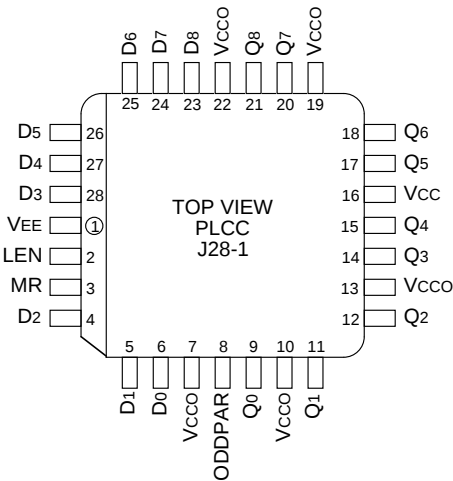


PACKAGE/ORDERING INFORMATION



28-Pin PLCC (J28-1)

Ordering Information⁽¹⁾

Part Number	Package Type	Operating Range	Package Marking	Lead Finish
SY10E175JC	J28-1	Commercial	SY10E175JC	Sn-Pb
SY10E175JCTR ⁽²⁾	J28-1	Commercial	SY10E175JC	Sn-Pb
SY100E175JC	J28-1	Commercial	SY100E175JC	Sn-Pb
SY100E175JCTR ⁽²⁾	J28-1	Commercial	SY100E175JC	Sn-Pb
SY10E175JZ ⁽³⁾	J28-1	Commercial	SY10E175JZ with Pb-Free bar-line indicator	Matte-Sn
SY10E175JZTR ^(2, 3)	J28-1	Commercial	SY10E175JZ with Pb-Free bar-line indicator	Matte-Sn
SY100E175JZ ⁽³⁾	J28-1	Commercial	SY100E175JZ with Pb-Free bar-line indicator	Matte-Sn
SY100E175JZTR ^(2, 3)	J28-1	Commercial	SY100E175JZ with Pb-Free bar-line indicator	Matte-Sn

Notes:

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

TRUTH TABLE

D	LEN	MR	Q	ODDPAR
H	L	L	H	H if odd no. of D _n HIGH
L	L	L	L	H if odd no. of D _n HIGH
X	H	L	Q ₀	Q ₀
X	X	H	L	L

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

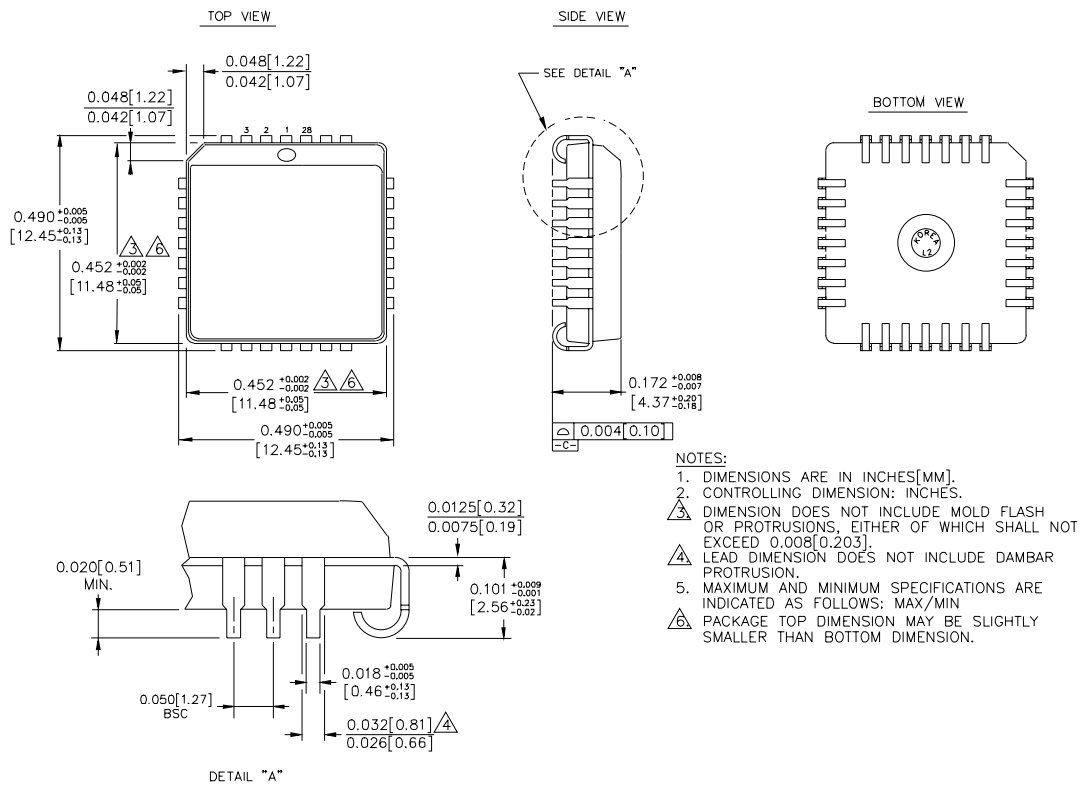
Symbol	Parameter	T _A = 0°C			T _A = +25°C			T _A = +85°C			Unit	Condition
		Min.	Typ.	Max.	Min.	Typ.	Max.	Min.	Typ.	Max.		
I _{IH}	Input HIGH Current	—	—	150	—	—	150	—	—	150	μA	—
I _{EE}	Power Supply Current	—	—	—	—	—	—	—	—	—	mA	—
	10E	—	110	132	—	110	132	—	110	132		
	100E	—	110	132	—	110	132	—	127	152		

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 D to Q	450	600	800	450	600	800	450	600	800	ps	—
	D to ODDPAR	850	1150	1450	850	1150	1450	850	1150	1450		
	LEN to Q	525	700	900	525	700	900	525	700	900		
	LEN to ODDPAR	525	700	900	525	700	900	525	700	900		
	MR to Q (t _{PHL})	525	700	900	525	700	900	525	700	900		
	MR to ODDPAR (t _{PHL})	525	700	900	525	700	900	525	700	900		
t _S	Set-up Time D (Q)	275	100	—	275	—	—	275	—	—	ps	—
	D (ODDPAR)	900	700	—	900	—	—	900	—	—		
t _H	Hold Time D (Q)	175	–100	—	175	—	—	175	—	—	ps	—
	D (ODDPAR)	–300	–700	—	–300	—	—	–300	—	—		
t _{RR}	Reset Recovery Time	850	600	—	850	600	—	850	600	—	ps	—
t _{skew}	Within-Device Skew LEN, MR	—	75	—	—	75	—	—	75	—	ps	1
	D to Q	—	75	—	—	75	—	—	75	—		
	D to ODDPAR	—	200	—	—	200	—	—	200	—		
t _r t _f	Rise/Fall Times 20–80%	300	500	800	300	500	800	300	500	800	ps	—

Note:

1. Within-device skew is defined as identical transitions on similar paths through a device.

28-PIN PLCC (J28-1)

Rev. 03

MICREL, INC. 2180 FORTUNE DRIVE SAN JOSE, CA 95131 USATEL + 1 (408) 944-0800 FAX + 1 (408) 474-1000 WEB <http://www.micrel.com>

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