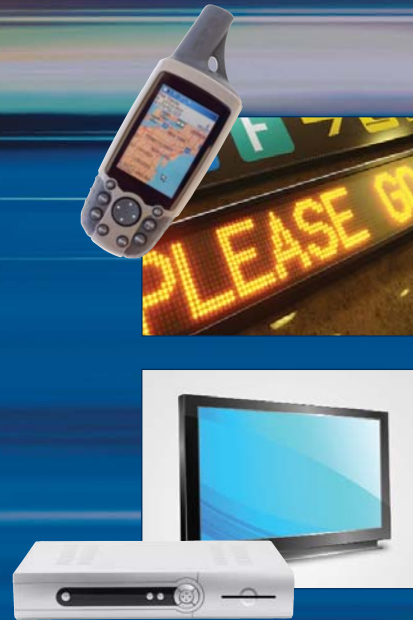




Product Selection Guide

March 2011



High-Performance Power and Hall-Effect Sensor ICs



High-Performance Power and Hall-Effect Sensor ICs

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Allegro's products are not to be used in life support devices or systems, if a failure of an Allegro product can reasonably be expected to cause the failure of that life support device or system, or to affect the safety or effectiveness of that device or system.

Allegro Sensor ICs

Allegro MicroSystems, Inc. is a leader in developing and manufacturing innovative, reliable, high-performance Hall-effect magnetic sensor ICs. The development of Allegro sensor ICs not only includes leading edge innovations in the area of integrated circuit design but also includes application specific innovation in the area of custom package design.

A small sampling of Allegro's custom packaging developments include:

- Proprietary, integrated magnet packages that simplify magnetic system design in automotive speed sensing applications. See the SE, SG, SH and SJ packages.
- Revolutionary, integrated current sensing packages with high bandwidth magnetic design features. See the SOIC and CA/CB packages with integrated, low resistance current conductors and the 1 mm thick KT package.
- Small footprint, low profile DFN packages for communications and consumer products. See the EL, EW and CG packages. The package options shown below are a sampling of Allegro's most recent, high technology packages. For specific package information, please visit Allegro's website at: www.allegromicro.com/en/Products/Packaging.

Current Sensing Packages with Integrated Conductors

CA/CB
Terminals: 5



L/LC (SOIC-8)
Terminals: 8

Surface Mount Packages

LH (SOT23W)
Terminals: 3



L/LC (SOIC-8)
Terminals: 8



Single In-Line Packages

UA (TO-92)
Terminals: 3



K
Terminals: 4



KT
Terminals: 4

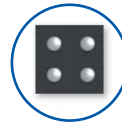


KN
Terminals: 4



Low Profile, Smallest Footprint Packages

CG (WLCSP)
Terminals: 4
Size: .96 x .96 mm
body width



EW (DFN)
Terminals: 6
Size: 1.5 x 2 mm body
width



EL (DFN)
Terminals: 3, 6
Size: 2 x 2 mm body
width



Integrated Magnet Packages

SE
Terminals: 4



SG
Terminals: 4



SH
Terminals: 4



SJ
Terminals: 4



Please Note: Package sizes are photographed to show relative scale.

Allegro Integrated Circuits

Allegro MicroSystems, Inc. is a leader in developing, manufacturing and marketing high-performance power integrated circuits and integrated Hall-effect magnetic sensor ICs. Allegro's innovative solutions serve high-growth applications within the automotive, communications, computer/office automation, consumer and industrial markets.

- Allegro's power packages offer industry-leading thermal performance with limited board space.
- TSSOP – Industry-standard TSSOP with optional thermal pad for enhanced power dissipation
- QFP – Universal quad flat pack with thermal pad for enhanced performance
- QFN/TDFN – Quad and dual, low-profile, surface-mount packages with thermal pad for enhanced performance
- MSOP – Industry-standard miniature small outline package
- SOIC – Small outline integrated circuit with some thermal pad versions for enhanced performance
- CSP – Wafer level chip scale
- Additional industry-standard packaging options are available to meet individual design requirements.

The package options shown below are a sampling of Allegro's most recent, high technology packages. For specific package information, please visit Allegro's website at:
www.allegromicro.com/en/Products/Packaging.

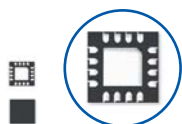
Without Leads

ES, EC, ET, EU, EV

(QFN with exposed pad)

Terminals: 16-48

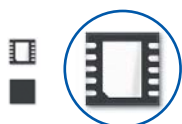
Size: 3 x 3 mm body width to
7 x 7 mm body width



EJ (TDFN with exposed pad)

Terminals: 3-16

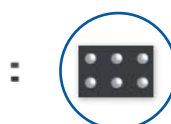
Size: 2 x 2 mm body to
3 x 3 mm body width



Chip Scale

CG (Chip Scale)

Terminals: 4-12



Allegro Integrated Circuits

With Leads

JP (QFP with exposed pad)

Terminals: 48

Size: 7 x 7 mm body width



LB (SOIC)

Terminals: 16-28

Size: 7.5 mm body width



LZ (MSOP with exposed pad)

Terminals: 10

Size: 3 mm body width



LP (TSSOP with exposed pad)

Terminals: 16-32

Size: 4.4 mm body width



LJ (SOIC with exposed pad)

Terminals: 8

Size: 3.9 mm body width



Please Note: Package sizes are photographed to show relative scale.

Linear Hall-Effect Sensor ICs

P/N	Supply Voltage (V)	Quiescent Output (V)	Typical Sensitivity (mV/G)	Output Bandwidth (kHz)	Temp Ranges	Packages	Features
A1301	4.5 to 6.0	Typ 50% Vcc	2.50	20	E, K	LH, UA	Continuous-time
A1302	4.5 to 6.0	Typ 50% Vcc	1.30	20	E, K	LH, UA	Continuous-time
A1321	4.5 to 5.5	Typ 50% Vcc	5.00	30	E, L	LH, UA	Chopper-stabilized
A1322	4.5 to 5.5	Typ 50% Vcc	3.13	30	L	LH, UA	Chopper-stabilized
A1323	4.5 to 5.5	Typ 50% Vcc	2.50	30	E, L	LH, UA	Chopper-stabilized
A1354	4.5 to 16	40 to 60%	10 to 20%/G	0.2	K	KT	2-Wire, PWM output
A1356	4.5 to 18	50 %D (nom)	45 to 75 m% D/G	0.4 (Internal BW)	L	KB	2 kHz PWM carrier frequency
A1373	4.5 to 5.5	0.7 to 4.5 (Programmable)	1.75 to 11.25 (Programmable)	2.5	E, L	KB	Chopper-stabilized
A1374	4.5 to 5.5	0.7 to 4.5 (Programmable)	1.75 to 11.25 (Programmable)	20	E, L	KB	Chopper-stabilized
A1381	4.5 to 5.5	2.3 to 2.6 (Programmable)	6 to 9 (Programmable)	12	E, L	LH, UA	Chopper-stabilized
A1382	4.5 to 5.5	2.3 to 2.6 (Programmable)	4 to 6.25 (Programmable)	17	E, L	LH, UA	Chopper-stabilized
A1383	4.5 to 5.5	2.3 to 2.6 (Programmable)	2.75 to 4.25 (Programmable)	21	E, L	LH, UA	Chopper-stabilized
A1384	4.5 to 5.5	2.3 to 2.6 (Programmable)	2 to 3	27	E, L	LH, UA	Chopper-stabilized
A1386	4.5 to 5.5	2.3 to 2.6 (Programmable)	2.1	20	E, L	LH, UA	Chopper-stabilized
A1391	2.5 to 3.5	Typ 50% Vref	1.25	10	S	EH	Chopper-stabilized
A1392	2.5 to 3.5	Typ 50% Vref	2.50	10	S	EH	Chopper-stabilized
A1393	2.5 to 3.5	Typ 50% Vref	5	10	S	EH	Chopper-stabilized, μ Power
A1395	2.5 to 3.5	Typ 50% Vref	10	10	S	EH	Chopper-stabilized, μ Power

Unipolar Hall-Effect Digital Switches

P/N	Operate Point (G)	Release Point (G)	Hysteresis (G)	Temp Range	Packages	Output	Replaces	Features
A1101	30 to 175	10 to 140	20 to 80	E, L	LH, UA	Open Collector	A3141	
A1102	115 to 245	60 to 190	30 to 80	E, L	LH, UA	Open Collector	A3142	
A1103	205 to 355	150 to 300	30 to 80	E, L	LH, UA	Open Collector	A3143	
A1104	35 to 450	25 to 430	>20	E, L	LH, UA	Open Collector	A3144	
A1106	260 to 430	160 to 330	70 to 140	E, L	LH, UA	Open Collector	A3121, A3122, A3123	
A1120	<50 (typ 35)	>5 (typ 25)	Typ 10	E, L	LH, UA	Open Collector	A3240	Supply Voltage 3 V to 24 V Chopper-Stabilized
A1121	<120	>40	>10 Typ 25	E, L	LH, UA	Open Collector	A3241	Chopper-Stabilized
A1122	<205	>105	>10 Typ 25	E, L	LH, UA	Open Collector	A3242	Chopper-Stabilized
A1125	<50 (typ 35)	>5 (typ 25)	Typ 10	E, L	LH, UA	Open Collector	A3340	Inverted Output Supply Voltage 3 V to 24 V Chopper-Stabilized
A1147	20 to 80	10 to 60	5 to 30	E, L	LH, UA	Current Source		
A1148	20 to 80	10 to 60	5 to 30	E, L	LH, UA	Current Source		
A1152	<110	>45	5 to 30	L	LH, UA	Current Source	A3361, A1142	Increased high voltage transient protection, lower min Vcc
A1153	<110	>45	5 to 30	L	LH, UA	Current Source	A3163, A3362, A1143	Increased high voltage transient protection, lower min Vcc
A1155	20 to 60	10 to 55	5 to 30	L	LH, UA	Current Source	A1145	Increased high voltage transient protection, lower min Vcc
A1156	20 to 60	10 to 55	5 to 30	L	LH, UA	Current Source	A1146	Increased high voltage transient protection, lower min Vcc
A1184	300 to 600		5 to 30	E, L	LH, UA	Current Source		Programmable switchpoints
A1190	10 to 200		5 to 30	L	LH, UA	Current Source	A1180	Programmable switchpoints, Icc(low) = 2.0 to 5.0 mA
A1192	10 to 200		5 to 30	L	LH, UA	Current Source	A1182, A1185	Programmable switchpoints, Icc(low) = 5.0 to 6.9 mA
A1193	10 to 200		5 to 30	L	LH, UA	Current Source	A1183, A1186	Programmable switchpoints, Icc(low) = 5.0 to 6.9 mA, inverted A1192
A3250	50 to 350	Typ 13 G below Bop	5< 13-18 Typ <35	L	LT	Open Collector		Programmable switchpoints
A3295	<75	>5	Typ 10	K	LH, UA	Open Collector		

Temperature range codes: S = -20°C to 85°C

E = -40°C to 85°C

K = -40°C to 125°C

L = -40°C to 150°C

Omnipolar Hall-Effect Digital Switches

P/N	Operating Voltage	Operate Point (G)	Release Point (G)	Hysteresis (G)	Temp Ranges	Packages	Supply Current	Features
A3211	2.5 V to 3.5 V	±55	±10	Typ 7.7	E	EL, EH, LH	6 µA (typ)	Inverted output; operates at approx. 0.1% duty cycle
A3212	2.5 V to 3.5 V	±55	±10	Typ 7.7	E	EH, EL, LH, UA	6 µA (typ)	Operates at approx. 0.1% duty cycle
A3213	2.4 V to 5.5 V	±70	±10	Typ 7.7	E, L	LH, UA	825 µA (max)	
A3214	2.4 V to 5.5 V	±70	±10	Typ 7.7	E, L	LH, UA	14 µA (max)	Operates at approx. 0.1% duty cycle
A3245	3.6 V to 24 V	±55	±10	Typ 15	E, L	LH	1.5 mA (typ)	Integrated voltage regulator

BLDC Motor Drivers with Integrated Hall for Commutation

P/N	Continuous Load Current	Number of Bridges	Output	Motor Type	Package	Operate Point (G)	Features
A1442	±200	Full bridge	MOS	BLDC	EW	±75	Reverse battery and short circuit protection, Active braking function, Thermal shutdown protection, Soft-switching
A1448	±200	Full bridge	MOS	BLDC	EW	±75	Reverse battery and short circuit protection, Direct input PWM Speed Control, Active braking function, Thermal shutdown protection, Soft-switching

Low Power Hall-Effect Digital Latches / Switches

P/N	Operating Voltage	Operate Point (G)	Release Point (G)	Hysteresis (G)	Temp Ranges	Packages	Supply Current	Features
A1171	1.65 V to 3.5 V	±55	±6	Typ 6	E	EW	4.0 µA (typ) (VDD = 1.8 V)	Complementary outputs Also unipolar operating mode
A1172	1.65 V to 3.5 V	±55	±6	Typ 6	E	CG	4.0 µA (typ) (VDD = 1.8 V)	Wafer Level Chip Scale Package (WLCSP)
A1174	1.65 V to 3.5 V	5 to 55	-55 to -5	Typ 72	E	EW	82 mA (VDD = 3 V)	Innovative clocking scheme of current control and direction detection

Bipolar Hall-Effect Digital Switches

P/N	Operate Point (G)	Release Point (G)	Hysteresis (g)	Temp Range	Packages	Output	Replaces	Features
A1202	<75	>-75	>30	L	UA		UGx3133	
A1203	<95	>-95	>30	E, L	LH, UA		UGx3132	
A1205	-40 to 50	-50 to 40	5 to 55	L	LH, UA		A3134	Optimized for pulsed Vcc
A3230	-10 to 25	-25 to 10	5 to 25	E, L	LH, UA			Chopper-stabilized (bipolar switch)

Hall-Effect Digital Latches

P/N	Operate Point (G)	Release Point (G)	Hysteresis (g)	Temp Range	Packages	Output	Replaces	Features
A1210	25 to 150	-150 to -25	>50 (typ 180)	E, L	LH, UA	Open Collector	UGN3177	
A1211	15 to 180	-180 to -15	>80 (typ 180)	L	UA	Open Collector	UGN3175	
A1212	50 to 175	-175 to -50	100 to 350	L	LH, UA	Open Collector	A3187	
A1213	80 to 200	-200 to -80	160 to 400	L	LH, UA	Open Collector	A3188, A3189	
A1214	140 to 300	-300 to -140	280 to 600	L	LH, UA	Open Collector	A3185	
A1220	5 to 40	-40 to -5	Typ 45	E, L	LH, UA	Open Collector	A3280	Supply Voltage 3 V to 24 V, Chopper-stabilized
A1221	15 to 90	-90 to -15	Typ 100	E, L	LH, UA	Open Collector	A3281	Supply Voltage 3 V to 24 V, Chopper-stabilized
A1222	70 to 150	-150 to -70	Typ 220	E, L	LH, UA	Open Collector	A3282	Supply Voltage 3 V to 24 V, Chopper-stabilized
A1223	100 to 180	-180 to -100	Typ 300	E, L	LH, UA	Open Collector	A3283	Supply Voltage 3 V to 24 V, Chopper-stabilized
A1225	140 to 300	-300 to -140	340 to 540	L	LH, UA	Open Collector	A3185	40 V load dump protection
A1227	50 to 175	-175 to -50	100 to 350	L	LH, UA	Open Collector	A3187	40 V load dump protection
A1229	80 to 200	-200 to -80	160 to 400	L	LH, UA	Open Collector	A3188	40 V load dump protection
A1242	5 to 80	-80 to -5	40 to 110	E, L	LH, UA	Current Source		Two-wire operation
A3290	5 to 50	-50 to -5	10 to 100	K	LH, UA	Open Collector		Chopper-stabilized
A3291	10 to 100	-100 to -10	20 to 100	K	LH, UH	Open Collector		Chopper-stabilized

Highly-Accurate Analog Speed Sensor ICs with Digital Outputs

P/N	Operate Point (G)	Release Point (G)	Hysteresis (g)	Temp Ranges	Packages	Minimum Speed (Hz)
A1421	0 to 27.5	-12.5 to 7.5	Typ 15	L	K	20
A1422	5 to 35	-35 to -5	Typ 30	L	K	20
A1423	10 to 100	-100 to -10	Typ 130	L	K	20
A1425	-11 to 11	-11 to 11	Typ 8.5	L	K	20

Dual Element Speed & Direction Sensor ICs for Ring Magnets

P/N	Operate Point (G)	Release Point (G)	Hysteresis (g)	Temp Ranges	Packages	Outputs Pins
A1230	30 max	-30 min	Typ 14	L	K, L	Dual Channel Quadrature
A3423	55 max	-55 min	Typ 30	E, L	K, L	Speed & Direction

Gear-Tooth Hall-Effect Speed Sensor ICs (Includes IC and Magnet)

P/N	Supply Voltage	Output Type	Power-On State	Specified Air Gap Range (>20 Hz)	Key Spec <i>See datasheet for details</i>	Minimum Speed	Applications	Temp and Packages
ATS617	4.5 V to 24 V	3-wire	High (off)	0.4 to 2.50 mm	Timing accuracy	10 Hz	Camshaft	L, SG
ATS625	4 V to 24 V	3-wire	High (off)	0.5 to 2.50 mm	Repeatability	Zero speed	Crankshaft	L, SG
ATS635/36	4.2 V to 24 V	3-wire	Low (off) / High (off)	2.50 mm max	User programmable switch point	Zero speed	Coarse	L, SE
ATS643	4 V to 24 V	2-wire	High (current)	0.5 to 2.50 mm	Duty Cycle	Zero speed	Transmission	L, SH
ATS667	4.0 V to 24 V	3-wire	High	0.5-2.5 mm	Duty Cycle	Zero-speed	Transmission	L, SG
ATS675	3.3 V to 26.5 V	3-wire	TPO	0.5 to 2.50 mm	Timing accuracy	Zero speed	Camshaft	L, SE
ATS682	4.0 V to 18 V	2-wire	High	0.5-2.75 mm	Duty Cycle	Zero-speed	ABS	L, SH

Integrated Leadframe Current Sensor ICs - Unidirectional, Bidirectional and Hot Swap Controllers

Type	P/N	Measurement Range	Isolation Voltage (V)	Bandwidth (kHz)	Temp Ranges	Packages	Features
Bidirectional	ACS709	±20 A to 35 A	2100	120	L	LF	Automotive Grade High Bandwidth, Fast Fault Response Current Sensor IC In Thermally Enhanced Package
Bidirectional	ACS710	±12.5 A to 25 A	3000	120	K	LA	High Bandwidth, Fast Fault Response Current Sensor IC In Thermally Enhanced Package
Bidirectional	ACS711	±12.5 A to 25 A	<100VDC	100	E, K	SOIC-8	Economic Low Voltage Isolation, Low Noise, High Bandwidth current sensor with integrated fault output
Bidirectional	ACS712	±5 A to 30 A	2100	>50	E	SOIC-8	Low noise, fast response, shielded current sensor IC
Unidirectional	ACS713	20 A to 30 A	2100	>50	E	SOIC-8	Unidirectional version of the ACS712
Bidirectional	ACS714	±5 A to 30 A	2100	80	E, L	L	Low noise, high speed current sensor IC with integrated shield; Automotive grade
Unidirectional	ACS715	20 A to 30 A	2100	80	E, L	L	Unidirectional version of ACS714 - Automotive grade
Bidirectional/Unidirectional	ACS756	±50 A to 100 A	3000	120	S, K	CA	Most accurate, highest bandwidth current sensor IC for monitoring currents from 50 to 100 A
Bidirectional	ACS758	±50 A to 200 A	3000	120	E, S, K, L	CB	Thermally enhanced, high bandwidth current sensor IC
Hot swap controller	ACS761	±20 A	N/A	50	E	LF	Hall-effect hot swap protection IC

Linear Hall-Effect Current Sensor ICs

P/N	Supply Voltage	Quiescent Output (V)	Typical Sensitivity	Output Bandwidth (kHz)	Temp Ranges	Packages	Features
A1351	4.5 to 5.5	50 % (QDC)	0.055 to 0.095 % DC/G	0.125	K	KT	PWM output, Factory programmed TC to 0 %/°C
A1360	4.5 to 5.5	Typ 10% or 50% Vcc	0.7 to 1.4 mV/G Programmable	50	L	KT	Factory programmed TC to 0 %/°C
A1361	4.5 to 5.5	Typ 10% or 50% Vcc	1.4 to 4.5 mV/G Programmable	50	L	KT	Factory programmed TC to 0 %/°C
A1362	4.5 to 5.5	Typ 10% or 50% Vcc	4.5 to 16 mV/G Programmable	50	L	KT	Factory programmed TC to 0 %/°C

Brushless DC Motor Drivers

P/N	Output Voltage Range	Output Current	Number of Bridges	Output	Interface	Logic Supply Voltage Range	Motor Type	Packages	Features
A3904	24 V to 5.5 V	127 mA	One linear sink driver	Linear MOSFET	I ² C	Internally generated	Voice Coil	DFN-6, WLCSP-6 Bare die	8 bit D to A, 1 x 0.7 mm WLCSP Internal sense resistor
A3907	2.3 V to 5.5 V	102 mA	One linear sink driver	Linear MOSFET	I ² C	Internally generated	Voice Coil	WLCSP-6 1.47 x 0.97 mm	10 bit D to A, Current ramp control, Sleep, 100 uA resolution
A3930/31K	7 V to 50 V	N/A	Three half bridges	MOSFET gate driver	Hall-based state machine	Internally generated	Three-phase brushless	eLQFP-48	Hall commutation logic, Sleep, SR, MD, Brake, Tach, PWM, Fault output, Prepositioning state (A3931 only)
A3932	12 V to 50 V	2 to 25 A Typical	Three half bridge gate drivers	MOSFET gate driver	Parallel	Internally generated	Three-phase brushless	TSSOP-38	SR, Tach, Fault output, Power MOSFET protection, Brake, PWM
A3935K	7 V to 40 V	N/A	Three half bridges	MOSFET gate driver	Parallel	4.75 V to 5.25 V	Three-phase brushless	QSOP-36 eLQFP-48	Automotive temp, Boost converter for low-battery operation, Fault output
A3938	12 V to 50 V	2 to 25 A Typical	Three half bridge gate drivers	MOSFET gate driver	Parallel	Internally generated	Three-phase brushless	TSSOP-38	SR, Fault output, Power MOSFET protection, Power loss brake, PWM
A4930	8 V to 36 V	1 to 10 A Typical	Single full bridge	MOSFET gate driver	Parallel	Internally generated	Single phase BLDC fan	5 x 5 mm DFN-28	Dead time protection, FG, RD outputs Lock protection, Soft start, Hall element input, PWM current limit
A4931	8 V to 38 V	1 to 10 A Typical	Three half bridges	MOSFET gate driver	Parallel	Internally generated	Three-phase brushless	5 x 5 mm QFN-28	PWM current limit, FG out, Hall element input, Locked rotor protection, UVLO, TSD
A4934	8 V to 20 V	1.25 A	Three half bridges	DMSO	Parallel	Internally generated	Three-phase brushless	eTSSOP-16	Sensorless commutation, soft switching, lock detect, standby mode, FG speed output
A4935K	7 V to 50 V	N/A	Three half bridges	MOSFET gate driver	Parallel	3.0 V to 5.5 V	Three-phase brushless	eLQFP-48	Automotive temp, Automotive diagnostics, Integrated charge pump
A4936	8 V to 38 V	1 to 10 A Typical	Three half bridges	MOSFET gate driver	Parallel	Internally generated	Three-phase brushless	5 x 5 mm QFN-32	PWM current limit, FG amplifier and comparator, Hall element input, Locked rotor protection, UVLO, TSD
A4938	8 V to 38 V	1 to 10 A Typical	Three half bridges	MOSFET gate driver	Parallel	Internally generated	Three-phase brushless	5 x 5 mm QFN-28	PWM current limit, FG out, HALL element input, UVLO, TSD, locked rotor and 2 over voltage protection settings
A4941	4.5 V to 20 V	1.25 A	Three Half Bridges	DMOS	Parallel	Internally generated	Three-phase brushless	e-TSSOP-16	Sensorless Commutation, soft switching, lock detect, standby mode, FG speed output

Note: SR = Synchronous rectification; Tach = Tachometer output; UVLO = Under voltage lockout protection, TSD = Thermal shutdown protection, OCP = Over current protection; DAC = Digital to analog converter; MD = Mixed decay; SPI = Serial peripheral interface; EMI = Electromagnetic interference; Sleep = Low power mode

DC Brush and Bipolar Stepper Motor Drivers

P/N	Output Voltage Range	Output Current Range	Number of Bridges	Output	Interface	Logic Supply Voltage Range	Motor Type	Packages	Features
A3901	2.5 V to 5.5 V	400 mA	Dual full	MOSFET	Parallel	Internally generated	Stepper or DC brush	DFN-10	Full, Half, Brake, Sleep, 3.0 x 3.0 x 0.75 mm DFN
A3903	2.5 V to 5.5 V	500 mA	Single full	MOSFET	Parallel	Internally generated	DC brush	DFN-8	Forward, Reverse, Brake, Standby, Linear voltage control 2.0 x 2.0 x 0.55 mm DFN
A3904	2.4 V to 5.5 V	127 mA	Voice coil driver	MOSFET	I ² C	1.8 V to 5.5 V	Voice coil	DFN-6, Wafer, WLCSP	8-bit DAC, 500 uA resolution, Small package footprint, Sleep
A3906	2.5 V to 9 V	1.0 A	Dual full	MOSFET	Parallel	Internally generated	Stepper or DC brush	QFN-20	Full, Half, Brake, Sleep, UVLO, Low RDS on, Internal PWM current control, Peak current flag outputs, SR
A3907	2.3 V to 5.5 V	102 mA	One linear sink driver	Linear MOSFET	I ² C	Internally generated	Voice Coil	WLCSP-6 1.47 x 0.97 mm	10 bit D to A, Current ramp control, Sleep, 100 uA resolution
A3908	2.5 V to 5.5 V	500 mA	Single full	MOSFET	Parallel	Internally generated	DC Brush	DFN-8	Forward, Reverse, Brake, Standby, Linear voltage control 2.0 x 2.0 x 0.55 mm DFN
A3941K	7 V to 50 V	N/A	Single full	MOSFET gate driver	Parallel	Internally generated	DC Brush	e-TSSOP-28	Automotive temperatures, automotive diagnostics, small outline thermally enhanced package
A3946K	7 V to 60 V	N/A	Half bridge	MOSFET gate driver	Parallel	Internally generated	DC Brush	SOIC-16 e-TSSOP-16	Automotive temp, Charge pump for low-battery operation, Fault output, 60 V operation
A3950	8 V to 36 V	2.8 A	Single full	DMOS	Parallel	Internally generated	DC brush	e-TSSOP-16, QFN-16	OCP, Fault output, Sleep, Internally generated logic supply
A3953	Vcc to 50 V	1.3 A	Single full	Bipolar	Parallel	3.0 V to 5.5 V	DC brush	DIP-16, SOIC-16	Sleep, Fast/slow decay, Brake, Satlington® sink outputs, PWM
A3955	Vcc to 50 V	1.5 A	Single full	Bipolar	Parallel	4.5 V to 5.5 V	MicroStepper (up to 8 steps/full step)	DIP-16, SOIC-16	3-Bit DAC, MD, Satlington® sink outputs, PWM
A3959	9.5 V to 50 V	3.0 A	Single full	DMOS	Parallel	4.5 V to 5.5 V	DC brush	DIP-24, SOIC-24, eTSSOP-28	Slow/fast/mixed decay, SR, Sleep, Brake, PWM
A3966	Vcc to 30 V	650 mA	Dual full	Bipolar	Parallel	4.75 V to 5.5 V	Stepper	SOIC-16	Full, Half, Satlington® sink outputs, PWM

DC Brush and Bipolar Stepper Motor Drivers (continued)

P/N	Output Voltage Range	Output Current Range	Number of Bridges	Output	Interface	Logic Supply Voltage Range	Motor Type	Packages	Features
A3967	4.75 V to 30 V	750 mA	Dual full	Bipolar	Parallel (Translator)	3.0 V to 5.5 V	MicroStepper (up to 8 steps/full step)	SOIC-24	Two-wire (Step/DIR) interface, MD, Sleep, Satlington® sink outputs, PWM
A3968	Vcc to 30 V	650 mA	Dual full	Bipolar	Parallel	4.75 V to 5.5 V	DC brush	SOIC-16	Brake function, Satlington® sink outputs, PWM
A3972	15 V to 50 V	1.5 A	Dual full	DMOS	Serial	4.5 V to 5.5 V	MicroStepper (up to 32 steps/full step)	DIP-24	6-Bit DAC, SPI, SR, MD, Sleep, PWM
A3977	8 V to 35 V	2.5 A	Dual full	DMOS	Parallel (Translator)	3.0 V to 5.5 V	MicroStepper (up to 8 steps/full step)	PLCC-44, e-TSSOP-28	Two-wire (Step/DIR) interface, MD, Sleep, SR, PWM
A3979	8 V to 35 V	2.5 A	Dual full	DMOS	Parallel (Translator)	3.0 V to 5.5 V	MicroStepper (up to 32 steps/full step)	e-TSSOP-28	Two-wire (Step/DIR) interface, MD, Sleep, SR, PWM
A3980K	7 V to 50 V	1.0 A	Dual full	DMOS	Parallel (Translator)	3.0 V to 5.5 V	MicroStepper (up to 16 steps/full step)	e-TSSOP-28	Protected output drivers, Two-wire (Step/DIR) interface, Fault reporting
A3981K	7 V to 50 V	1.0 A	Dual full	DMOS	Parallel / SPI	3.0 V to 5.5 V	MicroStepper (up to 16 steps/full step)	e-TSSOP-28	Protected output drivers, two-wire (Step/DIR) interface, SPI interface, fault reporting
A3982	8 V to 35 V	1.5 A	Dual full	DMOS	Parallel (Translator)	3.0 V to 5.5 V	Stepper full/half step	SOIC-24	Two-wire (Step/DIR) interface, MD, Sleep, SR, PWM, 2.0 A peak
A3983	8 V to 35 V	1.5 A	Dual full	DMOS	Parallel (Translator)	3.0 V to 5.5 V	MicroStepper (up to 8 steps/full step)	e-TSSOP-24	Two-wire (Step/DIR) interface, MD, Sleep, SR, PWM, 2.5 A peak
A3984	8 V to 35 V	1.5 A	Dual full	DMOS	Parallel (Translator)	3.0 V to 5.5 V	MicroStepper (up to 16 steps/full step)	e-TSSOP-24	Two-wire (Step/DIR) interface, MD, Sleep, SR, PWM, 2.0 A peak
A3985	12 V to 50 V	2 A to 10 A Typical	External Dual full	MOSFET gate driver	Serial	3.0 V to 5.5 V	MicroStepper (up to 32 steps/full step)	TSSOP-38	Serial interface, Sleep, 6 bit linear DACs, PWM, SR, MD
A3986	12 V to 50 V	2 A to 10 A Typical	External Dual full	MOSFET gate driver	Parallel (Translator)	3.0 V to 5.5 V	MicroStepper (up to 16 steps/full step)	TSSOP-38	Two-wire (Step/Dir) interface, Sleep, DAC, PWM, SR, MD
A3987	8 V to 50 V	1.5 A	Dual full	DMOS	Parallel (Translator)	3.0 V to 5.5 V	MicroStepper (up to 16 steps/full step)	e-TSSOP-24	Two-wire (Step/Dir) interface, MD, Sleep, SR, PWM, OCP
A3988	8 V to 36 V	1.2 A	Quad full	DMOS	Parallel	3.0 V to 5.5 V	MicroStepper (up to 4 steps/full step)	QFN-36 eLQFP-48	2-bit DAC, MD, PWM, Drop-in (not pin to pin) for two L6219 (A2916)
A3989	8 V to 36 V	1.2 A (step) 2.4 A (DC)	Three full	DMOS	Parallel	3.0 V to 5.5 V	MicroStepper and DC Brush (up to 4 steps/full step)	QFN-36	2-bit DAC, MD, PWM, Drop-in (not pin to pin) for L6219 (A2916), Brake, fast/slow decay
A3992	15 V to 50 V	1.5 A	Dual full	DMOS	Serial	4.5 V to 5.5 V	MicroStepper (up to 32 steps/full step)	DIP-24, eTSSOP-24	6-bit DAC, MD, SPI, SR, Sleep, PWM, OCP
A3995	8 V to 36 V	2.4 A	Dual full	DMOS	Parallel	3.0 V to 5.5 V	DC brush	QFN-36	Brake, Fast/slow decay, SR, PWM
A4940K	7 V to 50 V	N/A	Single full	MOSFET gate driver	Parallel	3.0 V to 5.5 V	DC Brush	e-TSSOP-24	Automotive temperatures, automotive diagnostics, small outline thermally enhanced package
A4954	8 V to 40 V	1.5 A	Dual full	DMOS	Parallel (IN1, IN2, IN3, IN4)	Internally generated	Stepper or DC Brush	e-TSSOP-16	Over-current protection (OCP), Adjustable PWM current limit, fully integrated charge pump
A4980K	3.3 V to 50 V	1.0 A	Dual full	DMOS	Parallel / SPI	3.0 V to 5.5 V	MicroStepper (up to 16 steps/full step)	e-TSSOP-28	Protected output drivers, two-wire (Step/DIR) interface, SPI interface, fault reporting, low voltage operating capability
A4982	8 V to 35 V	2.0 A	Dual full	DMOS	Parallel (Translator)	3.0 V to 5.5 V	MicroStepper (up to 16 steps/full step)	QFN-32, eTSSOP-24	Two-wire (Step/DIR) interface, OCP, MD, Sleep, SR, PWM, 2.0 A peak
A4983	8 V to 35 V	2.0 A	Dual full	DMOS	Parallel (Translator)	3.0 V to 5.5 V	MicroStepper (up to 16 steps/full step)	QFN-28	Two-wire (Step/DIR) interface, MD, Sleep, SR, PWM, 2.0 A peak
A4984	8 V to 35 V	2.0 A	Dual full	DMOS	Parallel (Translator)	3.0 V to 5.5 V	MicroStepper (up to 8 steps/full step)	QFN24, QFN-32, eTSSOP-24	Two-wire (Step/DIR) interface, OCP, MD, Sleep, SR, PWM, 2.0 A peak
A4985	8 V to 35 V	1.0 A	Dual full	DMOS	Parallel (Translator)	3.0 V to 5.5 V	MicroStepper (up to 8 steps/full step)	QFN24, QFN-32, eTSSOP-24	Two-wire (Step/DIR) interface, OCP, MD, Sleep, SR, PWM, 1.0 A peak
A4986	8 V to 35 V	2.0 A	Dual full	DMOS	Parallel	3.0 V to 5.5 V	MicroStepper and DC Brush (up to 4 steps/full step)	eTSSOP-24	2-bit DAC, OCP, MD, Sleep, SR, Int. PWM current control, 2.0 A peak
A4987	8 V to 35 V	1.0 A	Dual full	DMOS	Parallel	3.0 V to 5.5 V	MicroStepper and DC Brush (up to 4 steps/full step)	QFN-24, eTSSOP-24	2-bit DAC, OCP, MD, Sleep, SR, Int. PWM current control 1.0 A peak
A4988	8 V to 35 V	2.0 A	Dual full	DMOS	Parallel (Translator)	3.0 V to 5.5 V	MicroStepper (up to 16 steps/full step)	QFN-28	Two-wire (Step/DIR) interface, OCP, MD, Sleep, SR, PWM, 2.0 A peak
A4989	12 V to 50 V	2 A to 10 A Typical	External Dual full	MOSFET gate driver	Parallel (Translator)	3.0 V to 5.5 V	MicroStepper (up to 16 steps/full step)	TSSOP-38	Two-wire (Step/Dir) interface, Sleep, DAC, PWM, SR, MD
UDQ2916	10 V to 45 V	750 mA	Dual full	Bipolar	Parallel	4.75 V to 5.25 V	Stepper	SOIC-24	Internal PWM current control, 2-bit DAC

DC Brush and Bipolar Stepper Motor Drivers – Automotive Grade

P/N	Output Voltage Range	Output Current	Number of Bridges	Output	Interface	Logic Supply Voltage Range	Motor Type	Packages	Features
A3941K	7 V to 50 V	N/A	Single full	MOSFET gate driver	Parallel	Internally generated	DC Brush	e-TSSOP-28	Automotive temperatures, automotive diagnostics, small outline thermally enhanced package
A3946K	7 V to 60 V	N/A	Half bridge	MOSFET gate driver	Parallel	Internally generated	DC Brush	SOIC-16 e-TSSOP-16	Automotive temp, Charge pump for low-battery operation, Fault output, 60 V operation
A3980K	7 V to 50 V	1.0 A	Dual full	DMOS	Parallel (Translator)	3.0 V to 5.5 V	MicroStepper (up to 16 steps/full step)	e-TSSOP-28	Protected output drivers, Two-wire (Step/DIR) interface, Fault reporting
A4940K	7 V to 50 V	N/A	Single full	MOSFET gate driver	Parallel	3.0 V to 5.5 V	DC Brush	e-TSSOP-24	Automotive temperatures, automotive diagnostics, small outline thermally enhanced package
UDQ2916	10 V to 45 V	750 mA	Dual full	Bipolar	Parallel	4.75 V to 5.25 V	Stepper	SOIC-24	Internal PWM current control, 2-bit DAC

Three-Phase Brushless DC Motor Drivers – Automotive Grade

P/N	Output Voltage Range	Output Current	Number of Bridges	Output	Interface	Logic Supply Voltage Range	Motor Type	Packages	Key Features
A3930/31K	7 V to 50 V	N/A	Three half bridges	MOSFET gate driver	Hall-based state machine	Internally generated	Three-phase brushless	eLQFP-48	Hall commutation logic, Sleep, SR, MD, Brake, Tach, PWM, Fault output, Prepositioning state (A3931 only)
A3935K	7 V to 40 V	N/A	Three half bridges	MOSFET gate driver	Parallel	4.75 V to 5.25 V	Three-phase brushless	QSOP-36 eLQFP-48	Automotive temp, Boost converter for low-battery operation, Fault output
A4935K	7 V to 50 V	N/A	Three half bridges	MOSFET gate driver	Parallel	3.0 V to 5.5 V	Three-phase brushless	eLQFP-48	Automotive temperatures, Automotive diagnostics, Integrated charge pump

Display Drivers and Other Power ICs — Automotive Grade

P/N	Maximum Output Voltage (V)	Description	Maximum Output Current (mA)	Number of Outputs	Sink/Source	Latched Output	Serial Input	Packages
A2550K	60	Relay driver / Vreg	250	3 x Relay 1 x 5 V Vreg	Sink	No	No	eTSSOP-16
A3942K	60	Four Channel High-side MOSFET Pre-Driver IC	-	4	-	-	Yes	TSSOP-38
A6850K	40	Two-channel sensor interface IC	25	2	Source	No	No	SOIC-8

Relay/Solenoid Drivers

P/N	Maximum Output Voltage (V)	Maximum Output Current (mA)	Number of Outputs	Sink/Source	Latched Output	Serial Input	Packages	Features
A2981	50	350	8	Source	No	No	DIP-18	Clamp diodes
A2982	50	350	8	Source	No	No	DIP-18, SOIC-20	Clamp diodes
A2987-6	35	350	8	Source	No	No	DIP-20, SOIC-20	Clamp diodes, current limit, TSD

Smoke Detector ICs

P/N	Sensor Type	Reduced Sensitivity Timer	Horn Pattern	Supply Voltage (VDC)	Reverse Battery Protect	Temperature Range (°C)	Packages	Features
A5303	Photo	Y	Temporal (T3)	2.3-5.5	Y	-20 to 85	TSSOP-20	Low voltage operation; Digital horn output; Logic outputs for driving external sound IC
A5348	Ion	Y	Continuous Pulsing	6 to 12	Y	0 to 50	DIP-16	
A5358	Photo	Y	Continuous Pulsing	6 to 12		-25 to 75	DIP-16, SOIC-16	Warns on degraded chamber sensitivity
A5366	Photo	Y	Temporal (T3)	6 to 12		-25 to 75	DIP-16, SOIC-16	Warns on degraded chamber sensitivity
A5367	Ion	Y	Temporal (T3)	6 to 12	Y	-10 to 60	DIP-16	

Common features

All devices include:

- Maximum supply current of 9 μ A at 9 V supply
- Piezo horn driver
- Low battery alert signal
- Interconnect feature: alarm condition on one interconnected device causes alarm indication on all other interconnected devices

For additional smoke detector products, please see www.allegromicro.com/ic/safety.asp

DC/DC Regulators

P/N	Topology	Input Voltage	Output	Output Current	Packages	Features
A4401	Flyback	7 V to 40 V	N/A	Scalable	SOIC-8	High temperature capability, multiple output flyback controller, adaptive quasi-resonant on/off control, enable input can be driven by the battery voltage
A4402	Buck + LDO	6 V to 50 V	1.2 V	Buck - 1 A LDO - 0.25 A	16-ETSSOP	High temperature capability, integrated Power-On Reset and Watchdog Timer, adjustable soft-start, fixed on-time with up to 2 MHz operation
A4403	Buck	9 V to 46 V	0.8 V	3.6 A switch current	4 x 4 mm QFN-16	Valley current mode, fast transient response, high step-down ratios with on times <50nS, configurable on time for Fsw up to 2 MHz
A4447	Buck	8 V to 50 V	0.8 V	3 A peak switch current	eSOIC-8	50 V maximum input voltage, Adjustable output voltage, High efficiency, Adjustable fixed off-time buck converter
A4490	3 x Buck	4.5 V to 34 V	0.8 V	Each output rated at 2.2 A peak switch current	4 x 4 mm QFN-20	Three independent adjustable regulators, 550 kHz fixed frequency operation, ceramic output capacitors, integrated Power-On Reset, 120 deg. Out-of-phase switching - lower input ripple
A4492	3 x Buck	4.5 V to 34 V	0.8 V	Each output rated at 2.2 A peak switch current	4 x 4 mm QFN-20	High temperature capability, Three independent adjustable regulators, 550 kHz fixed frequency operation, ceramic output capacitors, integrated Power-On Reset, 120 deg. Out-of-phase switching - lower input ripple
A8450	Internal Buck + 3 LDO	6 V to 45 V	0.8 V	1.2 V to 3.3 V @ 200 mA, 3.3 V @ 200 mA, 5 V @ 200 mA, 5 V @ 200 mA	SOIC-24	High temperature capability, Internal buck regulator with two linear regulators (5 V tracking) and two linear controllers (3.3 V and 1.8 V to 3.3 V adjustable), Fault flag
A8498	Buck	8 V to 50 V	0.8 V	5 A peak switch current	eSOIC-8	50 V maximum input voltage, Adjustable output voltage, High efficiency, Adjustable fixed off-time buck converter
A8697	Buck	8 V to 25 V	0.8 V	7 A peak switch current	eSOIC-8	25 V maximum input voltage, Adjustable output voltage, High efficiency, Adjustable fixed off-time buck converter
A8698	Buck	8 V to 25 V	0.8 V	5 A peak switch current	eSOIC-8	25 V maximum input voltage, Adjustable output voltage, High efficiency, Adjustable fixed off-time buck converter

DC/DC Regulators - Automotive Grade

P/N	Topology	Input Voltage	Output	Output Current	Packages	Features
A4401	Flyback	7 V to 40 V	N/A	Scalable	SOIC-8	High temperature capability, multiple output flyback controller, adaptive quasi-resonant on/off control, enable input can be driven by the battery voltage
A4492	3 x Buck	4.5 V to 34 V	0.8 V	Each output rated at 2.2 A peak switch current	4 x 4 mm QFN-20	High temperature capability, Three independent adjustable regulators, 550 kHz fixed frequency operation, ceramic output capacitors, integrated Power-On Reset, 120 deg. Out-of-phase switching - lower input ripple
A8450	Internal Buck + 3 LDO	6 V to 45 V	0.8 V	1.2 V to 3.3 V @ 200 mA, 3.3 V @ 200 mA, 5 V @ 200 mA, 5 V @ 200 mA	SOIC-24	High temperature capability, Internal buck regulator with two linear regulators (5 V tracking) and two linear controllers (3.3 V and 1.8 V to 3.3 V adjustable), Fault flag

LNB Regulators for Satellite STB Power

P/N	Topology	Input Voltage	Output	Output Current	Packages	Features
A8285	Boost / Linear	8 V to 16 V	Single, adjustable	Iout max = 500 mA	SOIC-16	Boost/LDO, Integrated FET, 16 selectable output voltages from 12.7 V to 20.4 V, I ² C™ interface, 22 kHz tone (DiSEqC™ compatible), Current limit, Fault flag
A8286	Boost / Linear	8 V to 16 V	Dual, adjustable	Iout 900 mA limited per channel	5 x 5 mm QFN 28L	Same as A8290 (less Bypass FET), with dual channel outputs and A8290 single-footprint option
A8290	Boost / Linear	8 V to 16 V	Single, adjustable	Iout 900 mA limited	5 x 5 mm QFN 28L	Same as A8287, plus higher current limit for DIRECTV™ applications, 48 mSec ODT timer, additional diagnostics, Integrated DiSEqC™ Bypass FET
A8291	Boost / Linear	8 V to 16 V	Single, adjustable	Iout 600 mA limited	5 x 5 mm QFN 28L	Same as A8290 but lower output current limit for non-DIRECTV™ applications
A8292	Boost / Linear	8 V to 16 V	Dual, adjustable	Iout 600 mA limited per channel	5 x 5 mm QFN 28L	Same as A8286 but lower output current limit for non-DIRECTV™ applications
A8293	Boost / Linear	9 V to 16 V	Single, adjustable	Iout 700 mA limited	4 x 4 mm QFN 20L	Same features as A8290, but in smaller 4 x 4 pkg and for DiSEqC 1.x apps (no tone detect, no bypass FET, no need for DiSEqC filter)
A8296	Boost / Linear	10 V to 16 V	Single, adjustable	Adjustable 300-500 mA	3 x 3 mm QFN 16L	Same features as A8293, but in smaller 3 x 3 pkg and with adjustable current limit

LED Drivers - Switching

P/N	Example Applications	Auto motive?	Vin	Max. OVP	Iout Max	Channels	LEDs/ Channel	Total LED's	Topology	Freq. MHz	Package	Temperature Rating
A6210	LED Lighting	N	9-46 V	NA	3 A	1	1-9	1-9	Buck	up to 2 MHz	4 x 4 QFN-16	105°C
A8500	Notebook, Monitor	N	5-27 V +5 V bias	47 V	25 mA	8	12	96	Boost	0.2 to 2	4 x 4 TQFN-26	85°C 105°C
A8501	TFT Backlight (Navigation, Cluster, Backup Camera, DVD)	Y	6.8-22 V	38 V	100 mA	4	9	36	Boost	0.6 to 2.2	eTSSOP-28	125°C 85°C
A8503	Notebook, Monitor	N	5-27 V +5 V bias	47 V	35 mA	6	12	72	Boost	0.6 to 2	4 x 4 TQFN-26	105°C
A8504	Notebook, Monitor, Small LCD TV	N	5-27 V +5 V bias	47 V	40 mA	8	11	88	Boost	0.2 to 2	4 x 4 TQFN-26	85°C 105°C
A8507	Monitor/LCD TV	N	5-27 V +5 V bias	Scalable	80 mA	6	24	144	Boost Controller	0.25 to 1.0	SOIC-24 eTSSOP-24	85°C
A8510	Backlighting LCD monitors and televisions	N	5-40 V	60 V	40 mA	8	12	96	Boost Switching	2.25	QFN	40°C to 105°C
A8511	TFT Backlight (Navigation, Cluster, Backup Camera, DVD)	Y	6.8-22 V	38 V	150 mA	4	9	36	Boost	0.6 to 2.2	eTSSOP-28	125°C 85°C
A8512	Monitor/LCD TV	N	8-24 V	Scalable	80 mA	6	32	192	Boost Controller	0.3 to 1.0	5 x 5 QFN-28 SOIC-24	85°C
A8515	Radio, Navigation, Netbooks	N	5-40 V	55 V	120 mA	2	12	24	Boost	0.6 to 2.25	eTSSOP-16	105°C
A8516	Backlighting LCD monitors and televisions	N	8-24 V	50 V	120 mA	6	18	108	Boost Switching	1	SOIC / TSSOP	40°C to 85°C

LED Linear Constant-Current Drivers and Switches

P/N	Iout (mA) per channel	Number of Channels	Vout Max (V)	Latched Output?	Serial Input?	Package	Features
A6210	3000	1	40	N	N	QFN-16	High switching frequency, up to 2 MHz, Integrated power MOSFET, Only 6 external components required, Disable input for PWM, Thermal shutdown
A6260	350	1	39	N	N	SOIC-8	Thermal foldback, Reverse battery protection; Enable input for PWM; Slew-rate limiting
A6279	90	16	17	Y	Y	DIP-24, SOIC-24, HTSSOP-24, QFN-28	CC, LOD, SOTO, TSD, UVLO
A6280	150	3	17	Y	Y	DIP-16, QFN-16	CC, DotC, PWM, TSD, UVLO
A6281	150	3	17	Y	Y	QFN-16	CC, DotC, PWM, TSD, UVLO, internal PWM clock
A6282	50	16	13	Y	Y	QFN-24, SOIC-24, HTSSOP-24	CC, TSD, UVLO
A6285	80	16	13	Y	Y	QFN-32	CC, DotC, SOTO, TSD, UVLO

Note: CC = Constant Current, DotC = Dot Correction, LOD = LED Open Detection, PWM = PWM control per channel, SOTO = Staggered Output Turn-on, TSD = Thermal Shutdown, UVLO = Under-Voltage Lockout

LED Drivers - Automotive Grade

P/N	Example Applications	Vin	Max Output	Iout max	Ch	LEDs / Ch	Total LEDs	Topology	Freq (MHz)	Pkg	Features
A6260	Dome Light, Map Light, other interior lighting	6-40 V	N/A	350 mA	1	3	3	Linear	N/A	eSOIC-8	Thermal foldback, Reverse battery protection; Enable input for PWM; Slew-rate limiting
A6261	Dome Light, Map Light, other interior lighting	6-50 V	N/A	400 mA	4	3	12	Linear	N/A	eMSOP-10 eTSSOP-16	Low dropout voltage; LED open/short protection; PWM capable with slew control
A6262	Interior lighting with switch	6-50 V	N/A	400 mA	4	3	12	Linear	N/A	eMSOP-10 eTSSOP-16	A6261 plus debounce switch input
A6264	Stop, brake, or tail lighting (RCL)	6-50 V	N/A	400 mA	4	3	12	Linear	N/A	eMSOP-10 eTSSOP-16	A6261 plus Stop and Tail inputs
A8501	TFT Backlight (Navigation, Cluster, Backup Camera, DVD)	6.8-22 V	38 V	100 mA	4	9	36	Boost	0.6 to 2.2	eTSSOP-28	Fully integrated; adjustable Fsw to avoid FM band; 40 V load dump protection; high contrast ratio range; extensive fault protection; output disconnect switch; optional thermal derating
A8511	TFT Backlight (Navigation, Cluster, Backup Camera, DVD)	6.8-22 V	38 V	150 mA	4	9	36	Boost	0.6 to 2.3	eTSSOP-28	Fully integrated; adjustable Fsw to avoid FM band; 40 V load dump protection; high contrast ratio range; extensive fault protection; output disconnect switch; optional thermal derating

XENON Photoflash Cap Chargers with IGBT Driver

P/N	Topology	Input Voltage	Output	Output Current	Packages	Features
A8424	Flyback	3.0 V to 5.5 V (1.5 V to 11.0 Vbat)	Adjustable	0.5 to 1.5 A	3 x 3 mm TQFN 16L	Primary sensing, 55 V DMOS, 11 V Vbat, dual IGBT triggers, separate sink/source
A8425	Flyback	3.0 V to 5.5 V (1.5 V to 11.0 Vbat)	Adjustable	1.0 to 3.2 A	3 x 3 mm TQFN 16L	Primary sensing, 55 V DMOS, 11 V Vbat, dual IGBT triggers, separate sink/source
A8426	Flyback	3.0 V to 5.5 V (1.5 V to 11.0 Vbat)	Adjustable	1.0 to 3.2 A	3 x 3 mm TQFN 16L	Secondary sensing, 55 V DMOS, 11 V Vbat, separate sink/source, dual IGBT triggers, auto refresh
A8427	Flyback	2.3 V to 5.5 V (1.5 V to 6.0 Vbat)	Adjustable	0.8 to 2.4 A	3 x 3 mm TQFN 16L	Primary sensing, 40 V DMOS, separate sink/source, auto refresh
A8436	Flyback	3 V to 5.5 V (or 1.5 V min if Vcc supplied)	Adjustable	1.0 A, 1.2 A, 1.4 A	3 x 3 mm TDFN 10L	Secondary sensing, 40 V DMOS
A8437	Flyback	2.3 V to 5.5 V	Adjustable	0.3 to 1.2 A	3 x 3 mm TQFN 10L or 1.2 x 1.6 mm WLCSP	Primary sensing, 40 V DMOS, low voltage logic, separate sink/source (CSP only), dual IGBT triggers, IGBT interlock, auto refresh
A8438	Flyback	3 V to 5.5 V (or 1.5 V min if Vcc supplied)	Adjustable	1.6 A, 1.8 A, 2.0 A	3 x 3 mm TDFN 10L	Secondary sensing, 40 V DMOS
A8439	Flyback	3 V to 5.5 V (or 1.5 V min if Vcc supplied)	Adjustable	0.27 to 1.5 A	3 x 3 mm TDFN 10L	Secondary sensing, 40 V DMOS, continuous feedback, auto refresh, flexible 8-step ILIM programming
A8724	Flyback	3.0 V to 5.5 V (1.5 V to 11.0 Vbat)	Adjustable	0.4 to 1.5 A	3 x 3 mm TDFN 10L	Primary sensing, 55 V DMOS, 11 V Vbat, separate sink/source, flexible 8- step ILIM programming
A8731	Flyback	2.3 V to 5.5 V	Adjustable	0.4 to 1.2 A	3 x 3 mm TDFN 10L	Primary sensing, 40 V DMOS, dual IGBT triggers
A8732	Flyback	2.3 V to 5.5 V (1.5 V to 5.5 V Vbat)	Adjustable	0.4 to 1.5 A	2 x 2 mm TDFN-8L	Primary sensing, 50 V DMOS, 1 V logic compatible, small package flexible 16-step ILIM programming
A8733	Flyback	2.3 V to 5.5 V	Adjustable	0.6 to 1.8 A	3 x 3 mm TDFN 10L	Primary sensing, 40 V DMOS, system enable pin, auto refresh
A8735	Flyback	1.5 V to 5.5 V	Adjustable	1.0 A	2 x 2 mm TDFN-8L	Primary sensing, 50 V DMOS, 1 V logic compatible, small package
A8737	Flyback	2.3 V to 5.5 V	Adjustable	0.4 to 0.9 A	3 x 3 mm TDFN 10L 1.2 x 1.6 mm CSP	Primary sensing, 40 V DMOS, separate sink/source, integrated IGBT 5 V supply
A8738	Flyback	2.3 V to 5.5 V	Adjustable	0.4 to 0.9 A	3 x 3 mm TDFN 10L	Primary sensing, 40 V DMOS, separate sink/source, integrated IGBT 3 V supply
A8739	Flyback	2.3 V to 5.5 V	Adjustable	0.4 to 1.5 A	2 x 2 mm TDFN-8L	Primary sensing, 50 V DMOS, 1 V logic compatible, small package, flexible 16-step ILIM programming, Vout adjustable in 5 steps
A8835	Flyback	2.3 V to 5.5 V (1.5 V to 5.5 V Vbat)	Adjustable	0.55 to 1.75 A	3 x 3 mm TDFN 10L	Secondary sensing, 40 V DMOS, flexible 8-step ILIM programming
A8837	Flyback	3 V to 5.5 V	Adjustable	0.7 to 2 A	3 x 3 mm TDFN 10L	Secondary sensing, 40 V DMOS, flexible 8-step ILIM programming



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