

High efficiency Power LED driver for LCD backlighting

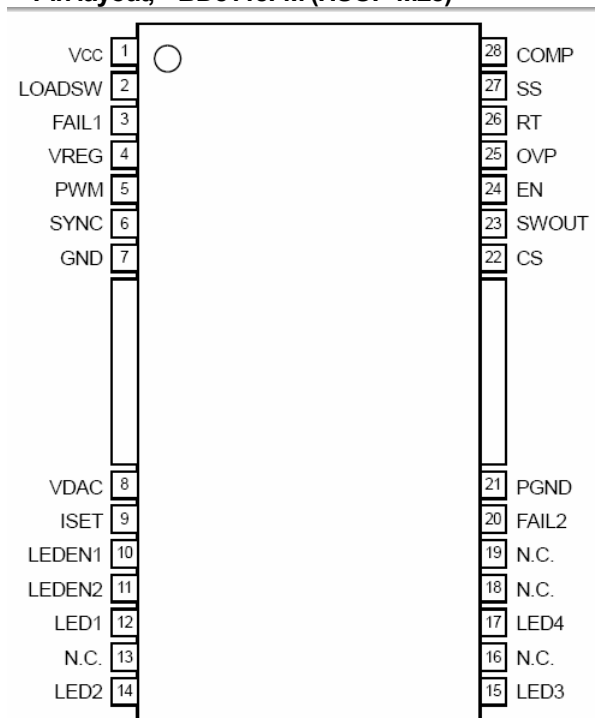
The automotive grade BD8118FM is designed for medium sized LCD back lighting applications. It integrates four precisely matched current sources to drive four LED chains with up to 150mA each. LED luminance can be controlled by PWM (0.38%-100%) or VDAC.

The output voltage of the integrated boost converter is regulated to minimize voltage drop of the current sources. It can be controlled by an enable switch and features a Soft Start mode to eliminate overshoot. The switching frequency is adjustable by synchronization or ext. RC. Further more various Built-in Protections like UVLO, OVP, OCP, TSD, LED open detection and Failure indication output guarantee a reliable operation. The device is qualified according to AEC-Q100. PPAP service is available. Samples are ready for shipment.

● Pin function table

Pin	Symbol	Function
1	VCC	Input power supply
2	LOADSW	FET connection for load switch
3	FAIL1	Failure signal output
4	VREG	Internal reference voltage output
5	PW M	PW M light modulation input
6	SYNC	External synchronization signal input
7	GND	Small-signal GND
8	V DAC	DC variable light modulation input
9	ISET	LED output current-setting resistance input
10	LEDEN1	LED output enable pin 1
11	LEDEN2	LED output enable pin 2
12	LED1	LED output 1
13, 16		N.C.
14	LED2	LED output 2
15	LED3	LED output 3
17	LED4	LED output 4
18, 19		N.C.
20	FAIL2	LED open detection signal output
21	PGND	LED output GND
22	CS	DC/DC output current detection input
23	SWOUT	DC/DC switching output
24	EN	Enable input
25	OVP	Over-voltage detection input
26	RT	Oscillation frequency-setting resistance input
27	SS	Soft start time-setting capacitance input
28	COMP	Error amplifier output

● Pin layout, BD8118FM (HSOP-M28)



ROHM ELECTRONICS GMBH

Product Marketing Manager

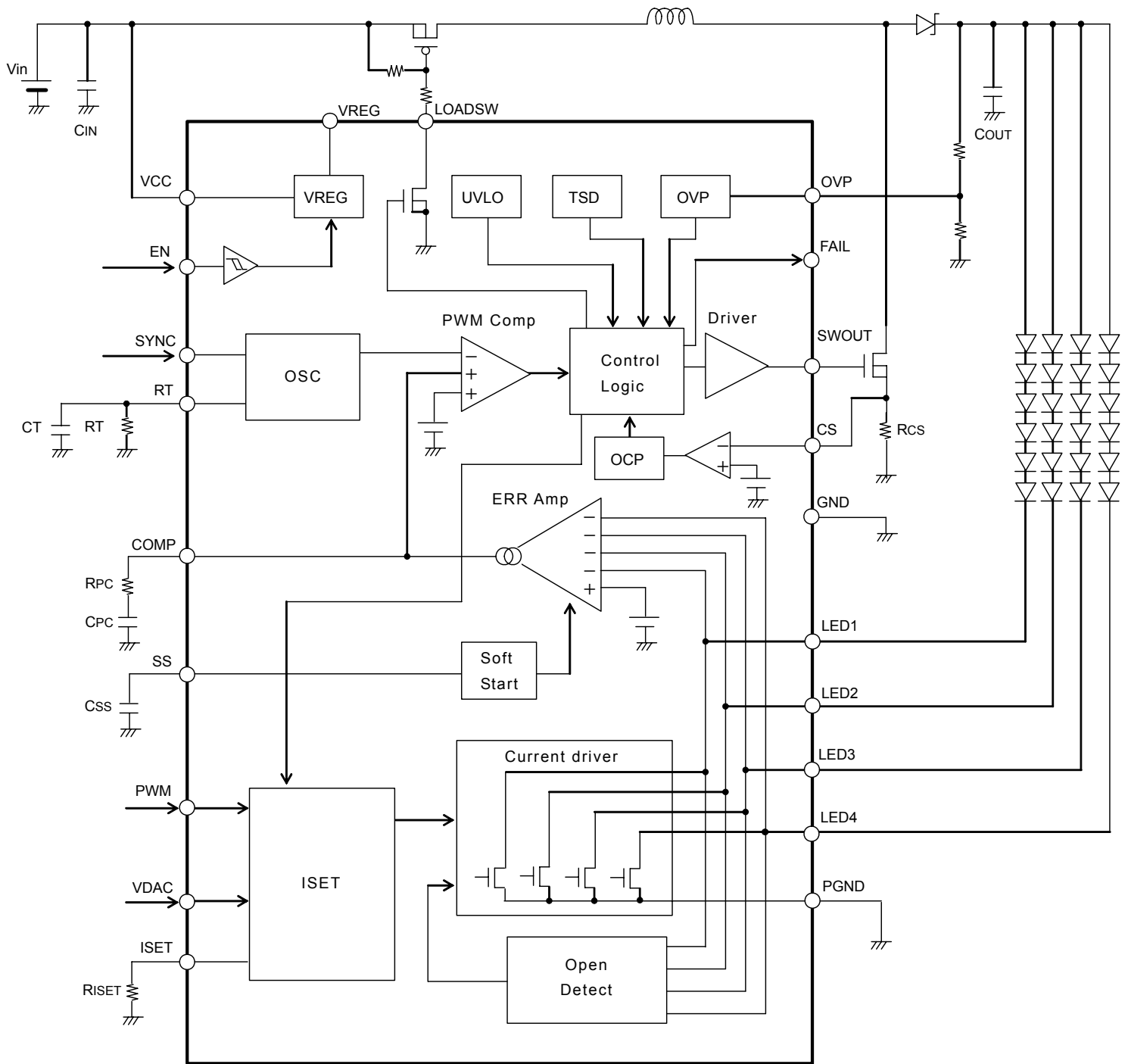
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Application example