PACKAGING INFORMATION

Orderable part number	Status (1)	Material type (2)	Package | Pins	Package qty | Carrier	RoHS (3)	Lead finish/ Ball material (4)	MSL rating/ Peak reflow (5)	Op temp (°C)	Part marking (6)
ULN2002AN	Active	Production	PDIP (N) | 16	25 | TUBE	Yes	NIPDAU	N/A for Pkg Type	-20 to 70	ULN2002AN
ULN2002AN.A	Active	Production	PDIP (N) | 16	25 | TUBE	Yes	NIPDAU	N/A for Pkg Type	-20 to 70	ULN2002AN
ULN2002ANE4	Active	Production	PDIP (N) | 16	25 | TUBE	Yes	NIPDAU	N/A for Pkg Type	-20 to 70	ULN2002AN
ULN2003ADR	Active	Production	SOIC (D) | 16	2500 | LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 70	ULN2003A
ULN2003ADR.A	Active	Production	SOIC (D) | 16	2500 | LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 70	ULN2003A
ULN2003ADRG3	Obsolete	Production	SOIC (D) | 16	-	-	Call TI	Call TI	-40 to 70	ULN2003A
ULN2003ADYYR	Active	Production	SOT-23-THIN (DYY) | 16	3000 | LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 70	UN2003A
ULN2003ADYYR.A	Active	Production	SOT-23-THIN (DYY) | 16	3000 | LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 70	UN2003A
ULN2003AID	Obsolete	Production	SOIC (D) | 16	-	-	Call TI	Call TI	-40 to 105	ULN2003AI
ULN2003AIDR	Active	Production	SOIC (D) | 16	2500 | LARGE T&R	Yes	NIPDAU | SN	Level-1-260C-UNLIM	-40 to 105	ULN2003AI
ULN2003AIDR.A	Active	Production	SOIC (D) | 16	2500 | LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 105	ULN2003AI
ULN2003AIDRG4	Obsolete	Production	SOIC (D) | 16	-	-	Call TI	Call TI	-40 to 105	ULN2003AI
ULN2003AIN	Obsolete	Production	PDIP (N) | 16	-	-	Call TI	Call TI	-40 to 105	ULN2003AIN
ULN2003AINSR	Active	Production	SOP (NS) | 16	2000 | LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 105	ULN2003AI
ULN2003AINSR.A	Active	Production	SOP (NS) | 16	2000 | LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 105	ULN2003AI
ULN2003AIPW	Obsolete	Production	TSSOP (PW) | 16	-	-	Call TI	Call TI	-40 to 105	UN2003AI
ULN2003AIPWR	Active	Production	TSSOP (PW) | 16	2000 | LARGE T&R	Yes	NIPDAU | SN	Level-1-260C-UNLIM	-40 to 105	(U2003AI, UN2003AI)
ULN2003AIPWR.A	Active	Production	TSSOP (PW) | 16	2000 | LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 105	(U2003AI, UN2003AI)
ULN2003AIPWRG4	Obsolete	Production	TSSOP (PW) | 16	-	-	Call TI	Call TI	-40 to 105	UN2003AI
ULN2003AN	Active	Production	PDIP (N) | 16	25 | TUBE	Yes	NIPDAU | SN	N/A for Pkg Type	-40 to 70	ULN2003AN
ULN2003AN.A	Active	Production	PDIP (N) | 16	25 | TUBE	Yes	NIPDAU	N/A for Pkg Type	-40 to 70	ULN2003AN
ULN2003ANS	Obsolete	Production	SOP (NS) | 16	-	-	Call TI	Call TI	-40 to 70	ULN2003A
ULN2003ANSR	Active	Production	SOP (NS) | 16	2000 | LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 70	ULN2003A
ULN2003ANSR.A	Active	Production	SOP (NS) | 16	2000 | LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 70	ULN2003A
ULN2003ANSRE4	Active	Production	SOP (NS) | 16	2000 | LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 70	ULN2003A
ULN2003ANSRG4	Active	Production	SOP (NS) | 16	2000 | LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 70	ULN2003A

Orderable part number	Status (1)	Material type (2)	Package | Pins	Package qty | Carrier	RoHS (3)	Lead finish/ Ball material (4)	MSL rating/ Peak reflow (5)	Op temp (°C)	Part marking (6)
ULN2003APW	Obsolete	Production	TSSOP (PW) | 16	-	-	Call TI	Call TI	-40 to 70	UN2003A
ULN2003APWR	Active	Production	TSSOP (PW) | 16	2000 | LARGE T&R	Yes	NIPDAU | SN	Level-1-260C-UNLIM	-40 to 70	UN2003A
ULN2003APWR.A	Active	Production	TSSOP (PW) | 16	2000 | LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 70	UN2003A
ULN2003APWRG4	Obsolete	Production	TSSOP (PW) | 16	-	-	Call TI	Call TI	-40 to 70	UN2003A
ULN2004AD	Obsolete	Production	SOIC (D) | 16	-	-	Call TI	Call TI	-20 to 70	ULN2004A
ULN2004ADR	Active	Production	SOIC (D) | 16	2500 | LARGE T&R	Yes	NIPDAU | SN	Level-1-260C-UNLIM	-20 to 70	ULN2004A
ULN2004ADR.A	Active	Production	SOIC (D) | 16	2500 | LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-20 to 70	ULN2004A
ULN2004ADRG4	Obsolete	Production	SOIC (D) | 16	-	-	Call TI	Call TI	-20 to 70	ULN2004A
ULN2004ADYYR	Active	Production	SOT-23-THIN (DYY) | 16	3000 | LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 70	UN2004A
ULN2004ADYYR.A	Active	Production	SOT-23-THIN (DYY) | 16	3000 | LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 70	UN2004A
ULN2004AN	Active	Production	PDIP (N) | 16	25 | TUBE	Yes	NIPDAU	N/A for Pkg Type	-20 to 70	ULN2004AN
ULN2004AN.A	Active	Production	PDIP (N) | 16	25 | TUBE	Yes	NIPDAU	N/A for Pkg Type	-20 to 70	ULN2004AN
ULN2004ANE4	Active	Production	PDIP (N) | 16	25 | TUBE	Yes	NIPDAU	N/A for Pkg Type	-20 to 70	ULN2004AN
ULN2004ANSR	Active	Production	SOP (NS) | 16	2000 | LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-20 to 70	ULN2004A
ULN2004ANSR.A	Active	Production	SOP (NS) | 16	2000 | LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-20 to 70	ULN2004A
ULQ2003AD	Obsolete	Production	SOIC (D) | 16	-	-	Call TI	Call TI	-40 to 85	ULQ2003A
ULQ2003ADG4	Obsolete	Production	SOIC (D) | 16	-	-	Call TI	Call TI	-	ULQ2003A
ULQ2003AN	Active	Production	PDIP (N) | 16	25 | TUBE	Yes	NIPDAU	N/A for Pkg Type	-40 to 85	ULQ2003A
ULQ2003AN.A	Active	Production	PDIP (N) | 16	25 | TUBE	Yes	NIPDAU	N/A for Pkg Type	-40 to 85	ULQ2003A
ULQ2004AD	Active	Production	SOIC (D) | 16	40 | TUBE	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 85	ULQ2004A
ULQ2004AD.A	Active	Production	SOIC (D) | 16	40 | TUBE	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 85	ULQ2004A
ULQ2004ADG4	Active	Production	SOIC (D) | 16	40 | TUBE	Yes	NIPDAU	Level-1-260C-UNLIM	-	ULQ2004A
ULQ2004ADG4.A	Active	Production	SOIC (D) | 16	40 | TUBE	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 85	ULQ2004A
ULQ2004ADR	Active	Production	SOIC (D) | 16	2500 | LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 85	ULQ2004A
ULQ2004ADR.A	Active	Production	SOIC (D) | 16	2500 | LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 85	ULQ2004A
ULQ2004ADRG4	Active	Production	SOIC (D) | 16	2500 | LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-	ULQ2004A
ULQ2004ADRG4.A	Active	Production	SOIC (D) | 16	2500 | LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 85	ULQ2004A
ULQ2004AN	Active	Production	PDIP (N) | 16	25 | TUBE	Yes	NIPDAU	N/A for Pkg Type	-40 to 85	ULQ2004AN
ULQ2004AN.A	Active	Production	PDIP (N) | 16	25 | TUBE	Yes	NIPDAU	N/A for Pkg Type	-40 to 85	ULQ2004AN

(1) **Status:** For more details on status, see our product life cycle.

(2) **Material type:** When designated, preproduction parts are prototypes/experimental devices, and are not yet approved or released for full production. Testing and final process, including without limitation quality assurance, reliability performance testing, and/or process qualification, may not yet be complete, and this item is subject to further changes or possible discontinuation. If available for ordering, purchases will be subject to an additional waiver at checkout, and are intended for early internal evaluation purposes only. These items are sold without warranties of any kind.

(3) **RoHS values:** Yes, No, RoHS Exempt. See the TI RoHS Statement for additional information and value definition.

(4) **Lead finish/Ball material:** Parts may have multiple material finish options. Finish options are separated by a vertical ruled line. Lead finish/Ball material values may wrap to two lines if the finish value exceeds the maximum column width.

(5) **MSL rating/Peak reflow:** The moisture sensitivity level ratings and peak solder (reflow) temperatures. In the event that a part has multiple moisture sensitivity ratings, only the lowest level per JEDEC standards is shown. Refer to the shipping label for the actual reflow temperature that will be used to mount the part to the printed circuit board.

(6) **Part marking:** There may be an additional marking, which relates to the logo, the lot trace code information, or the environmental category of the part.

Multiple part markings will be inside parentheses. Only one part marking contained in parentheses and separated by a "~" will appear on a part. If a line is indented then it is a continuation of the previous line and the two combined represent the entire part marking for that device.

OTHER QUALIFIED VERSIONS OF ULQ2003A, ULQ2004A :

- Automotive : ULQ2003A-Q1, ULQ2004A-Q1

NOTE: Qualified Version Definitions:

- Automotive - Q100 devices qualified for high-reliability automotive applications targeting zero defects