

Comparisons of LD7575 & NXX1203

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	Items	LD7575	NXX1203	Note
1	V _{cc} (max)	30V	16V	LD7575 is with wide operation voltage range. Usually, users need to add a zener diode on the V _{cc} of NXX1203 to prevent V _{cc} from damage.
2	UVLO	16V/10V	12.8V/7.8V	
3	V _{cc} OVP	With	Without	
4	OLP	With	Without	LD7575 provides better protection performance (OVP, OVP & short protection).
5	Driver Current	500mA	250mA	LD7575 is better for higher power application.
6	Frequency	Adjustable	Fix	Pin 1 of LD7575 is for frequency setting.
7	V _{cs} (max)	0.85V	1V	Lower power rating of sensing resistor in LD7575 application.
8	ESD	3KV	2KV	LD7575 is with higher ESD level.
9	DSS™ Mode (*1)	Without	With	DSS mode will degrade the green-mode performance thus LD7575 is not implemented it.
10	High-V Current	1mA	6mA	LD7575's lower HV current will reduce the power dissipation and further reduce the need of internal OTP. (*2)
11	Pin 1 definition	RT (frequency setting)	ADJ (adjust the burst mode level)	Same PCB layout (connect a resistor to GND in both applications)
12	Slope Compensation	With	Without	

*1 DSS mode --- dynamic self-supply is the trademark of On Semiconductor. It can be implemented for the applications which are without auxiliary transformer winding. However, on such applications, the power saving performance will become worse due to the continuous on-off on the HV current source. So that, LD7575 is not implemented such function.

*2 HV Current --- Even in the worst case (V_{cc} is shorted to GND), the generate power dissipation on the LD7575 is only $\sqrt{2} \cdot 264Vac \cdot 1mA = 373mW$. The generated heat can be self-dissipated by the SOP-8 package itself. Further, the negative temperature coefficient characteristic will help to reduce the HV current and further to avoid the thermal run-away.