

# LEDドライバ

## 昇圧LEDドライバ

バイポーラDMR

FET外付け 白色LEDドライバ										
品名	電源電圧 (V)	LED灯数	出力電圧 (V)	スイッチング周波数 (MHz)	主な輝度制御方式	制御インタフェース	パッケージ (mm)			
BD6583MUV-A	2.7 to 22.0	Max 72 12seriesx6strings in parallel (V <sub>f</sub> restrictions exist)	Max 43.0	1	PWM signal from the PWMPOW/PWMDRV terminal Resistance switching at the ISET terminal	Pin logic setting	VQFN024V4040			
BD9486F	9 to 18	Max About 120 120seriesx1string in parallel	Max About 400	0.05 to 0.80	PWM signal Analog signal	Pin logic setting	SOP16			
BD9411F	9 to 35	Max About 120 120seriesx1string in parallel	Max About 400	0.05 to 1.00	PWM signal Analog signal	Pin logic setting	SOP18			
BD9413F	9 to 35	Max About 120 120seriesx1string in parallel	Max About 400	0.05 to 1.00	PWM signal Analog signal	Pin logic setting	SOP18			
BD9483F	11 to 35	Max About 240 120seriesx2strings in parallel	Max About 400	0.05 to 0.80	PWM signal Analog signal	Pin logic setting	SOP24			
BD9483FV	11 to 35	Max About 240 120seriesx2strings in parallel	Max About 400	0.05 to 0.80	PWM signal Analog signal	Pin logic setting	SSOP-B24			
BD9416F	9 to 35	Max About 240 120seriesx2strings in parallel	Max About 400	0.05 to 1.00	PWM signal Analog signal	Pin logic setting	SOP24			
BD9416FS	9 to 35	Max About 240 120seriesx2strings in parallel	Max About 400	0.05 to 1.00	PWM signal Analog signal	Pin logic setting	SSOP-A24			
BD9479FV	9 to 35	Max About 96 12seriesx8strings in parallel	Max About 40	0.1 to 0.8	PWM signal Analog signal	Pin logic setting	SSOP-B40			
BD9408FV	9 to 35	Max About 120 120seriesx1string in parallel	Max About 400	0.05 to 2.00	PWM signal Analog signal	Pin logic setting	SSOP-B14			
BD9409F	11.5 to 35.0	Max About 120 120seriesx1string in parallel	Max About 400	0.05 to 1.00	PWM signal Analog signal	Pin logic setting	SOP16			
BD9420F	9 to 35	Max 72 12seriesx6strings in parallel (V <sub>f</sub> restrictions exist)	Max About 40	0.1 to 0.8	PWM signal Analog signal	Pin logic setting	SOP28			
BD9421F	9 to 35	Max 72 12seriesx6strings in parallel (V <sub>f</sub> restrictions exist)	Max About 40	0.1 to 0.8	PWM signal Analog signal	Pin logic setting	SOP24			
FET内蔵 白色LEDドライバ										
BD60A00NUX	2.7 to 5.5	Max 10 10seriesx1string in parallel	Max 40.0	0.6	PWM signal Resistance switching at the ISET terminal	Pin logic setting	VSON008X2030			
BD60A60NUX	2.7 to 5.5	Max 6 6seriesx1string in parallel	Max 26.0	0.6	PWM signal Resistance switching at the ISET terminal	Pin logic setting	VSON008X2030			
BD65B60GWL	2.7 to 5.5	Max 16 8seriesx2strings in parallel	Max 28.5	1.1/0.6	I <sup>2</sup> C BUS PWM signal Resistance switching at the ISET terminal	I <sup>2</sup> C BUS + PWM	UCSP50L1 1.4x1.8, H=Max 0.55			
BD6586MUV	2.7 to 5.5	Max 24 6seriesx4strings in parallel	Max 24.0	1	PWM signal Resistance switching at the ISET terminal	Pin logic setting	VQFN024V4040			
BD65D00MUV	6 to 27	Max 40 10seriesx4strings in parallel	Internal FET Max 40.0 External FET Max 80.0	0.6 to 1.6	PWM signal Resistance switching at the ISET terminal Analog voltage control	Pin logic setting	VQFN028V5050			
BD6142AMUV	4.2 to 27	Max 80 10seriesx8strings in parallel	Max 41.0	0.6 to 1.6	PWM signal Resistance switching at the ISET terminal Analog voltage control	Pin logic setting	VQFN024V4040			
BD9394EFV	9 to 35	Max 72 18seriesx4strings in parallel	Max 60.0	0.1 to 0.8	PWM signal Analog signal	Pin logic setting	HTSSOP-B24			
BD9394FP	9 to 35	Max 72 18seriesx4strings in parallel	Max 60.0	0.1 to 0.8	PWM signal Analog signal	Pin logic setting	HSOP20			
BD93941EFV	9 to 35	Max 72 18seriesx4strings in parallel	Max 60.0	0.1 to 0.8	PWM signal Analog signal	Pin logic setting	HTSSOP-B20			
BD93941FP	9 to 35	Max 72 18seriesx4strings in parallel	Max 60.0	0.1 to 0.8	PWM signal Analog signal	Pin logic setting	HSOP20			
BD93942F	9 to 35	Max 72 18seriesx4strings in parallel	Max 60.0	0.1 to 0.8	PWM signal Analog signal	Pin logic setting	SOP16			
BD9470AEFV	9 to 35	Max 72 18seriesx4strings in parallel	Max 40.0	0.1 to 0.5	PWM signal	Pin logic setting	HTSSOP-B28			
BD9470AFM	9 to 35	Max 72 18seriesx4strings in parallel	Max 40.0	0.1 to 0.5	PWM signal	Pin logic setting	HSOP-M28			
BD9397EFV	9 to 35	Max 84 14seriesx6strings in parallel	Max 50.0	0.10 to 1.25	PWM signal Analog signal	Pin logic setting	HTSSOP-B40			
BD9422EFV	9 to 35	Max 84 14seriesx6strings in parallel	Max 60.0	0.10 to 1.25	PWM signal Analog signal	Pin logic setting I <sup>2</sup> C	HTSSOP-B40			
FET内蔵 同期整流方式 白色LEDドライバ										
BD6071HFN	2.7 to 5.5	Max 3 3seriesx1string in parallel	Max 14.0	1	PWM signal from EN terminal	—	HSO8			
BD6072HFN	2.7 to 5.5	Max 4 4seriesx1string in parallel	Max 18.0	1	PWM signal from EN terminal	—	HSO8			
LEDカメラフラッシュドライバ										
品名	電源電圧 (V)	LED灯数	出力電圧 (V)	出力電流	スイッチング周波数 (MHz)	制御インタフェース	パッケージ (mm)			
BD6164GUT	2.7 to 4.5	1 (Large current LED)	Max 4.7	52, 72mA (Torch mode) 260, 280, 300, 320mA (Flash mode)	4	I <sup>2</sup> C BUS	VCSP60N1 1.5x1.1, H=Max 0.675			
BD7757MWX	2.7 to 5.0	Max 2 1 to 2seriesx1string in parallel (V <sub>f</sub> restrictions exist) (large current LED)	Max 5.1	0 to 1.5A	2	UPIC*	USON014X3020			
ヘッドライト用LEDドライバ										
品名	電源電圧 (V)	アプリケーション	ch	耐圧 (V)	出力電流	調光モード	DC/DC	動作温度 (°C)	パッケージ	車載対応 AEC-Q100
BD18351EFV-M	4.5 to 65.0	Head Lamp/DRL	1	65	Depend on Extra parts	PWM/DC	Boost	-40 to +125	HTSSOP-B24	YES

\*UPIC: Uni-Port Interface Control

## 降圧LEDドライバ

DC/DCコンバータタイプ 降圧型LED照明ドライバ						
品名	電源電圧 (V)	スイッチング端子電圧 (V)	Ron (Ω)	発信周波数 (kHz)	過電流保護	パッケージ
BM531Q11	9.0 to 35.0	250	0.93 (Typ)	Max 440	✓	DIP7AK
BD94062F	10.5 to 35.0	—	—	Max 800	✓	SOP16

  

PFCダイレクト電流共振タイプ 大画面向け白色LEDドライバ						
品名	電源電圧 (V)	駆動方式	発振周波数可変 (kHz)	主な輝度制御方式	制御インタフェース	パッケージ
BD92111F	8.0 to 18.0	Half Bridge	30 to 200	PWM signal	Pin logic setting	SOP18
BD94121F	9.0 to 18.0	Half Bridge	30 to 300	PWM signal/Analog signal	Pin logic setting	SOP18
BD94122F	9.0 to 18.0	Half Bridge	30 to 300	PWM signal/Analog signal	Pin logic setting	SOP18

## 昇降圧LEDドライバ

白色LEDドライバ										
品名	電源電圧 (V)	昇圧FET	ch	出力電圧 (V)	出力電流 (mA)	スイッチング周波数 (MHz)	PWM調光率	動作温度 (°C)	パッケージ	車載対応 AEC-Q100
BD81A24EFV-M	4.5 to 35.0	Internal	4	Max 40	Max 120/ch	0.2 to 2.2	10,000 : 1@100Hz	-40 to +125	HTSSOP-B28	YES
BD81A24MUV-M	4.5 to 35.0	Internal	4	Max 40	Max 120/ch	0.2 to 2.2	10,000 : 1@100Hz	-40 to +125	VQFN28SV5050	YES
BD81A24MUF-M	4.5 to 35.0	Internal	4	Max 40	Max 120/ch	0.2 to 2.2	10,000 : 1@100Hz	-40 to +125	VQFN28FV5050	YES
BD81A44EFV-M	4.5 to 35.0	External	4	Max 40	Max 120/ch	0.2 to 2.2	10,000 : 1@100Hz	-40 to +125	HTSSOP-B28	YES
BD81A44MUV-M	4.5 to 35.0	External	4	Max 40	Max 120/ch	0.2 to 2.2	10,000 : 1@100Hz	-40 to +125	VQFN28SV5050	YES
BD81A44MUF-M	4.5 to 35.0	External	4	Max 40	Max 120/ch	0.2 to 2.2	10,000 : 1@100Hz	-40 to +125	VQFN28FV5050	YES
BD81A74EFV-M	4.5 to 35.0	External	4	Max 40	Max 120/ch	0.2 to 2.2	10,000 : 1@100Hz	-40 to +125	HTSSOP-B28	YES
BD81A74MUV-M	4.5 to 35.0	External	4	Max 40	Max 120/ch	0.2 to 2.2	10,000 : 1@100Hz	-40 to +125	VQFN28SV5050	YES
<b>New</b> BD81A76EFV-M	4.5 to 35.0	External	6	Max 40	Max 120/ch	0.2 to 2.2	10,000 : 1@100Hz	-40 to +125	HTSSOP-B30	YES

  

ヘッドライト用LEDドライバ										
品名	電源電圧 (V)	アプリケーション	ch	耐圧 (V)	出力電流	調光モード	DC/DC	動作温度 (°C)	パッケージ	車載対応 AEC-Q100
BD8381AEFV-M	5 to 30	Head Lamp/DRL	1	50	Depend on extraparts	PWM/DC	Buck-Boost, Boost, Buck	-40 to +125	HTSSOP-B28	YES

## ライティング向けLEDドライバ

650V LED照明用AC/DCコントローラ							
品名	電源電圧 (V)	AC電圧入力 (Vac)	PFC機能内蔵	MOSFET内蔵	LED平均電流 (mA)	スイッチング周波数 (kHz)	パッケージ
BM520Q15F	8.9 to 26.0	80 to 275	—	✓	up to 200	20 to 200	SOP8
BM521Q25F	8.9 to 25.0	80 to 275	✓	✓	up to 200	20 to 300	SOP8
BD521GOFJ	8.9 to 25.0	80 to 275	✓	—	—	20 to 300	SOP-J8

## インダクタ不要(チャージポンプ)LEDドライバ

White LED Drivers								
品名	電源電圧 (V)	LED灯数	チャージポンプ昇圧回路			主な輝度制御方式	制御インタフェース	パッケージ
			出力電圧 (V)	出力電流 (mA)	ポンプ周波数			
BD1604MUV	2.7 to 5.5	1 to 4	Max 4.5	120	1MHz	PWM control via EN terminal Resistance switching at ISET terminal	Pin logic setting	VQFN016V3030
BD2606MVV	2.7 to 5.5	1 to 6	Max 4.7	120	250kHz/1kHz	Built-in 64-step current DAC (0.5 to 32.0mA)	I <sup>2</sup> C BUS	SQFN016V4040

## 定電流/シリパラ LEDドライバ

### パラレル出力 LEDドライバ

品名	電源電圧 (V)	LED灯数	定電流ドライバ				制御 インタフェース	パッケージ				
			最大電流設定方式	最大電流	チャンネル間 マッチング	輝度制御						
BD1754HFN	2.7 to 5.5	1 to 4 (Parallel Connection)	Resistance change at ISET terminal	32mA (at an ISET resistance of 120kΩ)	Max 3% (at 1V LED pin voltage)	Built-in 64-step current DAC	UPIC*	HSO8				
BD2802GU	2.7 to 5.5	6 (RGB 2ch)	Resistance change at ISET terminal	30.48mA (at an ISET resistance of 120kΩ)	Max 10% (at 1V LED pin voltage)	Built-in 128-step current DAC	I <sup>2</sup> C BUS	VCSP85H2				
BD2812GU	2.7 to 5.5	6 (RGB 2ch)	Resistance change at ISET terminal	30.48mA (at an ISET resistance of 120kΩ)	Max 10% (at 1V LED pin voltage)	Built-in 128-step current DAC/ Inductorless (Charge Pump)	I <sup>2</sup> C BUS	VCSP85H3				
品名	電源電圧 (V)	出力電圧 (V)	出力数 (ch)	出力形式	最大LED電流	各出力の形式	その他	制御方式	最大クロック周波数 (MHz)	パッケージ	車載対応 AEC-Q100	
BD8379EFV-M	3.0 to 5.5	3.5	12	Open Drain	50mA/ch	ON/OFF	—	SPI	1.25	HTSSOP-B20	YES	
BD2808MUV-M	3.0 to 5.5	3.0	20	RGB×8 (24ch)	Constant Current	50mA/ch	Built-in 64-step current DAC for RGB	Built-in 256-step PWM control for all channels	2-Wire Serial	1.0	VQFN48MCV070	YES
<b>New</b> BD8388FV-M	3.0 to 5.5	3.0	40	8	Open Drain	50mA/ch	ON/OFF	—	SPI	1.25	SSOP-B16	YES
BD8389FV-M	3.0 to 5.5	3.0	40	12	Open Drain	50mA/ch	ON/OFF	—	SPI	1.25	SSOP-B20	YES

### ドットマトリクスLEDドライバ

品名	電源電圧 (V)	LEDマトリクス	最大LED電流	内蔵パターン		マトリクス データ RAM	モバイル ライト	PWM 調光 (step)	電流設定 (step)	インタフェース	最大クロック周波数	パッケージ (mm)
				Scroll	Slope							
BU26507GUL	2.7 to 5.5	5×6 30dots	42.5mA/Line	✓	✓	2pages	—	64	16	I <sup>2</sup> C BUS/SPI (2 address/—)	400kHz/13MHz	VCSP50L2 2.5×2.5, H=Max 0.55
BD26503GUL	2.7 to 5.5	7×17 119dots	30mA/Line	✓	✓	2pages	—	64	16	I <sup>2</sup> C BUS/SPI (2 address/—)	400kHz/13MHz	VCSP50L3 3.6×3.6, H=Max 0.55
BD26503KS2	2.7 to 5.5	7×17 119dots	30mA/Line	✓	✓	2pages	—	64	16	I <sup>2</sup> C BUS/SPI (2 address/—)	400kHz/13MHz	SQFP-T52
BU16501KS2	2.7 to 5.5	8×16 128dots	42.5mA/Line	—	—	1page	—	64	16	I <sup>2</sup> C BUS/SPI (2 address/—)	400kHz/13MHz	SQFP-T52

### LEDソースドライバ

品名	電源電圧 (V)	アプリケーション	ch	出力	耐圧 (V)	最大出力電流 (mA)	調光	電流精度 (%)	LEDオープン検出マスク電圧 (V)	動作温度 (°C)	パッケージ	車載対応 AEC-Q100
BD18340FV-M	4.5 to 19.0	DRL/Position/FOG/Turn/Rear	1 to 10	Controller (External PNP)	70	Total 1,000	PWM/DC (±5%)	±3 (T <sub>a</sub> =25 to 125°C)	variable	-40 to +125	SSOP-B16	YES
BD18341FV-M	4.5 to 19.0	DRL/Position/FOG/Turn/Rear	1 to 10	Controller (External PNP)	70	Total 1,000	PWM/DC (±12%)	±3 (T <sub>a</sub> =25 to 125°C)	variable	-40 to +125	SSOP-B16	YES
<b>New</b> BD18342FV-M	4.5 to 19.0	DRL/Position/FOG/Turn/Rear	1 to 10	Controller (External PNP)	70	Total 1,000	PWM	±3 (T <sub>a</sub> =25 to 125°C)	variable	-40 to +125	SSOP-B16	YES
<b>New</b> BD18343FV-M	4.5 to 19.0	DRL/Position/FOG/Turn/Rear	1 to 10	Controller (External PNP)	70	Total 1,000	External PWM signal	±3 (T <sub>a</sub> =25 to 125°C)	variable	-40 to +125	SSOP-B16	YES
<b>New</b> BD18345EFV-M	4.5 to 19.0	DRL/Position/FOG/Turn/Rear	1 to 10	Controller (External PNP)	70	Total 1,000	PWM/DC	±3 (T <sub>a</sub> =25 to 125°C)	variable	-40 to +125	HTSSOP-B20	YES
<b>New</b> BD18337EFV-M	5.5 to 20.0	DRL/Position/FOG/Turn/Rear	4	Internal	40	150mA/ch	PWM	±10 (Output current: 50 to 100mA) (T <sub>a</sub> =25 to 125°C) ±5 (Output current: 100 to 150mA) (T <sub>a</sub> =25 to 125°C)	11.0	-40 to +125	HTSSOP-B16	YES
<b>New</b> BD18347EFV-M	5.5 to 20.0	DRL/Position/FOG/Turn/Rear	4	Internal	40	150mA/ch	PWM	±10 (Output current: 50 to 100mA) (T <sub>a</sub> =25 to 125°C) ±5 (Output current: 100 to 150mA) (T <sub>a</sub> =25 to 125°C)	7.65	-40 to +125	HTSSOP-B16	YES
BD8372EFJ-M	5.5 to 40.0	DRL/Position/FOG/Turn/Rear	1	Internal	50	200	High Current/ Low Current	±3 (T <sub>a</sub> =25°C)	—	-40 to +125	HTSOP-J8	YES
BD8372HFP-M	5.5 to 40.0	DRL/Position/FOG/Turn/Rear	1	Internal	50	200	High Current/ Low Current	±3 (T <sub>a</sub> =25°C)	—	-40 to +125	HRP7	YES
BD8374EFJ-M	4.5 to 42.0	DRL/Position/FOG/Turn/Rear	1	Internal	50	500	PWM	±3 (T <sub>a</sub> =25°C)	—	-40 to +125	HTSOP-J8	YES
BD8374HFP-M	4.5 to 42.0	DRL/Position/FOG/Turn/Rear	1	Internal	50	500	PWM	±3 (T <sub>a</sub> =25°C)	—	-40 to +125	HRP7	YES
BD83732HFP-M	4.5 to 42.0	DRL/Position/FOG/Turn/Rear	1	Internal	50	500	PWM/DC	±3 (T <sub>a</sub> =25°C)	7.65	-40 to +125	HRP7	YES
BD83733HFP-M	4.5 to 42.0	DRL/Position/FOG/Turn/Rear	1	Internal	50	500	PWM/DC	±3 (T <sub>a</sub> =25°C)	11.0	-40 to +125	HRP7	YES
BD83740HFP-M	4.5 to 42.0	DRL/Position/FOG/Turn/Rear	1	Internal	50	500	PWM	±3 (T <sub>a</sub> =25°C)	—	-40 to +125	HRP7	YES
BD83740EFJ-M	4.5 to 42.0	DRL/Position/FOG/Turn/Rear	1	Internal	50	500	PWM	±3 (T <sub>a</sub> =25°C)	—	-40 to +125	HTSOP-J8	YES

\*UPIC: Uni-Port Interface Control

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