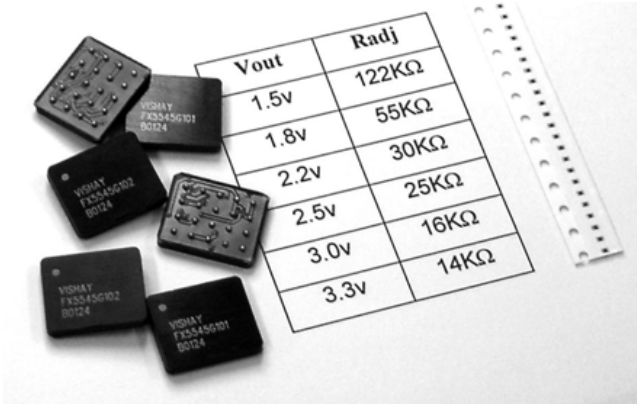


Buck or Boost with High Output Density Power



DESCRIPTION

The DC/DC converter provides fully integrated synchronous Buck or Boost converter solution for the latest one-cell lithium ion cellular phones. Its input voltage is between 2.5V to 6V capable of delivering up to 6A output current. An external resistor according to the formulas respectively, can adjust an output voltage between 0.8V, 0.9V to 1.3V and 1.35V to 4.5V for Buck and 3.3V to 6V for Boost.

*The numbers are for illustration purpose only.

PRODUCT DESCRIPTION						
TYPE	MOUNTING	TOPOLOGY	INPUT VOLTAGE (V)	OUTPUT VOLTAGE (V)	MAX OUTPUT CURRENT (A)	OUTPUT POWER (W)
FX5545G001ADJ	BGA or LGA	Buck	2.7-6.0	1.35-4.5*	0.6	1.5
FX5545G201ADJ	BGA or LGA	Buck	2.7-6.0	1.35-4.5*	1.0	3.0
FX5545G005ADJ	BGA or LGA	Buck	2.7-6.0	1.35-4.5*	1.5	5.0
FX5545G105ADJ	BGA or LGA	Buck	2.7-6.0	1.35-4.5*	2.0	6.5
FX5545G205ADJ	BGA or LGA	Buck	2.7-6.0	1.35-4.5*	2.5	8.2
FX5545G305ADJ	BGA or LGA	Buck	2.7-6.0	1.35-4.5*	3.0	10.0
FX5545G008ADJ	BGA or LGA	Buck	2.5-6.0	0.8-4.5*	3.0	10.0
FX5545G018ADJ	BGA or LGA	Buck	2.5-6.0	0.9-1.3	3.0	3.6
FX5545G108ADJ	BGA or LGA	Buck	2.5-6.0	0.9-4.5*	4.0	15.0
FX5545G011ADJ	BGA or LGA	Buck	2.5-6.0	0.9-4.5*	6.0	27.0
FX5545G002ADJ	BGA or LGA	Boost	2.5-6.0	3.3-6.0	0.3	1.5
FX5545G202ADJ	BGA or LGA	Boost	2.5-6.0	3.3-6.0	0.6	3.0
FX5545G402ADJ	BGA or LGA	Boost	2.5-6.0	3.3-6.0	1.0	5.0
FX5545G006ADJ	BGA or LGA	Boost	2.5-6.0	3.3-6.0	1.5	9.0
FX5545G106ADJ	BGA or LGA	Boost	2.5-6.0	3.3-6.0	2.0	12.0
FX5545G206ADJ	BGA or LGA	Boost	2.5-6.0	3.3-6.0	2.5	15.0

*Note: For higher output voltage please consult factory at FunctionPAK@Vishay.com

Self Selectable Output Voltage

Vishay

Buck or Boost with High Output Density Power



R_{EXT}/D_{EXT} SELECTION)				
COMPONENT TYPE	TOPOLOGY	REQUESTED OUTPUT VOLTAGE	R _{EXT} DEVICE	D _{EXT} DEVICE
FX5545G001ADJ FX5545G201ADJ	Buck	1.35V - 4.5V	$R_{EXT} [K\Omega] = \frac{28.6}{V_{OUT} - 1.3}$	N/C
FX5545G005ADJ FX5545G105ADJ FX5545G205ADJ FX5545G305ADJ		1.35V - 4.5V	$R_{EXT} [K\Omega] = \frac{71.5}{V_{OUT} - 1.3}$	N/C
FX5545G008ADJ		0.8V	$R_{EXT} [K\Omega] = \frac{52}{(V_{OUT} - 0.75) V_{OUT}}$	D2-MCL4448
		0.9V - 1.3V	$R_{EXT} [K\Omega] = \frac{66}{(1.2V_{OUT} - 1) V_{OUT}}$	D2-BAR065V
		1.35V - 4.5V	$R_{EXT} [K\Omega] = \frac{71.5}{V_{OUT} - 1.3}$	N/C
FX5545G018ADJ		0.9V - 1.3V	$R_{EXT} [K\Omega] = \frac{66}{(1.2V_{OUT} - 1) V_{OUT}}$	N/C
FX5545G108ADJ		0.9V - 1.3V	$R_{EXT} [K\Omega] = \frac{66}{(1.2V_{OUT} - 1) V_{OUT}}$	D2-BAR65V
		1.35V - 4.5V	$R_{EXT} [K\Omega] = \frac{71.5}{V_{OUT} - 1.3}$	N/C
FX5545G011ADJ		0.9V - 1.3V	$R_{EXT} [K\Omega] = \frac{66}{(1.2V_{OUT} - 1) V_{OUT}}$	D2-BAR65V
		1.35V - 4.5V	$R_{EXT} [K\Omega] = \frac{71.5}{V_{OUT} - 1.3}$	N/C
FX5545G002ADJ FX5545G202ADJ FX5545G402ADJ	Boost	3.3V - 6.0V	$R_{EXT} [K\Omega] = \frac{28.6}{V_{OUT} - 1.3}$	N/C
FX5545G006ADJ FX5545G106ADJ FX5545G206ADJ		3.3V - 6.0V	$R_{EXT} [K\Omega] = \frac{71.5}{V_{OUT} - 1.3}$	N/C

PIN CONFIGURATION							
For GXX2		For GXX1; GXX5; GXX6 and G018		For G008 and G108		For G011	
PIN	CONNECTION	PIN	CONNECTION	PIN	CONNECTION	PIN	CONNECTION
1	N/C	1, 2	\overline{SD}	1, 2	\overline{SD}	1-4, 6, 7	GND
2, 6	\overline{SD}	3, 7	SYNC	3, 7	SYNC	5, 9	Vin
3, 7	PWM/PSM	4, 8	N/C	4, 8	Vref	8	SYNC
4, 8	SYNC	5, 9	Vin	5, 9	Vin	10, 13	GND
5, 9	Vout	6, 10	PWM/PSM	6, 10	PWM/PSM	11	\overline{SD}
10 - 12	N/C	11, 12	N/C	11, 12	N/C	12	PWM/PSM
13, 17	GND	13, 17	GND	13, 17	GND	15, 16	GND
14, 18	N/C	14, 18	Vout	14, 18	Vout	14, 17, 18	Vout
15, 16	Ext. Resistor	15, 19	Ext. Resistor	15, 19	Ext. Resistor	19	Ext. Resistor
19, 20	Vin	16, 20	GND	16, 20	GND	20	Vref