

# PCA9306 Datasheet change

Lit Number: SCPS113M→SCPS113N  
PCA9306 Change overview

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- Thermal metric changes for DCT and DCU packages
- Switching characteristics AC changes for DCT and DCU packages
- Input clamp voltage for all packages
- Master/slave terminology to be Controller/target

# Thermal metric changes

Units (C/W)	Old DCT	Old DCU	New DCT	New DCU
R_thetaJA	189.6	210.1	254.1	275.5
R_thetaJC	119.6	81.9	148.6	127.1
R_thetaJB	102.1	88.8	168.8	186.9
PSI_JT	44.5	8.3	70.1	65.7
PSI_JB	101	88.4	167.4	185.9

# Switching characteristics AC changes

Parameter	Datasheet section	Loading	EN Voltage	Old (ns)	New (ns)	Package
T_PHL (max)	6.6	CL=15pF	3.3V	0.5	0.75	DCT and DCU
T_PHL (max)	6.7	CL=15pF	2.5V	0.6	0.75	DCT and DCU
T_PHL (max)	6.8	CL=50pF	3.3V	1.4	1.7	DCT and DCU
T_PHL (max)	6.8	CL=30pF	3.3V	1.1	1.4	DCT and DCU
T_PHL (max)	6.8	CL=15pF	3.3V	0.7	1.0	DCT and DCU
T_PHL (max)	6.9	CL=50pF	2.5V	1.3	2.1	DCT and DCU
T_PHL (max)	6.9	CL=30pF	2.5V	1.3	1.7	DCT and DCU
T_PHL (max)	6.9	CL=15pF	2.5V	0.8	1.3	DCT and DCU

# Input clamp voltage change

Parameter	Datasheet section	Test conditions	Old (ns)	New (ns)
V_IK (min)	6.5	I_i= -18mA and EN=0V	none	-1.2 V
V_IK (max)	6.5	I_i= -18mA and EN=0V	-1.2 V	0 V

# **Master/slave terminology to be Controller/target**

- To follow with TI's guidelines for inclusive terminology, all uses of the terms master/slave will now be changed to controller/target to match with I3C's chosen terminology
  - This includes images