



June 24, 2014
PPCN #140008

PROCESS/ PRODUCT CHANGE NOTIFICATION

This is to inform you that Micrel will modify SY10/100EL11V product datasheet. This change is to correct an error in the DC electrical characteristic table. There is no change in the product function and performance.

If you have any questions concerning this change, please contact:

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TYPE OF CHANGE

Datasheet DC electrical characteristic corrections.

EFFECTIVITY

Effective immediately. The revised datasheet will be released online accordingly.

PRODUCT ID (DESCRIPTION)

SY10EL11VZG

SY10EL11VZG TR

SY100EL11VZG

SY100EL11VZG TR

DESCRIPTION OF CHANGE:

This change is to correct an error in the DC electrical characteristic table of SY10-100EL11V product datasheet.

EFFECT OF CHANGE

This change is to correct a mistake in the DC electrical table of the SY10/100EL11V product datasheet. There is no change in the form and fit of the products. Products are built with the same fab and assembly technologies and locations, tested, packed and delivered the same as before.

QUALIFICATION

Not applicable.



Current Datasheet

10K SERIES DC ELECTRICAL CHARACTERISTICS⁽¹⁾

V_{CC} = 3.3V ±10%; V_{EE} = 0V

Symbol	Parameter	T _A = -40°C		T _A = 0°C		T _A = +25°C		T _A = +85°C		Unit
		Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	
V _{OH}	Output HIGH Voltage	-1080	-890	-1020	-840	-980	-810	-910	-720	mV
V _{OL}	Output LOW Voltage	-1950	-1650	-1950	-1630	-1950	-1630	-1950	-1595	mV
V _{IH}	Input HIGH Voltage	-1230	-890	-1170	-840	-1130	-810	-1060	-720	mV
V _{IL}	Input LOW Voltage	-1950	-1500	-1950	-1480	-1950	-1480	-1950	-1445	mV

100K SERIES DC ELECTRICAL CHARACTERISTICS⁽²⁾

V_{CC} = 3.3V ±10%; V_{EE} = 0V

Symbol	Parameter	T _A = -40°C			T _A = 0°C to +85°C			Unit	Conditions
		Min.	Typ.	Max.	Min.	Typ.	Max.		
V _{OH}	Output HIGH Voltage	-1085	-1005	-880	-1025	-955	-880	mV	V _{IN} = V _{IH} (Max) or V _{IL} (Min)
V _{OL}	Output LOW Voltage	-1830	-1695	-1555	-1810	-1705	-1620	mV	
V _{IH}	Input HIGH Voltage ⁽³⁾	-1165	—	-880	-1165	—	-880	mV	
V _{IL}	Input LOW Voltage ⁽⁴⁾	-1810	—	-1475	-1810	—	-1475	mV	

10K SERIES DC ELECTRICAL CHARACTERISTICS⁽¹⁾

V_{CC} = 5.0V ±10%; V_{EE} = 0V

Symbol	Parameter	T _A = -40°C		T _A = 0°C		T _A = +25°C		T _A = +85°C		Unit
		Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	
V _{OH}	Output HIGH Voltage	-1080	-890	-1020	-840	-980	-810	-910	-720	mV
V _{OL}	Output LOW Voltage	-1950	-1650	-1950	-1630	-1950	-1630	-1950	-1595	mV
V _{IH}	Input HIGH Voltage	-1230	-890	-1170	-840	-1130	-810	-1060	-720	mV
V _{IL}	Input LOW Voltage	-1950	-1500	-1950	-1480	-1950	-1480	-1950	-1445	mV

100K SERIES DC ELECTRICAL CHARACTERISTICS⁽²⁾

V_{CC} = 5.0V ±10%; V_{EE} = 0V

Symbol	Parameter	T _A = -40°C			T _A = 0°C to +85°C			Unit	Conditions
		Min.	Typ.	Max.	Min.	Typ.	Max.		
V _{OH}	Output HIGH Voltage	-1085	-1005	-880	-1025	-955	-880	mV	V _{IN} = V _{IH} (Max) or V _{IL} (Min)
V _{OL}	Output LOW Voltage	-1830	-1695	-1555	-1810	-1705	-1620	mV	
V _{IH}	Input HIGH Voltage ⁽³⁾	-1165	—	-880	-1165	—	-880	mV	
V _{IL}	Input LOW Voltage ⁽⁴⁾	-1810	—	-1475	-1810	—	-1475	mV	



New Datasheet

10K SERIES DC ELECTRICAL CHARACTERISTICS⁽¹⁾

VCC = 3.3V \pm 10%; VEE = 0V

Symbol	Parameter	TA = -40°C		TA = 0°C		TA = +25°C		TA = +85°C		Unit
		Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	
VOH	Output HIGH Voltage	1890	2740	1950	2790	1990	2820	2060	2910	mV
VOL	Output LOW Voltage	1020	1980	1020	2000	1020	2000	1020	2035	mV
VIH	Input HIGH Voltage	1740	2740	1800	2790	1840	2820	1910	2910	mV
VIL	Input LOW Voltage	1020	2130	1020	2150	1020	2150	1020	2185	mV

100K SERIES DC ELECTRICAL CHARACTERISTICS⁽²⁾

VCC = 3.3V \pm 10%; VEE = 0V

Symbol	Parameter	TA = -40°C			TA = 0°C to +85°C			Unit	Conditions
		Min.	Typ.	Max.	Min.	Typ.	Max.		
VOH	Output HIGH Voltage	1885	2295	2750	1945	2345	2750	mV	VIN = VIH(Max) or VIL(Min)
VOL	Output LOW Voltage	1140	1605	2075	1160	1595	2010		
VIH	Input HIGH Voltage ⁽³⁾	1805	—	2750	1805	—	2750	mV	
VIL	Input LOW Voltage ⁽⁴⁾	1160	—	2155	1160	—	2155	mV	

10K SERIES DC ELECTRICAL CHARACTERISTICS⁽¹⁾

VCC = 5.0V \pm 10%; VEE = 0V

Symbol	Parameter	TA = -40°C		TA = 0°C		TA = +25°C		TA = +85°C		Unit
		Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	
VOH	Output HIGH Voltage	3420	4600	3480	4660	3520	4780	3590	4780	mV
VOL	Output LOW Voltage	2550	3850	2550	3870	2550	3870	2550	3905	mV
VIH	Input HIGH Voltage	3270	4610	3330	4660	3370	4690	3440	4780	mV
VIL	Input LOW Voltage	2550	4000	2550	4020	2550	4020	2550	4055	mV

100K SERIES DC ELECTRICAL CHARACTERISTICS⁽²⁾

VCC = 5.0V \pm 10%; VEE = 0V

Symbol	Parameter	TA = -40°C			TA = 0°C to +85°C			Unit	Conditions
		Min.	Typ.	Max.	Min.	Typ.	Max.		
VOH	Output HIGH Voltage	3415	2295	4620	3475	2345	4620	mV	VIN = VIH(Max) or VIL(Min)
VOL	Output LOW Voltage	2670	1605	3945	2690	1595	3880		
VIH	Input HIGH Voltage ⁽³⁾	3335	—	4620	3335	—	4620	mV	
VIL	Input LOW Voltage ⁽⁴⁾	2690	—	4025	2690	—	4025	mV	