

## RadHard MSI Logic SMD Cross Reference

1/22/99

| Description                                   | UTMC        |            | Harris      |            | National    |            |
|---|-------------|------------|-------------|------------|-------------|------------|
|   | Part Number | SMD Number | Part Number | SMD Number | Part Number | SMD Number |
| Quadruple 2-Input NAND Gates                  | UT54ACS00   | 5962-96512 | HCS00MS     | 5962-95724 | 54AC00      | 5962-87549 |
|   | UT54ACTS00  | 5962-96513 | HCTS00MS    | 5962-95637 | 54ACT00     | 5962-87699 |
| Quadruple 2-Input NOR Gates                   | UT54ACS02   | 5962-96514 | HCS02MS     | 5962-95679 | 54AC02      | 5962-87612 |
|   | UT54ACTS02  | 5962-96515 | HCTS02MS    | 5962-95682 |             |            |
| Hex Inverters                                 | UT54ACS04   | 5962-96516 | HCS04MS     | 5962-95725 | 54AC04      | 5962-87609 |
|   | UT54ACTS04  | 5962-96517 | HCTS04MS    | 5962-95732 |             |            |
| Quadruple 2-Input AND Gates                   | UT54ACS08   | 5962-96518 | HCS08MS     | 5962-95680 | 54AC08      | 5962-87615 |
|   | UT54ACTS08  | 5962-96519 | HCTS08MS    | 5962-95683 |             |            |
| Triple 3-Input NAND Gates                     | UT54ACS10   | 5962-96520 | HCS10MS     | 5962-95777 | 54AC10      | 5962-87610 |
|   | UT54ACTS10  | 5962-96521 | HCTS10MS    | 5962-95765 |             |            |
| Triple 3-Input AND Gates                      | UT54ACS11   | 5962-96522 | HCS11MS     | 5962-95720 | 54AC11      | 5962-87611 |
|   | UT54ACTS11  | 5962-96523 | HCTS11MS    | 5962-95721 |             |            |
| Hex Inverter Schmit Trigger                   | UT54ACS14   | 5962-96524 | HCS14MS     | 5962-95681 | 54AC14      | 5962-87624 |
|   | UT54ACTS14  | 5962-96525 | HCTS14MS    | 5962-95719 |             |            |
| Dual 4-Input NAND Gates                       | UT54ACS20   | 5962-96526 | HCS20MS     | 5962-95778 | 54AC20      | 5962-87613 |
|   | UT54ACTS20  | 5962-96527 | HCTS20MS    | 5962-95733 |             |            |
| Triple 3-Input NOR Gates                      | UT54ACS27   | 5962-96528 | HCS27MS     | 5962-95780 |             |            |
|   | UT54ACTS27  | 5962-96529 | HCTS27MS    | 5962-95734 |             |            |
| Hex Noninverting Buffers                      | UT54ACS34   | 5962-96530 |             |            |             |            |
|   | UT54ACTS34  | 5962-96531 |             |            |             |            |
| 4-Wide AND-OR-INVERT Gates                    | UT54ACS54   | 5962-96532 |             |            |             |            |
|   | UT54ACTS54  | 5962-96533 |             |            |             |            |
| Dual D Flip-Flops with Clear & Preset         | UT54ACS74   | 5962-96534 | HCS74MS     | 5962-95782 | 54AC74      | 5962-88520 |
|   | UT54ACTS74  | 5962-96535 | HCTS74MS    | 5962-95763 | 54ACT74     | 5962-87525 |
| 4-Bit Comparators                             | UT54ACS85   | 5962-96536 |             |            |             |            |
|   | UT54ACTS85  | 5962-96537 | HCTS85MS    | 5962-95768 |             |            |
| Quadruple 2-Input Exclusive OR Gates          | UT54ACS86   | 5962-96538 | HCS86MS     | 5962-95783 | 54AC86      | 5962-89550 |
|   | UT54ACTS86  | 5962-96539 | HCTS86MS    | 5962-95763 |             |            |
| Dual J-K Flip-Flops                           | UT54ACS109  | 5962-96540 | HCS109MS    | 5962-95784 | 54AC109     | 5962-89551 |
|   | UT54ACTS109 | 5962-96541 | HCTS109MS   | 5962-95769 | 54ACT109    | 5962-88534 |
| Quadruple 2-Input NAND Schmitt Triggers       | UT54ACS132  | 5962-96542 | HCS132MS    | 5962-95726 |             |            |
|   | UT54ACTS132 | 5962-96543 | HCTS132MS   | 5962-95739 |             |            |
| 3-Line to 8-Line Decoders/Demultiplexers      | UT54ACS138  | 5962-96544 | HCS138MS    | 5962-95727 | 54AC138     | 5962-87622 |
|   | UT54ACTS138 | 5962-96545 | HCTS138MS   | 5962-95740 | 54ACT138    | 5962-87554 |
| Dual 2-Line to 4-Line Decoders/Demultiplexers | UT54ACS139  | 5962-96546 | HCS139MS    | 5962-95804 | 54AC139     | 5962-87623 |

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|  | Part Number | SMD Number | Part Number | SMD Number | Part Number | SMD Number |
| 1 of 8 Data Selectors/Multiplexers                           | UT54ACTS139 | 5962-96547 | HCST139MS   | 5962-95753 | 54ACT139    | 5962-87553 |
|  | UT54ACS151  | 5962-96548 | HCS151      | 5962-95728 | 54AC151     | 5962-87691 |
|  | UT54ACTS151 | 5962-96549 |             |            | 54ACT151    | 5962-88756 |
| Dual 4-Input Multiplexer w/Three-State Outputs               | UT54ACS153  | 5962-96550 |             |            | 54AC153     | 5962-87625 |
|  | UT54ACTS153 | 5962-96551 | HCTS153MS   | 5962-95754 | 54ACT153    | 5962-87698 |
| Quadruple 2 to 1 Multiplexers                                | UT54ACS157  | 5962-96552 | HCS157MS    | 5962-95805 | 54AC157     | 5962-89539 |
|  | UT54ACTS157 | 5962-96553 | HCTS157MS   | 5962-95755 | 54ACT157    | 5962-89539 |
| 4-Bit Synchronous Counters                                   | UT54ACS163  | 5962-96554 | HCS163MS    | 5962-95807 | 54AC163     | 5962-89582 |
|  | UT54ACTS163 | 5962-96555 | HCTS163MS   | 5962-95743 | 54ACT163    | 5962-91723 |
| 8-Bit Shift Registers  | UT54ACS164  | 5962-96556 | HCS164MS    | 5962-95785 |             |            |
|  | UT54ACTS164 | 5962-96557 | HCTS164MS   | 5962-95663 |             |            |
| 8-Bit Parallel Shift Registers                               | UT54ACS165  | 5962-96558 | HCS165MS    | 5962-95786 |             |            |
|  | UT54ACTS165 | 5962-96559 |             |            |             |            |
| 4-Bit Up-Down Binary Counters                                | UT54ACS169  | 5962-96560 |             |            | 54AC169     | 5962-91603 |
|  | UT54ACTS169 | 5962-96561 |             |            | 54ACT169    | 883        |
| Synchronous 4-Bit Up-Down BCD Counters                       | UT54ACS190  | 5962-96562 | HCS190MS    | 5962-95808 |             |            |
|  | UT54ACTS190 | 5962-96563 | HCTS190MS   | 5962-95771 |             |            |
| Synchronous 4-Bit Up-Down Binary Counters                    | UT54ACS191  | 5962-96564 |             |            | 54AC191     | 5962-89749 |
|  | UT54ACTS191 | 5962-96565 | HCTS191MS   | 5962-95756 |             |            |
| Synchronous 4-Bit Up-Down Clock                              | UT54ACS193  | 5962-96566 | HCS193MS    | 5962-95788 |             |            |
|  | UT54ACTS193 | 5962-96567 | HCTS193MS   | 5962-95757 |             |            |
| Clock & Wait-State Generation Circuit                        | UT54ACTS220 | 5962-96753 |             |            |             |            |
| Octal Buffers w/Inverted Three-State Outputs                 | UT54ACS240  | 5962-96568 | HCS240MS    | 5962-95809 | 54AC240     | 5962-87550 |
|  | UT54ACTS240 | 5962-96569 | HCTS240MS   | 5962-95772 | 54ACT240    | 5962-87759 |
| Octal Buffers & Line Drivers, Three-State Outputs            | UT54ACS244  | 5962-96570 | HCS244MS    | 5962-95731 | 54AC244     | 5962-87552 |
|  | UT54ACTS244 | 5962-96571 | HCTS244MS   | 5962-95744 | 54ACT244    | 5962-87760 |
| Schmitt Trigger Octal Bus Transceivers w/Three-State Outputs | UT54ACS245S | 5962-96572 |             |            |             |            |
| Octal Bus Transceivers w/Three-State Outputs                 | UT54ACS245  | 5962-96572 | HCS245MS    | 5962-96797 | 54AC245     | 5962-87758 |
|  | UT54ACTS245 | 5962-96573 | HCTS245MS   | 5962-95745 | 54ACT245    | 5962-87663 |
| Dual 4-Input Multiplexers                                    | UT54ACS253  | 5962-96574 | HCS253MS    | 5962-95790 | 54AC253     | 5962-87693 |
|  | UT54ACTS253 | 5962-96575 |             |            | 54ACT253    | 5962-87761 |
| Look-Ahead Carry Generators for Counters                     | UT54ACS264  | 5962-96576 |             |            |             |            |
|  | UT54ACTS264 | 5962-96577 |             |            |             |            |
| Octal D Flip-Flops w/Clear                                   | UT54ACS273  | 5962-96578 | HCS273MS    | 5962-95791 | 54AC273     | 5962-87756 |
|  | UT54ACTS273 | 5962-96579 | HCTS273MS   | 5962-95764 |             |            |

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|   | Part Number  | SMD Number | Part Number | SMD Number | Part Number | SMD Number |
| Quadruple S-R Latches                           | UT54ACS279   | 5962-96580 |             |            |             |            |
|   | UT54ACTS279  | 5962-96581 |             |            |             |            |
| 9-Bit Parity Generators/Checkers                | UT54ACS280   | 5962-96582 |             |            | 54AC280     | 5962-92201 |
|   | UT54ACTS280  | 5962-96583 |             |            |             |            |
| 4-Bit Binary Full Adders                        | UT54ACS283   | 5962-96584 | HCS283MS    | 5962-95811 |             |            |
|   | UT54ACTS283  | 5962-96585 | HCTS283MS   | 5962-95774 | 54ACT283    | 5962-883   |
| Hex Buffer/Line Driver w/Three-State Outputs    | UT54ACS365   | 5962-96586 |             |            |             |            |
|   | UT54ACTS365  | 5962-96587 | HCTS365MS   | 5962-95775 |             |            |
| Octal Transparent Latches w/Three-State Outputs | UT54ACS373   | 5962-96588 | HCS373MS    | 5962-95792 | 54AC373     | 5962-87555 |
|   | UT54ACTS373  | 5962-96589 | HCTS373MS   | 5962-95747 | 54ACT373    | 5962-87556 |
| Octal D Flip-Flops w/Three-State Outputs        | UT54ACS374   | 5962-96590 | HCS374MS    | 5962-95793 | 54AC374     | 5962-87694 |
|   | UT54ACTS374  | 5962-96591 | HCTS374MS   | 5962-95748 | 54ACT374    | 5962-87631 |
| Octal Driver, w/Inverted Three-State Outputs    | UT54ACS540   | 5962-96592 |             |            | 54AC540     | 5962-87695 |
|   | UT54ACTS540  | 5964-96593 | HCTS540MS   | 5962-95776 |             |            |
| Octal Driver, w/Three-State Outputs             | UT54ACS541   | 5964-96594 |             |            | 54AC541     | 5962-88706 |
|   | UT54ACTS541  | 5964-96595 | HCTS541MS   | 5962-96726 |             |            |
| Dual 4-Input NOR Gate                           | UT54ACS4002  | 5962-96596 |             |            |             |            |
|   | UT54ACTS4002 | 5962-96597 | HCTS4002MS  | 5962-95760 |             |            |