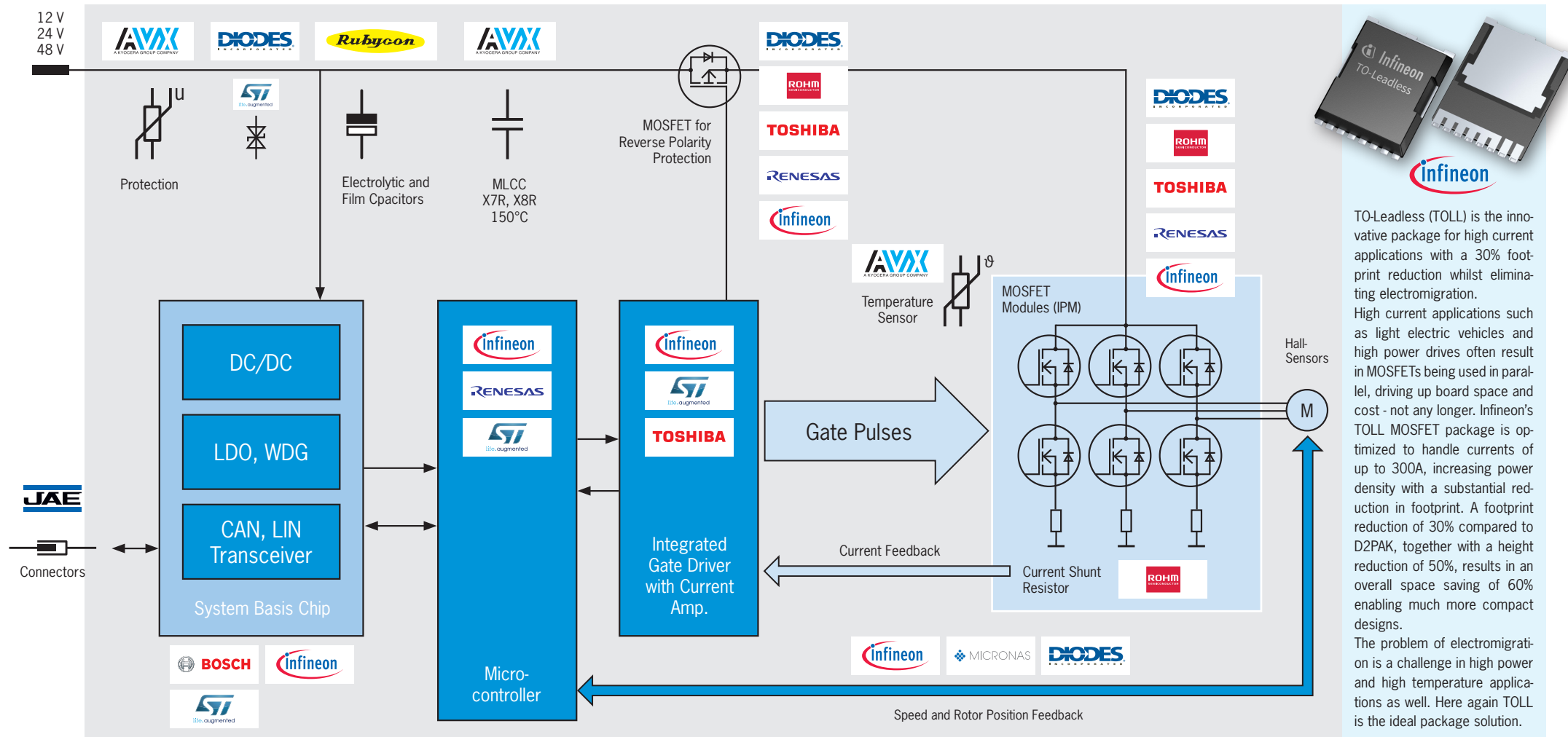


Discover Innovation in Motion

Medium integrated BLDC Motor Control

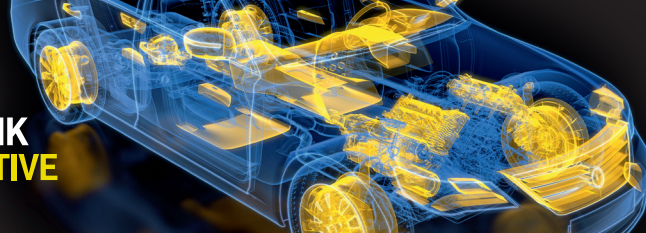
AUTOMOTIVE Products



APPLICATIONS: Auxiliary drives, E-Booster, pumps, fans, BLDC motor control, DC-motor replacement

FEATURES: Long life, robust & maintenance-free, bus controlled, diagnostic feedback

BENEFITS: Flexible power scaling with discrete MOSFETs, small weight, cost efficient



Integrated Gate Drivers / Motor Controllers



Manufacturer	Series/Type	MCU	LDO	WDG	Topologie	Gate Drivers	Output Transistors	Current Meas	Description	Boardnet
Infineon	TLE987x	Cortex M3	yes	yes	3-phase	3 HS, 3 LS	external N-channel	1 Shunt	embedded Power IC, MCU, LDO, LIN-transceiver, gate drivers	12 V
Micronas	HVC4223F	Cortex M3	yes	yes	3-phase +	12	integrated	1 Shunt	integrated BLDC/stepper motor control IC, MCU, LDO, LIN-transceiver, gate drivers, power MOSFETs, for up to 10 W	12 V
Melexis	MLX812xx	MLX16-FX	yes	yes	3-phase	6	external N-channel		Sensorless BLDC motor controller, MCU, LDO, LIN-transceiver, gate drivers	12 V
Melexis	MLX8131x						integrated			
Bosch	CY260	no	no	no	3-phase	6	integrated	1 Shunt	ISO 26262, monolithic B6 bridge, gate drivers, power MOSFETs, for up to 60 W	12 V
ST	L9907	no	no	no	3-phase	6	external N-channel	2 Shunt	ISO 26262, FET driver for 3-phase BLDC motor, current sense amplifier	12 V ... 48 V
Toshiba	TB9081	no			3-phase	6+5	external N-channel	3 Shunt	ISO 26262, 3-phase and fail-safe relay pre-driver, current sense amplifier	12 V ... 48 V
Infineon	TLE9180	no			3-phase	11	external N-channel		ISO 26262, FET driver for 3-phase BLDC motor, current sense amplifier	12 V ... 48 V
Infineon	BTN8962/82	no	no	no	half bridge	1 HS, 1 LS	integrated		Half bridge, for DC-motor drive	12 V
Infineon	AURIRS20302S	no	no	no	3-phase	3 HS, 3 LS	external N-channel	1 Shunt	Truck, HVAC	24 V ... 150 V
Infineon	TLE718x	no	no	no	3-phase	3 HS, 3 LS	external N-channel			12 V
ST	L99ASC03	no	yes	yes	3-phase	3 HS, 3 LS	external N-channel	1 Shunt	Gate driver, LDO, WDG, 1xOpAmp	12 V

Capacitors



Manufacturer	Type	Series	Voltage Range, V	Temp.	Features
Rubycon	electrolytic	TZV	6,3 ... 50	105°C	standard, 200 hrs
Rubycon	electrolytic	TLV	6,3 ... 35	105°C	long life 5000 hrs
Rubycon	electrolytic	RX30	10 ... 400	130°C	high temp, long life up to 4000 hrs
AVX	ceramic	X7R	16 ... 3000	125°C	also as FLEXITERM™, FLEXISAFE™ and ESD-SAFE™
AVX	ceramic	X8R	25 ... 100	150°C	high temp
AVX	ceramic	NP0	25 ... 100	125°C	highly stable voltage and temperature characteristics

Microcontrollers



Manufacturer	Series	Type	Description	Features
Renesas	RL78/F1x	R5F10x	16-Bit MCU	low power, ASIL B support, AUTOSAR possible
Renesas	RH850	R7F70x	32-Bit MCU	low power, scalability, up to ASIL D support
Infineon	AURIX™	SAK-TC2xx	32-Bit MCU	Safety up to ASIL D, multiple cores
ST	STM8	STM8AF	8-Bit MCU	price efficient, ASIL B ready
ST	SPC5	SPC56x, SPC58x	32-Bit MCU	PowerArchitecture™, up to ASIL D support

System Basis Chips



Manufacturer	Series	Type	Description	Features
Infineon	TLE845x		LIN LDO	LIN Transceiver, LDO, 8-Pin Package
Infineon	TLE926		Mid-Range SBC	3 x LDO, CAN-FD, up to 3 LIN, Watchdog, Fail Safe Outputs
Infineon	TLE9271/2/3		DC/DC SBC	LDO, DC/DC buck, CAN-FD, Watchdog, up to 3 LIN
Infineon	TLE9278		Multi CAN Power	CAN-FD (PN), up to 4 LIN, DC/DC boost+buck, WWDG