



GLF Integrated Power

Integrated Power Load Switch

Product Type	Product Name	V _{IN} Min. Voltage [V]	V _{IN} Max. Voltage [V]	I _{OUT} Rating [A]	R _{ON} Typ. @ V _{IN} Max [mΩ]	I _Q Typ. @ V _{IN} Max [nA]	I _{SD} Typ. @ V _{IN} Max [nA]	Slew Rate Control	Rise Time t _R Typ. [us]	EN Active	Output Discharge [Ω]	Reverse Current Blocking	ESD [kV]	Operating Temperature [°C]	Package CSP Size [mm x mm x mm] Unless otherwise noted			
Nano-Current Consumed Power Switch	GLF71300	1.1	5.5	2	34	1	19	✓	430	H	NA	NA	HBM : 6 CDM : 2	- 40 ~ 85	0.77 x 0.77 x 0.46			
	GLF71301					1				H	85			- 40 ~ 105				
	GLF71301H					1				H	85							
	GLF71302					0.54 uA				L	NA							
	GLF71303					0.54 uA				L	85							
	GLF71306					1				H	NA							
	GLF71308	1	H	85														
	GLF71305	1.5	5.5	2	31	3	22	340	H	85	- 40 ~ 85	0.97 x 0.97 x 0.55						
	GLF71307	1				19	9	H	85									
	GLF71310	7				28	335	H	NA									
	GLF71311	0.52 uA				✓	335	H	85									
	GLF71313	7				28	335	L	85	- 40 ~ 105								
	GLF71315	7				28	335	H	85									
	GLF71511	1.1	5.5	2	25	7	28	✓	2.2 ms	H	85	- 40 ~ 105	0.97 x 1.47 x 0.55					
	GLF71320					4	15	3	50	✓	400	H		NA				
	GLF71321					4	15	3	50	✓	400	H		85	- 40 ~ 85			
	GLF71325					4	18 @ 3.3V	1 @ 3.3V	16 @ 3.3V	✓	2.2 ms	H		85	- 40 ~ 105			
	GLF71301T					2	34	1	19	✓	430	H		85				
	GLF71311T					2	31	7	28	✓	335	H		85				
	GLF1100-T1G7	1.5	5.5	2	82	5	25	✓	2.2 ms	H	85	NA	HBM : 4 CDM : 2	- 40 ~ 85	0.77 x 0.77 x 0.35			
GLF1110-T1G7	2					54	2	13	✓	600	H			NA	0.97 x 0.97 x 0.35			
GLF1111-T1G7	2					54	2	13	✓	600	H			85				
GLF81311	2	6.5	3	41	10	20	✓	2.3 ms	H	560	NA	HBM : 6 CDM : 2	- 40 ~ 85	SOT23-5L				
True Reverse Current Blocking	GLF72100	1.5	5.5	2	37	0.45 uA	20	✓	570	H	NA	✓	HBM : 4 CDM : 2	- 40 ~ 85	0.77 x 0.77 x 0.46			
	GLF72101					0.45 uA	20	✓	570	H	85							
	GLF72102*					0.45 uA	20	✓	570	L	NA							
	GLF72103					0.45 uA	20	✓	48	H	85							
	GLF72105					0.45 uA	20	✓	570	L	85							
	GLF72110					3	29	1.4uA	24	✓	1.2ms					H	NA	0.97 x 0.97 x 0.55
	GLF72111					3	29	1.4 uA	24	✓	1.2ms					H	85	0.97 x 0.97 x 0.55
	GLF72120					4	14	1.3 uA	56	✓	730					H	NA	0.97 x 1.47 x 0.55
	GLF72122					4	14	1.3 uA	56	✓	2000					H	NA	
	GLF1200					2	54	0.47uA	13	✓	600					H	NA	
	GLF1201					2	54	0.47uA	13	✓	600					H	85	
GLF82321	2	6.5	2	40	1.6uA	20	✓	2.6ms	H	550	NA	HBM : 4 CDM : 2	- 40 ~ 85	SOT23-5L				
Prog. Long t _R of V _{OUT}	GLF71431	1.5	5.5	7	10	5	55	Prog.	150 us~34 ms	H	83	NA	HBM : 6 CDM : 2	- 40 ~ 85	1.27 x 1.67 x 0.55			
3 Channels	GLF78131/T	1.1		1.5	60	6	23	✓	500	H	235			1.27 x 1.67 x 0.55/T0.35				
Low V _{IN} Range with NFET	GLF72510	0.8	3.6	3	27	80 nA @ 1.2V 15 uA @ 3.6V	6	✓	430	H	NA	✓**	HBM : 6 CDM : 2	- 40 ~ 85	0.97 x 0.97 x 0.55			
	GLF72511					85												
	GLF72501					2	32	180nA @ 1V	630	✓	400				H	85	0.77 x 0.77 x 0.46	
	GLF72520					4	10	60 nA @ 0.8V 6.5 uA @ 3.6V	6.5	✓	780				H	NA	0.97 x 1.47 x 0.55	
	GLF72524/T					4	10	60 nA @ 0.8V 6.5 uA @ 3.6V	6.5	✓	280				H	85	0.97 x 1.47 x 0.55/T0.35	
	GLF1501-T1G7					3	52	50 nA @ 0.8V 10 uA @ 3.6V	6	✓	390				H	85	SOT23-5L	
	GLF72525	0.7	4	9	5.6 uA @ 0.7 V 8.8 uA @ 3.6 V	14	✓	82	H	85	✓	HBM : 8 CDM : 2	0.97 x 1.47 x 0.55					

*: On Request

**: Reverse Current Blocking Protection When Disabled

Power Mux : Two Input and Single Output

Product Type	Product Name	V _{IN} Min. Voltage [V]	V _{IN} Max. Voltage [V]	I _{OUT} Rating [A]	R _{ON} Typ. @ V _{IN} Max [mΩ]	I _Q Typ. @ V _{IN} Max [μA]	I _{SD} Typ. @ V _{IN} Max [nA]	Slew Rate Control	Rise Time t _R Typ. [us]	V _{IN} Auto Select	V _{IN} Manual Selection	Output Discharge [Ω]	Reverse Current Blocking	Operating Temperature [°C]	Package CSP Size [mm x mm x mm] Unless otherwise noted
Power Mux	GLF74520	1.5	5.5	2.5	35	4	20	✓	350	✓	✓	NA	✓	- 40 ~ 85	0.97 x 1.47 x 0.55
	GLF74130			4.5	20	4	50	✓	790	✓	✓	NA	✓		1.27 x 1.67 x 0.55
	GLF4001-T2G7	2.5	6.5	2	68	4	20	✓	350	✓	✓	NA	✓		SOT23-6L
	GLF4020-T2G7			2	92	4	6	✓	448	✓	✓	NA	✓		SOT23-6L

Battery Protection IC

Product Type	Product Name	V _{IN} Max. Voltage [V]	I _{OUT} Rating [A]	R _{ON} Typ. @ 4.2 V [mΩ]	R _{ON} Typ. @ 3.6 V [mΩ]	I _Q Typ. @ 4.2 V [μA]	I _Q Typ. @ 3.6 V [μA]	I _{SD} Typ. @ 2.5 V [nA]	Over Charge Protection V _{OC} [V]	Over Discharge Protection, V _{OD} [V]	Short Circuit Protection I _{SC} [A]	ON Voltage to V _{OUT} , V _{ON} [V]	V _{BAT} Min Charging [V]	Operating Temperature [°C]	Package WLCSP Size [mm x mm x mm]
Battery Protection	GLF73510	5.5	2	28	30	0.73	0.51	2	NA	3.05	NA	3.5	0.4	- 40 ~ 85	0.97 x 0.97 x 0.55
	GLF73710		1.5	30	31	0.70	0.65	35	NA	2.88	0.55	3.6			
	GLF73910-AD01		1.5	34	36	0.79	0.72	70	4.35	2.8	0.6	3.6			
	GLF73910-AD01C		1.5	34	36	0.79	0.72	70	4.35	2.8	0.6	3.6	0		
	GLF73910-BD01		1.5	34	36	0.79	0.72	70	4.50	2.8	0.6	3.6	0.4		
	GLF73911-AD01		1.5	34	36	0.79	0.72	35	4.35**	2.8	0.6	3.6			
	GLF73912		1.5	53	57	1	0.9	7	4.35	2.8	0.5	3.6			

(Note) **: Monitor V_{OUT} to release V_{OC}.

Product Type	Product Name	I _{OUT} Rating [A]	R _{ON} Typ. @ 4.2 V [mΩ]	I _Q Typ. @ 3.6 V [μA]	I _{SD} Typ. @ 2.5 V [nA]	Over Charge Protection V _{OC} [V]	Over Discharge Protection, V _{OD} [V]	Over Charge Current I _{OC} [mA]	Over Discharge Current I _{DC} [mA]	Short Circuit Protection I _{SC} [mA]	ON Voltage to V _{OUT} , V _{ON} [V]	Shipping Mode	V _{BAT} Min Charging [V]	Operating Temperature [°C]	Package WLCSP Size [mm x mm x mm]	
Battery Protection with Shipping Mode	GLF73915-AD12C	1.5	53	0.9	7	4.35	2.8	300	NA	500	3.6	✓	0	- 40 ~ 85	0.97 x 0.97 x 0.55	
Full Protection	GLF73610 -CE23C	1.5	62 @3.7V	1.48 @3.7 V	8		2.8	330	76	250	3.6	✓	0	- 40 ~ 85		
	GLF73610 -DE23C															4.45
	GLF73610 -EE23C**															4.275
	GLF73610 -FE23C**															4.375
	GLF73610 -GE23C															4.425
GLF73610 -HE23C	4.475															
						4.525										

*: In Dev.

**: On Request

Current Limit Power Switch

Product Type	Product Name	V _{IN} Max. Voltage [V]	I _{OUT} Rating [A]	R _{ON} Typ. @ V _{IN} Max [mΩ]	I _Q Typ. @ V _{IN} Max [μA]	I _{SD} Typ. @ V _{IN} Max [nA]	I _{LIM} Current Limit [A]	Short Circuit Protection I _{SC} [A]	Reverse Current Blocking	EN Active	Output Discharge [Ω]	Thermal Shutdown [°C]	ESD [kV]	Operating Temperature [°C]	Package CSP Size [mm x mm x mm] Unless otherwise noted
Current Limit	GLF2310A-T1G7	5.5	2.1	56	20	50	40 mA ~2.1 A	7.6	Yes	H	NA	140	HBM : 8 CDM : 2	- 40 ~ 85	SOT23-5L
	GLF2311A-T1G7										85				SOT23-5L
	GLF2310A-T2G7										NA				SOT23-6L
	GLF2311A-T2G7										85				SOT23-6L
	GLF2311B-T1G7										85				SOT23-5L
	GLF2321B-T1G7										85				SOT23-5L
			Fixed 2.1 A												
			1.8				Fixed 1.8 A	5.3							

Power Deep Sleep Protection IC

Product Type	Product Name	V _{IN} Min. Voltage [V]	V _{IN} Max. Voltage [V]	I _{OUT} Rating [A]	R _{ON} Typ. @ 3.6 V [mΩ]	I _Q Typ. @ 3.6 V [nA]	I _{SD} Typ. @ 3.6 V [nA]	Output Discharge [Ω]	Slew Rate Control	Rise Time t _R Typ [ms]	On Delay Time by /SRO, t _{VON} [s]	On Delay Time by WAKE, t _{dON} [ms]	Off Delay Time, t _{Sly-Dly} [s]	Operating Temperature [°C]	WLCSP Package Size
Power Deep Sleep	GLF76311	2.5	5.5	2	34	6	7	85	✓	1	3	NA	6	- 40 ~ 85	0.97 x 0.97 x 0.55
	GLF76321 / T	1.5		2	31	3	7	85	✓	1	1.3	0.8	7		0.97 x 1.47 x 0.55/0.35
	GLF76521 / T	1.8		2	31	3	7	85	✓	1	0.3	0.8	1.8		

Power Reset Protection IC

Product Type	Product Name	V _{IN} Min. Voltage [V]	V _{IN} Max. Voltage [V]	I _{OUT} Rating [A]	R _{ON} Typ. @ 3.6 V [mΩ]	I _Q Typ. @ 3.6 V [nA]	I _{SD} Typ. @ 3.6 V [nA]	Output Discharge [Ω]	Rise Time t _R Typ [ms]	On Delay Time by /SRO, t _{VON} [s]	On Delay Time by WAKE, t _{dON} [ms]	Off Delay Time, t _{Sly-Dly} [s]	Reset Duration, t _{Reset} [ms]	Operating Temperature [°C]	WLCSP Package Size
Power Reset	GLF76121	2.5	5.5	2	34	3	7	85	1	1.5	0.9	6	750	- 40 ~ 85	0.97 x 1.47 x 0.55
	GLF76121S			2	34	3	7	85	1	1.5	0.9	3.0	360		
	GLF76121L			2	34	3	7	85	1	1.5	0.9	12	750		
	GLF76431	1.8	5.5	6	19	0.42uA	0.36uA	90	1	0.8ms	0.8	7.5	470		1.27 x 1.67 x 0.55

Automotive IC

Product Type	Product Name	V _{IN} Min. Voltage [V]	V _{IN} Max. Voltage [V]	I _{OUT} Rating [A]	R _{ON} Typ. @ V _{IN} Max [mΩ]	I _Q Typ. @ V _{IN} Max [nA]	I _{SD} Typ. @ V _{IN} Max [nA]	Slew Rate Control	Rise Time t _R Typ. [us]	EN Active	Output Discharge [Ω]	Reverse Current Blocking	ESD [kV]	Operating Temperature [°C]	Package Type
Nano-Current Consumed Power Switch	GLF1111Q-T1G7	1.5	5.5	2	60	2	13	✓	400	High	85	NA	HBM : 4 CDM : 2	- 40 ~ 125	SOT23-5L
	GLF1110Q-T1G7*	1.5	5.5	2	60	2	13	✓	400	High	NA	NA			
True Reverse Current Blocking	GLF1200Q-T1G7	1.5	5.5	2	60	480	25	✓	600	High	NA	✓			SOT23-5L
	GLF1201Q-T1G7*	1.5	5.5	2	60	480	25	✓	600	High	85	✓			

*: In Dev.