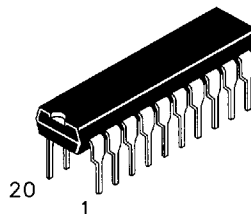


Octal Buffer, NINV (3-State); Octal Buffer, INV (3-State)

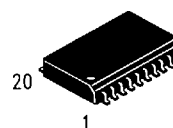
The DV74ALS465A and DV74ALS466A are octal three-state bus drivers designed for flexibility in implementing bus interface with memory, microprocessor, or communication systems. The three-state buffers are controlled by one common gate for all eight buffers. The buffers on the ALS 465A are non-inverting; the buffers on the ALS466A are inverting. The buffer outputs are maintained in a high impedance state during power supply ramp-up or ramp-down. This eliminates bus glitching problems that arise during power-up and power-down.

- **AVG's ALS has guaranteed DC and AC specification over full temperature and Vcc range**
- **Switching specifications at 50 pF**
- **AVG's ALS has the lowest speed power product (4pJ per gate typical) of all logic series**
- **Buffer Tristate during Power Up/Down**

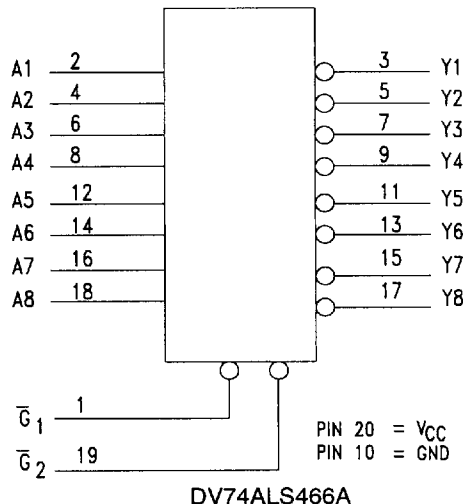
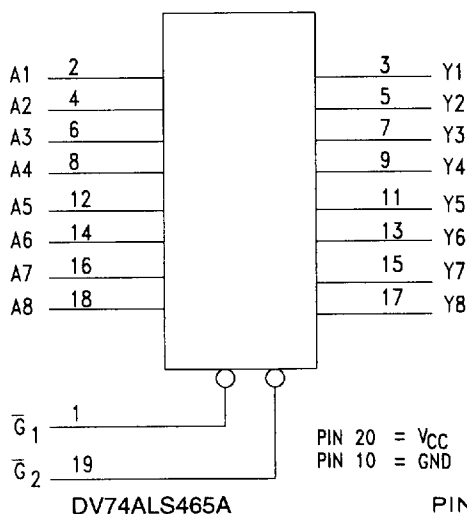
DV74ALS465A DV74ALS466A



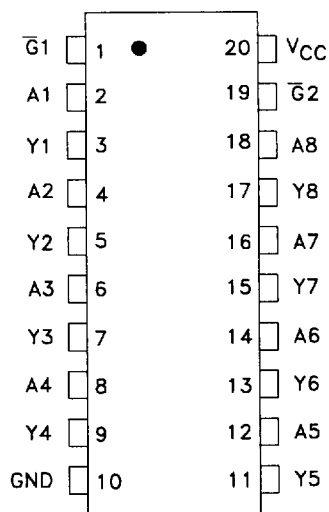
P Suffix
Plastic DIP
AVG-005 Case



D Suffix
Plastic SOP
AVG-006 Case



PIN ASSIGNMENT



INPUTS			OUTPUT	
G1	G2	A	'465	'466
H	X	X	Z	Z
X	H	X	Z	Z
L	L	L	L	H
L	L	H	H	L

H = High Logic Level
L = Low Logic Level
X = Don't Care
Z = High Impedance

ABSOLUTE MAXIMUM RATINGS

Maximum ratings are those values beyond which damage to the device may occur.

Symbol	Parameter	ALS465A-ALS466A	Unit
V _{CC}	Supply Voltage	+7.0	V
V _{IN}	Input Voltage	-0.5 to +7.0	V
V _{OUT}	Voltage Applied to Disabled Output	V _{CC}	V
T _{STG}	Storage Temperature Range	-65 to +150	°C

GUARANTEED OPERATING CONDITIONS

Symbol	Parameter	ALS465A-ALS466A		Unit
		Min	Max	
V _{CC}	Supply Voltage	4.5	5.5	V
V _{IH}	High Level Input Voltage	2.0		V
V _{IL}	Low Level Input Voltage		0.8	V
I _{OH}	High Level Output Current		-15	mA
I _{OL}	Low Level Output Current		24	mA
T _A	Operating Free Air Temperature Range	-10 to +70		°C

DC ELECTRICAL CHARACTERISTICS over full operating conditions

Symbol	Parameter	Condition	ALS465A-ALS466A			Unit
			Min	Typ	Max	
V _{IK}	Input Clamp Voltage	V _{CC} = min, I _{IN} = 0-18 mA			-1.5	V
V _{OH}	High Level Output Voltage	V _{CC} =min I _{OH} =-0.4mA	2.5			V
			2.4	3.2		V
			2			V
V _{OL}	Low Level Output Voltage	I _{OL} = 2 4 mA		0.35	0.5	V
I _{IH}	High Level Input Current	V _{CC} =max, V _{IN} = 2.7V			20	μA
I _{IL}	Low Level Input Current	V _{CC} =max, V _{IN} =0.4V			-0.1	mA
I _O	Output Short Circuit Current	V _{CC} =5.5V, V _O = 2.25V	-30		-112	mA
I _{OZH}	High Impedance Output Current	V _{CC} =5.5V, V _O = 2.7V			20	μA
I _{OZL}	High Impedance Output Current	V _{CC} =5.5V, V _O = 0.4V			-20	μA
I _{CC}	Supply Current	V _{CC} =5.5V, ALS465A		23	33	mA
I _{CC}	Supply Current	V _{CC} =5.5V, ALS466A		19	27	mA

SWITCHING CHARACTERISTICS over full operating range;

Symbol	Parameter	ALS465A $C_L = 50\text{pF}$ $R_1=500\Omega, R_2=500\Omega$		ALS466A $C_L = 50\text{pF}$ $R_1=500\Omega, R_2=500\Omega$		Unit
		Min	Max	Min	Max	
t_{PLH} t_{PHL}	Propagation Delay Time, From A to Y	2 4	13 12	3 2	12 9	ns
t_{PZH} t_{PZL}	Propagation Delay Time From Enable to Any Y	4 5	23 25	4 7	16 23	ns
t_{PHZ} t_{PLZ}	Propagation Delay Time From Disable to Any Y	2 3	10 18	2 2	10 17	ns

SWITCHING WAVEFORMS

