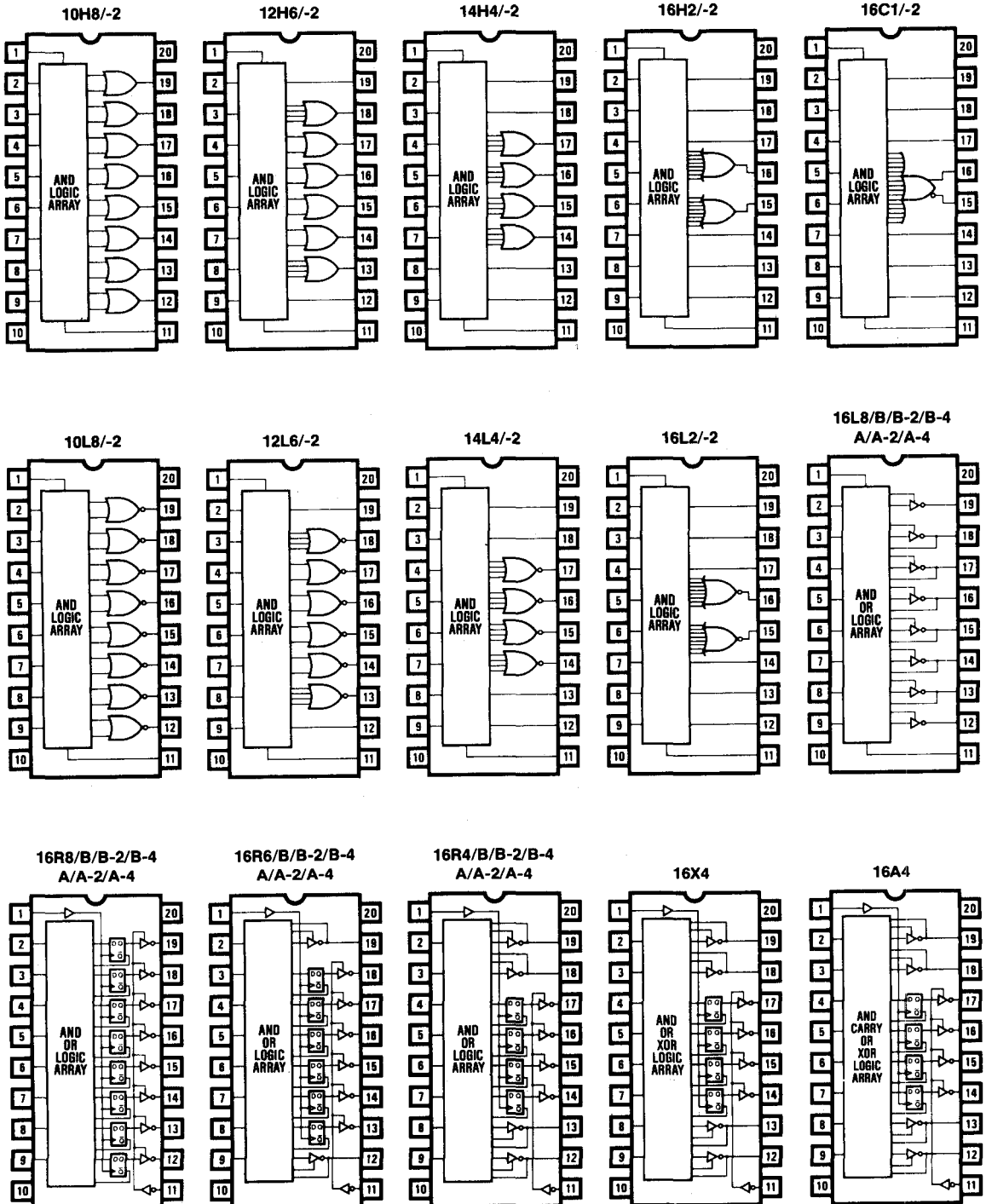
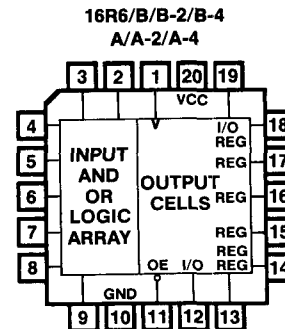
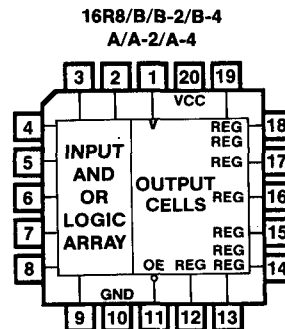
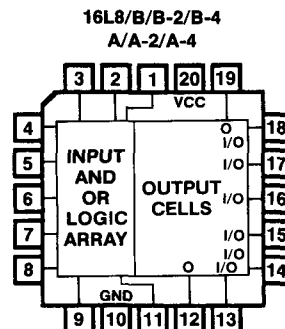
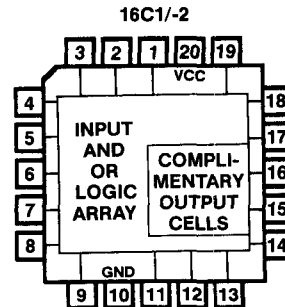
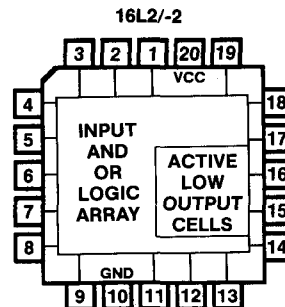
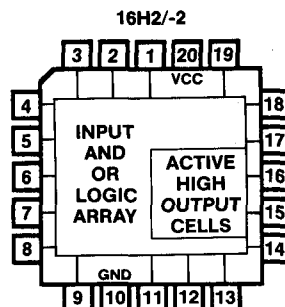
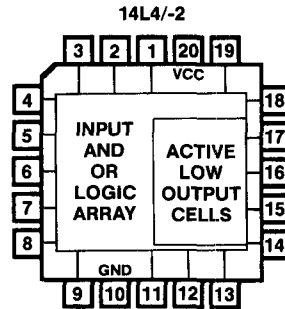
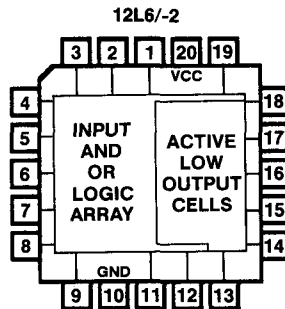
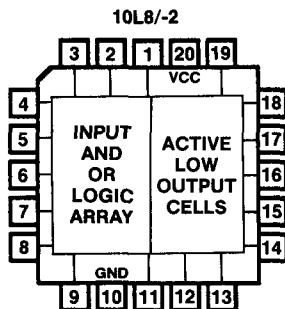
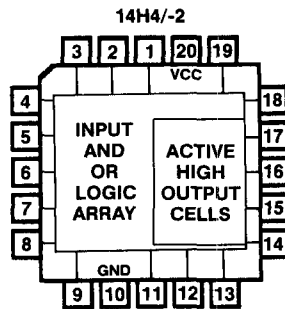
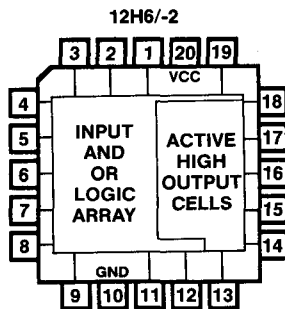
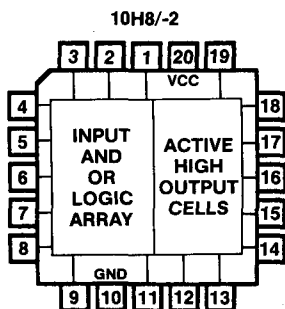


20-Pin PAL/HAL Devices



20-Pin PAL/HAL Devices-PLCC



Standard PAL/HAL Devices Series 20
10H8, 12H6, 14H4, 16H2, 16C1, 10L8, 12L6, 14L4, 16L2

Operating Conditions

SYMBOL	PARAMETER	MILITARY			COMMERCIAL			UNIT
		MIN	TYP	MAX	MIN	TYP	MAX	
V_{CC}	Supply voltage	4.5	5	5.5	4.75	5	5.25	V
T_A	Operating free-air temperature	-55			0		75	°C
T_C	Operating case temperature			125				°C

Electrical Characteristics Over Operating Conditions

SYMBOL	PARAMETER	TEST CONDITIONS		MIN	TYP	MAX	UNIT	
V _{IL} *	Low-level input voltage			0.8			V	
V _{IH} *	High-level input voltage			2			V	
V _{IC}	Input clamp voltage	V _{CC} = MIN	I _I = -18mA	-0.8	-1.5		V	
I _{IL}	Low-level input current	V _{CC} = MAX	V _I = 0.4V	-0.02	-0.25		mA	
I _{IH}	High-level input current	V _{CC} = MAX	V _I = 2.4V	25			μA	
I _I	Maximum input current	V _{CC} = MAX	V _I = 5.5V	1			mA	
V _{OL}	Low-level output voltage	V _{CC} = MIN	MIL	I _{OL} = 8mA		0.3	0.5	V
			COM	I _{OL} = 8mA				
V _{OH}	High-level output voltage	V _{CC} = MIN	MIL	I _{OH} = -2mA		2.4	2.8	V
			COM	I _{OH} = -3.2mA				
I _{OS}	Output short-circuit current **	V _{CC} = 5V	V _O = 0V	-30	-70	-130	mA	
I _{CC}	Supply current	V _{CC} = MAX		55			90	mA

Switching Characteristics

SYMBOL	PARAMETER		TEST CONDITIONS	MILITARY			COMMERCIAL			UNIT
				MIN	TYP	MAX	MIN	TYP	MAX	
t_{PD}	Input or feed-back to output	Except 16C1	$R_1 = 560\Omega$ $R_2 = 1.1\text{k}\Omega$	25	45		25	35		ns
		16C1		25	45		25	40		

14L4

