

Specification	Vendor Feedback (TPS63810)		
	Min	TYP	MAX
input voltage range	2.2V		5.5V
output voltage range	1.8V		5.2V
output voltage accuracy	-1.5%		1.5%
	-1.5%		3.5%
output discharge		Meet	
softstart	Yes, soft start time is typ 0.3ms		
max output current	2.5A continuous current ≥2.5V input @3.3V output		
	3A continuous current ≥3V input @3.3V output		
start-up sequency			
VSW rating (Input voltage for less than 10 ns (LX1, LX2). All voltage values are with respect to network ground terminal, unless otherwise noted.)	-3V		9V
reverse protection	Meet		
enable pin	Meet		
switching frequency	Buckboost mode: TYP 1.6MHz		
	Meet		
load transient 3.5VIN@3.3VOUT@0~1A/us	-89mV (PSM) -92mV (FPWM)		85mV (PSM) 140mV (FPWM)
output ripple Vin=3.3V/Vout=3.3V/Io=100mA Vin=3.8V/Vout=3.3V/Io=100mA		4.6mV (FPWM) 86mV (PSM)	
		5.2mV (FPWM) 135mV (PSM)	
I/O level	Meet 1.8V Standard		
over current protection	Meet		
over temp protection	Meet		
efficiency	Meet		
I2C speed	Meet		
reset	Meet		
I2C address	Meet		
ESD (HBM)	2KV		
ESD (CBM)	500V		
latch Up	100mA		
Early failure rate	15FIT		
Inherent failure rate	0.6FIT		
HTOL	meet requirement		
HAST	meet requirement		

uHAST	meet requirement
HTSL	meet requirement
BLTC (WLCSP only)	meet requirement
Drop Test (WLCSP only)	meet requirement
TC	meet requirement
ORT (Ongoing Reliability Test)	meet requirement
Supplier process control capacity	meet requirement
	N/A
	SQS, meet requirement
	N/A
	meet requirement
	meet requirement
	meet requirement
	meet requirement
	meet requirement
FDPPM	20PPM
operating temperaure range	-40~ 85c
Junction temperature range	-40~125c
storage temperature range	-65/150c
Flame retardant requirements	meet requirement
meet ROHS	YES
Pb free	Lead free
Others	/
package size requirement	Refer to datasheet
MSL	MSL 1