BQ25505 Configuration for LiPo battery charging (OV 4.2V) and solar power source

User Input	VBIAS	1,21	V	Fixed

	Comparator threshold for VSTORof charger. Typically the max storage element voltage, e.g. 4.2V for Lilon battery.					Comparator threshold voltages indicating when VSTORhas risen above VBAT_OK_HYST or fallen below VBAT_OK.					For the bq25570 only, comparator threshold for VOUT of buck converter.					Maximum power point threshold, e.g. ~0.7-0.8 of solar panel's open circuit voltage.				
	VBAT_UV ≤ VBAT_OV ≤ 5.5V					VBAT_OV ≥ VBAT_OK_HYST ≥ VBAT_UV					1.3V ≤ VOUT ≤ VBAT_OV					MPPT				
Desired						RSUM[1]	12	MW								RSUM[1]	20	MW		
Desired	RSUM[1]	10	MW			VBAT_OK	2,7	V	> VBAT_UV		RSUM[1]	13	MW			VIN_DC(OC)	6	V	Open Circuit Volts	
Desired	VBAT_OV	4,2	V			VBAT_OK_HYST	3	V	> VBAT_OK		VOUT	3,3	V			VREF_SAMP	4	V	MPP voltage	
								closest 1%resistor[1]										closest 1%resistor[1]		
			closest 1%resistor[1]				Exact	<	>				closest 1%resistor[1]				Exact	<	>	
Computed		Exact	<	>		ROK1	4,840	4,750	4,870	MW		Exact	<	>		ROC1	3,333	3,320	3,400	MW
Computed	ROV1	4,321	4,320	4,420	MW	ROK2	5,960	5,900	6,040	MW	ROUT1	4,767	4,750	4,870	MW	+10MEG[2]	10,000	10,000	10,000	MW
Computed	ROV2	5,679	5,620	5,760	MW	ROK3	1,200	1,130	1,270	MW	+10MEG[2]	0,000	0,000	0,000	MW	ROC2	6,667	6,650	6,810	MW
Computed	VBAT_OV	→	4,176	4,180	V	VBAT_OK	→	2,713	2,711	V	ROUT2	8,233	8,060	8,250	MW	+10MEG[2]	0,000	0,000	0,000	MW
Computed						VBAT_OK_HYST	→	3,001	3,026	V	VOUT	→	3,263	3,260	V	VREFSAMP	→	4,002	3,978	V
Selected	ROV1	5,6	MW			ROK1	4,99	MW			ROUT1	4,75	MW			ROC1	3,3	MW		
Selected	ROV2	7,32	MW			ROK2	7,32	MW			'+10MEG[2]	0,00	MW			+10MEG[2]	10,000	MW		
Selected		↓				ROK3	0,806	MW			ROUT2	8,25	MW			ROC2	6,6	MW		
							↓					↓				+10MEG[2]	0,000	MW		
Typ voltage[3]	VBAT_OV(typ)	4,187	V	-0,30	%diff	VBAT_OK(typ)	2,985	V	9,55	%diff	VOUT(typ)	3,312	0,35	%diff			↓			
Typ voltage[3]						VBAT_OK_HYST (typ)	3,180	V	5,67	%diff						VREF_SAMP	4,010	V	0,25	%diff

[1] If the available 1%resistors for the recommend resistor total (RSUM) produce too high of %difference, try using the closest 1%> and < resistor cross combo ORincreasing or decreasing RSUM in order to find a closer 1%resistor match ORadding 1 or more additional resistors and use two resistors in series that sum to the recommended value.

[2] Granularity of resistors values > 10 Mohm is greatly reduced so you may need to use a 10 Mohm resistor in series with a smaller resistor in order to achieve the desired resistance value.

[3] Total dc regulation accuracy isa function of VBIAStolerance, resistor tolerance, line regulation, load regulation and output voltage ripple (i.e., output capacitance).