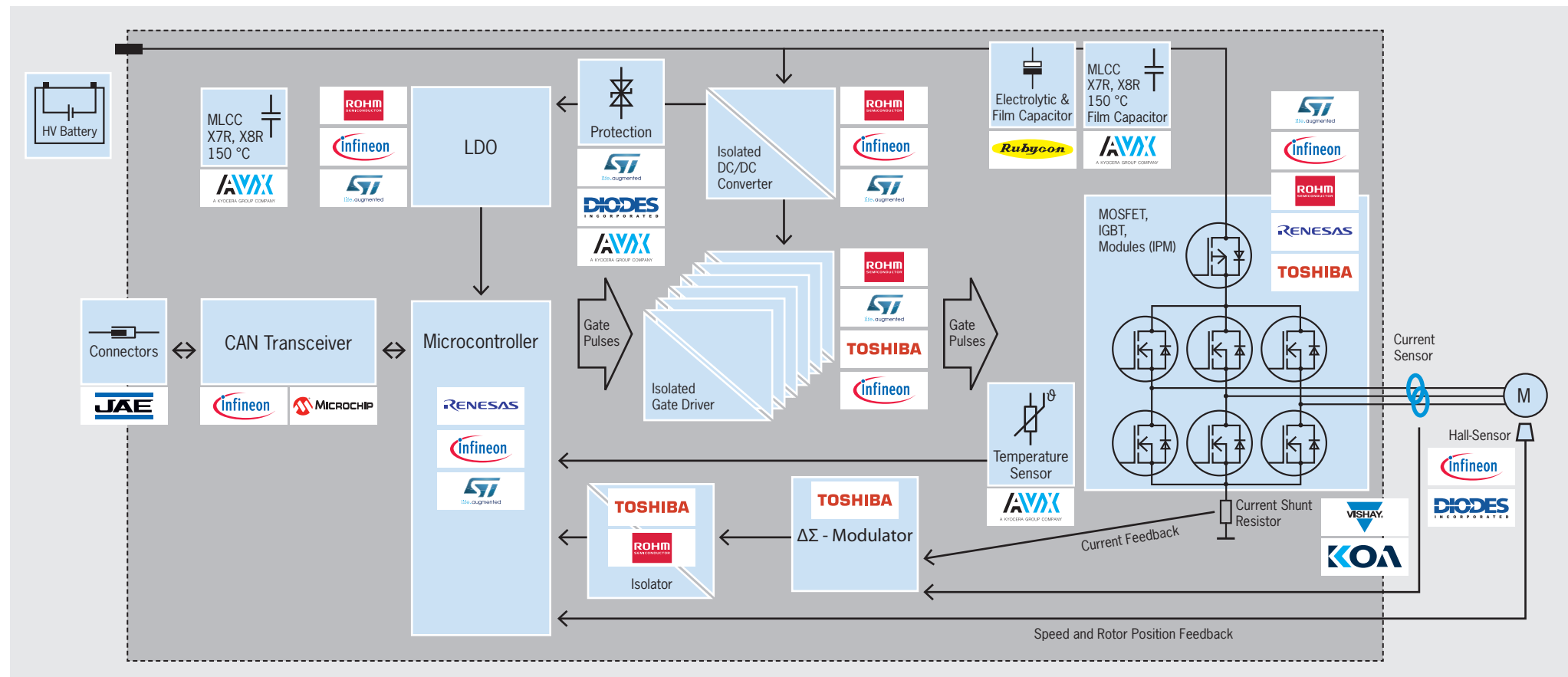




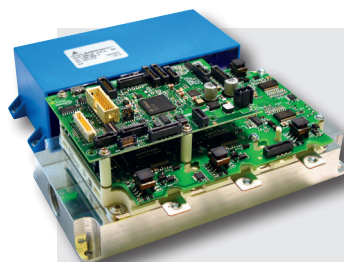
Discover Innovation in Motion

# AUTOMOTIVE Products

## HV Main Inverter



**APPLICATIONS:** Electric vehicles, BLDC motor control  
**FEATURES:** High voltage, high power density, maintenance-free  
**BENEFITS:** Space saving, small weight, cost efficient



#### Sensors



Manufacturer	Physic	Series/Type	Description
Infineon	Magnetic	TLE49x5	Hall
Infineon	Magnetic	TLE4963/5	Hall Switch, Latch, unipolar
DIODES	Magnetic	AH376xQ	Hall Switch, Latch, unipolar, omnipolar
AVX	Temperature	NJ28, NP30, NI24	NTC, leaded, radial
AVX	Temperature	NK20	NTC, chip



#### Demokit

Manufacturer	Series	Type	Features
Infineon	HEV-Inverter Demo Kit	HYBRIDKIT DRIVE	500V, up to 150kW, AURIX™ TC277, EiceDRIVER™, HybridPACK™

#### Isolater IC



Manufacturer	Type	Isolation Voltage	# of Channels	Propagation Delay	Features
ROHM	BM67220	2500 Vrms	2	45 ns	digital, uni-directional
ROHM	BM67221	2500 Vrms	2	45 ns	digital, bi-directional
ROHM	BM67290	2500 Vrms	1	-	analog voltage to duty cycle converter
Toshiba	TLP7830	5000 Vrms	1	-	$\Delta\Sigma$ -encoder with opto coupler, non AEC-Q
Toshiba	TLX9310, 9376	3750 Vrms	1	250 ns, 35 ns	opto coupler, IC output, push-pull
Toshiba	TLX9309, 9304, 9378	3750 Vrms	1	800 ns, 550 ns, 100 ns	opto coupler, IC output, open collector
Toshiba	TLX9185A, 9291A	3750 Vrms	1	-	opto coupler, transistor output
Toshiba	TLX9300, 9000	3750 Vrms	1	-	opto coupler, transistor w/ integr. Rbe
Toshiba	TLX9175J	3750 Vrms	1	-	photorelay 600 V/15 mA
Toshiba	TLX9905/06	3750 Vrms	1	-	photovoltaic coupler, 7 V/12 $\mu$ A

#### Isolated Gate Driver

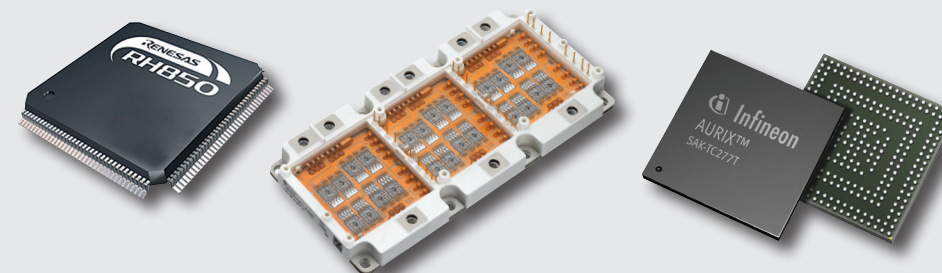


Manufacturer	Type	Isolation Voltage	# of Channels	Propagation Delay	Features
ST	STGAP1S	1500 V	1	130 ns	neg. gate drive ability, diagnosis
ROHM	BM610x	2500 Vrms	1	120 ns ... 350 ns	
ROHM	BM6005x	2500 Vrms	1	110 ns ... 260 ns	DC/DC controller integrated
ROHM	BM60210FV-C		1		1200V Half Bridge Driver
Infineon	1ED020I12FTA		1	200 ns	
Infineon	2ED020I12FA		2	195 ns	
Infineon	1ED020I12FA2		1	195 ns	
Infineon	1EDI2001AS		1	255 ns	
Infineon	1EBN1001AS		1	10 ns	
Infineon	1EDI2002AS		1	255 ns	
Toshiba	TB9150FNG	2500 Vrms	1	tbd	DC/DC controller integrated

#### Power Film Capacitors



Manufacturer	Series	Voltage Range, V	Temp.	Features
Rubycon	HVC	100...2000	105 °C	High Ripple, Low ESR, High Capacitance
Rubycon	MPC	100...1600	85 °C	For Snubber Circuit
Rubycon	PCK	450...2000	105 °C	For High Frequency, High Current Applications
AVX	CB	63...630	125 °C	Self healing, excellent thermal shock resistance
AVX	FLCC	75...1400	105 °C	For Inverter DC-Link filtering



#### Microcontroller



Manufacturer	Series	Type	Description	Features
Renesas	RH850	R7F70x	32-Bit MCU	well established, 40nm technology
Infineon	AURIX™	SAK-TC2xx	32-Bit MCU	HEV-Inverter Demo Kit available
ST	SPC5	SPC574K, SPC58x	32-Bit MCU	PowerArchitecture™, well established. 55/40nm technology

#### Power Modules



Manufacturer	Type	Configuration	Voltage, V	Current, A	Package
Infineon	FS400R12A2T4	IGBT4 - T4, Sixpack	1200	400	HybridPACK™2
Infineon	FS800R07A2E3_B31	IGBT3 - E3, Sixpack	680	800	HybridPACK™2
Infineon	FS600R07A2E3_B31	IGBT3 - E3, Sixpack	680	600	HybridPACK™2
Infineon	FS400R07A1E3_H5	IGBT3 - E3, Sixpack	650	400	HybridPACK™1
Infineon	F4-75R07W1H3_B11A	IGBT - HighSpeed 3, Fourpack	650	75	EasyPACK 1B
Infineon	FS75R07W2E3_B11A	IGBT3 - E3, Sixpack	650	75	EasyPACK 1B
Infineon	F4-50R07W1H3_B11A	IGBT - HighSpeed 3, Fourpack	650	50	EasyPACK 1B
Infineon	FS50R07W1E3_B11A	IGBT3 - E3, Sixpack	650	50	EasyPACK 2B
Infineon	FZ30R07W1E3_B31A	IGBT3 - E3, Single switch	650	30	EasyPACK 1B
Infineon	FS215R04A1E3D	IGBT3 - E3, Sixpack	400	215	HybridPACK™1