

PRODUCT CATALOG **Industrial**

2024

Dioo Microcircuits Co., Ltd. Jiangsu
SSE Stock Code 688381

www.dioo.com

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Corporate Profile



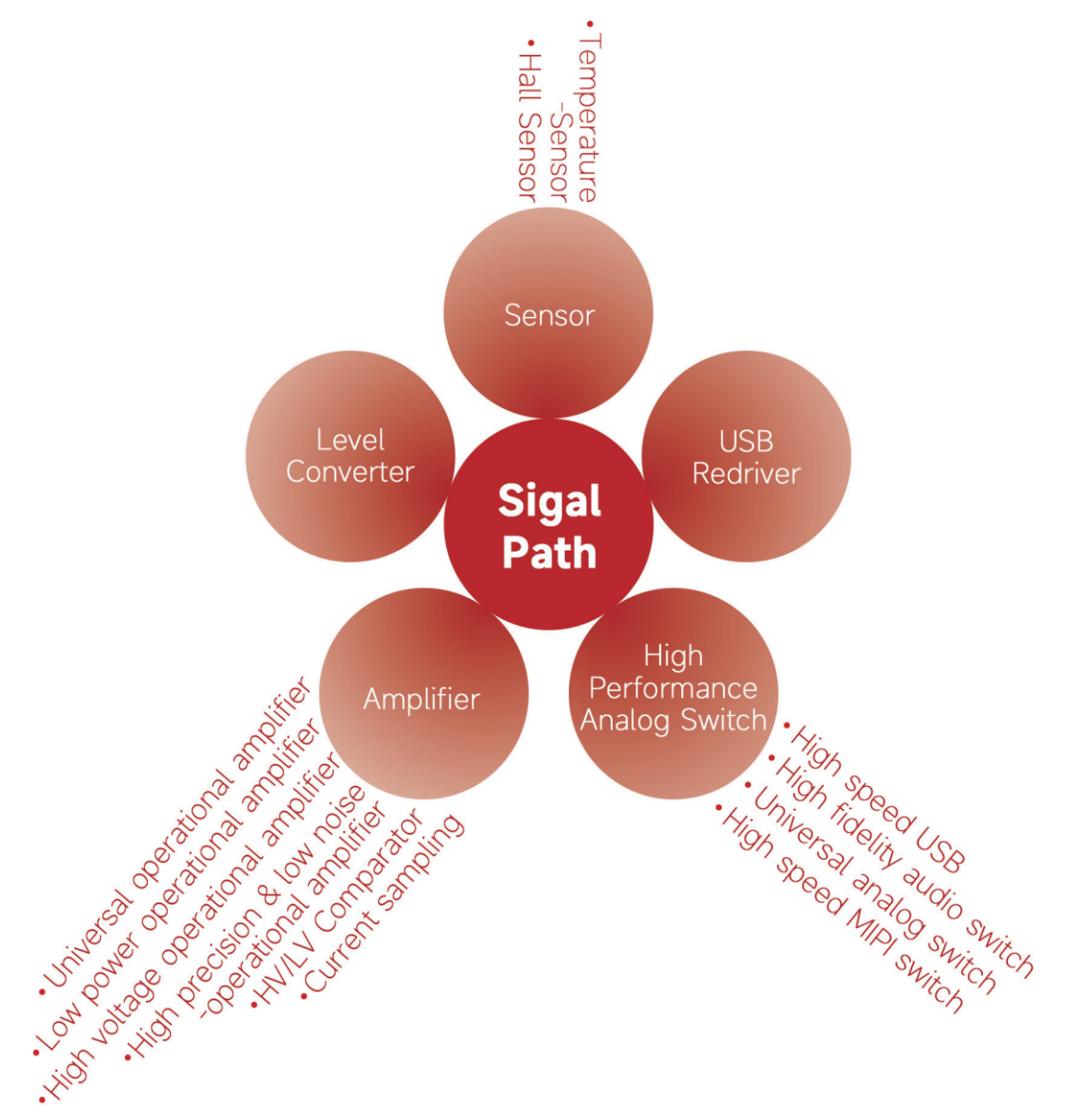
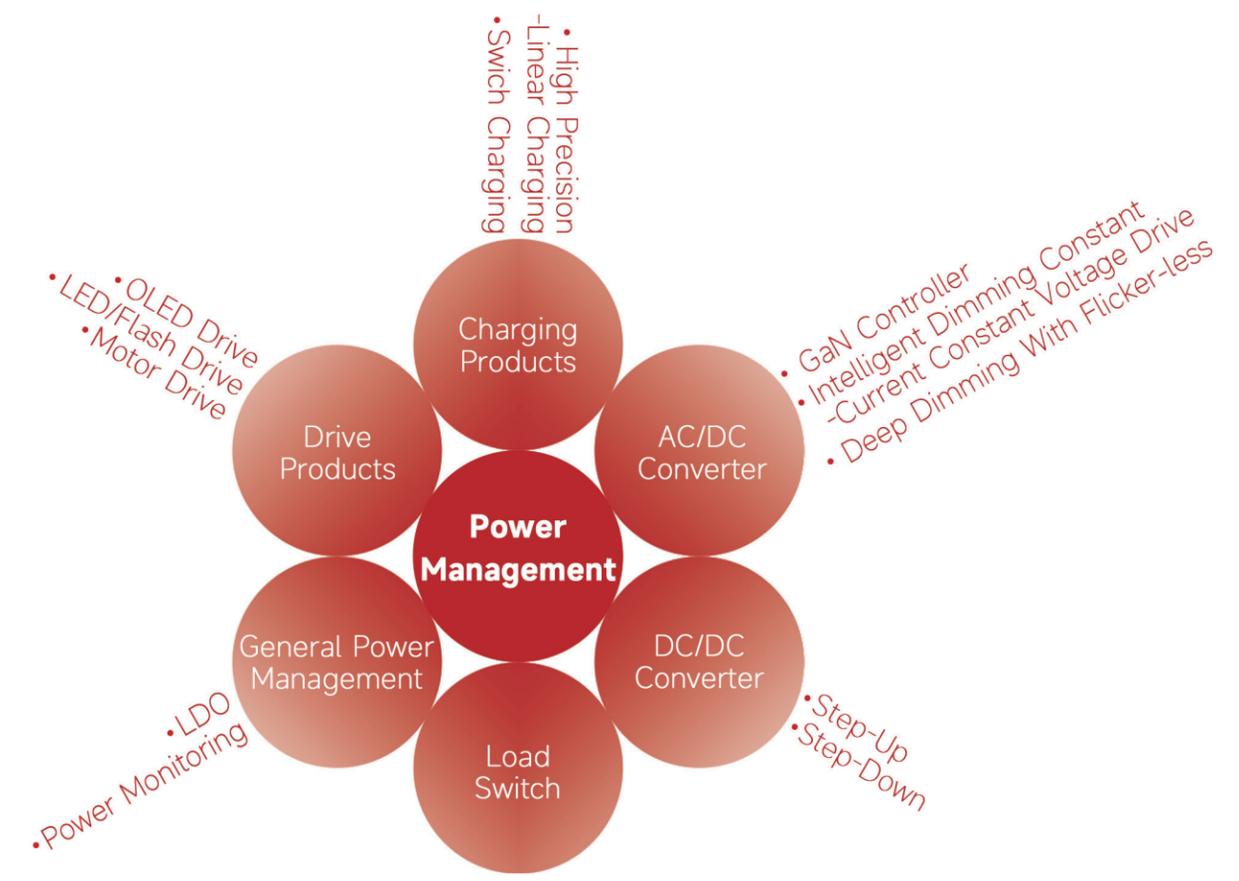
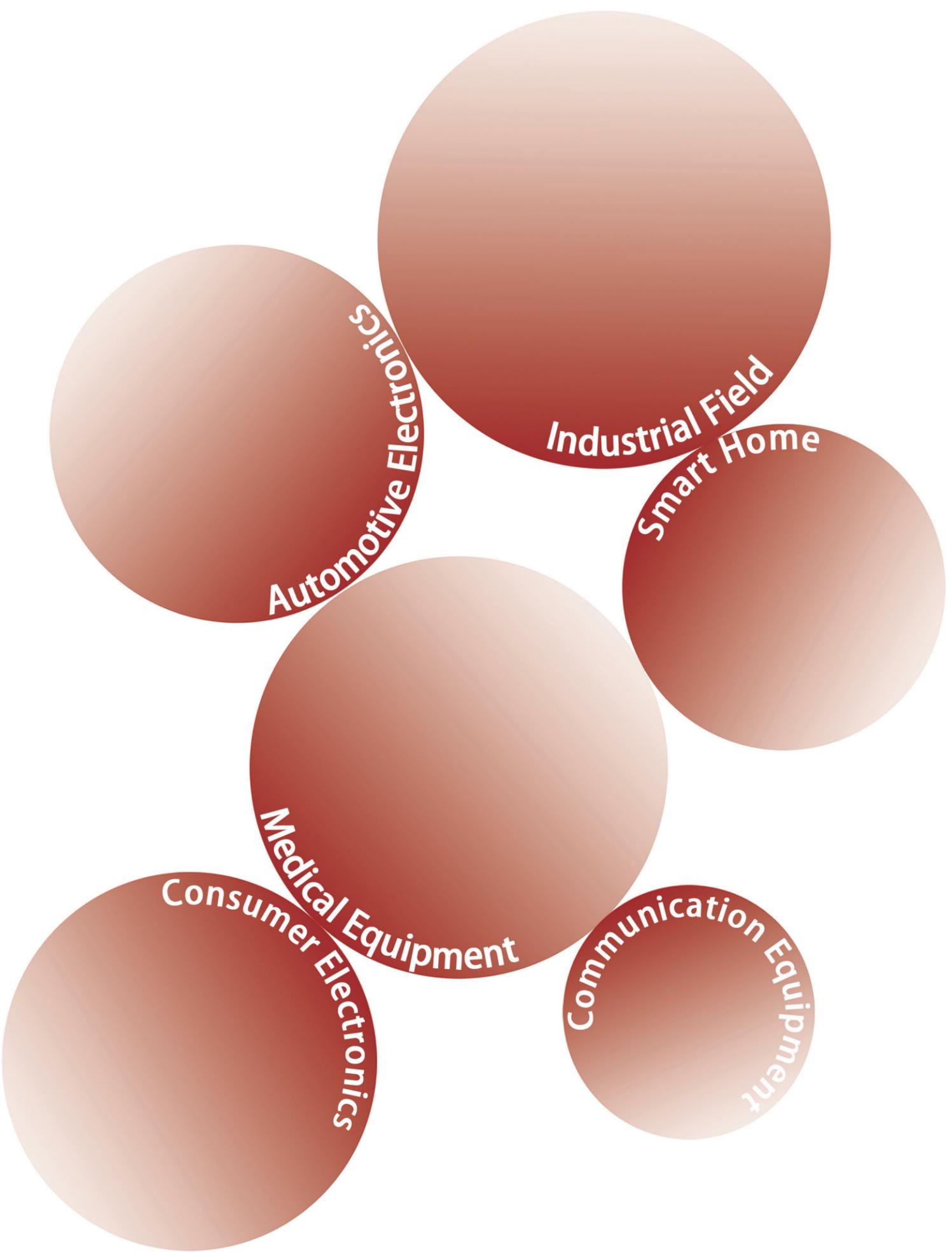
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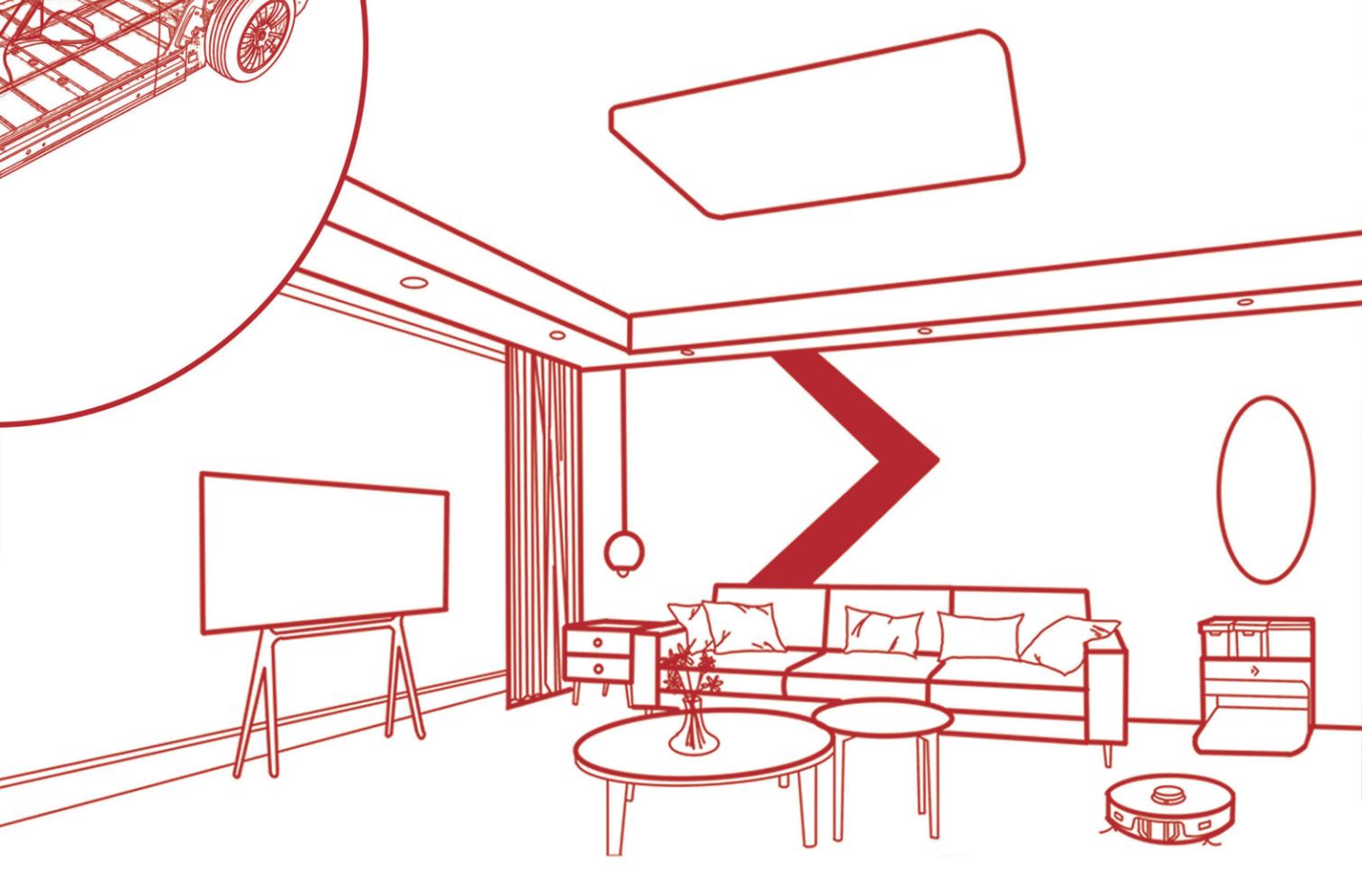
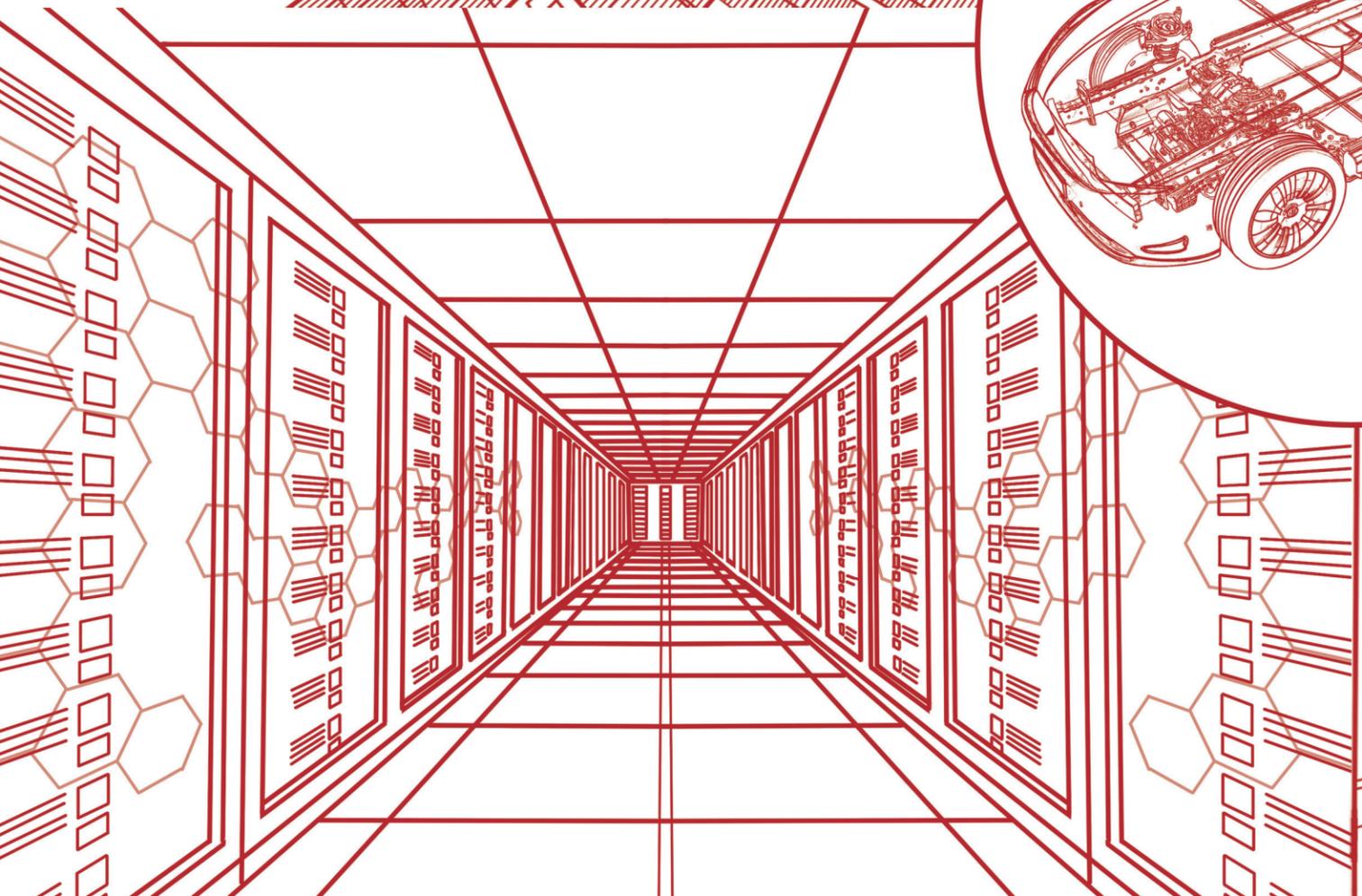
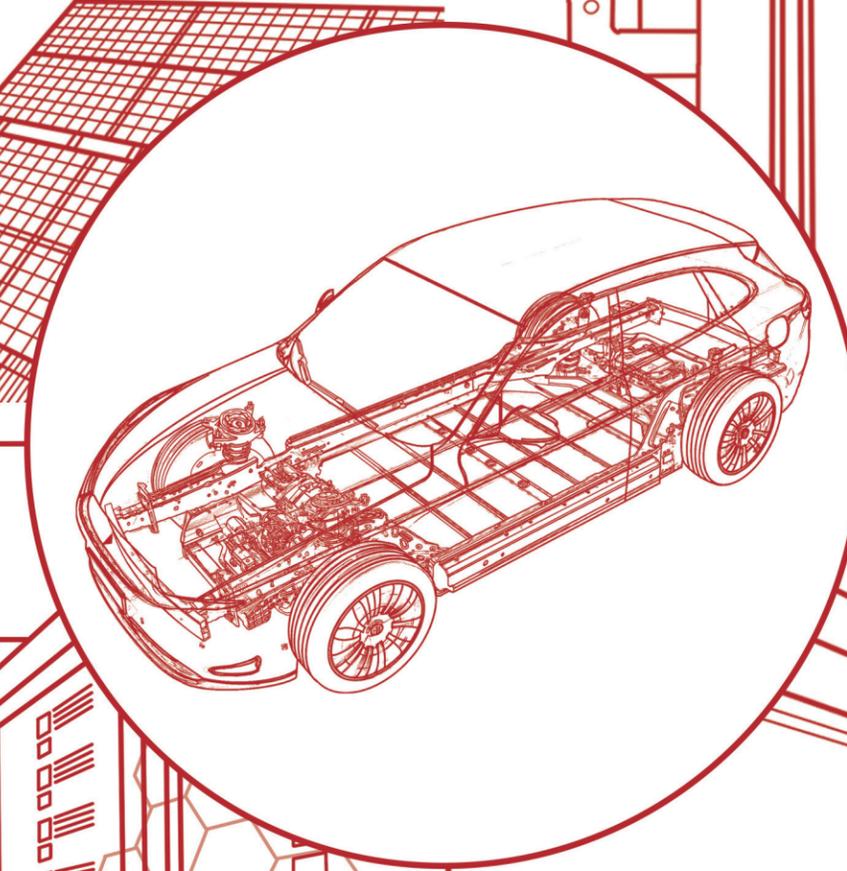
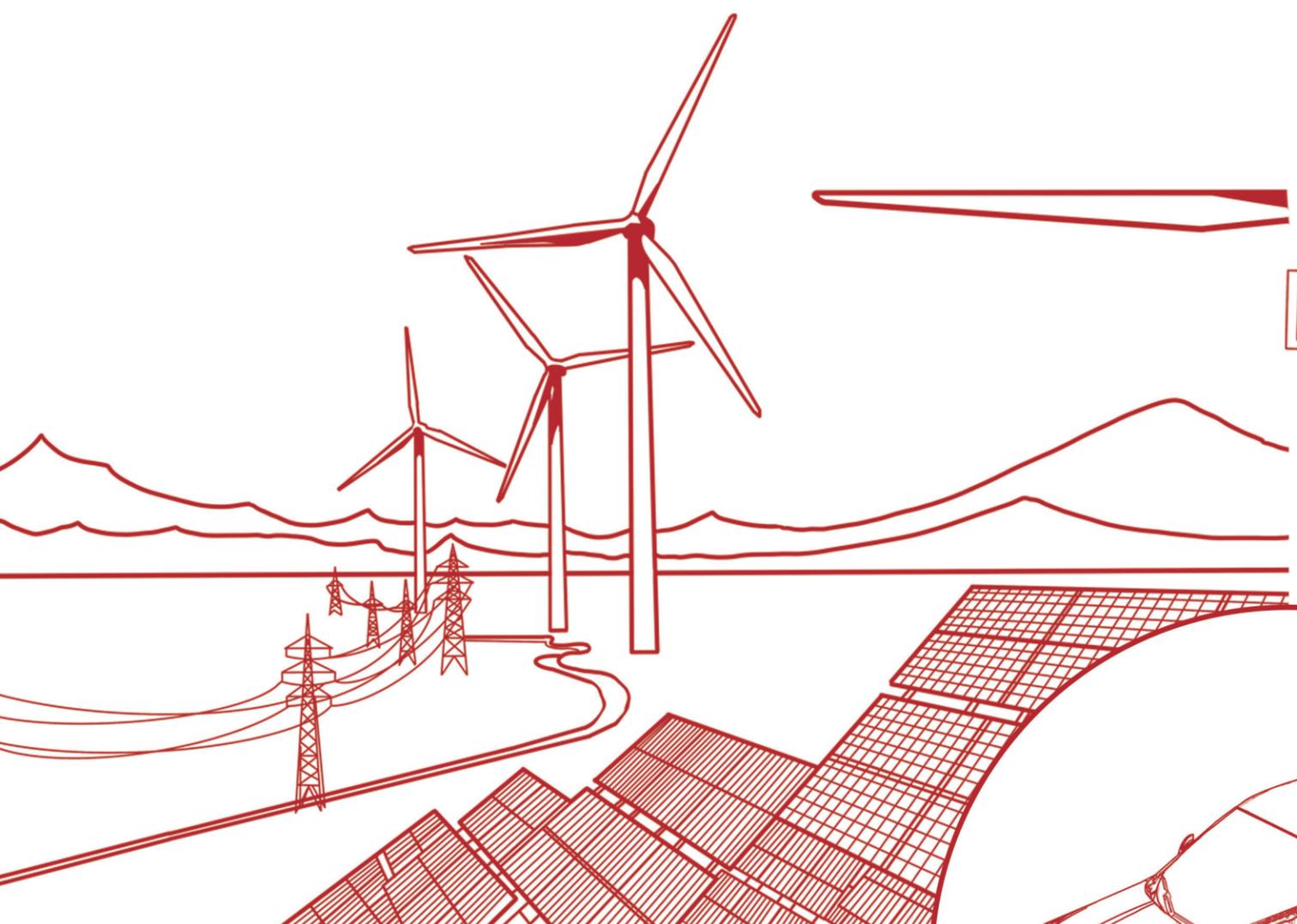
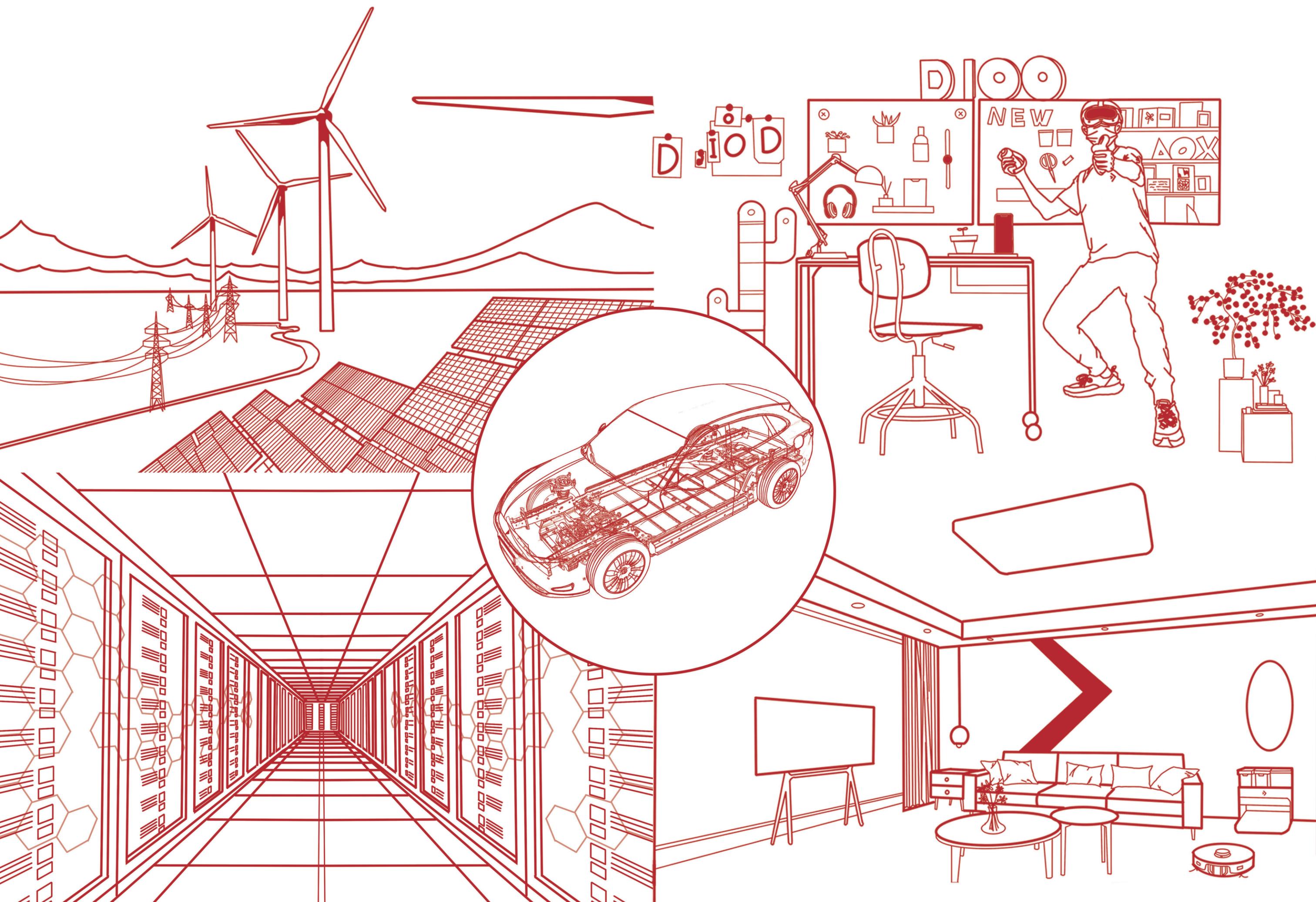
is an integrated-circuit chip design enterprise specialized in the design and sales of high-performance analog chips.

With an average of more than 15 years of experience, the core members of the management team are from Fairchild Semiconductor.

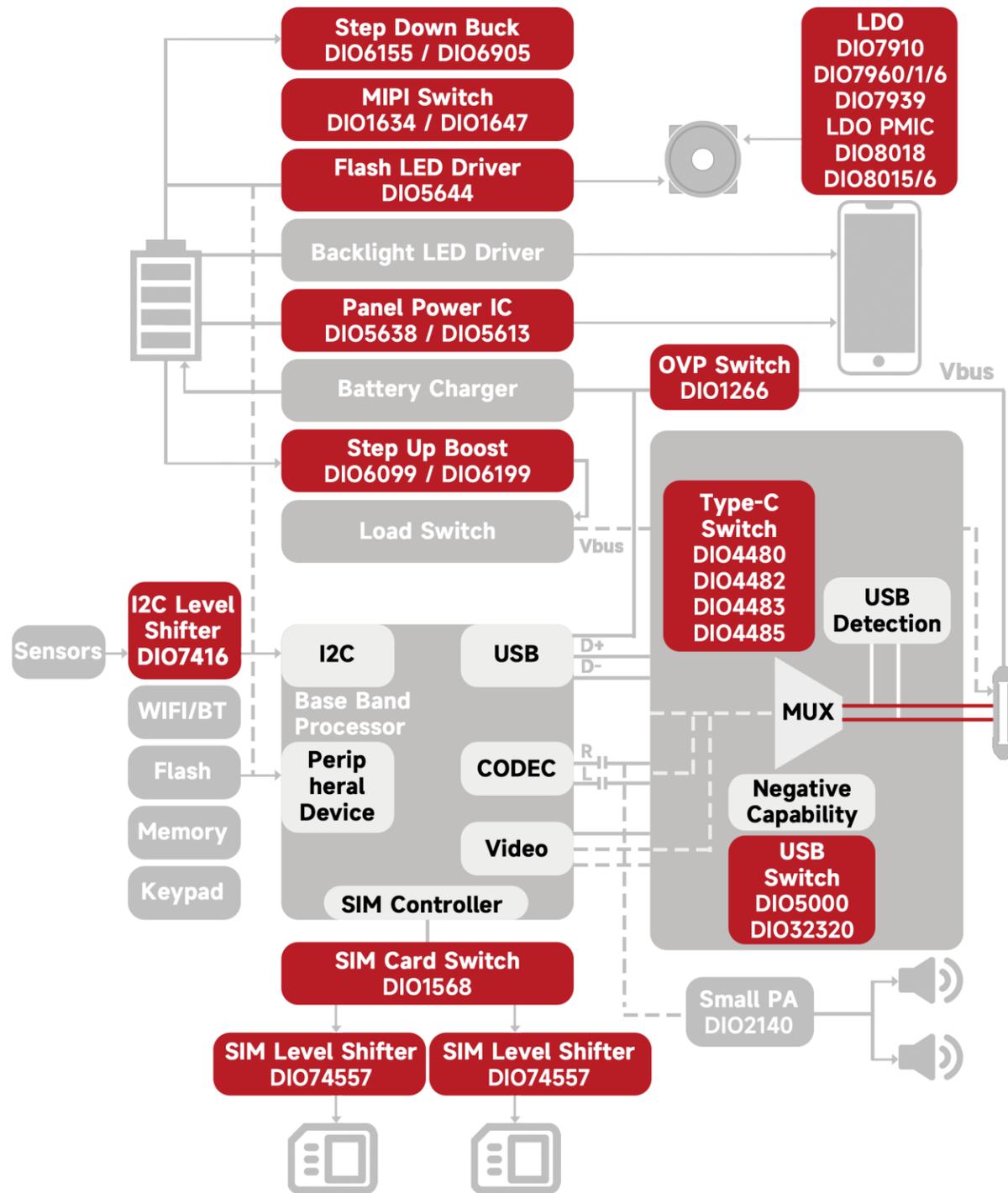
We adhere to our core ideology of technological innovation, an analog chip design and development focus, and having a coordinated product development implemented in our business strategy . We will continue providing customers with high-performance, low-power, quality analog chip products. >





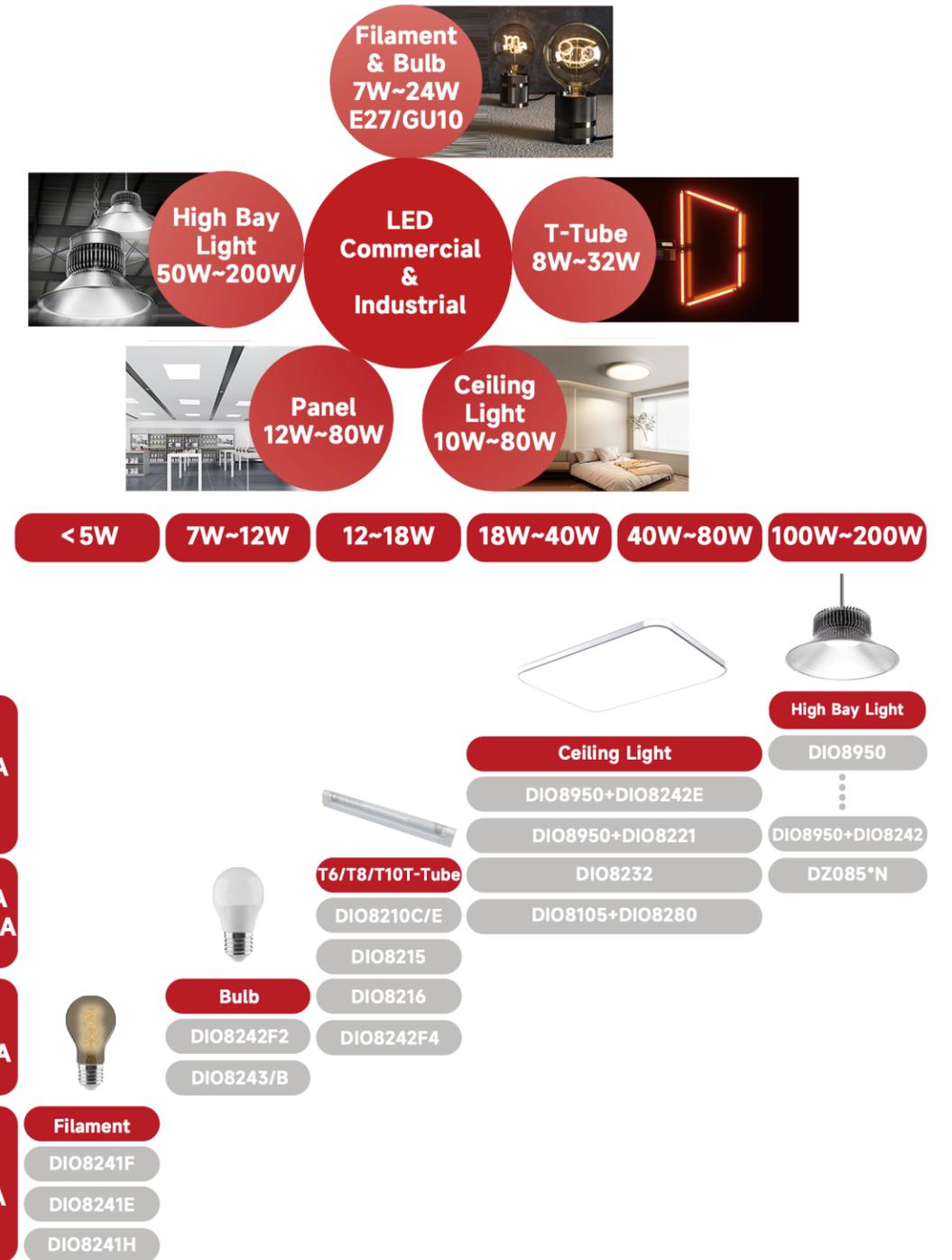


5G Mobile Phone



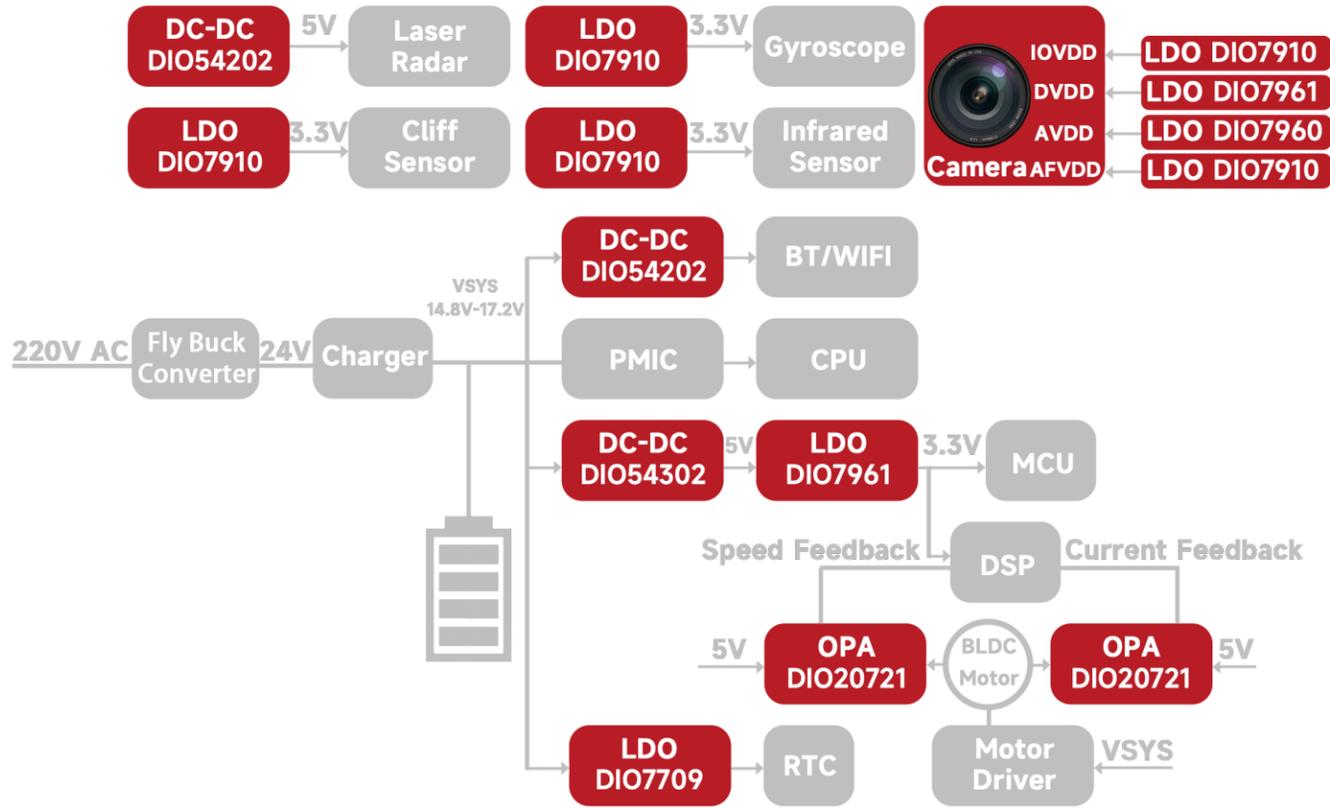
5G mobile phone is a medium for human-computer interaction, information exchange, and communication between two or more media. Our solution includes high-speed USB switches, Buck converters, LDOs, Boost converters, OVP, Load switches, OCP, a flash driver, a LED backlight driver, a current sensor, Audio PAs, analog switches, a MIPI switch, an LCD bias driver, etc.

Intelligent Lighting



LEDs are the most common and popular light source nowadays, and with energy saving and long service life, LEDs will be ubiquitous. Our solution includes APFC constant current flyback LED drivers, APFC constant current buck LED drivers, APFC constant current boost LED drivers, APFC constant voltage LED drivers, full-power flicker-free series, filament-lamp flicker-free series, Type B&A+B solutions, intelligent dimming total solutions, etc.

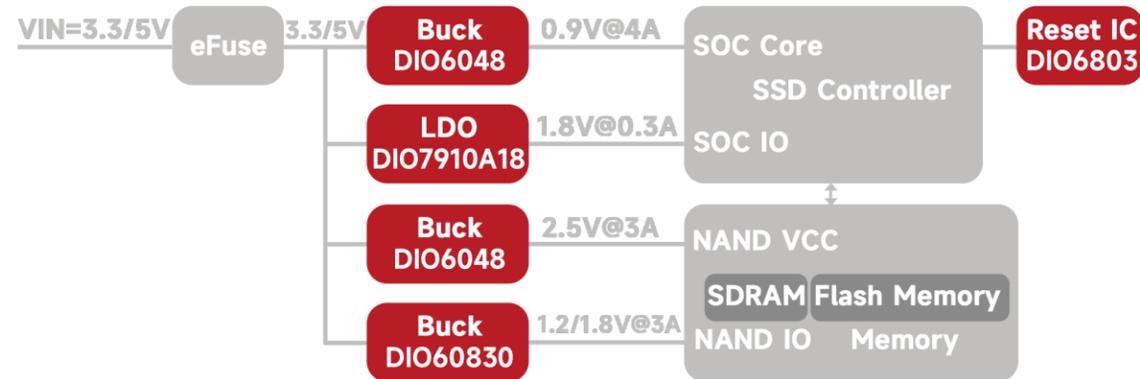
Sweeping Robot



Floor Sweep Robots are smart home appliances that utilizes SLAM modeling technology. It allows the machine to autonomously clean the floor, lightening the workload of daily chores. These machines are most commonly equipped with brushes and vacuums that allow them to sweep garbage into their trash collecting compartment.

Our solution includes buck converters, low dropout regulators, operational amplifiers, Load switch, etc.

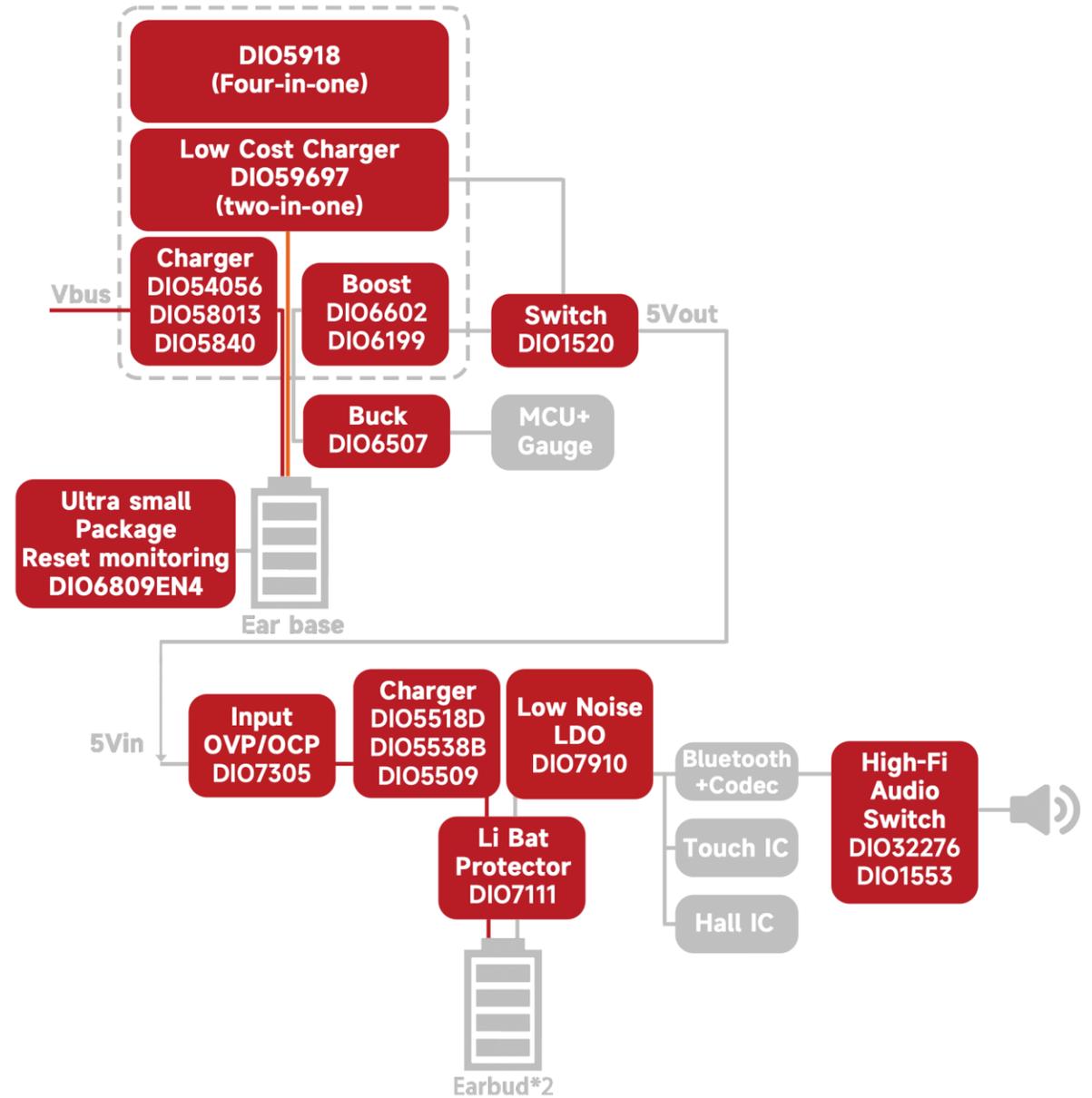
SSD



A Solid State Disk, also known as Solid State Drive, or SSD for short, is a hard disk composed of memory chips fixed in a certain array. Because the transmission speed of SSD is higher than traditional solid state disk, it is mostly used in computers and servers.

Our solution involves buck converters, low dropout regulator, a reset IC, etc.

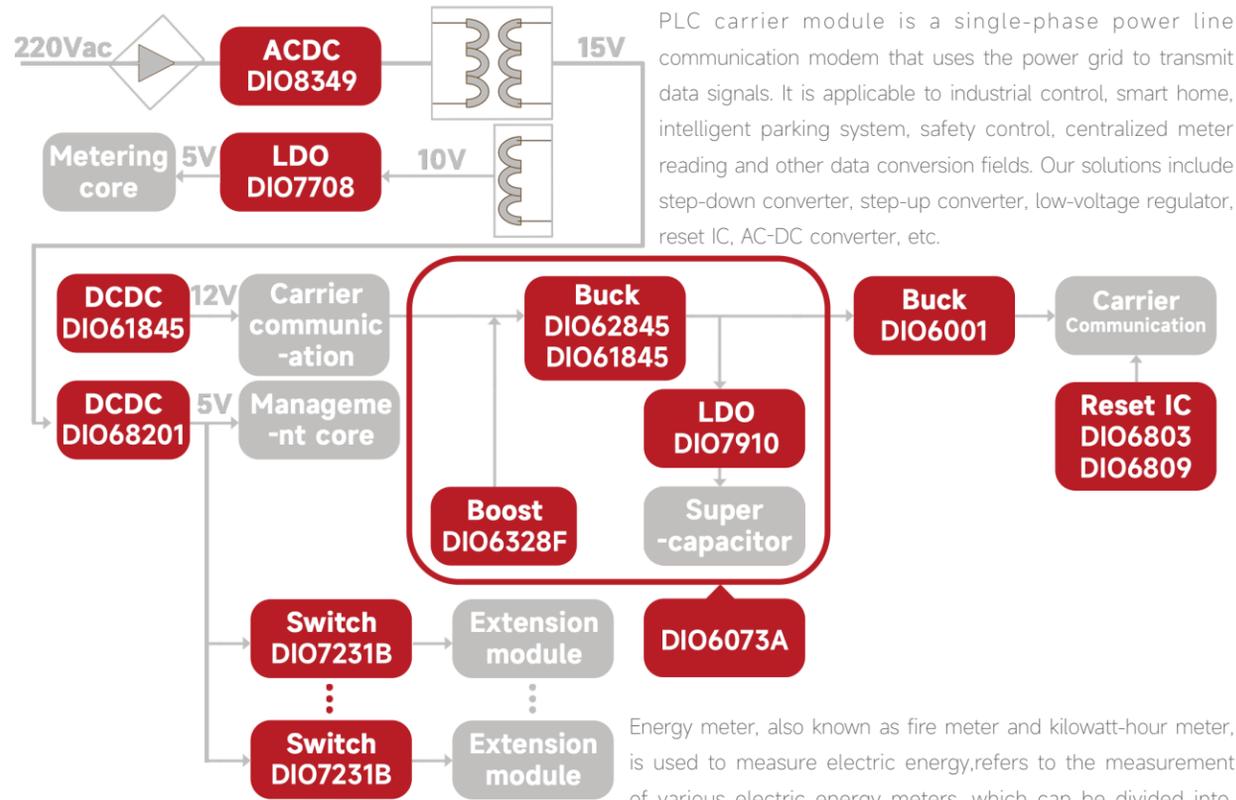
TWS True Wireless Bluetooth



TWS stands for true Wireless Stereo Bluetooth headphones, a technology based on developments in chip technology. TWS technology is applied to the field of Bluetooth headset. It can keep the headset fully charged by putting the headset in the charging bin, which alleviates the inconvenient charging mode of traditional Bluetooth headset.

Our solution includes buck converters, low dropout regulators, boost converters, low power small package load switches, analog switches, audio switches, a lithium battery charging IC (earbuds charging case), an ultra-thin lithium battery charging IC (earphone), an overvoltage and overcurrent protection, a low-power comparator, etc.

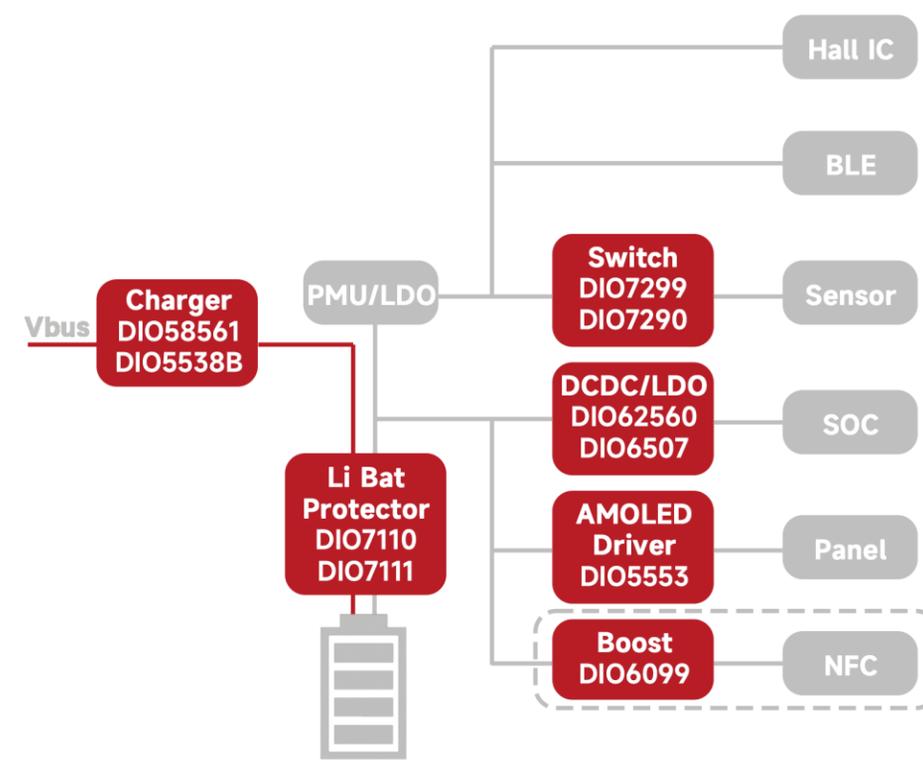
Meter & PLC Carrier Module



PLC carrier module is a single-phase power line communication modem that uses the power grid to transmit data signals. It is applicable to industrial control, smart home, intelligent parking system, safety control, centralized meter reading and other data conversion fields. Our solutions include step-down converter, step-up converter, low-voltage regulator, reset IC, AC-DC converter, etc.

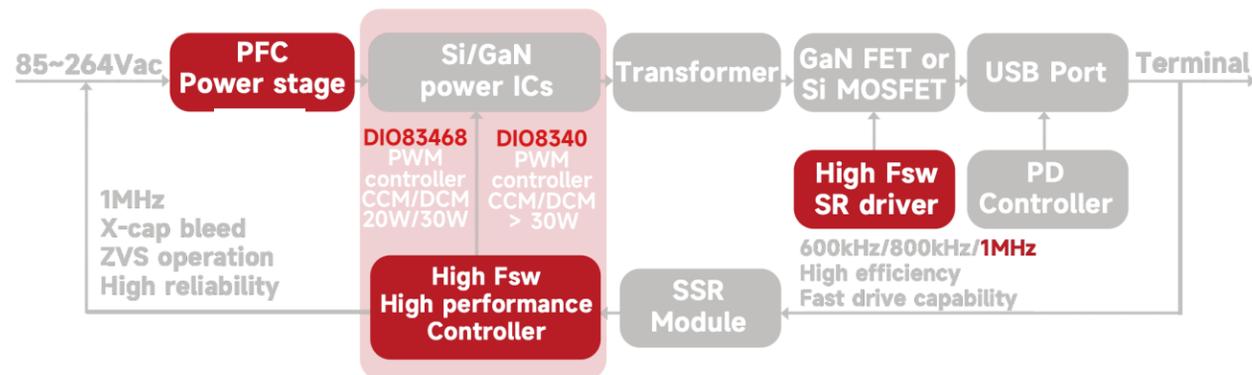
Energy meter, also known as fire meter and kilowatt-hour meter, is used to measure electric energy, refers to the measurement of various electric energy meters, which can be divided into, Southern Power Grid meter, overseas meter and so on. According to the application, it can be divided into single-phase meter, three-phase meter, smart meter, etc.

Smart Wearable Watch & Bracelet



Smart watches and Band not only display time, but also monitor body temperature, blood oxygen, blood pressure, heart rate and so on, allowing customers to know their health status at any time. With the development of science and technology, some smart watches become more and more intelligent. They also have additional functions such as communication, social entertainment, payment and GPS positioning, which are favored by consumers. Our solutions include lithium-ion protection, battery charge management, overvoltage and overcurrent protection, load switch, linear regulator, DC-DC Converter switch converter, load switch, operational amplifier, etc.

GaN Adapter



DIO8352/DIO8355A

500kHz(Max.)High frequency QR flyback controller.
High efficiency & Low noise @ full load 65w-100w

DIO82612/DIO82615

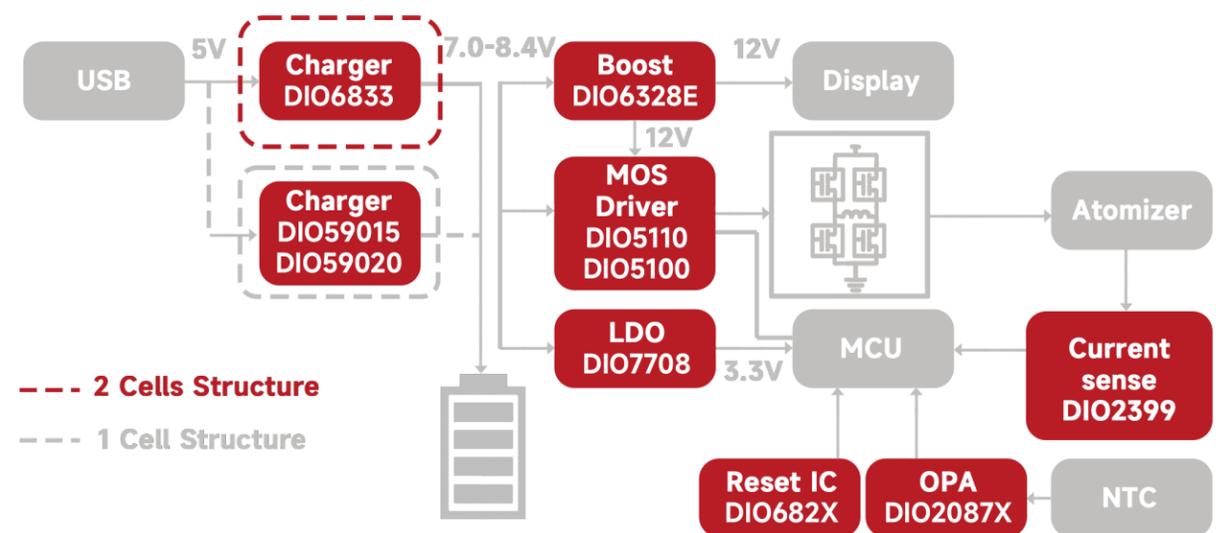
MOSFET VDS Sampling withstand voltage up to 230V.
Support Options such as QR,DCM and CCM
Suitable for GaN high-power fast charging applications.

DIO82602

MOSFET VDS BV > 120V,
Support Options such as QR,DCM and CCM

The high-frequency synchronous rectifier at MHz level is suitable for the GaN high-power quick charging applications. It is not only highly compatible with QR and ACF systems, but it also enables highly reliable and differentiated designs with low thermal resistance packages, helping customers to quickly implement smaller size and varied power levels of high-performance USB PD quick charging solutions.

Electronic Cigarette



--- 2 Cells Structure

--- 1 Cell Structure

Electronic cigarette is an electronic product that mimics cigarettes. It is an atomizer powered by a rechargeable lithium polymer battery that heats up the electronic liquids (commonly called tobacco oil, E-liquid or E-juice) in the vaporizing chamber. Our solutions include low voltage difference linear regulator, boost converter, load switch, high precision zero temperature drift current sensor, analog switch, MOS driver, lithium battery charging IC, etc.

Industrial Products List

DC Switching Boost Converter

A DC switching boost converter is a converter that converts a known DC voltage into another fixed or adjustable DC voltage. The output voltage is higher than the input voltage. The efficiency, ripple, dynamic response, static power consumption, frequency, package size, etc. of the boost converter. The main parameters can be used to select appropriate solutions according to different application requirements.

Part number	Description	Input Voltage Vin (V)	Quiescent Current Iq(uA)	Output Voltage (V)	Iout (A)	VFB(V)	Fsw(MHz)	Ron(mΩ)	Enable	Features	Package	Cross reference
DIO6328E	25V 2.3A 1MHz, Asynchronous DC Boost Converter	2.3-25	100	2.3-25	2.3	0.6	1	150	H	OCP/OVP/OTP	SOT23-5,SOT23-6 DFN3*3-10	SY7208C
DIO6328F	25V 2.3A 1MHz, Asynchronous DC Boost Converter					0.2					SOT23-6	-
DIO6346	28V 0.9A 1MHz,Synchronous DC Boost Converter	1.8-5.5	110	4.5-28	0.9	0.803	1.05	850/450			WLCSP-6	TPS61046
DIO6305B	5V 1.1A 1.2MHz, Synchronous DC Boost Converter	2.7-5.25	30	3-5.25	1.1	0.5	1.2	400		OCP/OVP OTP/SCP	SOT23-6	SGM6605-5.0
DIO6650	5V 1.2A 1.2MHz, 5V Fixed Output, Synchronous DC Boost Converter	2.7-4.5		5	1.2	-	1.2	400		OCP/OTP	TSOT23-6	SGM6605-5.0
DIO6650B	5V 0.75A 1.0MHz, 5V Fixed Output, Low Power Synchronous DC Boost Converter	0.7-5.0	12	5	0.75	-	1	350		OCP/OTP/SCP	DFN2*2-6	-
DIO6602				1.8-5.5	0.75	0.5						-
DIO6602A				5V 1.5A 1.0MHz, Low Power Synchronous DC Boost Converter	1.8-3.8	1.5						0.5
DIO6605B	5V 1.2A 1.2MHz, Fixed 5V Output, Synchronous DC Boost converter	2.7-4.5	30	5	1.2	-	1.2	400		SOT23-6 DFN2*3-8	-	
DIO6099	5.5V 1.0A 1.0MHz, Synchronous DC Boost Converter	0.9-5.5	0.4	1.8-5.5	1	1	1	250		OCP/OVP OTP/SCP	SOT23-6,DFN2*2-6 WLCSP-6	-
DIO6199B	5.5V 1.0A 1.0MHz, Synchronous DC Boost Converter	1.1-5.5	2.0-5.5	250				-				
DIO6199C	5.5V 1.0A 1.0MHz, Synchronous DC Boost Converter	0.9-5.5	0.6	1.8-4.8				300(LS)/ 350(HS)		OCP/OVP/OTP/ SCP/UVLO	SOT23-6,DFN2*2-6	TPS61099 SGM66099
DIO6095	5V 0.9A 1.0MHz, 5V Fixed Output, Synchronous DC Boost Converter	0.9-5.5	0.4	5	0.9	-	300	OCP/OVP OTP/SCP		DFN2*2-6 WLCSP-6	-	
DIO6197	3.3V 1MHz, 3.3V Fixed Output, Low Power Synchronous Boost Converter with Low Input Voltage	0.9-3.8	1	3.3	0.9	-		OCP/OTP UVLO/Bypass		SOT23-5	TPS61097	

DC Switching Buck Converter

A DC switching buck converter is a converter that converts a known DC voltage into another fixed or adjustable DC voltage. The output voltage is lower than the input voltage. Its applications are very wide, including almost any electronic product. The main parameters of switching buck converters include efficiency, ripple, dynamic response, static power consumption, frequency, package size, etc. The main parameters can be used to select appropriate solutions according to different application requirements.

Part number	Description	Input Voltage Vin (V)	Quiescent Current Iq(uA)	Output Voltage (V)	Iout (A)	VFB(V)	Fsw(MHz)	MOSFET (H/L)(mΩ)	Enable	Control Mode	Features	Package	Cross reference
DIO61845	40V 0.6A 2000KHz, Synchronous DC Buck Converter	5.0-40	150	Adj	0.6	0.8	2	400/200	H	PWM PSM	OCP/OTP/ SCP	SOT23-6	MP2457 TPS560430
DIO60845	40V 0.6A 650KHz, Synchronous DC Buck Converter						0.65						MP2457 TPS560430

DC Switching Buck Converter

Part number	Description	Supply Voltage Vin (V)	Quiescent Current IQ (uA)	Output Voltage (V)	Iout (A)	VFB (V)	Fsw (MHz)	MOSFET (H/L)(mΩ)	Enable	Control Mode	Features	Package	Cross reference					
DIO62845B	28V 1A 500KHz, Synchronous DC Buck Converter	4.5-28	140	Adj	1	0.8	0.5	130/90	H	COT PWM	OCP/OTP/SCP	SOT23-6	-					
DIO68201						0.6											TPS54202 SY8201	
DIO62845	28V 2A 500KHz, Synchronous DC Buck Converter				2	0.8										MP2451 LM2842		
DIO54270																	-	
DIO54202	28V 2A 700KHz, Synchronous DC Buck Converter									0.6		0.7	120/75		COT/PWM		TPS54202	
DIO54312										0.6		0.7			COT/PWM		TPS54302	
DIO54302	28V A 500KHz, Synchronous DC Buck Converter							3		0.6		0.5	80/40		COT/PWM		TPS54302	
DIO54335						0.765				COT/PWM PSM			-					
DIO69209	24V 2A 700KHz, Synchronous DC Buck Converter, Light Load Continuous Mode	4.5-24	700	Adj	2	0.765	0.7	120/75	H(1.5V) H(0.8V)	COT PWM	OCP/OTP/SCP	SOT23-6	TPS562208 TPS562209					
DIO69309	24V 3A 700KHz, Synchronous DC Buck Converter, Light Load Continuous Mode				3									80/40		TPS563208 TPS563209		
DIO6912	24V 2A 500KHz, Synchronous DC Buck Converter, Light Load Continuous Mode				2									130/90		SY8120		
DIO6913	24V 3A 500KHz, Synchronous DC Buck Converter, Light Load Continuous Mode		3			80/40		SY8113										
DIO6920	24V 500KHz 2A, Synchronous DC Buck Converter, VEN H=1.5V				140			0.765		120/75						TSOT23-6	TPS562200 TPS562201	
DIO6920H	24V 500KHz 2A, Synchronous DC Buck Converter, VENH=0.8V																	-
DIO69201	24V 700KHz 2A, Synchronous DC Buck Converter, High Speed Dynamic Response						2	0.765		0.7		120/70		COT/PWM PSM				TPS562200 TPS562201
DIO6921						0.6		120/75		COT/PWM				-				
DIO6922	24V 2A 500KHz, Synchronous DC Buck Converter					0.6	0.5	130/90		COT PWM		DFN2*2-6	-					
DIO6930	24V 3A 500KHz, Synchronous DC Buck Converter						0.5			COT/PWM PSM			TPS56339 TPS563200					
DIO69301	24V 3A 700KHz, Synchronous DC Buck Converter, High Speed Dynamic Response		190		3	0.765	0.7	80/40		COT/PWM		TSOT23-6	TPS563200 TPS563201					
DIO6931	24V 3A 500KHz, Synchronous DC Buck Converter						0.5			COT/PWM PSM			TPS56339 TPS563200					
DIO6957	24V 2A 500KHz, Synchronous DC Buck Converter, Small Package	4.5-20	140	Adj	2	0.8	0.8	63/36	H	COT/PWM	OCP/OTP/ SCP/QOD	SOT-563	MP1652,MP1657					
DIO6958	20V 3A 800KHz, Synchronous DC Buck Converter, Small Package				3											MP1653,MP1658		
DIO6970	24V 2A 500KHz, Synchronous DC Buck Converter				2									120/75		MP1470		
DIO6971	24V 3A 500KHz, Synchronous DC Buck Converter	4.5-24			3		0.5	80/40		OCP/OTP/SCP		TSOT23-6	MP1471					
DIO62560B	5V 0.6A 1.5MHz, Synchronous DC Buck Converter	2.5-5.5	40	Adj	0.6	0.6	1.5	230/170		PWM	OTP/SCP	DFN2*2-6	-					
DIO6002	5V 1.2A 1.5MHz, Synchronous DC Buck Converter, Small Package				1.2										SOT23-5	SY8088CAAC		
DIO6001	5V/1A, 1.5MHz, Synchronous DC Buck Converter				1										SOT23-5 DFN2*2-6	SY8008 TLV62568		
DIO6100/B					1										SY8008			

DC Switching Buck Converter

Part number	Description	Supply Voltage Vin (V)	Quiescent Current IQ (uA)	Output Voltage (V)	Iout (A)	VFB (V)	Fsw (MHz)	MOSFET (H/L)(mΩ)	Enable	Control Mode	Features	Package	Cross reference		
DIO6988A	24V 8A 600KHz,Synchronous DC Buck Converter	4.5-24	90	Adj	8	3.3	0.6	20/10	H	COT/ PWM/PFM	OCP/OTP/UVLP/ OVP	QFN2.5*2.5-16	SY8388A		
DIO6988B	24V 8A 600KHz,Synchronous DC Buck Converter with 3.3V、300mA LDO												SY8388B		
DIO6988C	24V 8A 600KHz,Synchronous DC Buck Converter with 5V、100mA LDO												SY8388C		
DIO6986A	24V 6A 600KHz, Synchronous DC Buck Converter				6								30/15	SY8386A	
DIO6986B	24V 6A 600KHz,Synchronous DC Buck Converter with 3.3V、300mA LDO													SY8386B	
DIO6986C	24V 6A 600KHz,Synchronous DC Buck Converter with 5V、100mA LDO													SY8386C	
DIO6957B	20V 2A 500KHz, Synchronous DC Buck Converter, Small Package	4.2-20	140	Adj	2	0.8	0.8	130/65	H	COT/PWM	OCP/OTP/SCP	SOT-563		MP1653,MP1658	
DIO6966	20V 2A 500KHz, Synchronous DC Buck Converter				2										63/36
DIO6968	20V 3A 800KHz, Synchronous DC Buck Converter				3										76/43
DIO62810	5V/0.6A, 4MHz/5MHz, synchronous Step-Down converter with Power-Good Function	2.5-5.5	590	0.9-1.8	0.6	-	4/5	300/130	H	COT/ PWM/ FPWM	OCP/SCP/UVLO	DFN1.2*1.2-6 WLCSP0.77*0.93-5	XC929x		
DIO62820			14												
DIO60010	5V/1A, 1.8MHz, synchronous Step-Down converter with Power-Good Function	2.5-5.5	25	Adj	1	0.6	1.8	260/180	H	COT/Auto mode	OTP/SCP/PG	SOT563 SOT23-5 SOT23-6	SY8008,TLV62568		
DIO60010A										COT/ Forced PWM			-		
DIO60011	5V/1A, 1.8MHz,Synchronous DC Buck Converter	2.5-5.5	25	Adj	1	0.6	1.8	260/180	H	COT/Auto mode	OTP/SCP	SOT563 SOT23-6	MP1601		
DIO60011A										COT/ Forced PWM			MP1601A		
DIO60830	5V 3A 1MHz,Synchronous DC Buck Converter	2.4-5.5	5	Adj	3	0.6	1	80/50	H	PWM	OTP/SCP/OVP/ QOD/PG	DFN2*2-8,DFN3*3-10 EP-SOIC8,SOT563	SY8003		
DIO6145P	5.5V 6A 1.2MHz,Synchronous DC Buck Converter	2.8-5.5	40		6		1.2	20/12		COT/ PWM/PFM	OCP/OTP/SCP/ QOD	QFN2*1.5-12 QFN2*3-12	MP2145		
DIO6157	5.5V 4A 2MHz,Synchronous DC Buck Converter	2.5-5.5	10		4		2	26/25		COT/ PWM/PFM	OCP/OTP/SCP/ QOD	DFN1.5*1.5-6	-		

DC Switching Buck Converter

Part number	Description	Supply Voltage Vin (V)	Quiescent Current IQ (uA)	Output Voltage (V)	Iout (A)	VFB (V)	Fsw (MHz)	MOSFET (H/L)(mΩ)	Enable	Control Mode	Features	Package	Cross reference		
DIO6507	5V 1A,1.5MHz,Synchronous DC Buck Converter	2.5-5.9	40	Adj	1	0.6	1.5	230/170		PWM	OTP/SCP	DFN1.6*1.6-6	RP507K		
DIO6010		2.5-5.5										SOT23-5 DFN2*2-6	PAM2305,RT8010A TLV62568,LM3671 SGM6013		
DIO6015B	5V 1.5A 1MHz,Synchronous DC Buck Converter	2.7-5.5	80	Adj	1.5	0.6	1	180/120		PWM	OTP/SCP/OVP	SOT23-5	SY8009A TLV62566		
DIO6012	5V 2A 1MHz,Synchronous DC Buck Converter				100/80							SY8009BEBC SY8009CAAC			
DIO6012B					100/80							SY8009B			
DIO6022					130/100							SOIC-8	SY8082		
DIO6905	5V 2A 1.65MHz,Synchronous DC Buck Converter	2.3-5.5	15	Adj	2	0.6	1.65	120/80		COT/PWM	OCP/OTP SCP/QOD	SOT563 DFN1.6*1.6-6	MP1605C		
DIO6905B	5V 2A 1.8MHz,Synchronous DC Buck Converter		30									SY8892E,RT5760A(B) TLV62569P,TLV62084			
DIO6905C	5V 2A 1.65MHz,Synchronous DC Buck Converter		15										COT/ PWM/ FPWM	OCP/OTP/SCP/ QOD/PG	SOT563
DIO6905E	5V 2A 1.8MHz,Synchronous DC Buck Converter		30									COT/PWM	OCP/OTP/SCP/ QOD/PG	SOT563 DFN2*2-8	SY8892E
DIO6023	5V 2.5A 1MHz,Synchronous DC Buck Converter	2.7-5.5	80	Adj	2.5	0.6	1	100/70	H	PWM	OTP/SCP/OVP	SOT23-6	SY8032E		
DIO6083	5V 3.5A 1MHz,Synchronous DC Buck Converter				3.5							DFN2*2-8	SY8003 RT5797A		
DIO6073	3-way Power Management Chip with 36V Buck & 18V Boost	8.2-36	500	Adj	3.3	0.6	0.63	600/330		PWM	OVP/OTP	EP-SOIC8 QFN3*4-24	-		
		0.75-6.0			0.5									0.8	1
		3.3			2.55									0.07	-
DIO6071	3-way Power Management Chip with 36V Buck & 18V Boost	8.2-36	500	Adj	3.1	0.6	0.63	600/330		PWM	OVP/OTP	QFN3*4-24 EP-SOIC8	-		
		0.75-6.0			0.5									0.8	1
		3.1			2.55									0.07	-
DIO6063	5V 3.5A 1MHz,Synchronous DC Buck Converter	2.7-5.5	80	Adj	3.5	0.6	1	90/70		PWM	OCP/SCP OVP/OTP	DFN3*3-10	SY8063		
DIO6013	5V 3A 1MHz,Synchronous DC Buck Converter				3			100/70				SY8083 TPS5432			
DIO6047	5V 4A 1MHz,Synchronous DC Buck Converter				4			QFN3*3-16				SY8047			
DIO6048	5V 4A 1.25MHz,Synchronous DC Buck Converter				2.5-5.5								10	OCP/SCP/ OVP/OTP	
DIO6145	5.5V 6A 1.2MHz,Synchronous DC Buck Converter	2.8-5.5	40	Adj	6	0.6	1.2	20/12	COT/PWM /PFM	OCP/OTP SCP/QOD	QFN2*3-12 QFN2*1.5-12	MP2145			
DIO6690	5.5V 2A 1.8MHz,Synchronous DC Buck Converter	3.0-5.5	30		2		1.8	120/80			COT/PFM	DFN2*1.5-8	MT6690		

DC Switching Buck Converter

Part number	Description	Supply Voltage Vin (V)	Quiescent Current IQ (uA)	Output Voltage (V)	Iout (A)	VFB (V)	Fsw (MHz)	MOSFET (H/L)(mΩ)	Enable	Control Mode	Features	Package	Cross reference
DIO6155	5.5V 2A 2MHz,Synchronous DC Buck Converter	2.5-5.5	10	Adj	2	0.6	2	26/25	H	COT/Auto mode/ FPWM	OCP/OTP/ SCP/QOD	DFN1.5*1.5-6	-
DIO61824	5.5V 1A 2MHz,Synchronous DC Buck Converter				1					COT/Auto mode			TPS62824
DIO61824A					COT/Forced PWM					TPS62824A			
DIO61825					2					COT/Auto mode			TPS62825
DIO61825A	5.5V 2A 2MHz,Synchronous DC Buck Converter				2					COT/Forced PWM			TPS62825A
DIO61826	5.5V 3A 2MHz,Synchronous DC Buck Converter				3					COT/Auto mode			TPS62826
DIO61826A					COT/Forced PWM					TPS62826A			
DIO61827	5.5V 4A 2MHz,Synchronous DC Buck Converter				4					COT/Auto mode			TPS62827
DIO61827A					COT/Forced PWM					TPS62827A			

Li-ion Battery Protection IC

Part number	Description	Battery Voltage (V)	Operating Current IOP (uA)	Battery Under Voltage Threshold VUV(V)	Over-Charge Voltage Threshold VOV(V)	Pass Resistance RP(mΩ)	Over-Discharge Current Iod(A)	Discharge Short-Circuit Current Isc(A)	Features	Package	Cross reference
DIO7110	Ultra-small Packaged Li-ion Battery Overcharge/Overdischarge Protection IC, Built-in MOSFET	0-5.5	1.3	2.4-3	4.2-4.55	56	A/B:1.33 C/D:0.66	2*Iod/3*Iod	OVP/UVLO/OTP/ SCP/Bypass	DFN1.5*2-6	SGM41100
DIO7111									OVP/UVLO/ OTP/SCP	DFN2*2-6	-

Li-ion Battery Linear Charging IC

Part number	Description	Operating VOP (V)	Charging terminated IBAT(DONE) (uA)	Charge current (Max)(A)	Absolute Max (V)	Vin (Max)(V)	OVP Threshold (V)	Battery Regulation voltage(V)	Recharge Threshold (V)	Trickle Threshold (V)	Control interface	NTC Terminal	Charge Mode	Features	Package	Cross reference		
DIO5030	36V High Withstand Voltage, 600mA Linear Charging IC, JEITA Specification Compliant, No Charge T>45°C	4.45-6.3	6	0.6	36	32	6.5	4.2	4.05	2.5	VIN	Y	TC/CC/CV	OVP/OTP/ SCP/PG/CHG	SOT23-6	-		
DIO5050	30V High Withstand Voltage, 1A Linear Charging IC, JEITA Specification Compliant, No Charge T>50°C		1		30	28	6.6								DQFN1.8*1.4-10	-		
DIO5060A	28V High Withstand Voltage, 600mA Linear Charging IC, Supports Power Path, JEITA Specification Compliant, No Charge T>45°C	4.35-6.5	50	0.6	28	25	6.5	A420:4.2 A440:4.4 A445:4.45	A420:4.05 A440:4.25 A445:4.3	2.5	VIN	N	TC/CC/CV	OVP/OTP/ SCP/PG/CHG	DFN2*2-10	-		
DIO5060B	28V High Withstand Voltage, 600mA Linear Charging IC, Supports Power Path, JEITA Specification Compliant, No Charge T>45						6.5	B420:4.2 B440:4.4 B445:4.45	B420:4.05 B440:4.25 B445:4.3						DQFN1.8*1.4-10	-		
DIO5081	36V High Withstand Voltage, 600mA Linear Charging IC, JEITA Specification Compliant, No Charge T>45°C	4.6-6.5	1	0.6	36	32	6.7	4.35	4.2	2.56	VIN	Y	TC/CC/CV	OVP/OTP/ SCP/PG/CHG	DQFN1.8*1.4-10	-		
DIO5090C	36V High Withstand Voltage, 600mA Linear Charging IC, JEITA Specification Compliant, No Charge T>55°C	4.45-6.3		1			1	6.5	4.25	4.1					2.5	EP-MSOP10	-	
DIO5090X	36V High Withstand Voltage, 1A Linear Charging IC, JEITA Specification Compliant, No Charge A:T>50°C B/D:T>45°C		1	1	6.5	4.2	4.05	2.5	2.5	-	-							
DIO54068	500mA Linear Charging IC	4.5-5.5	80	0.5	36	-	6.4	4.2	4.05	2.9	IO	Y	TC/CC/CV	OVP/OTP/ SCP/PG	SOT23-5	-		
DIO5508	1000mA Linear Charging IC		1	1	6	4.1	3.95	2.83	2.9	2.83	IO	Y			EP-SOIC8 EP-MSOP8	-		
DIO5508A	600mA Linear Charging IC	1	136	0.6	6	4.2	4.05	2.9	2.9	VIN	N	OVP/OTP/ SCP/PG	SOT23-6 DFN2*2-6	-				
DIO5508B	800mA Linear Charging IC	4.65-5.5	136	0.8	6.2	4.35	4.2	2.6	2.6	2.6	IO	Y	TC/CC/CV	OVP/OTP/ SCP/PG	DFN2*2-8	-		
DIO5508H	800mA Linear Charging IC														DFN3*3-10	-		
DIO5508CD10	250mA Linear Charging IC	4.5-5.5	80	0.25	10	-	6	4.2 B:4.35 C:4.4	4.05 B:4.2 C:4.25	2.5	VIN	N	TC/CC/CV	OVP/OTP/ SCP/PG	DFN1*1-6	-		
DIO5509	100mA Linear Charging IC	4.5-5.5 B:4.65-5.5 C:4.7-5.5	80	0.1				H:4.2 HB:4.35 HC:4.4	H:4.05 HB:4.2 HC:4.25	2.5					2.5			
DIO5518B	500mA Linear Charging IC	4.5-5.5	130	0.5	6.2	4.35	4.2	2.6	2.6	2.6	VIN	Y	TC/CC/CV	OVP/OTP/ SCP/PG	SOT23-5	LTC4054		
DIO5518C	750mA Linear Charging IC	4.65-5.5		0.75											DFN2*2-6	-		
DIO5518D	300mA Linear Charging IC	4.5-5.5	136	0.3	6	4.2	4.05	2.9	2.9	2.9	VIN	N	TC/CC/CV	OVP/OTP/ SCP/PG	SOT23-5	-		
DIO5518E			130												2.5	2.5	DFN1.2*1.2-6	-
DIO5519			136												2.5	2.5	SOT23-5	-
DIO5519B			136												2.5	2.5	DFN1.2*1.2-6	-
DIO5538	100mA Linear Charging IC	4.5-5.5	100	0.1	6	4.2	4.05	2.9	2.9	2.9	VIN	N	TC/CC/CV	OVP/OTP/ SCP/PG	SOT23-5	LTC4054L		
DIO5538B	120mA Linear Charging IC														4.35	4.2	2.9	DFN1.8*2-6
DIO5538C	100mA Linear Charging IC	4.65-5.5	100	0.1	6	4.4	4.25	2.5	2.5	2.5	VIN	Y	TC/CC/CV	OVP/OTP/ SCP/PG	-	-		
DIO5538D															4.2	4.05	2.5	DFN2*2-8
DIO5538BCN8	100mA Linear Charging IC	4.65-5.5	100	0.1	6	4.35	4.25	2.5	2.5	2.5	VIN	N	TC/CC/CV	OVP/OTP/ SCP/PG	SOT23-5	-		
DIO5538CST5															4.35	4.25	2.5	DFN2*2-10
DIO5840A	36V High Withstand Voltage, 1A Linear Charging IC, JEITA Specification Compliant, No charge T>50°C	4.45-6.3	1	1	36	24	6.5	4.2	4.05	2.5	VIN	Y	TC/CC/CV	OVP/OTP/ SCP/PG	DFN2*2-10	BQ24040		

Li-ion Battery Linear Charging IC

Part number	Description	Supply Voltage (V)	Charging terminated IBAT (DONE) (uA)	Charge current (Max)(A)	Absolute Max (V)	Vin (Max) (V)	OVP Threshold (V)	Battery Regulation voltage(V)	Recharge Threshold (V)	Trickle Threshold (V)	Control interface	NTC Terminal	Charge Mode	Features	Package	Cross reference	
DIO5840B/D	36V High Withstand Voltage, 1A Linear Charging IC, JEITA Specification Compliant, No Charge T>45°C	4.45-6.3	1	1	36	24	6.5	4.2	4.05	2.5	VIN				DFN2*2-10	-	
DIO5840J	36V High Withstand Voltage, 1A Linear Charging IC, JEITA Specification Compliant, No Charge T>55°C	4.45-6.25				32										-	
DIO5841J	36V High Withstand Voltage, 1A Linear Charging IC, JEITA Specification Compliant, No Charge T>55°C	4.45-6.25				24	BQ24045										
DIO54056	1A Linear Charging IC	4.5-5.5	80	1	36	-	6.4	4.2	4.05		IO				DFN2*2-10 EP-SOIC8	-	
DIO59073	28V High Withstand Voltage, 1.2A Linear Charging IC	4.35-6.4	1.3	1.2	28	26	6.6	4.2	4.1	3.35		Y			QFN3*3-16	BQ24073	
DIO59074		4.35-10.2														10.5	-
DIO59075		4.35-6.4					6.6	4.1	4							-	
DIO59078		4.35-6.4					6.6	4.1	4							-	
DIO59079		4.35-6.4					6.6	4.1	4							-	
DIO50581A	300mA Linear Charging IC	4.7-5.5	90	0.3	30		6.4	4.4	4.25	2.5		N			DFN2*2-10 DFN3*3-10	-	
DIO50581B								4.365	4.215							-	
DIO50581D								4.2	4.05							-	
DIO54056A	800mA Linear Charging IC	4.75-5.5	80	0.8			6.4	4.4	4.25	2.6	IO		TC/CC/CV	OVP/OTP SCP/PG	DFN2*2-8	-	
DIO54056B								4.35	4.2							PST4056	
DIO54056C								4.2	4.05							PST4056	
DIO58011	100mA Linear Charging IC	4.5-5.5	82	0.1				6.4	4.2	4.05	2.5	Y			DFN3*3-10	-	
DIO58011B		4.65-5.5						6.8	4.35	4.2	2.6					-	
DIO58013	1A Linear Charging IC	4.5-5.5	73.8	1	36			6.4	4.2	4.05	2.5					MP2602	
DIO58013B		4.65-5.5						6.8	4.35	4.2	2.6					-	
DIO58013A		4.5-5.5						6.4	4.2	4.05	2.5					-	
DIO58056		4.65-5.5						6.6	4.35	4.2	2.6					N	SGM4056
DIO58056B		4.7-5.5						6.7	4.4	4.25	2.62						
DIO58056C	4.75-5.5	6.8	4.45	4.3	2.65	-											
DIO58056D	4.75-5.5	6.8	4.45	4.3	2.65	-											
DIO58561	100mA Linear Charging IC	4.5-5.5	82	0.1				6.4	4.2	4.05	2.5				DFN2*2-8	SGM40561	
DIO58561B		4.65-5.5						6.8	4.35	4.2	2.6					-	

Double Cell Li-ion Battery Switching Charging IC

Part number	Description	Operating Vop(V)	Quiescent Current(uA)	Charge current (Max) (A)	Battery charge voltage VCV(V)	Recharge Threshold(V)	Trickle Threshold(V)	Fsw(MHz)	Control interface	Features	Package	Cross reference
DIO6833A	18V, 2A, Dual Li-ion Battery Synchronous Boost Charging IC	4.375-5.5	200	2	8.4V/8.7	VCV-0.2	5.6	1	IO	OVP/OTP SCP/STAT	QFN3*3-16	-
DIO6833B		3.6-5.5										-
DIO6833C	4.375-5.5	SY6982C										
DIO6833E	3.6-5.5	SY6982E										
DIO6833F	4.375-5.5	VCV-0.4				SY6982F						

Single Cell Li-ion Battery Switching Charging IC

The battery charger chip is a chip that can charge and control a variety of batteries. Can charge single and dual lithium batteries. Any product using lithium batteries is a target market. The main parameters of the charging IC include charging efficiency, temperature rise, maximum charging current, whether it has software configuration function, NTC, over-voltage protection, package size, etc.

Part number	Description	Supply Voltage (V)	Current in high impedance (uA)	Charge current (Max)(A)	Battery charge voltage VOREG (V)	Recharge Threshold (V)	Trickle Threshold (V)	Fsw (MHz)	Control interface	Features	Package										
DIO59015	1.5A Switch Charging IC, Supports OTG Function, I2C Control	4.0-6.0	5	1.5	4.2-4.4	VOREG-(0.05-0.2)	2	2	IIC	OTG/OVP/SCP/ OTP	TQFN3*3-16 DFN3*3-12										
DIO59016											1.5										
DIO59020	2A Switch Charging IC, Supports OTG Function, I2C Control	4.0-6.0	12	2	A:4.2 B:4.3 C:4.35 D:4.4	A:4.1 B:4.2 C:4.25 D:4.3	2	2	IO	OTG/OVP/SCP/ OTP/PG	DFN3*3-12										
DIO59110X	1.5A Switch Charging IC, Supports OTG Function, I2C Control																				
DIO59111X	1.5A Switch Charging IC																				
DIO59120X	2A Switch Charging IC, Supports OTG Function																				
DIO59121X	2A Switch Charging IC	4.5-5.5	5	0.7	420CN20:4.2 435CN20:4.35 440CN20:4.4	420CN20:4.2 435CN20:4.35 440CN20:4.4	2.5	0.5	VIN	OTG/OVP/SCP/ OTP	EP-SOIC8										
DIO5908	1.5A Switch Charging IC, Supports Power Path, & JEITA Specification Compliant																				
DIO5908B												4.2	4.05								
DIO5918A5												4.35	4.2								
DIO5918A0	0.5A Switch Charging IC, Supports Power Path, & JEITA Specification Compliant											4.5-5.5	5	0.7	420CN20:4.2 435CN20:4.35 440CN20:4.4	420CN20:4.2 435CN20:4.35 440CN20:4.4	2.5	0.5	IO	OTG/OVP/SCP/ OTP/PG	QFN3*3-20
DIO5918B5	1.5A Switch Charging IC, Supports Power Path, & JEITA Specification Compliant																				
DIO5918B0	0.5A Switch Charging IC, Supports Power Path, & JEITA Specification Compliant																				

Low Dropout Linear Voltage Regulator

Low dropout voltage regulator, referred to as LDO, is a low dropout linear voltage regulator. Linearly reduce a known voltage to the desired DC voltage. Compared with DC switching buck converters, it is suitable for places with small current and low efficiency requirements. The main parameters of LDO include voltage accuracy, voltage drop, ripple, power factor, dynamic response, package size, etc.

Part number	Description	Input Voltage (V)	Quiescent Current Iq (uA)	Output Voltage(V)	VFB(V)	Vd(mV)	Iout (max) (A)	PSRR (dB@1KHz)	Line Regulation (mV)	Load Regulation (mV)	Output Voltage Noise (uVrms)	Accuracy	Features	Package	Cross reference			
DIO7708A	30V 300mA, Low Power Linear Voltage Regulator, Supports Adjustable Output Voltage & Fixed Output Voltage	2.75-24	4	ADJ: 1.2-5 FIX: 1.2-3.3	1.2	240	0.3	60	10	10	36	2%	OCP/OTP/QOD	TSOT23-5,SOT23-5 DFN2*2-6	NCP718A			
DIO7708B				ADJ: 1.2-5 FIX: 1.2-3.3									TSOT23-5,SOT23-5 DFN2*2-6	NCP718B				
DIO7708X390	15V 300mA Low Power Linear Voltage Regulator, Fixed Output Voltage 3.9V	2.5-15	3	FIX:3.9	-	150	0.3	60	10	10	36	2%	OCP/OTP	SOT89-3 SOT23-5	-			
DIO7708X400	15V 300mA Low Power Linear Voltage Regulator, Fixed Output Voltage 4V			FIX:4		260									-			
DIO7708X420	15V 300mA Low Power Linear Voltage Regulator,Fixed Output Voltage 4.2V			FIX:4.2		150									-			
DIO7709	30V 300mA, Low Power Linear Voltage Regulator, Fixed Output Voltage	2.5-24	4	FIX:1.2-5	-	240	0.3	60	10	10	36	2%	OCP/OTP	SOT89-3,SOT23-5 SOT23-3,DFN2*2-6	SGM2200			
DIO7709330A	30V 300mA Low Power Linear Voltage Regulator, Fixed Output Voltage 3.3V	2.5-30		FIX:3.3		260								5	TPS70933DBVR			
DIO78XX	30V 150mA Low Power Linear Voltage Regulator	2.5-30	30	ADJ: 5-24 FIX: 9-24	1.2	240	-		0.04%	0.25%			OCP/OTP/QOD	SOT89-3,SOT23-5 SOIC-8	MC78L00			
DIO7805	30V 300mA, Low Power Linear Voltage Regulator, Fixed Output Voltage 5.0V	2.5-24	4	FIX:5	-	240	0.15	60	10	10	450	2%	OCP/OTP	TO252-3,SOT89-3 DFN2*2-6,SOT23-3	TPS70950DRVT			
DIO7865	300mA,Low Power Linear Voltage Regulator	3.0-40		FIX: 2.5/3.3/5 ADJ:0.65-16	0.65	500							10	10	450	OCP/OTP/UVLO/ PG	DFN2*2-6,EP-MSOP8 EP-SOIC8,SOT23-5	TPS7B82
DIO7855	150mA,Low Power Linear Voltage Regulator			FIX: 1.8/2.5/3.3/5 ADJ:0.65-16		210											355	TPS7B81 MPQ2013 TLE42644G
DIO7758	5V 300mA Low Power Linear Voltage Regulator	1.6-5.5	25	FIX: 0.8-3.3	-	140	0.3	75	0.02%/V	40	70	±1%	OCP/OTP/QOD	DFN2*2-6	-			
DIO7982	5V 150mA, Ultra-Low Power 0.5uA Linear Voltage Regulator	1.8-5.5	0.5	FIX:1.2-3.6	-	170	0.15	57	0.012%/V	8	85	±1%	OTP/QOD/OCP	DFN1*1-4,SOT23-5, DFN0.8*0.8-4	NCP170			
DIO7964	5V 120mA, Three Terminal Linear Voltage Regulator	4.5-5.5	137	1.0/1.8/3.3	-	-	0.12*3	-	1%	0.20%		±2%	OCP/OTP	EP-MSOP-8 EP-SOIC-8	-			
DIO7910	300mA, Ultra-Low Noise, Low Power Linear Voltage Regulator	1.6-5.5	25	FIX:0.8-3.3	-	170	0.3	75	0.02%/V	40	70	±1%	OCP/OTP QOD	DFN1*1-4,SOT23-5 DFN0.8*0.8-4 SC70-5	NCP114 SGM2036,TPS732XX TLV702XX,TPS7A05			
DIO7911	500mA, Ultra-Low Noise, Low Power Linear Voltage Regulator		34	FIX:0.75-5, ADJ:0.8-5		125	0.6	86	6				55	OCP/OTP/QOD	DFN1*1-4 SOT23-5,SC70-5	-		
DIO7912	300mA, Ultra-Low Noise, Low Power Linear Voltage Regulator		25	FIX:0.8-3.3		170	0.3	75	0.02%/V				70	OCP/OTP/QOD	DFN1*1-4,SOT23-5 DFN0.8*0.8-4,SC70-5	XC6238		
DIO8018	7 channels LDO PMIC	CH1/2:0.6-2.0	280(all)	CH1/2:0.504-1.504	-	CH1/2:120	CH1/2:1.5	CH1/2:77	0.5	6	20	±0.5%	UVLO/UVPI/ OCP/OTP/QOD/ RESET	WLCSP1.61*1.96-20	PM8010 PM8008			
		CH3-7:1.8-5.5		CH3-7:1.5-3.412		CH3/4/6:100 CH5/7:135	CH3/4/6:0.3 CH5/7:0.6	CH3-7:92	0.1	3	10							
DIO8016	4 channels LDO PMIC	VIN1:0.6-2.0	90(all)	DVDD1/2:0.6-1.8	-	DVDD1/2:110	DVDD1/2:1.2	DVDD1:62 DVDD2:56	0.5	18	50	±0.5%	UVLO/UVPI/ OCP/OTP/QOD/ RESET	DFN2*2-10	WL2866D			
		VIN2:2.5-5.5		AVDD1/2:1.2-4.3		AVDD1/2:120	AVDD1/2:0.4	AVDD1/2:88	2	8	15							
DIO7976	500mA, high accuracy LDO with Power Good Function	1.7-6.0	27	FIX:0.65-5.5 ADJ:0.55-5.0	0.55	150	0.5	64	2	0.04V/A	40	±2%		DFN2*2-6 DFN3*3-8 SOT23-5	TPS745,RP111			
DIO7960	250mA, Ultra-Low Noise, Low Power Linear Voltage Regulator	1.65-5.5	18	FIX:1-3.3	-	90	0.25	95	6	2(CSP) 20(DFN)	10	±1%	OCP/OTP/QOD	WLCSP-4,DFN1*1-4	NCP160			
DIO7961	450mA, Ultra-Low Noise, Low Power Linear Voltage Regulator					2(CSP) 30(DFN) 36(SOT23-5)	WLCSP-4,DFN1*1-4 SOT23-5							NCP161				
DIO7966	250mA, Ultra-Low Noise, Low Power Linear Voltage Regulator					2	DFN1*1-4							NCP160 SGM2033				
DIO7939	1500mA, Ultra-Low Noise, Low Power Linear Voltage Regulator	(VOUT+VDO) -4V	45	FIX:0.4-1.8 ADJ:0.5-3.3	0.5/0.6	50	1.5	VIN:70 VBIAS:65	WLCSP:43 DFN:110	2	FIX:40 ADJ:35*VOUT VFB		WLCSP-6 DFN2*2-6	NCP139				

Load Switch

Load switches can effectively control and protect circuit faults under specific conditions, such as overcurrent, overvoltage, etc. Product types of load switches include overvoltage protection switches, overcurrent protection switches, universal switches, etc. The main parameters of load switches include equivalent impedance, response time, tolerance voltage/current, package size, etc.

Part number	Description	Input Voltage Vin (V)	Quiescent Current Iq(uA)	Iout (A)	Enable	Rds (mΩ)	Features	Package	Cross reference
DIO1266	Overvoltage Protection Load Switch	2.5-40		4		35		WLCSP1.63*1.17-12	FPF2280,SGM40666,SGM40654
DIO1266B								WLCSP1.3*1.8-12	FPF2280,AW3290X,KTS1680C,SGM40666,SGM40654
DIO1280	30V Overvoltage Protection IC, Built-in 100V Surge Absorber Tube	2.5-25	80	3	L	30	OVP/OTP/PG	WLCSP-12	FPF2280
DIO1280B									FPF2280
DIO1280C									-
DIO1286									FPF2280
DIO7002A	5.5V 2.5A 70 mΩ, Overcurrent Protection IC	2.7-5.5	60	2.5	H	70	OCP/OTP/RCB	SOT23-5	SY6280
DIO7002B					L				
DIO7003HA/LA	5.5V 2.0A 75 mΩ, Overcurrent Protection IC, Fixed Current			0.35			OCP/OTP/RCB/PG		-
DIO7003HB/LB				0.7					-
DIO7003HC/LC				1					TPS2061(5),AP2161,AP2171 RT9742GN,RT9742HN
DIO7003HD/LD				1.5					TPS2068,TPS2069,RT9742EN,RT9742FN
DIO7003HE/LE				2					RT9742CN,RT9742DN
DIO7004HA/LA	5.5V 2.0A 75 mΩ, Overcurrent Protection IC, Fixed Current, Built-in Output Discharge Resistor, Short-circuit Current Foldback Function	2.7-5.5	50	0.35	H/L	75	OCP/OTP/RCB/PG/QOD	SOT23-5,SOIC-8 EP-MSOP8,MSOP-8	-
DIO7004HB/LB				0.7					-
DIO7004HC/LC				1					AP2171,RT9742GG, RT9742HG,TPS2065D
DIO7004HD/LD				1.5					TPS2069D,RT9742EG RT9742FG
DIO7004HE/LE				2					SY6288C(D),RT9742CG RT9742DG
DIO7004NHA/LA	5.5V 2.0A 75 mΩ, Overcurrent Protection IC, Fixed Current, Short-circuit Current Foldback Function			0.35			OCP/OTP/RCB/PG		-
DIO7004NHB/LB				0.7					-
DIO7004NHC/LC				1					TPS2061(5),AP2161,AP2171 RT9742GN,RT9742HN
DIO7004NHD/LD				1.5					TPS2068,TPS2069 RT9742EN,RT9742FN
DIO7004NHE/LE				2					RT9742CN,RT9742DN
DIO7305	5.5V 2.0A 75 mΩ, Overcurrent Protection IC, Fixed Current, Short-circuit Current Foldback Function	3.0-5.0	128	1.5	H	110	OVP/OCP/OTP/PG	DFN2*2-8	-
DIO72520		3-5.5		2				DFN2*2-6	TPS25200
DIO7495		2.5-5.5	65	70				QFN1.2*1.2-9	FPF2495
DIO7005HA/LA	5.5V 2.0A 75 mΩ, Overcurrent Protection IC	2.7-5.5	50	0.35	H/L	75	OCP/OTP/RCB	SOT23-5	-
DIO7005LB/LB				0.7					
DIO7005HC/LC				1					

Load Switch

Part number	Description	Input Voltage Vin (V)	Quiescent Current Iq(μA)	Iout (A)	Enable	Rds (mΩ)	Features	Package	Cross reference					
DIO7005HD/LD	5.5V 2.0A 75 mΩ, Overcurrent Protection IC	2.7-5.5	50	1.5	H/L	75	OCP/OTP/RCB	SOT23-5	-					
DIO7005HE/LE				2			OCP/OTP/RCB/PG							
DIO7164HA/LA	5.5V 2.0A 75 mΩ, Overcurrent Protection IC, Fixed Current			0.35			H/L			75	OCP/OTP/RCB/PG	SOT23-5	-	
DIO7164HB/LB				0.7										
DIO7164HC/LC				1.0										
DIO7164HD/LD				1.5										
DIO7195B	5.5V 2.5A 55 mΩ, Overcurrent Protection IC	1.8-5.5	100	2.5	H	55	OVP/OCP/OTP/RCB/PG	WLCSP-6	FPF2195,TPS22980					
DIO7300	5.5V 2.0A 60 mΩ, Load Switch			60		RCB	SOT23-5	-						
DIO7301	5.5V 2.0A 48 mΩ, Load Switch			48				RCB/QOD	-					
DIO7301B														
DIO7330	5.5V 2.4A 40 mΩ, Load Switch			2.4		40	RCB	DFN1.2*1.6-4	NCP330					
DIO7330B														
DIO7527A	5.5V 1.0A 70 mΩ, Overcurrent Protection IC	2.7-5.5	70	1	H	70	OCP/OTP/RCB/PG	SOT23-5,SOT23-6 MSOP-8,EP-MSOP8	-					
DIO7527B					L									
DIO7527C					H									
DIO7527D					L									
DIO7552	5.5V 2.5A 70 mΩ, Overcurrent Protection IC				2.7-5.5					2.57	L	OTP/RCB/PG	SOT23-6,DFN2*2-6	TPS2552,NCP380L
DIO7553											H			TPS2553,NCP380H
DIO7552B		4.75-5.5	0.425	L	OTP/RCB/PG/QOD	TPS2552,NCP380L								
DIO7553B				H		TPS2553,NCP380H								
DIO7231	5.5V 0.3A 135 mΩ, Overcurrent Protection IC	2.7-5.5	50	0.425	N/A	135	OCP/OTP/RCB	SOT23	-					
DIO7231B							100		0.25	OCP/OTP/RCB/QOD	AP2331			
DIO7063A	5.5V 0.9A 75 mΩ, Overcurrent Protection IC, Fixed Current				50	0.9	H	75	OCP/OTP/RCB/PG	SOT23-5,MSOP-8	SY6288A1			
DIO7063B							L				SY6288B			
DIO7963	5V 0.2A Overcurrent Protection Switch +5V 170mA LDO				4.5-5.5	-	0.2		400	OCP/OTP/RCB	EP-SOIC-8			
DIO7929	5.5V 2A 60 mΩ, Convertible Rate Control Load Switch				1.8-5.5	100	2	H	60	RCB/QOD	SOT23-6	-		
DIO7929B		45												

Load Switch

Part number	Description	Input Voltage Vin (V)	Quiescent Current Iq(uA)	Iout (A)	Enable	Rds (mΩ)	Features	Package	Cross reference		
DIO7290	5V 1.5A, Low Power Consumption Load Switch, Ultra-small Package, Built-in EN Pull-down Resistor	1.2-5.5	0.031	2	H	48	QOD	WLCSP0.76*0.76-4	TPS22916		
DIO7290B	5V 1.5A, Low Power Load Switch, Ultra-small Package								NCP333		
DIO7291	5V 1.5A, Low Power Consumption Load Switch, Ultra-small Package, Built-in EN Pull-down Resistor								-		
DIO7296	5V 0.5A, Low Power Load Switch, Ultra-small Package	1.0-5.5	0.03	0.5	H	45	QOD	WLCSP0.9*0.9-4	TPS22902,TPS22906		
DIO7297		1.2-5.5							47	TPS22906	
DIO7298	3.6V, 2A, Low Power Load Switch, Ultra-small Package	1.0-3.6	40	TPS22906,SGM2578							
DIO7299	5V 2A, Low Power Load Switch, Ultra-small Package	1.2-5.5	0.031	2		36		TPS22913,NCP334,SGM2578			
DIO72520	Overvoltage and Over-Current Protection IC	3.0-5.5	18			110		OVP/OCP/OTP	DFN2*2-6	TPS25200	
DIO7320	Two Channel 5V, 2.4A Per Channel, 40 mΩ, Load switch - can be used in parallel with two channels	1.8-5.5	100	3		H		28	RCB	EP-SOIC-8	-
DIO7320B	Two Channels 5V, 3.0A Per Channel, 28 mΩ, Load Switch, Built-in Discharge Resistor - can be used in parallel with two channels.										
DIO7970	3.6V, 4A, 4.7mΩ On-Resistance Load Switch	0.65-3.6	18	4				4.7	OTP/QOD	WLCSP-8	TPS22970
DIO7971	3.6V, 3A, 6.7mΩ On-Resistance Load Switch			3				6.7	OTP/QOD/PG/CT		TPS22971
DIO7610A	5.5V 6A 1mΩ, Load Switch	0.8-5.5	28	6				L	13	OTP/QOD	DFN2*2-8
DIO7610B					SGM2256B						

Reset IC

The reset IC chip can automatically and manually reset the main chip. The reset chip is used for software failures or when the circuit returns to normal during operation.

Part number	Description	Supply voltage(V)	Iq (Typ)(uA)	Reset Threshold VRES(V)	VCC to RST Delay(us)	RESET active	Hvres (V)	Output driver type/reset output	Reset Pulse Width TRES (ms)	Watchdog timeout period Twd(s)	WDI Pulse Width Twp (ns)	Package	Cross reference	
DIO706	Low Power Reset IC with Watchdog	1.15-5.5	52	4.4 J:4.0 T:3.08 S:2.93 R/P:2.63	23	L/H (DIO706P)	0.01VRES	Active low push-pull	200	1.6	50	SOIC-8	MAX706	
DIO6803	Low Power Reset IC with Open-Drain Output	1.0-5.5	8	R:2.63 S:2.93		L	0.03VRES	OD	240	-	-	-	SOT23 SOT23-3	SGM803,TLV803
DIO6805	Low Power Reset IC, Push-Pull Output			L		-	Active low push-pull	25	SOT23				-	
DIO6811	Low Power Reset IC, Push-Pull Output, with Manual Reset			L:4.63 M:4.38 J:4.0 T:3.08 S:2.93 R:2.63 Z:2.32		H	-	Active high push-pull	240	SOT143-4 SOT23-5			MAX812,SGM812	
DIO6812				L		-	OD	-						
DIO6813				L		-	OD	-						
DIO6818	Low Power Reset IC with Open-Drain Output			T:3.08 S:2.93 R:2.63		L	0.05VRES	Active high OD	SOT143-4 SOT23-3 SOT23-3L	RT9818				

Reset IC

Part number	Description	Supply voltage(V)	I _q (Typ)(μ A)	Reset Threshold VRES(V)	VCC to RST Delay(us)	RESET active	Hvres (V)	Output driver type/reset output	Reset Pulse Width TRES (ms)	Watchdog timeout period Twd(s)	WDI Pulse Width Twp (ns)	Package	Cross reference
DIO8030	Low Power Reset IC with Open-Drain Output	1.0-5.5	3		23			Active low push-pull	8-12ms			SOT23 SOT23-3	SGM803
DIO6821	Double Button Input Reset IC, Open Collector Output	1.6-6.5	0.01	-	-	L	-	OD	400	-	-	DFN1.45*1-6 DFN1*1-6	TPS3421
DIO6821C									80			DFN1.45*1-6 DFN1*1-6	
DIO6822									400			DFN1.45*1-6 DFN0.8*0.8-4 DFN1*1-6	TPS3422
DIO6820									-			DFN1.45*1-6 DFN1*1-6	TPS3420

MOSFET Driver

A MOSFET driver is applied to high power MOS as an auxiliary driver. The main parameters of a MOSFET driver such as support for operating voltage, output current capacity, whether to support the dead time adjustment, and package size are required for products such as electronic cigarettes, scanners, and wireless charging.

Part number	Description	Supply voltage(V)	V _{in} Max (V)	Output Current Max (A)	Number of Outputs	Topology	Rise Time Typ (ns)	Fall Time Typ (ns)	Dead Time Max (ns)	Package	Cross reference
DIO5110	12V 3A MOSFET Driver	5.5-13.2	58	3	2	Half-Bridge	20	20	40	SOIC-8 DNF3*3-8 DNF2*2.2-8	ADP3110
DIO5105	15V 3A MOSFET Driver	3.0-15	40					15	Set by resistor	-	
DIO5100	12V 3A MOSFET Driver	5.5-13.2	35					20			DNF3*3-10 MSOP-10

LED Flash Driver

As the technical requirements for cameras continue to grow, the requirements for flash control becoming increasingly subdivided and detailed. The main parameters are maximum flash current, maximum continuous current, subdivision function, package size, etc.

Part number	Description	Supply voltage (V)	I _Q (Typ) (mA)	Topology	V _{out} (Max) (V)	I _{out} (Max) (A)	Frequency (kHz)	Peak efficiency (%)	Features	Package	Cross reference
DIO5644	Dual Color Temperature 1.5A Booster Flash Driver, 2MHz/4MHz, Support I2C Dimming Function	2.7-5.5	0.3	Boost	5.4	1.5*2	4000	87	Dual Color Temperature Independent Control	WLCSP-12	LM3644,LM3643 LM3643A,SY7806
DIO5151	1A Buck/Boost Charge Pump LED Flash Driver	3.0-5.5		Buck,Boost Charge Pump		1	2000	90	240ms flash timing	DNF3*3-10 DFN2*2-8	-
DIO5151B											

Motor Driver

Part number	Description	Supply voltage (V)	Number of full bridge	Peak output current (A)	Sleep current (μA)	Control mode	RDS(ON) (HS/LS) (mOhms)	Package	Cross reference
DIO5833	15V, 1A, Dual H-Bridge Motor Driver with Current Regulation	2.7-15	2	1	1.6	PWM	600/400	EP-TSSOP16 QFN3*3-16	DRV8833C
DIO57100	Integrated H-bridge Motor Driver	4-40		12	1.5		60/40	EP-SOP16,SOP16	VNH7100

Voltage Detection IC

Part number	Description	Supply voltage (V)	IQ (Typ) (uA)	RTH Threshold Voltage VRTH(V)	FTH Threshold Voltage VFTH(V)	Detection accuracy (%)	Output driver type/reset output	Package
DIO302	Low Power Consumption Voltage Detection IC	1.9-6	8.8	1.211	1.211	±2%	Active low and high/push-pull	SOT23-6
DIO302A						±1%		

LED Backlighting Driver

LED backlight driver is a power driver for LED as an auxiliary light source, such as portable product displays, infrared lighting, etc. Main parameters of LED backlight driver: such as support power, maximum voltage, dimming level, package size, etc.

Part number	Description	Supply voltage (V)	Topology	Vout (V)	Reference Voltage (mV)	Peak efficiency (%)	Switching frequency (Max) (kHz)	Brightness Control	Package	Cross reference
DIO5661	37V Boost Backlighting Driver with PWM Dimming Support	2.7-5.5	Boost	37	200	86	1100	PWM	SOT23-6 TSOT23-6 DFN2*2-6	SGM3733B
DIO5662										
DIO5361H	42V Boost Backlighting Driver, Supports One Line 32 Levels Dimming	2.8-5.5	Boost	42	200	-	850	One Wire	DFN2*2-6	TPS61161
DIO5322	40V Boost Backlighting Driver with PWM Dimming Support	2.7-5.5		40	300	90	1100	PWM	SOT23-6	SGM3720 SY7310
DIO5632	Dual Output Positive and Negative Voltage LCD Driver, Supports I2C Control	2.5-5.5	Boost, Charge pump			85	1000(charge pump) 1800(BOOST)	I2C	WLCSP-15	TPS65132,RT4801 SM5109
DIO5638										
DIO5639										
DIO56380		2.7-5.5								-
DIO5553		2.9-5.5	Boost, Charge pump, LDO		-	88	500(BOOST)	SRL interface	WLCSP-21	AAT1553
DIO5558										AAT1800
DIO5613	Three-Way Output Positive and Negative Voltage AMOLED Driver, Supporting One-Line Control	2.9-4.5	Boost,Invert			-	1600	One Wire	TQFN3*3-16	TPS65651
DIO56132										TPS65632
DIO56133										TPS65633
DIO5718	28V 2A Synchronous Buck Backlighting Driver, Supports Analog/PWM Dimming	4.5-28	Buck		100	-	1000	PWM	TSOT23-6	SY8718
DIO5718S								-		-
DIO5718A								Analog		-
DIO5718P								PWM		TSOT23-6 DFN2*1.5-6
DIO57180	28V 1.5A Synchronous Buck Backlighting Driver, Supports Analog/PWM Dimming	4.75-28				-	800	PWM	TSOT23-6 DFN2*1.5-6	
DIO53701	28V 2A Synchronous Buck Backlighting Driver, Supports Analog Dimming	4.2-28				93	1000	Analog	DFN1.5*2-6	-
DIO53702	5V 2A Synchronous Buck Backlighting Driver, Supports Analog Dimming	4.2-5.5				-				

Analog Switch

Analog switches are mainly used to connect or disconnect signals in electronic devices. Analog switches have the advantages of low power consumption, high speed, no mechanical contact, small size, and long service life. As a result, they are widely used in automatic control systems and computers. The main parameters of analog switches are switching speed, parasitic capacitance, drive capacity, package size, etc.

Part number	Description	Supply voltage (V)	Icc Quiescent Current (Typ) (A)	Configuration	Number of Switches	Channels	Ron (Typ) (Ohms)	Con (Typ) (pF)	-3dB Bandwidth (MHz)	Package	Cross reference		
DIO3476	1:4 (0.8Ω) Hi-Fi Audio Switch with Two Negative Swing and USB2.0 Signal Processing Capability	1.65-5.5	18	DP4T	2	USB/UART Audio	0.8	20	480	QFN2*3-18	-		
DIO3202B	USB 2.0 High Speed and Audio Switch with Negative Signal Transfer Capability	2.7-5.5	95	2XQPQT		Audio/USB	2 4	9 5	720	DQFN-10	-		
DIO3203	1:3 USB 2.0/Audio/UART Double Pole Triple Throw Ultra-High Speed switch with Negative Signal Transfer Capability		72	DP3T			1.6 3.5	6.8		TQFN-16 DQFN-12	FSA806		
DIO3303	1:3 USB 2.0 High Speed Single pole Triple throw High Speed Switch	2.7-4.4	60			USB	3.5	6.8		DQFN-12	-		
DIO4480	Type-C Signal/Audio High-Speed Changeover Switch	2.7-5.5	4	-	-	Audio/USB	1.2 4.6	8		900 1000	WLCSP-25	FSA4480	
DIO4481/B	USB Type-C Analog Audio Switch with Protection Function, Moisture detection		3	SPDT DPDT	5		1 4.3		830 970				
DIO4482/B	USB Type-C Analog Audio Switch with Protection Function, Moisture detection		2		5		1.0 4.3		970 830				
DIO4483/B	USB Type-C Analog USB2.0/Audio/UART Switch with Protection Function		2.55-5.5	4	SPDT DP3T		6		Audio/USB/ UART	1.2/4.6/1.0			800/950/800
DIO4485	USB Type-C Analog USB2.0/Audio/UART Switch with Protection Function, Moisture detection	2.7-5.5	4			1.2 4.6 15.1		8		940 1050 800	WLCSP-25	-	
DIO3001	USB 2.0 Double Pole Double Throw High Speed Switch	2.3-5.5	0.4	DPDT	2	USB	6	3	>2000	QFN2*1.5-10	-		
DIO3212	USB 2.0 Double Pole Double Throw Switch	2.3-5.0	30			USB	5.7	5	1000	QFN-10 DFN-10 MSOP10	TS3USB221 PI3USB221		
DIO32020	USB 2.0, Audio Switch with Negative Signal Transfer Capability	2.7-5.5	18			Audio USB	0.8 3.8	7	1100	DQFN-10 QFN-10 MSOP-10	FSA221 FSA321 TS5USBA224		
DIO3480	DP/DM Double Pole and Double Throw Switch + Adjustable Comparator Overvoltage Protection	2.3-5.5	85			DPDT	2	USB	5.5	4	1200	WLCSP-24	-
DIO3402	USB 2.0 High Voltage Double Pole and Double Throw High Speed Switch with 20V Withstand Voltage		25						5.2	4.3	1500	WLCSP-12	MAX14743
DIO5000									5.5	4.5		QFN2*1.5-10 DQFN1.8*1.4-10	PI3USB4000
DIO5008									DP/DM Dual SPDT Switch with 20V Overvoltage Protection	26		QFN2*1.5-10 DQFN1.8*1.4-10	-
DIO32221	USB 2.0 Double Pole Double Throw High Speed Switch	2.7-5.5	1	DPDT	2	USB	6	3	>2000	MSOP-10 QFN1.8*1.4-10 QFN2.0*1.5-10	TS3USB30,NLAS7222A/B FSUSB30,SGM7228		
DIO32220										MSOP-10,DQFN-10 QFN-10	TS3USB30,NLAS7222 FSUSB30,SGM7228		
DIO32320										QFN1.8*1.4-10 QFN1.4*1.2-10 MSOP-10	FSUSB42 SGM7227		
DIO32321EN8										DFN1.6*1.2-8	-		
DIO32321										QFN1.8*1.4-10 DFN1.6*1.2-8 QFN1.4*1.2-10 MSOP-10	FSUSB42,SGM7227		
DIO32730										DQFN1.8*1.4-10	DG2730		
DIO32210	USB2.0 Low Power, USB Double Pole Single Throw High Speed Switch	2.7-5.5	1	SPST	1	3	QFN1.5*1.5-8	-					
DIO3350	USB 3.1 Super-Speed Data Switch, 11 Gbps	1.5-5.0	21	QPDT	4	6	0.45	11000	QFN2.6*1.8-16 QFN2*2-18 QFN2.5*4.5-20	HD3SS3202,HD3SS3212 PI3DBS12212,TC7PC13212			
DIO3343									QFN2.4*1.6-16	CBTU02043			
DIO3340									QFN2*2-18 QFN2*3-18	FUSB340			

Analog Switch

Part number	Description	Supply voltage (V)	Icc Quiescent Current (Typ) (µA)	Configuration	Number of Switches	Channels	Ron (Typ)(Ohms)	Con (Typ)(pF)	-3dB Bandwidth (MHz)	Package	Cross reference	
DIO3340B	USB 3.1 Super-Speed Data Switch, 10 Gbps	1.5-5.0	21	QPDT	4	USB	6	0.45	11000	QFN 2*3-18	FUSB340	
DI3PCIE350	PCIE3.0 Super-Speed Data Switch,11 Gbps									QFN2*2-18 QFN2.5*4.5-20	PI3PCIE3212	
DZ106	High Voltage Dual-Pole Single-Throw Switch	1.1-5.5V	42	DPST	2	Data/Audio	0.13	25	340	WLCSP-6	-	
DIO1005	75MHz, Single Pole Double Throw Analog Switch	1.8-4.3	0.5	SPDT	2	Data	0.75	106	75	DFN3*3-10 MSOP-10	SGM3005	
DIO1268		1.6-4.2								DQFN-10 QFN-10	FSA2268	
DIO1523		1.8-4.2								DQFN-10	-	
DIO3166		100MHz, Single Pole and Throw Analog Switch								1.65-5.5	0.01	1
DIO1159B	100MHz, Single Pole Double Throw Analog Switch	0.01	1	SOT23-6,SC70-6 DFN1.6*1.6-6,DFN1.8*2-6 DFN1.45*1-6,DFN1.5*1-6	TS5A3159							
DIO1510	140MHz, Single Pole Double Throw Analog Switch with Negative Signal Transmission Capability	1.8-5.5	0.146		1	Data Audio	0.4	-	140	SC70-6	-	
DIO1466	170MHz, Double Pole Double Throw Analog Switch with Negative Signal Transmission Capability	1.65-5.25	0.1	DPDT	4	Data Audio	2.7	16	170	DQFN-16 TQFN3*3-16 QFN2.5*2.5-16	FSA2466,PI3A412 TS3A44159,SGM44599	
DIO1269	180MHz, Single Pole Double Throw Audio Switch with Negative Signal Transmission Capability	2.7-5.25	32	SPDT	2		1	120	180	DQFN-10	FSA2269	
DIO1713	200MHz, Single Pole and Throw Analog Switch	1.8-5.5	0.001	SPST	4	Data Audio	2.5	22	200	SOIC-16 TSSOP-16	ADG713	
DIO1567	Dual-SIM, eSIM,Single Pole Double Throw Analog Switch	1.6-4.5	0.005	SPDT		Data SIM	2.7 0.65	10 100	200 37	200 60	DQFN-16 TQFN-16	FSA2567
DIO1568		1.65-5.5	0.5	SPDT		2.7 0.85	20 100					
DIO1500	300MHz, Four Pole Single Throw Depletion Type Audio Switch	0-3.0	50	QPST	4	Data/Audio	0.5	-	300	WLCSP-12	FSA550	
DIO1501									330		-	
DIO1505	247MHz, SPST Depletion Audio Switch with Negative Swing	0-5.5	25	SPST	1		0.65	14	247	WLCSP-4	FSA515	
DIO1717	300MHz, Single Pole Double Throw Analog Switch with Negative Signal Transmission Capability	2.5-5.5	0.1	SPDT	2	Data	2.8	24	300	DQFN-10 MSOP-10	SGM3717	
DIO3712	300MHz, Single Pole Double Throw Analog Switch with Overvoltage Protection	1.8-5.5	5	SPDT		Data	4.5	10			DQFN-10	PI3A223
DIO3713	180MHz, Single Pole Double Throw Analog Switch with Negative Signal Transmission Capability		2			4	SOP14/TSSOP-14	-				
DIO1520	300MHz, Single Pole Double Throw Analog Switch	1.65-5.5	0.02	SPDT	2	Data/Audio	0.7	-	300	DQFN-10	-	
DIO1520B					1	-						
DIO1553	340MHz, Single Pole Single Throw Depletion Type Audio Switch	0-4.3	0.05		2	Audio	0.6	21	340	WLCSP-9	FSA553	
DIO1553B	340MHz, Single Pole Single Throw Depletion Type Audio Switch						0.35					
DIO3157E	>300MHz, Enhanced Low Voltage Single Pole Double Throw Analog Switch with Power-On and Power-Off Protection	1.65-5.5	0.1	SPDT	1	Data	10	16	350	SC70-6 SOT23-6	-	
DIO23157	>300MHz, Single Pole Double Throw Analog Switch	1.8-5.5	5	DPDT	2		4.5	10	>300	MSOP-10	TS5A23157	
DIO17170	383MHz, Single Pole Double Throw Analog Switch with Negative Signal Transmission Capability		0.025	SPDT	2	Audio	2	-	383	DQFN-10	-	

Analog Switch

Part number	Description	Supply voltage (V)	Icc Quiescent Current (Typ) (A)	Configuration	Number of Switches	Channels	Ron (Typ) (Ohms)	Con (Typ) (pF)	-3dB Bandwidth (MHz)	Package	Cross reference		
DIO1166	350MHz, Single Pole Single Throw Analog Switch with Overvoltage Protection	1.65-5.5	0.1	SPST	1	Data	10	16	350	SC70-5	TS5A3166 PI5A1217SB385 NC7SZ66M5X		
DIO32276	550MHz, Double Pole and Throw Audio Switch		20	DPDT	2	Audio	0.8	10	550	DQFN1.8*1.8-12	FSA2276		
DIO1646	2.5GHz, Ten Single Pole Double Throw MIPI Switches	1.65-5.0	45	SPDT	10	MIPI	5.5	1.6	2500	WLCSP-36	TS5MP646 FSA646		
DIO1647	3.5GHz, Ten Single Pole Double Throw MIPI Switches		25				7.5/8.4	1.5	3500				
DIO1648			17				6.5						
DIO1628	6GHz, Ten Single Pole Double Throw MIPI Switches	1.65-5.5	17	TPDT	6	MIPI	10	4	6000	LGA1.7*2.4-24	PI3WVR628		
DIO1634		1.65-5.0	25	SPDT	10		7.5	1.5		WLCSP-36	FSA634		
DIO1642	4GHz, Triple Pole Double Throw MIPI Switch	1.65-5.5	17	TPDT	6	I2C	10	4	4000	QFN3.4*2.5-24	FS642		
DIO74544	Low-Voltage, 4-Channel I2C SMBus Multiplexer with Interrupt Logic		50	4ch	-		-	-	-	-	0.4	TSSOP16 SOP16	TCA9546A
DIO74546	Low Voltage 4-Channel I2C and SMBus Switch with Reset Function				8		TSSOP20					TCA9544A	
DIO74548	8-Channel I2C Switch with Reset				2		-					8	I2C

Operational Amplifier

The operational amplifier continuously detects weak signals such as temperature, humidity, pressure, length, current, voltage, gas, and temperature, amplifies them, and transmits them to the system. It is one of the most important devices for signal fidelity. According to application requirements, it can be divided into ordinary operational amplifiers, high-speed operational amplifiers, low-power operational amplifiers, high-slew rate operational amplifiers, high-precision operational amplifiers, etc.

Part number	Description	Supply voltage (V)	Iq per channel (Typ)(uA)	Channels	GBW (Typ)(MHz)	Slew rate (Typ)(V/us)	Rail-to-rail	Vos @ 25°C (Max)(mV)	Input bias current (+/-) (Typ)(pA)	Package	Cross reference	
DIO2051A	0.5MHz, 16uA, Rail-to-Rail CMOS Operational Amplifier	1.8-5.5	16	1	0.55	0.32	In, Out	3.5	0.5	SOT23-5	TLV9041,OPA347 TP6001U	
DIO32051				1						5	SOT23-5 SC70-5	TLV9041,OPA347 TLV9001
DIO32051A				1						20	SOT23-5 SC70-5 DFN0.8*0.8-4	TLV9041,OPA347,TLV9001
DIO32052				2						5	SOIC-8 MSOP-8 TSOT23-8	TLV9042,OPA2347 TLV9002
DIO32054				4							SOIC-14 TSSOP-14	TLV2764,TLV9044 TLV9004
DIO32358	1.4MHz, 60uA, Rail-to-Rail I/O CMOS Amplifier	2.0-5.5	60	2	1.4	0.6	In, Out	6	5	SOIC-8 MSOP-8	TLV6002,LMV612 LMV358,OPA2348	
DIO3581				1						SOT23-5 SC70-5	LMV321,TLV6001 LMV611,OPA348	
DIO3582				2						SOIC-8 MSOP-8 DFN2*2-8	TLV6002,LMV612 LMV358,OPA2348	
DIO3584				4						SOIC-14 TSSOP-14	LMV324,TLV6004 LMV612,OPA4348	
DIO20721	10MHz, 620uA, Rail-to-Rail CMOS Operational Amplifier	2.5-5.5	620	1	10	6.5	In, Out	5	1	SC70-5 SOT23-5	TLV2361,OPA374 MCP6201	
DIO20721D				1						SOT23-6	TLV2361,OPA374	
DIO20722				2						SOIC-8,MSOP-8 TSSOP-8,DFN2*2-8 TSOT23-8	SGM8922,TLV2362 OPA2374,LMV716 TLV9062	
DIO20724				4						SOIC-14 TSSOP-14	TLV2634,OPA4374	
DIO2641	105MHz,Low Power,Super-Speed Rail-to-Rail CMOS Operational Amplifier	2.7-13.2	7000	1	105	85	In, Out	11	-	SOT23-5 SOIC-8	LHM6642	
DIO2642			7000	2		85				SOIC-8 MSOP-8	LHM6643	

Operational Amplifier

Part number	Description	Supply voltage(V)	IQ per channel (Typ)(uA)	Channels	GBW (Typ)(MHz)	Slew rate (Typ)(V/us)	Rail-to-rail	Vos @ 25°C (Max)(mV)	Input bias current (+/-) (Typ)(pA)	Package	Cross reference
DIO2644	105MHz,Low Power,Super-Speed Rail-to-Rail CMOS Operational Amplifier	2.7-13.2	7000	4	105	85	In, Out	11	-	SOIC-14 TSSOP-14	LHM6644
DIO2172	10MHz,583uA, Rail-to-Rail CMOS Operational Amplifier	3.0-5.5		2	10	7		TSOT23-8	TLV9062IPWR		
DIO20221	3MHz, 190uA, Rail-to-Rail CMOS Operational Amplifier	2.5-5.5	190	1	3	1.7		5	1	SC70-5 SOT23-5	SGM8621
DIO20222				2						MSOP-8 SOIC-8	SGM8622
DIO20224				4						SOIC-14 TSSOP-14	SGM8624
DIO20321	6MHz, 350uA, Rail-to-Rail CMOS Operational Amplifier	2.5-5.5	350	1	6	3.6		3.5	1	SOT23-5 SOIC-8	SGM8631,LMV821 TLV2361
DIO20322				2						SOIC-8 MSOP-8 TSSOP-8	SGM8632,LMV822 TLV2362
DIO20324				4						SOIC-14 TSSOP-14	SGM8634,LMV824
DIO2036				6						QFN4*4-20	-
DIO8358	1MHz, Rail-to-Rail I/O CMOS Amplifier	2.1-5.5	40	2	1	0.6		A:3.5 B:8	5	SOIC-8 MSOP-8	OPA2348,OPA2342
DIO2601	3.5MHz, Rail-to-Rail CMOS Operational Amplifier	4.5-36	950	1	3.5	2.5	Out	3.5	10	SOT23-5 SOIC-8	OPA141,SGM8291 TLC071
DIO2602				2						MSOP-8,TSSOP-8 DFN2*2-8,SOIC-8	OPA2141,SGM8292 TLC072
DIO2604				4						SOIC-14 TSSOP-14	OPA4141,TL3474A SGM8294,TLC074
DIO2841	low power,4.5MHz RRIO COMS operational amplifier	2.7-12	620	1	4.5	3		0.6	5	SC70-5	LMV841
DIO29001	400kHz, Rail-to-Rail I/O CMOS Amplifier	1.65-5.5	40	1	0.4	0.17		1.5	10	DFN0.8*0.8-4 SOT23-5,SC70-5	TLV9041,OPA347,TLV9001
DIO29002				2						SOIC-8 MSOP-8 TSOT23-8	TLV9042,OPA2347, TLV9002,TLV9062
DIO29004				4						SOIC-14 TSSOP-14	TLV2764,TLV9044,TLV9004
DIO2351	12uV offset voltage, 1.2MHz rail-to-rail CMOS high-precision operational amplifier	2.5-5.5	730	1	1.2	1		0.03	20	SOT23-5,SOIC-8	AD8551,OPA378
DIO2352				2						SOIC-8,MSOP-8 TSSOP-8	AD8552
DIO2354				4						TSSOP-14	AD8554
DIO2361	300kHz Rail-to-Rail CMOS High Precision Operational Amplifier	1.8-5.5	17	1	0.3	0.16		0.04 A:0.01 B:0.02 M:0.065	1	SC70-5,SOT23-5 SOIC-8,MSOP-8	OPA333,TLV333,OPA317 OPA330,OPA378
DIO2362				2						DFN2*2-8,DFN3*3-8 SOIC-8,MSOP-8	TLV2333,OPA2333,OPA2317 OPA2330,OPA2378
DIO2364		4		SOP-14,TSSOP-14 DFN2*3-14						TLV4333, OPA4317 OPA4330	
DIO2372		2.5-5.5		2						MSOP-8	TLV2333,OPA2333,OPA2317 OPA2330,OPA2378
DIO2381	450kHz Rail-to-Rail CMOS High Precision Operational Amplifier	2.5-5.5	40	1	0.45	0.3		A:0.005 B:0.01 C:0.02	10	SC70-5,SOT23-5 SOP-8,MSOP-8	OPA333,TLV333,OPA317,OPA330,OPA378
DIO2382				2						DFN2*2-8,DFN3*3-8 SOP-8,MSOP-8	TLV2333,OPA2333,OPA2317,OPA2330,OPA2378
DIO2384				4						TSSOP-14,SOP-14	TLV4333,OPA4317,OPA4330
DIO20381	380nA Rail-to-Rail Input/Output CMOS Operational Amplifier	1.4-5.5	0.38	1	0.005	0.0015		3	1	SOT23-5 SOIC-8 MSOP-8	SGM8141,TLV8801 LPV801,TLV379

Operational Amplifier

Part number	Description	Supply voltage(V)	IQ per channel (Typ)(μ A)	Channels	GBW (Typ)(MHz)	Slew rate (Typ)(V/ μ s)	Rail-to-rail	Vos @ 25°C (Max)(mV)	Input bias current (+/-) (Typ)(pA)	Package	Cross reference					
DIO20381D	380nA Rail-to-Rail Input/Output CMOS Operational Amplifier	1.4-5.5	0.38	1	0.005	0.0015		3	10	SOT23-6,SOIC-8 MSOP-8	SGM8141,TLV379					
DIO20182				1					DFN1.6*1.2-8 MSOP-8	-						
DIO20382				2					SOIC-8,MSOP-8	SGM8142,TLV8802,LPV802 TLV2369,TLV2379,TLV522						
DIO20384				4					SOP-14,TSSOP-14	TLV4379						
DIO20881	600nA Rail-to-Rail Input/Output CMOS Operational Amplifier	1.4-5.5	0.6	1	0.014	0.0035		3.5	10	SOT23-5,SOIC-8 MSOP-8	MCP6041,TP2111 TP2121					
DIO20881D				2					SOT23-6,SOIC-8 MSOP-8,DFN1.2*1.2-6	MCP6043,TP2111N TP2121N						
DIO20882				4					SOIC-8,MSOP-8	MCP6042,TLV2369,TLV522 TP2112,TP2122						
DIO20884									SOP-14,TSSOP-14	MCP6044,TP2114 TP2124						
DIO20991	60 μ V Ultra-low Distortion Voltage, Low Power Amplifier	1.8-5.5	7	1	0.11	0.08	In, Out	0.06	50	DFN1.2*1.2-6	-					
DIO20491	4 μ A Rail-to-Rail Input/Output CMOS Operational Amplifier		4		4	0.15		0.07	0.85	1	SOT23-5,DFN2*2-6	SGM8049-1,TLV379 LMP2231,OPA379,OPA336				
DIO20921	4 μ A Rail-to-Rail Input/Output CMOS Operational Amplifier								SOT23-5,DFN2*2-6 SOIC-8,MSOP-8		SGM8521,TP1511,LMP2231 TLV379,TLV379,LPV321-N					
DIO20921D											SOT23-6,SOIC-8 MSOP-8	-				
DIO20922									2		SOIC-8,MSOP-8	SGM8522,TP1512,LMP2232 TLV2379,LPV358-N				
DIO20924									4		SOP-14 TSSOP-14	SGM8524,TP1514,LMP2234 TLV4379,LPV324-N				
DIO2361L	110kHz, 7 μ A, Operational Amplifier								7		1	0.11	0.08	0.04 A:0.01 B:0.02 M:0.065	SC70-5,SOT23-5 SOIC-8,MSOP-8	MCP6V11,OPA333,TLV333 OPA317,OPA330,OPA378
DIO2362L									17		2	0.3	0.16	0.035	DFN2*2-8,DFN3*3-8 SOIC-8,MSOP-8	MCP6V12,TLV2333,OPA2333 OPA2317,OPA2330,OPA2378
DIO2362H															DFN2*2-8	-
DIO2331	30kHz Rail-to-Rail CMOS High Precision Operational Amplifier								1		1	0.03	0.01	0.015	DFN1.5*1.5-6,SOT23-5 SOIC-8,MSOP-8	MCP6031,OPA349
DIO2331D												SOT23-6	-			
DIO2331LN6	30kHz Rail-to-Rail CMOS High Precision Operational Amplifier	1.8-5.5	1	1	0.03	0.01	In,Out	0.015	1	DFN1.5*1.5-6	-					
DIO2333				1						SOIC-8,MSOP-8	MCP6033					
DIO2332				2							MCP6032,TLV2369,OPA2349					
DIO2334				4						SOIC-8,MSOP-8 SOIC-14,TSSOP-14	MCP6034					
DIO2331B				1						SOT23-5,SOIC-8 MSOP-8	-					
DIO2332B				2						MSOP-8,SOIC-8						
DIO2333B				1						TSSOP-14,SOIC-14						
DIO2334B				4						TSSOP-14,SOIC-14						
DIO2701	6MHz High Voltage Rail-to-Rail Output Operational Amplifier	4.5-32	1400	1	6	20	Out	3.5	10	SOT23-5,SOIC-8	-					
DIO2702				2						SOIC-8,MSOP-8 TSSOP-8						
DIO2704				4						TSSOP-14,SOIC-14						

High Precision Operational Amplifier

Part number	Description	Supply voltage (V)	I _q per channel (Typ)(μ A)	Channels	GBW (Typ)(MHz)	Gain Selection	Rail-to-rail	V _{os} @ 25°C (Max)(mV)	Input bias current (+/-)(Typ)(μ A)	Package	Cross reference
DIO2352A	High precision, 2.5kHz, Rail-to-Rail, CMOS Operational Amplifier	2.5-5.5	730		0.0025	50V/V	In, Out	0.08	5	SOIC-8 TSSOP-8 DFN2*2.2-8	-
DIO2352B						100V/V					-
DIO2213	Voltage Output, High or Low-Side Measurement, Bi-Directional Zero-Drift Series Current Shunt Monitor	3-40V	470	1	0.23	50V/V	-	0.15	-	SOT23-6 DFN2*2-6	-
DIO2210	70 V Common-Mode Voltage, High-Side Current-Sense Amplifier with Comparator and Refer				0.44	20V/V		MSOP-8 SOIC-8		INA200	
DIO2211					0.36	50V/V				INA201	
DIO2212					0.22	100V/V				INA202	
DIO2399A	Voltage Output, High or Low Voltage Side Measurement, Bi-Directional Zero Drift Series and Parallel Current Monitor	2.7-26	65		0.005	50V/V	In, Out	0.15	28	SC70-6 DQFN1.4*1.8-10	INA213
DIO2399B						100V/V				SC70-6 DQFN1.4*1.8-10	INA214

Temperature Sensors

Part number	Description	Supply voltage(V)	Remote channels	Temp resolution (max) (Bits)	Local sensor Inaccuracy (max)	Remote sensor Inaccuracy (max)	Addresses	Features	Package	Cross reference
DIO1414	Multiple Channel $\pm 1^\circ\text{C}$ Temperature Sensors with Beta Compensation	3.0 V to 3.6 V	3	12	$\pm 1^\circ\text{C}$	$\pm 1^\circ\text{C}$	6	REC/ ALERT/ THERM/ ADDR	MSOP-10, DFN3*3-10	EMC1414
DIO1413			2							EMC1413/TMP432
DIO1412			1							MSOP-8, DFN3*3-8
DIO1411	Temperature Sensor With I2C and SMBus Interface in Industry		0			-		ALERT/ ADDR	MSOP-8	TMP75/TMP175

USB Redriver

Part number	Description	Supply voltage(V)	Quiescentcurrent (max) (μ A)	Date Rates	Quiescentcurrent (max) (μ A)	Date Rates	EQ (Max)	DE(Max)	Operating temperature range ($^\circ\text{C}$)	Package	Cross reference
DIO36812	USB 3.2 Gen1 redriver	1.71-1.89V	2.5	5Gbps	2.5	5Gbps	-14dB	-4dB	-40 to 85	QFN4*4-24	PS8719

Comparators

A comparator is an extension of an operational amplifier that compares two or more data items to determine whether they are equal or to determine the relationship and order between them. The main parameters of the comparator include rotation speed, static power consumption, accuracy, etc.

Part number	Description	supply voltage (V)	Channels	Output type	Propagation delay time(μ s)	Vos@25°C (mV)	Rail-to-rail	Package	Cross reference	
DIO20871	CMOS Input, Push-Pull Output Comparator	1.4-5.5	1	Push-pull	1.3	5	In,Out	SOT23-5 SC70-5	SGM8701,TLV3491, LMV7291,TLV1701	
DIO20871A									LMV331,LMV7271	
DIO20872								2	SOIC-8 MSOP-8	TLV3492,TLV7256
DIO20872B										DFN1.6*1.2-8
DIO20874								4	SOP-14 TSSOP-14	TLV3494
DIO20875								1	SOIC-8 MSOP-8	SGM8704
DIO20891	Micropower CMOS Input RRIO Push-Pull Output Comparator	1.4-5.5	1	Push-pull	8	5	In,Out	SC70-5 DFN1*1-6 DFN0.8*0.8-4	TLV3691	
DIO20892								2	DFN1.6*1.2-8	-
DIO20871B	CMOS Input, Open Drain Output Comparator	1.4-5.5	1	Open-drain	1.3	5	In,Out	SOT23-5	-	
DIO20874B								4	QFN3*3-16	-
DIO331	CMOS Input, Open Drain Output Comparator	1.8-5.5	1	Open-drain	0.084	5	In,Out	SOT23-5 SC70-5	LMV331	
DIO393								2	SOIC-8 MSOP-8	LMV393
DIO20903	High Voltage, Dual Differential Comparator with Open-Drain Output	2.7-36	2	Open-drain	0.17	4.5	In	SOIC-8,MSOP-8 DIP8,TSSOP-8, TSOT23-8,DFN2*2-8	LM2903	

Class D Audio Amplifier

Part number	Description	Supply voltage (V)	IQ (Typ) (mA)	Audio input type	Architecture	Speaker Channel	Load (Min) (ohms)	Output power (W)	SNR (dB)	THD + N @ 1 kHz (%)	Closed/open loop	Package	Cross reference
DIO2140	2.8W Analog Input Class D Audio Amplifier with Variable Gain and Short-Circuit Protection	2.5-5.5	4.6	Analog Input	Class-D	Mono	4	2.8	97	0.07	Open	DFN-8 MSOP-8	PAM8303D

Level Shift

Part number	Description	VCCA (V)	VCCB (V)	Applications	Number of bits	Data rate (max) (Mbps)	Operating temperature range (°C)	Package	Cross reference
DIO74557	SIM Card Interface Level Shifter with EMI Filter and ESD Protection	1.08-1.95	1.65-3.6	SIM Card	3	10MHz	-40 to 85	WLCSP-9 QFN1.8*1.4-10	NVT4557
DIO7416	Ultra-Low-Voltage I2C Translator with Rise Time	1.08-3.6	1.08-3.6	I2C	2	-		DFN1.4*1-8 DFN1.35*0.8-8 TSOT23-8	TCA9416
DIO74134	1-Bit Unidirectional Voltage Level Shifter			General	1	-		DFN1.45*1.0-6 DFN1*1-6,SC70-5	N74AUP1T34
DIO7S102	2bit bidirectional voltage level translator	1.08-3.6	1.65-5.5	I2C, MDIO,I2S, JTAG, SPI, UART	2	100Mbps (Push pull) 2Mbps (Opendedrain)		VSSOP-8	TXS0102
DIO7S104	4bit bidirectional voltage level translator				4			TSSOP-14 UQFN-12	TXS0104
DIO7S108	8bit bidirectional voltage level translator				8			TSSOP-14 UQFN-12 VQFN3.5*3.5-14	TXS0108
DIO7B102	2bit bidirectional voltage level translator			I2S, JTAG, SPI, UART	2	100Mbps (Push pull)		TSSOP-20 QFN-20	TXB0102
DIO7B104	4bit bidirectional voltage level translator				4			TSSOP-14 UQFN-12 VQFN3.5*3.5-14	TXB0104
DIO7B108	8bit bidirectional voltage level translator				8			TSSOP-20 QFN-20	TXB0108

Video Filter Driver

A video filter is a software component used to decode audio and video. Compared to passive LC filters and separate drivers, video filters provide better image quality and are particularly suitable for standard video signals, such as TV and set-top box.

Part number	Description	Supply voltage(V)	Resolution	Channels	Disable	-3dB Bandwidth(MHz)	Package	Cross reference
DIO2514	Single Channel SD Video Filter	3.135-5.5	SD	1	Yes	11.8	SOT23-6	SGM9114
DIO2554G/H	Four Channel SD Video Filter			4	No	11	MSOP-10 TSSOP-14	FMS6144A SGM9124
DIO2561	Single Channel SD Video Filter			1		11.8	SC70-5 SOIC-8	SGM9113
DIO2571	Single Channel SD Video Filter					FMS6141 SGM9111		
DIO2591	Single Channel SD Video Filter			Yes	11.8	SOT23-6 SC70-6	SGM9121	
DIO2663	Three Channel HD Video Filter	3.135-5.25	HD	3	No	35	TSSOP-14	FMS6363 NCS2563
DIO2664	Single Channel SD, Three Channel HD Video Filter		SD,HD	4		9 37		FMS6364A
DIO2673	Three Channel HD Video Filter		HD	3		80	EP-SOIC8	-
DIO2674	Single Channel SD, Three Channel HD Video Filter		SD HD	4		10 80	TSSOP-14	-
DIO2684						9 37	EP-MSOP-10	SGM9128
DIO2694					10 80	SGM9135		
DIO2763	Three Channel HD Video Filter		HD	3	170	SOIC-8	SGM9117	
DIO2764	Four Channel SD Video Filter		SD Bypass	4	Yes	9 200	TSSOP-14	THS7374
DIO2774	Single Channel SD, Three Channel HD Video Filter		SD,HD Bypass			10 40 110		THS7376

Video Filter + Audio Line Driver Combo Chip

Part number	Description	Supply voltage(V)	Audio Line Driver		Video Filter Driver			Package			
			VRMS (V)	Channels	Channels	Resolution	-3dB Bandwidth(MHz)				
DZ001	3VRMS Audio Line Driver + Single Channel SD Video Filter + 0.4W Mono Audio Amplifier	3.135-5.5	3	2	1	SD	11.8	EP-TSSOP20			
DIO2501	2VRMS Audio Line Driver + Single Channel SD Video Filter	3.0-3.6	2					SOIC-14			
DIO2511H	2VRMS Audio Line Driver + Single Channel SD Video Filter	3.135-5.5	3					SOP-16 TSSOP-16			
DIO2524	2VRMS Audio Line Driver + Four Channel SD Video Filter		2					TSSOP-24			
DIO2611H	3VRMS Audio Line Driver + Single Channel SD Video Filter		3					TSSOP-16			
DIO2614	2VRMS Audio Line Driver + 1 Channel SD 3 Channel HD Video Filter	3.0-3.6	2					4	SD HD	9 37	TSSOP-24 EP-TSSOP-28
DIO2621H	3VRMS Audio Line Driver + Single Channel SD Video Filter	3.135-5.5	3					1	SD	11.8	TSSOP20
DIO2624	2VRMS Audio Line Driver + 1 Channel SD 3 Channel HD Video Filter	3.0-3.6	2					4	SD HD	9 37	TSSOP-24 EP-TSSOP-28
DIO2724										10 80	

APFC Constant Current LED Driver - Flyback Topology

A large portion of the power supply topology of choice in the LED lighting market is flyback because these devices allow electrical isolation between the LED and the AC line, which is a safety requirement for most LED lights. Main parameters such as output power, efficiency, PFC, THD, line regulator, package size, etc.

Part number	Description	Supply voltage(Vac)	IQ(μA)	THD	Power Factor (>)	Quick Start(ms)	FMAX(KHz)	Internal MOSFET	NTC Terminal	Work Mode	Features	Package	Cross reference
DIO8604S	Single Stage Flyback & PFC Regulator With Primary Side Control For LED Lighting, Built-in MOSFET	90-277	260	<5%	0.95	<500	115	Y	N	QR/Flyback/CC	OVP/OTP SCP/OLP	SOIC-8	-
DIO8650D	Single Stage Flyback & PFC Controller With Primary Side Control For LED Lighting			<10%				N	N			SOT23-6 SOIC-8	SY5830
DIO8650E				Y				SOIC-8	-				
DIO8652				SOIC-8				-					

APFC Constant Current LED Driver - Buck Topology

In a non-isolated LED driver, there is no power transformer and no optocoupler. Non-isolation means that the output terminal and input terminal are directly electrically connected. This is a low cost LED driver solution. Main parameters such as output power, efficiency, PFC, THD, line regulator, package size, etc.

Part number	Description	Supply voltage (Vac)	IQ(μA)	THD	Power Factor (>)	Start Time(<ms)	FMAX(KHz)	Internal MOSFET	NTC Terminal	Work Mode	Features	Package
DIO8804	Single Stage Buck PFC Regulator for LED Lighting, Built-in MOSFET	90-277	260	15%	0.9	500	115	Y	N	QR/BUCK/CC	OVP/OTP SCP/OLP	SOIC-8
DIO8850	Single Stage Buck PFC Controller for LED Lighting						115	N	N	SOT23-6 SOIC-8		
DIO8850B							125	Y	SOIC-8			
DIO8852							SOIC-8					

APFC Constant Current LED Driver - Boost Topology

Part number	Description	Supply voltage(Vac)	IQ(uA)	Power Factor (>)	THD	FMAX(KHz)	Internal MOSFET	NTC Terminal	Work Mode	Features	Package
DIO8904B	Single Stage Boost & PFC driver Without Auxiliary Winding for LED Lighting,Built-in MOSFET	90-277	130	0.95	<10%	110	Y	N	DCM/BOOST	OLP/OTP	SOIC-8
DIO8950	Single Stage Boost & PFC Controller Without Auxiliary Winding For LED Lighting					130					

APFC Constant Voltage LED Driver - Flyback Topology

Part number	Description	Supply voltage(Vac)	Operating Current(mA)	THD	Power Factor (>)	Start Current (uA)	Quick Start(ms)	FMAX(KHz)	Internal MOSFET	NTC Terminal	Work Mode	Features	Package
DIO8105	Single Stage Flyback & PFC Controller with PSR CV Control For LED Lighting	90-277	1	<20%	0.9	10	<500	105	N	N	Flyback/QR/CV	OCP/OVP OTP/SCP	SOT23-6 SOIC-8

Constant Current LED Driver - Linear Topology

Part number	Description	Supply voltage(Vac)	IQ(uA)	Power Factor (>)	Current Ripple	Internal MOSFET	NTC Terminal	Work Mode	Features	Package
DIO8450	TRIAC Dimmable, High Efficiency High compatibility Constant current Linear Driver,Built-in MOSFET	120	240	0.8	-	Y	N	CC	OTP	EP-SOIC8
DIO84512					<±1%					

DCDC Constant Current LED Driver - Buck Topology

Buck LED drivers are suitable for applications where the input voltage is higher than the LED voltage, such as many automotive or industrial applications. These LED drivers provide the highest efficiency, lowest noise, and simplest peripheral components. Main parameters such as output power, efficiency, minimum dimming, THD, line regulator, package size, etc.

Part number	Description	Supply voltage(V)	IQ(uA)/IDN(uA)	IOUT(A)	Breakdown Voltage (V)	Dimming Mode	Dimming Step	FMAX(KHz)	Internal MOSFET	NTC Terminal	Work Mode	Features	Package
DIO8280A	High Efficiency, Up to 80V Input, 400KHz Constant Current LED Driver, Built-in MOSFET	16-85	10	2	90	PWM Analog	<0.5%	400	Y	N	Buck	OCP/OLP/ OTP/SCP	EP-SOIC8
DIO8280L		10-85		1									

Dimming Interface Converter

Part number	Description	VIN Max	IQ(uA)	Fsw(KHz)	Dimming Mode	Reference voltage of Vs	Package	Cross reference
DIO8269	High-Performance, Three-in-One, Dimming Interface Converter	60V	100	0.4~10	-	1.5V	SOIC-8	SY5867

High Frequency Synchronous Rectifier - SR

The MHz high-frequency synchronous rectifier is suitable for the GaN high-power quick charging applications. It is not only highly compatible with QR and ACF systems, but it also enables highly reliable and differentiated designs with low thermal resistance packages, which helps customers quickly implement smaller size and varied power levels of high-performance USB PD quick charging solutions.

Part number	Description	Topology	Supply voltage(V)	Frequency(Max)(kHz)	UVLO thresholds on/off (V)	Package
DIO82612	High Frequency Synchronous Rectifier Controller	Active Clamp Flyback, QR, DCM, CCM Flyback, LLC	4-28	800	4.5/4	TSOT23-6
DIO82615						SOIC8 EP-SOIC8
DIO82616						
DIO82602			TSOT23-6			

SSR-PWM Flyback Topology - PD Fast Charging

Part number	Description	Power MOS	Operating Mode	Fsw	Standby Power Consumption	VIN voltage	Package	Drive voltage/ method	Cross reference
DIO8352	20W-150W, High Frequency & High Performance Off-line Quasi-Resonant Flyback Control	External	QR	ADJ <100KHz	<50mW	Single Vin power supply 34V	SSOP-10	12V	NCP1342
DIO8355				500KHz				6V/Direct drive GaN	-
DIO8355A				350KHz		Double Vin power supply High voltage Vin			

SSR-PWM Flyback Topology - PD Fast Charging

Part number	Description	Power MOS (V)	Work mode	Frequency (kHz)	Standby power (mW)	Power(W)	Supply voltage (V)	Package
DIO83468	SSR PWM Flyback CV Series	650	CCM/DCM	65kHz	< 50mW	30W	30	SOIC-8
DIO8340		External				>30W		SOT23-6

Current Ripple Remover - Universal

Part number	Description	Supply voltage (V)	Operation Current (mA)	Input Current (max) (mA)	LED Voltage Limit Threshold(V)	Off Voltage Threshold (V)	VGATE (V)	FRIPPLE(Hz)	Internal MOSFET	Features	Package		
DIO8210C	Adaptive 100/120Hz Current Ripple Remover, Universal Type, Built-in MOSFET	10-75	0.25	350	6	9	-	100/120	Y(85V)	SLP/OTP	EP-SOIC8		
DIO8210E		10-30										1000	6
DIO8210H													
DIO8232		10-55				6							
DIO8215B		Clamp: 37		0.24		500					4	11	Y(150V)
DIO8221B	Controller for Adaptive 100/120Hz Current Ripple Removing Circuit, Universal Type	Clamp: 37	0.24	-	-	-	8	N			SOT23-6		

Ripple Remover - Filament

Part number	Description	Supply voltage (V)	Start Up Current (uA)	Input Current (max)(mA)	LEDN Compare Voltage VREF(V)	Breakdown Voltage (V)	Rdson(Ω)	Current Ripple	FRIPPLE (Hz)	Internal MOSFET(V)	Dimming Mode	Features	Package	
DIO8241	Adaptive 100/120Hz Current Ripple Remover,Filament Lamp Use	<100	1	60	6	100	16	-	100/120	100V	TRIAC	-	SOT23-3 SOT23-5 SOT89-3	
DIO8241F														
DIO8241H														
DIO8241J														
DIO8241JT														
DIO8242C														
DIO8242D					21									
DIO8242E					9									
DIO8242F2					120									
DIO8242F3					180								6	
DIO8242F4					240									
DIO8242H					24									
DIO8242Z					6									
DIO8242Z														
DIO8243					<120								20	300
DIO8244	<400	1	60	6	500	40	-		500V			-	SOT23-3 SOT23-5 SOT89-3	
DIO8244F	<500													
DIO8244H	<400													
DIO8244H													12	

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