

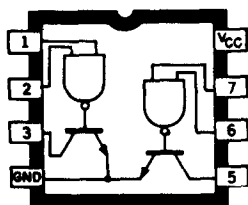
SERIES 3600 LAMP and POWER DRIVERS

These 'mini-DIP' dual peripheral and power drivers are bipolar monolithic integrated circuits incorporating AND, NAND, OR, or NOR logic gates, high-current switching transistors, and transient suppression diodes on the same chip. The two output transistors are capable of simultaneously sinking 300 mA continuously. In the OFF state, these drivers will sustain at least 80 V.

FEATURES

- Four Logic Types
- DTL/TTL/PMOS/CMOS Compatible Inputs
- Low Input Current
- 300 mA Continuous Output Current
- Sustaining Voltage of 80 V
- Hermetically-Sealed Package to MIL-M-38510
- High-Reliability Screening to MIL-STD-883, Class B
- Operating Temperature Range:
 - 0°C to +70°C (UDN series)
 - 55°C to +125°C (UDS series)
- Plastic Package (8-pin) Dual In-Line M
- Hermetic Package (8-pin) Dual In-Line H

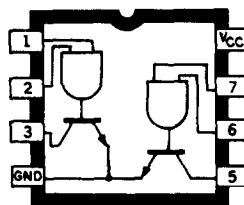
DUAL AND DRIVER



DWG. NO. A-9792

UDN-3611M
UDN-3611H
UDS-3611H
UDS-3611H MIL

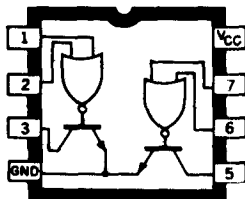
DUAL NAND DRIVER



DWG. NO. A-9793

UDN-3612M
UDN-3612H
UDS-3612H
UDS-3612H MIL

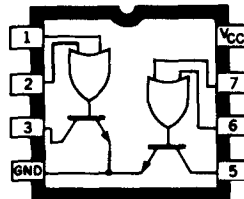
DUAL OR DRIVER



DWG. NO. A-9795

UDN-3613M
UDN-3613H
UDS-3613H
UDS-3613H MIL

DUAL NOR DRIVER



DWG. NO. A-9794

UDN-3614M
UDN-3614H
UDS-3614H
UDS-3614H MIL

Alpha-Numeric CROSS-REFERENCE to SPRAGUE Integrated Circuits

To Replace	Use Sprague Type	To Replace	Use Sprague Type	To Replace	Use Sprague Type	To Replace	Use Sprague Type
SN75474P	UDN3614M	SN76642N	ULN2113A	TL1741C	ULN2151D	732DC	ULN2120A
SN76104N	ULN2120A	SN76643N	ULN2111A	TL7401N	US8881A	741-93-5B	ULN2151D
SN76105N	ULN2122A	SN76665N	ULN2165A	TL7437N	US7437A	741CE	ULN2151D
SN76111N	ULN2121A	SN76669N	ULN2136A	TL7438N	US7438A	741HC	ULN2151D
SN76113N	ULN2128A	SN76675N	ULN2129A	UA741CT	ULN2151D	741TC	ULN2151M
SN76115N	ULN2110A	SN76678P	ULN2209M	UA741CV	ULN2151M	746DC	ULN2114A
SN76116N	ULN2244A	SN76688ND	ULN2211P	UA741EHC	ULN2151D	746HC	ULN2114K
SN76130N	ULN2126A	SN76689N	ULN2289A	UA741HC	ULN2151D	753TC	ULN2209M
SN76177ND	ULN2278P	SSS741BJ	ULN2151D	UA741TC	ULN2151M	758DC	ULN2244A
SN76226	ULN2216	SW7401N	US8881A	UA2136	ULN2136A	767DC	ULN2128A
SN76227	ULN2217	SW7437N	US7437A	UA3064	ULN2264A	767PC	ULN2128A
SN76228	ULN2218	SW7438N	US7438A	UA3065	ULN2165A	780DC	ULN2124A
SN76242N	ULN2124A	T2741WV	ULN2151D	UA3067	ULN2267A	781DC	ULN2127A
SN76243AN	ULN2127A	T7401B1	US8881A	UA3075	ULN2129A	7432DC	US7432A
SN76246N	ULN2114A	TBA221	ULN2151D	UA3089	ULN2289A	7432PC	US7432A
SN76246N	ULN2228A	TBA221B	ULN2151M	UC4741C	ULN2151D	7437DC	US7437A
SN76267N	ULN2267A	TBA221N	ULN2151D	UC4741CE	ULN2151M	7437PC	US7437A
SN76298N	ULN2298A	TBA331	ULN2046	XR1310	ULN2110A	7438DC	US7438A
SN76564N	ULN2264A	TBA341	ULN2054	705PC	ULN2278P	7438PC	US7438A
SN76635N	ULN2137A	TDA1200	ULN2289A	720DC	ULN2137A	7439DC	US7439A
				729DC	ULN2122A		

Original Source CROSS-REFERENCE to SPRAGUE Integrated Circuits

To Replace	Use Sprague Type	To Replace	Use Sprague Type	To Replace	Use Sprague Type	To Replace	Use Sprague Type
ADVANCED MICRO DEVICES INC		FAIRCHILD SEMICONDUCTOR Cont.		INTERSIL INC		MOTOROLA SEMI. PROD. INC. Cont.	
AM741HC	ULN2151D	CA3086	ULN2086A	ICB8008C	ULN2151D	MC1339P2	ULN2126A
AMSSS741CJ	ULN2151D	SN75451BP	UDN3611M	ICB8741C	ULN2151D	MC1356P	ULN2136A
AEG-TELEFUNKEN		SN75452BP	UDN3612M	ICL8008CPA	ULN2151M	MC1357P2	ULN2111A
TL1741C	ULN2151D	SN75453BP	UDN3613M	ICL8008CT Y	ULN2151D	MC1357PQ	ULN2111N
TL7401N	US8881A	SN75454BP	UDN3614M	741-93-5B	ULN2151D	MC1358P2	ULN2165A
TL7437N	US7437A	UA741EHC	ULN2151D	ITT SEMICONDUCTORS		MC1358PQ	ULN2165N
TL7438N	US7438A	UA741HC	ULN2151D	ITT505*	UHP482	MC1364P2	ULN2264A
		UA741TC	ULN2151M	ITT512	UHP491	MC1370P	ULN2124A
		UA2136	ULN2136A	ITT552	ULN2001A	MC1371P2	ULN2127A
		UA3064	ULN2264A	ITT554	ULN2002A	MC1375P	ULN2129A
				ITT556	ULN2003A	MC1389P	ULN2289A
ANALOG DEVICES INC				ITT3064	ULN2264A	MC1398P2	ULN2298A
AD502J	ULN2151D	UA3065	ULN2165A	ITT3065	ULN2165A	MC1439G	ULN2139D
AD502K	ULN2151D	UA3067	ULN2267A	ITT7401N	US8881A	MC1439P1	ULN2139M
AD512J	ULN2151D	UA3075	ULN2129A	ITT7438AN	US7438A	MC1741CG	ULN2151D
AD514J	ULN2151D	UA3089	ULN2289A	ITT7437N	US7437A		
AD514K	ULN2151D	705PC	ULN2278P	LITHIC SYSTEMS INC		MC1741CP1	ULN2151M
AD514L	ULN2151D			LA3045	ULS2045H	MC3003	US7432A
AD741CH	ULN2151D	720DC	ULN2137A	LA3046	ULN2046A	MC3491P*	UHP482
AD741CN	ULN2151M	729DC	ULN2122A	LA3086	ULN2086A	MC7437L	US7437A
AD741JN	ULN2151M	732DC	ULN2120A			MC7438L	US7438A
		741CE	ULN2151D	MICROPAC INDUSTRIES INC		MC75451P	UDN3611M
		741HC	ULN2151D			MC75452P	UDN3612M
AD741KH	ULN2151D					MC75453P	UDN3613M
AD741KN	ULN2151M					MC75454P	UDN3614M
AD741LH	ULN2151D					MPQ2221	TPQ2221
AD741LN	ULN2151M						
EXAR INTEGRATED SYSTEMS INC		741TC	ULN2151M			MPQ2222	TPQ2222
		746DC	ULN2114A			MPQ2483	TPQ2483
		746HC	ULN2114K			MPQ2484	TPQ2484
		753TC	ULN2209M			MPQ2906	TPQ2906
		758DC	ULN2244A			MPQ2907	TPQ2907
		767DC	ULN2128A			MPQ3725	TPQ3725
		767PC	ULN2128A			MPQ3725A	TPQ3725A
XR1310	ULN2110A	780DC	ULN2124A			MPQ3798	TPQ3798
FAIRCHILD SEMICONDUCTOR		781DC	ULN2127A			MPQ3799	TPQ3799
		7432DC	US7432A			MPQ3904	TPQ3904
		7432PC	US7432A			MPQ3906	TPQ3906
		7437DC	US7437A			MPQ6001	TPQ6001
CA3045	ULN2045H	7437PC	US7437A			MPQ6002	TPQ6002
CA3046	ULN2046A	7438DC	US7438A			MPQ6100	TPQ6100
CA3065	ULN2165A	7438PC	US7438A			MPQ6100A	TPQ6100A
CA3067	ULN2267A						
CA3075	ULN2129A	7439DC	US7439A			SN7401N	US8881A

*Indicates the Sprague suggested replacement is similar but not an exact pin-for-pin electrical replacement.

SPRAGUE

INTEGRATED CIRCUIT CROSS REFERENCE GUIDE O.E.M. TO SPRAGUE

Original Source CROSS-REFERENCE to SPRAGUE Integrated Circuits

To Replace	Use Sprague Type	To Replace	Use Sprague Type	To Replace	Use Sprague Type	To Replace	Use Sprague Type
NATIONAL SEMI. MICRO. DIV.		NUCLEONIC PRODUCTS CO. INC.		SGS-ATES		TEXAS INSTRUMENTS	
CA 3045 ULN2045H CA 3046 ULN2046A CA 3054 ULN2054A CA 3086 ULN2086A DM7401N US8881A		NC7401N US8881A SFC2046E ULN2046A SFC2054EC ULN2054A		TDA 1200 ULN2289A L141T1 ULN2151D T7401B1 US8881A		Cont.	
DM7427N US7427A DM7432N US7432A DM7437N US7437A DM7438N US7438A DS3611N UDN3611M		N V PHILIPS		SIEMENS		SN55462JP UDS3612H SN55463JP UDS3613H SN55464JP UDS3614H SN55471JP UDS3611H SN55472JP UDS3612H	
DS3612N UDN3612M DS3613N UDN3613M DS3614N UDN3614M DS7889N* UHP482 DS8885N* UHP481		TBA221B ULN2151M		TBA221 ULN2151D		SN55473JP UDS3613H SN55474JP UDS3614H SN75451BP UDN3611M SN75452BP UDN3612M SN75453BP UDN3613M	
DS8889N* UHP482 LM377 ULN2278P LM380 ULN2280B LM384 ULN2281B LM741CH ULN2151D		PLESSEY SEMICONDUCTORS		SIGNETICS CORP.		SN75454BP UDN3614M SN75461P UDN3611M SN75462P UDN3612M SN75463P UDN3613M SN75464P UDN3614M	
LM741CN ULN2151M LM746N ULN2114A LM1304N ULN2120A LM1304N-01 ULN2120N LM1305N ULN2122A		PRECISION MONOLITHICS INC.		N5065A ULN2165A N5070B ULN2124A N5071A ULN2127A N5072A ULN2114A N5111A ULN2111A		SN75471P UDN3611M SN75472P UDN3612M SN75473P UDN3613M SN75474P UDN3614M SN76104N ULN2120A	
LM1305N-01 ULN2122N LM1307N ULN2128A LM1307N-01 ULN2128N LM1310N ULN2110A LM1800 ULN2244A		DVR-01 UHP480 SSS741BJ ULN2151D		N7401A US8881A N7437A US7437A N7438A US7438A N8881A US8881A NE546A ULN2137A		SN76105N ULN2122A SN76111N ULN2121A SN76113N ULN2128A SN76115N ULN2110A SN76116N ULN2244A	
LM1820N ULN2137A LM1841N ULN2136A LM2111N ULN2111A LM2111N-01 ULN2111N LM2113N ULN2113A		RAYTHEON COMPANY		PA239 ULN2126A UA741CT ULN2151D UA741CV ULN2151M		SN76130N ULN2126A SN76177ND ULN2278P SN76226 ULN2216 SN76227 ULN2217 SN76228 ULN2218	
LM2113N-01 ULN2113N LM3045H ULN2045H LM3046N ULN2046A LM3054N ULN2054A LM3064N ULN2264A		RC741T ULN2151D		SILICON GENERAL INC.		SN76242N ULN2124A SN76243AN ULN2127A SN76246N ULN2114A SN76246N ULN2228A SN76267N ULN2267A	
LM3065N ULN2165A LM3065N-01 ULN2165N LM3067N ULN2267A LM3070N ULN2124A LM3071N ULN2127A		RCA CORP. SOLID STATE DIV.		SG741CM ULN2151M SG741SCM ULN2151M SG741SCT ULN2151D SG3081N ULN2081A SG3082N ULN2082A		SN76298N ULN2298A SN76564N ULN2264A SN76635N ULN2137A SN76642N ULN2113A SN76643N ULN2111A	
LM3075N ULN2129A LM3075N-01 ULN2129N LM3086N ULN2086A LM3611N UDN3611M LM3612N UDN3612M		CA 758E ULN2244A CA 1310E ULN2110A CA 1398E ULN2298A CA 2111AE ULN2111A CA 3014 ULN2113A		SG3086 ULN2086A SG3217J ULN2151D SG3821J ULN2045H SG3821N ULN2046A SG3822N ULN2054A		SN76665N ULN2165A SN76669N ULN2136A SN76675N ULN2129A SN76678P ULN2209M SN76688ND ULN2211P	
LM3613N UDN3613M LM3614N UDN3614M MC1304P ULN2120A MC1305P ULN2122A MC1307P ULN2128A		CA 3045 ULN2045H CA 3046 ULN2046A CA 3047 ULN2047 CA 3054 ULN2054A CA 3065 ULN2165A		SG3886N ULN2086A		SN76689N ULN2289A	
MC1310P ULN2210A		CA 3067 ULN2267A CA 3070 ULN2124A CA 3071 ULN2127A CA 3072 ULN2114A CA 3075 ULN2129A		SOLITRON DEVICES INC.		THOMSON CSF	
		CA 3081 ULN2081A CA 3082 ULN2082A CA 3083 ULN2083 CA 3086 ULN2086A CA 3089 ULN2289A		UC4741C ULN2151D UC4741CE ULN2151M		SFC2741C ULN2151D SFC2741DC ULN2151M	
		CA 3120E ULN2125A CA 3121 ULN2269A CA 3123E ULN2137A		STEWART-WARNER MICROCIRCUITS INC.		TRANSISTRON ELECTRONICS CORP.	
		R T C		SW7401N US8881A SW7437N US7437A SW7438N US7438A		T2741WV ULN2151D	
		TBA221B ULN2151M TBA221N ULN2151D		TEXAS INSTRUMENTS			
		SESCOSEM		SN7427N US7427A SN7437N US7437A SN7438N US7438A SN72741L ULN2151D SN72741P ULN2151M			
		TBA331 ULN2046 TBA341 ULN2054		SN55451B JP UDS3611H SN55452B JP UDS3612H SN55453B JP UDS3613H SN55454B JP UDS3614H SN55461JP UDS3611H			

*Indicates the Sprague suggested replacement is similar but not an exact pin-for-pin electrical replacement.

Although care has been taken in the preparation of this guide to insure its technical correctness, no responsibility is assumed by the Sprague World Trade Corp. for any consequences of the use of items listed.

Warranty is limited to replacement of defective parts only.

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