



AUTOMOTIVE

3PEAK AUTOMOTIVE PRODUCTS SELECTION GUIDE



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Electronics

ABOUT 3PEAK

Established in 2012, 3PEAK was listed on the Shanghai Science and Technology Innovation Board on September 21, 2020. The company is committed to the research and development of high-performance, high-quality, and highly reliable integrated circuit products, including signal chains, power analog chips, mixed-signal front-ends, and embedded processors to provide customers with all-around solutions. The applications of the products cover many fields such as communication, industrial, security monitoring, medical and health, instrumentation, new energy, and automotive industry.

PRODUCTS IN AUTOMOTIVE

PRODUCT

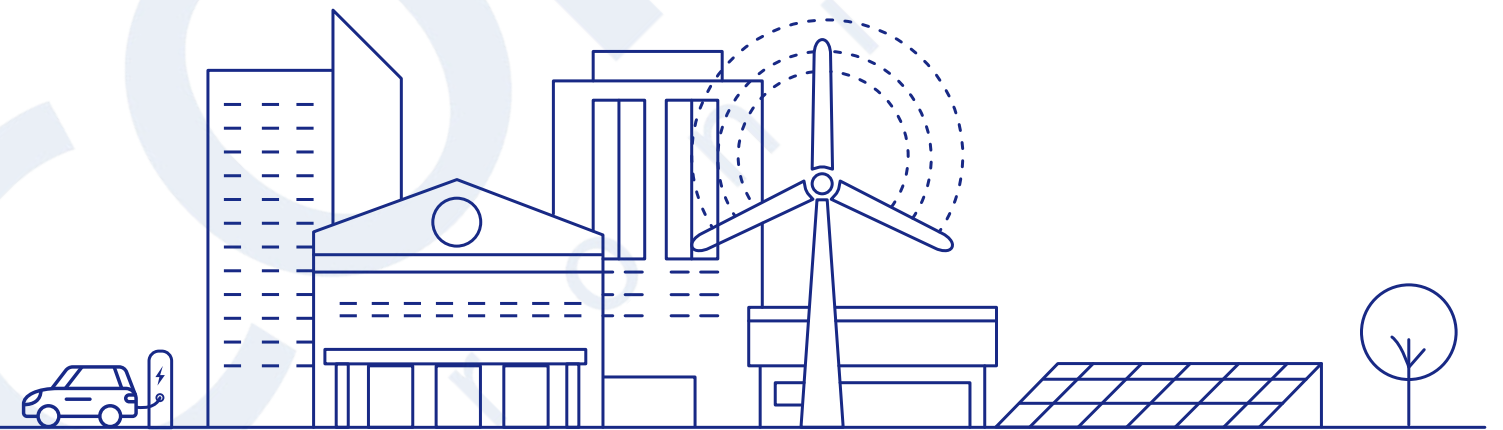
- A comprehensive analog product family provides a full signal chain and power management solution.
- Strong R&D ability, all products have their own IPs and no patent issue.
- Advanced product performance to compete with Global semiconductor companies.

QUALITY

- 3PEAK automotive parts are full AEC-Q100 qualified devices.
- Automotive parts are manufactured in TS/IATF16949 certified partner sites.
- Dedicated team to support automotive customers. Follow the “2485” rule for quality-related requirements.

SUPPLY

- All supplies are long-term partners for more than 10 years, which guarantees stable delivery.



APPLICATIONS	CAN / LIN / SBC	HALF-BRIDGE DRIVERS	LOW-SIDE DRIVERS	ISOLATED DRIVERS	DIGITAL ISOLATOR	SUPERVISORS & RESET	VOLTAGE REFERENCE	PMIC	BUCK	LDO	COMPARATORS	SPECIAL AMPLIFIERS	GENERAL OPERATIONAL AMPLIFIERS	ADC	TRANSFORMER DRIVERS
BODY CONTROL	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
ADAS	✓	✓	✓			✓	✓	✓	✓	✓	✓	✓	✓	✓	
POWERTRAIN SYSTEM	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
INFOTAINMENT & CLUSTER	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	

AUTOMOTIVE PRODUCTS LIST

Status as of May 31,2023

Category	Part Number	Description	Status	Package	Compatible P/N	Application	
Operational Amplifier	High-Speed Operational Amplifier	TPH2861-DF4R-S	5V, 8GHz, G=7 Stable, High Speed Amplifier	Sample	DFN2X2-8	/	Generic Components, xEV
	High-Voltage Operational Amplifier	LM2902A-SO2R-S	30V General Amplifier, 4 CH	Production	SOP14	LM2902	Generic Components, xEV
	High-Voltage Operational Amplifier	LM2902A-TS2R-S	30V General Amplifier, 4 CH	Production	TSSOP14	LM2902	Generic Components, xEV
	High-Voltage Operational Amplifier	LM2904A-SO1R-S	30V, 2CH, General Amplifier	Production	SOP8	LM2904	Generic Components, xEV
	High-Voltage Operational Amplifier	LM2904A-TS1R-S	30V, 2CH, General Amplifier	Production	TSSOP8	LM2904	Generic Components, xEV
	High-Voltage Operational Amplifier	LM2904A-VS1R-S	30V, 2CH, General Amplifier	Production	MSOP8	LM2904	Generic Components, xEV
	High-Voltage Operational Amplifier	TP2261L1-S5TR-S	36V, 3.5MHz Amplifier	Sample	SOT23-5	NCS20072	Generic Components, xEV
	High-Voltage Operational Amplifier	TP2262L1-SO1R-S	36V, 3.5MHz Amplifier, 2 CH	Production	SOP8	NCS20072	Generic Components, xEV
	High-Voltage Operational Amplifier	TPA1881Q-S5TR-S	36V OPA, 12MHz, 50uV, 1ch	Sample	SOT23-5	/	Generic Components, xEV
	High-Voltage Operational Amplifier	TPA1882Q-SO1R-S	36V OPA, 12MHz, 50uV, 2ch	Sample	SOP8	OPA2197	Generic Components, xEV
	High-Voltage Operational Amplifier	TPA1882Q-VR-S	36V, 12MHz, 50uV Vos, Zero-drift Amplifier	Production	MSOP8	OPA2197	Generic Components, xEV
	High-Voltage Operational Amplifier	TPA2644-SO2R-S	36 V, 1 MHz OPA, High PSRR, 4 CH	Sample	SOP14	/	Generic Components, xEV
	Micropower Operational Amplifier	TP1561AL1-S5TR-S	5V, 1 CH, 6MHz Amplifier	Production	SOT23-5	LMV841	Generic Components, xEV
	Micropower Operational Amplifier	TP1562AL1-SO1R-S	5V, 2 CH, 6MHz Amplifier	Production	SOP8	LMV842	Generic Components, xEV
	Micropower Operational Amplifier	TP1562AL1-VS1R-S	5V, 2 CH, 6MHz Amplifier	Production	MSOP8	LMV842	Generic Components, xEV
	Micropower Operational Amplifier	TP1564AL1-SO2R-S	5V, 4 CH, 6MHz Amplifier	Production	SOP14	LMV844	Generic Components, xEV
	Zero-Drift Operational Amplifier	TPA5561Q-S5TR-S	5V, 3.5MHz, 50uV Vos, High Precision Amplifier	Production	SOT23-5	TSZ181, OPA335	Generic Components, xEV
	ISO-Amplifier	TPA8001-SOAR-S	ISO AMP: G=8.2, differential output	Sample	WSOP8	AMC1301	xEV
	ISO-Amplifier	TPA8003-SOAR-S	ISO AMP: G=1, differential output	Sample	WSOP8	AMC1311B	xEV
Analog Switch	Low Voltage Switch	TPW3188Q-TS3R-S	5 V Analog Switch, 500 MHz, 8:1, 1 CH	Production	TSSOP16	TMUX1308	Generic Components, Body Domain Control Modules
Comparators	Comparators	LM2901A-SO2R-S	30V General Comparator, 4 CH	Production	SOP14	LM2901	Generic Components, xEV
	Comparators	LM2901A-TS2R-S	30V General Comparator, 4 CH	Production	TSSOP14	LM2901	Generic Components, xEV
	Comparators	LM2903A-SO1R-S	30V, 2CH, General Comparator	Production	SOP8	LM2903	Generic Components, xEV
	Comparators	LM2903A-TS1R-S	30V, 2CH, General Comparator	Production	TSSOP8	LM2903	Generic Components, xEV
	Comparators	LM2903A-VS1R-S	30V, 2CH, General Comparator	Production	MSOP8	LM2903	Generic Components, xEV
	Comparators	LM2903DQ-SO1R-S	30V, 2CH, General Comparator	Production	SOP8	LM2903	Generic Components, xEV
	Comparators	TPA2031Q-S5TR-S	5V, 100ns Comparator	Production	SOT23-5	TS3021	Generic Components, Lidar
Data Converter	Precision ADC	TPC5120Q-TS7R-S	12 bit, 16 CH ADC	Production	TSSOP38	ADS7953-Q1	BMS, Infotainment
Interface	CAN	TPT1042Q-DF6R-S	CAN FD, 70V, Standby	Production	DFN3X3-8	TJA1042, TCAN1042	CAN Network in Vehcile, Generic Components
	CAN	TPT1042Q-SO1R-S	CAN FD, 70V, Standby	Production	SOP8	TJA1042, TCAN1042	CAN Network in Vehcile, Generic Components
	CAN	TPT1042VQ-DF6R-S	CAN FD, 70V, standby	Production	DFN3X3-8	TJA1042, TCAN1042	CAN Network in Vehcile, Generic Components
	CAN	TPT1042VQ-SO1R-S	CAN FD, 70V, standby	Production	SOP8	TJA1042, TCAN1042	CAN Network in Vehcile, Generic Components

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Category	Part Number	Description	Status	Package	Compatible P/N	Application	
Interface	CAN	TPT1042V-SO1R-S	CAN FD, 70V, standby	Production	SOP8	TJA1042, TCAN1042	CAN Network in Vehicle, Generic Components
	CAN	TPT1043Q-DFKR-S	CAN FD, 70 V, Standby, Remote Wake up	Production	DFN4.5X3-14	TJA1043, TCAN1043	CAN Network in Vehicle, Generic Components
	CAN	TPT1043Q-SO2R-S	CAN FD, 70 V, Standby, Local and Remote Wake up	Production	SOP14	TJA1043, TCAN1043	CAN Network in Vehicle, Generic Components
	CAN	TPT1044V-SO1R-S	CAN FD, 42V CAN BUS, pin5 VIO, pin8 STB	Production	SOP8	TJA1044, TCAN1044	CAN Network in Vehicle, Generic Components
	CAN	TPT1051Q-DF6R-S	CAN FD, 70V CAN BUS	Production	DFN3X3-8	TJA1051, TCAN1051	CAN Network in Vehicle, Generic Components
	CAN	TPT1051Q-SO1R-S	CAN FD, 70V CAN BUS	Production	SOP8	TJA1051, TCAN1051	CAN Network in Vehicle, Generic Components
	CAN	TPT1051VQ-DF6R-S	CAN FD, 70V CAN BUS	Production	DFN3X3-8	TJA1051, TCAN1051	CAN Network in Vehicle, Generic Components
	CAN	TPT1051VQ-SO1R-S	CAN FD, 70V CAN BUS	Production	SOP8	TJA1051, TCAN1051	CAN Network in Vehicle, Generic Components
	CAN	TPT1145NQ-DFKR-S	CAN FD, 70V, Silent, Selective Wake Up/Wake-Up Frame	Production	DFN4.5X3-14	TJA1145, TCAN1145	CAN Network in Vehicle, Generic Components
	CAN	TPT1145NQ-SO2R-S	CAN FD, 70V, Silent, Selective Wake Up/Wake-Up Frame	Production	SOP14	TJA1145, TCAN1145	CAN Network in Vehicle, Generic Components
	CAN	TPT1145Q-SO2R-S	CAN FD, 70V, Silent, Selective Wake Up/Wake-Up Frame	Production	SOP14	TJA1145, TCAN1145	CAN Network in Vehicle, Generic Components
Isolator	Digital Isolator	TPT7720F-SO1R-S	2 CH, 100 Mbps digital Isolator	Production	SOP8	ISO7720F, Si8621B	HV/LV DCDC, OBC, Traction Inverter, Charging Pile Station, BMS
	Digital Isolator	TPT7720-SO1R-S	2 CH, 100 Mbps digital Isolator	Production	SOP8	ISO7720, Si8620E	HV/LV DCDC, OBC, Traction Inverter, Charging Pile Station, BMS
	Digital Isolator	TPT7721-SO1R-S	2 CH, 100 Mbps digital Isolator	Production	SOP8	ISO7721, Si8622E	HV/LV DCDC, OBC, Traction Inverter, Charging Pile Station, BMS
	Digital Isolator	TPT7721-SOBR-S	2 CH, 100 Mbps digital Isolator	Production	WSOP16	ISO7721, Si8622E	HV/LV DCDC, OBC, Traction Inverter, Charging Pile Station, BMS
	Digital Isolator	TPT7740F-SO3R-S	4 CH, 100 Mbps digital Isolator	Production	SOP16	ISO7740F, Si8640B	HV/LV DCDC, OBC, Traction Inverter, Charging Pile Station, BMS
	Digital Isolator	TPT7741F-SO3R-S	4 CH, 100 Mbps digital Isolator	Production	SOP16	ISO7741F, Si8641B	HV/LV DCDC, OBC, Traction Inverter, Charging Pile Station, BMS
	Digital Isolator	TPT7741F-SOBR-S	4 CH, 100 Mbps digital Isolator	Production	WSOP16	ISO7741F, Si8641B	HV/LV DCDC, OBC, Traction Inverter, Charging Pile Station, BMS
	Digital Isolator	TPT7741-SOBR-S	4 CH, 100 Mbps digital Isolator	Production	WSOP16	ISO7740, Si8641E	HV/LV DCDC, OBC, Traction Inverter, Charging Pile Station, BMS
	Digital Isolator	TPT7741-SSAR-S	4 CH, 100 Mbps digital Isolator	Production	QSOP16	ISO7740, Si8641E	HV/LV DCDC, OBC, Traction Inverter, Charging Pile Station, BMS
	Digital Isolator	TPT7742F-SOBR-S	4 CH, 100 Mbps digital Isolator	Production	WSOP16	ISO7742F, Si8642B	HV/LV DCDC, OBC, Traction Inverter, Charging Pile Station, BMS
	Digital Isolator	TPT7742-SOBR-S	4 CH, 100 Mbps digital Isolator	Production	WSOP16	ISO7742, Si8642E	HV/LV DCDC, OBC, Traction Inverter, Charging Pile Station, BMS
LDO	High Voltage LDO	TPL803133Q-DF6R-S	42V/300mA Wide Input Voltage Range, 3uA Ultralow Iq LDO	Sample	DFN3X3-8	RTQ2569, TPS7B82-Q1	Generic Components
	High Voltage LDO	TPL803133Q-EV1R-S	42V/300mA Wide Input Voltage Range, 3uA Ultralow Iq LDO	Sample	EMSOP8	RTQ2569, TPS7B82-Q1	Generic Components
	High Voltage LDO	TPL803133Q-ST4R-S	42V/300mA Wide Input Voltage Range, 3uA Ultralow Iq LDO	Sample	SOT223-3	RTQ2569, TPS7B82-Q1	Generic Components
	High Voltage LDO	TPL803133-ST4R-S	42V/300mA Wide Input Voltage Range, 3uA Ultralow Iq LDO	Sample	SOT223-3	RTQ2569, TPS7B82-Q1	Generic Components
	High Voltage LDO	TPL803150Q-DF6R-S	42V/300mA Wide Input Voltage Range, 3uA Ultralow Iq LDO	Sample	DFN3X3-8	RTQ2569, TPS7B82-Q1	Generic Components
	High Voltage LDO	TPL803150Q-EV1R-S	42V/300mA Wide Input Voltage Range, 3uA Ultralow Iq LDO	Sample	EMSOP8	RTQ2569, TPS7B82-Q1	Generic Components
	High Voltage LDO	TPL803150Q-ST4R-S	42V/300mA Wide Input Voltage Range, 3uA Ultralow Iq LDO	Sample	SOT223-3	RTQ2569, TPS7B82-Q1	Generic Components
	High Voltage LDO	TPL8032ADQ-E51R-S	20V/300mA, 79dB PSRR, 5.68uVrms Ultra-low noise LDO	Production	ESOP8	TLS203	Generic Components
	High Voltage LDO	TPL803450Q-EV1R-S	42V/300mA Wide Input Voltage Range, 3uA low Iq LDO with PG and delay	Sample	EMSOP8	TPS7A66-Q1	Generic Components
	High Voltage LDO	TPL8151ADQ-E51R-S	29V/1.5A high-current LDO	Production	ESOP8	LD1086	Generic Components

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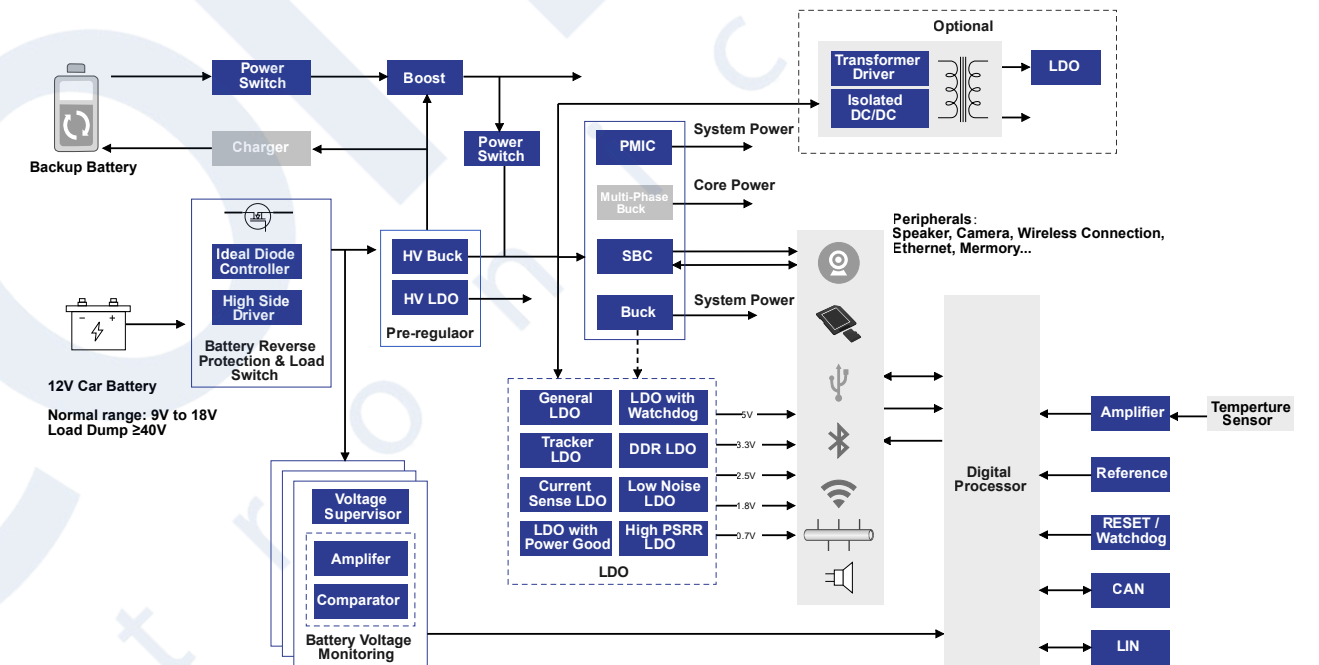
Category	Part Number	Description	Status	Package	Compatible P/N	Application	
LDO	High Voltage LDO	TPL8651Q-ES1R-S	42V/150mA Voltage Tracking LDO with Output Feedback	Sample	ESOP8	TPS7B4254-Q1, TLE4254	Generic Components
	High Voltage LDO	TPL8652FQ-ES1R-S	42V/250mA Voltage Tracking LDO with Output Feedback	Sample	ESOP8	/	Generic Components
	Low Voltage LDO	TPL905212-S5TR-S	5.5V/500mA, 82 dB PSRR, 8.6 uVrms Ultra-low Noise LVLDO	Production	SOT23-5	TPS775	Generic Components
	Low Voltage LDO	TPL905215-S5TR-S	5.5V/500mA, 82 dB PSRR, 8.6 uVrms Ultra-low Noise LVLDO	Production	SOT23-5	TPS775	Generic Components
	Low Voltage LDO	TPL905218-S5TR-S	5.5V/500mA, 82 dB PSRR, 8.6 uVrms Ultra-low Noise LVLDO	Production	SOT23-5	TPS775	Generic Components
	Low Voltage LDO	TPL905225-S5TR-S	5.5V/500mA, 82 dB PSRR, 8.6 uVrms Ultra-low Noise LVLDO	Production	SOT23-5	TPS775	Generic Components
	Low Voltage LDO	TPL905228-S5TR-S	5.5V/500mA, 82 dB PSRR, 8.6 uVrms Ultra-low Noise LVLDO	Production	SOT23-5	TPS775	Generic Components
	Low Voltage LDO	TPL905230-S5TR-S	5.5V/500mA, 82 dB PSRR, 8.6 uVrms Ultra-low Noise LVLDO	Production	SOT23-5	TPS775	Generic Components
	Low Voltage LDO	TPL905233-S5TR-S	5.5V/500mA, 82 dB PSRR, 8.6 uVrms Ultra-low Noise LVLDO	Production	SOT23-5	TPS775	Generic Components
	Low Voltage LDO	TPL905236-S5TR-S	5.5V/500mA, 82 dB PSRR, 8.6 uVrms Ultra-low Noise LVLDO	Production	SOT23-5	TPS775	Generic Components
	Low Voltage LDO	TPL910ADJQ-DF6R-S	5.5V/1A, 78 dB PSRR, 4.9 uVrms ultra-low noise, Adjustable Output-voltage LDO	Production	DFN3X3-8	TPS7A8101-Q1, RTQ2510, MPQ25001, NCV59800	Generic Components
Voltage Reference	Voltage Reference	TPR3312-S3TR-S	0.15%, 30ppm/°C, Precision Series Voltage Reference	Production	SOT23G-3	REF33	Generic Components
	Voltage Reference	TPR3320-S3TR-S	0.15%, 30ppm/°C, Precision Series Voltage Reference	Production	SOT23G-3	REF33	Generic Components
	Voltage Reference	TPR3325-S3TR-S	0.15%, 30ppm/°C, Precision Series Voltage Reference	Production	SOT23G-3	REF33	Generic Components
	Voltage Reference	TPR3330-S3TR-S	0.15%, 30ppm/°C, Precision Series Voltage Reference	Production	SOT23G-3	REF33	Generic Components
	Voltage Reference	TPR3333-S3TR-S	0.15%, 30ppm/°C, Precision Series Voltage Reference	Production	SOT23G-3	REF33	Generic Components
	Voltage Reference	TPR3340-S3TR-S	0.15%, 30ppm/°C, Precision Series Voltage Reference	Production	SOT23G-3	REF33	Generic Components
	Voltage Reference	TPR431B-S3TR-S	0.5%, Precision Shunt Voltage Reference	Production	SOT23G-3	TLV431, TL431	Generic Components
	Voltage Reference	TPR6040F20-S3TR-S	0.1%, 30ppm/°C, Precision Shunt Voltage Reference	Production	SOT23G-3	LM4040	Generic Components
	Voltage Reference	TPR6040F25-S3TR-S	0.1%, 30ppm/°C, Precision Shunt Voltage Reference	Production	SOT23G-3	LM4040	Generic Components
	Voltage Reference	TPR6040F30-S3TR-S	0.1%, 30ppm/°C, Precision Shunt Voltage Reference	Production	SOT23G-3	LM4040	Generic Components
	Voltage Reference	TPR6040F33-S3TR-S	0.1%, 30ppm/°C, Precision Shunt Voltage Reference	Production	SOT23G-3	LM4040	Generic Components
	Voltage Reference	TPR6040F40-S3TR-S	0.1%, 30ppm/°C, Precision Shunt Voltage Reference	Production	SOT23G-3	LM4040	Generic Components
	Voltage Reference	TPR6040F50-S3TR-S	0.1%, 30ppm/°C, Precision Shunt Voltage Reference	Production	SOT23G-3	LM4040	Generic Components
Supervisor	Supervisor	TPV8368SAQ-S6TR-S	High Voltage Sense and Low IQ Supervisor with Programmable Delay	Production	SOT23-6	R3121N030E-TR-KE	Generic Components
Drivers	Non-isolated Gate Driver	TPM2025Q-FC1R-S	2 CH, 5 V, 7 A, GaN Driver	Production	QFN2X2-10	LMG1025-Q1	Lidar
	Non-isolated Gate Driver	TPM27524Q-DF4R-S	2 CH, 25 V 5 A, Lowside GateDriver	Production	DFN2X2-8	UCC27524A-Q1	HV/LV DCDC, OBC, Traction Inverter Charging Pile Station
	Non-isolated Gate Driver	TPM27524Q-EV1R-S	2 CH, 25 V 5 A, Lowside GateDriver	Sample	EMSOP8	UCC27524A-Q1	HV/LV DCDC, OBC, Traction Inverter Charging Pile Station
	Non-isolated Gate Driver	TPM27524Q-SO1R-S	2 CH, 25 V 5 A, Lowside GateDriver	Production	SOP8	UCC27524A-Q1	HV/LV DCDC, OBC, Traction Inverter Charging Pile Station
	Transformer Driver	TPM6501AQ-S5TR-S	30 V, 1 A, Push-pull Isolated DCDC, 160 kHz	Sample	SOT23-5	SN6501	HV/LV DCDC, OBC, Traction Inverter, Charging Pile Station, BMS
	Transformer Driver	TPM6505AQ-S6TR-S	30 V, 1 A, Push-pull Isolated DCDC, 160 kHz	Sample	SOT23-6	SN6505	HV/LV DCDC, OBC, Traction Inverter, Charging Pile Station, BMS

APPLICATIONS



T-BOX

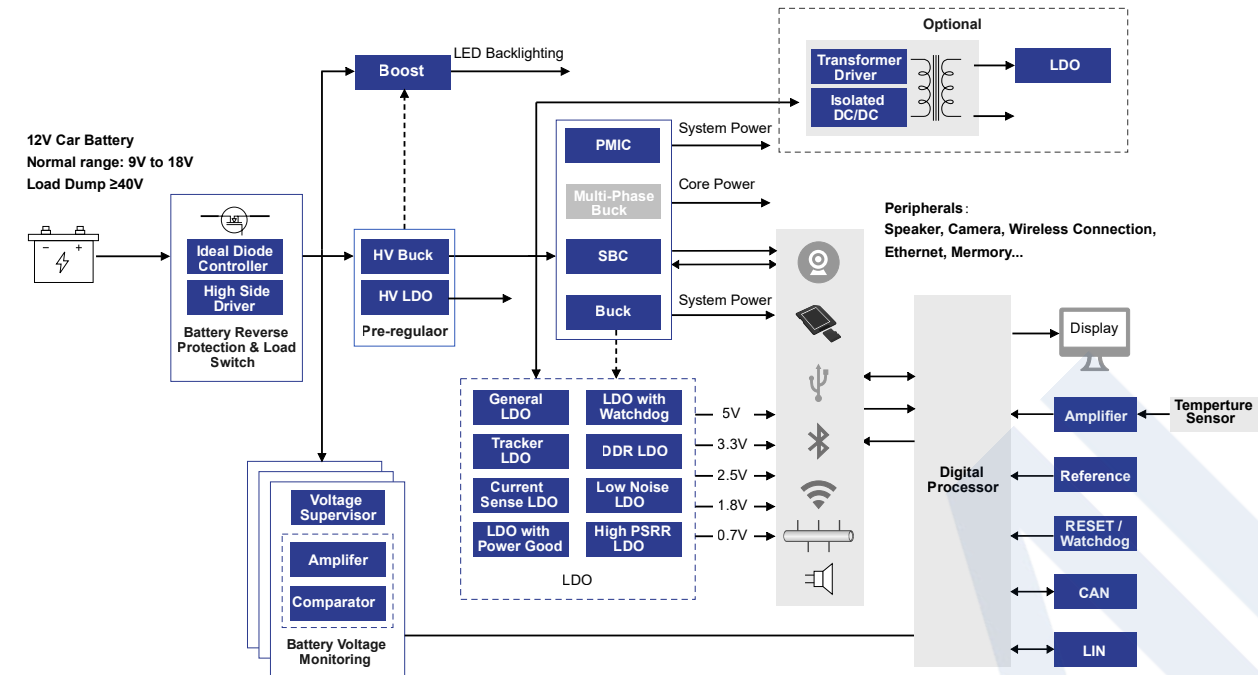
T-Box is a communication box responsible for communication inside the vehicle. Depending on the type of communication, its functions can be divided into two aspects: remote wireless communication and local communication inside the vehicle. On the one hand, T-Box receives remote control signals through wireless networks such as cellular networks, Bluetooth, and WiFi, after decoding, it reports to the vehicle control system through local networks such as the CAN bus to achieve remote control of the vehicle. On the other hand, T-Box can also read vehicle information in real-time, report it to the cloud through wireless networks, and ultimately provide feedback to the remote terminal.



PL	Part Number	Description	Target Product
CAN	TPT104xQ	CAN FDTransceiver, 70V CAN BUS, pin5 NC, pin8 Standby	TJA104x, TCAN104x
CAN	TPT1051VQ	CAN FDTransceiver, 70V CAN BUS, pin5 VIO, pin8 Silent	TJA1051, TCAN1051
CAN	TPT1145NQ	Standby / Sleep Mode, Partial networking wake up	TJA1145
Operational Amplifiers	TPA188xQ	36V OPA, 12MHz, 50uV, 1/2ch	
Operational Amplifiers	TPA5561Q	5V, 3.5MHz, Zero Drift OPA	TSZ181, OPA335
Comparator	LM2903DQ	36V General Purpose Comparator, 2ch	LM2903
LDO	TPL8031xxQ	42V/300mA Wide Input Voltage Range, Ultralow Iq LDO	RTQ2569, TPS7B82-Q1,
LDO	TPL8151ADQ	30V/1.5A high-current LDO for Automotive	LD1086
LDO	TPL865xQ	42V, 150/250mA Tracker/Voltage-Tracking LDO	TPS7B4254/53-Q1, TLE4254/53
LDO	TPL910ADJQ	5.5V/1A ultra-low noise LDO for Automotive	TPS7A8101-Q1, RTQ2510, MPQ25001, NCV59800
Reference	TPR33xx	Precision Series Voltage Reference	REF33
Reference	TPR431B	Precision Shunt Voltage Reference	TLV431, TL431
Reference	TPR6040Fxx	Voltage Reference	LM4040
Supervisor	TPV8368SAQ	High Voltage Sense and Low IQ Supervisor with Programmable Delay	R3121N030E-TR-KE

INFOTAINMENT

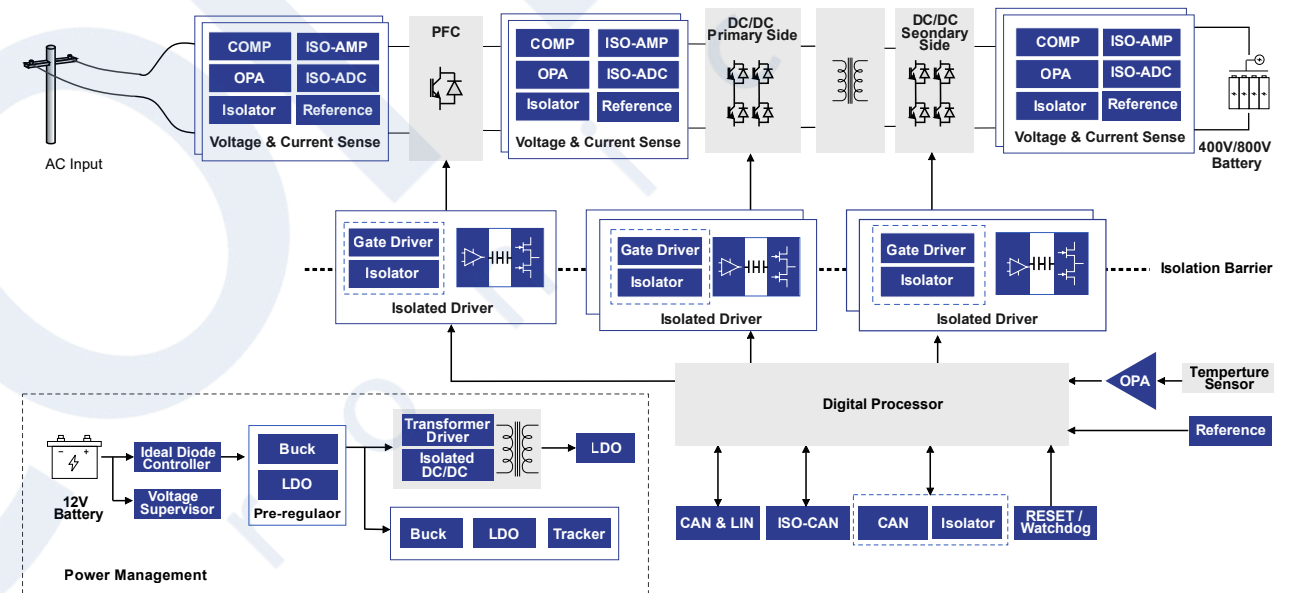
The in-vehicle entertainment system is the bridge for human-machine interaction. With the intelligence and network connectivity of vehicles, the in-vehicle entertainment system is developing towards higher integration and intelligence, which also puts higher performance requirements on the entire hardware system.



PL	Part Number	Description	Target Product
CAN	TPT104xQ	CAN FDTransceiver, 70V CAN BUS, pin5 NC, pin8 Standby	TJA104x, TCAN104x
CAN	TPT1051VQ	CAN FDTransceiver, 70V CAN BUS, pin5 VIO, pin8 Silent	TJA1051, TCAN1051
CAN	TPT1145NQ	Standby / Sleep Mode, Partial networking wake up	TJA1145
I2C	TPW3188Q	5V Analog Switch, 500MHz, 8:1	
LDO	TPL8032ADQ	20V/300mA low-noise LDO for Automotive	TLS203
LDO	TPL803450Q	42V/300mA Wide Input Voltage Range, Ultralow Iq LDO with PG	TPS7A66-Q1
LDO	TPL8151ADQ	30V/1.5A high-current LDO for Automotive	LD1086
LDO	TPL910ADJQ	5.5V/1A ultra-low noise LDO for Automotive	TPS7A8101-Q1, RTQ2510, MPQ25001, NCV59800
Reference	TPR33xx	Precision Series Voltage Reference	REF33
Reference	TPR431B	Precision Shunt Voltage Reference	TLV431, TL431
Reference	TPR6040Fxx	Voltage Reference	LM4040
Supervisor	TPV8368SAQ	High Voltage Sense and Low IQ Supervisor with Programmable Delay	R3121N030E-TR-KE

ON BOARD CHARGER (OBC)

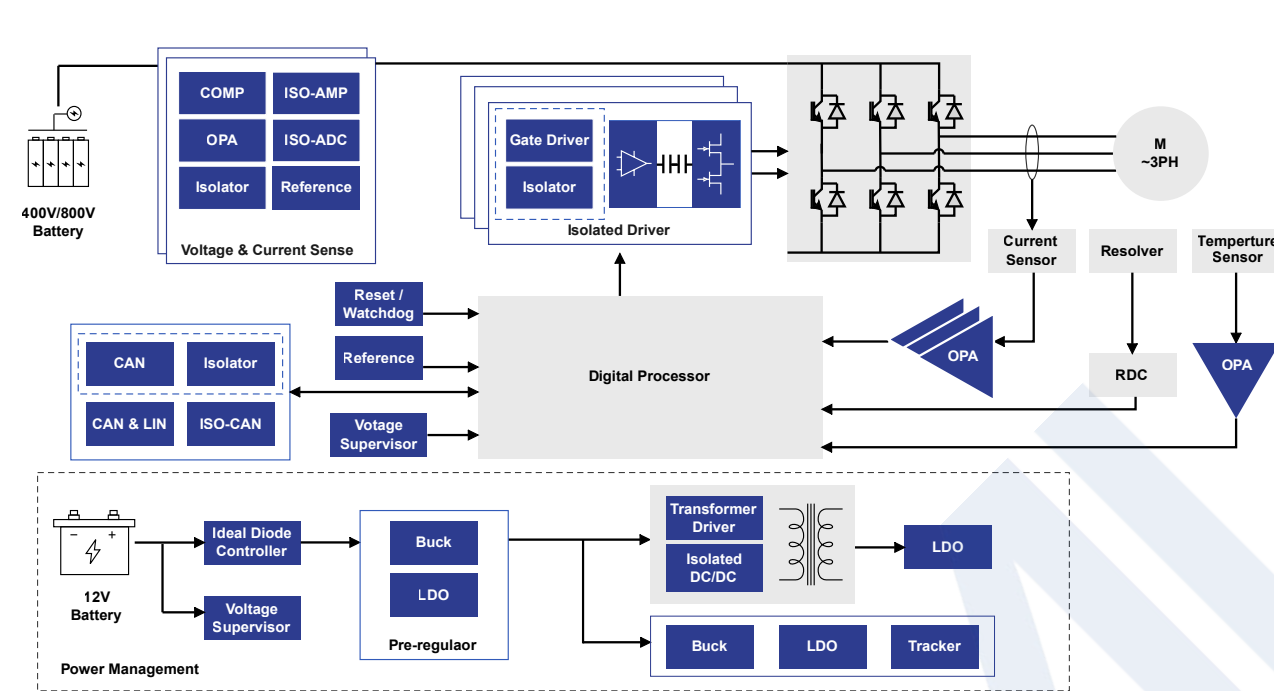
The On-Board Charger (OBC) is responsible for the charging management of the vehicle's power battery. With the rapid increase in energy density of new energy vehicles, the demand for fast charging is becoming more and more popular, and the control system of OBC is becoming more and more complex. While ensuring the efficient operation of OBC, ensuring its stability and reliability becomes increasingly important.



PL	Part Number	Description	Target Product
CAN	TPT104xQ	CAN FDTransceiver, 70V CAN BUS, pin5 NC, pin8 Standby	TJA104x, TCAN104x
CAN	TPT1051VQ	CAN FDTransceiver, 70V CAN BUS, pin5 VIO, pin8 Silent	TJA1051, TCAN1051
CAN	TPT1145NQ	Standby / Sleep Mode, Partial networking wake up	TJA1145
Isolator	TPT772x	150Mbps, 2ch	ISO772x
Isolator	TPT774x	150Mbps, 4ch	ISO774x
Operational Amplifiers	TPA188xQ	36V OPA, 12MHz, 50uV, 1/2ch	
Operational Amplifiers	TPA5561Q	5V, 3.5MHz, Zero Drift OPA	TSZ181, OPA335
Comparator	LM2903DQ	36V General Purpose Comparator, 2ch	LM2903
Comparator	TPA2031Q	5V Comparator	TS3021
LDO	TPL8032ADQ	20V/300mA low-noise LDO for Automotive	TLS203
LDO	TPL865xQ	42V, 150/250mA Tracker/Voltage-Tracking LDO	TPS7B4254/53-Q1, TLE4254/53
LDO	TPL9052xx	500mA Ultra-low Noise LDO	TPS775
Reference	TPR33xx	Precision Series Voltage Reference	REF33
Reference	TPR431B	Precision Shunt Voltage Reference	TLV431, TL431
Reference	TPR6040Fxx	Voltage Reference	LM4040
GateDriver	TPM27524Q	2CH 25V 5A Lowside GateDriver	UCC27524A-Q1
Transformer Driver	TPM650xAQ	30V 1A Isolated Transformer Driver	RTQ2569, TPS7B82-Q1
Supervisor	TPV8368SAQ	High Voltage Sense and Low IQ Supervisor with Programmable Delay	R3121N030E-TR-KE

TRACTION INVERTER

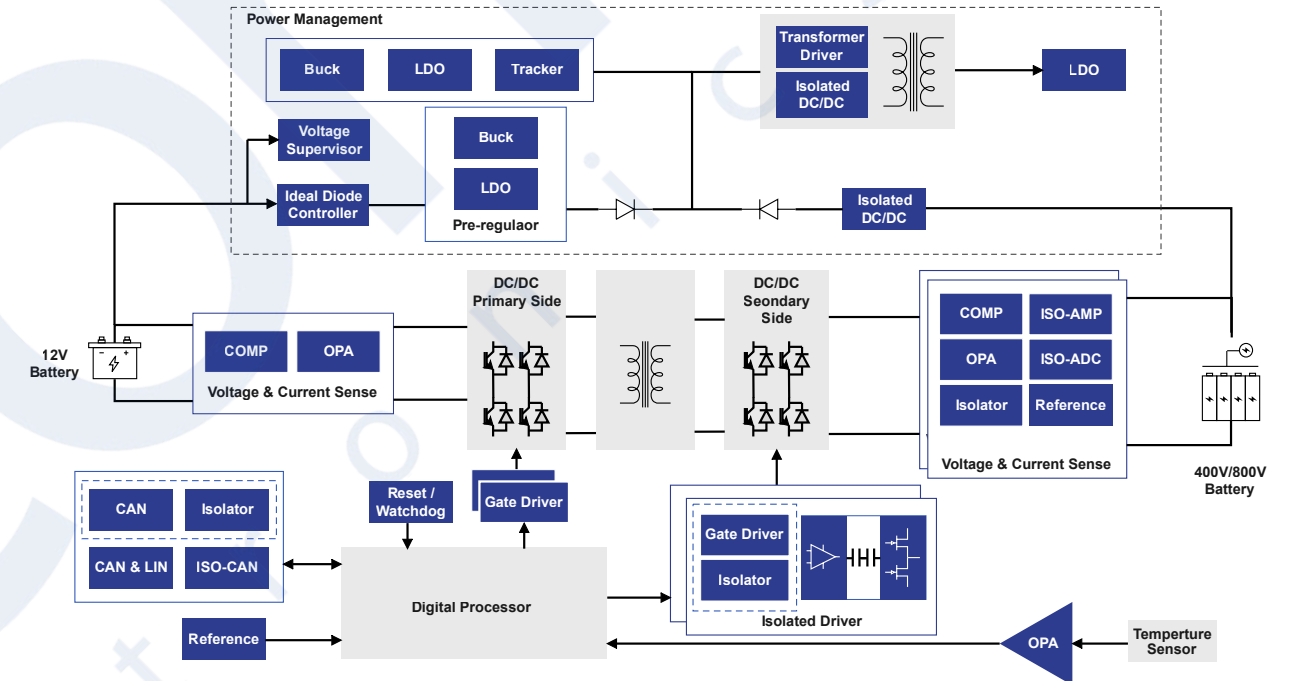
The traction motor is one of the core power devices of new energy vehicles. Its function is to convert the electrical energy of the power battery into mechanical energy to drive the vehicle forward. The performance differences of the traction motor will directly affect the power performance of the electric vehicle. High voltage, high speed, large torque, wide speed range, and strong overload capacity are its performance requirements, which require its drive system to be featured with high reliability, steady-state accuracy, and dynamic performance.



PL	Part Number	Description	Target Product
CAN	TPT104xQ	CAN FDTransceiver, 70V CAN BUS, pin5 NC, pin8 Standby	TJA104x, TCAN104x
CAN	TPT1051VQ	CAN FDTransceiver, 70V CAN BUS, pin5 VIO, pin8 Silent	TJA1051, TCAN1051
CAN	TPT1145NQ	Standby / Sleep Mode, Partial networking wake up	TJA1145
Isolator	TPT772x	150Mbps, 2ch	ISO772x
Isolator	TPT774x	150Mbps, 4ch	ISO774x
Operational Amplifiers	TPA188xQ	36V OPA, 12MHz, 50uV, 1/2ch	
Operational Amplifiers	TPA5561Q	5V, 3.5MHz, Zero Drift OPA	TSZ181, OPA335
Comparator	LM2903DQ	36V General Purpose Comparator, 2ch	LM2903
Comparator	TPA2031Q	5V Comparator	TS3021
LDO	TPL8032ADQ	20V/300mA low-noise LDO for Automotive	TLS203
LDO	TPL865xQ	42V, 150/250mA Tracker/Voltage-Tracking LDO	TPS7B4254/53-Q1, TLE4254/53
LDO	TPL9052xx	500mA Ultra-low Noise LVLDO	TPS775
Reference	TPR33xx	Precision Series Voltage Reference	REF33
Reference	TPR431B	Precision Shunt Voltage Reference	TLV431, TL431
Reference	TPR6040Fxx	Voltage Reference	LM4040
GateDriver	TPM27524Q	2CH 25V 5A Lowside GateDriver	UCC27524A-Q1
Transformer Driver	TPM650xAQ	30V 1A Isolated Transformer Driver	RTQ2569, TPS7B82-Q1
Supervisor	TPV8368SAQ	High Voltage Sense and Low IQ Supervisor with Programmable Delay	R3121N030E-TR-KE

HV/LV DCDC

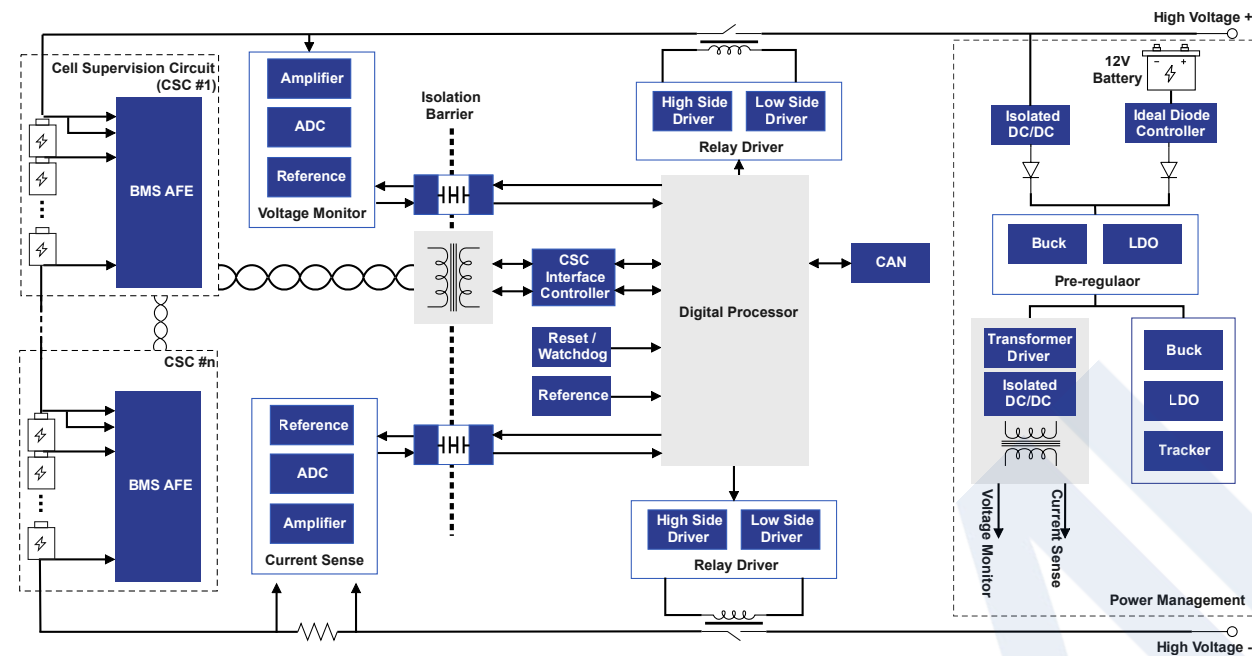
The power source of an electric vehicle comes from a high-voltage power battery, but its control systems such as the cabin, body, and chassis are still powered by a 12-V battery. The role of the high-low voltage DC converter is to convert the electrical energy of the power battery of the electric vehicle into low-voltage 12-V battery energy, thereby providing energy for the control system.



PL	Part Number	Description	Target Product
CAN	TPT104xQ	CAN FDTransceiver, 70V CAN BUS, pin5 NC, pin8 Standby	TJA104x, TCAN104x
CAN	TPT1051VQ	CAN FDTransceiver, 70V CAN BUS, pin5 VIO, pin8 Silent	TJA1051, TCAN1051
CAN	TPT1145NQ	Standby / Sleep Mode, Partial networking wake up	TJA1145
Isolator	TPT772x	150Mbps, 2ch	ISO772x
Isolator	TPT774x	150Mbps, 4ch	ISO774x
Operational Amplifiers	TPA188xQ	36V OPA, 12MHz, 50uV, 1/2ch	
Operational Amplifiers	TPA5561Q	5V, 3.5MHz, Zero Drift OPA	TSZ181, OPA335
Comparator	LM2903DQ	36V General Purpose Comparator, 2ch	LM2903
Comparator	TPA2031Q	5V Comparator	TS3021
LDO	TPL8032ADQ	20V/300mA low-noise LDO for Automotive	TLS203
LDO	TPL865xQ	42V, 150/250mA Tracker/Voltage-Tracking LDO	TPS7B4254/53-Q1, TLE4254/53
LDO	TPL9052xx	500mA Ultra-low Noise LVLDO	TPS775
Reference	TPR33xx	Precision Series Voltage Reference	REF33
Reference	TPR431B	Precision Shunt Voltage Reference	TLV431, TL431
Reference	TPR6040Fxx	Voltage Reference	LM4040
GateDriver	TPM27524Q	2CH 25V 5A Lowside GateDriver	UCC27524A-Q1
Transformer Driver	TPM650xAQ	30V 1A Isolated Transformer Driver	RTQ2569, TPS7B82-Q1
Supervisor	TPV8368SAQ	High Voltage Sense and Low IQ Supervisor with Programmable Delay	R3121N030E-TR-KE

AUTOMOTIVE BMS

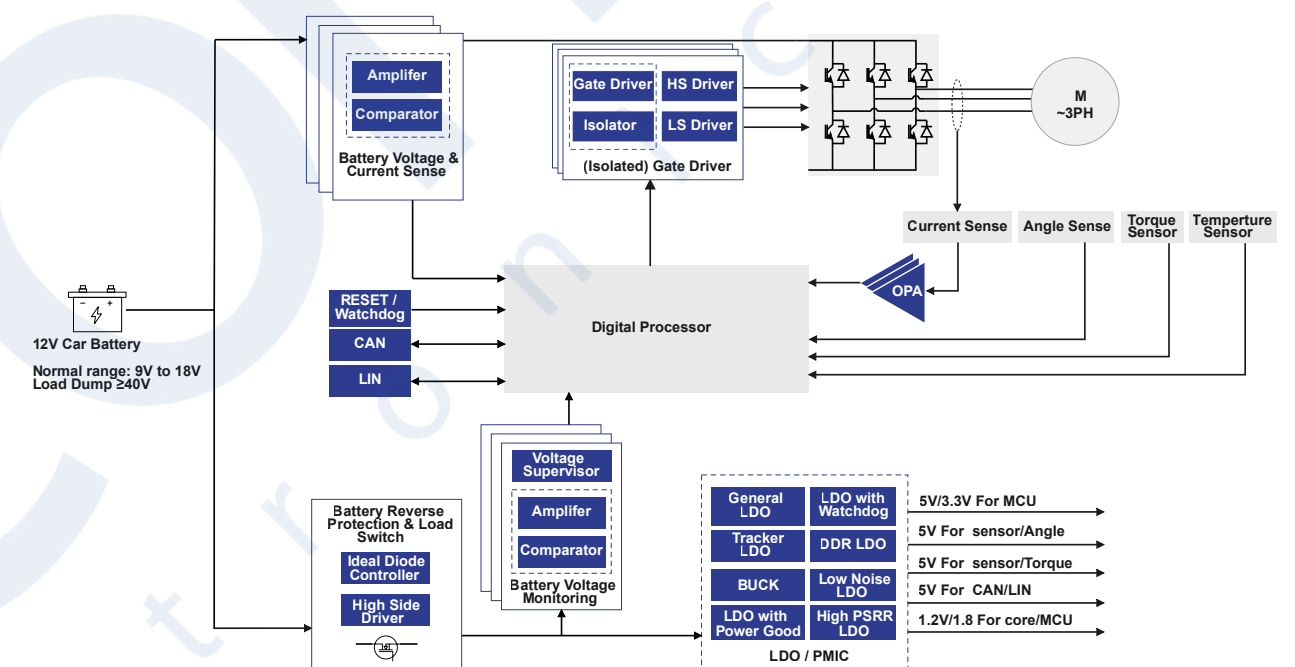
The vehicle power battery is the power source of electric vehicles. It has a high capacity and high energy density. The vehicle power battery works in a complex environment with long service life and requires very high reliability. The on-board battery management system needs to meet requirements such as high control precision and low system complexity. The integration of BMS AFE, which combines signal monitoring and conditioning circuits, simplifies circuit design, thereby improving battery performance and system reliability.



PL	Part Number	Description	Target Product
CAN	TPT104xQ	CAN FDTransceiver, 70V CAN BUS, pin5 NC, pin8 Standby	TJA104x, TCAN104x
CAN	TPT1051VQ	CAN FDTransceiver, 70V CAN BUS, pin5 VIO, pin8 Silent	TJA1051, TCAN1051
CAN	TPT1145NQ	Standby / Sleep Mode, Partial networking wake up	TJA1145
Isolator	TPT772x	150Mbps, 2ch	ISO772x
Isolator	TPT774x	150Mbps, 4ch	ISO774x
Operational Amplifiers	TPA188xQ	36V OPA, 12MHz, 50uV, 1/2ch	
Operational Amplifiers	TPA5561Q	5V, 3.5MHz, Zero Drift OPA	TSZ181, OPA335
Comparator	LM2903DQ	36V General Purpose Comparator, 2ch	LM2903
Comparator	TPA2031Q	5V Comparator	TS3021
Precision ADC	TPC5120Q	12bit,16ch, Precision ADC	ADS7953-Q1
LDO	TPL8031xxQ	42V/300mA Wide Input Voltage Range, Ultralow Iq LDO	RTQ2569, TPS7B82-Q1,
LDO	TPL865xQ	42V, 150/250mA Tracker/Voltage-Tracking LDO	TPS7B4254/53-Q1, TLE4254/53
LDO	TPL9052xx	500mA Ultra-low Noise LVLDO	TPS775
Reference	TPR33xx	Precision Series Voltage Reference	REF33
Reference	TPR431B	Precision Shunt Voltage Reference	TLV431, TL431
Reference	TPR6040Fxx	Voltage Reference	LM4040
GateDriver	TPM27524Q	2CH 25V 5A Lowside GateDriver	UCC27524A-Q1
Transformer Driver	TPM650xAQ	30V 1A Isolated Transformer Driver	RTQ2569, TPS7B82-Q1

ELECTRIC POWER STEERING (EPS)

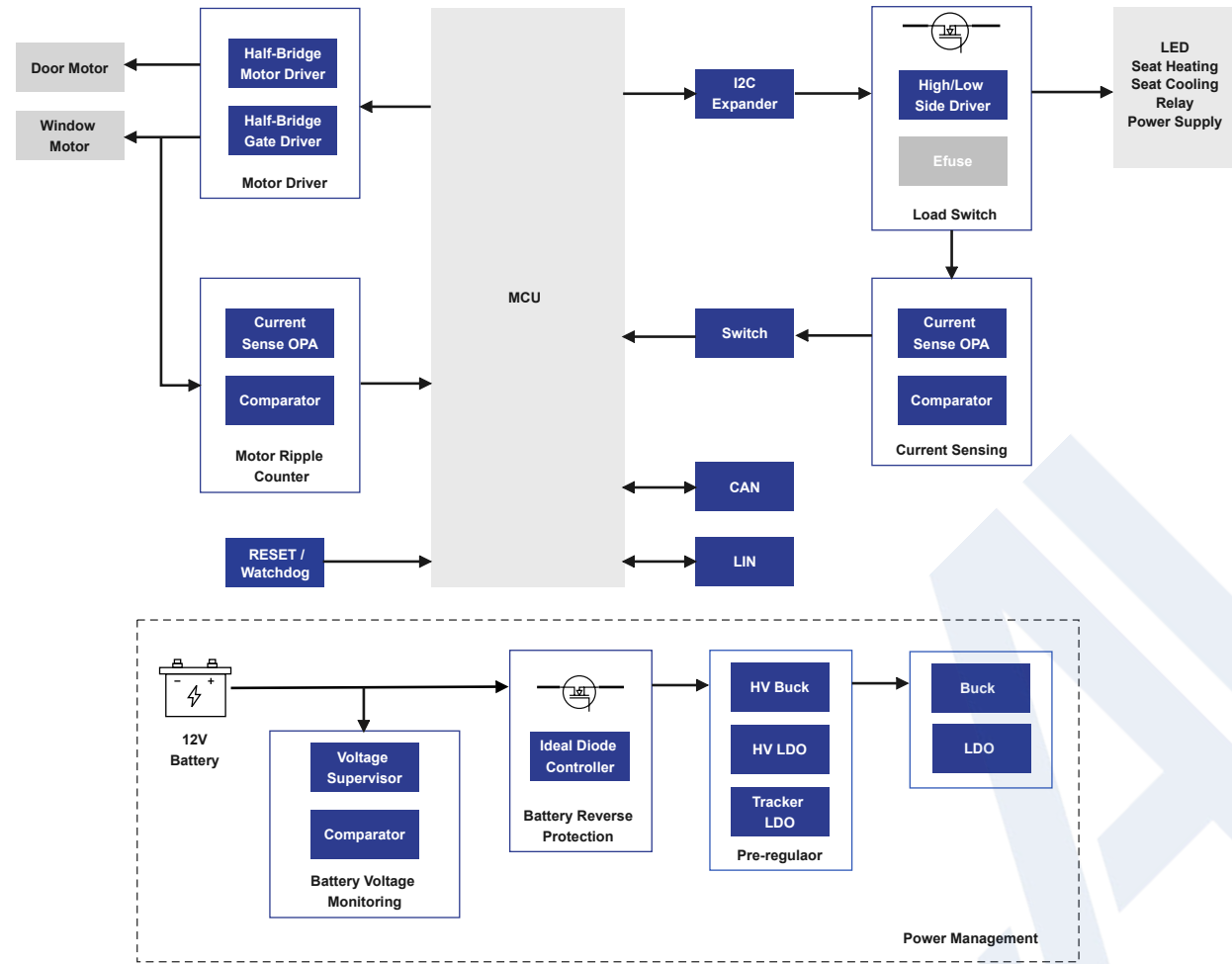
EPS, or electric power steering system, provides steering assistance directly through an electric motor. Compared with traditional hydraulic steering systems, EPS features a simpler structure, flexible assembly, and energy saving.



PL	Part Number	Description	Target Product
CAN	TPT104xQ	CAN FDTransceiver, 70V CAN BUS, pin5 NC, pin8 Standby	TJA104x, TCAN104x
CAN	TPT1051VQ	CAN FDTransceiver, 70V CAN BUS, pin5 VIO, pin8 Silent	TJA1051, TCAN1051
CAN	TPT1145NQ	Standby / Sleep Mode, Partial networking wake up	TJA1145
Isolator	TPT772x	150Mbps, 2ch	ISO772x
Isolator	TPT774x	150Mbps, 4ch	ISO774x
Operational Amplifiers	TPA188xQ	36V OPA, 12MHz, 50uV, 1/2ch	
Operational Amplifiers	TPA5561Q	5V, 3.5MHz, Zero Drift OPA	TSZ181, OPA335
Comparator	LM2903DQ	36V General Purpose Comparator, 2ch	LM2903
LDO	TPL8031xxQ	42V/300mA Wide Input Voltage Range, Ultralow Iq LDO	RTQ2569, TPS7B82-Q1
LDO	TPL803450Q	42V/300mA Wide Input Voltage Range, Ultralow Iq LDO with PG	TPS7A66-Q1
Supervisor	TPV8368SAQ	High Voltage Sense and Low IQ Supervisor with Programmable Delay	R3121N030E-TR-KE

BODY DOMAIN CONTROLLER

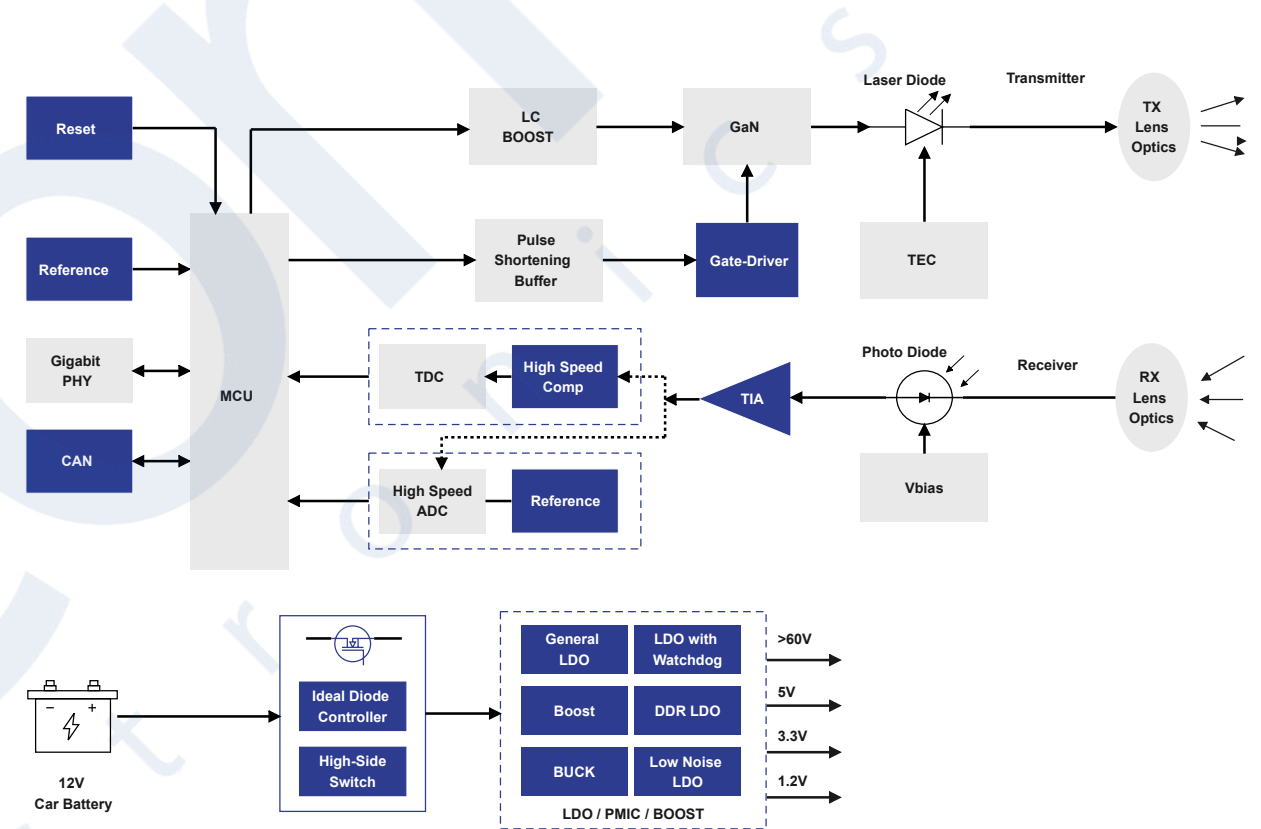
The body domain controller is used to control body-related functional modules such as doors, windows, seats, lights, and air conditioning. The basic functions of the system need to include diagnostic monitoring, drive output, network communication, and other functions.



PL	Part Number	Description	Target Product
CAN	TPT104xQ	CAN FDTransceiver, 70V CAN BUS, pin5 NC, pin8 Standby	TJA104x, TCAN104x
CAN	TPT1051VQ	CAN FDTransceiver, 70V CAN BUS, pin5 VIO, pin8 Silent	TJA1051, TCAN1051
CAN	TPT1145NQ	Standby / Sleep Mode, Partial networking wake up	TJA1145
I2C	TPW3188Q	5V Analog Switch, 500MHz, 8:1	
Comparator	LM2903DQ	36V General Purpose Comparator, 2ch	LM2903
LDO	TPL8031xxQ	42V/300mA Wide Input Voltage Range, Ultralow Iq LDO	RTQ2569, TPS7B82-Q1,
LDO	TPL8032ADQ	20V/300mA low-noise LDO for Automotive	TLS203
LDO	TPL803450Q	42V/300mA Wide Input Voltage Range, Ultralow Iq LDO with PG	TPS7A66-Q1
LDO	TPL865xQ	42V, 150/250mA Tracker/Voltage-Tracking LDO	TPS7B4254/53-Q1, TLE4254/53
LDO	TPL910ADJQ	5.5V/1A ultra-low noise LDO for Automotive	TPS7A8101-Q1, RTQ2510 MPQ25001, NCV59800
GateDriver	TPM27524Q	2CH 25V 5A Lowside GateDriver	UCC27524A-Q1
Supervisor	TPV8368SAQ	High Voltage Sense and Low IQ Supervisor with Programmable Delay	R3121N030E-TR-KE

LIDAR

Advanced Driver Assistance Systems (ADAS) rely on environmental perception. The vast majority of automakers consider the laser radar as an essential functional module in the environmental perception unit. Its performance directly affects the reliability and practicality of the ADAS.



PL	Part Number	Description	Target Product
CAN	TPT104xQ	CAN FDTransceiver, 70V CAN BUS, pin5 NC, pin8 Standby	TJA104x, TCAN104x
CAN	TPT1051VQ	CAN FDTransceiver, 70V CAN BUS, pin5 VIO, pin8 Silent	TJA1051, TCAN1051
CAN	TPT1145NQ	Standby / Sleep Mode, Partial networking wake up	TJA1145
LDO	TPL8031xxQ	42V/300mA Wide Input Voltage Range, Ultralow Iq LDO	RTQ2569, TPS7B82-Q1
LDO	TPL865xQ	42V, 150/250mA Tracker/Voltage-Tracking LDO	TPS7B4254/53-Q1, TLE4254/53
LDO	TPL910ADJQ	5.5V/1A ultra-low noise LDO for Automotive	TPS7A8101-Q1, RTQ2510 MPQ25001, NCV59800
Reference	TPR33xx	Precision Series Voltage Reference	REF33
Reference	TPR431B	Precision Shunt Voltage Reference	TLV431, TL431
Reference	TPR6040Fxx	Voltage Reference	LM4040
GateDrv	TPM2025Q	2CH 5V 7A GaN Driver	LMG1025-Q1
Supervisor	TPV8368SAQ	High Voltage Sense and Low IQ Supervisor with Programmable Delay	R3121N030E-TR-KE