



GLF Integrated Power Inc.

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 Type		
Nano-Current Consumption	GLF71300	1.1		2	34	1	19	✓	430	H	NA	NA	HBM : 6 CDM : 2	- 40 ~ 85	CSP 0.77 x 0.77 x 0.46		
	GLF71301					1				H	85			- 40 ~ 105			
	GLF71301H					1				H	85			- 40 ~ 85			
	GLF71302					0.54 uA				L	NA						
	GLF71303					0.54 uA				L	85						
	GLF71306					1				H	NA						
	GLF71308					1				H	85						
	GLF71305	3	22	340	H	85											
	GLF71307	1	19	9	H	85											
	GLF71310	2	5.5	31	7	28	✓	335	H	NA	- 40 ~ 85			CSP 0.97 x 0.97 x 0.55			
	GLF71311	3			H				85								
	GLF71313	2			0.52 uA				L	85							
	GLF71315	7			H				85								
	GLF71511	2			25				7	28						✓	2.2 ms
	GLF71320	3			50				✓	400			H		NA		
	GLF71321	3			50				✓	400			H		80		
	GLF71322	570	40	✓	400	L	NA										
	GLF71323	570	40	✓	400	L	80										
	GLF71325	4	18 @ 3.3 V	1 @ 3.3 V	16 @ 3.3 V	✓	2.2 ms	H	85	- 40 ~ 105	CSP 0.97 x 1.47 x 0.55						
	GLF71301T	2	34	1	19	✓	430	H	85								
	GLF71311T	2	31	7	28	✓	335	H	85								
	GLF1100	2	82	5	25	✓	2.2 ms	H	85								
	GLF1110	2	54	2	13	✓	600	H	NA								
	GLF1111	2	54	2	13	✓	600	H	85								
	GLF1110H	2	54	2	13	✓	600	H	NA								
GLF1111H	2	54	2	13	✓	600	H	85	- 40 ~ 105	SOT23-5L							
GLF81311	2	6.5	3	41	10	20	✓	2.3 ms			H	560					
GLF1120H	1.1	5.5	1	52	5	10	✓	380			H	NA					
GLF1121H					5		✓				H	85					
GLF1121HN					5		✓				H	85					
GLF1121L					550		✓				L	85					
GLF1123H					5		✓				H	85					
GLF71430	1.5	5.5	7	10	10	10	Prog.	up to 34 ms	H	NA	HBM : 8 CDM : 2	- 40 ~ 85	CSP 1.27 x 1.67 x 0.55				
GLF71431	1.5	5.5	7	10	10	55	Prog.	up to 34 ms	H	85							
2-Channel	GLF1411	1.5	5.5	1	180	10	32	✓	390 @ SR= High 45 @ SR= GND	H	95	HBM : 5 CDM : 2	- 40 ~ 85	DFN 1.5 x 1.5 -8L			
	GLF1421	1.5	5.5	1	175	440	20	✓	465 @ SR= High 50 @ SR= GND	H	95			DFN 1.5 x 1.5 -8L			
3-Channel	GLF78131 / T	1.1	5.5	1.5	60	6	23	✓	500	H	235	NA	HBM : 6 CDM : 2	- 40 ~ 85	CSP 1.27 x 1.67 x 0.55/ 0.35 T		

Integrated Power Load Switch (Continued Table)

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
True Reverse Current Blocking	GLF72100	1.5	5.5	2	37	0.45 uA	20	✓	570	H	NA	✓	HBM : 4 CDM : 2	- 40 ~ 85	CSP 0.77 x 0.77 x 0.46
	GLF72101			2	37	0.45 uA	20	✓	570	H	85				
	GLF72102*			2	37	0.45 uA	20	✓	570	L	NA				
	GLF72103			2	37	0.45 uA	20	✓	48	H	85				
	GLF72105			2	37	0.45 uA	20	✓	570	L	85				
	GLF72110			3	29	1.4 uA	24	✓	1.2 ms	H	NA				
	GLF72111			3	29	1.4 uA	24	✓	1.2 ms	H	85				
	GLF72112			3	29	1.4 uA	24	✓	18 us	H	NA				
	GLF72120			4	14	1.3 uA	56	✓	730	H	NA				
	GLF72122			4	14	1.3 uA	56	✓	2000	H	NA				
	GLF1200			2	54	0.47 uA	13	✓	600	H	NA				
	GLF1201			2	54	0.47 uA	13	✓	600	H	85				
	GLF1200H			2	54	0.47 uA	13	✓	600	H	NA				
	GLF1201H			2	54	0.47 uA	13	✓	600	H	85				
				GLF82321	2	6.5	2	40	1.6 uA	20	✓			2.6 ms	H
GLF1220H		1.5	5.5	1	52	500	10	✓	390	H	NA	HBM : 3 CDM : 2	CSP 0.67 x 0.67 x 0.425		
GLF1221H		1.5		1	52	500	10	✓	390	H	85				
Ultra-Low V _{IN}	GLF72510	0.8	3.6	3	27	80 nA @ 1.2 V 15 uA @ 3.6 V	6	✓	420	H	NA	✓**	HBM : 6 CDM : 2	- 40 ~ 85	NA
	GLF72511			3	27	15 uA @ 3.6 V	6	✓	420	H	85				
	GLF72501			2	32	180 nA @ 1 V	630	✓	390	H	85				
	GLF72520			4	10	60 nA @ 0.8 V 6.5 uA @ 3.6 V	6.5	✓	800	H	NA				
	GLF72524	4	10	60 nA @ 0.8 V 6.5 uA @ 3.6 V	6.5	✓	280	H	85						
	GLF1501	0.85	3	52	50 nA @ 0.85 V 30 uA @ 3.6 V	6	✓	400	H	85	HBM : 4 CDM : 2		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	- 40 ~ 105	CSP 0.97 x 1.47 x 0.55
	GLF1511	0.7	5.5	4	13	2 uA @ 0.7 V 30 uA @ 5.5 V	30	✓	360	H	250		✓**	HBM : 2 CDM : 1	CSP 0.97 x 1.47 x 0.55
GLF1531	0.8	5.5	2	33	14 uA	13	✓	2.83 ms	H	21	✓**	HBM : 2 CDM : 1	SOT23-6L		
Ultra-Low V _{IN} (2-channel)	GLF1401	0.6	5.5	6	19	18 uA @ dual channel 15 uA @ single channel	8	✓	1.97ms	H	200	NA	HBM : 4 CDM : 2	- 40 ~ 85	DFN 2 x 3 -14L
	GLF1403	0.6	5.5	6	19	15 uA @ single channel	8	✓	1.00ms	H	200	NA			

* : On Request

** : Reverse Current Blocking Protection When Disabled

Power Mux 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 [uA]	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 Type
Power Mux	GLF74520	1.5	5.5	2.5	35	4	20	✓	350	✓	✓	NA	✓**	- 40 ~ 85	CSP 0.97 x 1.47 x 0.55
	GLF74130			4.5	20	4	50	✓	790	✓	✓	NA	✓**		CSP 1.27 x 1.67 x 0.55
	GLF4001			2	68	4	20	✓	350	✓	✓	NA	✓**		SOT23-6L
	GLF74139	2.0	5.5	4.5	20	4	30	✓	1 ms	✓	✓	NA	✓		CSP 1.27 x 1.67 x 0.55
	GLF74138	2.0	5.5	4.5	20	4	30	✓	573	✓	✓	NA	✓**		CSP 1.27 x 1.67 x 0.55
	GLF4002	1.5	4.5	2	Channel1: 22 mΩ Channel2: 41 mΩ	1	400	✓	1.2 ms	✓	✓	NA	✓		CSP 1.27 x 1.27 x 0.55
	GLF4020	2.5	6.5	2	92	4	6	✓	448	✓	✓	NA	✓**		SOT23-6L
	GLF4028	2.5	5.5	2	97 @ 5.5 V 105 @ 4.5 V	3	5	✓	340	✓	✓	NA	✓**		SOT23-6L

** : Reverse Current Blocking Protection When Disabled

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 Type
Battery Protection	GLF73510	5.5	2	28	30	0.73	0.51	2	NA	3.05	NA	3.5	0.4	- 40 ~ 85	CSP 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			
	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 _{OD} [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 Type	
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	CSP 0.97 x 0.97 x 0.55	
Full Protection	GLF73610-CE23C	1.5	58	1.48 @ 3.7 V	8	4.450	2.8	330	76	250	3.6	√	0		- 40 ~ 85	CSP 0.97 x 0.97 x 0.55
	GLF73610-DE23C					4.275										
	GLF73610-GE23C					4.475										
	GLF73610-HE23C					4.525										
	GLF73611A**	1.5	56	1.6	15	4.475	2.9	330	215	500	3.6	√	1.32	CSP 0.97 x 0.97 x 0.55		
GLF73611B	2.8															

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

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 Type
Current Limit	GLF2310A-T1G7	5.5	2.6	56	20	50	40 mA ~2.2 A	6.6	√	H	NA	140	HBM : 8 CDM : 2	- 40 ~ 85	SOT23-5L
	GLF2311A-T1G7										300				SOT23-5L
	GLF2310A-T2G7										NA				SOT23-6L
	GLF2311A-T2G7										300				SOT23-6L
	GLF2311B-T1G7						300	SOT23-5L							
	GLF2313B-T1G7						300	SOT23-5L							
	GLF2321B-T1G7						300	SOT23-5L							
	GLF2331B-T1G7						300	SOT23-5L							
	GLF2351B-T1G7						300	SOT23-5L							
	GLF2351A-S3G7						3	32		19	63				40 mA~2.8 A

Over Voltage Protection Switch

Product Type	Product Name	V _{IN} Max. Voltage [V]	I _{OUT} Rating [A]	UVLO [V]	V _{OVp} Internal [V]	V _{OVp} Prg. Range [V]	R _{ON} Typ. @ 5 V _{IN} [mΩ]	I _Q Typ. @ 5 V _{IN} [μA]	Short Circuit V _{OUT} Detection [V]	Flag Indication	Thermal Shutdown [°C]	EN Active	ESD [kV]	Operating Temperature [°C]	Package Type
Over Voltage Protection	GLF2201	9	3	2.3	6.8	4 ~ 7	42	77	2	L	150	H	HBM : 6 CDM : 2	- 40 ~ 85	DFN 2 x 2 -6L

System Power Reset 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 _{ION} [ms]	Off Delay Time, t _{Sly-Dly} [s]	Reset Duration, t _{Reset} [ms]	Operating Temperature [°C]	Package Type
Power Reset	GLF76121	2.5	5.5	2	34	3	7	85	1	1.5	0.9	6	750	- 40 ~ 85	CSP 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	0.42 uA	0.36 uA	90	1	0.8 ms	0.8	7.5	470		CSP 1.27 x 1.67 x 0.55

System Power Deep Sleep 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 _{ION} [ms]	Off Delay Time, t _{Sly-Dly} [s]	Operating Temperature [°C]	Package Type
Power Deep Sleep	GLF76311	2.5	5.5	2	34	6	7	85	✓	1	3	NA	6	- 40 ~ 85	CSP 0.97 x 0.97 x 0.55
	GLF76321 / T	1.5		2	31	3	7	85	✓	1	1.3	0.8	7		CSP 0.97 x 1.47 x 0.55/
	GLF76521 / T	1.8		2	31	3	7	85	✓	1	0.3	0.8	1.8		0.35 T

Linear Regulator

Product Type	Product Name	V _{IN} Max. Voltage [V]	V _{OUT} Voltage [V]	V _{OUT} Accuracy [%]	Line Regulation [%/V]	Load Regulation [%/mA]	I _{OUT} Rating [mA]	Dropout [V]	Short Circuit [mA]	I _Q Typ. @ No load [uA]	I _{SD} Typ. [nA]	EN Pin	ESD [kV]	Operating Temperature [°C]	Package Type
Linear Regulator	GLF9011-18	5.5	1.8	2.5	0.16	0.002	150	52	250	0.4	4	H	HBM : 6 CDM : 2	- 40 ~ 85	CSP 0.97 x 0.97 x 0.55
	GLF9011-28		2.8	2.5	0.16	0.002	150	60	250	0.4	4	H			
	GLF9011-30		3.0	2.5	0.1	0.002	150	62	250	0.4	4	H			

DC-DC Switching Regulators

Product Type	Product Name	V _{IN} Min. Voltage [V]	V _{IN} Max. Voltage [V]	V _{OUT} Min. Voltage [V]	V _{OUT} Max. Voltage [V]	I _{OUT} [A]	I _Q Typ. [uA]	Switching Frequency [Mhz]	R _{ON} Typ. High Side [mΩ]	R _{ON} Typ. Low Side [mΩ]	PSM/Forced PWM	Power Good	Features	Operating Temperature [°C]	Package Type
Step-Down	GLF8114	2.5	5.5	0.6	5.5	4.0	21.0	1.3	75.0	57.0	PSM	✓	TSD, Cycle by cycle current protection	- 40 ~ 85	QFN 3 x 3 - 16L

Automotive - 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 Type
Nano-Current Consumption	GLF1111Q	1.5	5.5	2	60	2	13	✓	400	H	85	NA	HBM : 4 CDM : 2	- 40 ~ 125	SOT23-5L
	GLF1110Q	1.5	5.5	2	60	2	13	✓	400	H	NA	NA			
True Reverse Current Blocking	GLF1200Q	1.5	5.5	2	60	480	25	✓	600	H	NA	✓			HBM : 2 CDM : 1
	GLF1201Q	1.5	5.5	2	60	480	25	✓	600	H	85	✓			
Ultra-Low V _{IN}	GLF1531Q	0.8	5.5	2	44	14 uA	13	✓	2.83 ms	H	21	✓**		SOT23-6L	

**: Reverse Current Blocking Protection When Disabled