

## GENERAL DESCRIPTION

OB2263 is a highly integrated current mode PWM control IC optimized for high performance, low standby power and cost effective offline flyback converter applications in sub 30W range.

PWM switching frequency at normal operation is externally programmable and trimmed to tight range. At no load or light load condition, the IC operates in extended ‘burst mode’ to minimize switching loss. Lower standby power and higher conversion efficiency is thus achieved.

VDD low startup current and low operating current contribute to a reliable power on startup design with OB2263. A large value resistor could thus be used in the startup circuit to minimize the standby power.

The internal slope compensation improves system large signal stability and reduces the possible sub-harmonic oscillation at high PWM duty cycle output. Leading-edge blanking on current sense(CS) input removes the signal glitch due to snubber circuit diode reverse recovery and thus greatly reduces the external component count and system cost in the design.

OB2263 offers complete protection coverage with automatic self-recovery feature including Cycle-by-Cycle current limiting (OCP), over load protection (OLP), VDD over voltage clamp and under voltage lockout (UVLO). The Gate-drive output is clamped to maximum 18V to protect the power MOSFET.

Excellent EMI performance is achieved with On-Bright proprietary frequency shuffling technique together with soft switching control at the totem pole gate drive output.

Tone energy at below 20KHZ is minimized in the design and audio noise is eliminated during operation. OB2263 is offered in SOT23-6, SOP-8 and DIP-8 packages.

## FEATURES

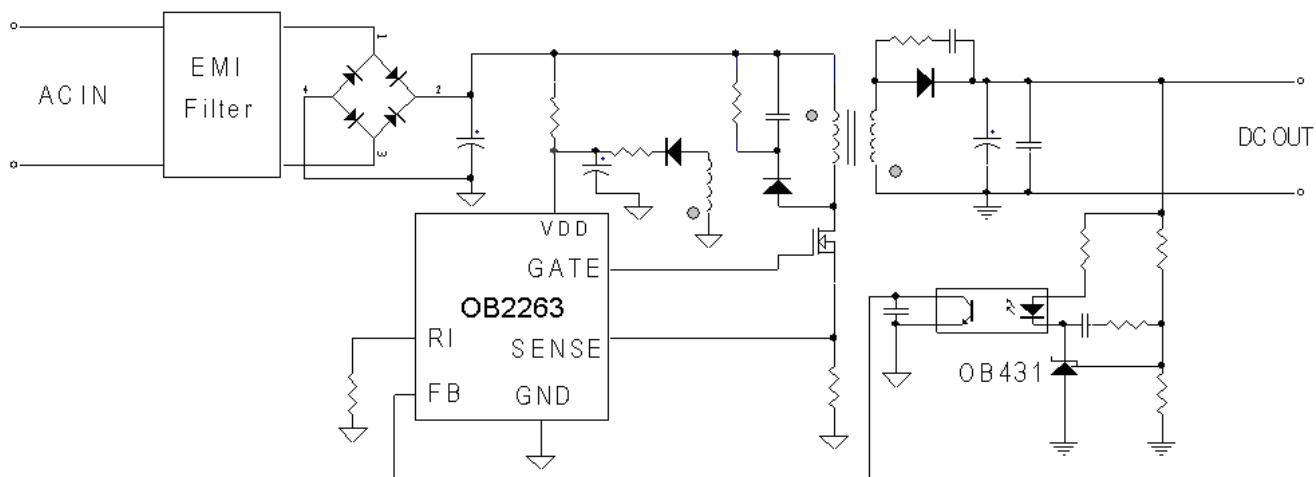
- On-Bright Proprietary Frequency Shuffling Technology for Improved EMI Performance.
- Extended Burst Mode Control For Improved Efficiency and Minimum Standby Power Design
- Audio Noise Free Operation
- External Programmable PWM Switching Frequency
- Internal Synchronized Slope Compensation
- Low VDD Startup Current and Low Operating Current (1.4mA)
- Leading Edge Blanking on Current Sense Input
- Good Protection Coverage With Auto Self-Recovery
  - VDD Over Voltage Clamp and Under Voltage Lockout with Hysteresis (UVLO)
  - Gate Output Maximum Voltage Clamp (18V)
  - On-Bright Proprietary Line Input Compensated Cycle-by-Cycle Over-current Threshold Setting For Constant Output Power Limiting Over Universal Input Voltage Range.
  - Overload Protection (OLP)

## APPLICATIONS

Offline AC/DC flyback converter for

- Battery Charger
- Power Adaptor
- Set-Top Box Power Supplies
- Open-frame SMPS

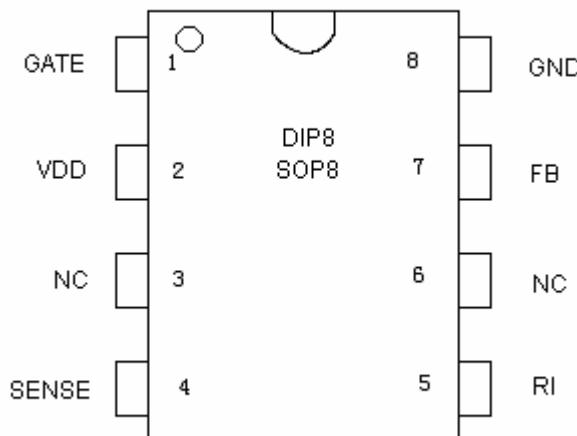
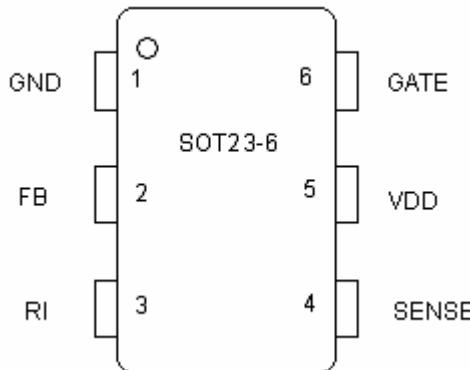
## TYPICAL APPLICATION



## GENERAL INFORMATION

### Pin Configuration

The OB2263 is offered in SOT23-6, DIP8 and SOP8 packages, shown as below.



### Ordering Information

Part Number	Description
OB2263MP	SOT23-6, Pb-free
OB2263AP	DIP8, Pb-free
OB2263CP	SOP8, Pb-free

### Package Dissipation Rating

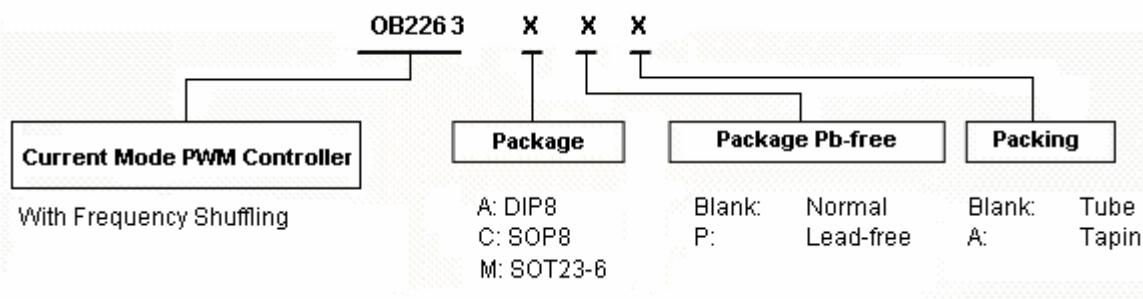
Package	R <sub>θJA</sub> (°C/W)
DIP8	90
SOP8	150
SOT23-6	200

### Absolute Maximum Ratings

Parameter	Value
VDD DC Supply Voltage	30 V
VDD Zener Clamp Voltage <sup>Note</sup>	VDD_Clamp+0.1V
VDD DC Clamp Current	10 mA
V <sub>FB</sub> Input Voltage	-0.3 to 7V
V <sub>SENSE</sub> Input Voltage to Sense Pin	-0.3 to 7V
V <sub>RI</sub> Input Voltage to RI Pin	-0.3 to 7V
Min/Max Operating Junction Temperature T <sub>J</sub>	-20 to 150 °C
Min/Max Storage Temperature T <sub>stg</sub>	-55 to 160 °C

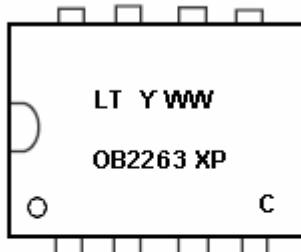
**Note:** VDD\_Clamp has a nominal value of 34V.

Stresses beyond those listed under "absolute maximum ratings" may cause permanent damage to the device. These are stress ratings only, functional operation of the device at these or any other conditions beyond those indicated under "recommended operating conditions" is not implied. Exposure to absolute maximum-rated conditions for extended periods may affect device reliability.



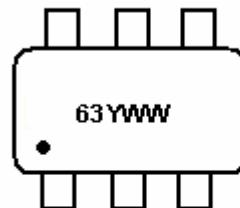
### Marking Information

**DIP8**  
**SOP8**



X: A for DIP 8  
C for SOP8  
P: Pb-free Package  
Y: Year Code(0-9)  
WW: Week Code(1-52)  
C: Optional Internal Code

**SOT23-6**



Y: Year Code(0-9)  
WW: Week Code(1-52)

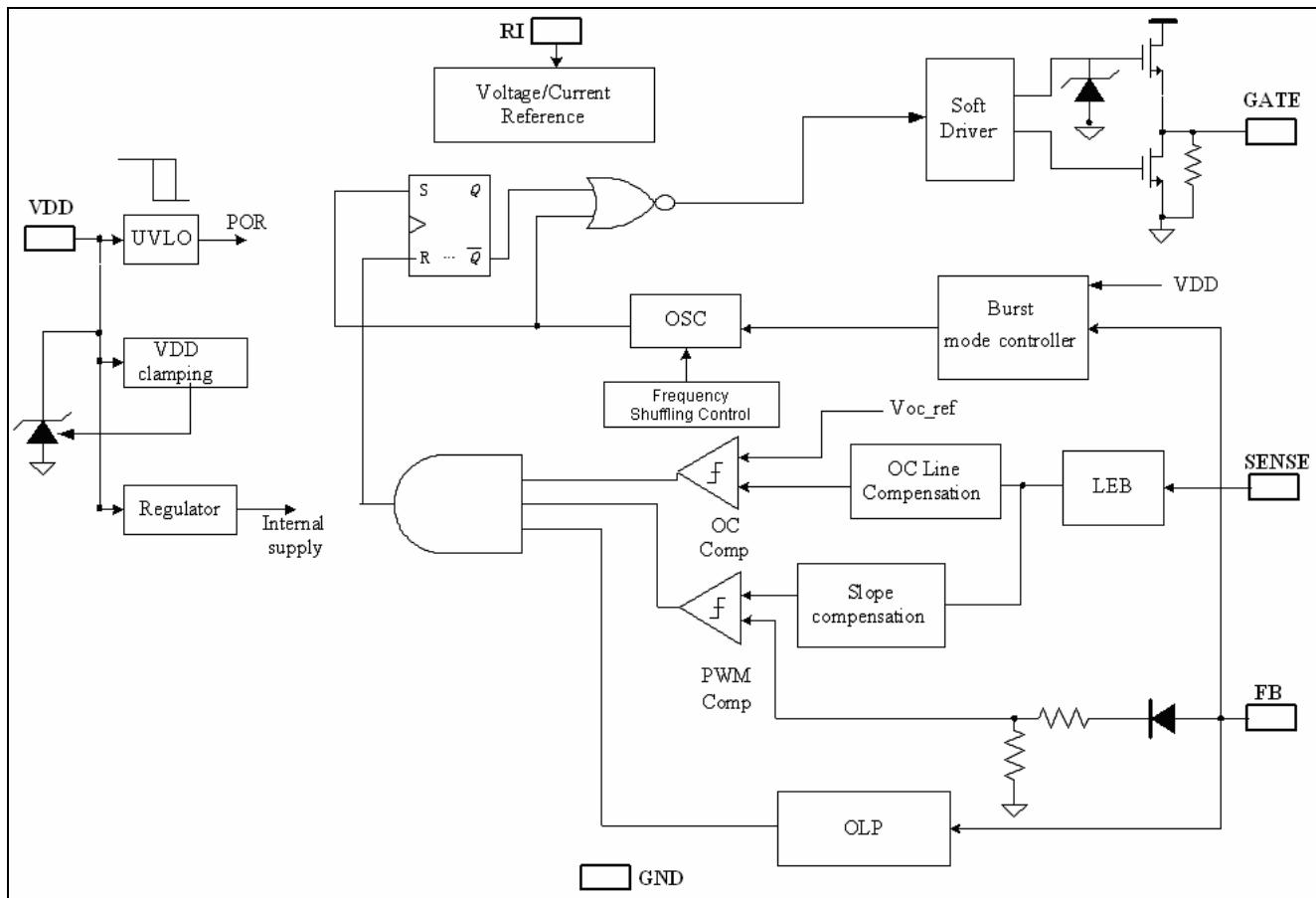
### TERMINAL ASSIGNMENTS

Pin Name	I/O	Description
GND	P	Ground
FB	I	Feedback input pin. The PWM duty cycle is determined by voltage level into this pin and SENSE pin input.
RI	I	Internal Oscillator frequency setting pin. A resistor connected between RI and GND sets the PWM frequency.
SENSE	I	Current sense input pin. Connected to MOSFET current sensing resistor node.
VDD	P	Chip DC power supply pin.
GATE	O	Totem-pole gate drive output for the power MOSFET.

### RECOMMENDED OPERATING CONDITION

Symbol	Parameter	Min	Max	Unit
VDD	VDD Supply Voltage	10	to 30	V
RI	RI Resistor Value	100		Kohm
T <sub>A</sub>	Operating Ambient Temperature	-20	to 85	°C

## BLOCK DIAGRAM



## ELECTRICAL CHARACTERISTICS

( $T_A = 25^\circ\text{C}$  if not otherwise noted)

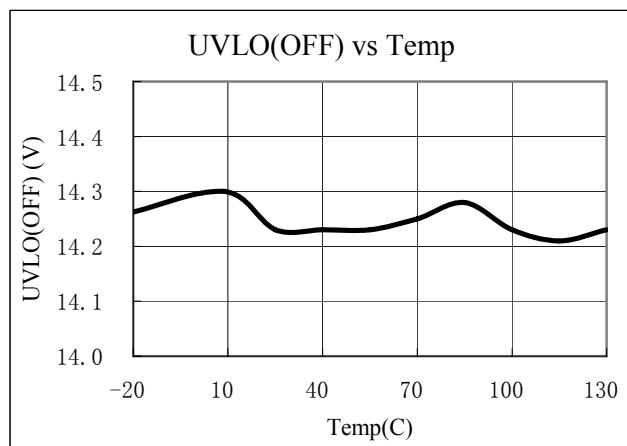
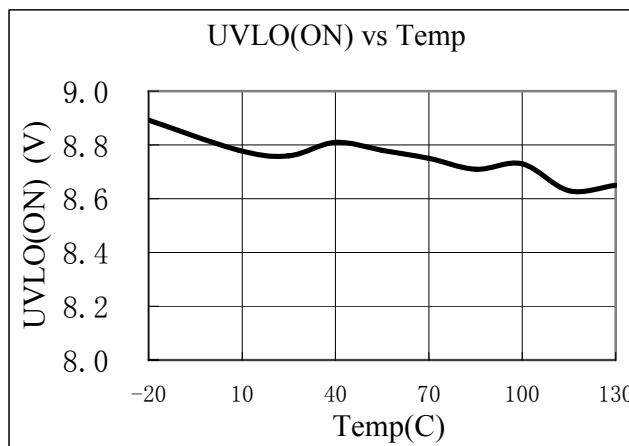
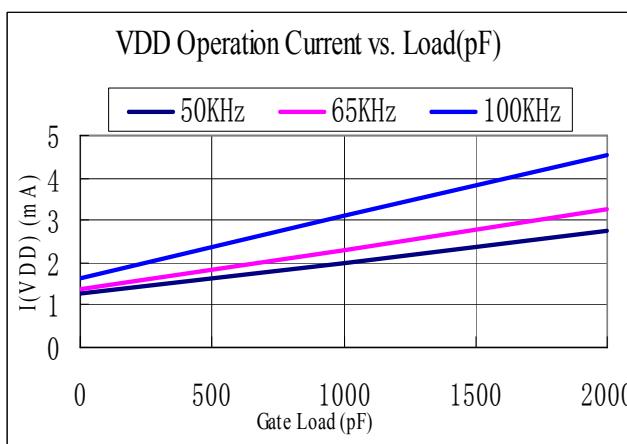
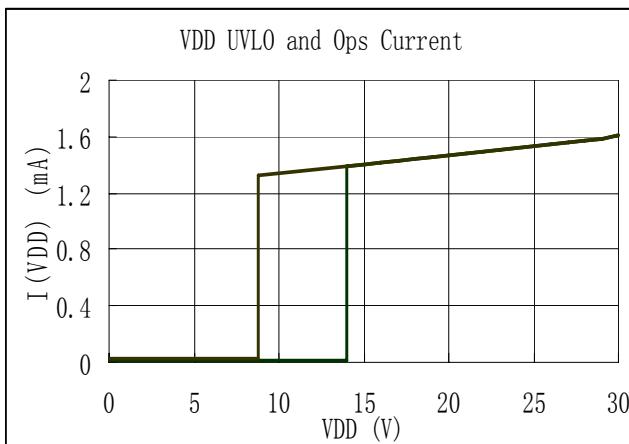
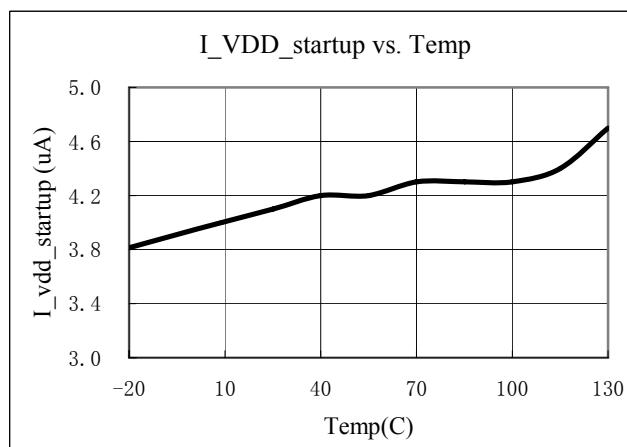
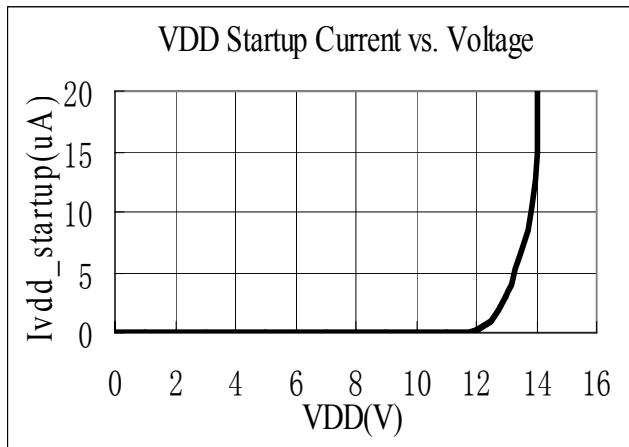
Symbol	Parameter	Test Conditions	Min	Typ	Max	Unit
<b>Supply Voltage (VDD)</b>						
I_VDD_Startup	VDD Start up Current	VDD=12.5V, RI=100K Measure Leakage current into VDD		3	20	uA
I_VDD_Ops	Operation Current	VDD=16V, RI=100Kohm, $V_{FB}=3\text{V}$		1.4		mA
UVLO(ON)	VDD Under Voltage Lockout Enter		7.8	8.8	9.8	V
UVLO(OFF)	VDD Under Voltage Lockout Exit (Recovery)		13	14	15	V
VDD_Clamp	VDD Zener Clamp Voltage	$I_{VDD} = 5 \text{ mA}$		34		V
<b>Feedback Input Section(FB Pin)</b>						
A <sub>VCS</sub>	PWM Input Gain	$\Delta V_{FB} / \Delta V_{cs}$		2.0		V/V
V <sub>FB_Open</sub>	V <sub>FB</sub> Open Loop Voltage			4.8		V
I <sub>FB_Short</sub>	FB pin short circuit current	Short FB pin to GND and measure current		1.2		mA
V <sub>TH_0D</sub>	Zero Duty Cycle FB Threshold Voltage	VDD = 16V, RI=100Kohm			0.75	V
V <sub>TH_PL</sub>	Power Limiting FB Threshold Voltage			3.7		V
T <sub>D_PL</sub>	Power limiting Debounce Time			35		mSec
Z <sub>FB_IN</sub>	Input Impedance			6		Kohm
DC_MAX	Maximum Duty Cycle	VDD=18V, RI=100Kohm, FB=3V, CS=0		75		%
<b>Current Sense Input(Sense Pin)</b>						
T_blank	Leading edge blanking time	RI = 100 Kohm		300		ns
Z <sub>SENSE_IN</sub>	Input Impedance			40		Kohm
T <sub>D_OC</sub>	Over Current Detection and Control Delay	VDD = 16V, CS>V <sub>TH_OC</sub> , FB=3.3V		75		nSec
V <sub>TH_OC</sub>	Over Current Threshold Voltage at zero Duty Cycle	FB=3.3V, RI=100 Kohm	0.70	0.75	0.80	V
<b>Oscillator</b>						
F <sub>OSC</sub>	Normal Oscillation Frequency	RI = 100 Kohm	60	65	70	KHZ
Δf_Temp	Frequency Temperature Stability	VDD = 16V, RI=100Kohm, $T_A -20^\circ\text{C}$ to $100^\circ\text{C}$		5		%
Δf_VDD	Frequency Voltage Stability	VDD = 12-25V, RI=100Kohm		5		%
RI_range	Operating RI Range		50	100	150	Kohm
V_RI_open	RI open load voltage			2		V

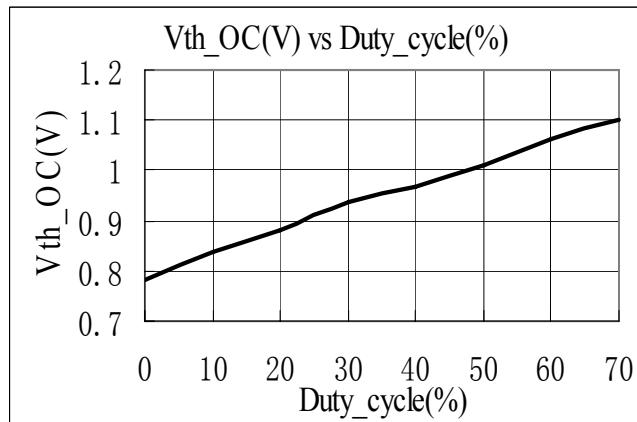
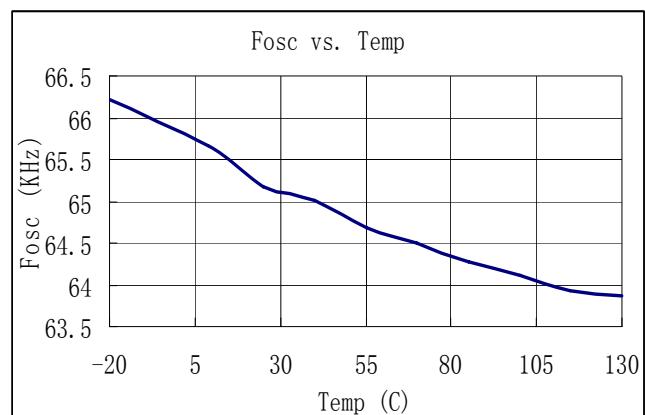
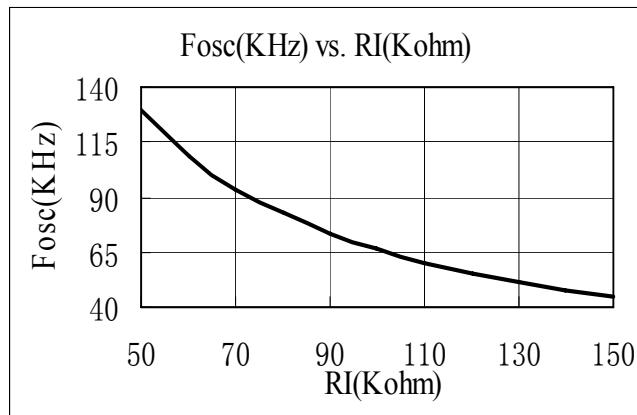
**Current Mode PWM Controller**<sup>Frequency Shuffling</sup>

F <sub>osc_BM</sub>	Burst Mode Base Frequency	VDD = 16V, RI = 100Kohm		22		KHZ
<b>Gate Drive Output</b>						
VOL	Output Low Level	VDD = 16V, Io = -20 mA			0.8	V
VOH	Output High Level	VDD = 16V, Io = 20 mA	10			V
V_Clamp	Output Clamp Voltage Level			18		V
T_r	Output Rising Time	VDD = 16V, CL = 1nf		220		nSec
T_f	Output Falling Time	VDD = 16V, CL = 1nf		70		nSec
<b>Frequency Shuffling</b>						
Δf_OSC	Frequency Modulation range /Base frequency	RI=100K	-3		3	%
f_shuffling	Shuffling Frequency	RI=100K		64		HZ

## CHARACTERIZATION PLOTS

VDD = 16V, RI = 100 Kohm, T<sub>A</sub> = 25°C condition applies if not otherwise noted.





## OPERATION DESCRIPTION

The OB2263 is a highly integrated PWM controller IC optimized for offline flyback converter applications in sub 30W power range. The extended burst mode control greatly reduces the standby power consumption and helps the design easily meet the international power conservation requirements.

- **Startup Current and Start up Control**

Startup current of OB2263 is designed to be very low so that VDD could be charged up above UVLO threshold level and device starts up quickly. A large value startup resistor can therefore be used to minimize the power loss yet provides reliable startup in application. For AC/DC adaptor with universal input range design, a 2 MΩ, 1/8 W startup resistor could be used together with a VDD capacitor to provide a fast startup and low power dissipation solution.

- **Operating Current**

The Operating current of OB2263 is low at 1.4mA. Good efficiency is achieved with OB2263 low operating current together with extended burst mode control features.

- **Frequency shuffling for EMI improvement**

The frequency Shuffling/jittering (switching frequency modulation) is implemented in OB2263. The oscillation frequency is modulated with a random source so that the tone energy is spread out. The spread spectrum minimizes the conduction band EMI and therefore reduces system design challenge.

- **Extended Burst Mode Operation**

At zero load or light load condition, majority of the power dissipation in a switching mode power supply is from switching loss on the MOSFET transistor, the core loss of the transformer and the loss on the snubber circuit. The magnitude of power loss is in proportion to the number of switching events within a fixed period of time. Reducing switching events leads to the reduction on the power loss and thus conserves the energy. OB2263 self adjusts the switching mode according to the loading condition. At from no load to light/medium load condition, the FB input drops below burst mode threshold level. Device enters Burst Mode control. The Gate drive output switches only when VDD voltage drops below a preset level and FB input is active to output an on state. Otherwise the gate drive remains at off state to

minimize the switching loss and reduces the standby power consumption to the greatest extend. The frequency control also eliminates the audio noise at any loading conditions.

- **Oscillator Operation**

A resistor connected between RI and GND sets the constant current source to charge/discharge the internal cap and thus the PWM oscillator frequency is determined. The relationship between RI and switching frequency follows the below equation within the specified RI in Kohm range at nominal loading operational condition.

$$F_{osc} = \frac{6500}{RI(Kohm)} (Khz)$$

- **Current Sensing and Leading Edge Blanking**

Cycle-by-Cycle current limiting is offered in OB2263 current mode PWM control. The switch current is detected by a sense resistor into the sense pin. An internal leading edge blanking circuit chops off the sense voltage spike at initial MOSFET on state due to Snubber diode reverse recovery so that the external RC filtering on sense input is no longer required. The current limit comparator is disabled and thus cannot turn off the external MOSFET during the blanking period. PWM duty cycle is determined by the current sense input voltage and the FB input voltage.

- **Internal Synchronized Slope Compensation**

Built-in slope compensation circuit adds voltage ramp onto the current sense input voltage for PWM generation. This greatly improves the close loop stability at CCM and prevents the sub-harmonic oscillation and thus reduces the output ripple voltage.

- **Gate Drive**

OB2263 Gate is connected to an external MOSFET gate for power switch control. Too weak the gate drive strength results in higher conduction and switch loss of MOSFET while too strong gate drive output compromises the EMI.

A good tradeoff is achieved through the built-in totem pole gate design with right output strength and dead time control. The low idle loss and good EMI system design is easier to achieve with this dedicated control scheme. An internal 18V clamp is added for MOSFET gate protection at higher than expected VDD input.

**Current Mode PWM Controller**<sup>Frequency Shuffling</sup>**• Protection Controls**

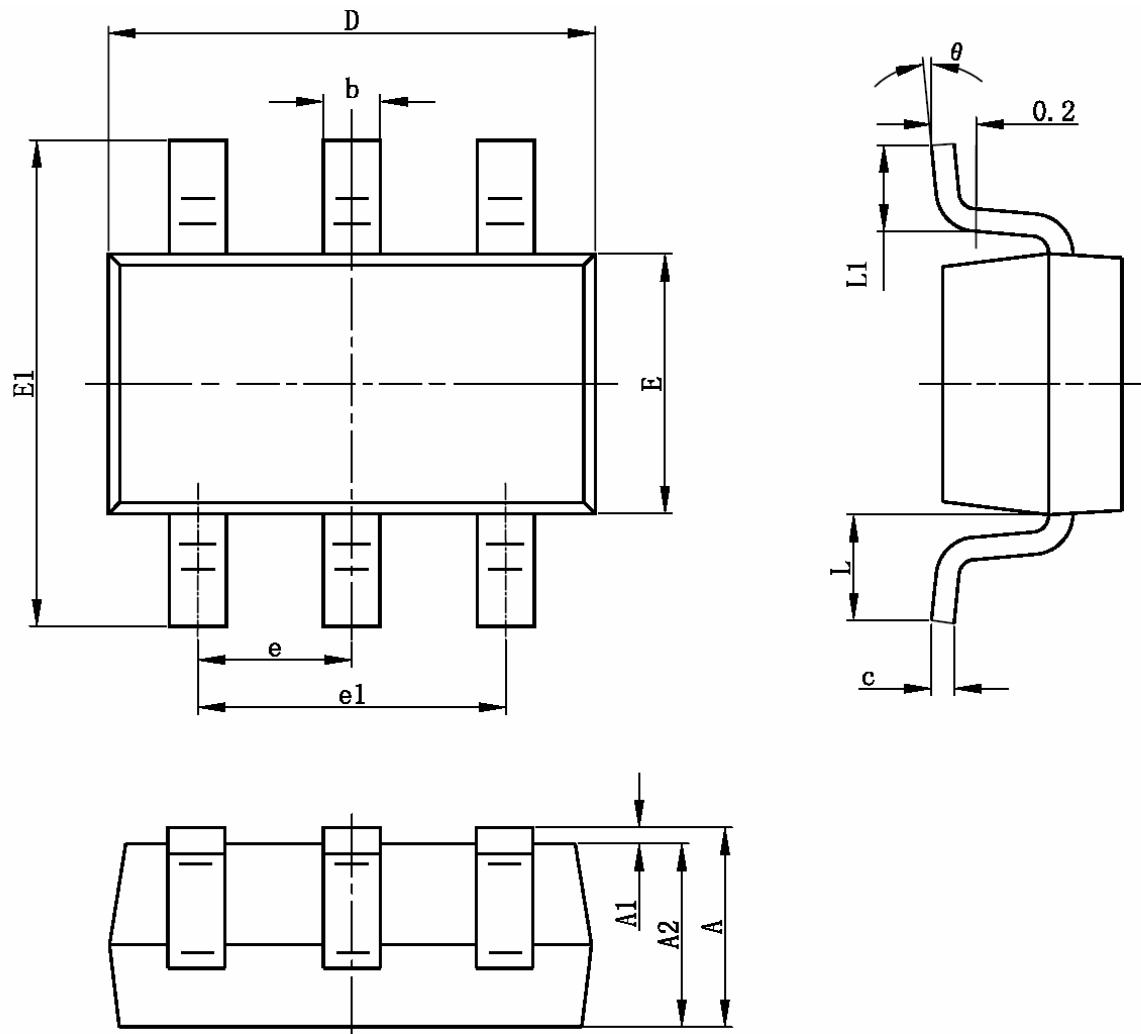
Good power supply system reliability is achieved with its rich protection features including Cycle-by-Cycle current limiting (OCP), Over Load Protection (OLP) and over voltage clamp, Under Voltage Lockout on VDD (UVLO).

With On-Bright Proprietary technology, the OCP threshold tracks PWM Duty cycles and is line voltage compensated to achieve constant output power limit over the universal input voltage range with recommended reference design.

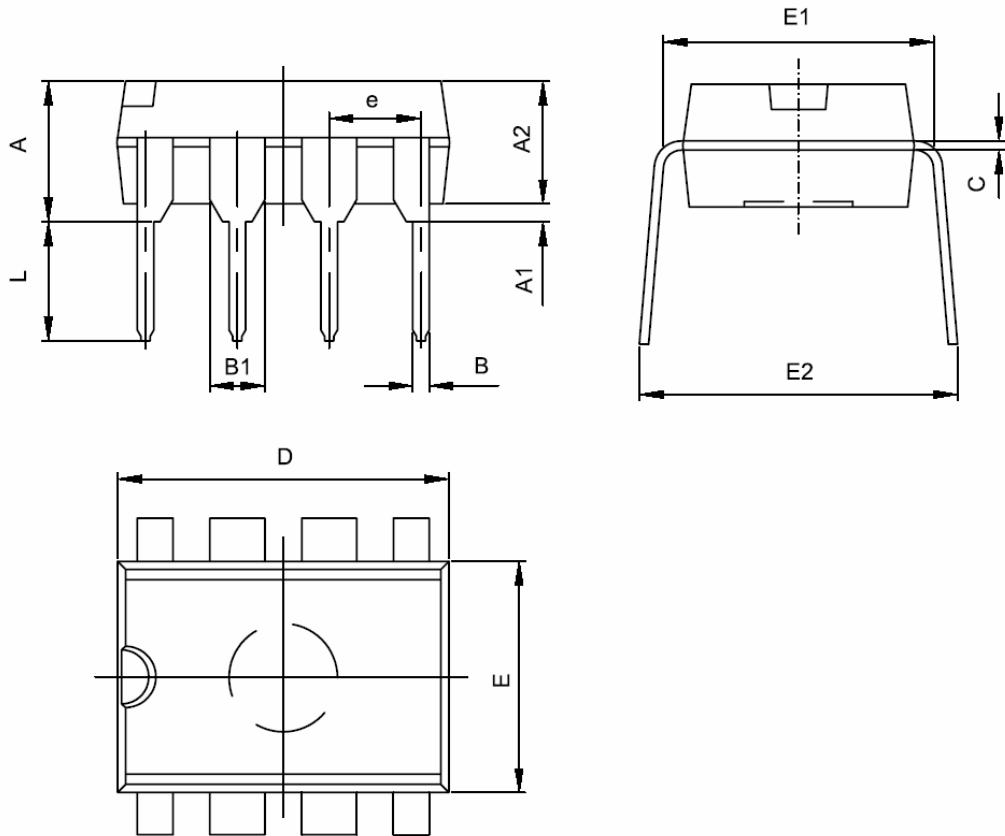
At overload condition when FB input voltage exceeds power limit threshold value for more than TD\_PL, control circuit reacts to shut down the output power MOSFET. Device restarts when VDD voltage drops below UVLO limit.

VDD is supplied by transformer auxiliary winding output. It is clamped when VDD is higher than threshold value. The power MOSFET is shut down when VDD drops below UVLO limit and device enters power on start-up sequence thereafter.

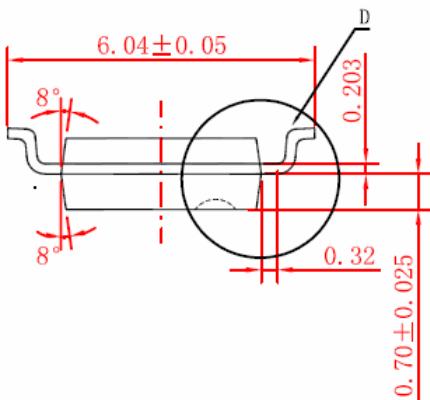
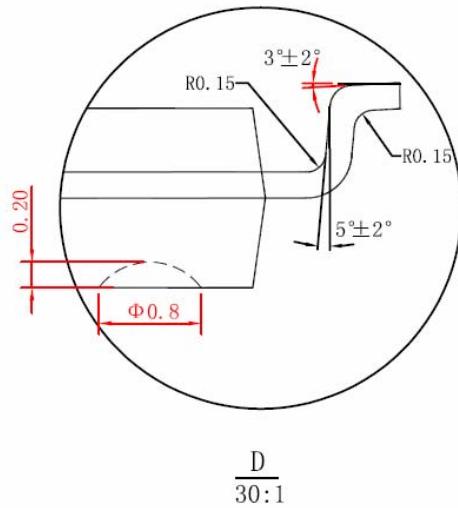
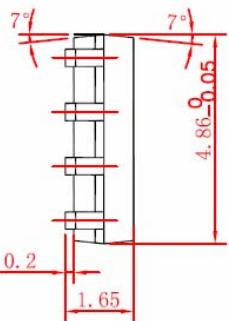
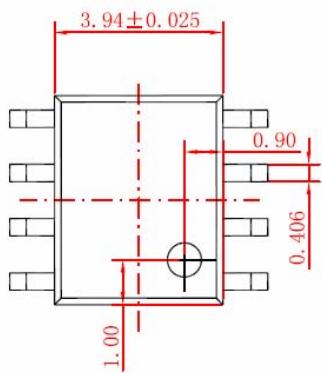
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**PACKAGE MECHANICAL DATA**
**SOT23-6**


Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	1.050	1.250	0.041	0.049
A1	0.000	0.100	0.000	0.004
A2	1.050	1.150	0.041	0.045
b	0.300	0.400	0.012	0.016
c	0.100	0.200	0.004	0.008
D	2.820	3.020	0.111	0.119
E	1.500	1.700	0.059	0.067
E1	2.650	2.950	0.104	0.116
e	0.950TYP		0.037TYP	
e1	1.800	2.000	0.071	0.079
L	0.700REF		0.028REF	
L1	0.300	0.600	0.012	0.024
θ	0°	8°	0°	8°

**8-Pin Plastic DIP**


Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	3.710	4.310	0.146	0.170
A1	0.510		0.020	
A2	3.200	3.600	0.126	0.142
B	0.360	0.560	0.014	0.022
B1	1.524(TYP)		0.060(TYP)	
C	0.204	0.360	0.008	0.014
D	9.000	9.400	0.354	0.370
E	6.200	6.600	0.244	0.260
E1	7.620(TYP)		0.300(TYP)	
e	2.540(TYP)		0.100(TYP)	
L	3.000	3.600	0.118	0.142
E2	8.200	9.400	0.323	0.370

**8-Pin Plastic SOP**


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## IMPORTANT NOTICE

### RIGHT TO MAKE CHANGES

On-Bright Electronics Corp. reserves the right to make corrections, modifications, enhancements, improvements and other changes to its products and services at any time and to discontinue any product or service without notice. Customers should obtain the latest relevant information before placing orders and should verify that such information is current and complete.

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# 深圳市致新科科技有限公司

## Shenzhen Zhixinke Technology Co., Ltd.



### 阻容器件

插件电解电容	贴片铝电解电容	贴片电容 MLCC	钽电容	薄膜电容
贴片电阻	热敏电阻	压敏电阻	碳膜电阻	金属膜电阻

高压MOS(N-400V N-500V N-600V N-650V N-700V N-800V N-900V / 电流: 0.5A~26A区间 电压电流选型)

2N65 650V 2A TO-252	7N60 600V 7A TO-252	8N65 650V 8A TO-251	10N50 500V 10A TO-220F	15N50 500V 15A TO-220F
4N65 650V 4A TO-220F	7N65 650V 7A TO-220F	8N65 650V 8A TO-252	12N65 650V 12A TO-220F	15N65 650V 15A TO-220F
5N60 600V 5A TO-220F	7N65 650V 7A TO-252	8N65 650V 8A TO-252	12N70 700V 12A TO-220F	15N70 700V 10A TO-220F
5N65 650V 5A TO-252	7N70 700V 7A TO-220F	9N70 700V 9A TO-252	13N50 500V 13A TO-220F	20N50 500V 20A TO-220F

低压MOS(电流: -160A~300A区间选型)

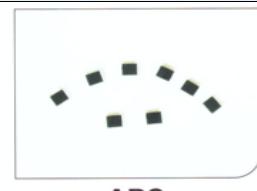
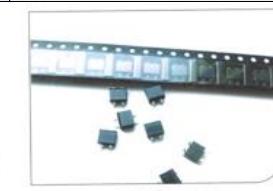
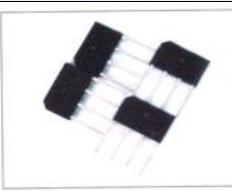
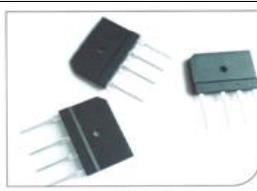
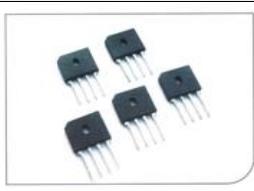
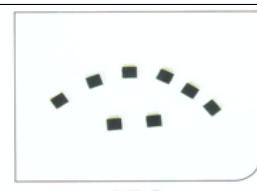
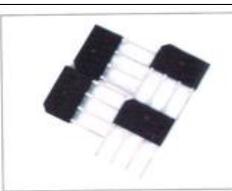
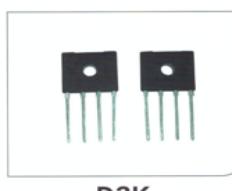
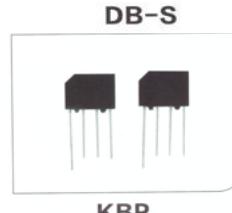
N+P 20V	P -100V	Dual N 30V	N 30V	N 75V
N+P 30V	P -12V	Dual N 100V	N 40V	N 85V
N+P 40V	P -16V	Dual N 20V	N 55V	N 100V
Dual P -30V	P -20V	Dual N 40V	N 60V	N 150V
Dual P -60V	P -40V	N 20V	N 68V	N 200V

二极管专业制造商(定制产品, 需要一周~二周时间) 参数查看选型表

超低正向肖特基整流二极管	肖特基整流二极管	普通整流二极管	快恢复整流二极管	高效整流二极管
超快恢复整流二极管	双向触发二极管	瞬变电压抑制二极管	稳压二极管	桥式整流器
小信号肖特基二极管	小信号开关二极管	光伏二极管	汽车整流器	高压触发管

桥式整流器专业制造(定制产品, 需要一周~二周时间)

型号	芯片尺寸/类别	型号	芯片尺寸/类别
DB107S	50MIL DBS	GBU606-GBU610	88MIL GBU
DB157S	60MIL DBS	GBU806-GBU810	95MIL GBU
DB207S	60MIL DBS	GBU1006-GBU1010	100MIL GBU
DB307S	70MIL DBS	GBU1506-GBU1510	110MIL GBU
DB107	50MIL DB	GBU2506-GBU2510	130MIL GBU
DB157	60MIL DB	GBJ406-410	84MIL 4GBJ
DB207	60MIL DB	GBJ606-610	88MIL 4GBJ
DB307	70MIL DB	GBJ806-810	95MIL 4GBJ
KBP201-KBP210	50MIL KBP	GBJ1006-1010	100MIL 4GBJ
KBP301-KBP310	60MIL KBP	GBJ1506-1510	110MIL 4GBJ
KBP401-KBP410	70MIL KBP	GBJ2506-2510	130MIL 4GBJ
GBP2	50MIL GBP短脚	GBJ1506-1510	110MIL 6GBJ
GBP3	60MIL GBP短脚	GBJ1506-1510	120MIL 6GBJ
GBP3	70MIL GBP短脚	GBJ2506-2510	130MIL 6GBJ
GBP4	84MIL GBP短脚	GBJ3506-3510	140MIL 6GBJ
GBP6	88MIL GBP短脚	GBJ3506-3510	160MIL 6GBJ
GBP2	50MIL GBP长脚	KBJ406-410	84MIL KBJ(4GBJ)
GBP3	60MIL GBP长脚	KBJ606-610	88MIL KBJ(4GBJ)
GBP3	70MIL GBP长脚	KBJ806-810	95MIL KBJ(4GBJ)
GBP4	84MIL GBP长脚	KBJ1006-1010	100MIL KBJ(4GBJ)
GBP6	88MIL GBP长脚	KBJ1506-1510	110MIL KBJ(4GBJ)
D3K 2A	60MIL D3K	KBJ2506-2510	130MIL KBJ(4GBJ)
D3K 3A	70MIL D3K	MB6S-10S	46MIL MBS
D3K 4A	84MIL D3K	MB6S-10S	50MIL MBS
KBL406-410	70MIL KBL	MB6F-10F	46MIL MBF
KBL406-410	84MIL KBL	MB6F-10F	50MIL MBF
KBL606-610	88MIL KBL	ABS6-ABS10	46MIL ABS
GBU406-GBU410	70MIL GBU	ABS6-ABS10	50MIL ABS
GBU406-GBU410	84MIL GBU	ABS6-ABS10	60MIL ABS



# 深圳市致新科科技有限公司

## Shenzhen Zhixinke Technology Co., Ltd.



光耦 红外对射

EL0631	EL814	LTV-217	KAQY212	MOC3022
EL1018	EL817	LTV-247	KMOC3021	MOC3023
EL1019	ELM440A	LTV-3063	KMOC3022	MOC3042
EL2501	ELM453	LTV-3223	KMOC3023	MOC3052
EL3041	ELM611	LTV-356	KMOC3041	MOC3063
EL3063	ELQ3H4	LTV-357	KMOC3042	MOC3043
EL354	ELQ3H7	LTV-814	KMOC3043	HS0038BD
EL357	ELR3223	LTV-816	KMOC3063	IR204C-A-L
EL3H4	ELS3120	LTV-817	KMOC3083	IR333C-A
EL3H7	ELS3150	CT3043	FOD814	ITR1100
EL406A	ELS680	CT3063	6N137	ITR8102
EL6N137	CT3023	CTT3223	MOC3021	ITR8402

长晶 JSCJ (原名长电)

1N4148WS	SOD323	BC547	T092	BZT52C3V6	SOD123	CJ431	SOT-23	MMBT3904	SOT23
2N5551	TO-92	BC548	T092	BZT52C3V9	SOD123	CJ7812	T0220-3L	MMBT540	SOT23
2SA1013	SOT89-3L	BCX56-16	SOT89-3L	BZT52C5V1	SOD123	CJ7815	T0252-2L	MMBTA44	SOT-23
2SB1386	SOT89	BD237	T0126	BZT52C6V2	SOD123	CJ78L05	SOT89	MMBTA94	SOT23
2SC1623	SOT23	BSS123	SOT23	BZT52C6V8S	SOD323	CJ78L08	SOT89	MMSZ4689	SOD123
2SC1815	T092	BU406	T0220-3L	BZT52C8V2	SOD123	CJ78L12	SOT89	RS3M	SMBG
2SC2712	SOT-23	BZT52C10	SOD123	BZX84C15	SOT23	CJ78M05	T0252	S8050	SOT23
2SD1724	TO-126	BZT52C12	SOD123	C1815	T092F	CJ78M06	T0252	S8550	SOT23
2SD965A	SOT89	BZT52C15	SOD123	CJ2301	SOT23	CJ78M12	T0252	S9012	SOT23
B0530WS	SOD323	BZT52C18	SOD123	CJ2302	SOT23-3	CJ79L05	T092	S9013	SOT23
B5819W	SOD123	BZT52C22S	SOD323	CJ2304	SOT-23	D882	T0126	S9014	SOT23
BAT54	SOT23-3	BZT52C24V	SOD123	CJ2306	SOT23	ES2J	SMAG	S9015	SOT23
BAV99	SOT23	BZT52C30	SOD123	CJ2310	SOT23	LM317	SOT223	SD103AW	SOD123
BC546B	T092	BZT52C3V3	SOD123	CJ3415	SOT23-3	MCR100-8	T092	TIP122	T0126

圣邦微 (SGMICRO)

SGM2019	SGM3110-5.0YN6/TR	SGM4056-6.8YPS8G/TR	SGM6232YPS8G/TR	SGM809
SGM2021	SGM3132YDE8G/TR	SGM4056-6.8YTDE8G/TR	SGM6603	SGM810
SGM2032	SGM3157YC6/TR	SGM4062YDE8G/TR	SGM6609YTDF12G/TR	SGM8272YS8G/TR
SGM2033	SGM3206YN5G/TR	SGM4064YDE8G/TR	SGM706	SGM8522XS/TR
SGM2036	SGM321YN5/TR	SGM44599YTQ16/TR	SGM721XN5/TR	SGM8582XS8G/TR
SGM2200	SGM324YS14/TR	SGM4582YTS16G/TR	SGM7222YMS10/TR	SGM8632XMS/TR
SGM2203	SGM330A-YQS/TR	SGM4807YTDE8G/TR	SGM7222YWQ10/TR	SGM8632XS/TR
SGM2268YWQ10/TR	SGM331A-YQS16G/TR	SGM4871YPS8/TR	SGM7227YMS10G/TR	SGM8634XS14/TR
SGM2549YN6G/TR	SGM358YMS/TR	SGM4890YMS/TR	SGM7227YUWQ10G/TR	SGM89000YTS14G/TR
SGM2551AYN5G/TR	SGM358YS/TR	SGM4891YDE8G/TR	SGM7228YWQ10G/TR	SGM8903YTS14G/TR
SGM2554AYN5G/TR	SGM3700YTQ16G/TR	SGM4917AYTQ16G/TR	SGM722XMS/TR	SGM8904YMS10G/TR
SGM2571ADYG/TR	SGM3732YTN6G/TR	SGM4918AYD10G/TR	SGM722XS/TR	SGM9111YC5/TR
SGM2576YN5G/TR	SGM3733BYTDI6G/TR	SGM4996YMS8G/TR	SGM8051YN5/TR	SGM9114YN6G/TR
SGM2578YG/TR	SGM3752YTN6G/TR	SGM6012	SGM8054XS/TR	SGM9116XS/TR

DIODES(美台) PAM 百利通 (pericom)

AL1666S-13	AL8863SP-13	APT17NTR-G1	PAM2861ABR	PAM8403DR-H
AL1692-30BS7-13	AP1084D25G-13	AS78L05RTR-E1	PAM2861CBR	PAM8404KGR
AL1692S-13	AP1084D33G-13	AZ1117	PAM2863ECR	PAM8406DR
AL1697-40DS7-13	AP1501-50K5G-13	AZ34063UMTR-G1	PAM8003DR	PAM8610TR
AL17050WT-7	AP1501-K5G-13	AZ431AN-ATRE1	PAM8004DR	PAM8620TR
AL3353S-13	AP1603WG-7	PAM2301CAABADJ	PAM8006ATR	PAM8902HKER
AL5812MP-13	AP2127K-ADJTRG1	PAM2305AABADJ	PAM8007NHR	PAM8904JER
AL8805W5-7	AP2204K-3.3TRG1	PAM2305CGFADJ	PAM8106TVR	PAM8908JER
AL8807W5-7	AP2204K-5.0TRG1	PAM2312AABADJ	PAM8124RHR	PAM8908JER
AL8808WT-7	AP2204K-ADJTRG1	PAM2401SCADJ	PAM8301AAF	PAM8945PJR
AL8843SP-13	AP2210N-3.3TRG1	PAM2421AE CADJR	PAM8302AADCR	SMAJ5.0A-13-F
AL8860MP-13	AP3012KTR-G1	PAM2423AE CADJR	PAM8302AASC R	ZXMP10A13FTA
AL8860WT-7	AP4310AMTR-G1	PAM2803AAF095	PAM8303DBSC	PT7C4302WEX
AL8861WT-7	AP4313KTR-G1	PAM2804AAB010	PAM8304ASR	PT7C4337UEX
AL8861Y-13	AP7333-33SAG-7	PAM2808BLBR	PAM8320RDR	PT7C4337WEX

# 深圳市致新科科技有限公司

## Shenzhen Zhixinke Technology Co., Ltd.



微盟 (Microne)

ME1117 MET1117	ME3116AM6G	ME431BXG	ME6210	ME8115BD7G
ME1502CM5G	ME321AM5G	ME6118A33B3G	ME6211	ME8115D7G
ME2107A50M5G	ME358ASG	ME6119C33M5G	ME6212	ME8125AS6G
ME2108	ME4054BM5G	ME6203A50M3G	ME6213C33M5G	ME8165GD8G
ME2188	ME4055AM6G	ME6206	ME6214C18M5G	ME8202SG
ME2214AM6G	ME4056SPG	ME6206A33M3G	ME6215C25M5G	ME8321AS7G
ME2807A30M3G	ME4074AM5G	ME6208	ME6216A30XG	ME8327BS7G-N
ME3102BM5G	ME4211AM6G	ME6209	ME6228	MEL7135PG-N
ME3110AM6G	ME4313CM6G	ME6209A50M3G	ME6230	MEL7136AP5G

恩智浦 (NXP) 安世半导体 (NXPERIA)

2N7002	74HC238PW	74HC574D	BCX51-16	HEF4094BT
74HCOOD	74HC245D	74HC595D	BT137-800E	HEF4511BT
74HCO4D	74HC245DB	74HC595N	BT139-800E	PCF8563T
74HC08D	74HC245N	74HC74D	BT151-500R	PCF8563T/5
74HC125D	74HC245PW	74HC86D	HEF4001BP	PCF8563TS/5
74HC138D	74HC257D	74HCT164D	HEF40106BP	PMBT3904
74HC138PW	74HC373N	74HCU04D	HEF4011BP	PMBT3906
74HC14D	74HC393D	BA591	HEF4011BT	PRTR5VOU2X
74HC154D	74HC4051D	BAT54	HEF4012BP	TJA1021T
74HC157D	74HC4051PW	BAV199	HEF4013BP	TJA1027T
74HC164D	74HC4066D	BAV99	HEF4013BT	TJA1040T
74HC164PW	74HC4316D	BC817-40	HEF4051BT	TJA1042T
74HC165D	74HC4538D	BC846B	HEF4069UBT	TJA1044T
74HC238D	74HC573D	BC858B	HEF4093BP	TJA1050T

德州仪器 (TIS)

CD14538BE	LM2576S	NE5532	SN74HC273	TLV75718PDBVR
CD4001BE	LM258DGKR	OP07CDR	SN74HC595	TLV75728PDBVR
CD40106BE	LM2596SX	OP07CP	SN74LVC1G08DCKR	TPA3116D2
CD4011BE	LM2901	PCA9306DCUR	SN74LVC1G175DCKR	TPS23881RTQR
CD4012BE	LM2902	SN65C1168ERGYR	SN74LVC1G3157DBVR	TPS2412PWR
CD4013BE	LM2903	SN65HVD230DR	SN74LVC1G32DRLR	TPS54331DDAR
CD4017BM96	LM2904	SN65HVD231DR	SN74LVC2G07DBVR	TPS54620RGYR
CD4026BE	LM317	SN65LBC184	SN74LVC2T45DCUR	TPS62291DRV
CD4050	LM321	SN74AHC1G08DBVR	TL081CP	TPS62410DRCR
CD4051	LM324	SN74AHC1G86DCK	TL082BCDR	TPS63000DRCR
CD4052	LM339	SN74AHC1GU04DRLR	TL084CN	TPS63020DSJR
CD4053	LM358	SN74AVC16T245DGGR	TL431	TPS76330DBVR
CD4069UBE	LM393	SN74HC04	TL494CDR	TSS721ADR
CD4081BE	LMV321IDBVR	SN74HC138	TLC272CDR	TXS0102DCUR
CD74HC221M96	LMV324ID	SN74HC14	TLC274CD	UCC28070PWR
DRV8837DSGR	MAX202	SN74HC148	TLV272CDR	UCC28180
L298N	MAX232	SN74HC165	TLV62569DBVR	ULN2003
LM224DR	MAX3232	SN74HC244	TLV70033DDCR	ULN2004

意法半导体 (STM)

BTA08-600CRG	L78L05ACUTR	M24C64-RMN6TP	STM32F207ZET6	STM8S103F3P6
BTA08-800CRG	L78M05CDT	ST1S10PHR	STM32F401CEU6	STM8S103K3T6C
BTB04-600SL	L78M08ABDT	STM32F030C6T6	STM32F405RGT6	STM8S105C6T6
HCF4052M013TR	LM258AD	STM32F030C8T6	STM32F407VET6	STM8S105K4T6C
L298N	LM2903	STM32F030F4P6	STM32F407VGT6	STM8S105S4T6C
L6562DTR	LM2904	STM32F030K6T6	STM32F407ZET6	STM8S105S6T6
L6599ATDTR	LM293	STM32F051C8T6	STM32F407ZGT6	STM8S207RBT6
L7805CDT	LM317T	STM32F071VBT6	STM32F429IET6	TDA2030AV
L7805CV	LM324	STM32F103C8T6	STM32G070RBT6	TDA7265
L7806CV	LM335	STM32F103R8T6	STM32L475VET6	TDA7851L
L7809CV	LM339	STM32F103RCT6	STM8L051F3P6	TIP122
L7812CV	LM358	STM32F103VCT6	STM8L052C6T6	VIPER12ADIP-E
L7815CD2T-TR	LM393	STM32F105RBT6	STM8S003F3P6	VIPER17LN
L78L05ABUTR	M24C02-WMN6TP	STM32F107VCT6	STM8S005K6T6C	VIPER22ASTR

# 深圳市致新科科技有限公司

## Shenzhen Zhixinke Technology Co., Ltd.



安森美(ONS) 仙童(FAIRCHILD)

6N137	LM339DR2G	MC33063ADR2G	MC78M08CDTRKG	MMBT3906LT1G
LM2902DR2G	LM393DR2G	MC34063ADR2G	MC7915CD2TR4G	MMBT8550LT1G
LM2903DR2G	LM358DR2G	MC7805	MC7915CTG	SG3525ANG
LM2904DR2G	MBR20100CTG	MC7812CDTRKG	MC79M05BDTRKG	UC2843BNG
LM317LBDR2G	MBRS340T3G	MC7815CTG	MC79M15CDTRKG	UC2844BD1R2G
LM324DR2G	MBRS540T3G	MC78L05ACDR2G	MMBT3904LT1G	UC3845BNG

MAXLINEAR 艾科嘉(EXAR) 西伯斯(SIPEX)

SP202EEN-L/TR	SP3222EEA-L/TR	SP3243EUEA-L/TR	SP485EEN-L/TR	SPX5205M5-L-3.3/TR
SP232EEN-L/TR	SP3232EBEA-L/TR	SP336EEY-L/TR	SPX29302T5-L/TR	SPX5205M5-L-5.0/TR
SP3220EEY-L/TR	SP3232EEY-L/TR	SP3485EN-L/TR	SPX3819M5-L-3-3/TR	SPX1117

新日本无线(JRC)

NJM2035M	NJM2370U33	NJM2831F33	NJM3414AM	NJM78M05DL1A
NJM2274R	NJM2567V	NJM3404AV	NJM4558M	NJM79M05DL1A

美信(MAXIM) 达拉斯(DALLAS)

DS1302	DS1337	MAX232AEPE	MAX232CSE	MAX3232IPWR
DS1307	MAX17126ETM	MAX232AEPE	MAX232ESE	MAX485ESA
DS1338Z	MAX1771CSA	MAX232AESE	MAX232N	MAX6701BAUT30
DS2431P	MAX202CPW	MAX232CPE	MAX3088ESA	MAX9722AEET

微芯(MICROCHIP) 爱特梅尔(ATMEL)

AT24C02C-SHSM-T	AT24C64D-SHSM-T	PIC16F1936-I/S0	PIC16F505-I/SL	PIC16F723A-I/SS
AT24C04C-SHSM-T	PIC12F1822-I/SN	PIC16F1938-I/S0	PIC16F54-I/S0	PIC16F723-I/S0
AT24C16C-SHSM-T	PIC12F508-I/P	PIC16F1938-I/SS	PIC16F676-I/SL	PIC16F883-I/SS
AT24C256C-SSH1-T	PIC16F1826-I/S0	PIC16F1947-I/PT	PIC16F722A-I/SS	PIC16F914-I/PT

STC

STC15W4K32S4	STC12C5A32S2	STC15W204S	STC8A8K48D4	STC8H1K08
STC8H3K64S4	STC12C5A32S2	STC15W404AS	STC8A8K64D4	STC8H3K32S2
STC11L32XE	STC12C5A56S2	STC15W4K32S4	STC8A8K64S4A12	STC8H3K48S
STC11L60XE	STC15F2K08S2	STC15W4K48S4	STC8F1K08S2	STC8H3K48S4
STC12C5604AD	STC15L204EA	STC89C55RD	STC8F2K16S2	STC8H8K48U
STC12C5A08AD	STC15W104	STC8A8K32S4A12	STC8G1K08A	STC8H8K64U

华邦(WINBOND)

W25Q128FVSIG	W25Q128JVSIQ	W25Q128JWP1Q	W25Q16JVSSIQ	W25Q32JWSNIQ
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美国芯源(MPS)

MP1471AGJ-Z	MP1653GTF-Z	MP2303ADN-LF-Z	MP2636GR-Z	MP8756GD-Z
MP1482DS-LF-Z	MP1657GTF-Z	MP2359DJ-LF-Z	MP3202DJ-LF-Z	MP9447GL-Z
MP1484EN-LF-Z	MP1658GTF-Z	MP2374DS-LF-Z	MP3426DL-LF-Z	MP9495DJ-LF-Z
MP1494DJ-LF-Z	MP2015AGG-33-Z	MP24943DN-LF-Z	MP5013AGJ-Z	MP9518GJS
MP1601GTF-Z	MP2122GJ-Z	MP26029GTF	MP6650GJS	NB679GD-Z
MP1605GTF-Z	MP2144GJ-Z	MP2603EJ-LF-Z	MP8126DF-LF-Z	NB680GD-Z

昂宝电子(On-Bright)

OB3635	OB2222MCP	OB2263MP	OB2281MP	OB2535CPA
OB2212AP	OB2263AP	OB2273AMP	OB2356LCPA	OB3636MP

电池芯片 马达驱动器

4054 SOT23-5	CW1053	HP4011	LN8238A	TC118
4056 ESOP8	DW02R	HY2213	FM8002A	TC618CS
CW1051	DW06D	IP5305	TC117HS	TMI8118S

其它IC

RTL8201CP-VD-LF	IT7C4337WEX	IT8563UEX	HYM8563	TH10CA061
RTL8201F-VB-CG	IT8563WEX	BM8563	AiP8563	TH11CA031

我司本着“质量为第一”的理念，通过正规渠道采购物料，专业采购师对采购物料要求严格，保证质量，在业界获得好评，货源优秀，港深两地常备原装现货。买原装正品IC，找致新科。