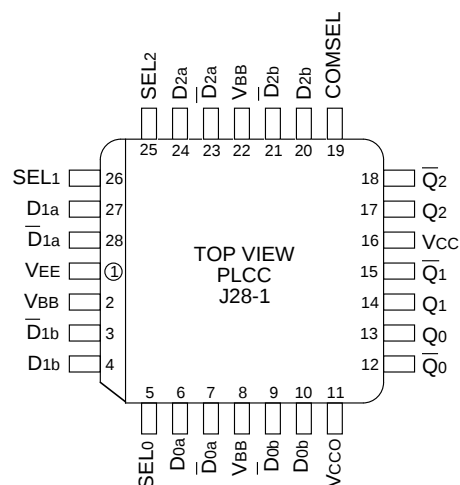


PACKAGE/ORDERING INFORMATION



28-Pin PLCC (J28-1)

Ordering Information⁽¹⁾

Part Number	Package Type	Operating Range	Package Marking	Lead Finish
SY10E457JC	J28-1	Commercial	SY10E457JC	Sn-Pb
SY10E457JCTR ⁽²⁾	J28-1	Commercial	SY10E457JC	Sn-Pb
SY100E457JC	J28-1	Commercial	SY100E457JC	Sn-Pb
SY100E457JCTR ⁽²⁾	J28-1	Commercial	SY100E457JC	Sn-Pb
SY10E457JZ ⁽³⁾	J28-1	Commercial	SY10E457JZ with Pb-Free bar-line indicator	Matte-Sn
SY10E457JZTR ^(2, 3)	J28-1	Commercial	SY10E457JZ with Pb-Free bar-line indicator	Matte-Sn
SY100E457JZ ⁽³⁾	J28-1	Commercial	SY100E457JZ with Pb-Free bar-line indicator	Matte-Sn
SY100E457JZTR ^(2, 3)	J28-1	Commercial	SY100E457JZ with Pb-Free bar-line indicator	Matte-Sn

Notes:

1. Contact factory for die availability. Dice are guaranteed at $T_A = 25^\circ\text{C}$, DC Electricals only.
2. Tape and Reel.
3. Pb-Free package is recommended for new designs.

DC ELECTRICAL CHARACTERISTICSV_{EE} = V_{EE} (Min.) to V_{EE} (Max.); V_{CC} = V_{CCO} = GND

Symbol	Parameter	T _A = 0°C			T _A = +25°C			T _A = +85°C			Unit	Condition
		Min.	Typ.	Max.	Min.	Typ.	Max.	Min.	Typ.	Max.		
V _{BB}	Output Reference Voltage										V	—
	10E	-1.38	—	-1.27	-1.35	—	-1.25	-1.31	—	-1.19		
	100E	-1.38	—	-1.26	-1.38	—	-1.26	-1.38	—	-1.26		
I _{IH}	Input HIGH Current	—	—	150	—	—	150	—	—	150	μA	—
I _{EE}	Power Supply Current										mA	—
	10E	—	92	110	—	92	110	—	92	110		
	100E	—	92	110	—	92	110	—	106	127		
V _{PP} (DC)	Input Sensitivity	50	—	—	50	—	—	50	—	—	mV	1
V _{CMR}	Common Mode Range	-1.5	—	0	-1.5	—	0	-1.5	—	0	V	2

Notes:

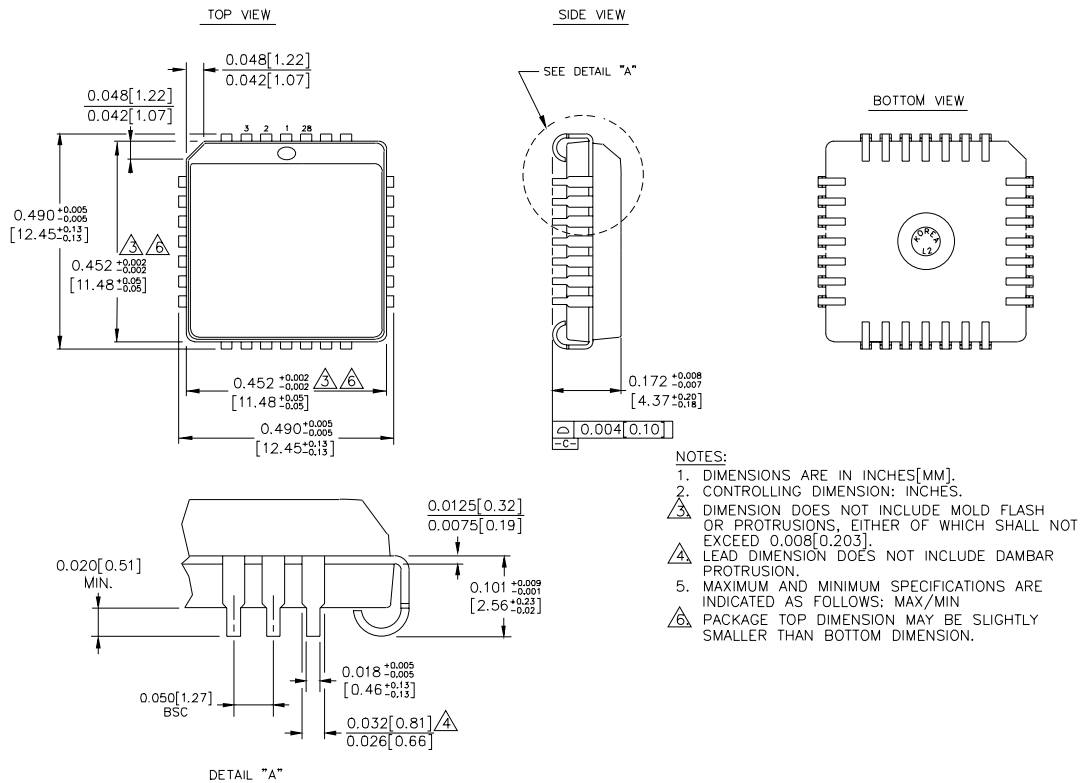
1. Differential input voltage required to obtain a full ECL swing on the outputs.
2. V_{CMR} is referenced to the most positive side of the differential input signal. Normal operation is obtained when the input signals are within the V_{CMR} range and the input swing is greater than V_{PP} (min.) and <1V.

AC ELECTRICAL CHARACTERISTICSV_{EE} = V_{EE} (Min.) to V_{EE} (Max.); V_{CC} = V_{CCO} = GND

Symbol	Parameter	T _A = 0°C			T _A = +25°C			T _A = +85°C			Unit	Condition
		Min.	Typ.	Max.	Min.	Typ.	Max.	Min.	Typ.	Max.		
t _{PD}	Propagation Delay to Output										ps	—
	D (Diff)	375	475	650	375	475	650	375	475	650		
	D	325	475	700	325	475	700	325	475	700		
	SEL	350	500	725	350	500	725	350	500	725		
	COMSEL	375	525	750	375	525	750	375	525	750		
t _{skew}	Within-Device Skew	—	40	—	—	40	—	—	40	—	ps	1
t _{skew}	Duty Cycle Skew t _{PLH} –t _{PHL}	—	±10	—	—	±10	—	—	±10	—	ps	2
V _{PP} (AC)	Minimum Input Swing	150	—	—	150	—	—	150	—	—	mV	3
t _r t _f	Rise/Fall Time	150	275	450	150	275	450	150	275	450	ps	—
	20–80%											

Notes:

1. Within-device skew is defined as identical transitions on similar paths through a device.
2. Duty cycle skew guarantee holds only for differential operation when the delays are measured from the cross point of the inputs to the cross point of the outputs.
3. Minimum input swing for which AC parameters are guaranteed.

28-PIN PLCC (J28-1)

Rev. 03

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