



DIO6022

High-Efficiency 1MHz, 2A Output Synchronous Step Down Converter

Features

- Low $R_{DS(ON)}$ for internal switches (top/bottom) 130m Ω /100m Ω , 2A
- 3-5.5V input voltage range
- 1MHz switching frequency minimizes the external components
- Internal soft-start limits the inrush current
- 100% dropout operation capability with input voltage up to 5V
- Output power good indicator
- RoHS compliant and Halogen free
- Compact and thermally enhanced SOIC-8 package

Descriptions

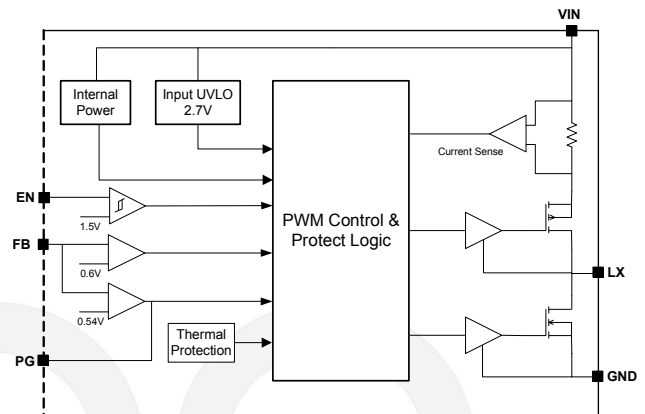
The DIO6022 is a high-efficiency 1MHz synchronous step-down DC-DC regulator IC capable of delivering up to 2A output current. The DIO6022 operates over a wide input voltage ranging from 3V to 5.5V and integrate main switch and synchronous switch with very low $R_{DS(ON)}$ to minimize the conduction loss.

Low output voltage ripple and small external inductor and capacitor sizes are achieved with 1MHz switching frequency. The integrated power good indicator provides the system reset function and facilitates the output sequencing design.

Applications

- LCD TV
- Set Top Box
- Net PC
- Mini-Notebook PC
- Access Point Router

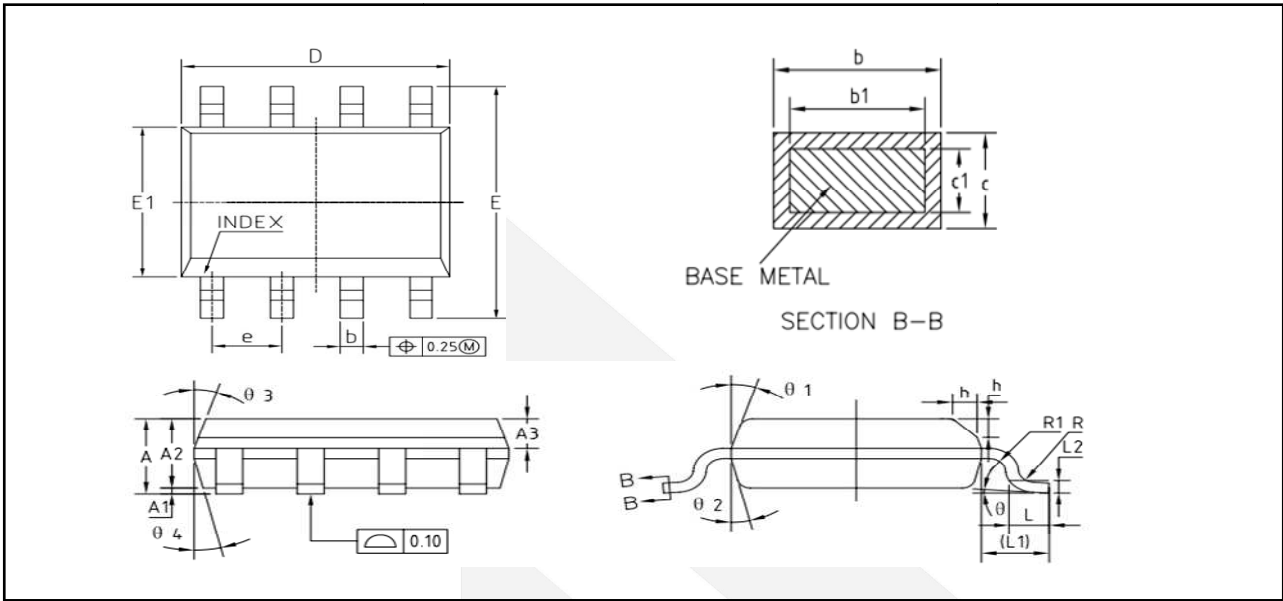
Function Block



Ordering Information

Order Part Number	Top Marking		T_A	Package	
DIO6022CS8	DIO6022	RoHS	-40 to +85°C	SOIC8	Tape & Reel, 2500

Physical Dimensions: SOIC-8



COMMON DIMENSIONS (UNITS OF MEASURE=MILLIMETER)			
Symbol	MIN	NOM	MAX
A	1.35	1.55	1.75
A1	0.10	0.15	0.25
A2	1.25	1.40	1.65
A3	0.50	0.60	0.70
b	0.38	-	0.51
b1	0.37	0.42	0.47
c	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	-	-
h	0.30	0.40	0.50
θ	0°	-	8°
θ1	15°	17°	19°
θ2	11°	13°	15°
θ3	15°	17°	19°
θ4	11°	13°	15°

CONTACT US

Dioo is a professional design and sales corporation for high-quality and performance analog semiconductors. The company focuses on industry markets, such as, cell phone, handheld products, laptop, and medical equipments and so on. Dioo's product families include analog signal processing and amplifying, LED drivers and charger IC. Go to <http://www.dioo.com> for a complete list of Dioo product families.

For additional product information, or full datasheet, please contact with our Sales Department or Representatives.



Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[DIOO:](#)

[DIO6022CS8](#)