21/SN74H21          | SN54S15/SN74S15            |
| 9S03     | SN54S03/SN74S03        | SN5403/SN7403              | 9022     |                          | SN74376                    |
| 9004     | SN29004/SN7420, SN5420 | SN54S03/SN74S03            | 9H22     | SN54H22/SN74H22          | SN54S22/SN74S22            |
| 9H04     | SN54H04/SN74H04        | SN5420/SN7420              | 9S22     | SN54S22/SN74S22          | SN54S22/SN74S22            |
| 9L04     | SN54LS04/SN74LS04      | SN54S04/SN74S04            | 9N23     | SN5423/SN7423            | SN5423/SN7423              |
| 9N04     | SN5404/SN7404          | SN54LS04/SN74LS04          | 9024     | SN29024/SN74109, SN54109 | SN54276/SN74276            |
| 9S04     | SN54S04/SN74S04        | SN5404/SN7404              | 9L24     | SN54LS109/SN74LS109      | SN54376/SN74376            |
| 9005     | SN29005/SN7450, SN5450 | SN54S04/SN74S04            | 9N25     | SN5425/SN7425            | SN54LS109/SN74LS109        |
| 9H05     | SN54S05/SN74S05        | SN5450/SN7450              | 9N26     | SN5426/SN7426            | SN5425/SN7425              |
| 9S05     | SN54S05/SN74S05        | SN54S05/SN74S05            | 9N27     | SN5427/SN7427            | SN5426/SN7426              |
| 9006     | SN5460/SN7460          | SN54S05/SN74S05            | 9H30     | SN54H30/SN74H30          | SN5427/SN7427              |
| 9N06     | SN5406/SN7406          | SN5460/SN7460              | 9N30     | SN5430/SN7430            | SN54S30/SN74S30            |
| 9007     | SN29007                | SN5406/SN7406              | 9S30     | SN54S30/SN74S30          | SN5430/SN7430              |
| 9N07     | SN5407/SN7407          | SN54S133/SN74S133          | 9N32     | SN5432/SN7432            | SN54S30/SN74S30            |
| 9008     | SN29008                | SN5407/SN7407              | 9S32     | SN54S32/SN74S32          | SN5432/SN7432              |
| 9N08     | SN5408/SN7408          | SN54S65/SN74S65            | 9033     | SN83433, SN93433         | SN54S32/SN74S32            |
| 9S08     | SN54S08/SN74S08        | SN5408/SN7408              | 9034     | SN5488A/SN7488A          | SN54S189/SN74S189          |
| 9009     | SN29009/SN7440, SN5440 | SN54S08/SN74S08            | 9N37     | SN5437/SN7437            | SN54S371/SN74S371          |
| 9N09     | SN5409/SN7409          | SN54S140/SN74S140          | 9N38     | SN5438/SN7438            | SN5437/SN7437              |
| 9S09     | SN54S09/SN74S09        | SN5409/SN7409              | 9H40     | SN54H40/SN74H40          | SN5438/SN7438              |
| 9H10     | SN54H10/SN74H10        | SN54S09/SN74S09            | 9N40     | SN5440/SN7440            | SN54S40/SN74S40            |
| 9N10     | SN5410/SN7410          | SN54S10/SN74S10            | 9S40     | SN54S40/SN74S40          | SN5440/SN7440              |
| 9S10     | SN54S10/SN74S10        | SN54S10/SN74S10            | 9H50     | SN54H50/SN74H50          | SN54S40/SN74S40            |
| 9H11     | SN54H11/SN74H11        | SN54S10/SN74S10            | 9N50     | SN5450/SN7450            | SN54S51/SN74S51            |
| 9S11     | SN54S11/SN74S11        | SN54S11/SN74S11            | 9H51     | SN54H51/SN74H51          | SN5450/SN7450              |
| 9012     | SN2901/SN7403, SN5403  | SN54S11/SN74S11            | 9N51     | SN5451/SN7451            | SN54S51/SN74S51            |
| 9N12     | SN5412/SN7412          | SN5403/SN7403              | 9S51     | SN54S51/SN74S51          | SN54S51/SN74S51            |
| 9S13     | SN5413/SN7413          | SN5412/SN7412              | 9H52     | SN54H52/SN74H52          | SN54S51/SN74S51            |
|          |                        | SN5413/SN7413              |          |                          |                            |

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| FSC<br>TYPE | TI DIRECT<br>REPLACEMENT | RECOMMENDED<br>FOR NEW DESIGN | FSC<br>TYPE | TI DIRECT<br>REPLACEMENT | RECOMMENDED<br>FOR NEW DESIGN |
|-------------|--------------------------|-------------------------------|-------------|--------------------------|-------------------------------|
| 9H53        | SN54H53/SN74H53          | SN54H53/SN74H53               | 93L00       | SN54LS195/SN74LS195      | SN54LS195/SN74LS195           |
| 9N53        | SN54S53/SN74S53          | SN54S53/SN74S53               | 93S00       | SN54S195/SN74S195        | SN54S195/SN74S195             |
| 9H54        | SN54H54/SN74H54          | SN54H54/SN74H54               | 9301        | SN39301/SN29301          | SN5442A/SN7442A               |
| 9L54        | SN54L54/SN74L54          | SN54LS54/SN74LS54             | 93L01       |                          | SN54L42/SN74L42               |
| 9N54        | SN54S54/SN74S54          | SN54S54/SN74S54               | 9302        |                          | SN5442A/SN7442A               |
| 9H55        | SN54H55/SN74H55          | SN54S65/SN74S65               | 9304        |                          | SN54H183/SN74H183             |
| 9H60        | SN54H60/SN74H60          | SN54S11/SN74S11               | 9305        |                          | SN54S169/SN74S169             |
| 9N60        | SN5460/SN7460            | SN5460/SN7460                 | 93S05       |                          | SN54S169/SN74S169             |
| 9H61        | SN54H61/SN74H61          | SN54S11/SN74S11               | 9307        | SN5448A/SN7448A          | SN5448A/SN7448A               |
| 9H62        | SN54H62/SN74H62          | SN54H62/SN74H62               |             | SN39308/SN54116          |                               |
| 9S64        | SN54S64/SN74S64          | SN54S64/SN74S64               | 9308        | SN29308/SN74116          | SN54116/SN74116               |
| 9S65        | SN54S65/SN74S65          | SN54S65/SN74S65               | 9309        | SN39309/SN29309          | SN54153/SN74153               |
| 9N70        | SN5470/SN7470            | SN5470/SN7470                 | 93L09       |                          | SN54L153/SN74L153             |
| 9H71        | SN54H71/SN74H71          | SN54S112/SN74S112             |             | SN39310/SN54160          |                               |
| 9H72        | SN54H72/SN74H72          | SN54S112/SN74S112             | 9310        | SN29310/SN74160          | SN54S162/SN74S162             |
| 9N72        | SN5472/SN7472            | SN5472/SN7472                 | 93S10       |                          | SN54S162/SN74S162             |
| 9H73        | SN54H73/SN74H73          | SN54S113/SN74S113             |             | SN39311/SN54154          |                               |
| 9N73        | SN5473/SN7473            | SN5473/SN7473                 | 9311        | SN29311/SN74154          | SN54154/SN74154               |
| 9H74        | SN54H74/SN74H74          | SN54S74/SN74S74               | 93L11       | SN54L154/SN74L154        | SN54L154/SN74L154             |
| 9N74        | SN5474/SN7474            | SN5474/SN7474                 | 9312        | SN39312/SN29312          | SN54151A/SN74151A             |
| 9S74        | SN54S74/SN74S74          | SN54S74/SN74S74               | 93S12       |                          | SN54S151/SN74S151             |
| 9N75        | SN5475/SN7475            | SN5475/SN7475                 | 9313        |                          | SN54251/SN74251               |
| 9H76        | SN54H76/SN74H76          | SN54S112/SN74S112             | 9314        |                          | SN54273/SN74273               |
| 9N76        | SN5476/SN7476            | SN5476/SN7476                 | 93L14       |                          | SN54L75/SN74L75               |
| 9H78        | SN54H78/SN74H78          | SN54S114/SN74S114             | 9315        | SN54141                  | SN74141                       |
| 9L86        | SN54L86/SN74L86          | SN54LS86/SN74LS86             | 9316        | SN39316/SN54161          | SN54S163/SN74S163             |
| 9N86        | SN5486/SN7486            | SN5486/SN7486                 |             | SN29316/SN74161          |                               |
| 9S86        | SN54S86/SN74S86          | SN54S86/SN74S86               | 93S16       |                          | SN54S163/SN74S163             |
| 9H101       | SN54H101/SN74H101        | SN54S112/SN74S112             | 9317B       | SN5446A/SN7446A          | SN5446A/SN7446A               |
| 9H102       | SN54H102/SN74H102        | SN54S112/SN74S112             | 9317C       | SN5446A/SN7446A          | SN5446A/SN7446A               |
| 9H103       | SN54H103/SN74H103        | SN54S113/SN74S113             |             | SN39318/SN54148          |                               |
| 9H106       | SN54H106/SN74H106        | SN54S112/SN74S112             | 9318        | SN29318/SN74148          | SN54148/SN74148               |
| 9H107       | SN54107/SN74107          | SN54107/SN74107               | 93L21       | SN54LS139/SN74LS139      | SN54LS139/SN74LS139           |
| 9N107       | SN54107/SN74107          | SN54107/SN74107               | 9321        | SN54S139/SN74S139        | SN54S139/SN74S139             |
| 9H108       | SN54H108/SN74H108        | SN54S114/SN74S114             |             | SN39322/SN54157          |                               |
| 9S112       | SN54S112/SN74S112        | SN54S112/SN74S112             | 9322        | SN29322/SN74157          | SN54157/SN74157               |
| 9S113       | SN54S113/SN74S113        | SN54S113/SN74S113             | 93L22       | SN54L157/SN74L157        | SN54L157/SN74L157             |
| 9S114       | SN54S114/SN74S114        | SN54S114/SN74S114             | 93S22       | SN54S157/SN74S157        | SN54S157/SN74S157             |
| 9N122       | SN54122/SN74122          | SN54122/SN74122               | 9324        |                          | SN54S85/SN74S85               |
| 9N123       | SN54123/SN74123          | SN54123/SN74123               | 93L24       |                          | SN54L85/SN74L85               |
| 9N132       | SN54132/SN74132          | SN54132/SN74132               | 9325        | SN74141                  | SN74141                       |
| 9S132       | SN54S132/SN74S132        | SN54S132/SN74S132             | 9328        |                          | SN5491A/SN7491A               |
| 9S133       | SN54S133/SN74S133        | SN94S133/SN74S133             | 93L28       |                          | SN54L91/SN74L91               |
| 9S134       | SN54S134/SN74S134        | SN54S134/SN74S134             | 9334        | SN54259/SN74259          | SN54259/SN74259               |
| 9S135       | SN54S135/SN74S135        | SN54S135/SN74S135             | 9338        |                          | SN74172                       |
| 9S140       | SN54S140/SN74S140        | SN54S140/SN74S140             | 9340        |                          | SN54S281/SN74S281             |
| 9N279       | SN54279/SN74279          | SN54279/SN74279               | 93L40       |                          | SN54LS181/SN74LS181           |
| 9300        | SN39300/SN54195          | SN54S299/SN74S299             | 9341        | SN54181/SN74181          | SN54S181/SN74S181             |
| 93H00       | SN29300/SN74195          | SN54S195/SN74S195             | 93S41       | SN54S181/SN74S181        | SN54S181/SN74S181             |
|             | SN54S195/SN74S195        |                               | 9342        | SN54182/SN74182          | SN54S182/SN74S182             |

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| <u>FSC</u><br><u>TYPE</u> | <u>TI DIRECT</u><br><u>REPLACEMENT</u> | <u>RECOMMENDED</u><br><u>FOR NEW DESIGN</u> | <u>FSC</u><br><u>TYPE</u> | <u>TI DIRECT</u><br><u>REPLACEMENT</u> | <u>RECOMMENDED</u><br><u>FOR NEW DESIGN</u> |
|---------------------------|----------------------------------------|---------------------------------------------|---------------------------|----------------------------------------|---------------------------------------------|
| 93S42                     | SN54S182/SN74S182                      | SN54S182/SN74S182                           | 93155                     | SN54155/SN74155                        | SN54155/SN74155                             |
| 93S43                     |                                        | SN74S274                                    | 93156                     | SN54156/SN74156                        | SN54156/SN74156                             |
| 9344                      |                                        | SN74S274                                    | 93157                     | SN54157/SN74157                        | SN54157/SN74157                             |
| 9345                      | SN5445/SN7445                          | SN5445/SN7445                               | 93S157                    | SN54S157/SN74S157                      | SN54S157/SN74S157                           |
| 93S46                     |                                        | SN54S85/SN74S85                             | 93S158                    | SN54S158/SN74S158                      | SN54S158/SN74S158                           |
| 93S47                     |                                        | SN54S85/SN74S85                             | 93160                     | SN54160/SN74160                        | SN54160/SN74160                             |
| 9348                      |                                        | SN54S280/SN74S280                           | 93161                     | SN54161/SN74161                        | SN54161/SN74161                             |
| 9349                      | SN54180/SN74180                        | SN54180/SN74180                             | 93162                     | SN54162/SN74162                        | SN54162/SN74162                             |
| 9350                      | SN54290/SN74290                        | SN54290/SN74290                             | 93163                     | SN54163/SN74163                        | SN54163/SN74163                             |
| 9352                      | SN5442A/SN7442A                        | SN5442A/SN7442A                             | 93164                     | SN54164/SN74164                        | SN54164/SN74164                             |
| 9353                      | SN5443A/SN7443A                        | SN5443A/SN7443A                             | 93165                     | SN54165/SN74165                        | SN54165/SN74165                             |
| 9354                      | SN5444A/SN7444A                        | SN5444A/SN7444A                             | 93166                     | SN54166/SN74166                        | SN54166/SN74166                             |
| 9356                      | SN54293/SN74293                        | SN54293/SN74293                             | 93170                     | SN54170/SN74170                        | SN54170/SN74170                             |
| 9357A                     | SN5446A/SN7446A                        | SN5446A/SN7446A                             | 93174                     | SN54174/SN74174                        | SN54174/SN74174                             |
| 9357B                     | SN5447A/SN7447A                        | SN5447A/SN7447A                             | 93175                     | SN54175/SN74175                        | SN54175/SN74175                             |
| 9358                      | SN5448/SN7448                          | SN5448/SN7448                               | 93S175                    | SN54S175/SN74S175                      | SN54S175/SN74S175                           |
| 9359                      | SN5449/SN7449                          | SN5449/SN7449                               | 93176                     | SN54176/SN74176                        | SN54176/SN74176                             |
| 9360                      | SN54192/SN74192                        | SN54192/SN74192                             | 93177                     | SN54177/SN74177                        | SN54177/SN74177                             |
| 93S62                     |                                        | SN54S280/SN74S280                           | 93178                     | SN54178/SN74178                        | SN54178/SN74178                             |
| 9366                      | SN54193/SN74193                        | SN54193/SN74193                             | 93179                     | SN54179/SN74179                        | SN54179/SN74179                             |
| 9368C                     |                                        | SN54143/SN74143                             | 93180                     | SN54180/SN74180                        | SN54180/SN74180                             |
| 9370C                     |                                        | SN54144/SN74144                             | 93H183                    | SN54H183/SN74H183                      | SN54H183/SN74H183                           |
| 93H72                     |                                        | SN54S194/SN74S194                           | 93190                     | SN54190/SN74190                        | SN54190/SN74190                             |
| 9374C                     |                                        | SN54143/SN74143                             | 93191                     | SN54191/SN74191                        | SN54191/SN74191                             |
| 9375                      | SN5475/SN7475                          | SN54175/SN74175                             | 93194                     | SN54194/SN74194                        | SN54194/SN74194                             |
| 9377                      | SN5477/SN7477                          | SN54175/SN74175                             | 93S194                    | SN54S194/SN74S194                      | SN54S194/SN74S194                           |
| 9380                      | SN5480/SN7480                          | SN5480/SN7480                               | 93195                     | SN54195/SN74195                        | SN54195/SN74195                             |
| 9382                      | SN5482/SN7482                          | SN5482/SN7482                               | 93196                     | SN54196/SN74196                        | SN54196/SN74196                             |
| 9383                      | SN5483A/SN7483A                        | SN54283/SN74283                             | 93197                     | SN54197/SN74197                        | SN54197/SN74197                             |
| 9386                      | SN54LS266/SN74LS266                    | SN54LS266/SN74LS266                         | 93198                     | SN54198/SN74198                        | SN54198/SN74198                             |
| 93H87                     | SN54H87/SN74H87                        | SN54H87/SN74H87                             | 93199                     | SN54199/SN74199                        | SN54199/SN74199                             |
| 9390                      | SN5490A/SN7490A                        | SN54290/SN74290                             | 93S251                    | SN54S251/SN74S251                      | SN54S251/SN74S251                           |
| 9391                      | SN5491A/SN7491A                        | SN5491A/SN7491A                             | 93S257                    | SN54S257/SN74S257                      | SN54S257/SN74S257                           |
| 9392                      | SN5492A/SN7492A                        | SN5492A/SN7492A                             | 93S258                    | SN54S258/SN74S258                      | SN54S258/SN74S258                           |
| 9393                      | SN5493A/SN7493A                        | SN54293/SN74293                             | 93400                     |                                        | SN54S201/SN74S201                           |
| 9394                      | SN5494/SN7494                          | SN5494/SN7494                               | 93403                     | SN54S289/SN74S289                      | SN54S289/SN74S289                           |
| 9395                      | SN5495A/SN7495A                        | SN5495A/SN7495A                             | 93404                     |                                        | SN54S289/SN74S289                           |
| 9396                      | SN5496/SN7496                          | SN5496/SN7496                               | 93405                     |                                        | SN54S189/SN74S189                           |
| 93S137                    |                                        | SN54S138/SN74S138                           | 93406                     | SN54187/SN74187                        | SN54187/SN74187                             |
| 93S138                    | SN54S138/SN74S138                      | SN54S138/SN74S138                           | 93407                     | SN5481A/SN7481A                        | SN5481A/SN7481A                             |
| 93S139                    | SN54S139/SN74S139                      | SN54S139/SN74S139                           |                           | SN54S300A/SN74S300A                    | SN54S300A/SN74S300A                         |
| 93141C                    | SN74141                                | SN74141                                     | 93410                     | SN54S301/SN74S301                      | SN54S301/SN74S301                           |
| 93145                     | SN54145/SN74145                        | SN54145/SN74145                             |                           | SN54S200A/SN74S200A                    | SN54S200A/SN74S200A                         |
| 93150                     | SN54150/SN74150                        | SN54150/SN74150                             | 93411                     | SN54S201/SN74S201                      | SN54S201/SN74S201                           |
| 93151                     | SN54151/SN74151                        | SN54151A/SN74151A                           | 93412                     | SN54S214/SN74S214                      | SN54S214/SN74S214                           |
| 93S151                    | SN54S139/SN74S139                      | SN54S139/SN74S139                           | 93415A                    | SN54S314/SN74S314                      | SN54S314/SN74S314                           |
| 93152                     | SN54152/SN74152                        | SN54151A/SN74151A                           | 93415                     | SN54S314/SN74S314                      | SN54S314/SN74S314                           |
| 93153                     | SN54153/SN74153                        | SN54153/SN74153                             | 93416                     | SN54S387/SN74S387                      | SN54S387/SN74S387                           |
| 93S153                    | SN54S153/SN74S153                      | SN54S153/SN74S153                           | 93417                     | SN54S387/SN74S387                      | SN54S387/SN74S387                           |

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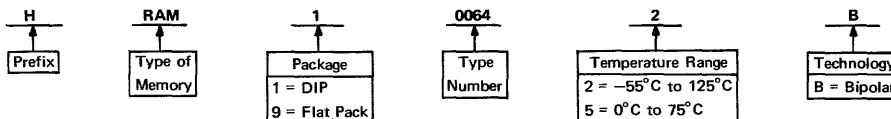
## FAIRCHILD

| <u>FSC</u><br><u>TYPE</u> | <u>TI DIRECT</u><br><u>REPLACEMENT</u> | <u>RECOMMENDED</u><br><u>FOR NEW DESIGN</u> | <u>FSC</u><br><u>TYPE</u> | <u>TI DIRECT</u><br><u>REPLACEMENT</u> | <u>RECOMMENDED</u><br><u>FOR NEW DESIGN</u> |
|---------------------------|----------------------------------------|---------------------------------------------|---------------------------|----------------------------------------|---------------------------------------------|
| 93421                     | SN54S200A/SN74S200A                    | SN54S200A/SN74S200A                         | 93436                     | SN54S270/SN74S270                      | SN54S270/SN74S270                           |
|                           | SN54S201/SN74S201                      | SN54S201/SN74S201                           | 93438                     | SN54S475/SN74S475                      | SN54S475/SN74S475                           |
| 93425A                    | SN54S214/SN74S214                      | SN54S214/SN74S214                           | 93446                     |                                        | SN54S472/SN74S472                           |
| 93425                     | SN54S214/SN74S214                      | SN54S214/SN74S214                           | 93448                     | SN54S474/SN74S474                      | SN54S474/SN74S474                           |
| 93426                     | SN54S287/SN74S287                      | SN54S287/SN74S287                           | 9600                      |                                        | SN54221/SN74221                             |
| 93427                     | SN54S287/SN74S287                      | SN54S287/SN74S287                           | 9601                      | SN29601                                | SN54122/SN74122                             |
| 93433                     | SN83433, SN93433                       | SN5481A/SN7481A                             | 9602                      |                                        | SN54123/SN74123                             |
| 93434                     | SN5488A/SN7488A                        | SN5488A/SN7488A                             | 9603                      | SN54121/SN74121                        | SN54221/SN74221                             |
| 93435                     | SN7489                                 | SN7489                                      |                           |                                        |                                             |

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## HARRIS

Example of Harris order code:



| <u>HARRIS</u><br><u>TYPE</u> | <u>TI DIRECT</u><br><u>REPLACEMENT</u> | <u>RECOMMENDED</u><br><u>FOR NEW DESIGNS</u> | <u>HARRIS</u><br><u>TYPE</u> | <u>TI DIRECT</u><br><u>REPLACEMENT</u> | <u>RECOMMENDED</u><br><u>FOR NEW DESIGNS</u> |
|------------------------------|----------------------------------------|----------------------------------------------|------------------------------|----------------------------------------|----------------------------------------------|
| M 7602                       | SN54S188/SN74S188                      | SN54S188/SN74S188                            | M 7640                       | SN54S475/SN74S475                      | SN54S475/SN74S475                            |
| M 7603                       | SN54S288/SN74S288                      | SN54S288/SN74S288                            | M 7641                       | SN54S474/SN74S474                      | SN54S474/SN74S474                            |
| M 7610                       | SN54S387/SN74S387                      | SN54S387/SN74S387                            | RAM 1-0064                   | SN7489                                 | SN7489                                       |
| M 7611                       | SN54S287/SN74S287                      | SN54S287/SN74S287                            | PROM 1-0512                  | SN54186/SN74186                        | SN54S470/SN74S470                            |
|                              |                                        | SN54S470/SN74S470                            | PROM 1-1024                  | SN54S287/SN74S287                      | SN54S287/SN74S287                            |
| M 7620                       |                                        | SN54S473/SN74S473                            | PROM 1-1024A                 | SN54S387/SN74S387                      | SN54S387/SN74S387                            |
|                              |                                        | SN54S471/SN74S471                            | ROM 1-1024                   | SN54187/SN74187                        | SN54187/SN74187                              |
| M 7621                       |                                        | SN54S472/SN74S472                            | PROM 1-8256                  | SN54S188/SN74S188                      | SN54S188/SN74S188                            |

## INTEL

Example of Intel order code:

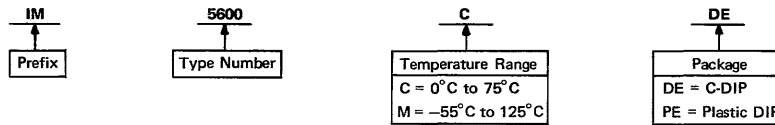


| INTEL<br>TYPE | TI DIRECT<br>REPLACEMENT | RECOMMENDED<br>FOR NEW DESIGNS | INTEL<br>TYPE | TI DIRECT<br>REPLACEMENT | RECOMMENDED<br>FOR NEW DESIGNS |
|---------------|--------------------------|--------------------------------|---------------|--------------------------|--------------------------------|
| 3101          | SN54S289/SN74S289        | SN54S289/SN74S289              | 3301 A        | SN54187/SN74187          | SN54187/SN74187                |
| 3101 A        | SN54S289/SN74S289        | SN54S289/SN74S289              | 3304          |                          | SN54S473/SN74S473              |
| 3102          |                          | SN54S200A/SN74S200A            | 3404 A        |                          | SN54S373/SN74S373              |
| 3106 A        | SN54S200A/SN74S200A      | SN54S200A/SN74S200A            | 3601          | SN54S387/SN74S387        | SN54S387/SN74S387              |
|               | SN54S201/SN74S201        | SN54S201/SN74S201              | 3604          | SN54S475/SN74S475        | SN54S475/SN74S475              |
|               | SN54S300A/SN74S300A      | SN54S300A/SN74S300A            | 3621          | SN54S287/SN74S287        | SN54S287/SN74S287              |
| 3107 A        | SN54S301/SN74S301        | SN54S301/SN74S301              | 3624          | SN54S474/SN74S474        | SN54S474/SN74S474              |
| 3110          | SN74S214, SN74S314       | SN74S214/SN74S314              | 8212          | SN54S412/SN74S412        | SN54S412/SN74S412              |
| 3205          |                          | SN54S138/SN74S138              | 8224          | SN74LS424 (TIM8224)      | SN74LS424 (TIM8224)            |
| 3212          | SN54S412/SN74S412        | SN54S412/SN74S412              | 8228          | SN74S428 (TIM8228)       | SN74S428 (TIM8228)             |
|               |                          |                                | 8338          | SN74S438 (TIM8238)       | SN74S438 (TIM8238)             |

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## INTERSIL

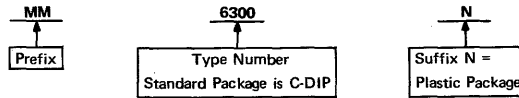
Example of Intersil ordering code:



| INTERSIL<br>TYPE | TI DIRECT<br>REPLACEMENT | RECOMMENDED<br>FOR NEW DESIGNS | INTERSIL<br>TYPE | TI DIRECT<br>REPLACEMENT | RECOMMENDED<br>FOR NEW DESIGNS |
|------------------|--------------------------|--------------------------------|------------------|--------------------------|--------------------------------|
| 5501             | SN54S289/SN74S289        | SN54S289/SN74S289              | 5543             | SN54S300A/SN74S300A      | SN54S300A/SN74S300A            |
| 5502             | SN5481A/SN7481A          | SN5481A/SN7481A                | 5553             | SN54S301/SN74S301        | SN54S301/SN74S301              |
| 5503             | SN54S300A/SN74S300A      | SN54S300A/SN74S300A            | 5600             | SN54S200A/SN74S200A      | SN54S200A/SN74S200A            |
|                  | SN54S301/SN74S301        | SN54S301/SN74S301              | 5602             | SN54S188/SN74S188        | SN54S188/SN74S188              |
|                  | SN54S214/SN74S214        | SN54S214/SN74S214              | 5603             | SN54S475/SN74S475        | SN54S475/SN74S475              |
| 5508             | SN54S314/SN74S314        | SN54S314/SN74S314              | 5604             | SN54S387/SN74S387        | SN54S387/SN74S387              |
| 55S08            | SN54S314/SN74S314        | SN54S314/SN74S314              | 5604             |                          | SN54S470/SN74S470              |
| 5512             | SN5481A/SN7481A          | SN5481A/SN7481A                | 5610             | SN54S288/SN74S288        | SN54S288/SN74S288              |
| 55S18            | SN54S214/SN74S214        | SN54S214/SN74S214              | 5623             | SN54S287/SN74S287        | SN54S287/SN74S287              |
|                  | SN54S200A/SN74S200A      | SN54S200A/SN74S200A            | 5624             | SN54S370/SN74S370        | SN54S370/SN74S370              |
| 5523             | SN54S201/SN74S201        | SN54S201/SN74S201              | 5625             | SN54S474/SN74S474        | SN54S474/SN74S474              |
|                  | SN54S300A/SN74S300A      | SN54S300A/SN74S300A            |                  |                          |                                |
| 5533             | SN54S301/SN74S301        | SN54S301/SN74S301              |                  |                          |                                |

## MONOLITHIC MEMORIES

Example of Monolithic Memories ordering code:



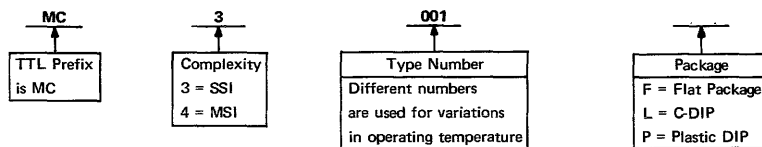
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| MONOLITHIC MEMORIES | TI DIRECT REPLACEMENT | RECOMMENDED FOR NEW DESIGNS | MONOLITHIC MEMORIES | TI DIRECT REPLACEMENT | RECOMMENDED FOR NEW DESIGNS |
|---------------------|-----------------------|-----------------------------|---------------------|-----------------------|-----------------------------|
| <u>TYPE</u>         |                       |                             | <u>TYPE</u>         |                       |                             |
| A5200               |                       | SN54S473/SN74S473           | 5335                |                       | SN54S470/SN74S470           |
| A5240               |                       | SN54S473/SN74S473           | 5340                | SN54S475/SN74S475     | SN54S475/SN74S475           |
| A5241               |                       | SN54S472/SN74S472           | 5341                | SN54S474/SN74S474     | SN54S474/SN74S474           |
| A5280               |                       | SN54S473/SN74S473           | 5348                | SN54S473/SN74S473     | SN54S473/SN74S473           |
| A5281               |                       | SN54S472/SN74S472           | 5349                | SN54S472/SN74S472     | SN54S472/SN74S472           |
| A6240               |                       | SN54S473/SN74S473           | 5530                | SN54S301/SN74S301     | SN54S301/SN74S301           |
| A6241               |                       | SN54S472/SN74S472           | 5531                | SN54S201/SN74S201     | SN54S201/SN74S201           |
| A6280               |                       | SN54S473/SN74S473           | 5560                | SN54S289/SN74S289     | SN54S289/SN74S289           |
| A6281               |                       | SN54S472/SN74S472           | 5561                | SN54S189/SN74S189     | SN54S189/SN74S189           |
| H5200               | SN54187/SN74187       | SN54187/SN74187             | 6200                | SN54187/SN74187       | SN54187/SN74187             |
| H5201               | SN54S287/SN74S287     | SN54S287/SN74S287           | 6201                | SN54S387/SN74S387     | SN54S387/SN74S387           |
| H5240               |                       | SN54S473/SN74S473           | 6205                | SN54S270/SN74S270     | SN54S270/SN74S270           |
| H5241               |                       | SN54S472/SN74S472           | 6206                | SN54S370/SN74S370     | SN54S370/SN74S370           |
| H6200               |                       | SN54S473/SN74S473           | 6210                |                       | SN54S470/SN74S470           |
| H6201               | SN54S287/SN74S287     | SN54S287/SN74S287           | 6225                |                       | SN54S473/SN74S473           |
| H6240               |                       | SN54S473/SN74S473           | 6230                | SN5488A/SN7488A       | SN5488A/SN7488A             |
| H6241               |                       | SN54S472/SN74S472           | 6231                |                       | SN54S473/SN74S473           |
| 5200                | SN54187/SN74187       | SN54187/SN74187             | 6235                |                       | SN54S470/SN74S470           |
| 5201                | SN54S387/SN74S387     | SN54S387/SN74S387           | 6260                |                       | SN54S473/SN74S473           |
| 5205                | SN54S270/SN74S270     | SN54S270/SN74S270           | 6300                | SN54S387/SN74S387     | SN54S387/SN74S387           |
| 5206                | SN54S370/SN74S370     | SN54S370/SN74S370           | 6301                | SN54S287/SN74S287     | SN54S287/SN74S287           |
| 5210                |                       | SN54S470/SN74S470           | 6305                |                       | SN54S470/SN74S470           |
| 5225                |                       | SN54S470/SN74S470           | 6306                |                       | SN54S471/SN74S471           |
| 5230                | SN5488A/SN7488A       | SN5488A/SN7488A             | 6308                | SN54S470/SN74S470     | SN54S470/SN74S470           |
| 5231                | SN54S188A/SN74S188A   | SN54S188A/SN74S188A         | 6309                | SN54S471/SN74S471     | SN54S471/SN74S471           |
| 5235                |                       | SN54S470/SN74S470           | 6330                | SN54S188A/SN74S188A   | SN54S188A/SN74S188A         |
| 5255                |                       | SN54S473/SN74S473           | 6331                | SN54S288/SN74S288     | SN54S288/SN74S288           |
| 5260                |                       | SN54S473/SN74S473           | 6335                |                       | SN54S470/SN74S470           |
| 5300                | SN54S387/SN74S387     | SN54S387/SN74S387           | 6340                | SN54S475/SN74S475     | SN54S475/SN74S475           |
| 5301                | SN54S287/SN74S287     | SN54S287/SN74S287           | 6341                | SN54S474/SN74S474     | SN54S474/SN74S474           |
| 5305                | SN54S270/SN74S270     | SN54S270/SN74S270           | 6348                | SN54S473/SN74S473     | SN54S473/SN74S473           |
| 5306                | SN54S370/SN74S370     | SN54S370/SN74S370           | 6349                | SN54S472/SN74S472     | SN54S472/SN74S472           |
| 5308                | SN54S470/SN74S470     | SN54S470/SN74S470           | 6530                | SN54S301/SN74S301     | SN54S301/SN74S301           |
| 5309                | SN54S471/SN74S471     | SN54S471/SN74S471           | 6531                | SN54S201/SN74S201     | SN54S201/SN74S201           |
| 5330                | SN54S188A/SN74S188A   | SN54S188A/SN74S188A         | 6560                | SN54S289/SN74S289     | SN54S289/SN74S289           |
| 5331                | SN54S288/SN74S288     | SN54S288/SN74S288           | 6561                | SN54S189/SN74S189     | SN54S189/SN74S189           |



## MOTOROLA

Example of Motorola order code:



| MOTOROLA TYPE | TI DIRECT REPLACEMENT | RECOMMENDED FOR NEW DESIGNS | MOTOROLA TYPE | TI DIRECT REPLACEMENT | RECOMMENDED FOR NEW DESIGNS |
|---------------|-----------------------|-----------------------------|---------------|-----------------------|-----------------------------|
| MC3000        | SN74H00               | SN74S00                     | MC3107        |                       | SN54S15                     |
| MC3001        | SN7408                | SN74S11                     | MC3108        | SN54H04               | SN54S04                     |
| MC3002        |                       | SN74S02                     | MC3109        | SN54H05               | SN54S05                     |
| MC3003        | SN7432                | SN74S32                     | MC3110        | SN54H20               | SN54S20                     |
| MC3004        | SN74H01               | SN74S03                     | MC3111        | SN54H21               | SN54S11                     |
| MC3005        | SN74H10               | SN74S10                     | MC3112        | SN54H22               | SN54S22                     |
| MC3006        | SN74H11               | SN74S11                     | MC3115        |                       | SN54S133, SN54S134          |
| MC3007        |                       | SN74S15                     | MC3116        | SN54H30               | SN54S133                    |
| MC3008        | SN74H04               | SN74S04                     | MC3118        | SN54H62               | SN54S11                     |
| MC3009        | SN74H05               | SN74S05                     | MC3119        | SN54H61               | SN54S11                     |
| MC3010        | SN74H20               | SN74S20                     | MC3120        | SN54H50               | SN54S51                     |
| MC3011        | SN74H21               | SN74S11                     | MC3121        | SN54S86               | SN54S86                     |
| MC3012        | SN74H22               | SN74S22                     | MC3122        |                       | SN54S135                    |
| MC3015        |                       | SN74S133, SN74S134          | MC3123        | SN54H51               | SN54S51                     |
| MC3016        | SN74H30               | SN74S133                    | MC3124        | SN54H40               | SN54S40                     |
| MC3018        | SN74H62               | SN74S11                     | MC3125        | SN54H40               | SN54S40                     |
| MC3019        | SN74H61               | SN74S11                     | MC3126        |                       | SN54S37, SN54S38            |
| MC3020        | SN74H50               | SN74S51                     | MC3128        |                       | SN54S37, SN54S38            |
| MC3021        | SN74S86               | SN74S86                     | MC3129        |                       | SN54S37, SN54S38            |
| MC3022        |                       | SN74S135                    | MC3130        | SN54H60               | SN54S11                     |
| MC3023        | SN74H51               | SN74S51                     | MC3131        | SN54H52               | SN54S64                     |
| MC3024        | SN74H40               | SN74S40                     | MC3132        | SN54H53               | SN54S64                     |
| MC3025        | SN74H40               | SN74S40                     | MC3133        | SN54H54               | SN54S64                     |
| MC3026        |                       | SN74S140                    | MC3134        | SN54H55               | SN54S64                     |
| MC3028        |                       | SN74S240, SN74S241          | MC3150        |                       | SN54S373, SN54S374          |
| MC3029        |                       | SN74S240, SN74S241          | MC3151        |                       | SN54S373, SN54S374          |
| MC3030        | SN74H60               | SN74S11                     | MC3152        |                       | SN54S373, SN54S374          |
| MC3031        | SN74H52               | SN74S64                     | MC3154        | SN54H71               | SN54S112                    |
| MC3032        | SN74H53               | SN74S64                     | MC3155        | SN54H72               | SN54S112                    |
| MC3033        | SN74H54               | SN74S64                     | MC3160        | SN54H74               | SN54S74                     |
| MC3034        | SN74H55               | SN74S64                     | MC3161        | SN54S114              | SN54S114                    |
| MC3050        |                       | SN74S373, SN74S374          | MC3162        | SN54S113              | SN54S113                    |
| MC3051        |                       | SN74S373, SN74S374          | MC3163        | SN54H73               | SN54S112                    |
| MC3052        |                       | SN74S373, SN74S374          | MC4000        |                       | SN74S139                    |
| MC3053        |                       | SN74S374                    | MC4001        |                       | SN74184/SN74185A            |
| MC3054        | SN74H71               | SN74S112                    | MC4002        |                       | SN74S139                    |
| MC3055        | SN74H72               | SN74S112                    | MC4004        | SN7481A               | SN7481A                     |
| MC3060        | SN74H74               | SN74S74                     | MC4005        | SN7481A               | SN7481A                     |
| MC3061        | SN74S114              | SN74S114                    | MC4006        |                       | SN74S138                    |
| MC3062        | SN74S113              | SN74S113                    | MC4007        |                       | SN74S139                    |
| MC3063        | SN74H73               | SN74S112                    | MC4008        |                       | SN74S280                    |

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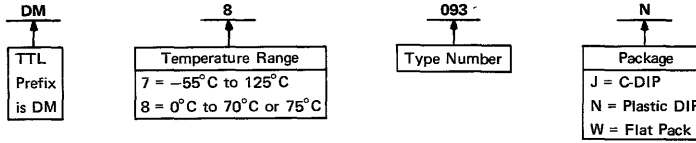
MOTOROLA

| <u>MOTOROLA</u><br><u>TYPE</u> | <u>TI DIRECT</u><br><u>REPLACEMENT</u> | <u>RECOMMENDED</u><br><u>FOR NEW DESIGNS</u> | <u>MOTOROLA</u><br><u>TYPE</u> | <u>TI DIRECT</u><br><u>REPLACEMENT</u> | <u>RECOMMENDED</u><br><u>FOR NEW DESIGNS</u> |
|--------------------------------|----------------------------------------|----------------------------------------------|--------------------------------|----------------------------------------|----------------------------------------------|
| MC3100                         | SN54H00                                | SN54S00                                      | MC4010                         |                                        | SN74S135                                     |
| MC3101                         | SN5408                                 | SN54S11                                      | MC4012                         |                                        | SN74S299                                     |
| MC3102                         |                                        | SN54S02                                      | MC4015                         |                                        | SN74S195                                     |
| MC3103                         | SN5432                                 | SN5432                                       | MC4016                         |                                        | SN74S168                                     |
| MC3104                         | SN54H01                                | SN54S03                                      | MC4017                         |                                        | SN74S168                                     |
| MC3105                         | SN54H10                                | SN54S10                                      | MC4018                         |                                        | SN74S169                                     |
| MC3106                         | SN54H11                                | SN54S11                                      | MC4019                         |                                        | SN74S169                                     |
| MC4021                         |                                        | SN74S85                                      | MC4306                         |                                        | SN54S138                                     |
| MC4022                         |                                        | SN74S85                                      | MC4307                         |                                        | SN54S138, SN54S139                           |
| MC4023                         |                                        | SN74S260                                     | MC4308                         |                                        | SN54S280                                     |
| MC4025                         |                                        | SN74S124                                     | MC4310                         |                                        | SN54S280                                     |
| MC4026                         |                                        | SN74S381                                     | MC4316                         |                                        | SN54S168                                     |
| MC4027                         |                                        | SN74S381                                     | MC4317                         |                                        | SN54S168                                     |
| MC4028                         |                                        | SN74S281                                     | MC4318                         |                                        | SN54S169                                     |
| MC4029                         |                                        | SN74S281                                     | MC4319                         |                                        | SN54S169                                     |
| MC4029                         |                                        | SN74S281                                     | MC4324                         |                                        | SN54S124                                     |
| MC4030                         |                                        | SN74S281                                     | MC4326                         |                                        | SN54S381                                     |
| MC4031                         |                                        | SN74S281                                     | MC4327                         |                                        | SN54S381                                     |
| MC4032                         |                                        | SN74S182                                     | MC4328                         |                                        | SN54S281                                     |
| MC4035                         |                                        | SN74S373, SN74S374                           | MC4329                         |                                        | SN54S281, SN54S281                           |
| MC4037                         |                                        | SN74S373, SN74S374                           | MC4330                         |                                        | SN54S281, SN74S381                           |
| MC4038                         |                                        | SN74S138                                     | MC4331                         |                                        | SN54S281                                     |
| MC4039                         |                                        | SN74S143, SN74S144                           | MC4332                         |                                        | SN54S182                                     |
| MC4040                         |                                        | SN74S139                                     | MC4335                         |                                        | SN54S373, SN54S374                           |
| MC4042                         |                                        | SN74S240, SN74S241                           | MC4337                         |                                        | SN54S373, SN54S374                           |
| MC4043                         |                                        | SN74S240, SN74S241                           | MC4350                         |                                        | SN54143                                      |
| MC4048                         |                                        | SN74S138                                     | MC9310                         | SN54160                                | SN54160                                      |
| MC4050                         |                                        | SN74143                                      | MC9311                         | SN54154                                | SN54154                                      |
| MC4051                         |                                        | SN74144                                      | MC9316                         | SN54161                                | SN54161                                      |
| MC4062                         |                                        | SN74S64                                      | MCM4002                        | SN7488A                                | SN7488A                                      |
| MC4300                         |                                        | SN54S139                                     | MCM4004                        | SN7481A                                | SN7481A                                      |
| MC4304                         | SN5481A                                | SN5481A                                      | MCM4005                        | SN7481A                                | SN7481A                                      |
| MC4305                         | SN5481A                                | SN5481A                                      | MCM4006                        | SN74S387                               | SN74S387                                     |

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## NATIONAL

Example of National order code:



| NATIONAL TYPE | TI DIRECT REPLACEMENT | RECOMMENDED FOR NEW DESIGNS | NATIONAL TYPE | TI DIRECT REPLACEMENT | RECOMMENDED FOR NEW DESIGNS |
|---------------|-----------------------|-----------------------------|---------------|-----------------------|-----------------------------|
| 7091          |                       | SN5437                      | 7553          |                       | SN54S163                    |
| 7093          | SN54125               | SN54125                     | 7554          |                       | SN54S373, SN54S374          |
| 7094          | SN54126               | SN54126                     | 7555          |                       | SN54S168                    |
| 7095          | SN54365               | SN54365                     | 7556          |                       | SN54S169                    |
| 7096          | SN54366               | SN54366                     | 7560          | SN54192               | SN54192                     |
| 7097          | SN54367               | SN54367                     | 75L60         | SN54L192              | SN54L192                    |
| 7098          | SN54368               | SN54368                     | 7563          | SN54193               | SN54193                     |
| 7121          | SN54251               | SN54251                     | 75L63         | SN54L193              | SN54L193                    |
| 71L22         | SN54L157              | SN54L157                    | 7570          | SN54164               | SN54164                     |
| 7123          | SN54S257              | SN54S257                    | 7573          | SN54S387              | SN54S387                    |
| 7130          |                       | SN54S85                     | 7574          | SN54S188              | SN54S188                    |
| 7131          |                       | SN54S85                     | 7577          | SN54S188              | SN54S188                    |
| 7136          |                       | SN5485                      | 7578          | SN54S288              | SN54S288                    |
| 7160          |                       | SN54S85                     | 7582          | SN54S301              | SN54S301                    |
| 7200          |                       | SN54S85                     | 7588          | SN54S188              | SN54S188                    |
| 7210          |                       | SN54151A, SN54351           | 7590          | SN54165               | SN54165                     |
| 7211          |                       | SN54151A, SN54351           | 7594          |                       | SN54S200A                   |
| 7213          | SN54154               | SN54154                     | 7595          | SN54S473              | SN54S473                    |
| 7214          | SN54LS253             | SN54LS253                   | 7596          |                       | SN54S472                    |
| 7219          |                       | SN54150                     | 7597          | SN54S287, SN54S370    | SN54S287, SN54S370          |
| 7220          |                       | SN54S280                    | 7598          |                       | SN54S471                    |
| 7223          |                       | SN54S139                    | 7599          | SN54S189              | SN54S189                    |
| 7230          |                       | SN54S257                    | 7600          |                       | SN54194                     |
| 7280          | SN54176               | SN54176                     | 7613          |                       | SN54376                     |
| 7281          | SN54177               | SN54177                     | 76L70         | SN54L164              | SN54L164                    |
| 7283          | SN5483A               | SN5483A                     | 7795          |                       | SN54S473                    |
| 7288          |                       | SN5492A                     | 7796          |                       | SN54S472                    |
| 7290          | SN54196               | SN54196                     | 7810          | 5426                  | 5426                        |
| 7291          | SN54197               | SN54197                     | 7811          |                       | SN5426                      |
| 7511          |                       | SN54376                     | 7812          | SN5416                | SN5416                      |
| 7512          |                       | SN54376                     | 7819          |                       | SN54S240, SN54S241          |
| 7520          |                       | SN5497                      | 7853          |                       | SN54221                     |
| 7544          |                       | SN54265                     | 7875A         |                       | SN54284                     |
| 7551          | SN54173               | SN54173                     | 7875B         |                       | SN54285                     |
| 7552          |                       | SN54S162                    | 8091          |                       | SN74S240, SN74S241          |
| 8093          | SN74125               | SN74125                     | 8551          | SN74173               | SN74173                     |
| 8094          | SN74126               | SN74126                     | 8552          |                       | SN74S162                    |
| 8095          | SN74365               | SN74365                     | 8553          |                       | SN74S163                    |
| 8096          | SN74366               | SN74366                     | 8554          |                       | SN74S373, SN74S374          |
| 8097          | SN74367               | SN74367                     | 8555          |                       | SN74S168                    |
| 8098          | SN74368               | SN74368                     | 8556          |                       | SN74S169                    |

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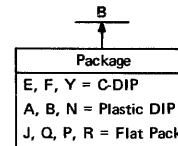
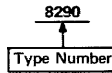
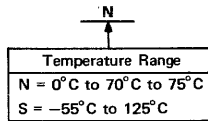
## NATIONAL

| NATIONAL<br>TYPE | TI DIRECT<br>REPLACEMENT | RECOMMENDED<br>FOR NEW DESIGNS | NATIONAL<br>TYPE | TI DIRECT<br>REPLACEMENT | RECOMMENDED<br>FOR NEW DESIGNS |
|------------------|--------------------------|--------------------------------|------------------|--------------------------|--------------------------------|
| 8121             | SN74251                  | SN74251                        | 8560             | SN74192                  | SN74192                        |
| 81L22            | SN74L157                 | SN74L157                       | 85L60            | SN74L192                 | SN74LS192                      |
| 8123             | SN74S257                 | SN74S257                       | 8563             | SN74193                  | SN74193                        |
| 8130             |                          | SN74S85                        | 85L63            | SN74L193                 | SN74LS193                      |
| 8131             |                          | SN74S85                        | 8570             | SN74164                  | SN74164                        |
| 8136             |                          | SN7485                         | 8573             | SN74S387                 | SN74S387                       |
| 8160             |                          | SN74S85                        | 8574             | SN74S287                 | SN74S287                       |
| 8200             |                          | SN74S85                        | 8577             | SN74S188                 | SN74S188                       |
| 8210             |                          | SN74151A, SN74351              | 8578             | SN74S288                 | SN74S288                       |
| 8211             |                          | SN74151A, SN74351              | 8579             | SN74164                  | SN74164                        |
| 8213             | SN74154                  | SN74154                        | 8580             | SN7495A                  | SN7495A                        |
| 8214             | SN74LS253                | SN74LS253                      | 8582             | SN74S301                 | SN74S301                       |
| 8219             |                          | SN74150                        | 8588             | SN7488A                  | SN7488A                        |
| 8220             |                          | SN74S280                       | 8590             | SN74165                  | SN74165                        |
| 8223             |                          | SN74S139                       | 8597             | SN74S287, SN74S370       | SN74S287, SN74S370             |
| 8230             |                          | SN74S257                       | 8598             |                          | SN7488A                        |
| 8280             | SN74176                  | SN74176                        | 8599             | SN74S189                 | SN74S189                       |
| 8281             | SN74177                  | SN74177                        | 8640             | SN74141                  | SN74141                        |
| 8283             | SN7483A                  | SN7483A                        | 86L70            | SN74L164                 | SN74L164                       |
| 8288             |                          | SN7492A                        | 8810             | SN7426                   | SN7426                         |
| 8290             | SN74196                  | SN74196                        | 8811             |                          | SN7426                         |
| 8291             | SN74197                  | SN74197                        | 8812             |                          | SN7416                         |
| 8296             | SN74196                  | SN74196                        | 8819             |                          | SN7426                         |
| 8500             | SN7476                   | SN7476                         | 8842             | SN7442A                  | SN7442A                        |
| 8501             | SN7473                   | SN7473                         | 8846             | SN7446A                  | SN7446A                        |
| 8510             | SN7474                   | SN7474                         | 8847             | SN7447A                  | SN7447A                        |
| 8511             |                          | SN74276                        | 8848             | SN7448                   | SN7448                         |
| 8512             |                          | SN74276                        | 8853             |                          | SN74221                        |
| 8520             |                          | SN7497                         | 8875A            |                          | SN74S274                       |
| 8530             | SN7490A                  | SN7490A                        | 8875B            |                          | SN74S274                       |
| 8532             | SN7492A                  | SN7492A                        |                  |                          |                                |
| 8533             | SN7493A                  | SN7493A                        |                  |                          |                                |
| 8544             |                          | SN74265                        |                  |                          |                                |

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## SIGNETICS

Example of Signetics order code:



| SIGNETICS<br>TYPE | TI DIRECT<br>REPLACEMENT | RECOMMENDED<br>FOR NEW DESIGNS | SIGNETICS<br>TYPE | TI DIRECT<br>REPLACEMENT | RECOMMENDED<br>FOR NEW DESIGNS |
|-------------------|--------------------------|--------------------------------|-------------------|--------------------------|--------------------------------|
| 8H16              |                          | SN54S20/SN74S20                | 8201              |                          | SN54174/SN74174                |
| 8H20              |                          | SN54S112/SN74S112              | 8202              |                          | SN54174/SN74174                |
| 8H21              |                          | SN54S112/SN74S112              | 8203              |                          | SN54174/SN74174                |
| 8H22              |                          | SN54S112/SN74S112              | 8204              |                          | SN54S471/SN74S471              |
| 8H70              | SN54H11/SN74H11          | SN54S11/SN74S11                | 8205              |                          | SN54S472/SN74S472              |

## SIGNETICS

| <u>SIGNETICS</u> | <u>TI DIRECT</u>   | <u>RECOMMENDED</u>     | <u>SIGNETICS</u> | <u>TI DIRECT</u>    | <u>RECOMMENDED</u>     |
|------------------|--------------------|------------------------|------------------|---------------------|------------------------|
| <u>TYPE</u>      | <u>REPLACEMENT</u> | <u>FOR NEW DESIGNS</u> | <u>TYPE</u>      | <u>REPLACEMENT</u>  | <u>FOR NEW DESIGNS</u> |
| 8H80             | SN54H00/SN74H00    | SN54S00/SN74S00        | 8206             | SN54S200A/SN74S200A | SN54S200A/SN74S200A    |
| 8H90             | SN54H04/SN74H04    | SN54S04/SN74S04        |                  | SN54S201/SN74S201   | SN54S201/SN74S201      |
| 8T01             |                    | SN74141                | 82S06            | SN54S200A/SN74S200A | SN54S200A/SN74S200A    |
| 8T04             |                    | SN547A/SN7447A         |                  | SN54S201/SN74S201   | SN54S201/SN74S201      |
| 8T05             |                    | SN5448/SN7448          | 8207             | SN54S300A/SN74S300A | SN54S300A/SN74S300A    |
| 8T06             |                    | SN54143/SN74143        |                  | SN54S301/SN74S301   | SN54S301/SN74S301      |
| 8T09             |                    | SN54128/SN74128        | 82S07            | SN54S300A/SN74S300A | SN54S300A/SN74S300A    |
| 8T10             | SN54173/SN74173    | SN74173                |                  | SN54S301/SN74S301   | SN54S301/SN74S301      |
| 8T13             |                    | SN54128/SN74128        | 82S08            | SN54S314/SN74S314   | SN54S314/SN74S314      |
| 8T18             |                    | SN5426/SN5426          | 82S10            | SN54S314/SN74S314   | SN54S314/SN74S314      |
| 8T20             |                    | SN54121/SN74121        | 82S11            | SN54S214/SN74S214   | SN54S214/SN74S214      |
| 8T22             | SN54122/SN74122    | SN54122/SN74122        | 82S16            | SN54S200A/SN74S200A | SN54S200A/SN74S200A    |
| 8T23             |                    | SN54128/SN74128        |                  | SN54S201/SN74S201   | SN54S201/SN74S201      |
| 8T24             |                    |                        | 82S17            | SN54S300A/SN74S300A | SN54S300A/SN74S300A    |
| 8T26             |                    | SN54125/SN74125        |                  | SN54S301/SN74S301   | SN54S301/SN74S301      |
| 8T28             |                    | SN54S240/SN74S240      | 8223             | SN54S188/SN74S188   | SN54S188/SN74S188      |
|                  |                    | SN54S241/SN74S241      | 8224             | SN5488A/SN7488A     | SN5488A/SN7488A        |
| 8T51             |                    | SN54143/SN74143        | 8225             | SN54S289/SN74S289   | SN54S289/SN74S289      |
|                  |                    | SN54144/SN74144        | 82S25            | SN54S289/SN74S289   | SN54S289/SN74S289      |
| 8T54             |                    | SN54143/SN74143        | 82S26            | SN54S387/SN74S387   | SN54S387/SN74S387      |
|                  |                    | SN54144/SN74144        | 8228             |                     | SN54S471/SN74S471      |
| 8T59             |                    | SN54143/SN74143        | 82S29            | SN54S287/SN74S287   | SN54S287/SN74S287      |
|                  |                    | SN54144/SN74144        | 8230             | SN39312/SN29312     | SN54151A/SN74151A      |
| 8T71             |                    | SN54143/SN74143        | 82S30            |                     | SN54S151A/SN74S151A    |
|                  |                    | SN54144/SN74144        | 8231             |                     | SN54S251/SN74S251      |
| 8T74             |                    | SN54143/SN74143        | 82S31            |                     | SN54S151/SN74S151      |
|                  |                    | SN54144/SN74144        | 8232             |                     | SN54151A/SN74151A      |
| 8T75             |                    | SN54143/SN74143        | 82S32            |                     | SN54S151/SN74S151      |
|                  |                    | SN54144/SN74144        | 8233             |                     | SN54157/SN74157        |
| 8T79             |                    | SN54143/SN74143        | 82S33            |                     | SN54S157/SN74S157      |
|                  |                    | SN54144/SN74144        | 8234             |                     | SN54S258/SN74S258      |
| 8T80             |                    | SN5426/SN7426          | 82S34            |                     | SN54S258/SN74S258      |
| 8T90             |                    | SN5406/SN7406          | 8235             |                     | SN4H87/SN74H87         |
| 8T93             |                    | SN54125/SN74125        | 8241             |                     | SN5486/SN7486          |
|                  |                    | SN54425/SN74425        | 82S41            |                     | SN54S86/SN74S86        |
| 8T94             |                    | SN54125/SN74125        | 8242             | SN54LS266/SN74LS266 | SN54LS266/SN74LS266    |
|                  |                    | SN54425/SN74425        | 82S42            |                     | SN54S135/SN74S135      |
| 8T95             |                    | SN54365/SN74365        | 8243             |                     | SN54198/SN74198        |
| 8T96             |                    | SN54366/SN74366        | 8250             |                     | SN5442A/SN7442A        |
| 8T97             |                    | SN54367/SN74367        | 82S50            |                     | SN54138/SN74138        |
| 8T98             |                    | SN54368/SN74368        | 8252             | SN39301/SN29301     | SN5442A/SN7442A        |
| 8162             |                    | SN54121/SN74121        | 82S52            |                     | SN54S280/SN74S280      |
| 8200             |                    | SN54174/SN74174        | 8255             | SN54S289/SN74S289   | SN54S289/SN74S289      |
| 8260             |                    | SN54S281/SN74S281      | 82147            | SN54147/SN74147     | SN54147/SN74147        |
| 8261             |                    | SN54S182/SN74S182      | 82148            | SN54148/SN74148     | SN54148/SN74148        |
| 8262             |                    | SN54180/SN74180        | 8415             |                     | SN5420/SN7420          |
| 82S63            |                    | SN54S280/SN74S280      | 8416             |                     | SN5420/SN7420          |
| 8263             |                    | SN54153/SN74153        | 8417             |                     | SN5410/SN7410          |
| 8264             |                    | SN54153/SN74153        | 8424             |                     | SN54111/SN74111        |
| 8266             |                    | SN54157/SN74157        | 8425             |                     | SN54111/SN74111        |
| 82S66            |                    | SN54S157/SN74S157      | 8440             |                     | SN5450/SN7450          |

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## SIGNETICS

| SIGNETICS<br>TYPE | TI DIRECT<br>REPLACEMENT | RECOMMENDED<br>FOR NEW DESIGNS | SIGNETICS<br>TYPE | TI DIRECT<br>REPLACEMENT | RECOMMENDED<br>FOR NEW DESIGNS |
|-------------------|--------------------------|--------------------------------|-------------------|--------------------------|--------------------------------|
| 8267              |                          | SN54157/SN74157                | 8455              | SN5440/SN7440            | SN5440/SN7440                  |
| 8268              | SN5480/SN7480            | SN54181/SN74181                | 8470              | SN5410/SN7410            | SN5410/SN7410                  |
| 8269              |                          | SN5485/SN7485                  | 8471              | SN5412/SN7412            | SN5412/SN7412                  |
| 8270              | SN54178/SN74178          | SN54194/SN74194                | 8480              | SN5400/SN7400            | SN5400/SN7400                  |
| 82S70             |                          | SN54S299/SN74S299              | 8481              | SN5403/SN7403            | SN5403/SN7403                  |
| 8271              | SN54179/SN74179          | SN54194/SN74194                | 8490              | SN5404/SN7404            | SN5404/SN7404                  |
| 82S71             |                          | SN54S299/SN74S299              | 8706              |                          | SN5460/SN7460                  |
| 8273              |                          | SN54198/SN74198                | 8731              |                          | SN5460/SN7460                  |
| 8274              |                          | SN54198/SN74198                | 8806              | SN5460/SN7460            | SN5460/SN7460                  |
| 8275              |                          | SN54174/SN74174                | 8808              | SN5430/SN7430            | SN5430/SN7430                  |
| 8276              |                          | SN5491A/SN7491A                | 8815              | SN5425/SN7425            | SN5425/SN7425                  |
| 8277              |                          | SN5491A/SN7491A                | 8816              |                          | SN5420/SN7420                  |
| 8280              | SN54176/SN74176          | SN54176/SN74176                | 8821              |                          | SN5476/SN7476                  |
| 8281              | SN54177/SN74177          | SN54177/SN74177                | 8822              |                          | SN54107/SN74107                |
| 8283              |                          | SN54S169/SN74S169              | 8824              |                          | SN5476/SN7476                  |
| 8284              |                          | SN54S169/SN74S169              | 8825              |                          | SN5470/SN7470                  |
| 8285              |                          | SN54S168/SN74S169              | 8826              |                          | SN54107/SN74107                |
| 8288              |                          | SN54163/SN74163                | 8827              |                          | SN5476/SN7476                  |
| 8290              | SN54196/SN74196          | SN54196/SN74196                | 8828              | SN5474/SN7474            | SN5474/SN7474                  |
| 82S90             | SN54S196/SN74S196        | SN54S196/SN74S196              | 8829              | SN54110/SN74110          | SN54110/SN74110                |
| 8291              | SN54197/SN74197          | SN54LS197/SN74LS197            | 8840              | SN5450/SN7450            | SN5450/SN7450                  |
| 82S91             | SN54S197/SN74S197        | SN54S197/SN74S197              | 8848              | SN54H54/SN74H74          | SN54S64/SN74S64                |
| 8292              | SN54LS196/SN74S196       | SN54LS196/SN74LS196            | 8855              |                          | SN5440/SN7440                  |
| 8293              | SN54LS197/SN74LS197      | SN54LS197/SN74LS197            | 8859              | SN5450/SN7450            | SN5450/SN7450                  |
| 82S110            | SN54S314/SN74S314        | SN54S314/SN74S314              | 8870              |                          | SN5410/SN7410                  |
| 82S111            | SN54S214/SN74S214        | SN54S214/SN74S214              | 8875              | SN5427/SN7427            | SN5427/SN7427                  |
|                   | SN54S200A/SN74S200A      | SN54S200A/SN74S200A            | 8879              | SN5410/SN7410            | SN5410/SN7410                  |
| 82S116            | SN54S201/SN74S201        | SN54S201/SN74S201              | 8880              |                          | SN5400/SN7400                  |
|                   | SN54S300A/SN74S300A      | SN54S300A/SN74S300A            | 8881              | SN5401/SN7401            | SN5401/SN7401                  |
| 82S117            | SN54S301/SN74S301        | SN54S301/SN74S301              | 8885              |                          | SN5402/SN7402                  |
| 82S123            | SN54S288/SN74S288        | SN54S288/SN74S288              | 8889              |                          | SN5401/SN7401                  |
| 82S124            | SN54S387/SN74S387        | SN54S387/SN74S387              | 8890              | SN5404/SN7404            | SN5404/SN7404                  |
| 82S126            | SN54S387/SN74S387        | SN54S387/SN74S387              | 8891              | SN5405/SN7405            | SN5405/SN7405                  |
| 82S129            | SN54S287/SN74S287        | SN54S287/SN74S287              |                   |                          |                                |
| 82S130            | SN54170/SN74170          | SN54170/SN74170                |                   |                          |                                |

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