

## **Product List**

DM9310

## **Description**

The DM9310 is a battery charger controller. It has hard-wire charging state machine. There is voltage feedback input from the battery. The battery charging profile will be supported by pulse width modulation output. And drive through an external MOSFET.

### **Features**

• Operating Voltage: 4.5V ~ 5.5V

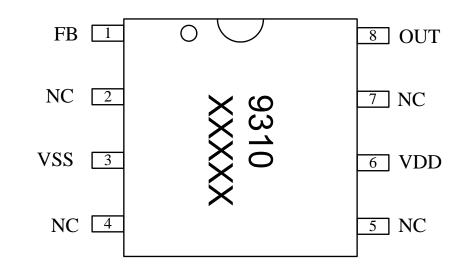
Voltage feedback input.

• Digital charging control output

Package type: 8L-SOP.

## **Pin Configuration**

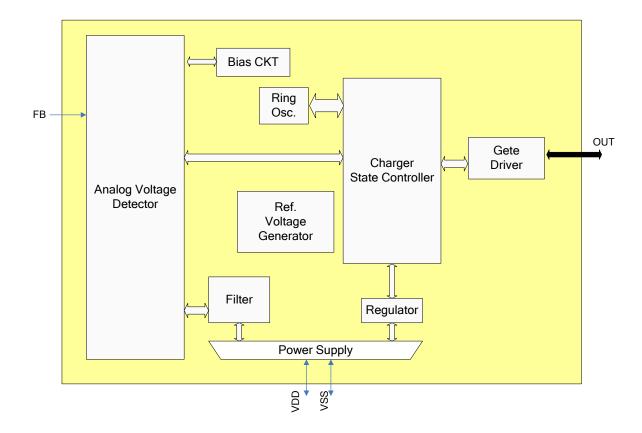
8 Pin SOP



Top Marking Notes Line-1: P/N Line-2: Lot No.



# **Block Diagram**





# **Pin Description**

8L	Symbol	I/O	Description
1	FB	I	Voltage sense input
2	NC	-	NC
3	VSS	I	Power Supply
4	NC	-	NC
5	NC	-	NC
6	VDD	I	Power Supply
7	NC	-	NC
8	OUT	0	Gate Control Output

# **Operating Conditions**

Symbol	Description	Min.	Тур.	Max.	Unit.	Remarks
TA	Operating temperature	-40	25	85	$^{\circ}$	Ambient temperature under bias
VDD	Supply voltage	1.8		5.5	V	
Vref	Internal reference voltage	1.1	1.2	1.3	V	

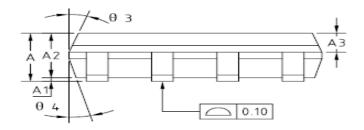
### **DC** Characteristics

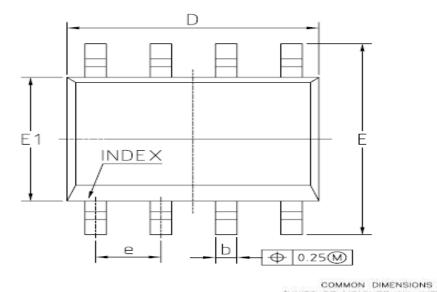
 $T_A = -40^{\circ}C$  to  $85^{\circ}C$ ,  $V_{dd} = 5.0V$ 

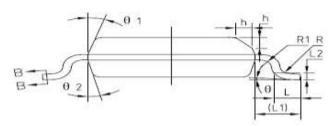
Symbol	Parameter	Valid	Min	Max	Units	Conditions
VIL1	Input Low-voltage	OUT, FB	-0.5	0.8	V	Vdd=5V
VIH1	Input High-voltage	OUT, FB	2.0	$V_{CC} + 0.5$	V	
VOL	Output Low-voltage	OUT, FB		0.4	V	IOL=4.9mA
VOIII	Output High-voltage	OUT, FB	90% V <sub>CC</sub>		V	IOH= -4.6mA
VOH1	using Strong Pull-up <sup>(1)</sup>		2.4		V	IOH= -14mA
VOH2	Output High-voltage using Weak Pull-up <sup>(2)</sup>	OUT, FB	2.4		V	IOH= -250uA
IIL	Logic 0 Input Current	OUT, FB		-75	uA	Vin= 0.45V
ITL	Logical Transition Current	OUT, FB		-650	uA	Vin= 2.0V
ILI	Input Leakage Current	OUT, FB		±10	uA	0.45V <vin<vcc< td=""></vin<vcc<>
ICC	Power Supply Current	VDD, VSS		5	mA	Vdd =5V 25 °C

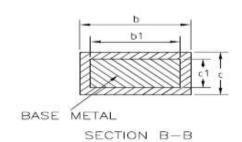


# **Package Information**









SYMBOL	MIN	NOM	MAX					
A	1.35	1.55	1.75					
A1	0.05	0.15	0.25					
A2	1.25	1.40	1.65					
A3	0.50	0.60	0.70					
ь	0.38	-	0.51					
b1	0.37	0.42	0.47					
c1	0.17	-	0.25					
c1	0.17	0.20	0.23					
D	4.80	4.90	5.00					
E	5.80	6.00	6.20					
E1	3.80	3.90	4.00					
e		1,27BSC						
L	0.45	0.60	0.80					
L1		1.04REF						
L2		0.25BSC						
R	0.07	-	-					
R1	0.07	77.	-					
h	0.30	0.40	0.50					
0	O.	-	8"					
0 1	15*	17"	19*					
9.2	11"	1.3*	15"					
0.3	15	17*	19"					
0.4	111	13*	15"					

NOTES: ALL DIMENSIONS MEET JEDEC STANDARD MS-012 AA DO NOT INCLUDE MOLD FLASH OR PROTRUSIONS.



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