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PRODUCT MANUAL

Product Catalog•Application Solution



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CHANGJING ELEC. TECH.

Jiangsu Changjing Electronics Technology Co., Ltd. is a company specialized in the research and development, production, and sales of semiconductor products.

Founded in November 2018, the company is headquartered in the National Nanjing Jiangbei New Area Research and Innovation Park. It has subsidiaries and offices in Shenzhen, Shanghai, Beijing, Hong Kong, and Wuxi, making it a well-known comprehensive semiconductor enterprise in China.

The company's main products include two major categories: finished products (discrete devices and power management ICs) and wafers, covering diodes, transistors, MOSFETs, IGBT single tubes/modules, third-generation semiconductors, and power management IC products represented by LDO, DC-DC, and lithium battery protection. These products meet consumer, industrial, and automotive standards, supporting customer one-stop procurement needs.

The company adheres to the vision of "creating a world-class semiconductor brand," with a mission to achieve self-sufficiency in critical core technologies in China's power semiconductor field. It employs a dual-driven development strategy of "research and development leadership" and "supply chain synergy," striving to forge a technological advantage, steadily advancing supply chain integration, and continuously cultivating and promoting rapid, robust, and sustainable development in business sectors such as power devices and power management ICs.



01

Xinshun Microelectronics

Address: Jiangyin City, Jiangsu Province
Business Scope: Chip research and development and manufacturing

02

Changjing Puliang

Address: Nanjing City, Jiangsu Province
Business Scope: Power device / Power management IC packaging and testing



03

Haide Semiconductor

Address: Jiangyin City, Jiangsu Province
Business Scope: Power device / Module packaging and testing

History

Create a world-class semiconductor brand



2007

Established Shenzhen Changjing Semiconductor Co., Ltd.



2020

Acquisition of Jiangsu High Diode Semiconductor Co., Ltd.



2022

Acquisition of Jiangsu Xinshun Microelectronics Co., Ltd.

2018

Jiangsu Changjing Electronics Technology Co., Ltd. was reorganized and established

2021



Invest in the construction of Jiangsu Changjing Pulian Power Semiconductor Co., Ltd.
Invest and establish Nanjing Changxin Testing Technology Co., Ltd.

JSCJ



Product Series	Transistor	Small Signal Transistor	Digital Transistor
		Power Transistor	Darlington Transistor
	Diode	Fast Recovery Diode (FRD)	PIN Diode
		Schottky Diode (SBD)	Electrostatic Discharge Diode (ESD)
		Switching Diode	Transient Voltage Suppressor Diode (TVS)
		Rectifier Diode/Bridge	Zener Diode
	MOSFET	Shielded Gate Trench MOS	Superjunction MOS (SJ MOS)
		Trench MOS	Planar MOS
	IC	LDO	Comparator
		DC-DC	Darlington Array
		Motor Driver	Lithium Battery Protection IC
		Reference Power Supply	Operational Amplifier
		Charge Management IC	Voltage Detection
		Three-Terminal Voltage Regulator Integrated Circuit	Reset IC
	IGBT	IGBT Single Tube	IGBT Module
		IPM	
	Third Generation Semiconductor	Silicon Carbide Schottky Diode (SiC SBD)	Gallium Nitride HEMT (GaN HEMT)
		Silicon Carbide MOSFET (SiC MOSFET)	
	Automotive Electronics	Automotive Grade Transistor	Automotive Grade MOSFET
		Automotive Grade Diode	Automotive Grade Crystal Oscillator
Wafer	Small Signal Bipolar Junction Transistor Wafer	Power Schottky Wafer	
	TVS Wafer	MOSFET Wafer	
	FRD Wafer	IGBT Wafer	

Catalogue

CATALOG

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01

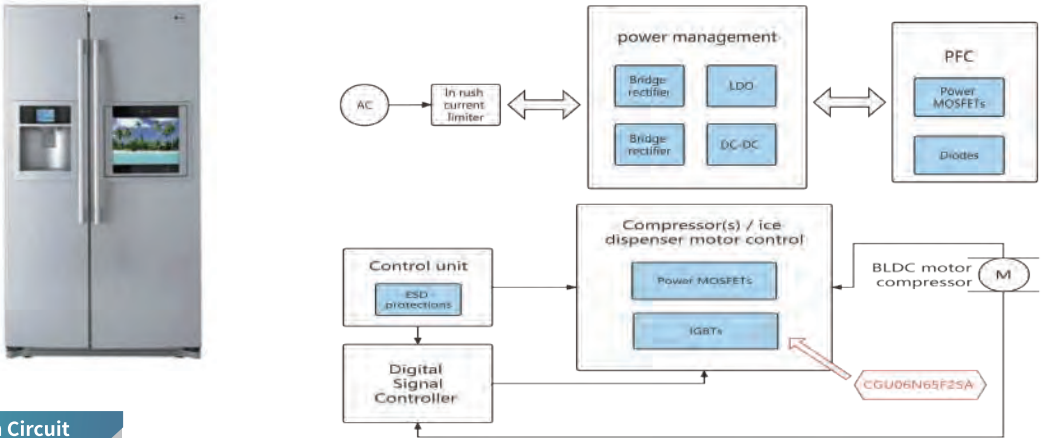
Consumer Electronics

Refrigerator

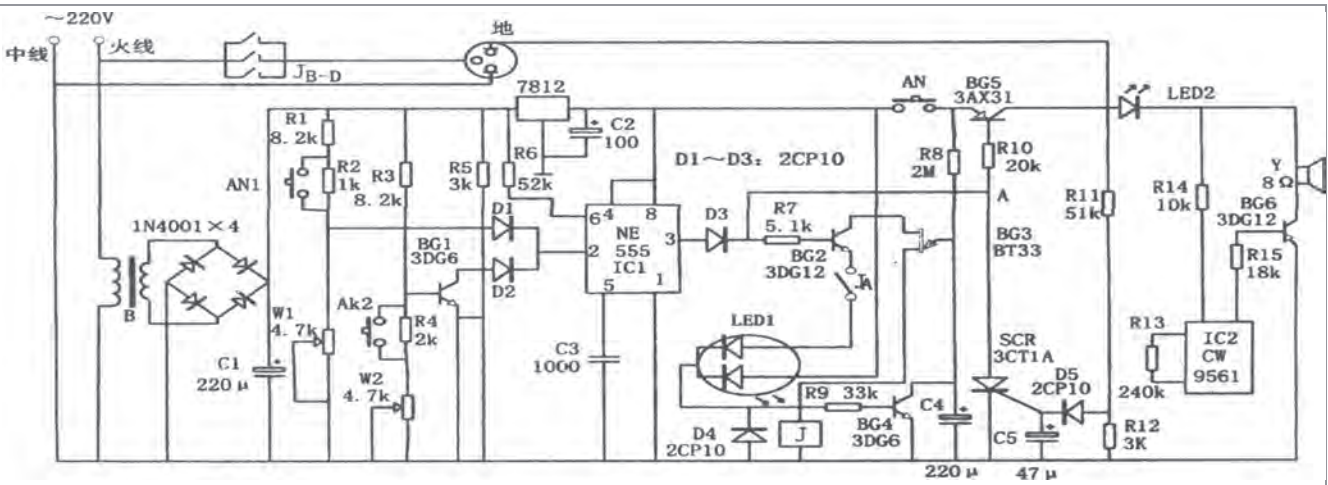
Function	Part Number	V _{in(max)} (V)	V _{out} (V)	I _{o(max)} (mA)	I _o (μA)	V _D (mV)	PSRR(dB@1kHz)	Package		
LDO	CJ7805B Series	25	5	1000	3200	2000	70	TO-252-2L/TO-220-3L		
	CJ1117 Series	20	1.8~5.0	1000	2000	1300	65	SOT-223/89/TO-252-2L		
Function	Part Number	V _{CBO} (V)	V _{CEO} (V)	I _O (A)	V _{CE(sat)} (V)		Type	Package		
Transistor	MMBT3904	60	40	0.2	0.4		NPN	SOT-23		
	SS8050	40	25	1.5	0.5		NPN	SOT-23		
	2SD1899	60	60	3	0.25		NPN	TO-252-2L		
	TIP217	-100	-100	-5	-4		PNP	TO-220-3L		
Function	Part Number	P _{PP} (W)	V _{RWM} (V)	I _{PP} (A)	V _C (V)		C _J (pF)	Package		
TVS	CJSMBJ18CA	600	18	20.6	29.2		-	SMBG		
	P6SMB15CA	600	15	28.3	21.2		-	SMBG		
Function	Part Number	V _R (V)	I _O (A)		V _F (V)		I _R (uA)	Package		
SBD	SBD20200CT	200	20		0.76		100	TO-220-3L		
Function	Part Number	V _{CES} (V)	IC @ TC=100℃ (A)	IC @ Tc=25℃ (A)	V _{CE(sat)} (V)	Switching Frequency (Khz)	Short Current Withstand Time (us)	Eon (mJ)	Eoff (mJ)	Package
IGBT	CGU06N65F2SAA	650	6	12	1.73	8-20	5	0.062	0.052	TO-252
IPM	ICS06N65S2D1(NPI)	650	6	TBD	1.73	8-20	TBD	TBD	TBD	SOP23

Product Introduction

Refrigerators are indispensable in households worldwide. Beyond their low energy consumption, large capacity, and superior freshness preservation, refrigerators have embraced the era of "smart" with the evolution of smart home technology. We offer a comprehensive array of product solutions tailored to various functions of smart refrigerators, including diodes, transistors, TVS diodes, small-signal MOSFETs, ultra-low-power LDOs, crystal oscillators, and high-power drivers.



Application Circuit



Jiangsu Changjing Electronics Technology Co., Ltd.

Creating a World-Class Semiconductor Brand

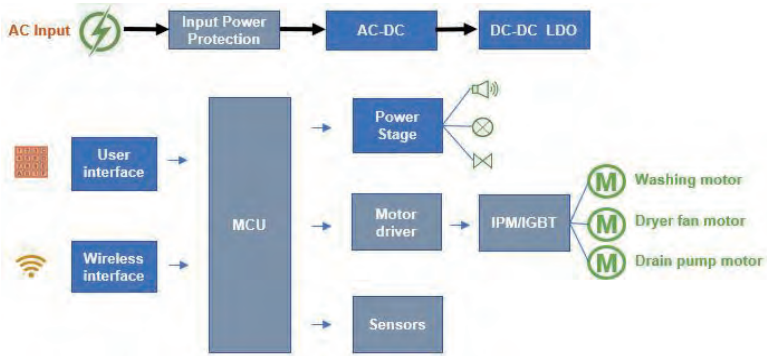
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Washing Machine

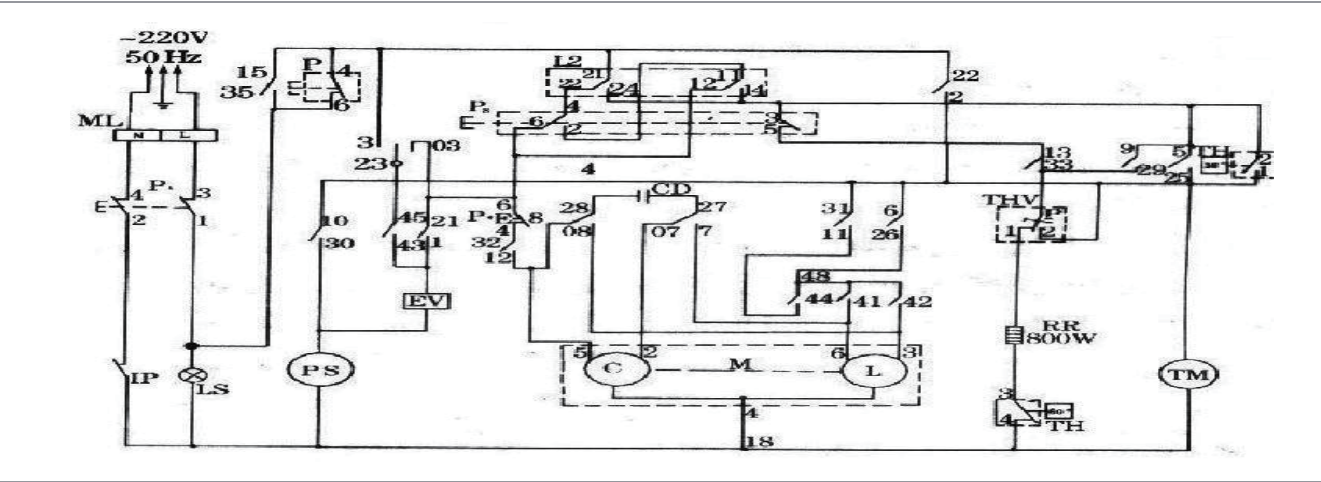
Function	Part Number	V _{in(max)} (V)	V _{out} (V)	I _{o(max)} (mA)	I _o (μA)	V _o (mV)	PSRR(dB@1kHz)	Package
LDO	CJ6205 Series	6	1.2~5.0	500	50	100	75	SOT-23-3L/-5L
	CJ1117 Series	20	1.8~5.0	1000	2000	1300	65	SOT-223/89/TO-252-2L
Function	Part Number	V _{CBO} (V)	V _{CEO} (V)	I _o (A)	V _{CE(sat)} (V)	Type	Package	
Transistor	DTC123JCA	50	50	0.1	0.3	NPN	SOT-23	
	DTA114ECA	-50	-50	-0.1	0.3	PNP	SOT-23	
	BC847	50	45	0.1	0.5	NPN	SOT-23	
	UMD12N	50	50	0.1	0.3	NPN+PNP	SOT-363	
Function	Part Number	P _{PP} (W)	V _{RWM} (V)	I _{PP} (A)	V _C (V)	C _J (pF)	Package	
TVS	CJSMBJ18CA	600	18	20.6	29.2	-	SMBG	
	P6SMB15CA	600	15	28.3	21.2	-	SMBG	
Function	Part Number	V _R (V)	I _o (A)	V _F (V)	I _R (uA)	Package		
SBD	SBD20200CT	200	20	0.76	100	TO-220-3L		
	DSS120	200	1	0.95	100	SOD-123FL		
Function	Part Number	V _R (V)	I _O (A)	V _F (V)	T _{rr} (ns)	I _R (uA)	Package	
FRD	ES1J	600	1	1.7	35	5	SMAG	

Product Introduction

Washing machines have become an essential part of our daily lives. With the advancement of artificial intelligence, we strive for a more scientific, efficient, and energy-saving way to wash clothes. JSCJ provides electronic components that ensure efficient power management, robust and reliable user interfaces, and motor control with low noise and high power density.



Application Circuit



Air Conditioner (Indoor Unit)

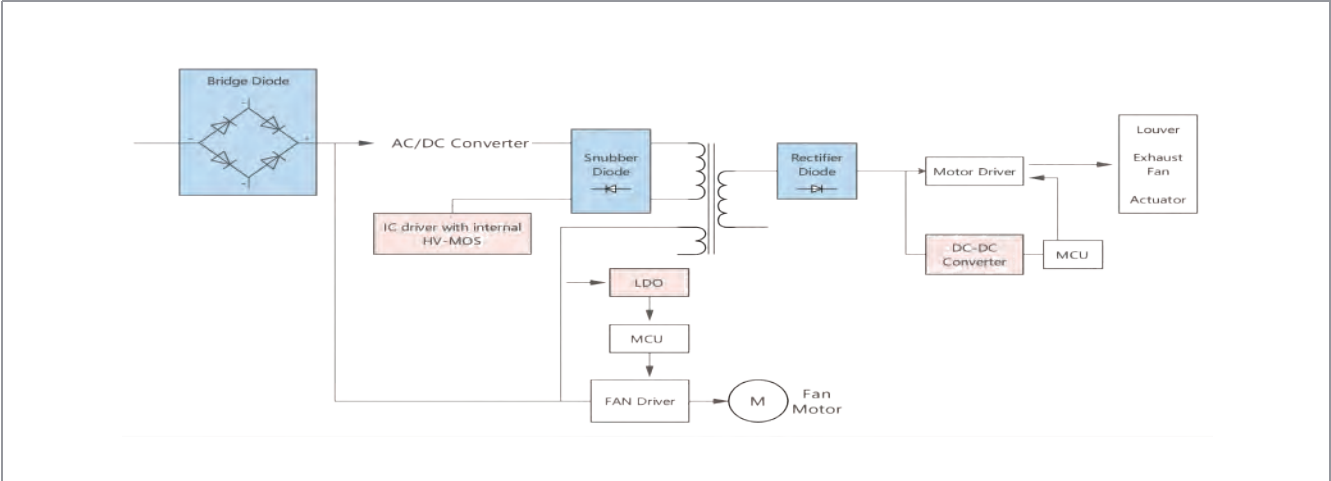
Function	Part Number	V _{DS} (V)	R _{DS(on)} (mΩ)		V _{GS(th)} (V)	Q _g (nC)	C _{iss} (pF)	Package		
			10V TYP	4.5V TYP						
MOSFET	CJ2301A	-20	-	90	-0.4 ~ -1.0	5.5	405	SOT-23		
	CJL3407	-30	50	68	-1 ~ -3	-	700	SOT-23-6L		
	CJ4459A	-30	35	55	-1.4 ~ -2.4	11	625	SOT-23		
Function	Part Number	Frequency (HZ)	Load capacitance (PF)		Frequency Tolerance (at 25℃) (PPM)		Package			
Crystal	CJ03-040002020B20	4.00	20		20		49SMD			
	CJ13-160000910B20	16.00	9		10		3225			
	CJ03-041942020B20	4.19	20		20		49SMD			
Function	Part Number	V _{in(max)} (V)	V _{out} (V)	I _{o(max)} (mA)	I _o (μA)	V _D (mV)	PSRR(dB@1kHz)	Package		
LDO	CJ6376 Series	36	1.2~12	300	2	300	70	SOT-23-3L		
	CJ75LXXS Series	36	1.2~12	300	2	300	70	SOT-89-3L		
	CJ6385 Series	40	2.8~9.0	200	2	700	55	SOT-89-3L		
Function	Part Number	V _R (V)	I _o (A)		I _{FSM} (A)	V _F (V)	Package			
Rectifier Bridge	GBJ1510	1000	15		240	1	6GBJ			
	GBJ2510	1000	25		350	1	6GBJ			
	GBJ3510	1000	35		400	1	6GBJ			
Function	Part Number	VCES (V)	IC @ TC=100℃ (A)	IC @ Tc=25℃ (A)	VCE(sat) (V)	Switching Frequency (Khz)	Short Current Withstand Time (us)	Eon (mJ)	Eoff (mJ)	Package
IPM	ICS02N60S2D1(NPI)	600	2	TBD	1.7	8-20	TBD	TBD	TBD	SOP23
	ICS03N60S2D1(NPI)	600	3	TBD	1.65	8-20	TBD	TBD	TBD	SOP23

Product Introduction

Air conditioners are an indispensable part of modern living, with smart connected models continuously emerging. JSCJ's solutions include efficient power management modules, stable and low-consumption PFC controllers, and low-noise, high-power motor controls.



Application Circuit



Air Conditioner (Outdoor Unit)

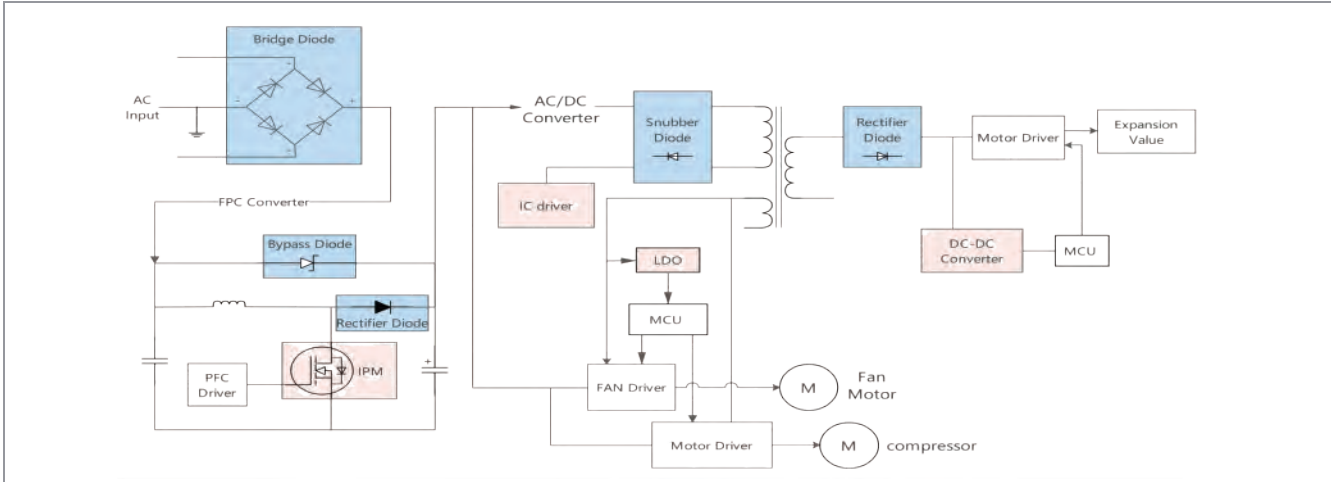
Function	Part Number	V _R (V)	I _O (A)	V _F (V)	T _{rr} (ns)	I _R (uA)	Package			
FRD	MURF10H60	600	10	1.06	32	10	TO-220			
	MURF15H60	600	15	1.15	23	10	TO-220			
	MURW30H60	600	30	1.55	21	10	TO-247			
	MURW60H60CTB	600	30	1.00	29	10	TO-247			
Function	Part Number	Frequency (MHZ)	Load capacitance (pF)	Frequency Tolerance (at 25℃) (PPM)		Package				
Crystal	CJ03-040002020B20	4.00	20	20		49SMD				
	CJ13-160000910B20	16.00	9	10		3225				
	CJ03-041942020B20	4.19	20	20		49SMD				
Function	Part Number	V _R (V)	I _O (A)	I _{FSM} (A)	V _F (V)	Package				
Rectifier Bridge	GBJ1510	1000	15	240	1	6GBJ				
	GBJ2510	1000	25	350	1	6GBJ				
	GBJ3510	1000	35	400	1	6GBJ				
Function	Part Number	V _R (V)	I _O (A)	V _F (V)	T _{rr} (ns)	I _R (uA)	Package			
FRD SiC Schottky	MURF1660CT	600	16	1.17	35	2.0	TO-220F			
	CSD06H065	650	6	1.55	-	-	TO-220-2LD			
Function	Part Number	V _{CES} (V)	IC @ TC=100℃ (A)	IC @ Tc=25℃ (A)	V _{CE} (sat) (V)	Switching Frequency (Khz)	Short Current Withstand Time (us)	E _{on} (mJ)	E _{off} (mJ)	Package
IGBT	CGWT40N65F2KAQ	650	40	80	1.7	20-45	7	1.2	0.32	TO-247
	CGWT30N65F2KAQ(NPI)	650	30	TBD	1.65	20-45	TBD	TBD	0.75	TO-247
IPM	CGU06N65F2SAA	650	6	12	1.73	8-20	5	0.062	0.052	TO-252
	ICS06N65S2D1(NPI)	650	6	TBD	1.73	8-20	TBD	TBD	TBD	SOP23

Product Introduction

Air conditioners are an indispensable part of modern living, with smart connected models continuously emerging. Changjing's solutions include efficient power management modules, stable and low-consumption PFC controllers, and low-noise, high-power motor controls.



Application Circuit



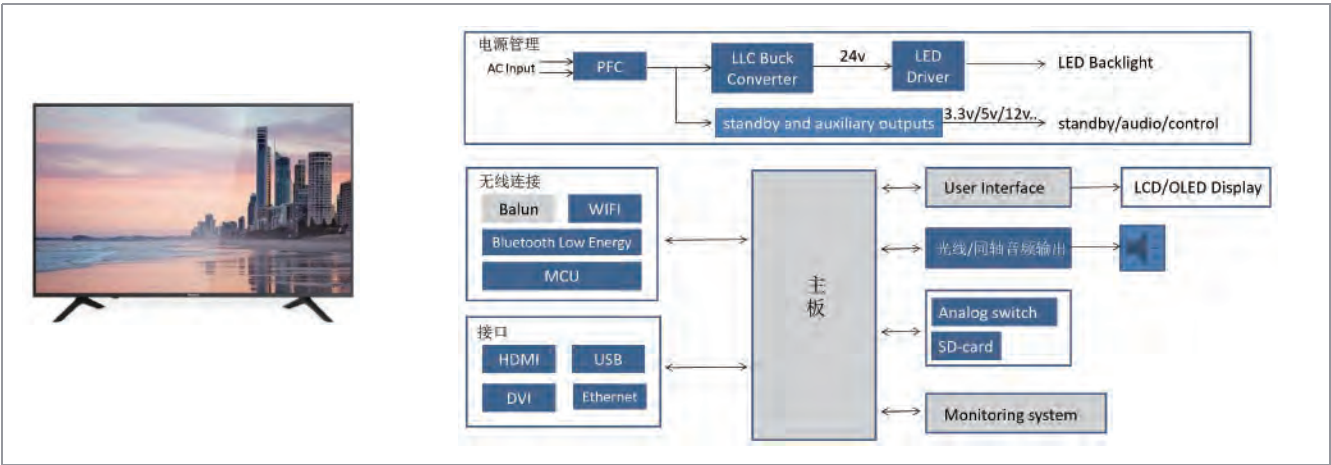
TV

Function	Part Number	V _{DS} (V)	I _D (A)	V _{GS(th)} (V)	R _{DS(on)} (mΩ)		C _{iss} (pF)	Package
					@10V TYP	@10V MAX		
MOSFET	CJU15N10	100	15	1.0 ~ 3.0	70	100	773	TO-252-2L
	CJAC80SN10	100	80	1.3 ~ 2.5	6.2	8.5	2200	PDFNWB5*6
	CJPF10N65M1E	650	10	2.0~ 4.0	820	1000	1340	TO-220F-3L
	CJPF12N65M1	650	12	2.0 ~ 4.0	670	800	1930	TO-220F-3L
	CJPF360JN65A	650	11.5	2.5 ~ 4.5	320	360	807	TO-220F-3L
Function	Part Number	V _R (V)	I _O (A)	V _F (V)	T _{rr} (ns)	I _R (uA)	Package	
FRD	MUR8H60	600	8	1.05	25	10	TO-220-2L	
	MUR1060CT	600	10	1.3	35	0.5	TO-220-3L	
	MUR1660CT	600	16	1.17	35	0.1	TO-220-3L	
Function	Part Number	V _R (V)	I _O (A)	V _F (V)	I _R (uA)	Package		
SBD	SBD(D/F)10100CT	100	10	0.85	100	TO-220(F)-3L/TO-252-2L		
	SBD(D/F)20100CT	100	20	0.85	100	TO-220(F)-3L/TO-252-2L		
	SBD(D/F)20200CT	200	20	0.95	100	TO-220(F)-3L/TO-252-2L		
Function	Part Number	P _{PP} (W)	V _{RWM} (V)	I _{PP} (A)	V _C (V)	C _J (pF)	Package	
TVS	CESDB5V0AT3	120	5.0	8	15	27	SOT-323	
	CESDB5V0D5	112	5.0	8	14	27	SOD-523	
	ESDVD3V3H4	375	3.3	25	15	3	SOT-23-6L	
	ESDU3V3AG4	80	3.3	4	12	0.4	DFNWB2.5x1-.10L	
	ESDU5V0AG4C	19	5.0	5	12	0.5	DFNWB2.5x1-.10L	

Product Introduction

As a staple in homes, televisions have evolved with internet technology into interactive devices that integrate TV viewing, entertainment, learning, office work, and central control. Our products keep pace with continuous innovation, providing a diverse range of solutions including diodes, transistors, TVS , and MOSFETs to meet varied design requirements.

Application Circuit



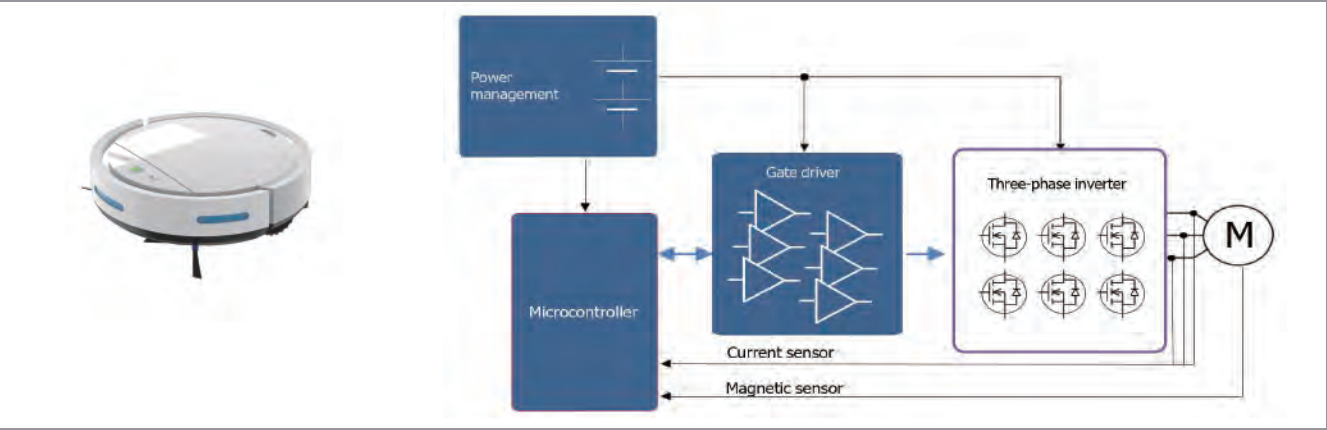
Robotic Vacuum Cleaner

Function	Part Number	P _{PP} (W)	V _{RWM} (V)	I _{PP} (A)	V _C (V)	C _J (pF)	Package	
TVS	ESDBU3V3A1	24	3.3	4	6	0.4	DFNWB1.0*0.6-2L	
	ESDBU3V3AE1	24	3.3	4	6	0.4	DFNWB0.6*0.3-2L	
Function	Part Number	V _R (V)	I _O (A)	V _F (V)	I _R (uA)	Package		
SBD	SS14	40	1	0.55	500	SMAG		
	SS34	40	3		500	SMAG		
	SS36	60	3			SMAG		
	SK310BF	100	3	0.85	1	SMBF		
Function	Part Number	V _{DS} (V)	ID(A)	V _{GS(th)} (V)	R _{DS(on)} (mΩ)		C _{iss} (pF)	Package
					@10V TYP	@4.5V TYP		
MOSFET	CJAC13TH06	60	130	1.0~2.5	2.2	3.0	5298	PDFNWB5*6
	CJU12P06	-60	-12	-1.0~-3.0	75	90	900	TO-252-2L
	CJAB2003	±30	30/-20	±1.0~±2.5	10/26	17/40	1000/943	PDFNWB3.3*3.3-8L-B
	CJBD3020	30	20	1.0~3.0	9.5	14.5	823	PDFNWB3.3*3.3-8L-B
Function	Part Number	V _{in(max)} (V)	V _{out} (V)	I _{o(max)} (mA)	I _O (μA)	V _D (mV)	PSRR(dB@1kHz)	Package
LDO	CJ7533	36	3.3	350	2	500	70	SOT-89-3L
	CJ6376A33M	36	3.3	300	2	300	70	SOT-23-3L
	SCJT1117B-3.3	20	3.3	1000	2000	1300	65	SOT-223
Function	Part Number	Frequency (KHz)	Load capacitance (PF)	Frequency Tolerance (at 25℃) (PPM)			Package	
Crystal	CJ13-240001210B20	24M	12PF	10			3225	
	CJ13-160001210B20	16M	12PF	10			3225	
	CJK05-327681220B20	32.768K	12.5PF	20			7015	

Product Introduction

With technological advancements, robotic vacuum cleaners have become increasingly popular in recent years, with rapid market growth. We provide a variety of combinations for these devices, including electrostatic protection TVS, low-power LDOs, and low-resistance MOSFETs, catering to different power requirements for driving circuits.

Application Circuit



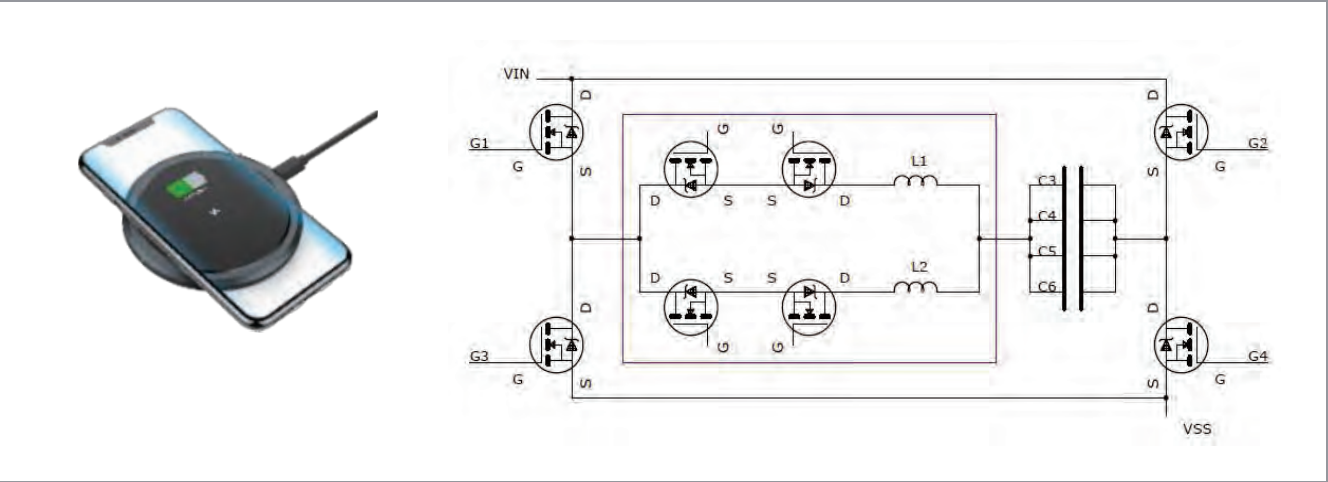
PD-Wireless Charging

Function	Part Number	V _{DS} (V)	I _D (A)	V _{GS(th)} (V)	R _{DS(on)} (mΩ)		C _{iss} (pF)	Package
					@10V TYP	@4.5V TYP		
MOSFET	2N7002K	60	0.34	1.0~2.5	900	1000	40	SOT-23
	CJAB35N03S	30	35	1.3~2.5	5.2	7.5	1100	PDFNWB3.3*3.3-8L
	CJAB55N03S	30	55	1.0~2.5	3.8	5.9	2800	PDFNWB3.3*3.3-8L
	CJAB35SN03	30	35	1.2~2.5	6.0	8.0	630	PDFNWB3.3*3.3-8L
	CJAE35SN06	60	30	1.0~2.5	7.5	10.5	1270	DFNWB3*3-8L
	CJQ14SN06	60	14	1.0~2.5	9.7	12.8	1257	SOP8
	CJMP3009G	-30	-9	-1.0~-3.0	19	27	1400	DFNWB2*2-6L
	CJBD3020	30	20	1.0~3.0	9.5	14.5	823	PDFNWB3.3*3.3-8L-B
Function	Part Number	V _{in(max)} (V)	V _{out} (V)	I _{O(max)} (mA)	I _O (μA)	V _D (mV)	PSRR(dB@1kHz)	Package
LDO	CJ6330B33M	18	3.3	300	2	160	65	SOT-23-5L
	CJ6330B50M	18	5.0	300	2	160	65	SOT-23-5L
Function	Part Number	V _R (V)	I _O (A)	V _F (V)	I _R (uA)	Package		
SBD	DSS34	40	3	0.55	500	SOD-123FL		
	DSS36	40	6	0.7	500	SOD-123FL		
Function	Part Number	Frequency (HZ)	Load capacitance (PF)	Frequency Tolerance (at 25℃) (PPM)			Package	
Crystal	CJ13-080001210B20	8M	12	10			3225	
	CJ13-400000910B20	40M	9	10			3225	

Product Introduction

For the PD wireless charging market, our solutions include a variety of MOSFETs (low-resistance, small-package) for USB input control, coil switching, and full-bridge inverter circuits, along with various crystal oscillators (small-package SMD2016) for frequency-fixed circuits, offering a rich selection of peripheral components for different power levels of wireless chargers.

Application Circuit



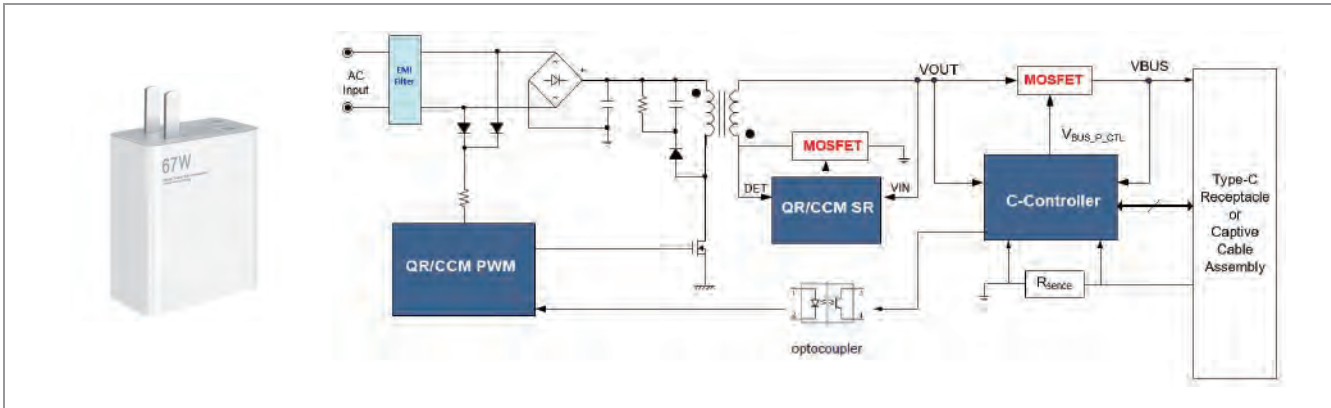
PD-Fast Charge Adapter

Function	Part Number	V _R (V)	I _O (A)	V _F (V)	T _{rr} (ns)	I _R (uA)	Package	
FRD	RS1ML	1000	1	1.3	500	10	SOD-123FL	
	RS2ML	1000	2	1.3	500	5	SOD-123FL	
Function	Part Number	V _R (V)	I _O (A)	V _F (V)	I _R (uA)	Package		
Rectifier	RS3MF	1000	3	1.3	5	SMAF		
	RS4MBF	1000	4	1.3	5	SMBF		
Function	Part Number	P _{PP} (W)	V _{RWM} (V)	I _{PP} (A)	V _C (V)	C _J (pF)	Package	
TVS	ESDG5V0AP	425	5	25	17	160	SOT-23	
	CESD12VD3	220	12	9	24	45	SOD-323	
	ESDM15VD3	204	15	6	34	30	SOD-323	
	CESD24VD3	330	24	7.5	44	36	SOD-323	
Function	Part Number	V _{DS} (V)	I _D (A)	V _{GS(th)} (V)	R _{DS(on)} (mΩ)		C _{iss} (pF)	Package
					@10V TYP	@4.5V TYP		
MOSFET	CJQ9R9SN065AL	60	11	1.3~2.5	7.5	9.7	1180	SOP-8
	CJAC80SN10	100	80	1.3~2.5	6.2	8.8	2200	PDFNWB5*6
	CJAC80SN10H	100	80	1.4~2.4	6.7	-	1977	PDFNWB5*6
	CJAC6R0SN10AL	100	95	1.4~2.4	4.6	6.5	3167	PDFNWB5*6
	CJAC110SN10L	100	110	1.5~2.5	4.3	6.0	3366	PDFNWB5*6
	CJAB35N03S	30	35	1.3~2.5	5.2	7.5	1100	PDFNWB3.3*3.3-8L
	CJAB55N03S	30	55	1.0~2.5	3.8	5.9	2800	PDFNWB3.3*3.3-8L
	CJAB65N03L	30	65	1.0~2.5	2.5	3.6	3103	PDFNWB3.3*3.3-8L
	CJAB75N03U	30	75	1.0~2.2	2.2	3.2	3120	PDFNWB3.3*3.3-8L

Product Introduction

For the PD fast charge adapter market, we provide rectifying tubes (improving CE characteristics), voltage stabilizing tubes, TVS, and MOSFETs (primary high-voltage, secondary synchronous, output switch). Our synchronous rectification MOSFETs (40~150V series) utilize advanced SGT technology, featuring low resistance, low loss, high frequency and efficiency, addressing the needs for small size and high power in PD technology, and solving technical challenges like temperature rise and EMI.

Application Circuit



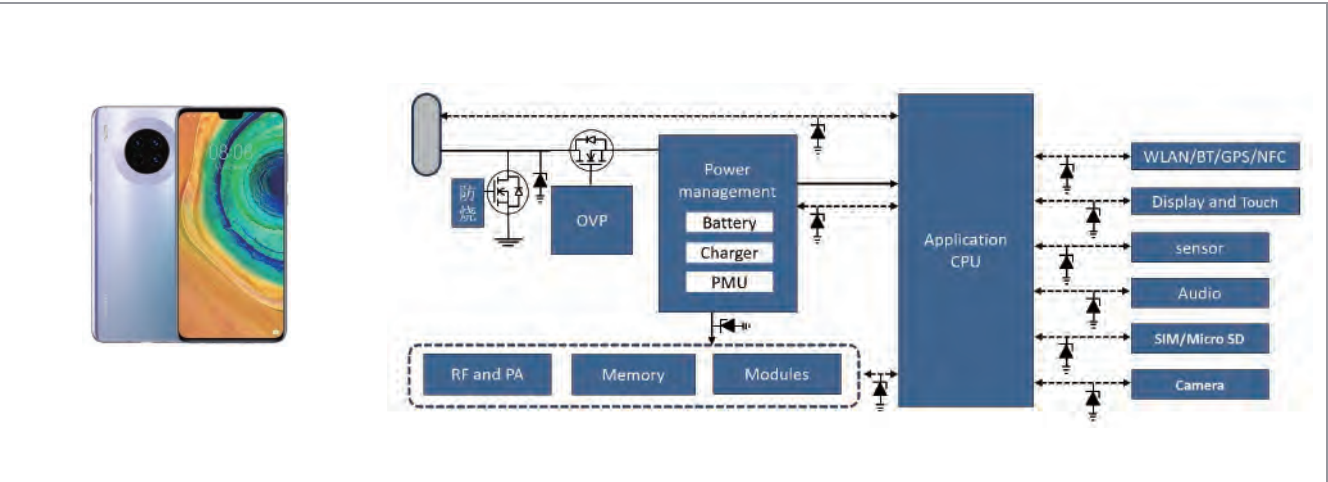
Mobile Phone

Function	Part Number	P _{PP} (W)	V _{RWM} (V)	I _{PP} (A)	V _C (V)	C _J (pF)	Package	
TVS	ESDI4V8FD1	3135	4.85	165	17	350	DFN1610-2L	
	ESDBU5V0AE1C	50	5	5	10	0.35	DFN0603-2L	
	ESDUEL5V0B1	165	5	11	15	1	DFN1006-2L	
	ESDUNF15VB1	720	15	30	24	70	DFN1006-2L	
	ESDUNL24VC1	5100	24	170	30	548	DFNWB2.0*2.0-3L	
Function	Part Number	V _{in(max)} (V)	V _{out} (V)	I _{o(max)} (mA)	I _O (μA)	V _D (mV)	PSRR(dB@1kHz)	Package
LDO	CJ6206E Series	6	0.6~5.5	400	5	100	65	SOT-23-3L/-5L
	CJ6213 Series	6	1.0~5.0	500	45	50	80	SOT-23-3L/-5L
Function	Part Number	V _{DS} (V)	I _D (A)	V _{GS(th)} (V)	R _{DS(on)} (mΩ)		C _{iss} (pF)	Package
					@10V TYP	@4.5V TYP		
MOSFET	CJMN3010L	30	10	0.45~1.0	-	8.3	1773	DFNWB2.0*2.0-6L
	CJAB75N03U	30	75	1.0~2.2	2.2	3.2	3120	PDFNWB3.3*3.3-8L
	CJBA3134K	20	0.75	0.35~1.1	-	250	79	DFN1006-3L
	CJBA3139K	-20	-0.66	-0.35~1.1	-	450	113	DFN1006-3L
Function	Part Number	V _R (V)	I _O (A)	V _F (V)	I _R (uA)	Package		
SBD	B1040A2	40	1	0.57	10	DFNWB1.0*0.6-2L		
	B1040WS	40	1	0.55	50	SOD-323		
	DS161B-40THD02	40	2	0.71	10	WBFBP-02L		

Product Introduction

Mobile phones have become an indispensable part of our lives. As mobile technology continues to evolve, our products keep pace with ongoing innovation. For the mobile phone market, we offer a variety of compact package solutions including electrostatic TVS diodes (0201, 0402), small-signal MOSFETs (CSP package), and ultra-low-power LDOs to meet the diverse design needs of our customers.

Application Circuit



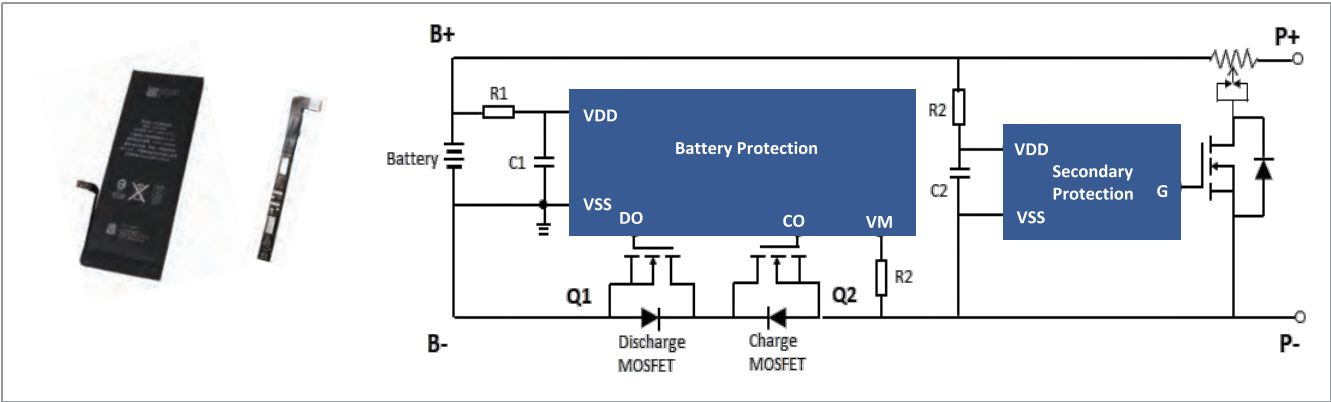
Mobile Phone Battery Management System

Function	Part Number	V _{DS} (V)	I _D (A)	V _{GS(th)} (V)	R _{DS(on)} (mΩ)		C _{iss} (pF)	Package
					@4.5V TYP	@3.8V TYP		
MOSFET	CJAE2002	18	15	0.4~1.0	4.4	4.6	1970	DFNWB3*3-8L
	CJCD2003	18	12	0.4~1.0	6.2	6.8	1950	DFNWB2*3-6L
	CJCD2004	20	10	0.4~1.0	7.3	7.8	1950	DFNWB2*3-6L
	CJCD2005	20	8.0	0.4~1.0	9.0	9.7	1800	DFNWB2*3-6L
	CJCD2007	20	8.0	0.4~1.0	12.5	13.5	1150	DFNWB2*3-6L
	CJL8810A	20	7.0	0.4~1.0	12.8	13	785	SOT-23-6L
	CJS9004A	20	10	-	7.5	8.4	-	TSSOP8
	CJS8810A	20	7.0	0.4~1.0	14.5	14.8	725	TSSOP8
	CJ6207SP	12	8.5	0.4~1.4	4.0	4.2	1290	CSPB2213-6
	CJ13024SP	12	9.0	-	4.7	5.0	-	CSPB1912-6
	CJ8208SP-A	12	14	0.35~1.4	2.2	2.5	3530	CSPC3015-10
	CJ8209SP	12	17	0.4~1.4	1.2	1.3	4975	CSPC2624-10
	CJ12209SP	12	19.8	0.35~1.4	1.2	1.3	6315	CSPC3028-14
	CJ15221SP	12	22.7	0.4~1.4	1.1	1.3	4500	CSPC3220-10
	CJ4502SP	20	3.5	0.5~1.3	22.6	23.3	644	CSPB1111-4
	CJ4506SP	20	10	0.3~1.1	11.2	-	1746	CSPB1717-4
	CJ6617SP	20	12	0.4~1.2	4.9	5.2	2609	CSPB2217-6
	CJ8508SP	20	13	-	2.45	2.5	-	CSPC3421-10

Product Introduction

In recent years, the lithium battery market has seen rapid development. The battery protection board is a crucial component within the battery pack. To enhance the stability of these boards, we offer an array of electrical components with excellent performance and superior heat dissipation. Our MOSFETs with CSP package feature unique designs with built-in ESD protection, ultra-small and ultra-thin dimensions, complemented by very small package (0201) TVS, enabling more precise and detailed lithium battery products.

Application Circuit



PC Motherboard

Function	Part Number	V _{DS} (V)	I _D (A)	V _{GS(th)} (V)	R _{DS(on)} (mΩ)		C _{iss} (pF)	Package
					@10V TYP	@4.5V TYP		
MOSFET	CJAB35SN03	30	35	1.0~2.5	6.0	8.0	630	PDFNWB3.3*3.3-8L
	CJAC40SN03	30	40	1.2~2.5	4.8	6.5	1940	PDFNWB5*6-8L
	CJAC50SN03	30	50	1.0~2.5	3.8	5.5	1220	PDFNWB5*6-8L
	CJAC6R8SN03A(NPI)	30	30	1.0~2.5	5.6	8.2	-	PDFNWB5*6-8L
	CJAC2R8SN03A(NPI)	30	85	1.0~2.5	2.3	2.8	-	PDFNWB5*6-8L
	CJAC1R7SN03B(NPI)	30	210	1.0~2.5	1.4	1.9	-	PDFNWB5*6-8L
	CJACR95SN03B(NPI)	30	370	1.0~2.5	0.75	1.0	-	PDFNWB5*6-8L

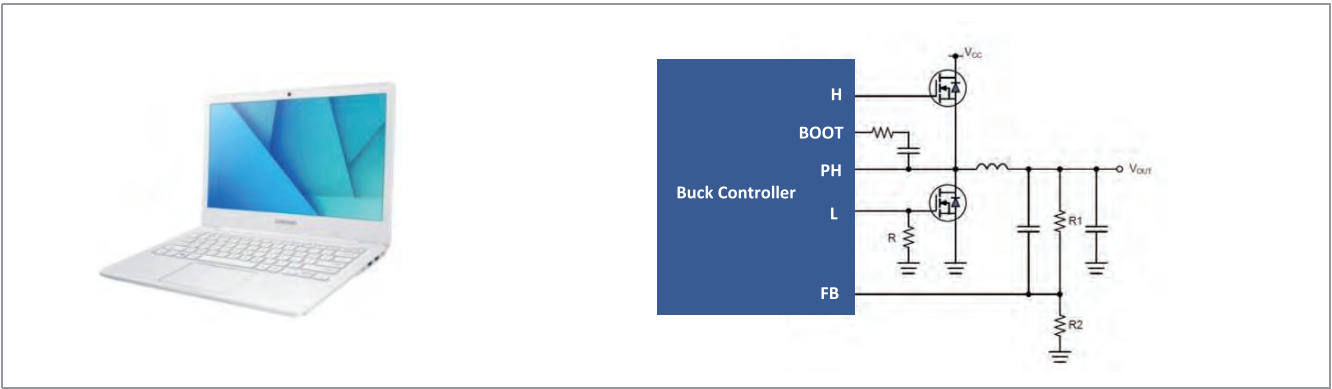
Function	Part Number	P _{PP} (W)	V _{RWM} (V)	I _{PP} (A)	V _C (V)	C _J (pF)	Package
TVS	ESDBU3V3AE1	24	3.3	4	6	0.4	DFN0603-2L
	ESDBL5V0AH1	60	5	6	7.2	13	DFN1006-2L
	ESDTU5V0A1	45	5	4	10.5	0.35	DFN1006-2L

Function	Part Number	V _{in(max)} (V)	V _{out} (V)	I _{o(max)} (mA)	I _o (μA)	V _D (mV)	PSRR(dB@1kHz)	Package
LDO	CJ6206E Series	6	0.6~5.5	400	5	100	65	SOT-23-3L/-5L
	CJ6205 Series	6	1.2~5.0	500	50	100	75	SOT-23-3L/-5L
	CJ1117 Series	20	1.8~5.0	1000	2000	1300	65	SOT-223/89/TO-252-2L

Product Introduction

PCs are categorized into desktops and laptops. The performance of the PC motherboard determines the capability of the PC, while the power supply system directly impacts the motherboard's operation. We have developed low junction capacitance (Ciss), low internal resistance (2mΩ~7mΩ) MOSFETs with excellent switching frequency characteristics for the upper and lower bridges in PC motherboard power supply systems. These improvements greatly enhance heat dissipation and stability, meeting the high-load demands of PC motherboards.

Application Circuit



TWS

Function	Part Number	P _{PP} (W)	V _{RWM} (V)	I _{PP} (A)	V _C (V)	C _J (pF)	Package
TVS	ESDBM3V3AE1	80	3.3	9	9	22	DFNWB0.6*0.3-2L
	ESDBS3V3AE1	120	3.3	16	8.5	34	DFNWB0.6*0.3-2L
	ESDSU5V0AE1	80	5.0	4	20	0.24	DFNWB0.6*0.3-2L
	ESDH85V0AE1	80	5.5	7	15	20	DFNWB0.6*0.3-2L
	ESDBM7V0A1	297	7.0	17	12	50	DFN1006-2L
	ESDQ12VFA1	1650	12	55	30	500	WBFBP-02L

Function	Part Number	V _{DS} (V)	I _D (A)	V _{GS(th)} (V)	R _{DS(on)} (mΩ)		C _{iss} (pF)	Package
					@10V TYP	@4.5V TYP		
MOSFET	CJBA3134K	20	0.75	0.35~1.1	-	250	79	DFN1006-3L
	CJ4616SP	15	8	0.5~1.3	-	14	485	CSPB1515-4
	CJ4502SP	20	3.5	0.5~1.3	-	22.6	644	CSPB1111-4
	CJ4506SP	20	10	0.3~1.1	-	11.2	1764	CSPB17-17-4
	CJ4612SP	22	6	0.5~1.3	-	30	258	CSPB1313-4

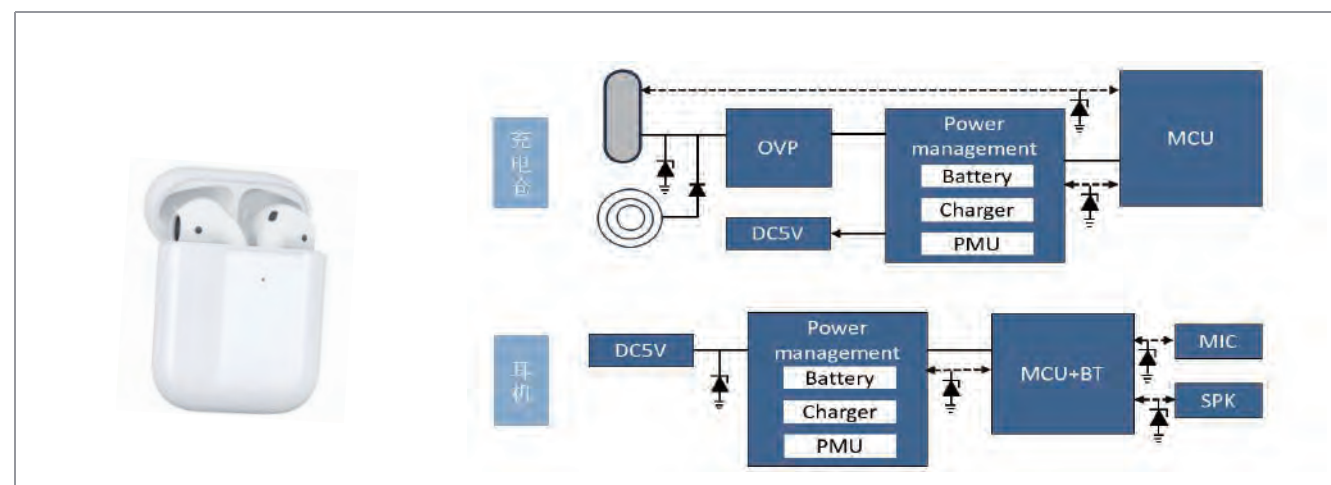
Function	Part Number	V _{in(max)} (V)	V _{out} (V)	I _{O(max)} (mA)	I _O (μA)	V _D (mV)	PSRR(dB@1kHz)	Package
LDO	CJ6206E-DAN-3.3	6	3.3	400	5	100	65	DFNWB1*1-4L
	CJ6111-M5N-3.3	6.5	3.3	300	0.8	120	80	SOT-23-5L

Function	Part Number	Frequency (MHz)	Load capacitance (PF)	Frequency Tolerance (at 25℃) (PPM)	Package
Crystal	CJ13-240000910B20	24M	9	10	3225
	CJ13-260000910B20	26M	9	10	3225
	CJ16-320001010B20	32M	10	10	2016
	CJ16-260000710B20	26M	7	10	2016

Product Introduction

The TWS earphone market is rapidly expanding in an era where nearly everyone owns a pair. For the charging cases of TWS earphones, we offer a diverse range of components including small-package (0201, 0402) TVS diodes, small-package (SMD2016) crystal oscillators, small-signal MOSFETs, and lithium battery protection MOSFETs (CSP package), providing various combination solutions for charging cases.

Application Circuit



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Security Monitoring

Function	Part Number	V _{in(max)} (V)	V _{out} (V)	I _{o(max)} (mA)	I _o (μA)	V _D	PSRR(dB@1kHz)	Package
LDO	CJ6206E Series	6	1.0~5.0	400	5	100mV@100mA	65	SOT-23-3L/-5L DFNWB1×1-4L
	CJ6213 Series	6	1.8~6.0	500	45	50mV@100mA	80	SOT-23-3L/-5L DFNWB1×1-4L

Function	Part Number	V _{DS} (V)	ID(A)	V _{GS(th)} (V)	R _{DS(on)} (mΩ)		C _{iss} (pF)	Package
					@10V TYP	@4.5V TYP		
MOSFET	CJQ9R9SN065AL	60	11	1.3~2.5	7.5	9.7	1180	SOP-8
	CJAC80SN10	100	80	1.3~2.5	6.2	8.8	2200	PDFNWB5*6
	CJAC80SN10H	100	80	1.4~2.4	6.7	-	1977	PDFNWB5*6
	CJAC6R0SN10AL	100	95	1.4~2.4	4.6	6.5	3167	PDFNWB5*6
	CJAC110SN10L	100	110	1.5~2.5	4.3	6.0	3366	PDFNWB5*6
	CJQ14SN06	60	14	1.0~2.5	9.7	12.8	1257	SOP8
	CJPF10N65M1E	650	10	2.0~4.0	820	1000	1340	TO-220F-3L
	CJPF12N65M1	650	12	2.0~4.0	670	800	1930	TO-220F-3L
SBD	DSS34	40	3	0.55	500			SOD-123FL
	SBD20200CT	200	20	0.76	100			TO-220-3L

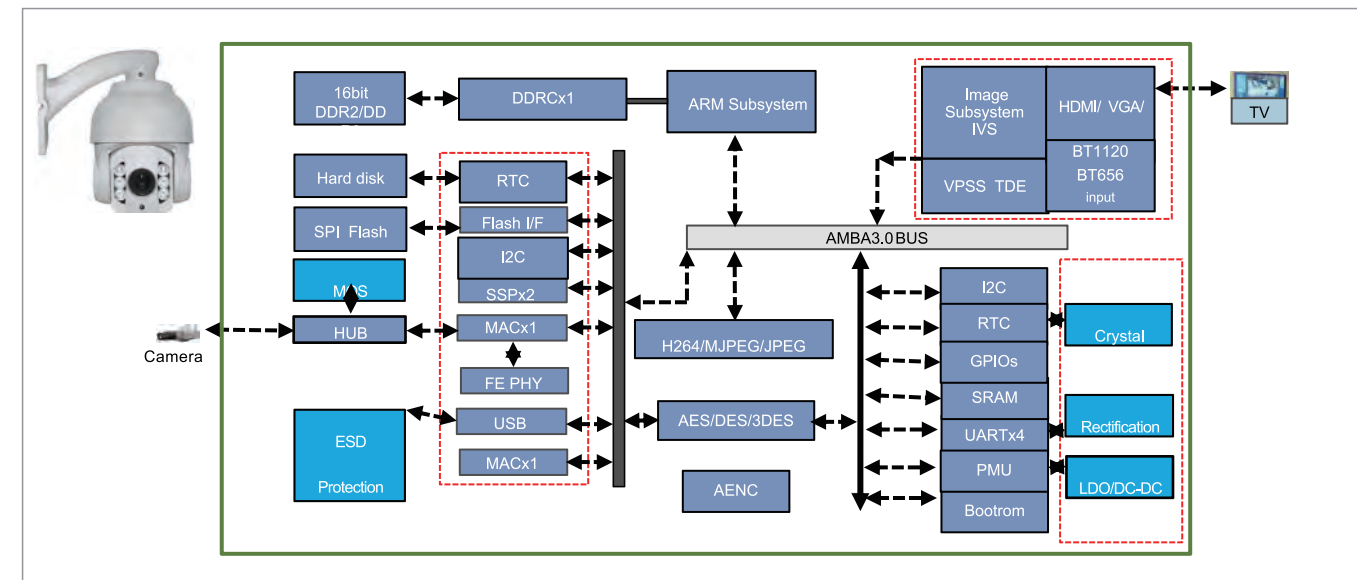
Function	Part Number	V _R (V)	I _O (A)	V _F (V)	I _R (uA)	Package
Motor Driver	CJDR9112	6.0V	1.1A	1	PWM (IN 1 / IN 2)	DFNWB2×2-8L
	CJDR6208	5.5V	0.5A	-	Serial	QFNWB6×6-44L

Function	Part Number	V _{OUT} (V)	I _{OUT} (mA)	V _{IN(on)} (V)	II(sat) (mA)	VCE(sat) (V)	ICEX (μA)	VBR (V)	Package
Darlington Transistor	ULN2803	50	500	2.7	0.95	1	50	75	SOP-18/SSOP24

Product Introduction

In recent years, awareness of safety has increased, and the application of smart security systems across various industries has become more mature and widespread. Our products continue to advance in step with the market, constantly progressing to meet these growing demands.

Application Circuit



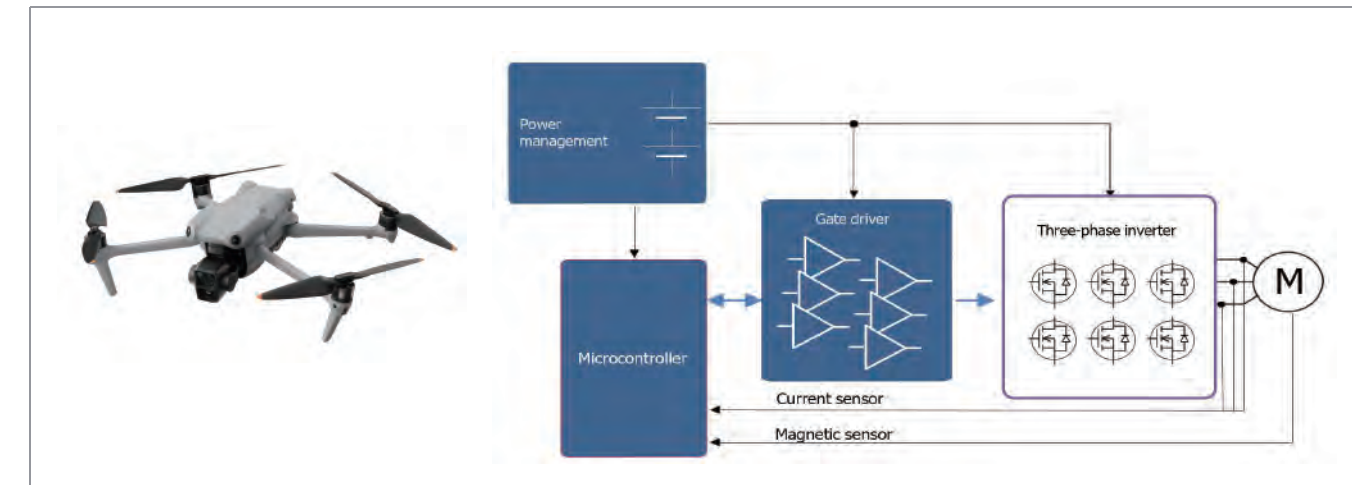
Unmanned Aerial Vehicle-UAV

Function	Part Number	P _{PP} (W)	V _{RWM} (V)	I _{PP} (A)	V _C (V)	C _J (pF)	Package	
TVS	ESDBM3V3AE1	80	3.3	9	9	22	DFNWB0.6*0.3-2L	
	ESDBS3V3AE1	120	3.3	16	8.5	34	DFNWB0.6*0.3-2L	
	ESDSU5V0AE1	80	5.0	4	20	0.24	DFNWB0.6*0.3-2L	
	ESDHB5V0AE1	80	5.5	7	15	20	DFNWB0.6*0.3-2L	
	ESDBM7V0A1	297	7.0	17	12	50	DFN1006-2L	
	ESDQ12VFA1	1650	12	55	30	500	WBFBP-02L	
Function	Part Number	I _{o(max)} (mA)	V _{in(max)} (V)	V _{out} (V)	I _O (mA)	P _{PP} (W)	PSRR(dB@1kHz)	Package
LDO	CJ6206B33F	300	8	3.3	300	0.3	65	DFNWB1*1-4L
	CJ6101B33M	300	6	3.3	300	0.4	50	SOT-23-5L
Function	Part Number	V _{DS} (V)	ID(A)	V _{GS(th)} (V)	R _{DS(on)} (mΩ)		C _{iss} (pF)	Package
					@10V TYP	@4.5V TYP		
MOSFET	CJAC2R0SN04C	40	150	1.0~2.5	1.6	2.4	3060	PDFNWB5*6
	CJAC1R5SN04C	40	180	1.0~2.5	1.2	1.8	3900	PDFNWB5*6
	CJAC1R3SN04C	40	190	1.0~2.5	1.0	1.4	5310	PDFNWB5*6
	CJAC200SN04U	40	200	1.0~2.5	0.67	1.05	9107	PDFNWB5*6
	CJAC13TH06	60	130	1.0~2.5	2.2	3.0	5298	PDFNWB5*6
	CJAC100SN08U	80	100	2.0~4.0	3.0	5.9	3780	PDFNWB5*6

Product Introduction

The application areas for UAV include aerial photography, agriculture, plant protection, micro-selfies, express delivery, disaster relief, observing wildlife, monitoring infectious diseases, surveying, news reporting, electrical inspection, rescue operations, film production, and creating romantic moments. The industry's development demands advanced application technologies. Changjing provides electronic components that ensure efficient power management and high power density for motor control.

Application Circuit



Civilian Utility Meters—Water, Electricity, and Gas Meters

Function	Part Number	P _{PP} (W)	V _{RWM} (V)	I _{PP} (A)	V _C (V)	C _J (pF)	Package	
TVS	ESDBW712C2	396	12	10	30	55	SOT-23	
	ESD36VAP	240	36	3	80	30	SOT-23	
	ESDBKV3V3D3	1120	3.3	28	40	4.3	SOD-323	
	ESDBKV12VD3	352	12	11	32	2	SOD-323	
	ESDBS3V3AE1	120	3.3	16	5.8	34	DFNWB0.6×0.3-2L	
	CJSMAJ10CA	400	10	23.5	17	-	SMAG	
	CJSMBJ33CA	600	33	11.3	53.3	-	SMBG	
	CJSMBJ18CA	600	18	20.5	29.2	-	SMBG	
Function	Part Number	Type	V _{CBO} (V)	V _{CEO} (V)	I _O (A)	V _{CE(sat)} (V)	Package	
Transistor	M8050	NPN	40	25	0.8	0.5	SOT-23	
	2SC2412	NPN	60	50	0.15	0.4	SOT-23	
	MMBT3904	NPN	60	40	0.2	0.3	SOT-23	
	MMBT2222A	NPN	75	40	0.6	0.3	SOT-23	
	MMBT4401	NPN	60	40	0.6	0.4	SOT-23	
	2SA2029	PNP	-60	-50	-0.15	-0.5	SOT-723	
Function	Part Number	TYPE	V _{DS} (V)	R _{DS(on)} 10V TYP(mΩ)	ID (A)	Package		
LV MOSFET	CJ2309A	P-ch	-60	190	-2	SOT-23		
	CJ2302	N-ch	20	60	2.1	SOT-23		
	CJ2301	P-ch	-20	112	-2.3	SOT-23		
	CJ3415	P-ch	-20	50	-4	SOT-23		
	CJQ4435	P-ch	-30	14	-9.1	SOP-8		
	2N7002KW	N-ch	60	900	0.34	SOT-323		
	CJ3134K	N-ch	20	380	0.75	SOT-723		
Function	Part Number	V _{in(max)} (V)	V _{out} (V)	I _{o(max)} (mA)	I _Q (μA)	V _D (mV)	PSRR(dB@1kHz)	Package
LDO	CJ6376 Series	2.5~36	2.1~12	300	200	2	70	SOT-23-3L
	CJ75L Series	2.5~36	2.1~12	350	700	2	70	SOT-89-3L
	CJ6385 Series	3.0~40	-	200	400	2	55	SOT-89-3L

Product Introduction

With technological advancements, traditional mechanical meters have evolved into more convenient smart meters, which are increasingly varied. For the utility meter market, our company offers products such as ESD protectors, TVS diodes, small-signal transistors, MOSFETs, and LDOs. Our extensive range of products can meet the diverse design needs of this market.



Water Meter

Electricity Meter

Gas Meter

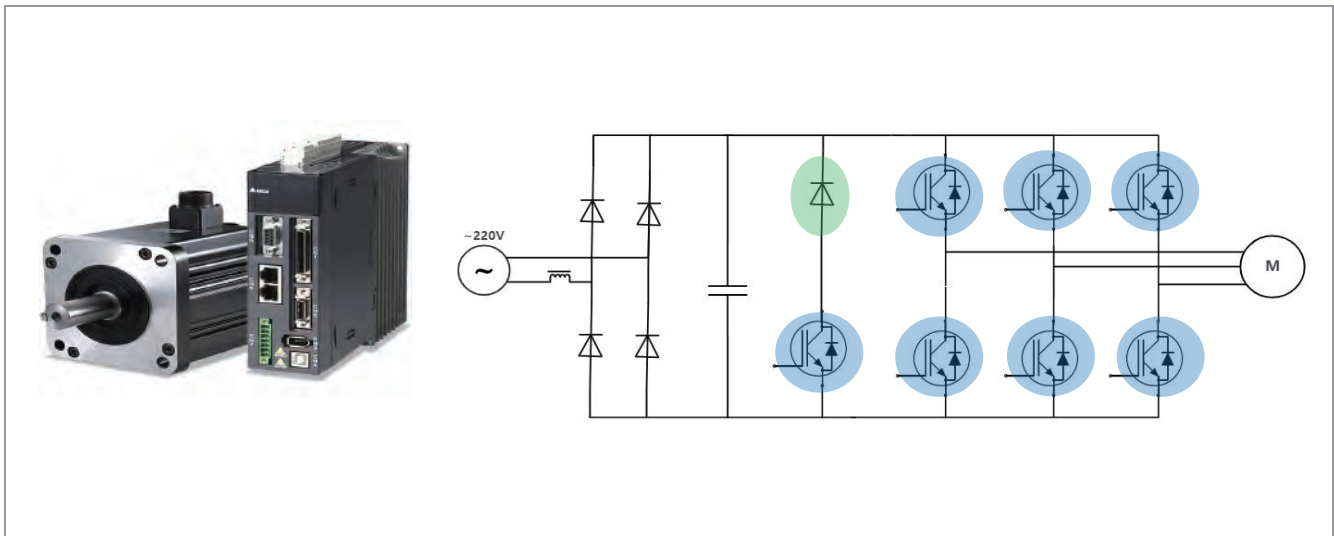
Servo Motor

Function	Part Number	VCES (V)	IC @ TC=100℃ (A)	IC @ TC=25℃ (A)	VCE(sat) (V)	Switching Frequency (Khz)	Short Current Withstand Time (us)	Eon (mJ)	Eoff (mJ)	Package
IGBT	CGB30N65F2KAQ	650	30	60	1.65	20-45	7	0.75	0.36	TO-263
	CGWT40N65F2KAD	650	40	80	1.7	20-45	5	1.23	0.34	TO-247
	CGWT80N65F2KAD	650	80	100	1.75	20-45	7	2.69	0.87	TO-247
	CGR75N120F2KAD	1200	75	120	1.65	20-45	10	6	2.6	TO-247plus
PIM	MCP75N120S2C3	1200	75	120	1.65	8-20	10	6	2.6	PIM3
	MCP100N120S2C3	1200	100	160	1.65	8-20	10	12.4	2.8	PIM3
Function	Part Number	V _R (V)	I _O (A)	V _F (V)	T _{rr} (ns)	I _R (uA)	Package			
FRD	MUR10H60	600	10	1.3	24	10	TO-220-2L			
	MUR15H60L	600	15	1.35	24	10	TO-220-2L			
	MUR20H60	600	20	2.15	19	10	TO-220-2L			
	MUR30H60	600	30	2.7	21	10	TO-220-2L			
Function	Part Number	V _R (V)	I _O (A)	V _F (V)	I _R (uA)	Package				
SBD	RB520S-40	40	200	0.55	10	SOD-523				
	SS54	40	5000	0.55	500	SMAG				
Function	Part Number	P _{PP} (W)	V _{RWM} (V)	I _{PP} (A)	V _C (V)	C _J (pF)	Package			
TVS	CJSMAJ18CA	400	18	13.7	29.2	-	SMAG			
	ESDG5V0AP	425	5	25	17	160	SOT-23			
Function	Part Number	V _{in(max)} (V)	V _{out} (V)	I _{o(max)} (mA)	I _Q (μA)	V _D (mV)	PSRR(dB@1kHz)	Part Number		
LDO	CJ6376 Series	36	1.2~12	300	2	300	70	SOT-23-3L		
	CJ75LXXS Series	36	1.2~12	300	2	300	70	SOT-89-3L		
	CJ1117 Series	20	1.8~5.0	1000	2000	1300	65	SOT-223/89/TO-252-2L		

Product Introduction

Servo motors are high-precision, high-response, and stable-speed motors widely used in medical equipment, aerospace, intelligent transportation systems, industrial automation, clean energy industries, and scientific research experiments. For the industrial automation sector, Changjing has launched a variety of power devices including single transistors & modules to meet customer design requirements.

Application Circuit



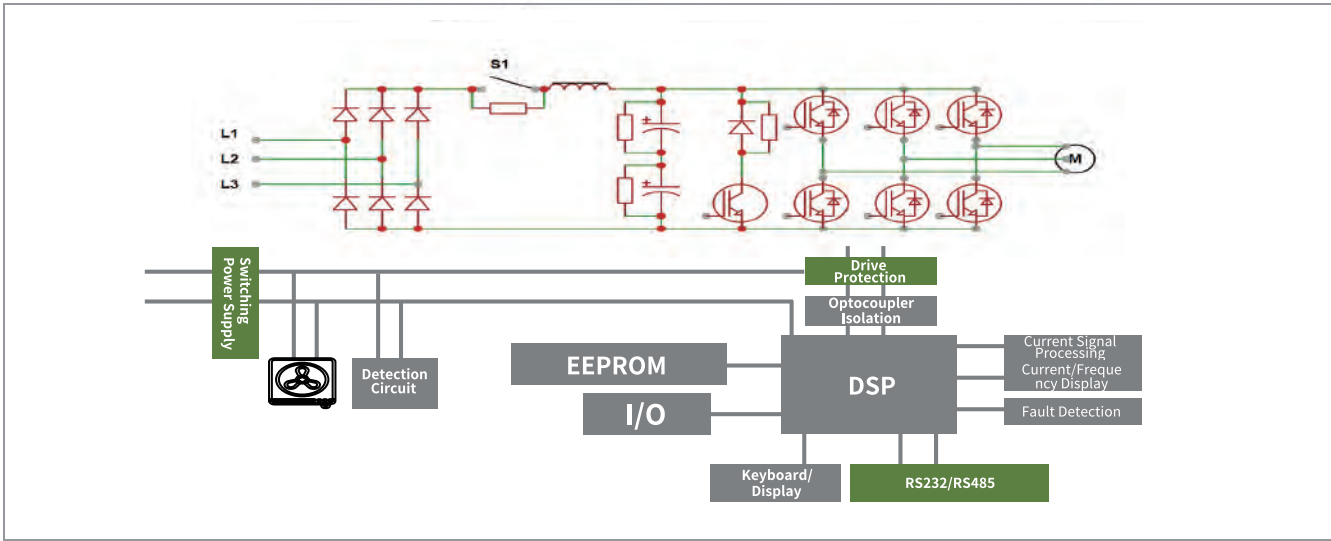
Converter

Function	Part Number	V _{CES} (V)	IC @ TC=100°C (A)	IC @ Tc=25°C (A)	V _{CE(sat)} (V)	Switching Frequency (Khz)	Short Current Withstand Time (us)	Eon (mJ)	Eoff (mJ)	Package
IGBT	CGWT40N120F2KAD	1200	40	80	1.7	20-45	5	3	1.4	TO-247
	CGR75N120F2KAD	1200	75	120	1.65	20-45	10	6	2.6	TO-247plus
	CGR100N120F2KAD	1200	100	160	1.55	20-45	5	8.14	4.75	TO-247plus
	CGR140N120F2KAD	1200	140	200	1.5	20-45	3	10.2	4.2	TO-247plus
PIM	MCP75N120S2C3	1200	75	120	1.65	8-20	10	6	2.6	PIM3
	MCP100N120S2C3	1200	100	160	1.65	8-20	10	12.4	2.8	PIM3
Function	Part Number	V _R (V)	I _O (A)	V _F (V)	T _{rr} (ns)	I _R (uA)	Package			
FRD	MURW30H120	1200	30	2.8	35	10	TO-247-2L			
	MURW60H120	1200	60	3.5	43	10	TO-247-2L			
	US1M	1000	1	1.7	75	5	SMAG			
Function	Part Number	V _R (V)	I _O (A)	V _F (V)	I _R (uA)	Package				
SBD	ST20150L	150	20	0.85	50	TO-277				
Function	Part Number	P _{PP} (W)	V _{RWM} (V)	I _{PP} (A)	V _C (V)	C _J (pF)	Package			
TVS	CJSMBJ36CA	600	36	10.4	58.1	-	SMBG			
	P6SMB15CA	600	12.8	28.3	21.2	-	SMBG			
Function	Part Number	V _{in(max)} (V)	V _{out} (V)	I _{o(max)} (mA)	I _o (uA)	V _D (mV)	PSRR(dB@1kHz)	Package		
LDO	CJ7805B Series	25	5	1000	3200	2000	70	TO-252-2L/TO-220-3L		
	CJ1117 Series	20	1.8~5.0	1000	2000	1300	65	SOT-223/89/TO-252-2L		
Function	Part Number	V _{CBO} (V)	V _{CEO} (V)	I _O (A)	V _{CE(sat)} (V)	Type	Package			
Transistor	MMBT4401	60	40	0.6	0.4	NPN	SOT-23			
	MMBT4403	-40	-40	-0.6	-0.4	PNP	SOT-23			
	BC807	-50	-45	-0.5	-0.7	PNP	SOT-23			
	UMX1N	±60	±50	±0.15	±0.4	NPN+PNP	SOT-363			

Product Introduction

With the continuous development of industrial automation, converter technology is also evolving, enhancing performance, efficiency, reliability, and intelligence. In the future, advanced variable frequency technology will be used more extensively across various application fields, making significant contributions to industrial automation and energy conservation.

Application Circuit



APF&SVG

Function	Part Number	V _{CES} (V)	I _C (A)(T _C =100℃)	V _{CE(sat)} (V)	E _{off} (mj)	I _F (A)	Frequency(kHz)	Package
IGBT	CGWT80N65F2SAD	650	80	1.55	1.23	80	<20	TO-247
	CGR120N65F2SAD(NPI)	650	120	1.5	-	120	<20	TO-247Plus
	CGR160N65F3SAD(NPI)	650	160	1.5	-	160	<20	TO-247Plus
	MCI100N65S2B2(NPI)	650	100	1.45	-	100	<20	B2
IGBT MOD	MCI150N65S3B2(NPI)	650	150	1.45	-	150	<20	B2
	MCF450N170L2E3	1700	450	1.8	105	450	<8	E3
	MCF600N170L2E3	1700	600	1.8	115	600	<8	E3

Function	Part Number	V _{CBO} (V)	V _{CEO} (V)	I _O (A)	V _{CE(sat)} (V)	Type	Package
Transistor	CJA606NL	150	60	6	0.03	NPN	SOT-89
	CJA606PL	-100	-60	-6	-0.02	PNP	SOT-89

Function	Part Number	V _R (V)	I _O (A)	V _F (V)	T _{rr} (ns)	I _R (uA)	Package
FRD	MURW75H65	650	75	2.35	40	10	TO-247-2L
	MURW100H65	650	100	1.6	48	10	TO-247-2L
	MURW150H65	650	150	2.35	40	10	TO-247-2L

Function	Part Number	P _{PP} (W)	V _{RWM} (V)	I _{PP} (A)	V _C (V)	C _J (pF)	Package
TVS	CJSMAJ18CA	400	18	13.7	29.2	-	SMAG
	ESDG5V0AP	425	5	25	17	160	SOT-23

Function	Part Number	V _{in(max)} (V)	V _{out} (V)	I _{O(max)} (mA)	I _O (uA)	V _D (mV)	PSRR(dB@1kHz)	Part Number
LDO	CJ6376 Series	36	1.2~12	300	2	300	70	SOT-23-3L
	CJ75LXXS Series	36	1.2~12	300	2	300	70	SOT-89-3L
	CJ1117 Series	20	1.8~5.0	1000	2000	1300	65	SOT-223/89/TO-252-2L

Product Introduction

APF & SVG are employed to enhance the quality of electrical energy in power grids and strengthen the stability of remote power transmission, providing a solid guarantee for the electricity quality of millions of households.

Product Image



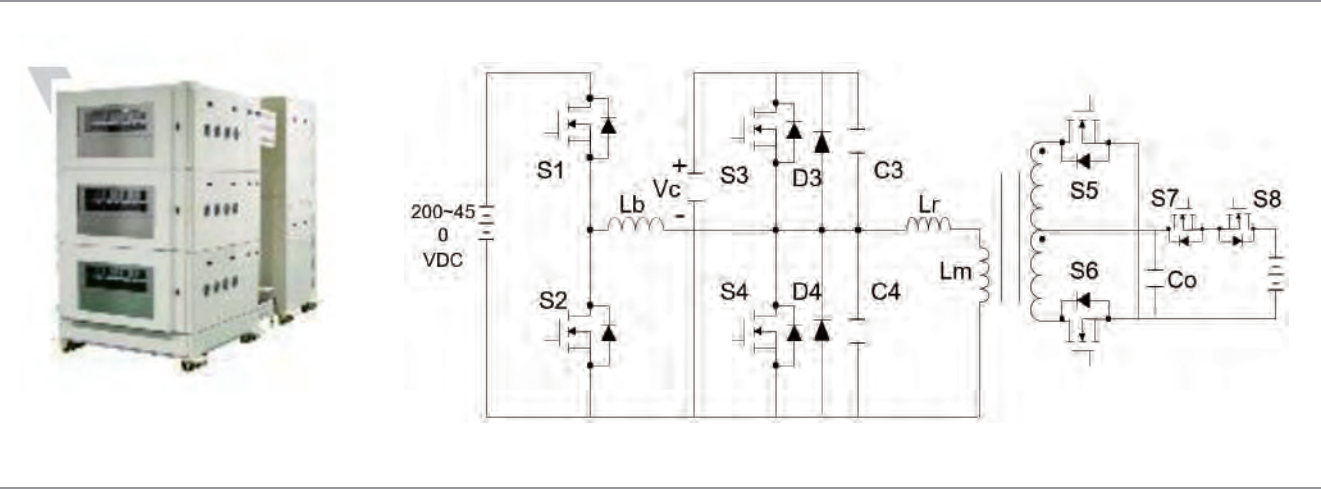
Battery Formation

Function	Part Number	V _R (V)	I _O (A)	V _F (V)	T _{rr} (ns)	I _R (uA)	Package	
FRD	US1M	1000	1	1.7	75	5	SMAG	
	US3M	1000	3	1.7	75	10	SMCG	
Function	Part Number	V _R (V)	I _O (A)	V _F (V)	I _R (uA)	Package		
SBD	SS220	200	2	0.95	100	SMAG		
	DSS34	40	3	0.55	500	SOD-123FL		
	BAS40-04	40	0.2	0.38	0.2	SOT-23		
Function	Part Number	V _{in(max)} (V)	V _{out} (V)	I _{O(max)} (mA)	I _O (uA)	V _D (mV)	PSRR(dB@1kHz)	Package
LDO	CJ7805B-TFN-ARG	25	5	1000	3200	2000	70	TO-252-2L
	CJ7812B-TFN-ARG	32	12	1000	3400	2000	70	TO-252-2L
Function	Part Number	V _{DS} (V)	I _D (A)	V _{GS(th)} (V)	R _{DS(on)} (mΩ)		C _{iss} (pF)	Package
					@10V TYP	@4.5V TYP		
MOSFET	CJACR70SN04AL	40	350	1.0 ~ 2.5	0.5	0.88	14040	PDFNWB5*6
	CJAC200SN04U	40	200	1.3 ~ 2.5	0.67	1.05	9107	PDFNWB5*6
	CJAC1R3SN04C	40	190	1.0 ~ 2.5	1.0	1.4	5310	PDFNWB5*6
	CJAC13TH06	60	130	1.0 ~ 2.5	2.2	3.0	5298	PDFNWB5*6
	CJAC130SN06L	60	130	1.0 ~ 2.5	2.6	3.5	3560	PDFNWB5*6
	CJTLR80SN04C4	40	450	1.0 ~ 2.5	0.6	0.85	8120	TOLL

Product Introduction

Lithium batteries undergo a crucial process before leaving the factory known as formation, aimed at enhancing the reactivity of electrochemical materials within the battery. The predominant formation techniques for lithium batteries globally include constant voltage charging, constant current charging, pulse charging, constant current discharge, and combinations of these modes. We have developed comprehensive discrete device material support for the battery formation market, including synchronous rectification, output reverse protection circuits, and clamping circuits, providing a complete array of device combinations.

Application Circuit



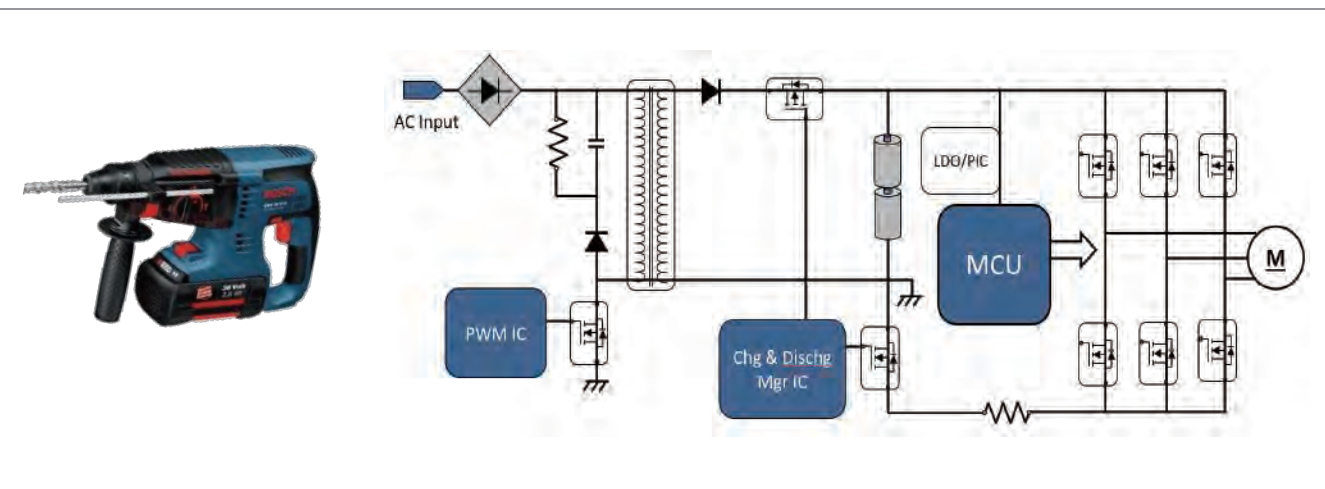
Power Tools

Function	Part Number	P _{PP} (W)	V _{RWM} (V)	I _{PP} (A)	V _C (V)	C _J (pF)	Package	
TVS	SMAJ20CA	400	20	12.3	32.4	-	SMAG	
	SMAJ24CA	400	24	10.3	38.9	-	SMAG	
	SMAJ36CA	400	36	6.9	58.1	-	SMAG	
Function	Part Number	V _R (V)	I _O (A)	V _F (V)	I _R (uA)	Package		
SBD	SBD20100TCTB	100	20	0.75	100	TO-220-3L		
	SBD30150SCTB	150	30	1.25	100	TO-220-3L		
	SBD40150TCTB	150	40	1.1	100	TO-220-3L		
Function	Part Number	V _{DS} (V)	I _D (A)	V _{GS(th)} (V)	R _{DS(on)} (mΩ)		C _{iss} (pF)	Package
					@10V TYP	@4.5V TYP		
MOSFET	CJAC2R0SN04C	40	150	1.0~2.5	1.6	2.4	3060	PDFNWB5*6
	CJAC1R5SN04C	40	180	1.0~2.5	1.2	1.8	3900	PDFNWB5*6
	CJAC1R3SN04C	40	190	1.0~2.5	1.0	1.4	5310	PDFNWB5*6
	CJAC200SN04U	40	200	1.0~2.5	0.67	1.05	9107	PDFNWB5*6
	CJAC13TH06	60	130	1.0~2.5	2.2	3.0	5298	PDFNWB5*6
	CJAC100SN08U	80	100	2.0~4.0	3.0	5.9	3780	PDFNWB5*6
Function	Part Number	I _{O(max)} (mA)	V _{in(max)} (V)	I _{O(max)} (mA)	I _O (μA)	V _D (mV)	PSRR(dB@1kHz)	Package
LDO	CJ7533	350	36	350	2	500	70	SOT-89-3L
	CJ6376A33M	300	36	300	2	300	70	SOT-23-3L
	CJ6386A33M	250	45	250	2	700	70	SOT-23-3L

Product Introduction

As power tools evolve from brushed DC motors to brushless DC motors, the requirements for MOSFETs' size, internal resistance, and Qg are increasingly stringent. For brushless motors, our company is dedicated to developing high-quality power MOSFETs (small package, low internal resistance, low Ciss) with resistance as low as 2mΩ and excellent switching frequency characteristics. Our products, including TVS and LDO, ensure stable battery supply and motor load.

Application Circuit



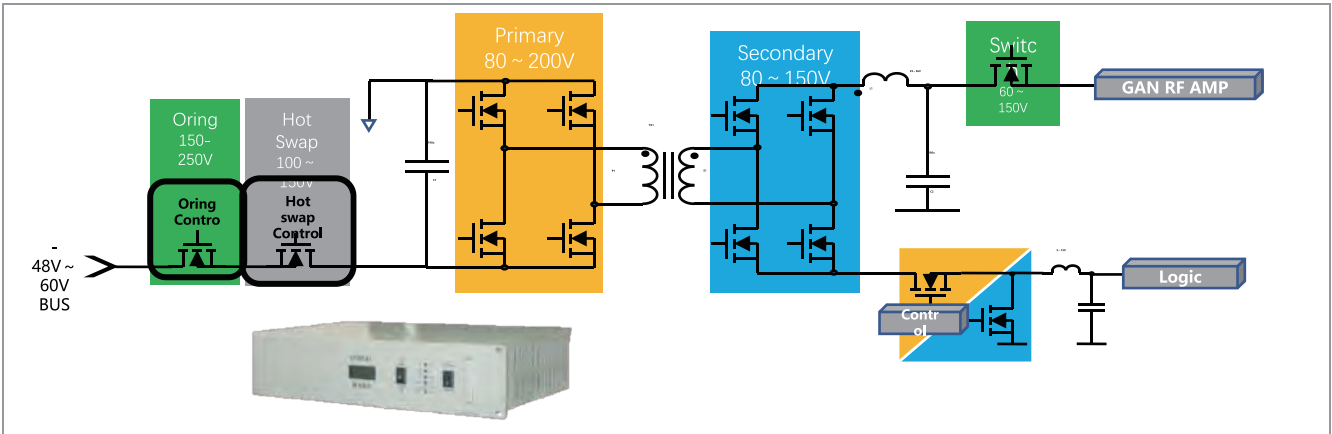
Base Station Power Supply

Function	Part Number	V _{DS}	R _{DS(on)} (mΩ)		I _D	Q _g	V _{GS(th)}	Package
		(V)	10V TYP	10V MAX	(A)	(nC)	(V)	
MOSFET	CJAC70SN15	150	10	12	70	45	2.0~4.0	PDFNWB5x6-8L
	CJAC012SN15BH	150	9.4	11.5	80	21.6	2.0~4.0	PDFNWB5x6-8L
	CJAC9R2SN15BH	150	7.8	9.2	100	TBD	2.0~4.0	PDFNWB5x6-8L
	CJAC100SN08U	80	3	4	100	60	2.0~4.0	PDFNWB5x6-8L
	CJAC5R8SN08AH	85	4.5	5.8	90	39.1	2.0~4.0	PDFNWB5x6-8L
	CJAC012SN15BH	150	9.4	11.5	80	21.6	2.0~4.0	PDFNWB5x6-8L
	CJAC130SN06L	60	2.6	3.2	130	66.4	1.0~2.5	PDFNWB5x6-8L
	CJAC3R0SN06AL	60	2.3	3	140	72.8	1.2~2.5	PDFNWB5x6-8L
	CJAC200SN04U	40	0.67	0.9	200	124	1.3~2.5	PDFNWB5x6-8L
	CJAC1R3SN04C	40	1	1.25	190	78.5	1.0~2.5	PDFNWB5x6-8L
Function	Part Number	P _{PP} (W)	V _{RWM} (V)		I _{PP} (A)	V _C (V)	C _J (pF)	Package
TVS	CJSMAJ5.0CA	400	5		43.5	9.2	-	SMAG
	CJSMBJ6.5CA	600	6.5		53.6	11.2	-	SMBG
	CJSMBJ85CA	600	85		4.4	137	-	SMBG
	5.0SMDJ85CA	5000	85		36.5	137	-	SMCG
Function	Part Number	V _R (V)		I _O (A)	I _{FSM} (A)	V _F (V)		Package
Rectifier Bridge	GBJ1510	1000		15	240	1		6GBJ
	GBJ2510	1000		25	350	1		6GBJ
	GBJ3510	1000		35	400	1		6GBJ

Product Introduction

As is well known, including South Korea and the United States, several countries and regions around the world have already taken the lead in launching 5G communications. China has also started 5G communication trials in over twenty cities and plans to promote it extensively in the future. Due to the need for technologies such as Massive MIMO, the output power of a single sector of a 5G base station's AAU has increased from 40W~80W in 4G to 200W or even higher. Compared to 3G and 4G, the power increase in base station supplies for 5G communications is 68%. In isolated switch-mode power supplies, depending on the topology, the loss of power semiconductor devices accounts for about 30% to 80% of total losses. Therefore, reducing the loss in power semiconductor devices is crucial for increasing output power and also significantly enhances efficiency. Changjing Technology's SGT Gen3.0 is such a power device. As can be seen in the diagram below of the radio communication unit, we provide a cost-effective, low-loss alternative.

Application Circuit



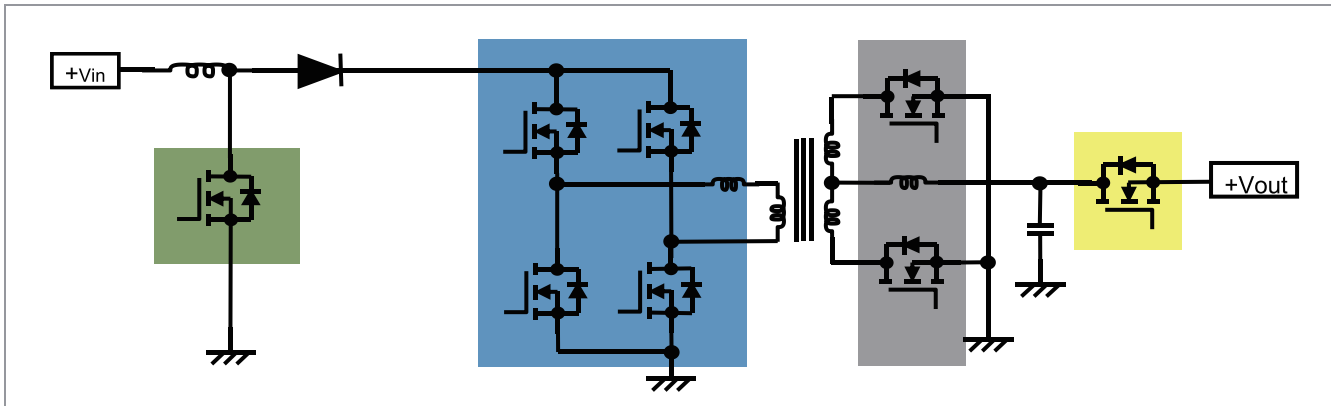
Server Power Supply

Function	Part Number	V _{DS}	R _{DS(on)} (mΩ)		I _D	Q _g	T _{rr}	Package
		(V)	10V TYP	10V MAX	(A)	(nC)	(V)	
MOSFET	CJP180JN60A	600	147	180	20	44	260	TO-220-3L
	CJWT030JN65AD	650	26	30	80	226	175	TO-247-3L
	CJAC200SN04U	40	0.67	0.9	200	124	/	PDFNWB5x6-8L
	CJACR70SN04AL	40	0.55	0.7	350	198	/	PDFNWB5x6-8L
	CJAC1R3SN06AL	60	1	1.3	200	115	/	PDFNWB5x6-8L
	CJACR70SN03AL	30	0.5	0.65	230	160	/	PDFNWB5x6-8L
Function	Part Number	V _R (V)	I _O (A)	V _F (V)	T _{rr} (ns)	I _R (uA)	Package	
FRD	MUR10H60	600	10	1.6	32	10	TO-220	
	MUR15H60	600	15	2.2	23	10	TO-220	
	MUR20H60	600	20	2.5	31	10	TO-220	
	MUR25H60	600	30	3.0	32	10	TO-220	
Function	Part Number	V _R (V)	I _O (A)	I _{FSM} (A)	V _F (V)	Package		
Rectifier Bridge	GBJ1510	1000	15	240	1	6GBJ		
	GBJ2510	1000	25	350	1	6GBJ		
	GBJ3510	1000	35	400	1	6GBJ		

Product Introduction

As businesses and organizations accelerate their digital transformation in operations, the demand for servers naturally increases. In daily use, server power supplies must handle various load conditions, and their electrical characteristics must match the applications to provide stable output. Improper parameter selection can lead to inadequate performance or overdesign, increasing complexity and cost. MOSFETs are used as the main switching elements, responsible for converting power input to the required stable output voltage. High-efficiency, high-density, and reliable MOSFETs are particularly crucial. High switching frequencies enhance power conversion efficiency and response time, but also impose greater demands on the switching characteristics of MOSFETs. Changjing Technology offers a comprehensive alternative solution. Changjing Technology's SJ MOS & SGT MOS feature reduced switching losses and quick response times. Efficient MOSFETs minimize energy loss during conversion, reducing power supply costs and environmental impact. The server power supply topology shown in the diagram below illustrates that we can provide a cost-effective, low-loss alternative.

Application Circuit



03

Automotive



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LED Headlight System

Function	Part Number	Type	Process	V _{DS} (V)	V _{GS(th)} (V)	R _{DS(on)} (mR@V _{GS} =10V)	Package
MOSFET	AD-CJ2309A	Single-P	Trench	-60	-1~-2.5	190	SOT-23
	AD-CJ2310	Single-N	Trench	60	0.5~2	105	SOT-23
	AD-CJAB35N03S	Single-N	Trench	30	1.3~2.5	6.8	PDFN3.3*3.3
	AD-CJAB35P03B	Single-P	Trench	-30	-1~-2.5	14	PDFN3.3*3.3
	AD-CJAB011SN06AL	Single-N	SGT	60	1.1~2.5	11	PDFN3.3*3.3
	AD-CJAB3R2SN04AL	Single-N	SGT	40	1.2~2.3	3.2	PDFN3.3*3.3
	AD-CJAC1R3SN04CH	Single-N	SGT	40	2.5~3.5	1.3	PDFN5*6
	AD-CJAC9R0SN06AL	Single-N	SGT	60	1.3~2.5	9	PDFN5*6

Function	Part Number	P _{PP} (W)	V _{RWM} (V)	V _{BRMin} (V)	V _{BRMax} (V)	I _R (uA)	i _t (mA)	V _C (V)	I _{PP} (A)	Package
TVS	AD-CJDTP6SMBJ28AC	600	28	31.1	34.4	1	1	45.4	13.2	SMBG
	AD-CJDTP6SMBJ24AC	600	24	26.7	29.5	1	1	38.9	15.4	SMBG

Function	Part Number	P _{PP} (W)	V _{RWM} (V)	I _R (uA)	C _J (PF)	V _C (V)	I _{PP} (A)	Package
ESD	AD-ESDBNC1524I1	320	24/15	1	21	44/34	7.5	SOD-323

Function	Part Number	P _D (mW)	I _F (mA)	V _R (V)	V _F (V)	I _R (uA)	t _{rr} (ns)	Package
Switching Diode	AD-1N4148WS	200	150	100	1.25	1	4	SOD-323
	AD-BAS16TW	200	150	75	1.25	1	4	SOT-363
	AD-BAS21	225	200	250	1.25	0.1	50	SOT-23

Function	Part Number	Polarity	P _C (mW)	I _O (mA)	V _{CC} (V)	V _{O(on)} (V)	R ₁ (Ω)	R ₂ (Ω)	Package
Digital transistor	AD-DTC114EUA	NPN	200	100	50	0.3	10K+	10K+	SOT-323
	AD-DTC143EE	NPN	150	100	50	0.3	4.7K+	4.7K+	SOT-523
	AD-DTC124EUA	NPN	200	100	50	0.3	22K+	22K+	SOT-323

LED Headlight System

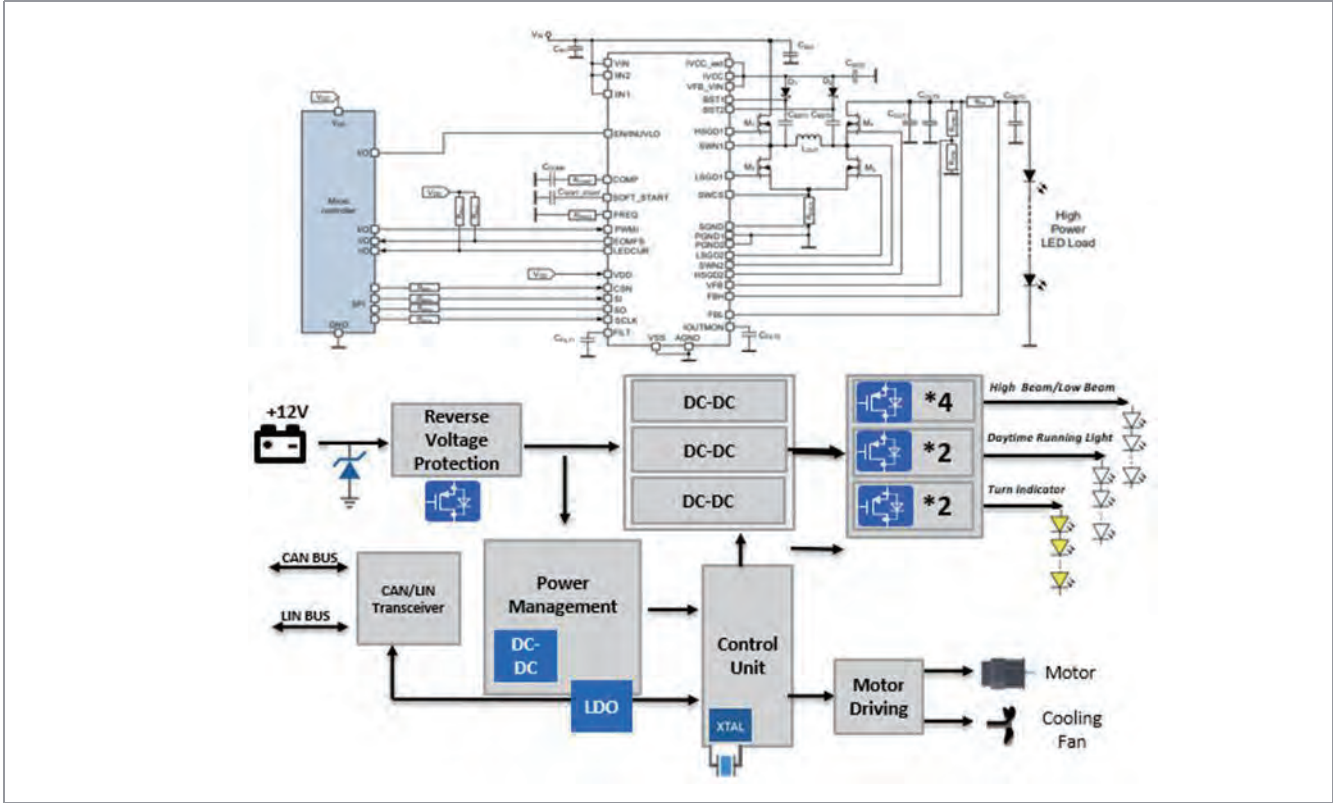
Function	Part Number	Polarity	IC(A)	V _{CBO} (V)	V _{CEO} (V)	V _{EBO} (V)	hFE _{Min}	hFE _{Max}	V _{CE(sat)} (V)	Package
Transistor	AD-BC817-40	NPN	0.5	50	45	5	250	600	0.7	SOT-23
	AD-BC807-40	PNP	0.5	50	45	5	250	600	0.7	SOT-23
	AD-2SA1576A-R	PNP	0.15	60	50	6	180	390	0.5	SOT-323
	AD-2SC4617-S	NPN	0.15	60	50	7	180	390	0.4	SOT-523

Function	Part Number	P _O (mW)	V _{ZTyp} (V)	V _{ZMin} (V)	V _{ZMax} (V)	I _{ZT} (mA)	I _R (uA)	Package
Zener Diode	AD-MMSZ5248BS	200	18	17.1	18.9	7	0.1	SOD-323
	AD-MMSZ5256B	350	30	28.5	31.5	4.2	0.1	SOD-123
	AD-BZT52C16	500	16	15.3	17.1	5	0.1	SOD-123

Product Introduction

Beyond its core Productality of illumination, the LED headlight system serves as a key differentiator for automakers, playing a crucial role in safety, reliability, energy efficiency, and user experience. JSCJ provides automotive-grade products in various package types, all of which are AEC-Q101 certified. In this application, JSCJ offers products including ESD diodes with low junction capacitance C_j, switching diodes, voltage regulators, TVS, transistors, and high-performance MOSFETs. JSCJ products meet customer application system performance requirements while ensuring operational reliability and stability.

Application Circuit



LED Tail Light System

Function	Part Number	Type	Process	V _{DS} (V)	V _{GS(th)} (V)	R _{DS(on)} (mR@V _{GS} =10V)	Package
MOSFET	AD-2N7002K	Single-N	Trench	60	1~2.5	2500	SOT-23
	AD-CJ2309A	Single-P	Trench	-60	-1~-2.5	190	SOT-23
	AD-CJ3400	Single-N	Trench	30	0.7~1.4	35	SOT-23
	AD-CJ3401	Single-P	Trench	-30	-0.7~-1.3	65	SOT-23
	AD-CJ2310	Single-N	Trench	60	0.5~2	105	SOT-23

Function	Part Number	Polarity	IC(A)	V _{CBO} (V)	V _{CEO} (V)	V _{EBO} (V)	hFE _{Min}	hFE _{Max}	V _{CE(sat)} (V)	Package
Transistor	AD-MMBT3904	NPN	0.2	60	40	6	100	300	0.3	SOT-23
	AD-MMBTA05	NPN	0.5	60	60	4	100	400	0.25	SOT-23
	AD-MMBTA55	PNP	0.5	60	60	4	100	400	0.25	SOT-23
	AD-BCP56-10	NPN	1	100	80	5	63	160	0.5	SOT-223
	AD-BCP53-10	PNP	1	100	80	5	63	160	0.5	SOT-223
	AD-BC857-B	PNP	0.1	50	45	5	220	475	0.5	SOT-23
	AD-BC817-40	NPN	0.5	50	45	5	250	600	0.7	SOT-23
	AD-BC807-40	PNP	0.5	50	45	5	250	600	0.7	SOT-23

Function	Part Number	P _O (mW)	V _{ZTyp} (V)	V _{ZMin} (V)	V _{ZMax} (V)	I _{ZT} (mA)	I _R (uA)	Package
Zener Diode	AD-MMSZ5231B	350	5.1	4.85	5.36	20	5	SOD-123
	AD-MMSZ5239B	350	9.1	8.65	9.56	20	3	SOD-123
	AD-BZX84C5V1	300	5.1	4.8	5.4	5	2	SOT-23
	AD-BZX84C16	300	16	15.3	17.1	5	0.1	SOT-23

Function	Part Number	P _{PP} (W)	V _{RWM} (V)	V _{BRMin} (V)	V _{BRMax} (V)	I _R (uA)	i _t (mA)	V _C (V)	I _{PP} (A)	Package
TVS	AD-CJDTP4SMAJ28AC	400	28	31.1	34.4	1	1	45.4	8.8	SMAG
	AD-CJDTP4SMAJ43AC	400	43	47.8	52.8	1	1	69.4	5.8	SMAG
	AD-CJDTP6SMBJ28AC	600	28	31.1	34.4	1	1	45.4	13.2	SMBG
	AD-CJDTP6SMBJ43AC	600	43	47.8	52.8	1	1	69.4	8.6	SMBG

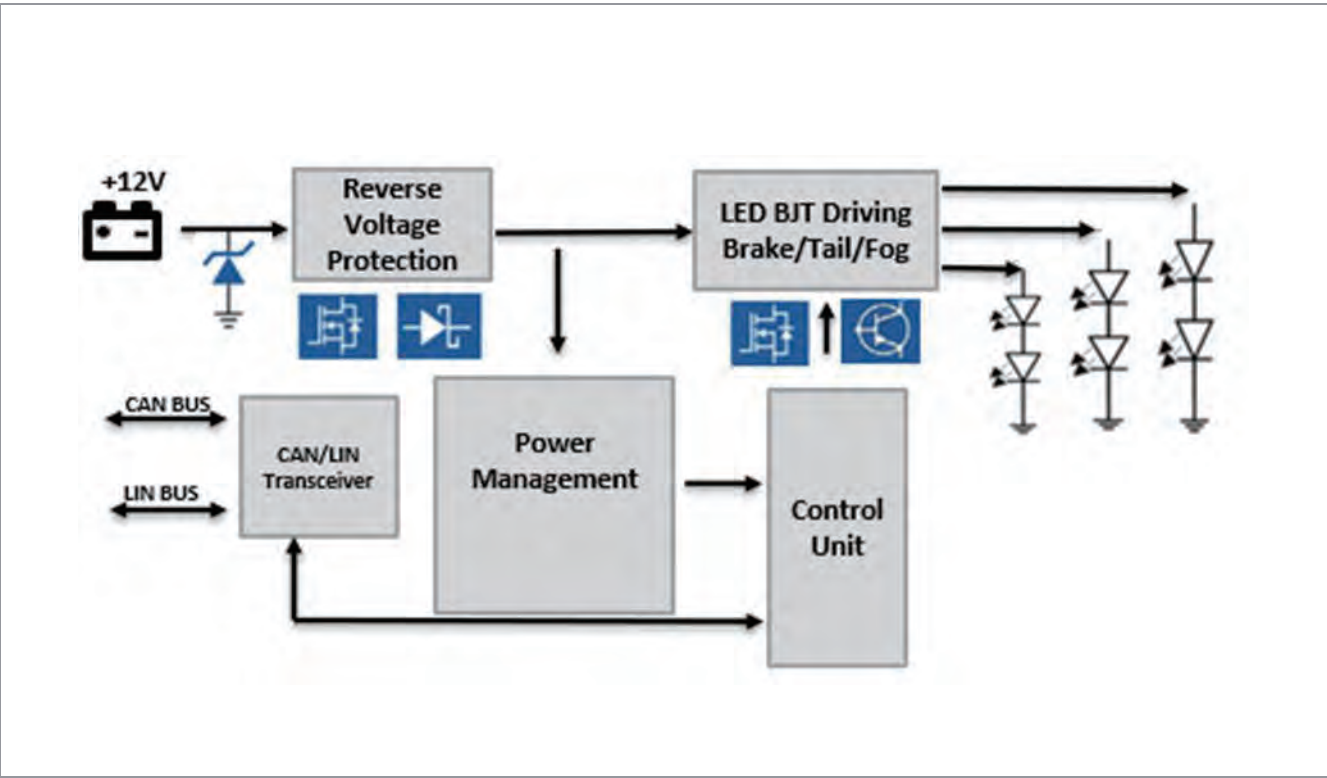
LED Tail Light System

Function	Part Number	P _{PP} (W)	V _{RWM} (V)	I _R (uA)	C _J (PF)	V _C (V)	I _{PP} (A)	Package
ESD	AD-ESDBNB24VS2	390	24	1	36	44.7	7.5	SOT-23
	AD-ESDBP5V0D3	750	5	1	120	25	30	SOD-323

Product Introduction

In addition to its core lighting Product, the LED tail light system is a key differentiator for car manufacturers in brand recognition and plays a vital role in safety, reliability, and energy efficiency. JSCJ offers automotive-grade products in various packaging types, all certified by AEC-Q101. In this application, JSCJ provides products including ESD diodes with low junction capacitance C_J, voltage regulators, TVS, transistors, and high-performance MOSFETs. JSCJ products meet the performance requirements of customer application systems while ensuring reliability and stability.

Application Circuit



EPS Electric Power Steering System

Function	Part Number	Type	Process	V _{DS} (V)	V _{GS(th)} (V)	R _{DS(on)} (mR@V _{GS} =10V)	Package
MOSFET	AD-CJANR90SN04AH	Single-N	SGT	40	2.5~3.5	0.9	PDFN5*6
	AD-CJAC1R3SN04AH	Single-N	SGT	40	2.5~3.5	1.3	PDFN5*6

Function	Part Number	P _{PP} (W)	V _{RWM} (V)	I _R (uA)	C _J (PF)	V _C (V)	I _{PP} (A)	Package
ESD	AD-ESDBNB24VS2	390	24	1	36	44.7	7.5	SOT-23

Function	Part Number	Polarity	I _C (A)	V _{CE0} (V)	V _{CEO} (V)	V _{EB0} (V)	hFE _{Min}	hFE _{Max}	V _{CE(sat)} (V)	Package
Transistor	AD-BC817-40	NPN	0.5	50	45	5	250	600	0.7	SOT-23
	AD-BC807-40	PNP	0.5	50	45	5	250	600	0.7	SOT-23

Function	Part Number	P _D (mW)	I _F (mA)	V _R (V)	V _F (V)	I _R (uA)	t _r (ns)	Package
Switching Diode	AD-1N4148W	350	150	100	1.25	1	4	SOD-123
	AD-BAV99	225	200	70	1.25	2.5	6	SOT-23

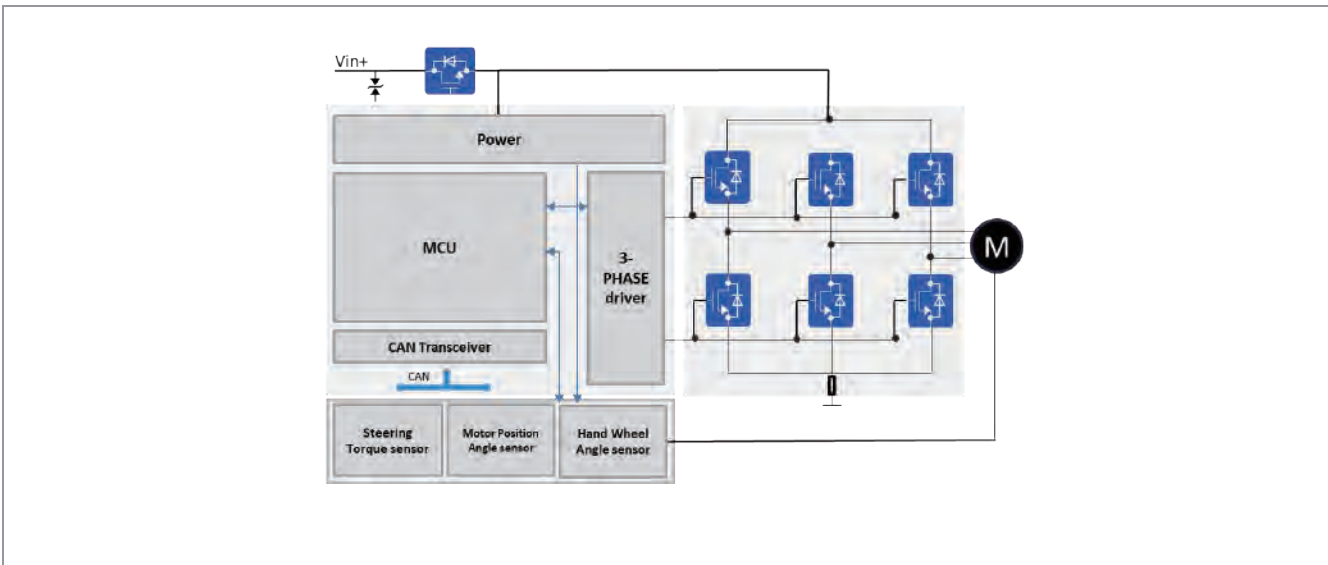
Function	Part Number	P _{PP} (W)	V _{RWM} (V)	V _{BRMin} (V)	V _{BRMax} (V)	I _R (uA)	i _i (mA)	V _C (V)	I _{PP} (A)	Package
TVS	AD-CJDT5PSMCJ26AC	5000	26	28.9	31.9	2	1	42.1	118.8	SMCG

Function	Part Number	P _D (mW)	V _{ZTyp} (V)	V _{ZMin} (V)	V _{ZMax} (V)	I _{ZT} (mA)	I _R (uA)	Package
Zener Diode	AD-BZT52C15	500	15	13.8	15.6	5	0.1	SOD-123
	AD-BZT52C13S	200	13	12.4	14.1	5	0.1	SOD-323

Product Introduction

The EPS (Electric Power Steering) system assists the driver in steering the vehicle using an electric motor, offering lower energy consumption and a smoother, more responsive driving experience. As a safety-critical application, the design of EPS must incorporate reliable components. JSCJ provides automotive-grade products in various packaging forms, all certified by AEC-Q101. In this application, JSCJ offers products including low junction capacitance C_J ESD diodes, voltage regulators, switching tubes, TVS, transistors, and high-performance MOSFETs. JSCJ products meet customer application system performance requirements while ensuring operational reliability and stability.

Application Circuit



Electric Seat Control System

Function	Part Number	P _{PP} (W)	V _{RWM} (V)	V _{BRMin} (V)	V _{BRMax} (V)	I _R (uA)	i _t (mA)	V _C (V)	I _{PP} (A)	Package
TVS	AD-CJDT3PSMCJ36AC	3000	36	40	44.2	1	1	58.1	51.64	SMCG
	AD-CJDT1P5SMCJ33AC	1500	33	36.7	40.6	1	1	53.3	28.1	SMCG
	AD-CJDT5PSMCJ30AC	5000	30	33.3	36.8	2	1	48.4	103.3	SMCG
	AD-CJDT5PSMCJ28AC	5000	28	31.1	34.4	2	1	45.4	110.1	SMCG
	AD-CJDTP6SMBJ36AC	600	36	40	44.2	1	1	58.1	10.3	SMBG
	AD-CJDTP6SMBJ33AC	600	33	36.7	40.6	1	1	53.3	11.3	SMBG
	AD-CJDTP6SMBJ30AC	600	30	33.3	36.8	1	1	48.4	12.4	SMBG
	AD-CJDTP6SMBJ28AC	600	28	31.1	34.4	1	1	45.4	13.2	SMBG
	AD-CJDT5PSMCJ26AC	5000	26	28.9	31.9	2	1	42.1	118.8	SMCG
	AD-CJDTP4SMAJ22A	400	22	24.4	26.9	1	1	35.5	11.3	SMAG
	AD-CJDTP4SMAJ24AC	400	24	26.7	29.5	1	1	38.9	10.3	SMAG
	AD-CJDTP4SMAJ28AC	400	28	31.1	34.4	1	1	45.4	8.8	SMAG
	AD-CJDTP4SMAJ33AC	400	33	36.7	40.6	1	1	53.3	7.5	SMAG

Function	Part Number	Type	Process	V _{DS} (V)	V _{GS(th)} (V)	R _{DS(on)} (mR@VGS=10V)	Package
MOSFET	AD-CJAC3R5SN04AH	Single-N	SGT	40	2.0~4.0	3.5	PDFN5*6
	AD-CJAN5R8SD04CH	Dual-N	SGT	40	2.0~4.0	5.8	PDFN5*6
	AD-CJAN7R4SN04CL	Single-N	SGT	40	1.3~2.5	7.4	PDFN5*6
	AD-CJAN7R4SD04CL	Dual-N	SGT	40	1.3~2.5	7.4	PDFN5*6
	AD-CJAB7R4SN04CL	Single-N	SGT	40	1.3~2.5	7.4	PDFN3.3*3.3
	AD-CJ3400	Single-N	Trench	30	0.7~1.4	35	SOT-23
	AD-CJ3401	Single-P	Trench	-30	-0.7~-1.3	65	SOT-23
	AD-2N7002KW	Single-N	Trench	60	1~2.5	2500	SOT-323

Function	Part Number	P _{PP} (W)	V _{RWM} (V)	I _R (uA)	C _J (PF)	V _C (V)	I _{PP} (A)	Package
ESD	AD-ESDBNB24VS2	390	24	1	36	44.7	7.5	SOT-23
	AD-ESDBNC152411	320	24/15	1	21	44/34	7.5	SOD-323

Function	Part Number	P _D (mW)	I _F (mA)	V _R (V)	V _F (V)	I _R (uA)	t _r (ns)	Package
Switching Diode	AD-BAV21WS	500	200	250	1.25	0.1	50	SOD-323
	AD-1N4148W	350	150	100	1.25	1	4	SOD-123
	AD-1N4448W	500	250	75	1.25	2.5	4	SOD-123
	AD-BAS316	250	250	75	1.25	1	4	SOD-323
	AD-BAV21W	500	200	250	1.25	0.1	50	SOD-123

Function	Part Number	Polarity	P _C (mW)	I _O (mA)	V _{CC} (V)	V _{O(on)} (V)	R ₁ (Ω)	R ₂ (Ω)	Package
Digitaltransistor	AD-DTC114YUA	NPN	200	100	50	0.3	10K+	47K+	SOT-323

Function	Part Number	P _D (mW)	I _F (mA)	V _R (V)	V _F (V)	I _R (uA)	Package
SBD	AD-BAT54WS	200	100	30	1	2	SOD-323

Electric Seat Control System

Function	Part Number	Polarity	I _C (A)	V _{CB0} (V)	V _{CE0} (V)	V _{EB0} (V)	hFE _{Min}	hFE _{Max}	V _{CE(sat)} (V)	Package
Transistor	AD-FMMT593	PNP	1	120	100	5	100	300	0.3	SOT-23
	AD-BC817-40	NPN	0.5	50	45	5	250	600	0.7	SOT-23
	AD-BC857-B	PNP	0.1	50	45	5	220	475	0.5	SOT-23
	AD-MMBT2222A	NPN	0.6	75	40	6	100	300	1	SOT-23
	AD-MMBT2907A	PNP	0.6	60	60	5	100	300	1.6	SOT-23
	AD-MMBTA06	NPN	0.5	80	80	4	100	400	0.25	SOT-23
	AD-MMBTA56	PNP	0.5	80	80	4	100	400	0.25	SOT-23

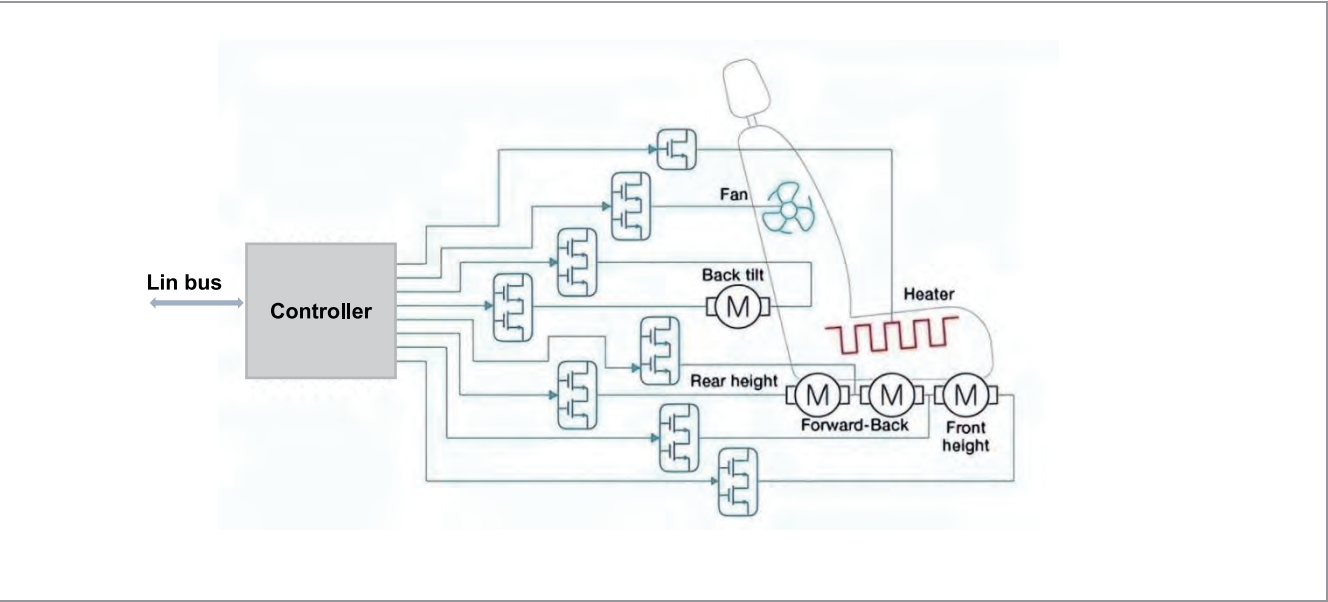
Function	Part Number	P _D (mW)	V _{ZTyp} (V)	V _{ZMin} (V)	V _{ZMax} (V)	I _{ZT} (mA)	I _R (uA)	Package
Zener Diode	AD-BZT52C5V1	500	5.1	4.8	5.4	5	2	SOD-123
	AD-BZT52B18S	200	18	17.64	18.36	5	0.1	SOD-323
	AD-BZT52C43S	500	43	40	46	5	0.1	SOD-323
	AD-MMSZ5231B	350	5.1	4.85	5.36	20	5	SOD-123
	AD-MMSZ5242B	350	12	11.4	12.6	20	1	SOD-123
	AD-MMSZ5252B	350	24	22.8	25.2	5.2	0.1	SOD-123

Function	Part Number	P _{PP} (W)	V _{RWM} (V)	I _R (uA)	C _J (PF)	V _C (V)	I _{PP} (A)	Package
ESD	AD-ESDBNB24VS2	390	24	1	36	44.7	7.5	SOT-23
	AD-ESDBNC152411	320	24/15	1	21	44/34	7.5	SOD-323

Product Introduction

The electric seat control system adjusts the seat position via buttons, controlling MOSFET-driven motors without the need for manual adjustment, enhancing convenience. JSCJ offers automotive-grade products in various packaging forms, all certified by AEC-Q101. In this application, JSCJ provides products including low junction capacitance C_J ESD diodes, switching diodes, Schottky diodes, voltage regulators, transistors, and high-performance MOSFETs. JSCJ products satisfy customer application system performance demands while ensuring reliability and stability.

Application Circuit



Smart Cockpit System

Function	Part Number	V _{RWM} (V)	I _R (uA)	C _i (PF)	V _c (V)	I _{PP} (A)	Package
ESD	AD-ESDBNB24VS2	24	1	36	44.7	7.5	SOT-23
	AD-ESDBNC1524I1	24/15	1	21	44/34	7.5	SOD-323
	AD-CESD24VD5	24	1	36	44	7.5	SOD-523
	AD-ESD24VC2	24	1	36	58	7	SOT-23
	AD-ESD36VAP	36	1	30	80	3	SOT-23
	AD-ESD36VF1	36	1	30	80	3	WBFBP-02C
	AD-ESDBKV24VD3	24	1	2	55	7	SOD-323
	AD-ESDBL36VD3	36	1	15	80	3	SOD-323
	AD-ESDBM24VD3	24	1	37	53	9	SOD-323
	AD-ESDBNB24VS2	24	1	36	44.7	7.5	SOT-23
	AD-ESDKV24VD3	24	1	2	55	7	SOD-323
	AD-ESDBNC1524I1	24/15	1	21	44/34	7.5	SOD-323
	AD-ESDL24VAE1	24	1	13	36	2.5	DFNWB0.6×0.3-2L
	AD-ESDU5V0Y1	5	1	0.5	15	5	WBFBP-02C-A(1.0×0.6×0.5)
	AD-ESDU5V0F1	5	1	0.5	15	5	WBFBP-02C
	AD-ESD5V0H4	5	5	2	20	12	SOT-23-6L
	AD-ESDBKV5V0D3	5	1	2	27	30	SOD-323
	AD-ESDKV5V0D3	5	1	2	27	30	SOD-323
	AD-ESDKV5V0C1	5	1	2	26	25	SOT-23
	AD-ESDUEG5V0O2	5	1	0.9	15	4	SOT-323
	AD-ESDBEB3V3I1S	3.3	1	0.3	5	5.5	SOD-323
	AD-ESDU5V0AG4C	5	1	0.8	3.88	5	DFNWB2.5-1-10L
	AD-ESDBEL24S2S	24	1	1.3	28	2.3	SOT-23

Function	Part Number	Type	Process	V _{DS} (V)	V _{GS(th)} (V)	R _{DS(on)} (mR@V _{GS} =10V)	Package
MOSFET	AD-CJAC1R3SN04CH	Single-N	SGT	40	2.0~4.0	1.3	PDFN5*6
	AD-CJAC2R0SN04AH	Single-N	SGT	40	2.0~4.0	2	PDFN5*6
	AD-CJAC3R5SN04AH	Single-N	SGT	40	2.0~4.0	3.5	PDFN5*6
	AD-CJAN5R8SD04CH	Dual-N	SGT	40	2.0~4.0	5.8	PDFN5*6
	AD-CJAN7R4SN04CL	Single-N	SGT	40	1.3~2.5	7.4	PDFN5*6
	AD-CJAN7R4SD04CL	Dual-N	SGT	40	1.3~2.5	7.4	PDFN5*6
	AD-CJAB7R4SN04CL	Single-N	SGT	40	1.3~2.5	7.4	PDFN3.3*3.3
	AD-CJ3401	Single-P	Trench	-30	-0.7~-1.3	65	SOT-23
	AD-CJ2310	Single-N	Trench	60	0.5~2	105	SOT-23
	AD-2N7002K	Single-N	Trench	60	1~2.5	2500	SOT-23

Function	Part Number	Polarity	I _c (A)	V _{CBO} (V)	V _{CEO} (V)	V _{EB0} (V)	hFE _{Min}	hFE _{Max}	V _{CE(sat)} (V)	Package
Transistor	AD-BC817-40	NPN	0.5	50	45	5	250	600	0.7	SOT-23
	AD-BC807-40	PNP	0.5	50	45	5	250	600	0.7	SOT-23
	AD-BCP53-16	PNP	1	100	80	5	100	250	0.5	SOT-223
	AD-BC847-B	NPN	0.1	50	45	6	200	450	0.5	SOT-23
	AD-MMBT3906	PNP	0.2	40	40	5	100	300	0.3	SOT-23

Smart Cockpit System

Function	Part Number	P _D (mW)	I _F (mA)	V _R (V)	V _F (V)	I _R (uA)	Package
SBD	AD-B5819WS	250	1000	40	0.9	1000	SOD-323
	AD-RB160M-40	350	1000	40	0.51	30	SOD-123
	AD-BAT54WS	200	100	30	1	2	SOD-323

Function	Part Number	P _D (mW)	I _F (mA)	V _R (V)	V _F (V)	I _R (uA)	t _r (ns)	Package
Switching Diode	AD-1N4148W	350	150	100	1.25	1	4	SOD-123

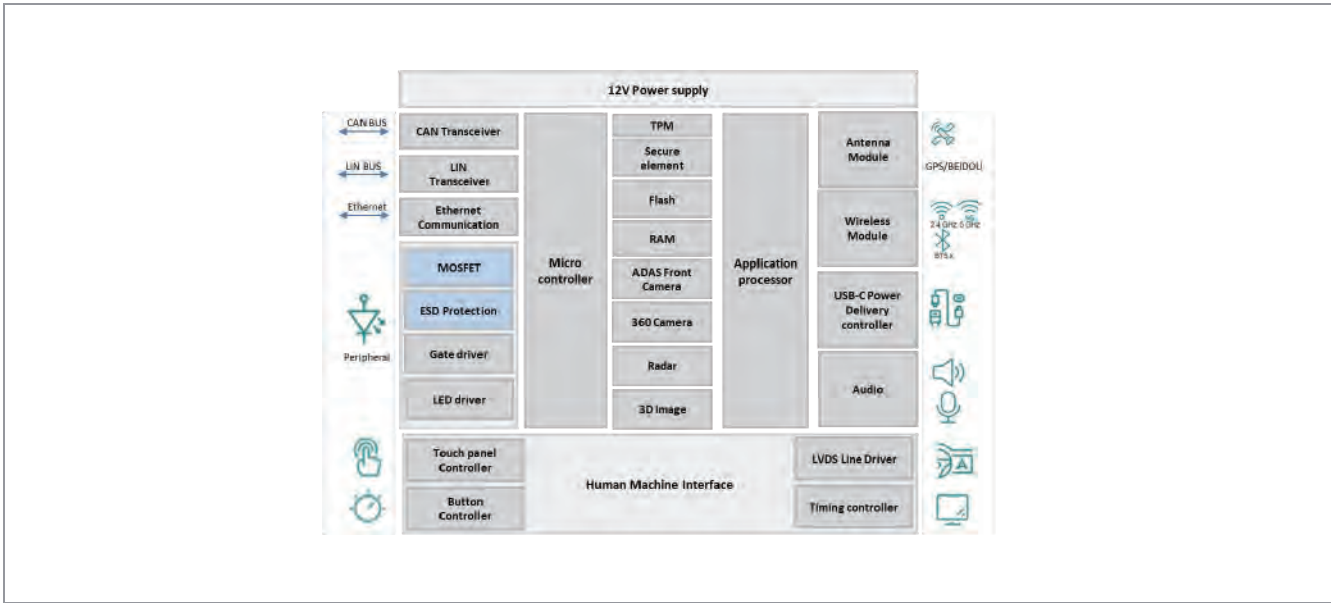
Function	Part Number	Polarity	P _C (mW)	I _O (mA)	V _{CC} (V)	V _{O(on)} (V)	R _I (Ω)	R _Z (Ω)	Package
Digital transistor	AD-DTC123JCA	NPN	200	100	50	0.3	2.2K+	47K+	SOT-23
	AD-DTC124ECA	NPN	200	100	50	0.3	22K+	22K+	SOT-23

Function	Part Number	P _D (mW)	V _{ZTyp} (V)	V _{ZMin} (V)	V _{ZMax} (V)	I _{ZT} (mA)	I _R (uA)	Package
Zener Diode	AD-BZT52C27	500	27	25.1	28.9	2	0.1	SOD-123
	AD-BZT52C18S	200	18	16.8	19.1	5	0.1	SOD-323

Product Introduction

The Smart Cockpit System integrates a variety of IT and artificial intelligence technologies to create a new integrated digital platform within the vehicle, providing drivers with an intelligent experience and enhancing vehicular safety. JSCJ offers automotive-grade products in diverse packages, all certified by AEC-Q101. In this application, JSCJ provides products including low junction capacitance C_J ESD diodes, switching diodes, Schottky diodes, voltage regulators, transistors, and high-performance MOSFETs. JSCJ's products meet customer application system performance requirements while ensuring operational reliability and stability.

Application Circuit



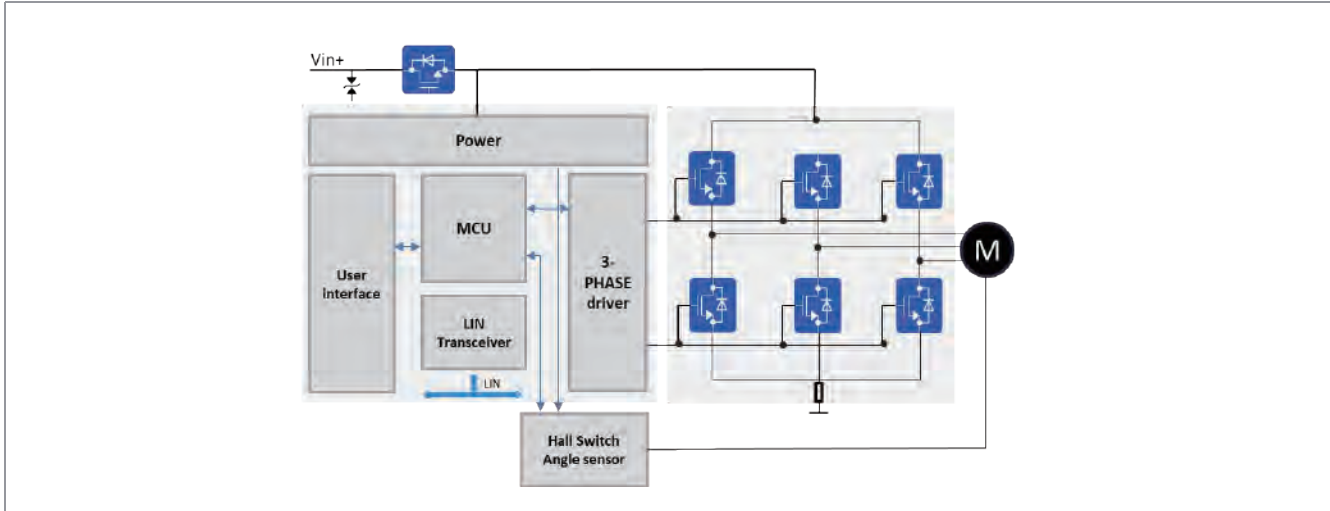
Windshield Wiper System

Function	Part Number	Type	Process	V _{DS} (V)	V _{GS(th)} (V)	R _{DS(on)} (mR@V _{GS} =10V)	Package			
MOSFET	AD-CJAC1R3SN04CH	Single-N	SGT	40	2.0~4.0	1.3	PDFN5*6			
	AD-CJAC2R0SN04AH	Single-N	SGT	40	2.0~4.0	2	PDFN5*6			
	AD-CJAC3R5SN04AH	Single-N	SGT	40	2.0~4.0	3.5	PDFN5*6			
	AD-CJAN5R8SD04CH	Dual-N	SGT	40	2.0~4.0	5.8	PDFN5*6			
Function	Part Number	V _{RWM} (V)	I _R (uA)	C _J (PF)	V _C (V)	I _{PP} (A)	Package			
ESD	AD-ESDBNB24VS2	24	1	36	44.7	7.5	SOT-23			
	AD-ESDBNC1524I1	24/15	1	21	44/34	7.5	SOD-323			
Function	Part Number	P _D (mW)	I _F (mA)	V _R (V)	V _F (V)	I _R (uA)	t _{rr} (ns)	Package		
Switching Diode	AD-BAV21WS	500	200	250	1.25	0.1	50	SOD-323		
Function	Part Number	Polarity	I _C (A)	V _{CBO} (V)	V _{CEO} (V)	V _{EBO} (V)	hFE _{Min}	hFE _{Max}	V _{CE(sat)} (V)	Package
Transistor	AD-BC817-40	NPN	0.3	0.5	50	45	250	600	0.7	SOT-23
Function	Part Number	Polarity	P _C (mW)	I _O (mA)	V _{CC} (V)	V _{O(on)} (V)	R ₁ (Ω)	R ₂ (Ω)	Package	
Digitaltransistor	AD-DTD123YCA	NPN	200	500	50	0.3	2.2K+	10K+	SOT-23	
Function	Part Number	Polarity	I _O (mA)	V _{CC} (V)	V _{O(on)} (V)	R ₁ (KΩ)	R ₂ (KΩ)	Package		
Dual Digitaltransistor	AD-UMB4N	PNP	100	50	0.3	10+		SOT-363		
	AD-UMD3N	PNP	100	50	0.3	10+	10+	SOT-363		
		NPN	100	50	0.3	10+	10+			
Function	Part Number	P _D (mW)	V _{ZTyp} (V)	V _{ZMin} (V)	V _{ZMax} (V)	I _{ZT} (mA)	I _R (uA)	Package		
Zener Diode	AD-AZ23C15	300	15	13.8	15.6	5	0.1	SOT-23		
	AD-BZT52B5V1S	200	5.1	5	5.2	5	2	SOD-323		

Product Introduction

The windshield wiper system uses a motor to drive the wipers across the windshield, maintaining glass cleanliness and ensuring normal vehicle operation. Control of the motor requires MOSFETs. JSCJ offers automotive-grade products in various packaging forms, all certified by AEC-Q101. In this application, JSCJ provides products including low junction capacitance Cj ESD diodes, switching diodes, voltage regulators, transistors, and high-performance MOSFETs. JSCJ's products satisfy customer application system performance needs while ensuring reliability and stability.

Application Circuit



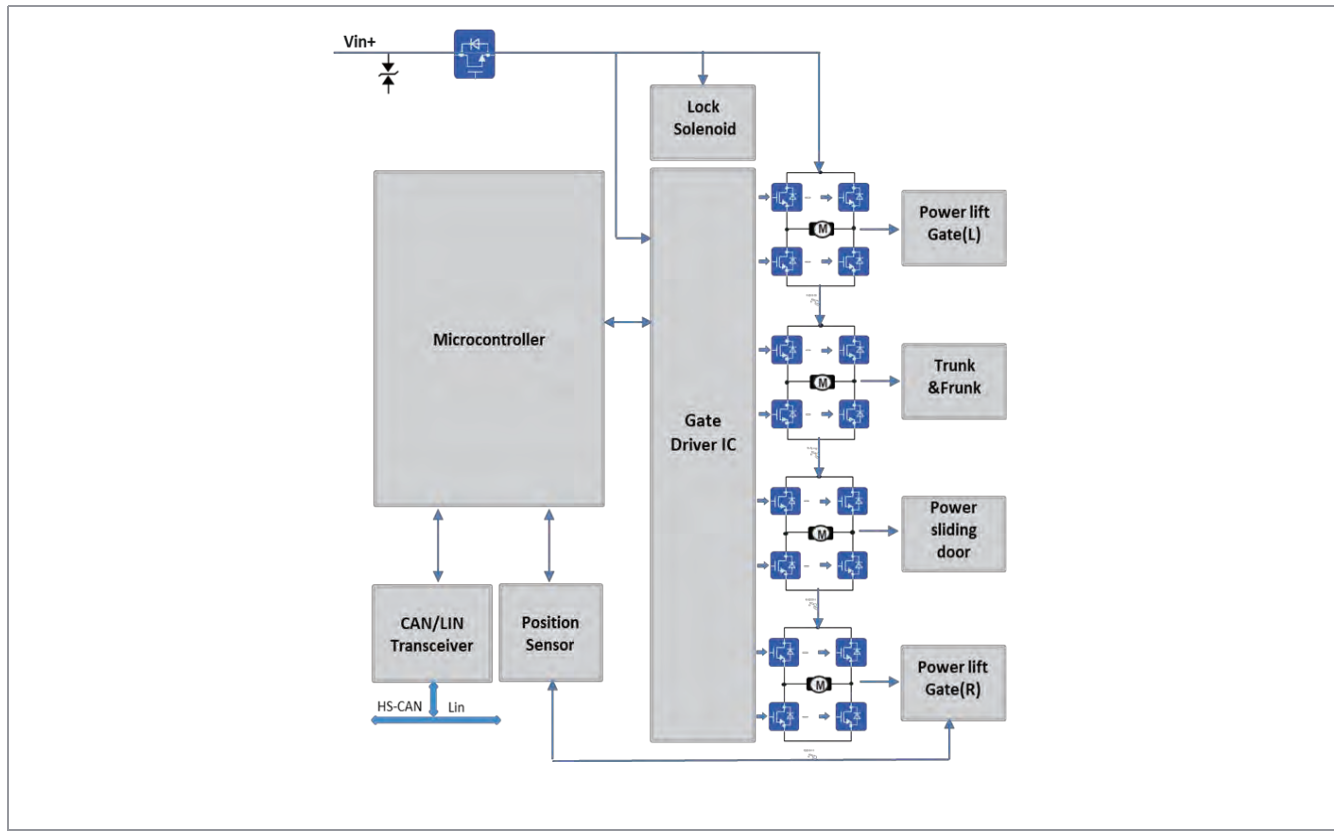
Electric Door Control System

Function	Part Number	P _{FP} (W)	V _{RWM} (V)	I _R (uA)	C _J (PF)	V _C (V)	I _{PP} (A)	Package
ESD	AD-ESDBNB24VS2	390	24	1	36	44.7	7.5	SOT-23
	AD-ESDBNC152411	320	24/15	1	21	44/34	7.5	SOD-323
	AD-ESD24VC2	406	24	1	36	58	7	SOT-23
Function	Part Number	P _D (mW)	I _F (mA)	V _R (V)	V _F (V)	I _R (uA)	t _{rr} (ns)	Package
Switching Diode	AD-BAS21	225	200	250	1.25	0.1	50	SOT-23
	AD-1N4148WS	200	150	100	1.25	1	4	SOD-323
	AD-1N4148W	350	150	100	1.25	1	4	SOD-123
	AD-BAV70	225	200	70	1.25	2.5	6	SOT-23

Product Introduction

The automotive electric door control system operates the opening and closing of vehicle doors by controlling the switching of MOSFETs, offering excellent convenience and efficiency. JSCJ provides automotive-grade products in various packages, all certified by AEC-Q101. In this application, JSCJ offers products including low junction capacitance Cj ESD diodes, switching diodes, voltage regulators, transistors, and high-performance MOSFETs. JSCJ's products meet customer application system performance requirements while ensuring operational reliability and stability.

Application Circuit



Electric Door Control System

Function	Part Number	Type	Process	V _{DS} (V)	V _{GS(th)} (V)	R _{DS(on)} (mR@VGS=10V)	Package			
MOSFET	AD-CJANR90SN04AH	Single-N	SGT	40	2.0~4.0	0.9	PDFN5*6			
	AD-CJAC1R3SN04CH	Single-N	SGT	40	2.0~4.0	1.3	PDFN5*6			
	AD-CJAC2R0SN04AH	Single-N	SGT	40	2.0~4.0	2	PDFN5*6			
	AD-CJAC3R5SN04AH	Single-N	SGT	40	2.0~4.0	3.5	PDFN5*6			
	AD-CJAN5R8SD04CH	Dual-N	SGT	40	2.0~4.0	5.8	PDFN5*6			
	AD-CJAN7R4SN04CL	Single-N	SGT	40	1.5~2.5	7.4	PDFN5*6			
	AD-CJAN7R4SD04CL	Dual-N	SGT	40	1.5~2.5	7.4	PDFN5*6			
	AD-CJAB7R4SN04CL	Single-N	SGT	40	1.5~2.5	7.4	PDFN3.3*3.3			
	AD-CJAC9R0SN06AL	Single-N	SGT	60	1.5~2.5	9	PDFN5*6			
	AD-CJAB9R0SN06AL	Single-N	SGT	60	1.5~2.5	9	PDFN3.3*3.3			
	AD-CJAN013SD06AL	Dual-N	SGT	60	1.5~2.5	13	PDFN5*6			
	AD-CJAN011SN06AL	Single-N	SGT	60	1.5~2.5	11	PDFN5*6			
	AD-CJAB011SN06AL	Single-N	SGT	60	1.5~2.5	11	PDFN3.3*3.3			
Function	Part Number	P _D (mW)	V _{ZTyp} (V)	V _{ZMin} (V)	V _{ZMax} (V)	I _{ZT} (mA)	I _R (uA)	Package		
Zener Diode	AD-DZ23C27	300	27	25.1	28.9	5	0.1	SOT-23		
	AD-BZX84C3V3	300	3.3	3.1	3.5	5	5	SOT-23		
	AD-BZT52C18S	200	18	16.8	19.1	5	0.1	SOD-323		
	AD-BZT52C15	500	15	13.8	15.6	5	0.1	SOD-123		
Function	Part Number	Polarity	I _C (A)	V _{CBO} (V)	V _{CEO} (V)	V _{EBO} (V)	hFE _{Min}	hFE _{Max}	V _{CE(sat)} (V)	Package
Transistor	AD-BC807-40	PNP	0.5	50	45	5	250	600	0.7	SOT-23
	AD-BC817-40	NPN	0.5	50	45	5	250	600	0.7	SOT-23
	AD-MMBT5551-H	NPN	0.6	180	160	6	200	300	0.2	SOT-23
Function	Part Number	Polarity	P _C (mW)	I _O (mA)	V _{CC} (V)	V _{O(on)} (V)	R ₁ (Ω)	R ₂ (Ω)	Package	
Digitaltransistor	AD-DTC114ECA	NPN	200	100	50	0.3	10K+	10K+	SOT-23	
	AD-DTC143ECA	NPN	200	100	50	0.3	4.7K+	4.7K+	SOT-23	
	AD-DTA143ECA	PNP	200	100	50	0.3	4.7K+	4.7K+	SOT-23	
Function	Part Number	Polarity	I _O (mA)	V _{CC} (V)	V _{O(on)} (V)	R ₁ (KΩ)	R ₂ (KΩ)	Package		
Dual Digitaltransistor	AD-UMD2N	PNP	100	50	0.3	22+	22+	SOT-363		
		NPN	100	50	0.3	22+	22+			
Function	Part Number	P _D (mW)	I _F (mA)	V _R (V)	V _F (V)	I _R (uA)	Package			
SBD	AD-RB521S-30	150	200	30	0.5	30	SOD-523			
	AD-RB521S-40	150	200	40	0.54	90	SOD-523			
	AD-SBDD10100CT		10000	100	0.85	100	TO-252-2L			

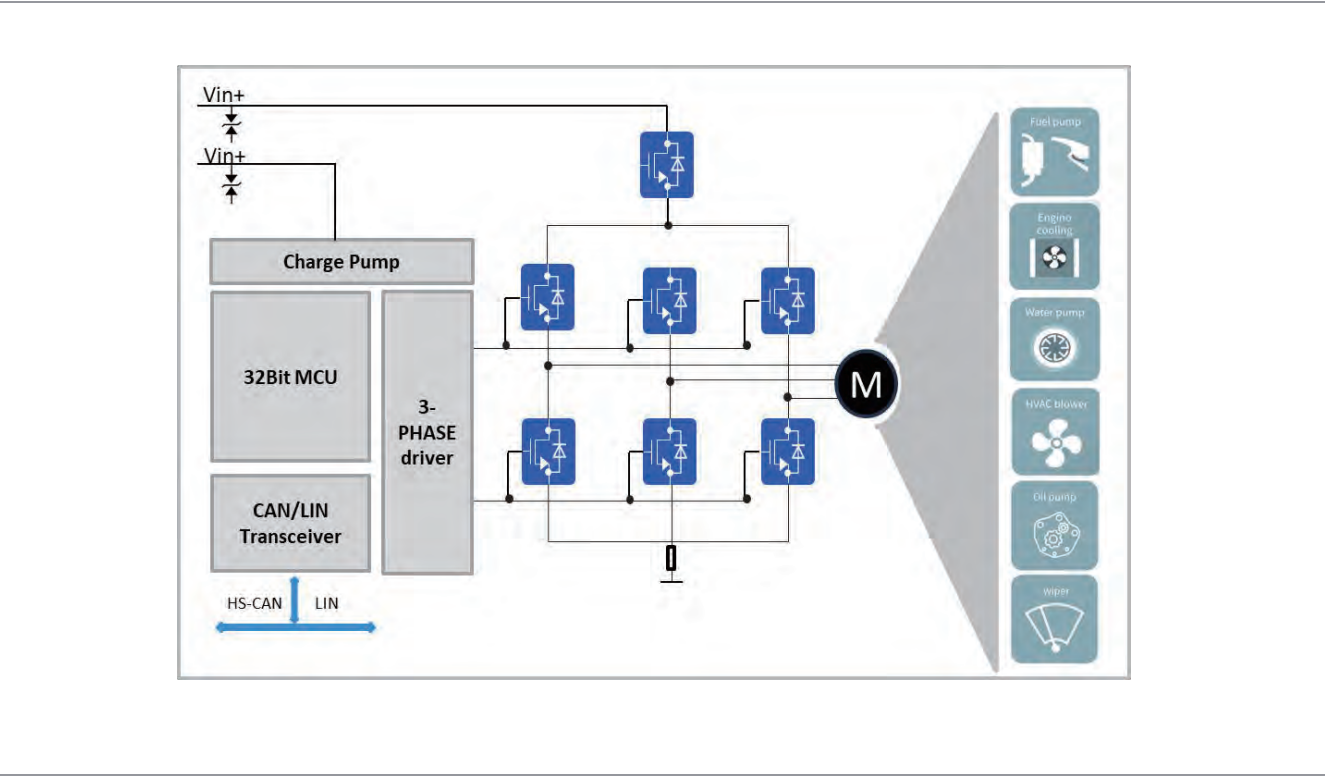
Pump and Fan Systems

Function	Part Number	P _{PP} (W)	V _{RWM} (V)	V _{BRMin} (V)	V _{BRMax} (V)	I _R (uA)	i _i (mA)	V _C (V)	I _{PP} (A)	Package
TVS	AD-CJDTP6SMBJ28AC	600	28	31.1	34.4	1	1	45.4	13.2	SMBG
	AD-CJDTP6SMBJ24AC	600	24	26.7	29.5	1	1	38.9	15.4	SMBG
Function	Part Number	P _D (mW)	V _{ZTyp} (V)	V _{ZMin} (V)	V _{ZMax} (V)	I _{ZT} (mA)	I _R (uA)	Package		
Zener Diode	AD-MMSZ5248BS	200	18	17.1	18.9	7	0.1	SOD-323		
	AD-MMSZ5256B	350	30	28.5	31.5	4.2	0.1	SOD-123		
	AD-BZT52C16	500	16	15.3	17.1	5	0.1	SOD-123		

Product Introduction

New energy vehicles have significant needs for cooling and fluid transfer, generating a demand for various pumps and fans. These systems rely on extensive motor control applications, all ultimately driven by control MOSFETs. JSCJ offers automotive-grade products in diverse packaging forms, all certified by AEC-Q101. In this application, JSCJ provides products including low junction capacitance Cj ESD diodes, voltage regulators, switching tubes, TVS, transistors, and high-performance MOSFETs. JSCJ's products satisfy the performance requirements of customer application systems while ensuring reliability and stability.

Application Circuit



Pump and Fan Systems

Function	Part Number	Type	Process	V _{DS} (V)	V _{GS(th)} (V)	R _{DS(on)} (mR@V _{GS} =10V)	Package
MOSFET	AD-CJANR90SN04AH	Single-N	SGT	40	2.0~4.0	0.9	PDFN5*6
	AD-CJAC1R3SN04CH	Single-N	SGT	40	2.0~4.0	1.3	PDFN5*6
	AD-CJAC2R0SN04AH	Single-N	SGT	40	2.0~4.0	2	PDFN5*6
	AD-CJAC3R5SN04AH	Single-N	SGT	40	2.0~4.0	3.5	PDFN5*6
	AD-CJAN5R8SD04CH	Dual-N	SGT	40	2.0~4.0	5.8	PDFN5*6
	AD-CJAN7R4SN04CL	Single-N	SGT	40	1.5~2.5	7.4	PDFN5*6
	AD-CJAN7R4SD04CL	Dual-N	SGT	40	1.5~2.5	7.4	PDFN5*6
	AD-CJAB7R4SN04CL	Single-N	SGT	40	1.5~2.5	7.4	PDFN3.3*3.3
	AD-CJAC9R0SN06AL	Single-N	SGT	60	1.5~2.5	9	PDFN5*6
	AD-CJAB9R0SN06AL	Single-N	SGT	60	1.5~2.5	9	PDFN3.3*3.3
	AD-CJAN013SD06AL	Dual-N	SGT	60	1.5~2.5	13	PDFN5*6
	AD-CJAN011SN06AL	Single-N	SGT	60	1.5~2.5	11	PDFN5*6
	AD-CJAB011SN06AL	Single-N	SGT	60	1.5~2.5	11	PDFN3.3*3.3

Function	Part Number	P _{PP} (W)	V _{RWM} (V)	I _R (uA)	C _J (PF)	V _C (V)	I _{PP} (A)	Package
ESD	AD-ESDBNC152411	320	24/15	1	21	44/34	7.5	SOD-323

Function	Part Number	Polarity	I _C (A)	V _{CBO} (V)	V _{CEO} (V)	V _{EB0} (V)	hFE _{Min}	hFE _{Max}	V _{CE(sat)} (V)	Package
Transistor	AD-BC817-40	NPN	0.5	50	45	5	250	600	0.7	SOT-23
	AD-BC807-40	PNP	0.5	50	45	5	250	600	0.7	SOT-23
	AD-2SA1576A-R	PNP	0.15	60	50	6	180	390	0.5	SOT-323
	AD-2SC4617-S	NPN	0.15	60	50	7	180	390	0.4	SOT-523

Function	Part Number	Polarity	P _C (mW)	I _O (mA)	V _{CC} (V)	V _{O(on)} (V)	R ₁ (Ω)	R ₂ (Ω)	Package
Digitaltransistor	AD-DTC114EUA	NPN	200	100	50	0.3	10K+	10K+	SOT-323
	AD-DTC143EE	NPN	150	100	50	0.3	4.7K+	4.7K+	SOT-523
	AD-DTC124EUA	NPN	200	100	50	0.3	22K+	22K+	SOT-323

Function	Part Number	P _D (mW)	I _F (mA)	V _R (V)	V _F (V)	I _R (uA)	t _r (ns)	Package
Switching Diode	AD-1N4148WS	200	150	100	1.25	1	4	SOD-323
	AD-BAS16TW	200	150	75	1.25	1	4	SOT-363
	AD-BAS21	225	200	250	1.25	0.1	50	SOT-23

Thermal Water Management, OBC, DCDC, PDU

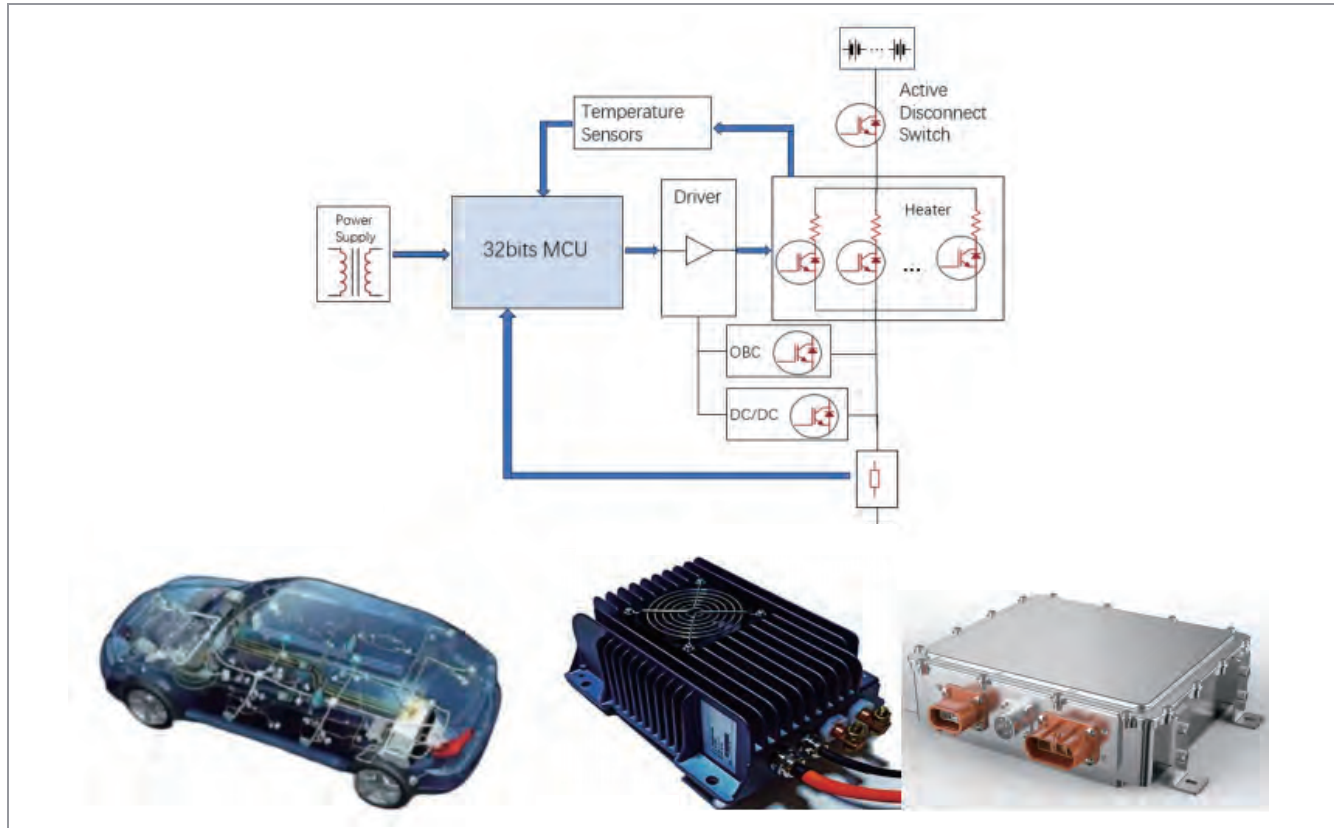
Function	Part Number	V _{CES} (V)	IC @ TC=100°C (A)	IC @ Tc=25°C (A)	V _{CE(sat)} (V)	Switching Frequency (Khz)	Short Current Withstand Time (us)	Eon (mJ)	Eoff (mJ)	Package
IGBT	CGWT40N65F2KAD	650	40	80	1.7	20-45	5	1.23	0.34	TO-247
	CGWT40N120F2KAD	1200	40	80	1.7	20-45	5	3	1.4	TO-247
	CGWT40N120F2LADM AECQ101	1200	40	80	1.5	0-8	7	2.8	1.9	TO-247
	CGWT40N120F2LANM AECQ101	1200	40	80	1.5	0-8	5	2.5	1.7	TO-247
	CGWT80N65F2KADM AECQ101	650	80	100	1.75	20-45	7	2.69	0.87	TO-247

Product Introduction

PTC heaters are commonly installed in new energy electric vehicles for battery thermal management and heating air conditioning systems. They are characterized by quick start-up, precise temperature control, high reliability, energy efficiency, and long service life. Consequently, PTC heaters are widely used in manufacturing various electric heating appliances and also serve as crucial components in control and protection devices such as current limiters, surge protectors, and overload protectors. The reliability of IGBTs, as the core component in PTC heater controllers, has a decisive impact on the overall performance of the PTC.

The term "Small Trio" refers to onboard chargers (OBC), vehicle-mounted DC/DC converters, and high-voltage distribution units (PDU), which play a critical role as power control devices in converting and transmitting AC and DC energy. These systems are evolving towards integration, multifunctionality, and high power. IGBTs play a crucial role by efficiently converting electrical energy into mechanical energy, providing strong power output. This not only enhances system efficiency and reliability but also lays a solid foundation for the future development of the onboard vehicle industry.

Application Circuit



04

New Energy



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ESS-Energy Stroage System

Function	Part Number	VCES (V)	IC @ TC=100℃ (A)	IC @ Tc=25℃ (A)	VCE(sat) (V)	Switching Frequency (Khz)	Short Current Withstand Time (us)	Eon (mJ)	Eoff (mJ)	Package
IGBT	CGWT80N65F2SAD	650	80	100	1.55	8-20	3	1.97	1.19	TO-247
	CGR75N120F2KAD	1200	75	120	1.65	20-45	10	6	2.6	TO-247plus
	CGR100N120F2KAD	1200	100	160	1.55	20-45	5	8.14	4.75	TO-247plus
	CGR140N120F3KAD	1200	140	200	1.5	20-45	3	10.2	4.2	TO-247plus
IGBT MOD	MCI225N120S2B3(NPI)	1200	225	-	1.45	20-45	TBD	TBD	TBD	B3
	MCI300N120S2B3(NPI)	1200	300	-	1.5	20-45	TBD	TBD	TBD	B3
	MCF450N120S2E3	1200	450	-	1.75	8-20	10	52	39	E3
	MCF600N120S2E3	1200	600	-	1.75	8-20	10	55	35	E3
Function	Part Number	V _{CBO} (V)	V _{CEO} (V)	I _O (A)	V _{CE(sat)} (V)	Type	Package			
Transistor	CJA606NL	150	60	6	0.03	NPN	SOT-89			
	CJA606PL	-100	-60	-6	-0.02	PNP	SOT-89			
Function	Part Number	V _R (V)	I _O (A)	V _F (V)	T _r (ns)	I _R (uA)	Package			
FRD	MURW75HS120	1200	75	2.35	90	10	TO-247-2L			
	MURW100HS120	1200	100	2.1	100	10	TO-247-2L			
	MURW170H120	1200	170	2.1	350	10	TO-247PLUS-2L			
Function	Part Number	P _{PP} (W)	V _{RWM} (V)	I _{PP} (A)	V _C (V)	C _J (pF)	Package			
TVS	CJSM AJ18CA	400	18	13.7	29.2	-	SMAG			
	ESDG5V0AP	425	5	25	17	160	SOT-23			
Function	Part Number	V _{in(max)} (V)	V _{out} (V)	I _{O(max)} (mA)	I _O (μA)	V _D (mV)	PSRR(dB@1kHz)	Part Number		
LDO	CJ6376 Series	36	1.2~12	300	2	300	70	SOT-23-3L		
	CJ75LXXS Series	36	1.2~12	300	2	300	70	SOT-89-3L		
	CJ1117 Series	20	1.8~5.0	1000	2000	1300	65	SOT-223/89/TO-252-2L		

Product Introduction

With the rapid development of green energy generation, energy storage provides a solid foundation for more efficient and energy-saving electrical applications, and is increasingly used in homes, businesses, and public facilities to save energy and reduce emissions.

Product Image



Household Energy Storage

Function	Part Number	V _{DS} (V)	R _{DS(on)} (mΩ)		V _{GS(th)} (V)	Q _g (nC)	C _{iss} (pF)	Package
			10V TYP	4.5V TYP				
MOSFET	CJTL1R6SN085AH	85	1.3	-	2.0 ~ 4.0	142	8920	TOLL
	CJAC110SN10H	100	4.5	-	2.0 ~ 4.0	71	3067	PDFNWB5*6
	CJTL2R0SN10C4	100	1.6	2.3	2.0 ~ 4.0	213	14867	TOLL
	CJWT030JN65AD	650	28	-	3.0 ~ 5.0	226.2	8473	TO-247-3L
SIC MOSFET	CJWQ032CP120M1H	1200	32@18V	-	2.0 ~ 4.0	129	2517	TO-247-4L

Function	Part Number	VCES (V)	IC @ TC=100°C (A)	IC @ Tc=25°C (A)	VCE(sat) (V)	Switching Frequency (Khz)	Short Current Withstand Time (us)	Eon (mJ)	Eoff (mJ)	Package
IGBT	CGWT40N65F2KAD	650	40	80	1.7	20-45	5	1.23	0.34	TO-247
	CGWT40N120F2KAD	1200	40	80	1.7	20-45	5	3	1.4	TO-247
	CGR75N120F2KAD	1200	75	120	1.65	20-45	10	6	2.6	TO-247plus

Function	Part Number	V _R (V)	I _O (A)	V _F (V)	T _{rr} (ns)	I _R (uA)	Package
FRD	MURW30H60	600	30	3	32	10	TO-247-2L
	MURW75H65	650	75	2.35	40	10	TO-247-2L
	MURW30H60L	600	30	1.6	38	10	TO-247-2L
	MURW75H60L	600	75	1.6	48	10	TO-247-2L
	MURW60HS120	1200	60	3.5	43	10	TO-247-2L

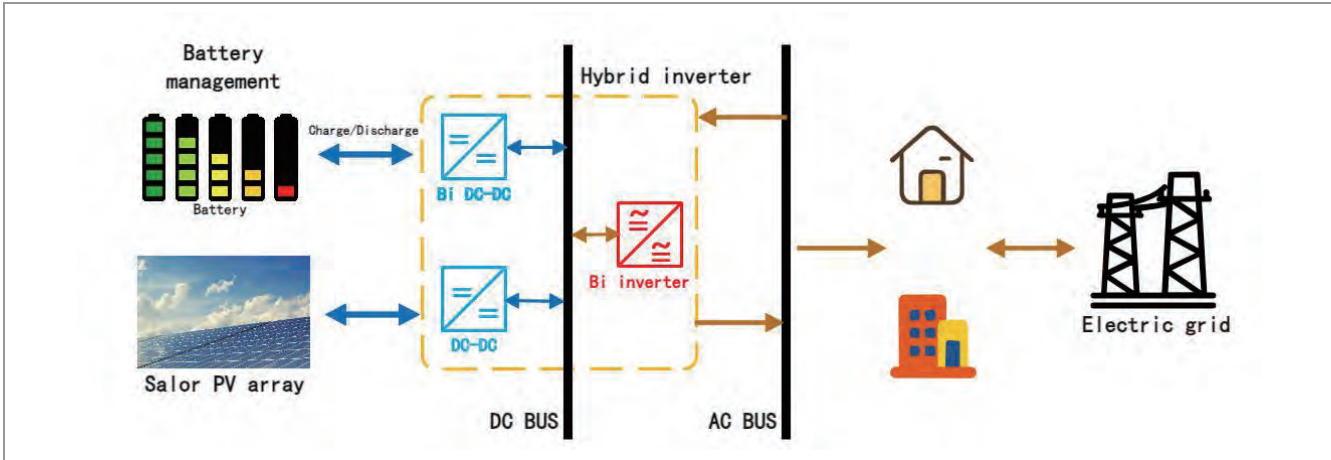
Function	Part Number	V _{CBO} (V)	V _{CEO} (V)	I _O (A)	V _{CE(sat)} (V)	Type	Package
Transistor	MJD31C	100	100	3	1.2	NPN	TO-252-2L
	MMBT5551	180	160	0.6	0.15	NPN	SOT-23
	MMBT2907A	-60	-60	-0.6	-0.4	PNP	SOT-23

Function	Part Number	P _{PP} (W)	V _{RWM} (V)	I _{PP} (A)	V _C (V)	C _J (pF)	Package
TVS	5.0SMDJ24CA	5000	24	128.5	38.9	-	SMCG
	5.0SMDJ48CA	5000	48	64.6	77.4	-	SMCG

Product Introduction

As the development of new energy sources and smart grids progresses, energy storage technology is poised for new growth opportunities. Future energy storage technology will become more smart, efficient, and sustainable. JSCJ offers high-performance, high-reliability products tailored to energy storage systems, supporting stable and efficient operation.

Application Circuit



Micro Inverter

Function	Part Number	V _{DS} (V)	R _{DS(on)} (mΩ)		V _{GS(th)} (V)	Q _g (nC)	C _{iss} (pF)	Package
			10V TYP	4.5V TYP				
MOSFET	CJAC70SN15	150	10	12	2.0 ~ 4.0	45	3850	PDFNWB5*6
	CJAC012SN15BH	150	9.4	11	2.0 ~ 4.0	21.6	1683	PDFNWB5*6
	CJB250JN80AD	800	200	-	2.0 ~ 4.0	42	2500	D ² PAK
	CJPF180JN60A	600	145	-	2.0 ~ 4.0	23	1500	TO-220F
	CJAC80SN10	100	6.2	8.8	1.3 ~ 2.5	46	220	PDFNWB5*6
	BSS123	100	3500	3800	1.0 ~ 2.0	1.4	29	SOT-23

Function	Part Number	VCES (V)	IC @ TC=100°C (A)	IC @ Tc=25°C (A)	VCE(sat) (V)	Switching Frequency (Khz)	Short Current Withstand Time (us)	Eon (mJ)	Eoff (mJ)	Package
IGBT	CGWT40N120F2LAD	1200	40	80	1.4	0-8	7	2.8	1.9	TO-247

Function	Part Number	V _R (V)	I _O (A)	V _F (V)	I _R (uA)	Package
SBD	B0530W	30	0.5	0.43	130	SOD-123
	BAT54S	30	0.2	1	2	SOT-23
	DSS210	100	2	0.85	100	SOD-123FL

Function	Part Number	V _R (V)	I _O (A)	V _F (V)	T _{rr} (ns)	I _R (uA)	Package
FRD	ES1D	200	1	0.95	35	5	SMAG
	ES3J	600	3	1.7	35	5	SMBG

Function	Part Number	V _{CBO} (V)	V _{CEO} (V)	I _O (A)	V _{CE(sat)} (V)	Type	Package
Transistor	MMBT4401	60	40	0.6	0.4	NPN	SOT-23
	2SC4081	60	50	0.15	0.4	NPN	SOT-323
	2SA1576A	-60	-50	-0.15	-0.5	PNP	SOD-323
	2SD2391	60	60	2	0.35	NPN	SOT-89-3L

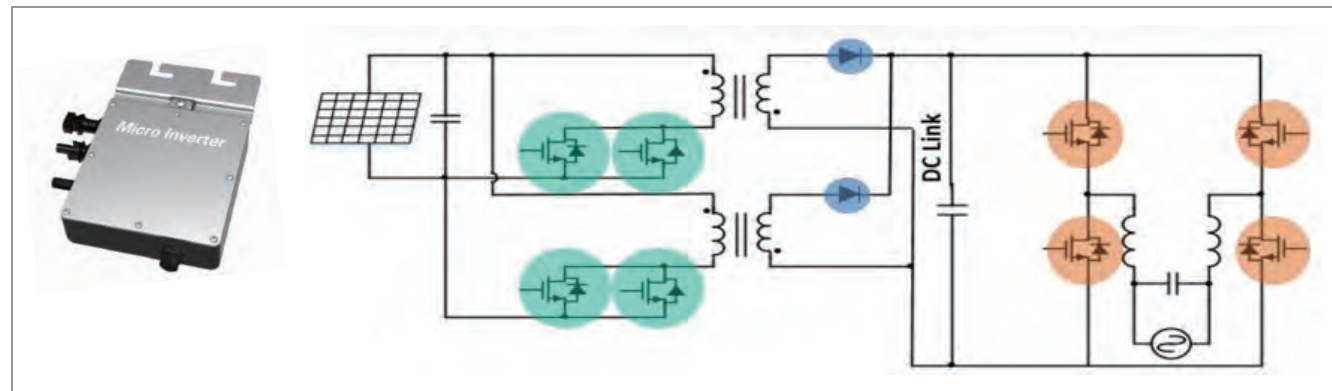
Function	Part Number	V _{in(max)} (V)	V _{out} (V)	I _{O(max)} (mA)	I _O (uA)	V _O (mV)	PSRR(dB@1kHz)	Package
LDO	CJ7805B Series	25	5	1000	3200	2000	70	TO-252-2L/TO-220-3L
	CJ1117 Series	20	1.8~5.0	1000	2000	1300	65	SOT-223/89/TO-252-2L

Function	Part Number	P _{PP} (W)	V _{RWM} (V)	I _{PP} (A)	V _C (V)	C _J (pF)	Package
TVS	5.0SMDJ75CA	5000	75	41.3	121	-	SMCG
	ESD5V0H4	240	5	12	20	2	SOT-23-6L

Product Introduction

The main feature of a micro inverter is its fully parallel circuit design, which connects with each module individually, allowing for independent control of each module. This enables individual maximum power point tracking for each module, which is then converted to AC and fed into the power grid. The primary purpose of micro inverters is to enhance the output power of each module, addressing the issue of low generation efficiency associated with traditional string inverters.

Application Circuit



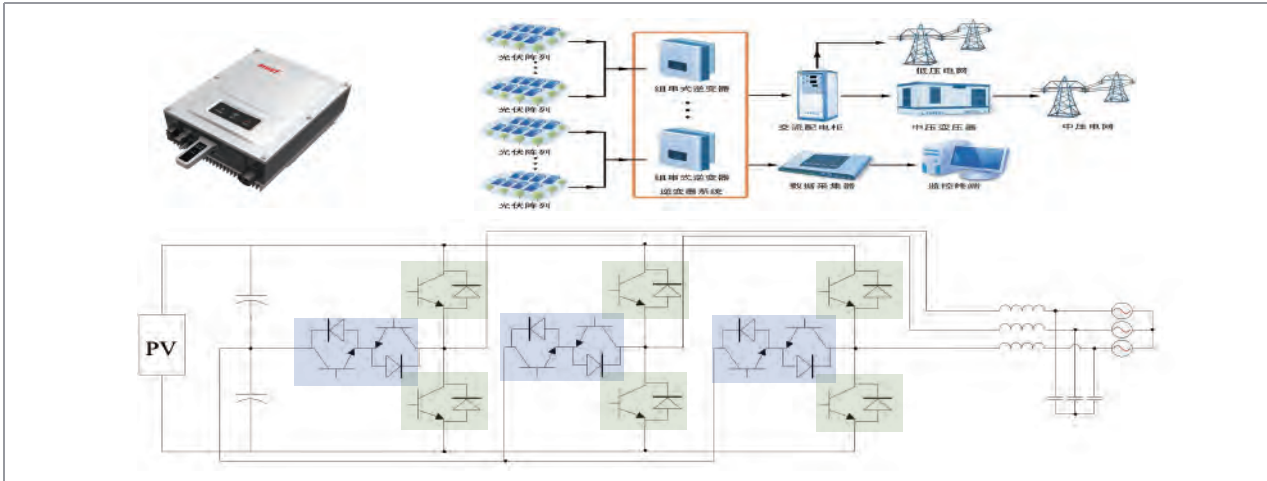
Series Inverter

Function	Part Number	VCES (V)	IC @ TC=100℃ (A)	IC @ TC=25℃ (A)	VCE(sat) (V)	Switching Frequency (Khz)	Short Current Withstand Time (us)	Eon (mJ)	Eoff (mJ)	Package
IGBT	CGWT40N65F2KAD	650	40	80	1.7	20-45	5	1.23	0.34	TO-247
	CGWT80N65F2KAD	650	80	100	1.75	20-45	7	2.69	0.87	TO-247
	CGR100N120F2KAD	1200	100	160	1.55	20-45	5	8.14	4.75	TO-247plus
	CGR140N120F3KAD	1200	140	200	1.5	20-45	3	10.2	4.2	TO-247plus
IGBT MOD	MCF450N120S2E3	1200	450	-	1.75	8-20	10	52	39	E3
	MCF600N120S2E3	1200	600	-	1.75	8-20	10	55	35	E3
Function	Part Number	V _R (V)	I _O (A)	V _F (V)	T _{rr} (ns)	I _R (uA)	Package			
SiC SBD	CSDW40H120	1200	40	1.8	-	100	TO-252			
	MUR30H60L	600	30	1.41	29	10	TO-220F			
FRD	MURW60H120	1200	60	2.8	30	10	TO-247-2L			
	US1M	1000	1	1.7	75	5	SMAG			
Function	Part Number	V _{CBO} (V)	V _{CEO} (V)	I _O (A)	V _{CE(sat)} (V)	Type	Package			
Transistor	MMBT5551	180	160	0.6	0.15	NPN	SOT-23			
	2SA1576A	-60	-50	-0.15	-0.5	PNP	SOT-323			
	2SD2391	60	60	2	0.35	NPN	SOT-89-3L			
Function	Part Number	Frequency (HZ)	Load capacitance (PF)	Frequency Tolerance (at 25℃) (PPM)			Package			
Crystal	CJ13-240002010B20	24M	20	10			3225			
	CJ13-080001210B20	8M	12	10			3225			
	CJK07-327681220B20(N)	32.768K	12.5	20			3215			
Function	Part Number	V _{in(max)} (V)	V _{out} (V)	I _{o(max)} (mA)	I _Q (μA)	V _D (mV)	PSRR(dB@1kHz)	Package		
LDO	CJ7805B Series	25	5	1000	3200	2000	70	TO-252-2L/TO-220-3L		
	CJ1117 Series	20	1.8~5.0	1000	2000	1300	65	SOT-223/89/TO-252-2L		
Function	Part Number	P _{PP} (W)	V _{RWM} (V)	I _{PP} (A)	V _C (V)	C _J (pF)	Package			
TVS	CJSMBJ36CA	600	36	10.4	58.1	-	SMBG			
	P6SMB15CA	600	12.8	28.3	21.2	-	SMBG			

Product Introduction

Within the photovoltaic inverter family, series inverters stand out for their flexible installation, diverse usage scenarios, and the annual increase in the maximum power range of a single string inverter. For series inverters, JSCJ has launched various IGBT models to meet the needs of different projects.

Application Circuit



Charging Pile

Function	Part Number	V _R (V)	I _O (A)		V _F (V)	T _{rr} (ns)	I _R (uA)	Package		
FRD	MURW30H120	1200	30		2.8	35	10	TO-247-2L		
	MURW60HS120	1200	60		2.8	30	10	TO-247-2L		
	MURW75H60L	600	75		1.6	48	10	TO-247-2L		
	MURW75H65	650	75		2.35	40	10	TO-247-2L		
Function	Part Number	V _R (V)	I _O (A)		V _F (V)	I _R (uA)		Package		
Rectifier	GBRW60160	1600	60		1	5		TO-247-2L		
SBD	SBD40100TCTB	100	40		0.72	100		TO-220-3L		
	SBD30100TCTB	100	30		0.73	100		TO-220-3L		
Function	Part Number	VCES (V)	IC @ TC=100°C (A)	IC @ TC=25°C (A)	VCE(sat) (V)	Switching Frequency (Khz)	Short Current Withstand Time (us)	Eon (mJ)	Eoff (mJ)	Package
IGBT	CGWT80N65F2KAD	650	80	100	1.75	20-45	7	2.69	0.87	TO-247
	CGWT80N65F2SAD	650	80	100	1.55	8-20	3	1.97	1.19	TO-247
Function	Part Number	V _{DS} (V)	R _{DS(on)} (mΩ) 10V TYP		V _{GS(th)} (V)	Q _g (nC)	C _{iss} (pF)	Package		
SJ MOSFET	CJWTO30JN65AD	650	26		3.0 ~ 5.0	226	8473	TO-247-3L		
	CJWQ032CP120M1LH	1200	32		1.8 ~ 3.6	129	2517	TO-247-4L		
SiC MOSFET	CJWTO40CP120M1H	1200	40		2.3 ~ 4.0	132	3030	TO-247-3L		
	CJWQ040CP120M1H	1200	45		2.3 ~ 4.0	132	3030	TO-247-4L		
Planar MOSFET	CJPF08N90M1	900	1000		2.0 ~ 4.0	44	2177	TO-220F		
Function	Part Number	V _{in(max)} (V)	V _{out} (V)	I _{o(max)} (mA)	I _Q (μA)	V _D (mV)	PSRR(dB@1kHz)	Package		
LDO	CJ7812B Series	32	12	1000	3400	2000	70	TO-252-2L/TO-220-3L		
	CJ1117 Series	20	1.8~5.0	1000	2000	1300	65	SOT-223/89/TO-252-2L		
Function	Part Number	V _{CBO} (V)	V _{CEO} (V)	I _O (A)	V _{CE(sat)} (V)	Type		Package		
Transistor	MMBT4401	60	40	0.6	0.4	NPN		SOT-23		
	MMBT4403	-40	-40	-0.6	-0.4	PNP		SOT-23		
	FZT692B	70	70	4.5	0.5	NPN		SOT-223		
	FZT954	-140	-100	-5	-0.03	PNP		SOT-223		

Product Introduction

In recent years, with the rapid development of new energy vehicles, charging infrastructure has continuously improved. High-power fast charging Piles have become a new standard, with the rated power of mainstream public fast chargers increasing from 60 kilowatts to 120 kilowatts, and some reaching up to 240 kilowatts, continually optimizing the structure of charging infrastructure.

Application Circuit

