

CHIPANALOG SOLUTIONS FOR AUTOMOTIVE APPLICATIONS

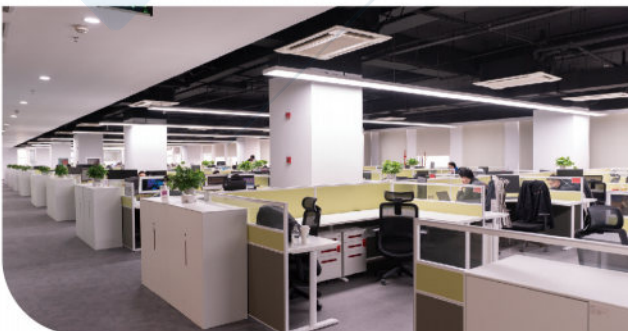


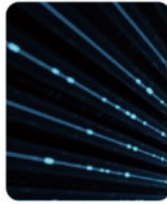
About us

Shanghai Chipanalog Microelectronics Co., Ltd. is a high-tech company focusing on R&D, design and sales of high-end analog semiconductor. Our broad portfolio includes isolation and interface, driver and power, high-performance analog and μ MiC (micro-Module in Chip) etc. product lines. These products have been used in industrial control, power energy, communication & computing, automotive applications worldwide.

Founded in 2016, Chipanalog is headquartered in Shanghai. After years of development, we have become a well-known supplier of high-end analog solutions, such as isolation and interfaces. Chipanalog serves more than 3,000 customers worldwide with extensive and high quality analog products.

SEMICONDUCTORS SUPPLIER





ISO26262 Certification

CERTIFICATIONS AND STANDARDS



CNAS Laboratory Accreditation Certification



Iso-relevant Certification

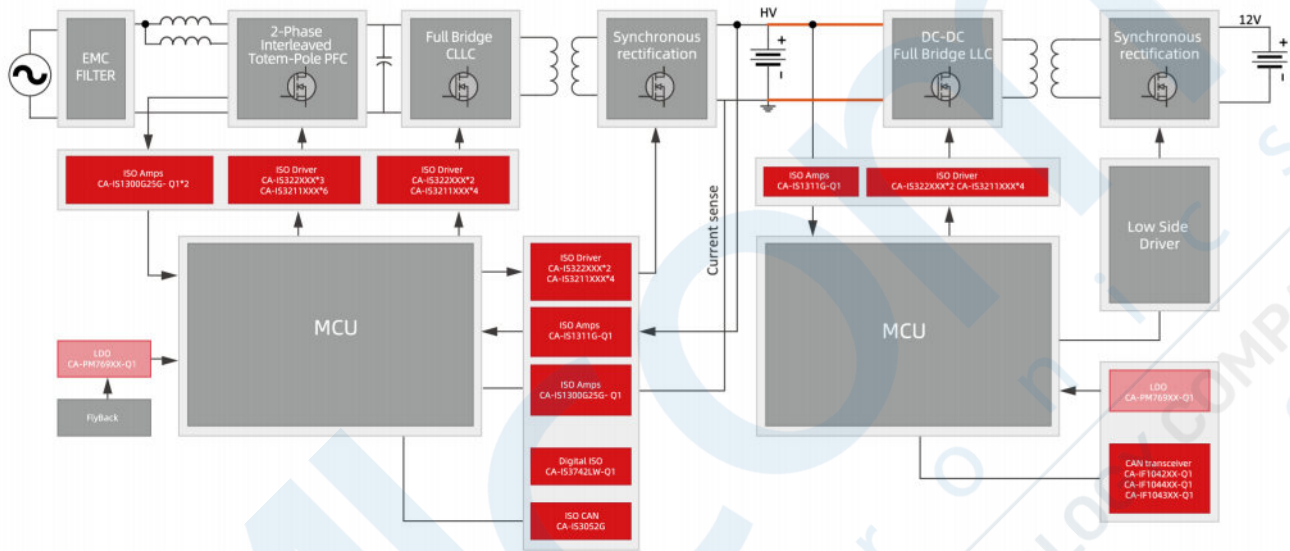


Auto-relevant Certification



Automotive OBC DC-DC

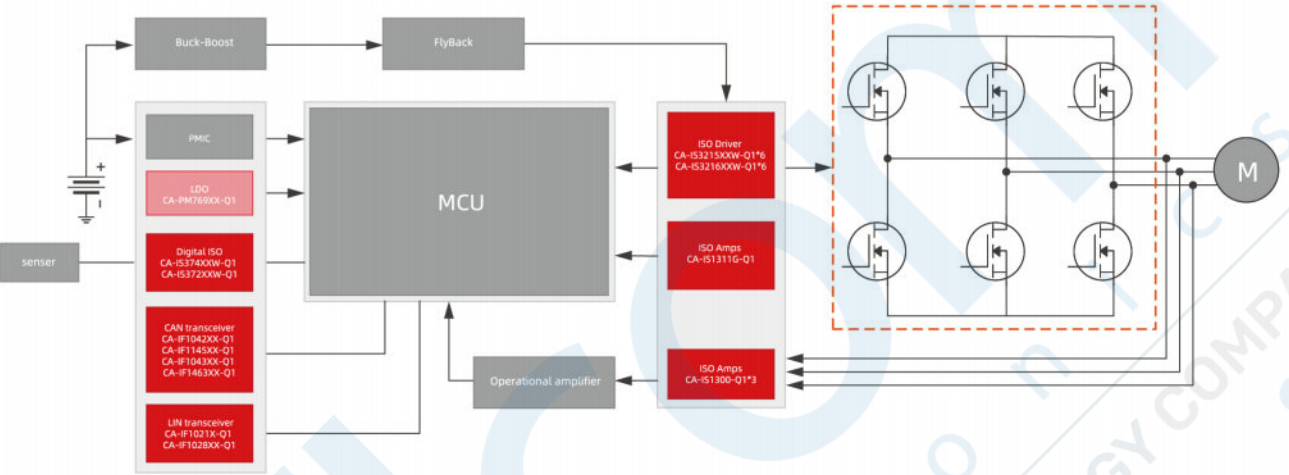
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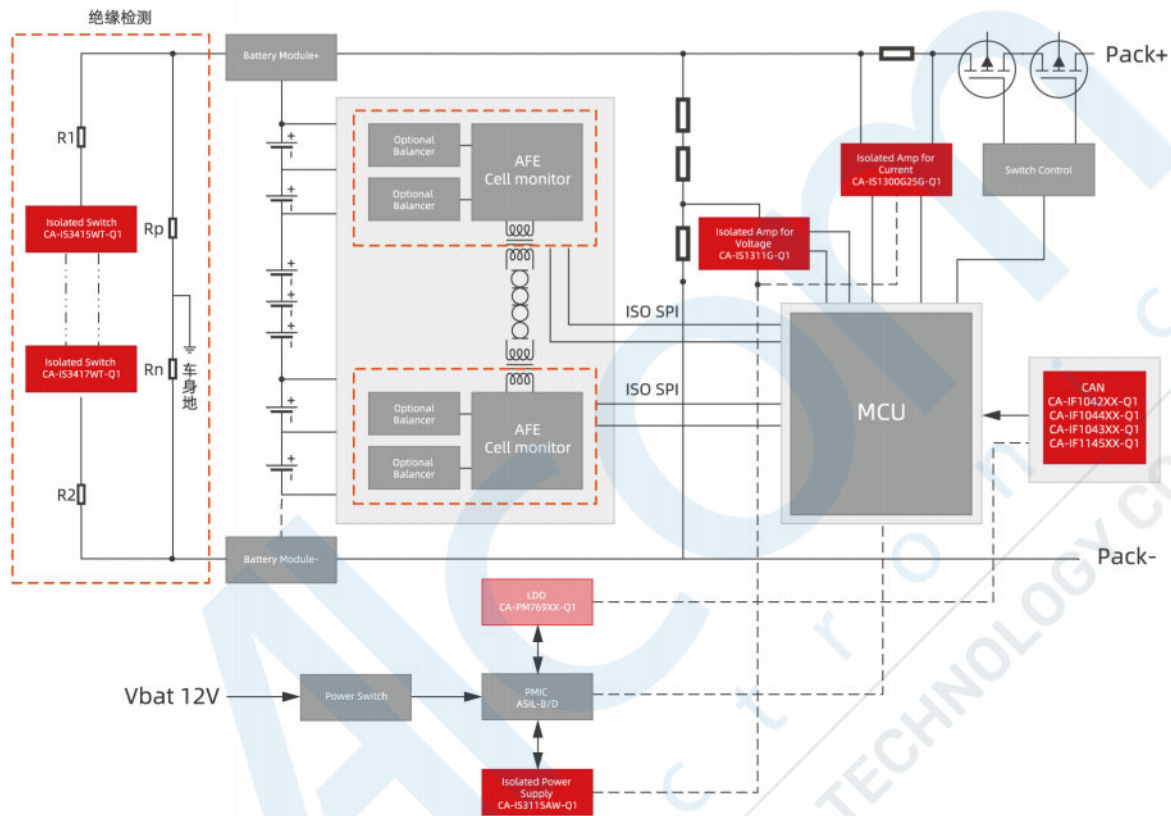
Product Lines	Part Number	Description	Applications	Features and Key Advantages
Isolated Drivers	CA-IS322XXX-Q1	Isolated drivers	MOSFET and IGBT driver	Large current driving, high isolation rating
	CA-IS3211XX-Q1	Isolated drivers	MOSFET and IGBT driver	Large current driving, high isolation rating
Digital Isolation	CA-IS3742LW-Q1	Digital isolators	Signal transmission between primary-side and secondary-side; isolated interface	High data-rate, high CMTI, high isolation rating
Isolated Amplifiers	CA-IS1300G25G-Q1	Isolated amplifier for current sensing	PFC current sensing; Charger current sampling	Low gain error and drift
	CA-IS1311G-Q1	Isolated amplifier for voltage sensing	Charger voltage sampling	Wide input range, low gain error and drift
CAN FD	CA-IF1042LX-Q1	CAN FD transceivers with low-power standby mode and remote wake-u	Automotive networking	±42V bus fault tolerant, own domestic property right
	CA-IF1042XX-Q1	CAN FD transceivers with low-power standby mode and remote wake-u	Automotive networking	±70V bus fault tolerant, high reliability
	CA-IF1043XX-Q1	Low-power, ±58V fault protected CAN transceivers	Automotive networking	CAN bus wake-up, local WAKE wake-up, ideal for low-power applications
	CA-IF1044XX-Q1	CAN FD transceivers with low-power standby mode and remote wake-u	Automotive networking	±58V bus fault tolerant, strong universality
	CA-IF1051XX-Q1	±58V fault protected CAN FD transceivers	Automotive networking	Silent mode, low-power
Isolated CAN	CA-IS3052G	Isolated CAN transceiver	Automotive networking	High data-rate, high CMTI, high isolation rating

Electric Drive

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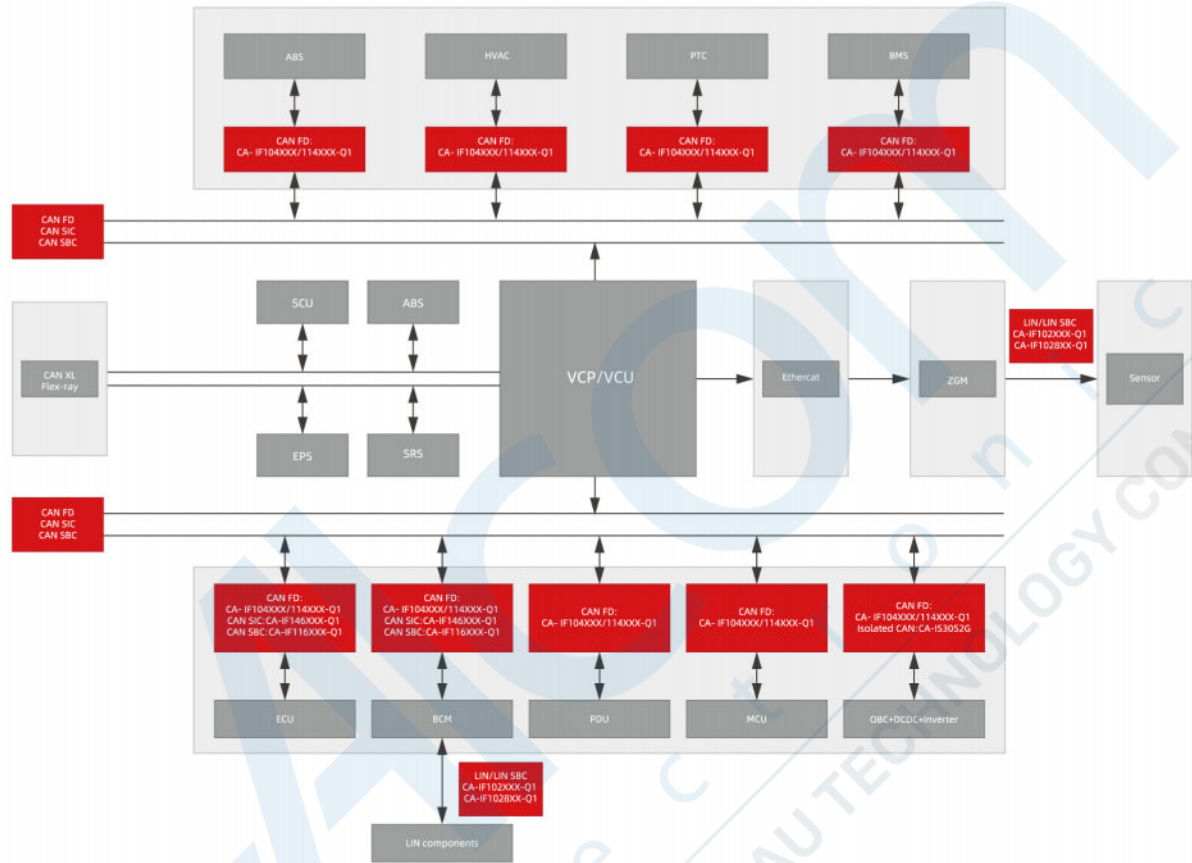
Product Lines	Part Number	Description	Applications	Features and Key Advantages
CAN FD	CA-IF1042LX-Q1	CAN FD transceivers with low-power standby mode and remote wake-u	Automotive networking	±42V bus fault tolerant, own domestic property right
	CA-IF1042XX-Q1	CAN FD transceivers with low-power standby mode and remote wake-u	Automotive networking	±70V bus fault tolerant, high reliability
	CA-IF1043XX-Q1	Low-power, ±58V fault protected CAN transceivers	Automotive networking	CAN bus wake-up, local WAKE wake-up, ideal for low-power applications
	CA-IF1044XX-Q1	CAN FD transceivers with low-power standby mode and remote wake-u	Automotive networking	±58V bus fault tolerant, strong universality
	CA-IF1051XX-Q1	±58V fault protected CAN FD transceivers	Automotive networking	Silent mode, low-power
LIN	CA-IF1021X-Q1	Fault protected LIN transceivers with inhibit and wake-up	Sensor networking	±58V bus fault tolerant, high anti-interference capability
LIN SBC	CA-IF1028XX-Q1	LIN transceivers with LDO	Combination switch	LDO features high-current driving, better EMC performance
Digital Isolators	CA-IS374XXW-Q1	Digital isolators	Signal transmission between high-voltage side and low-voltage side	High data-rate, high CMTI, high isolation rating
	CA-IS372XXW-Q1	Digital isolators	Signal transmission between high-voltage side and low-voltage side	High data-rate, high CMTI, high isolation rating
Isolated Amplifiers	CA-IS1300G25G-Q1	Isolated amplifier for voltage sensing	Phase current detect	Wide input range, low gain error and drift
Isolated Drivers	CA-IS3215xxW-Q1	Isolated drivers	IGBT and SIC MOSFET drivers	Features active protection, high CMTI, 15A sink/source
	CA-IS3216xxW-Q1	Isolated drivers	IGBT and SIC MOSFET drivers	Features active protection, high CMTI, 15A sink/source



Product Lines	Part Number	Description	Applications	Features and Key Advantages
Isolated Switches	CA-IS3415WT-Q1	1500V high-voltage, opto-compatible, isolated switch	Battery pack insulation detection	Ultra-high voltage, low quiescent current
	CA-IS3417WT-Q1	1700V high-voltage, opto-compatible, isolated switch	Battery pack insulation detection	Ultra-high voltage, low quiescent current
Isolated Power Supply	CA-IS3115AW-Q1	1.5W automotive, isolated DC-DC converter	High voltage sampling or AFE power supply	High output power, robust protection, better EMI performance, high CMTI
Isolated Amplifiers	CA-IS1300G25G-Q1	Isolated amplifier for current sensing	Battery pack voltage sampling	Low gain error and drift
	CA-IS1311G-Q1	Isolated amplifier for voltage sensing	Battery pack voltage sampling	Wide input range, low gain error and drift
CAN FD	CA-IF1042LX-Q1	CAN FD transceivers with low-power standby mode and remote wake-u	Automotive networking	±42V bus fault tolerant, own domestic property right
	CA-IF1042XX-Q1	CAN FD transceivers with low-power standby mode and remote wake-u	Automotive networking	±70V bus fault tolerant, high reliability
	CA-IF1043XX-Q1	Low-power, ±58V fault protected CAN transceivers	Automotive networking	CAN bus wake-up, local WAKE wake-up, ideal for low-power applications
	CA-IF1044XX-Q1	CAN FD transceivers with low-power standby mode and remote wake-u	Automotive networking	±58V bus fault tolerant, strong universality
	CA-IF1051XX-Q1	±58V fault protected CAN FD transceivers	Automotive networking	Silent mode, low-power

Automotive Networking

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Product Lines	Part Number	Description	Applications	Features and Key Advantages
CAN FD	CA-IF1042LX-Q1	CAN FD transceivers with low-power standby mode and remote wake-u	Automotive networking	±42V bus fault tolerant, own domestic property right
	CA-IF1042XX-Q1	CAN FD transceivers with low-power standby mode and remote wake-u	Automotive networking	±70V bus fault tolerant, high reliability
	CA-IF1043XX-Q1	Low-power, ±58V fault protected CAN transceivers	Automotive networking	CAN bus wake-up, local WAKE wake-up, ideal for low-power applications
	CA-IF1044XX-Q1	CAN FD transceivers with low-power standby mode and remote wake-u	Automotive networking	±58V bus fault tolerant, strong universality
	CA-IF1051XX-Q1	±58V fault protected CAN FD transceivers	Automotive networking	Silent mode, low-power
LIN	CA-IF1021X-Q1	Fault protected LIN transceivers with inhibit and wake-up	Sensor networking	±58V bus fault tolerant, high anti-interference capability
	CA-IF1022XX-Q1	Dual-channel LIN transceivers	Multichannel communication	±58V bus fault tolerant, better EMC performance
	CA-IF1024X-Q1	Four-channel LIN transceivers	Multichannel communication	±58V bus fault tolerant, better EMC performance
LIN SBC	CA-IF1028XX-Q1	LIN transceivers with LDO	Combination switch	LDO features high-current driving, better EMC performance

AUTOMOTIVE PRODUCTS SELECTION TABLE

ISOLATION & INTERFACE

Digital Isolation

Chipanalog Products Selection_Automotive Standard Digital Isolators

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Part number	Number of channels	Number of reversed channels	Isolation rating (Vrms)	CMTI (kV/ μ S)	Surge rating (kVpk)	ESD rating HBM(V)	Data rate (bps)	Operating voltage range (V)	Operating current per channel @ 1Mbps(mA,typ)	Default output	Temperature range (°C)	Package
CA-IS3710HS-Q1	1	0	3750	150	8	6000	DC-150M	2.5-5.5	1.5	High	-40~125	SOIC8(S)
CA-IS3710LS-Q1	1	0	3750	150	8	6000	DC-150M	2.5-5.5	1.5	Low	-40~125	SOIC8(S)
CA-IS3720HS-Q1	2	0	3750	150	8	6000	DC-150M	2.5-5.5	1.5	High	-40~125	SOIC8(S)
CA-IS3720LS-Q1	2	0	3750	150	8	6000	DC-150M	2.5-5.5	1.5	Low	-40~125	SOIC8(S)
CA-IS3721HS-Q1	2	1	3750	150	8	6000	DC-150M	2.5-5.5	1.5	High	-40~125	SOIC8(S)
CA-IS3721LS-Q1	2	1	3750	150	8	6000	DC-150M	2.5-5.5	1.5	Low	-40~125	SOIC8(S)
CA-IS3722HS-Q1	2	1	3750	150	8	6000	DC-150M	2.5-5.5	1.5	High	-40~125	SOIC8(S)
CA-IS3722LS-Q1	2	1	3750	150	8	6000	DC-150M	2.5-5.5	1.5	Low	-40~125	SOIC8(S)
CA-IS3720HW-Q1	2	0	5000	150	10	6000	DC-150M	2.5-5.5	1.5	High	-40~125	SOIC16-WB(W)
CA-IS3720LW-Q1	2	0	5000	150	10	6000	DC-150M	2.5-5.5	1.5	Low	-40~125	SOIC16-WB(W)
CA-IS3721HW-Q1	2	1	5000	150	10	6000	DC-150M	2.5-5.5	1.5	High	-40~125	SOIC16-WB(W)
CA-IS3721LW-Q1	2	1	5000	150	10	6000	DC-150M	2.5-5.5	1.5	Low	-40~125	SOIC16-WB(W)
CA-IS3722HW-Q1	2	1	5000	150	10	6000	DC-150M	2.5-5.5	1.5	High	-40~125	SOIC16-WB(W)
CA-IS3722LW-Q1	2	1	5000	150	10	6000	DC-150M	2.5-5.5	1.5	Low	-40~125	SOIC16-WB(W)
CA-IS3720HG-Q1	2	0	5000	150	10	6000	DC-150M	2.5-5.5	1.5	High	-40~125	SOIC8-WB(G)
CA-IS3720LG-Q1	2	0	5000	150	10	6000	DC-150M	2.5-5.5	1.5	Low	-40~125	SOIC8-WB(G)
CA-IS3722HG-Q1	1	0	5000	150	10	6000	DC-150M	2.5-5.5	1.5	High	-40~125	SOIC8-WB(G)
CA-IS3722LG-Q1	1	0	5000	150	10	6000	DC-150M	2.5-5.5	1.5	Low	-40~125	SOIC8-WB(G)
CA-IS3740HW-Q1	4	0	5000	150	10	6000	DC-150M	2.5-5.5	1.5	High	-40~125	SOIC16-WB(W)
CA-IS3740LW-Q1	4	0	5000	150	10	6000	DC-150M	2.5-5.5	1.5	Low	-40~125	SOIC16-WB(W)
CA-IS3741HW-Q1	4	1	5000	150	10	6000	DC-150M	2.5-5.5	1.5	High	-40~125	SOIC16-WB(W)
CA-IS3741LW-Q1	4	1	5000	150	10	6000	DC-150M	2.5-5.5	1.5	Low	-40~125	SOIC16-WB(W)
CA-IS3742HW-Q1	4	2	5000	150	10	6000	DC-150M	2.5-5.5	1.5	High	-40~125	SOIC16-WB(W)
CA-IS3742LW-Q1	4	2	5000	150	10	6000	DC-150M	2.5-5.5	1.5	Low	-40~125	SOIC16-WB(W)

Interface

Chipanalog Products Selection_Automotive CAN Transceivers

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Part Number	Logic supply input?	Remote wakeup	Data rate (Mbps)	Common mode voltage range(V)	Fault protection (V)	HBM ESD rating other pins ($\pm$ kV)	HBM ESD rating bus pins ($\pm$ kV)	Operating voltage range (V)	Logic operating voltage range (V)	Junction temp range (°C)	Package
CA-IF1051S-Q1	No	No	5	-30~30	-58~58	4	8	4.5~5.5	/	-55~150	SOIC8(S)
CA-IF1051VS-Q1	Yes	No	5	-30~30	-58~58	4	8	4.5~5.5	2.5~5.5	-55~150	SOIC8(S)
CA-IF1042S-Q1	No	Yes	5	-30~30	-70~70	8	16	4.5~5.5	/	-55~150	SOIC8(S)
CA-IF1042VS-Q1	Yes	Yes	5	-30~30	-70~70	8	16	4.5~5.5	3~5.5	-55~150	SOIC8(S)
CA-IF1044S-Q1	No	Yes	5	-30~30	-58~58	6	8	4.5~5.5	/	-55~150	SOIC8(S)
CA-IF1044VS-Q1	Yes	Yes	5	-30~30	-58~58	6	8	4.5~5.5	3~5.5	-55~150	SOIC8(S)
CA-IF1044D-Q1	No	Yes	5	-30~30	-58~58	6	8	4.5~5.5	/	-55~150	DNF8(D)
CA-IF1044VD-Q1	Yes	Yes	5	-30~30	-58~58	6	8	4.5~5.5	3~5.5	-55~150	DNF8(D)
CA-IF1043DF-Q1	Yes	Yes	5	-30~30	-58~58	4	4	4.5~5.5	1.7~5.5	-55~150	DFN14(DF)
CA-IF1043NF-Q1	Yes	Yes	5	-30~30	-58~58	4	4	4.5~5.5	1.7~5.5	-55~150	SOIC14(NF)

Part Number	Logic supply input?	Remote wakeup	Data rate (Mbps)	Common mode voltage range(V)	Fault protection (V)	HBM ESD rating other pins (±kV)	HBM ESD rating bus pins (±kV)	Operating voltage range (V)	Logic operating voltage range (V)	Junction temp range (°C)	Package
CA-IF1042LS-Q1	No	Yes	5	-30~30	-42~42	6	6	4.5~5.5	3~5.5	-55~150	SOIC8(S)
CA-IF1042LV5-Q1	Yes	Yes	5	-30~30	-42~42	6	6	4.5~5.5	3~5.5	-55~150	SOIC8(S)

Chipanalog Products Selection_LIN Transceivers

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Part Number	With internal LDO?	Remote wakeup	Data rate (Mbps)	Common mode voltage range (V)	Fault protection (V)	HBM ESD protection other pins (±kV)	HBM ESD protection bus pins (±kV)	Operating voltage range (V)	Logic operating voltage range (V)	Junction temp range (°C)	Package
CA-IF1021S-Q1	No	Yes	20	/	-58~58	2	4	5.5~27	/	-55~150	SOIC8(S)
CA-IF1021LS-Q1	No	Yes	20	/	-42~42	8	8	5.5~27	/	-55~150	SOIC8(S)
CA-IF1021D-Q1	No	Yes	20	/	-58~58	2	4	5.5~27	/	-55~150	DNF8(D)
CA-IF1021LD-Q1	No	Yes	20	/	-42~42	8	8	5.5~27	/	-55~150	DNF8(D)
CA-IF1024F-Q1	No	Yes	20	/	-42~42	8	14	5~18	/	-40~150	QFN24(F)
CA-IF1022F-Q1	No	Yes	20	/	-42~42	8	14	5~18	/	-40~150	QFN24(F)
CA-IF1022NF-Q1	No	Yes	20	/	-42~42	8	14	5~18	/	-40~150	SOP14(NF)
CA-IF1022DF-Q1	No	Yes	20	/	-42~42	8	14	5~18	/	-40~150	DFN14(DF)

DRIVER & POWER

Isolated Driver

Chipanalog Products Selection_Automotive Gate Drivers

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Part Number	Peak source/sink current (A)	UVLO threshold (V) output-side	Enable control	Supply voltage output-side (V)	Maximum transient isolation voltage (Vpk)	CMTI (kV/μs)	Surge rating (kVpk)	ESD protection HBM/CDM(kV)	Temperature range (°C)	Package
CA-IS3221CW-Q1	5/6	12	DIS	14~30	8000	150	12.8	4/2	-40~125	SOIC16-WB(W)
CA-IS3221BW-Q1	5/6	8	DIS	10~30	8000	150	12.8	4/2	-40~125	SOIC16-WB(W)
CA-IS3222CW-Q1	5/6	12	EN	14~30	8000	150	12.8	4/2	-40~125	SOIC16-WB(W)
CA-IS3222BW-Q1	5/6	8	EN	10~30	8000	150	12.8	4/2	-40~125	SOIC16-WB(W)
CA-IS3221CK-Q1	5/6	12	DIS	14~30	8000	150	12.8	4/2	-40~125	SOIC14-WB(K)
CA-IS3221BK-Q1	5/6	8	DIS	10~30	8000	150	12.8	4/2	-40~125	SOIC14-WB(K)
CA-IS3222CK-Q1	5/6	12	EN	14~30	8000	150	12.8	4/2	-40~125	SOIC14-WB(K)
CA-IS3222BK-Q1	5/6	8	EN	10~30	8000	150	12.8	4/2	-40~125	SOIC14-WB(K)
CA-IS3221CN-Q1	5/6	12	DIS	14~30	5300	150	8	4/2	-40~125	SOIC16-NB(N)
CA-IS3221BN-Q1	5/6	8	DIS	10~30	5300	150	8	4/2	-40~125	SOIC16-NB(N)
CA-IS3222CN-Q1	5/6	12	EN	14~30	5300	150	8	4/2	-40~125	SOIC16-NB(N)
CA-IS3222BN-Q1	5/6	8	EN	10~30	5300	150	8	4/2	-40~125	SOIC16-NB(N)

Chipanalog Products Selection_Isolated Smart Drivers

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Part Number	Power switch	Peak source/sink current (A)	DESAT threshold	Soft turn-off current	Dead-time	Internal/external clamp	Maximum transient isolation voltage (Vpk)	CMTI (kV/μs)	Surge rating (kVpk)	ESD protection HBM/CDM(kV)	Temperature range (°C)	Package
CA-IS3215NNW-Q1	IGBT	15	9V	400mA	N/A	Internal	8000	150	12.8	3/2	-40~125	SOIC16-WB(W)
CA-IS3215SNW-Q1	IGBT	15	9V	400mA	800ns	Internal	8000	150	12.8	3/2	-40~125	SOIC16-WB(W)
CA-IS3215LNW-Q1	IGBT	15	9V	400mA	N/A	Internal	8000	150	12.8	3/2	-40~125	SOIC16-WB(W)
CA-IS3216NNW-Q1	SiC	15	9V	1A	N/A	Internal	8000	150	12.8	3/2	-40~125	SOIC16-WB(W)

Power Management

Chipanalog Products Selection_Automotive LIN Transceivers with LDO (μMiC)

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Part Number	With internal LDO?	Remote wakeup	Data rate (kbps)	Common mode voltage range (V)	Fault protection (V)	HBM ESD protection other pins (±kV)	HBM ESD protection bus pins (±kV)	Operating voltage range (V)	Logic Operating voltage range (V)	Operating temperature range (°C)	Package
CA-IF102855-Q1	Yes	Yes	20	/	-42~42	8	8	5.5-28	/	-40~150	SOIC8(S)
CA-IF102835-Q1	Yes	Yes	20	/	-42~42	8	8	5.5-28	/	-40~150	SOIC8(S)
CA-IF10285D-Q1	Yes	Yes	20	/	-42~42	8	8	5.5-28	/	-40~150	DFN8(D)
CA-IF10283D-Q1	Yes	Yes	20	/	-42~42	8	8	5.5-28	/	-40~150	DFN8(D)

Chipanalog Products Selection_Automotive 1.5W Complete Isolated Power Supply (μMiC)

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Part Number	Output power (W)	Operating voltage range (V)	Isolation rating (Vrms)	CMTI (kV/μs)	Surge rating (kVpk)	ESD rating HBM(kV)	Temperature range (°C)	Package
CA-IS3115AW-Q1	1.5	4.5-5.5	5000	150	12.8	3	-40~125	SOIC16-WB(W)

Smart Switches

Chipanalog Products Selection_Solid State Relays (SSR) (μMiC)

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Part number	Off leakage current (μA)	Withstand drain-source voltage (V)	On resistance (Ω)	Maximum input reverse voltage (V)	Maximum transient isolation voltage (Vpk)	CMTI (kV/μs)	Surge rating (kVpk)	ESD rating HBM/CDM(kV)	Temperature range (°C)	Package
CA-IS3417WT-Q1	3	1700	100	5.5	8000	150	12.8	3/2	-40~125	SOIC12-WB(WT)

HPA

Precision Isolated Data Acquisi

Chipanalog Products Selection_Isolated Amplifiers

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Part number	Supply voltage high-side(V)	Supply voltage low-side(V)	Differential input voltage (mV)	CMRR (dB)	PSRR (dB)	Fixed gain	GERR (%)	Isolation rating (Vrms)	CMTI (kV/μs)	Output noise (mVRMS)	Surge rating (kVpk)	ESD rating HBM/CDM (kV)	Temperature range (°C)	Package
CA-IS1300B25G-Q1	3-5.5	3-5.5	±250	-98	-100	8.2	±0.3	5000	150	0.33	10	4/2	-40~125	SOIC8-WB(G)

Chipanalog Products Selection_Isolated Amplifiers

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Part number	Supply voltage high-side(V)	Supply voltage low-side(V)	Input voltage (V)	Input offset Vos (mV)	Output band-wide (kHz)	Fixed gain	GERR (%)	Isolation rating (Vrms)	CMTI (kV/μs)	Output noise (mVRMS)	Surge rating (kVpk)	ESD rating HBM/CDM (kV)	Temperature range (°C)	Package
CA-IS1311G-Q1	3-5.5	3-5.5	-0.1~2	±1.5	275	1	±0.3	5000	150	0.23	12.8	4/2	-40~125	SOIC8-WB(G)