3.0 ORDERING INFORMATION
RadHard MSI - 14-Lead Packages: Military Temperature Range
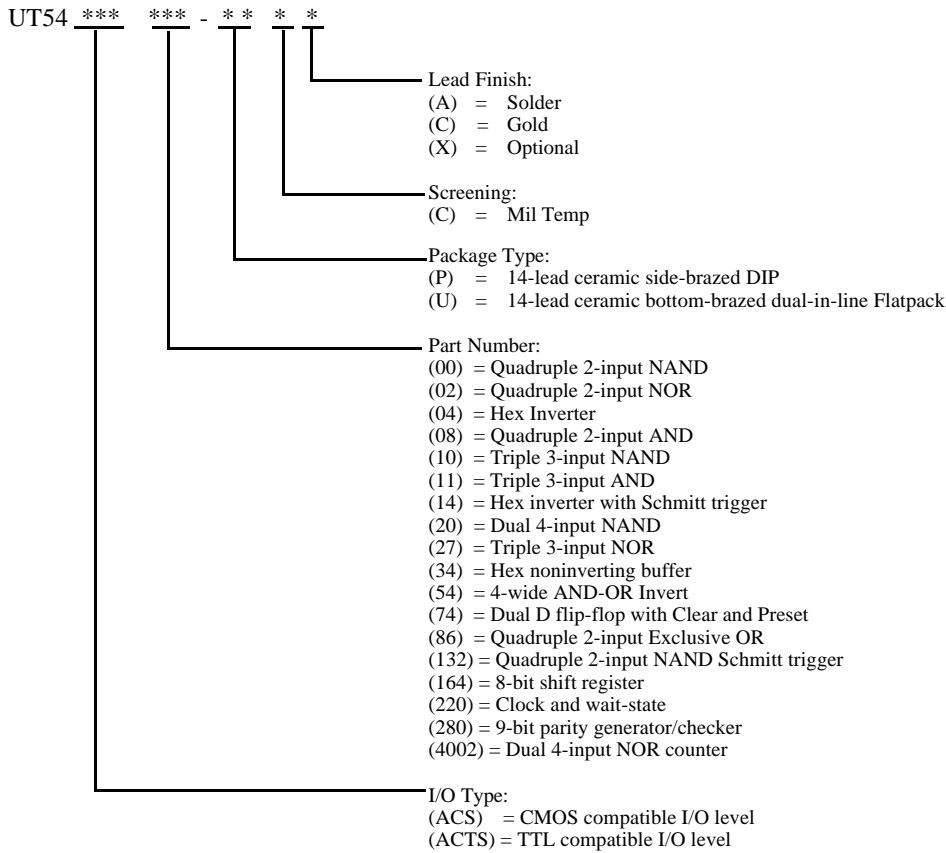
UT54 <u>***</u> <u>***</u> - <u>*</u> <u>*</u> <u>*</u> <u>*</u>

Lead Finish:
(A) = Solder
(C) = Gold
(X) = Optional

Screening:
(C) = Mil Temp

Package Type:
(P) = 14-lead ceramic side-brazed DIP
(U) = 14-lead ceramic bottom-brazed dual-in-line Flatpack

Part Number:
(00) = Quadruple 2-input NAND
(02) = Quadruple 2-input NOR
(04) = Hex Inverter
(08) = Quadruple 2-input AND
(10) = Triple 3-input NAND
(11) = Triple 3-input AND
(14) = Hex inverter with Schmitt trigger
(20) = Dual 4-input NAND
(27) = Triple 3-input NOR
(34) = Hex noninverting buffer
(54) = 4-wide AND-OR Invert
(74) = Dual D flip-flop with Clear and Preset
(86) = Quadruple 2-input Exclusive OR
(132) = Quadruple 2-input NAND Schmitt trigger
(164) = 8-bit shift register
(220) = Clock and wait-state
(280) = 9-bit parity generator/checker
(4002) = Dual 4-input NOR counter

I/O Type:
(ACS)   = CMOS compatible I/O level
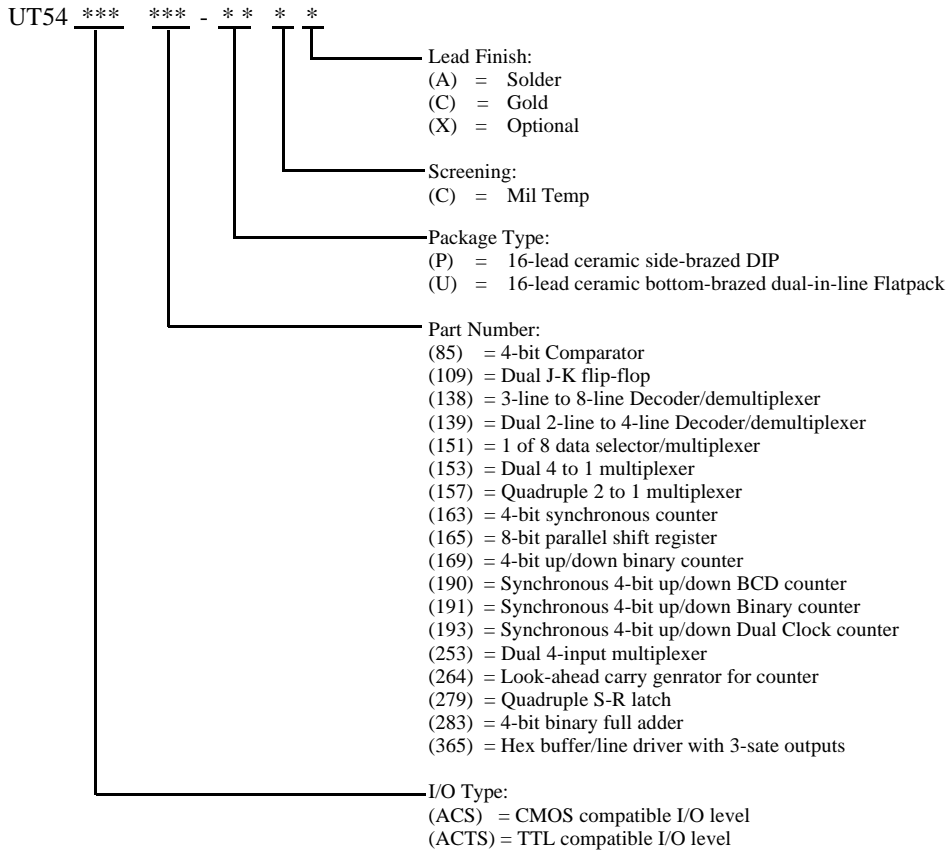(ACTS) = TTL compatible I/O level

Notes:
1. Lead finish (A,C, or X) must be specified.
2. If an "X" is specified when ordering, then the part marking will match the lead finish and will be either "A" (solder) or "C" (gold).
3. Total dose must be specified (Not available without radiation hardening).
4. Military Temperature Range flow per UTMC Manufacturing Flows Document. Devices have 48 hours of burn-in and are tested at -55C, room temperature, and 125C. Radiation characteristics are neither tested nor guaranteed and may not be specified.

ORDERING INFORMATION
RadHard MSI - 16-Lead Packages: Military Temperature Range

UT54 `***` `***` - `**` `*` `*`

Lead Finish:
(A) = Solder
(C) = Gold
(X) = Optional

Screening:
(C) = Mil Temp

Package Type:
(P) = 16-lead ceramic side-brazed DIP
(U) = 16-lead ceramic bottom-brazed dual-in-line Flatpack

Part Number:
(85) = 4-bit Comparator
(109) = Dual J-K flip-flop
(138) = 3-line to 8-line Decoder/demultiplexer
(139) = Dual 2-line to 4-line Decoder/demultiplexer
(151) = 1 of 8 data selector/multiplexer
(153) = Dual 4 to 1 multiplexer
(157) = Quadruple 2 to 1 multiplexer
(163) = 4-bit synchronous counter
(165) = 8-bit parallel shift register
(169) = 4-bit up/down binary counter
(190) = Synchronous 4-bit up/down BCD counter
(191) = Synchronous 4-bit up/down Binary counter
(193) = Synchronous 4-bit up/down Dual Clock counter
(253) = Dual 4-input multiplexer
(264) = Look-ahead carry genrator for counter
(279) = Quadruple S-R latch
(283) = 4-bit binary full adder
(365) = Hex buffer/line driver with 3-sate outputs

I/O Type:
(ACS) = CMOS compatible I/O level
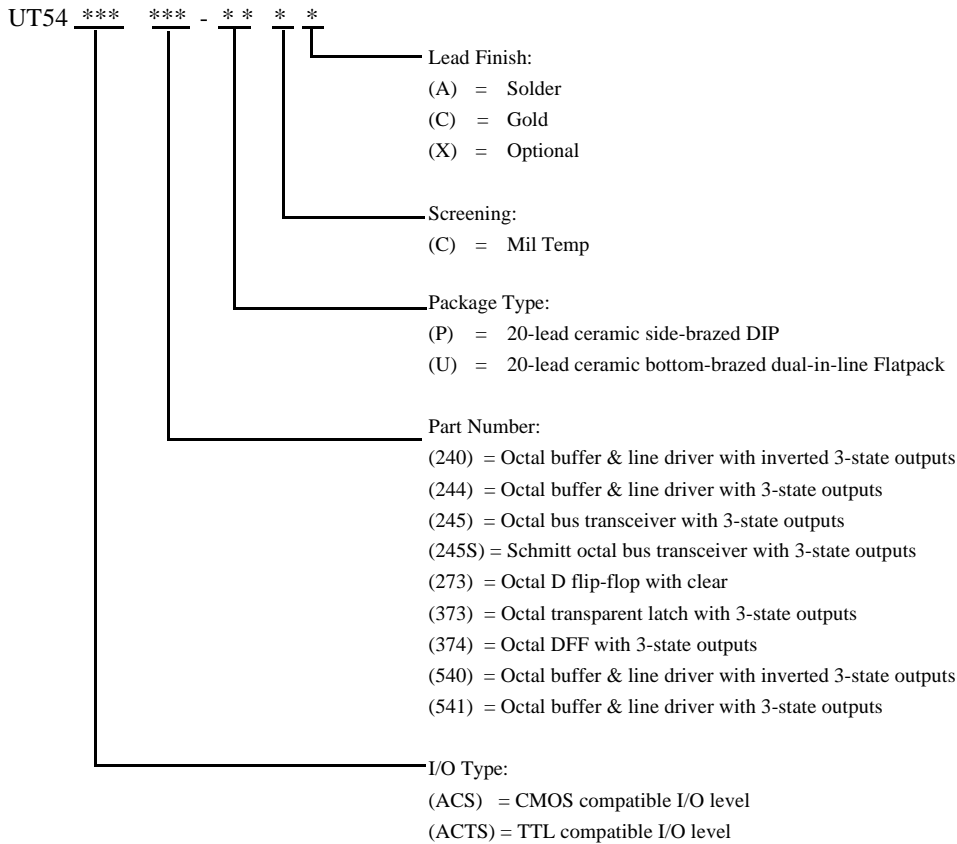(ACTS) = TTL compatible I/O level

Notes:
1. Lead finish (A,C, or X) must be specified.
2. If an "X" is specified when ordering, then the part marking will match the lead finish and will be either "A" (solder) or "C" (gold).
3. Total dose must be specified (Not available without radiation hardening).
4. Military Temperature Range flow per UTMC Manufacturing Flows Document. Devices have 48 hours of burn-in and are tested at -55C, room temperature, and 125C. Radiation characteristics are neither tested nor guaranteed and may not be specified.

ORDERING INFORMATION
RadHard MSI - 20-Lead Packages: Military Temperature Range

UT54 __***_ _***_ - _** _* _*

Lead Finish:

(A) = Solder

(C) = Gold

(X) = Optional

Screening:

(C) = Mil Temp

Package Type:

(P) = 20-lead ceramic side-brazed DIP

(U) = 20-lead ceramic bottom-brazed dual-in-line Flatpack

Part Number:

(240) = Octal buffer & line driver with inverted 3-state outputs

(244) = Octal buffer & line driver with 3-state outputs

(245) = Octal bus transceiver with 3-state outputs

(245S) = Schmitt octal bus transceiver with 3-state outputs

(273) = Octal D flip-flop with clear

(373) = Octal transparent latch with 3-state outputs

(374) = Octal DFF with 3-state outputs

(540) = Octal buffer & line driver with inverted 3-state outputs

(541) = Octal buffer & line driver with 3-state outputs

I/O Type:

(ACS)   = CMOS compatible I/O level
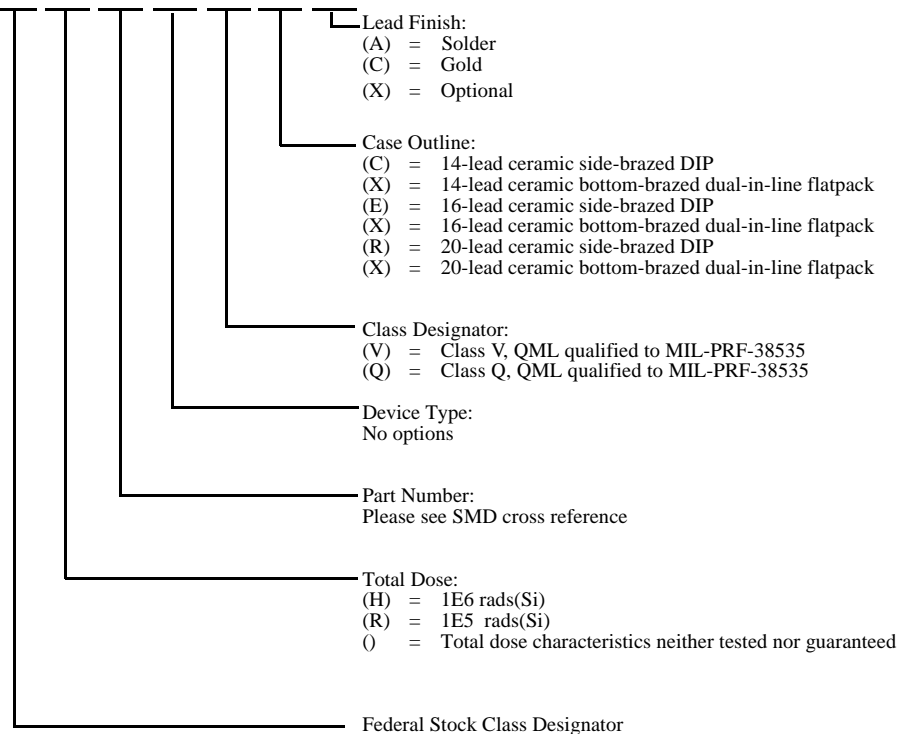
(ACTS) = TTL compatible I/O level

Notes:
1. Lead finish (A,C, or X) must be specified.
2. If an "X" is specified when ordering, then the part marking will match the lead finish and will be either "A" (solder) or "C" (gold).
3. Total dose must be specified (Not available without radiation hardening).
4. Military Temperature Range flow per UTMC Manufacturing Flows Document. Devices have 48 hours of burn-in and are tested at -55C, room temperature, and 125C. Radiation characteristics are neither tested nor guaranteed and may not be specified.

RadHard MSI Logic

Rad-Hard MSI: SMD, Class Q & Class V

```
5962    *  *****  01  *    *    *
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Lead Finish:
(A) = Solder
(C) = Gold
(X) = Optional

Case Outline:
(C) = 14-lead ceramic side-brazed DIP
(X) = 14-lead ceramic bottom-brazed dual-in-line flatpack
(E) = 16-lead ceramic side-brazed DIP
(X) = 16-lead ceramic bottom-brazed dual-in-line flatpack
(R) = 20-lead ceramic side-brazed DIP
(X) = 20-lead ceramic bottom-brazed dual-in-line flatpack

Class Designator:
(V) = Class V, QML qualified to MIL-PRF-38535
(Q) = Class Q, QML qualified to MIL-PRF-38535

Device Type:
No options

Part Number:
Please see SMD cross reference

Total Dose:
(H) = 1E6 rads(Si)
(R) = 1E5 rads(Si)
() = Total dose characteristics neither tested nor guaranteed

Federal Stock Class Designator

Notes:
1. Lead finish (A, C, or X) must be specified.
2. If an "X" is specified when ordering, part marking will match the lead finish and will be either "A" (solder) or "C" (gold).