

Industrial-grade STripFET F8 devices



40 V and 100 V power MOSFETs
boost overall system efficiency



The STripFET F8 reduces power consumption with a 40% improvement on figure of merit (FoM)

ST's advanced STripFET F8 achieve higher switching frequencies than previous technologies, thanks to low device capacitances that minimize dynamic parameters and switching losses. This allows designers to use smaller capacitive and magnetic components in more compact and cost-effective solutions, while increasing the power density of the final application.

KEY FEATURES AND BENEFITS

- Optimized gate charge for faster commutation speeds
- Higher immunity to spurious turn-on
- Lower $R_{DS(on)}$ for higher system efficiency

KEY APPLICATIONS

- Power supplies and converters
- Home and professional appliance
- Gaming drones

Available with breakdown voltages of 40 and 100 V, the new STripFET F8 technology brings major design benefits to your market applications:

- Higher power density allows the use of smaller packages, ensuring that the overall system design remains compact without compromising electrical performance.
- Higher noise immunity thanks to the improved filtering of output voltage overshoots.

Product selection

Product name	B_{VDS} [V]	Package	P [W]	I [A]	$R_{DS(on)}$ @4.5V [mΩ]	$R_{DS(on)}$ @10V [mΩ]	Qg [nC]	Status
STL320N4LF8	40	PowerFLAT 5x6	188	373	1.1	0.75	95	Full production
STL320N4F8	40	PowerFLAT 5x6	188	350		0.85	80	Full production
STL300N4LF8	40	PowerFLAT 5x6	167	304	1.5	1	70	Full production
STL300N4F8	40	PowerFLAT 5x6	167	290		1.1	65	Full production
STL220N4F8	40	PowerFLAT 5x6	127	203		1.7	42.5	In development
STL170N4LF8	40	PowerFLAT 5x6	111	167	3.2	2.2	34.5	Full production
STL130N4LF8	40	PowerFLAT 3.3x3.3	64	124	3.3	2.3	34.5	Full production
STL160N4F8	40	PowerFLAT 5x6	111	154		2.6	28	Full production
STL140N4LF8	40	PowerFLAT 5x6	94	141	3.75	2.6	24	Full production
STL100N4LF8	40	PowerFLAT 3.3x3.3	52	103	3.85	2.7	28	Full production
STL160N10F8	100	PowerFLAT 5x6	167	158		3.2	90	Full production
STL120N10F8	100	PowerFLAT 5x6	150	125		4.6	56	Full production



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