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Battery Management

Cell Balancing and Safety

Device	# of Series Connected Li-Ion Cells	Power FET Control	Shutdown				Programmable Threshold	Programmable Timeout	Cell Voltage Monitor	Pack Current Monitor	Cell Balancing FETs	Voltage Regulator (V)	Interface	Package
			Over-voltage	Under-voltage	Over-current	Short Circuit								
ISL9208	4 to 7	Y	Y	Y	Discharge + Charge	Discharge	4-Discharge OC, 4-Charge OC, 4-Short Circuit	8-Discharge OC, 8-Charge OC, 2-Short Circuit	Y	N	Y	3.3	I ² C	Eval Board, 32 Ld QFN
ISL9216	5	Y	Y	Y	Discharge + Charge	Discharge	4-Discharge OC, 4-Charge OC, 4-Short Circuit	8-Discharge OC, 8-Charge OC, 2-Short Circuit	Y	N	Y	3.3	I ² C	Eval Board, 32 Ld QFN
ISL9217	4 to 7	N	Y	Y	N	N	N	N	Y	N	Y	3.3	I ² C	24 Ld QFN
ISL94200	4 to 7	Y	Y	Y	Discharge + Charge	Discharge	4-Discharge OC, 4-Charge OC, 4-Short Circuit	8-Discharge OC, 8-Charge OC, 2-Short Circuit	Y	Y	N	3.3	I ² C	24 Ld QFN
ISL94201	4 to 7	N	Y	Y	N	N	N	N	Y	N	N	3.3	I ² C	24 Ld QFN

Battery Status Monitors and Backup Switches

Device	# of Li-Ion Cells Protected	System Management: System Resets, Power Indicators, Fault Detection	Over-Charge Protection	V _{IN} (min) (V)	V _{IN} (max) (V)	I _S (max) (A)	I _{OUT} (max) (mA)	Input Trip (mV)	Package
ICL7673	N/A	Yes	Yes	2.5	15	5	38	50	8 Ld PDIP, 8 Ld SOIC

Charge System Safety

Device	Programmable Overcurrent (A)	Input Overvoltage Protection (V)	Battery Overvoltage Protection (V)	Battery Leakage	R _{ON} @ 500mA (mΩ)	Package
ISL9200	0 to 1	6.8 typ, 6.65 min, 7.0 max	4.4 typ, 4.325 min, 4.475 max	20nA max @ 4.4VVB	250 typ, 450 max	12 Ld QFN
ISL9209	0 to 1	5.58 typ, 5.65 min, 6.0 max	4.4 typ, 4.325 min, 4.475 max	20nA max @ 4.4VVB	250 typ, 450 max	12 Ld DFN
ISL9209B	0 to 1.5	5.58 typ, 5.65 min, 6.0 max	4.34 typ, 4.28 min, 4.4 max	20nA max @ 4.34VVB	250 typ, 450 max	12 Ld TDFN
ISL9209C	0 to 1.5	5.58 typ, 5.65 min, 6.0 max	4.34 typ, 4.28 min, 4.4 max	20nA max @ 4.4VVB	170 typ, 280 max	12 Ld TDFN
ISL9211	0 to 1.5	5.8 typ, 5.6 min, 6.0 max	4.34 typ, 4.25 min, 4.4 max	20nA max @ 4.4VVB	170 typ, 280 max	8 Ld TDFN T+R
ISL9212	0 to 2	6.8 typ, 6.65 min, 7.0 max	4.4 typ, 4.325 min, 4.475 max	20nA max @ 4.4VVB	170 typ, 280 max	12 Ld DFN
ISL9212A	0 to 2	6.8 typ, 6.65 min, 7.0 max	4.4 typ, 4.325 min, 4.475 max	20nA max @ 4.4VVB	170 typ, 280 max	12 Ld DFN
ISL9212B	0 to 2	6.8 typ, 6.65 min, 7.0 max	4.4 typ, 4.325 min, 4.475 max	20nA max @ 4.4VVB	170 typ, 280 max	12 Ld DFN

Fuel Gauges

Device	V _S (V)	Operating Temp. Range (°C)	Supply Current Sleep (nA)	Supply Current Run (μA)	A/D Measurement	Comments	Package
ISL6295	2.8 to 7	-20 to 85	400	85	15 Bits + Sign	256 Bytes of EEPROM, Temp measurement	8 Ld TSSOP

Multiple Cell Li+/Polymer Battery Charger

Input Voltage Range: 7V to 25V, Topology: Fixed Frequency Synchronous Buck, Audible Noise: No, Operating Temperature Range: -10°C to 100°C, Thermal Shutdown: +150°C

Device	iSim	Input Current Limit Accuracy (%)	Battery Charge Voltage (V)	Charging Voltage Accuracy (max) (%)	Battery Charge Voltage Adjust (%)	Charge Current Limit Accuracy (%)	Trickle Charge Current Limit Accuracy (%)	Automatic Trickle Charge (typ) (V)	Battery Leakage Current (max) (µA)	Automatic Power Source Selection	DC Adapter Detection	Switching Freq. (typ) (kHz)	Max Duty Cycle (%)	Package
ISL6251	Y	±3	4.2/Cell (2S, 3S, 4S)	±0.5	±5/Cell	±5 (CHLIM=2.0V)	±50 (CHLIM=0.2V)	No (Set by Host)	10 (DCIN=0V, No System Load)	No	No	300	99.9	24 Ld QSOP, 28 Ld QFN
ISL6251A	Y	±3	4.2/Cell (2S, 3S, 4S)	±0.5	±5/Cell	±3 (CHLIM=2.0V)	±25 (CHLIM=0.2V)	No (Set by Host)	10 (DCIN=0V, No System Load)	No	No	300	99.9	24 Ld QSOP, 28 Ld QFN
ISL6252		±3	4.2/Cell (2S, 3S, 4S)	±0.5	±5/Cell	±3 (CHLIM=2.0V)	±25 (CHLIM=0.2V)	No (Set by Host)	10 (DCIN=0V, No System Load)	No	No	300	99.6	24 Ld QSOP, 28 Ld QFN
ISL6252A		±3	4.2/Cell (2S, 3S, 4S)	±0.5	±5/Cell	±3 (CHLIM=2.0V)	±25 (CHLIM=0.2V)	No (Set by Host)	10 (DCIN=0V, No System Load)	No	No	300	99.6	24 Ld QSOP, 28 Ld QFN
ISL6256		±3	4.2/Cell (2S, 3S, 4S)	±0.5	±5/Cell	±3 (CHLIM=2.0V)	±25 (CHLIM=0.2V)	No (Set by Host)	10 (DCIN=0V, No System Load)	Yes	Yes	300	99.6	28 Ld QFN, 28 Ld QSOP
ISL6256A		±3	4.2/Cell (2S, 3S, 4S)	±0.5	±5/Cell	±3 (CHLIM=2.0V)	±25 (CHLIM=0.2V)	No (Set by Host)	10 (DCIN=0V, No System Load)	Yes	Yes	300	99.6	28 Ld QFN, 28 Ld QSOP
ISL6253		±3	4.2/Cell (2S, 3S, 4S)	±0.6	±5/Cell	±3 (CHLIM=3.3V)	±35 (CHLIM=3.3V)	Yes (3.1/Cell)	10 (DCIN=0V, No System Load)	Yes	Yes	300	99.9	28 Ld QFN, 28 Ld QSOP
ISL6255	Y	±3	4.2/Cell (2S, 3S, 4S)	±0.5	±5/Cell	±5 (CHLIM=2.0V)	±50 (CHLIM=0.2V)	No (Set by Host)	10 (DCIN=0V, No System Load)	Yes	Yes	300	99.9	28 Ld QFN, 28 Ld QSOP
ISL6255A	Y	±3	4.2/Cell (2S, 3S, 4S)	±0.5	±5/Cell	±3 (CHLIM=2.0V)	±25 (CHLIM=0.2V)	No (Set by Host)	10 (DCIN=0V, No System Load)	Yes	Yes	300	99.9	28 Ld QFN, 28 Ld QSOP
ISL6257		±1.5	4.2/Cell (2S, 3S, 4S)	±0.5	±5/Cell	±1.5 (CHLIM=2.0V)	±25 (CHLIM=0.2V)	No (Set by Host)	10 (DCIN=0V, No System Load)	No (Set by Host)	Yes	300	99.9	28 Ld QFN
ISL6258		±3	6.144 to 19.2 in 16mV Steps	±0.5	16mV Steps	±3	128mA to 384mA	Yes (Threshold Set by User)	25 (DCIN=0V, No System Load)	Yes	No	400	99.9	28 Ld TQFN

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Power Management

Multiple Cell Li+/Polymer Battery Charger (Continued)

Input Voltage Range: 7V to 25V, Topology: Fixed Frequency Synchronous Buck, Audible Noise: No, Operating Temperature Range: -10°C to 100°C, Thermal Shutdown: +150°C

Device	iSim	Input Current Limit Accuracy (%)	Battery Charge Voltage (V)	Charging Voltage Accuracy (max) (%)	Battery Charge Voltage Adjust (%)	Charge Current Limit Accuracy (%)	Trickle Charge Current Limit Accuracy (%)	Automatic Trickle Charge (typ) (V)	Battery Leakage Current (max) (μA)	Automatic Power Source Selection	DC Adapter Detection	Switching Freq. (typ) (kHz)	Max Duty Cycle (%)	Package
ISL6258A		±3	6.144 to 19.2 in 16mV Steps	±0.5	16mV Steps	±3	128mA to 384mA	Yes (Threshold Set by User)	25 (DCIN=0V, No System Load)	Yes	No	400	99.9	28 Ld TQFN
ISL88731		±3	2.7 to 19.2 in 16mV Steps	±0.5	16mV steps	±3	64mA to 220mA	2.7	2 (DCIN=0V, No System Load)	No (Set by Host)	No (Set by Host)	400	99.9	28 Ld QFN

Single Cell Li+/Polymer Battery Chargers

Device	iSim	V _{OUT} (typ) (V)	Voltage Accuracy (%)	V _{IN1} (max) (V)	V _{IN2} (max) (V)	I _{OUT1} (max) (A)	I _{OUT2} (max) (A)	Safety Timer	Self Termination	Accepts CC Adapter	V _{IN1} Trickle Charge (min) (% CC)	V _{IN2} Trickle Charge (min) (% CC)	Thermal Regulation	Functions (Pin)	Package
ISL6291		4.1, 4.2	1	13.5	N/A	2	N/A	Y	Y	N	10	N/A	Y	Enable, Charge Status, Fault Indiction, NTC Input, Timeout Disable, Programmable I _{MIN}	16 Ld QFN
ISL6292	Y	4.1, 4.2	1	7	N/A	1.6 (DFN), 2.1 (QFN)	N/A	Y	Y	Y	10	N/A	Y	Enable, Charge Status, Fault Indiction, NTC Input, Timeout Disable, Programmable I _{MIN} , Reference Voltage	10 Ld DFN, 16 Ld QFN
ISL6292B		4.2	1	7	N/A		N/A	Y	Y	Y		N/A	Y		16 Ld QFN
ISL6292C		4.2	1	7	N/A	1.6	N/A	Y	Y	Y	10	N/A	Y	Enable, Charge Status, Fault Indiction, Reference Voltage	10 Ld DFN
ISL6292D		4.2	1	7	N/A	2.1	N/A	Y	Y	Y	10	N/A	Y	Enable, Charge Status, Fault Indiction, NTC Input, Timeout Disable, Programmable I _{MIN} , Reference Voltage	16 Ld QFN
ISL6293		4.2	1	28	5.5	1	0.5	N	N	N	9.2	8	Y	Enable, Charge Status	10 Ld DFN
ISL6294		4.2	1	28	N/A	0.9	N/A	N	N	N	15	N/A	Y	Enable, Charge Status, Programmable I _{MIN}	8 Ld DFN T+R, 8 Ld SOIC
ISL6297		4.2	0.7	7	N/A	1.5	N/A	Y	Y	Y	10	N/A	Y	Enable	16 Ld QFN
ISL6298		4.1, 4.2	1	7	N/A	0.45	N/A	Y	Y	Y	20	N/A	Y	Enable, Charge Status, Fault Indiction, NTC Input, Timeout Disable, Programmable I _{MIN} , Reference Voltage	10 Ld DFN, 16 Ld QFN
ISL6299A		4.2	1	28	7	1	0.38	N	N	N	11	12	Y	Enable, Charge Status, Programmable I _{MIN}	10 Ld DFN
ISL9203R5220		4.2	1	7	N/A	1.6	N/A	N	N	Y	10	N/A	Y	Enable, Charge Status, Reference Voltage	10 Ld DFN

Single Cell Li+/Polymer Battery Chargers (Continued)

Device	iSim	V _{OUT} (typ) (V)	Voltage Accuracy (%)	V _{IN1} (max) (V)	V _{IN2} (max) (V)	I _{OUT1} (max) (A)	I _{OUT2} (max) (A)	Safety Timer	Self Termination	Accepts CC Adapter	V _{IN1} Trickle Charge (min) (% CC)	V _{IN2} Trickle Charge (min) (% CC)	Thermal Regulation	Functions (Pin)	Package
ISL9204		4.2	1	30	N/A	0.35	N/A	N	N	N	19	N/A	Y	Enable, Charge Status, Power Presence Indication, Programmable I _{MIN}	8 Ld DFN
ISL9205		4.2	0.6	7	N/A	1	N/A	Y	Y	Y	10	N/A	Y	Enable, Timeout Disable, Charge Indication, Fault, NTC, I _{REF} Set, I _{MIN} Set, Time Set	16 Ld OFN
ISL9205A		4.2	0.6	7	N/A	1	N/A	N	N	Y	10	N/A	Y	Enable, Charge Indication, Fault, I _{REF} Set, I _{MIN} Set, Time Set	10 Ld DFN
ISL9205B		4.2	0.6	7	N/A	1	N/A	Y	Y	Y	10	N/A	Y	Enable, Charge Indication, Fault, I _{REF} Set, I _{MIN} Set, Time Set	10 Ld DFN
ISL9205C		4.256	0.6	7	N/A	1	N/A	Y	Y	Y	10	N/A	Y	Enable, Charge Indication, Fault, I _{REF} Set, I _{MIN} Set, Time Set	10 Ld DFN
ISL9205D		4.2	0.6	7	N/A	1	N/A	Y	Y	Y	10	N/A	Y	Enable, Charge Indication, Fault, NTC, I _{REF} Set, I _{MIN} Set, Time Set	10 Ld DFN
ISL9214		4.2	1	28	7	0.38	N/A	N	N	N	16	17	Y	Enable, Charge Status, Programmable I _{MIN} , Reference Voltage	10 Ld DFN
ISL9219		4.2	0.7	28	N/A	1.1	N/A	Y	Y	Y	10	N/A	Y	Enable, Trickle Mode Indication, Charge State Indication, Adapter Fault, PGOOD, ISET, NTC Input, Time Set	20 Ld OFN
ISL9219A		4.2	0.7	28	N/A	1.1	N/A	Y	Y	Y	10	N/A	Y	Enable, Trickle Mode Indication, Charge State Indication, Adapter Fault, PGOOD, ISET, NTC Input, Time Set	20 Ld OFN
ISL9221		4.2	1	28	5.4	1.2	0.465	N	Y	Y	18	N/A	Y	Enable, Charge Status, Power Present Indicator	12 Ld DFN
ISL9222		4.2	1	28	7	1	0.38	N	N	N	16	17	Y	Enable, Programmable I _{MIN} , Power Presence Indication, Auxiliary OR-gate For System Booting Logic	8 Ld TDFN
ISL9301		4.5	1	28	N/A	0.8	N/A	Y	Y	Y	6	N/A	Y	Power Presence, Charge Indication, Battery Disconnect, I _{REF} , I _{MIN} Set, Time Set	10 Ld DFN

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Power Management

Authentication

Device	V _S (V)	Operating Temp. Range (°C)	Supply Current (μA)	Data Bus	Data Bus Speed (Kbps)	Comments	Package
ISL6296	2.6 to 4.8	-25 to +85	110	Single Wire	23	64-Bit Secret with 16x8 OTP ROM	5 Ld SOT-23 T+R, 8 Ld DFN T+R
ISL6296A	2.6 to 4.8	-25 to +85	38	Single Wire	23	64-Bit Secret with 16x8 OTP ROM	5 Ld SOT-23 T+R, 8 Ld TDFN T+R
ISL9206	2.6 to 4.8	-20 to +85	0.15 in Sleep Mode/110 in Run Mode	Single Wire	23	FlexiHash+	5 Ld SOT-23 T+R, 8 Ld DFN T+R
ISL9206A	2.6 to 4.8	-25 to +85	0.15 in Sleep Mode/38 in Run Mode	Single Wire	23	FlexiHash+	5 Ld SOT-23 T+R, 8 Ld TDFN T+R

Hot Plug Controllers

Single Channel

Internal FET

Device	V _{BIAS} (V)	Controlled Voltages (V)	Regulation or Latch-Off for Overcurrent	r _{DS(ON)} (mΩ)	UV/OV Feature	Reporting	Package
ISL6121	+2.5 to +5.5	+2.5 to +5.5	Current Regulation (2A)	50	UV Lockout	Fault-bar for OC Latch-Off	8 Ld SOIC

External FET

Device	System Management: System Resets, Power Indicators, Fault Detection	Adjustable Gate Ramp	Advanced Fault Protection	V _{BIAS} (V)	Controlled Voltages (V)	Regulation or Latch-Off for Overcurrent	Adjustable or Fixed OC Vth	Int/Ext FET	UV/OV Feature	Reporting	Package
ISL6115	Y	Y	Y	12	12	Current Regulation	Adjustable		UV Lockout	PGOOD + Fault Off	8 Ld SOIC
ISL6116	Y	Y	Y	12	5	Current Regulation	Adjustable		UV Lockout	PGOOD + Fault Off	8 Ld SOIC
ISL6117	Y	Y	Y	12	3.3	Current Regulation	Adjustable		UV Lockout	PGOOD + Fault Off	8 Ld SOIC
ISL6120	Y	Y	Y	12	2.5	Current Regulation	Adjustable		UV Lockout	PGOOD + Fault Off	8 Ld SOIC
ISL6140	Y	Y	N	-10 to -80	-10 to -80	Latch-Off	Fixed	Ext	UV/OV Lockout	PWRGD-bar	8 Ld SOIC
ISL6141	Y	Y	Y	-20 to -80	-20 to -80	Current Regulation	Fixed	Ext	UV/OV Lockout	PWRGD-bar	8 Ld SOIC
ISL6142	Y	Y	Y	-20 to -80	-20 to -80	Current Regulation	Fixed	Ext	UV/OV Lockout	PWRGD-bar	14 Ld SOIC
ISL6150	Y	Y	N	-10 to -80	-10 to -80	Latch-Off	Fixed	Ext	UV/OV Lockout	PWRGD	8 Ld SOIC
ISL6151	Y	Y	Y	-20 to -80	-20 to -80	Current Regulation	Fixed	Ext	UV/OV Lockout	PWRGD	8 Ld SOIC
ISL6152	Y	Y	Y	-20 to -80	-20 to -80	Current Regulation	Fixed	Ext	UV/OV Lockout	PWRGD	14 Ld SOIC

Dual Channel

Internal FET

Device	V _{BIAS} (V)	Controlled Voltages (V)	Regulation or Latch-Off for Overcurrent	r _{DS(ON)} (mΩ)	UV/OV Feature	Reporting	Package
ISL6119	+2.5 to +5.5	+2.5 to +5.5	Current Regulation (1A)	80	UV Lockout	FAULT-bar for OC	8 Ld SOIC
ISL6118	+2.5 to +5.5	+2.5 to +5.5	Current Regulation (0.6A)	80	UV Lockout	FAULT-bar for OC	8 Ld SOIC

External FET

Device	V _{BIAS} (V)	Controlled Voltages (V)	Current Regulation or Latch-Off for Overcurrent	Int/Ext FET	UV/OV Feature	Reporting	Package
HIP1012A	12	+12 and +5 or +5 and +3.3	Current Regulation	Ext	UV Notification	PGOOD for UV or OC	14 Ld SOIC
HIP1013	12	+12 and +5 or +5 and +3.3	Latch-Off	Ext	UV Notification	PGOOD for UV or OC	14 Ld SOIC
HIP1020	+12 or +5	≤Bias Voltage	N/A	Ext	N/A	N/A	5 Ld SOT-23 T+R
ISL6160	12	+12 and +5	Current Regulation	Ext for +12V, Int for +5V	UV Lockout	FAULT-bar for UV or OC	14 Ld SOIC
ISL6161	12	+12 and +3.3	Current Regulation	Ext	UV Notification	PGOOD for UV or OC	14 Ld SOIC
ISL6173	2.2 to 3.6	0.7 to 3.3	Current Regulation	Ext	UV	PGOOD and FAULT	28 Ld QFN

PCI

Single Slot

Device	V _{BIAS} (V)	Controlled Voltages (V)	Regulation or Latch-Off for Overcurrent	Int/Ext FET	UV/OV Feature	Reporting	SM Bus	Package
HIP1011	12	+12, -12, +5, +3.3	Latch-Off	Int and Ext	UV Lockout	UV and OC	N	16 Ld SOIC
HIP1011A	12	+12, -12, +5, +3.3	Latch-Off	Int and Ext	UV Lockout	UV and OC	N	16 Ld SOIC
HIP1011B	12	+12, -12, +5, +3.3	Latch-Off	Int and Ext	UV Lockout	OC	N	16 Ld SOIC
ISL6111	12	+12, -12, +5, +3.3	Current Regulation	Int and Ext	UV Lockout	PGOOD for OC	N	20 Ld QFN

Dual Slot

Device	V _{BIAS} (V)	Controlled Voltages (V)	Regulation or Latch-Off for Overcurrent	Int/Ext FET	UV/OV Feature	Reporting	SM Bus	Package
HIP1011D	12	+12, -12, +5, +3.3	Latch-Off	Int and Ext	UV Lockout	UV and OC	N	28 Ld SSOP
HIP1011E	12	+12, -12, +5, +3.3	Latch-Off	Int and Ext	UV Lockout	OC	N	28 Ld SSOP

PCI Express

Dual Slot

Device	V _{BIAS} (V)	Controlled Voltages (V)	Regulation or Latch-Off for Overcurrent	Int/Ext FET	UV/OV Feature	Reporting	SM Bus	Package
ISL6112	3.3	+12 and +3.3 and 3.3 Aux	Current Regulation	Int and Ext	UV Lockout	PGOOD for UV or OC	Y	48 Ld QFN, 48 Ld TQFP
ISL6113	3.3	+12 and +3.3 and 3.3 Aux	Current Regulation	Int and Ext	UV Lockout	PGOOD for UV or OC, PE Reset	N	48 Ld QFN
ISL6114	3.3	+12 and +3.3 and 3.3 Aux	Current Regulation	Int and Ext	UV Lockout	PGOOD for UV or OC, PE Reset	N	48 Ld QFN

Isolated Power

Single-Ended (Flyback and Forward)

Device	iSim	Device Description	Control Mode	UVLO Rising (V)	UVLO Falling (V)	V _{BIAS} (max) (V)	No-Load Operating Current (mA)	# of PWM Outputs	FET Driver I _{OUT} (max) (A)	Max Duty Cycle (%)	Package
ISL6401	Y	Synchronizing Current Mode PWM for Subscriber Line Interface Circuits (SLICs)	Peak Current Mode	4.1	3.6	7	3.7	1	1	50	14 Ld SOIC, 16 Ld QFN
ISL6721	Y	Flexible Single Ended Current Mode PWM Controller	Peak Current Mode	8.25	7.7	20	4.5	1	1	100	16 Ld SOIC, 16 Ld TSSOP
ISL6722A		Flexible Single Ended Current Mode PWM Controllers	Peak Current Mode	8.25	7.7	20	4.5	1	1	100	16 Ld QFN, 16 Ld SOIC, 16 Ld TSSOP
ISL6723A		Flexible Single Ended Current Mode PWM Controllers	Peak Current Mode	13	7.7	20	4.5	1	1	100	16 Ld SOIC
ISL6840		Improved Industry-Standard Single-Ended PWM Controller	Peak Current Mode	7	6.6	20	2.3	1	1	100	8 Ld DFN T+R, 8 Ld MSOP, 8 Ld SOIC
ISL6841		Improved Industry-Standard Single-Ended PWM Controller	Peak Current Mode	7	6.6	20	2.3	1	1	50	8 Ld DFN T+R, 8 Ld MSOP, 8 Ld SOIC
ISL6842		Improved Industry-Standard Single-Ended PWM Controller	Peak Current Mode	14.4	8.8	20	2.3	1	1	100	8 Ld DFN T+R, 8 Ld MSOP, 8 Ld SOIC
ISL6843		Improved Industry-Standard Single-Ended PWM Controller	Peak Current Mode	8.4	7.6	20	2.3	1	1	100	8 Ld DFN T+R, 8 Ld MSOP, 8 Ld SOIC
ISL6844	Y	Improved Industry-Standard Single-Ended PWM Controller	Peak Current Mode	14.4	8.8	20	2.3	1	1	50	8 Ld DFN T+R, 8 Ld MSOP, 8 Ld SOIC
ISL6845		Improved Industry-Standard Single-Ended PWM Controller	Peak Current Mode	8.4	7.6	20	2.3	1	1	50	8 Ld DFN T+R, 8 Ld MSOP, 8 Ld SOIC
ISL8840A		High Performance Industry Standard Single-Ended Current Mode PWM Controller	Peak Current Mode	7	6.6	30	2.9	1	1	100	8 Ld MSOP, 8 Ld SOIC
ISL8841A		High Performance Industry Standard Single-Ended Current Mode PWM Controller	Peak Current Mode	7	6.6	30	2.9	1	1	50	8 Ld MSOP, 8 Ld SOIC
ISL8842A		High Performance Industry Standard Single-Ended Current Mode PWM Controller	Peak Current Mode	14.4	8.8	30	2.9	1	1	100	8 Ld MSOP, 8 Ld SOIC
ISL8843		Single-Ended Current Mode PWM Controller with 3% Current Limit and Military Temp Grade Option	Peak Current Mode	8.4	7.6	30	2.9	1	1	100	8 Ld MSOP, 8 Ld SOIC
ISL8843A		High Performance Industry Standard Single-Ended Current Mode PWM Controller	Peak Current Mode	8.4	7.6	30	2.9	1	1	100	8 Ld MSOP, 8 Ld SOIC
ISL8844A		High Performance Industry Standard Single-Ended Current Mode PWM Controller	Peak Current Mode	14.4	8.8	30	2.9	1	1	50	8 Ld MSOP, 8 Ld SOIC
ISL8845A		High Performance Industry Standard Single-Ended Current Mode PWM Controller	Peak Current Mode	8.4	7.6	30	2.9	1	1	50	8 Ld MSOP, 8 Ld SOIC

Double-Ended (Push-pull, Bridge, Bus Converters, Interleaved)

Device	iSim	Device Description	Control Mode	UVLO Rising (V)	UVLO Falling (V)	V _{BIAS} (max) (V)	No-Load Operating Current (mA)	# of PWM Outputs	FET Driver I _{OUT} (max) (A)	Max Duty Cycle (%)	Package
ISL6740	Y	Flexible Double-Ended Voltage-Mode PWM Controller	Voltage Mode	7.25	6.75	20	5	2	0.5	100	16 Ld SOIC, 16 Ld TSSOP
ISL6740A	Y	Flexible Double-Ended Voltage-Mode PWM Controller with Voltage Feed Forward	Voltage Mode	7.25	6.75	20	5	2	0.5	100	16 Ld TSSOP
ISL6741	Y	Flexible Double-Ended Peak-Current-Mode PWM Controller	Peak Current Mode	7.25	6.75	20	5	2	0.5	100	16 Ld SOIC, 16 Ld TSSOP
ISL6742	Y	Advanced Double-Ended PWM Controller with Synchronous Rectifier Control and Average Current Limit	Voltage, Peak Current, or Average Current Mode	8.75	7	20	5	4	0.1	100	16 Ld QSOP
ISL6744	Y	Intermediate Bus Double-Ended PWM Controller with Precision Dead-Time Adjustment	Voltage Mode	6.2	5.7	20	3	2	1	100	8 Ld MSOP, 8 Ld SOIC
ISL6744A		Intermediate Bus PWM Controller	Voltage Mode	6.2	5.7	20	3	2	1	100	8 Ld MSOP, 8 Ld SOIC
ISL6745		Voltage-Mode Double-Ended PWM Controller with Precision Dead-Time Adjustment	Voltage Mode	6.3	5.7	20	3	2	1	100	10 Ld MSOP

Zero-Voltage-Switching (ZVS) Full Bridge

Device	iSim	Device Description	Control Mode	UVLO Rising (V)	UVLO Falling (V)	V _{BIAS} (max) (V)	No-Load Operating Current (mA)	# of PWM Outputs	FET Driver I _{OUT} (max) (A)	Max Duty Cycle (%)	Package
ISL6551		ZVS Full Bridge PWM Controller	Peak Current Mode	9.6	8.6	16	13	6	2	100	28 Ld QFN, 28 Ld SOIC
ISL6752	Y	ZVS Full-Bridge Current-Mode PWM with Adjustable Synchronous Rectifier Control	Peak Current Mode	8.75	7	20	6	6	0.1	100	16 Ld QSOP
ISL6753	Y	ZVS Full-Bridge PWM Controller	Peak Current Mode or Voltage Mode	8.75	7	20	5	4	0.1	100	16 Ld QSOP

LNB Controllers

Single

Device	V _{IN} (min) (V)	V _{IN} (max) (V)	V _{OUT} (min) (V)	V _{OUT} (max) (V)	I _{OUT} (max) (mA)	I _{BIAS} (min) (mA)	Package
ISL6421	8	14	13	18	750	1.5	Eval Board, 32 Ld QFN
ISL6421A	8	14	13	18	500	1.5	Eval Board, 32 Ld QFN
ISL6423	8	14	13.3/14.3	18.3/19.3	750	1.5	Eval Board, 24 Ld QFN, 28 Ld HTSSOP
ISL6423B	8	14	13.3/14.3	18.3/19.3	750	1.5	24 Ld QFN, 28 Ld EPTSSOP
ISL6425	8	14	13	18	750	1.5	Eval Board, 32 Ld QFN

Dual

Device	V _{IN} (min) (V)	V _{IN} (max) (V)	V _{OUT} (min) (V)	V _{OUT} (max) (V)	I _{OUT} (max) (mA)	I _{BIAS} (min) (mA)	Package
ISL6405	8	14	13	18	750	1.5	Eval Board, 32 Ld QFN
ISL6422	8	14	2x13.3/14.3	2x18.3/19.3	2x750	3	38 Ld EPTSSOP, 40 Ld QFN
ISL6422B	8	14	2x13.3/14.3	2x18.3/19.3	2x750	3	38 Ld EPTSSOP, 40 Ld QFN
ISL6424	8	14	13	18	750	1.5	Eval Board, 32 Ld QFN

Linear Regulation

Low Noise

Device	V _{IN} (min) (V)	V _{IN} (max) (V)	V _{OUT} (min) (V)	V _{OUT} (max) (V)	I _{OUT} (max) (mA)	Package
ICL7663S	1.6	16	1.3	16	40	8 Ld PDIP, 8 Ld SOIC
ISL6412	3	3.6	1.8	2.8	840	16 Ld QFN
ISL6414	3	3.6	1.8	2.84	500	16 Ld QFN
ISL6416	3	3.6	1.8	2.8	500	16 Ld QSOP

Low Power

Device	iSim	V _{IN} Range (V)	V _{OUT} Range (V)	Fixed Output Voltage Option	O/P Volt Accuracy (%)	I _{OUT1} (max) (mA)	I _{OUT2} (max) (mA)	PSRR @ 1kHz (dB)	Noise (V _{RMS} 10 to 100) (kHz)	I _q (μA)	Typical Drop-Out Voltage (mV)	Enable/Shutdown	# of PORs	Operating Temp. Range (°C)	Package
ISL9000	Y	2.3 to 6.5	1.5 to 3.3	Y	±1.8	300	300	90	30	40	250 @ 300mA	Y	2	-40 to +85	Eval Board, 10 Ld DFN
ISL9000A		2.3 to 6.5	1.5 to 3.3	Y	±1.8	300	300	90	30	40	250 @ 300mA	Y	2	-40 to +85	10 Ld DFN
ISL9001		2.3 to 6.5	1.5 to 3.3	Y	±1.8	300		90	30	25	250 @ 300mA	Y		-40 to +85	8 Ld DFN T+R
ISL9001A		2.3 to 6.5	1.5 to 3.3	Y	±1.8	300		90	30	25	250 @ 300mA	Y		-40 to +85	8 Ld DFN T+R
ISL9003A		2.3 to 6.5	1.5 to 3.3	Y	±1.8	150	N/A	90	20	29	200 @ 150mA	Y	N/A	-40 to +85	5 Ld SC-70 T+R, 6 Ld μTDFN T+R
ISL9005		2.3 to 6.5	1.5 to 3.3	Y	±1.8	300		75	45	50	250 @ 300mA	Y		-40 to +85	8 Ld DFN T+R
ISL9005A		2.3 to 6.5	1.5 to 3.3	Y	±1.8	300		75	45	50	250 @ 300mA	Y		-40 to +85	8 Ld DFN T+R
ISL9007		2.3 to 6.5	1.5 to 3.3	Y	±1.8	400		75	30	50	250 @ 400mA	Y		-40 to +85	8 Ld MSOP
ISL9008A		2.3 to 6.5	1.5 to 3.3	Y	±1.8	150	N/A	65	45	45	200 @ 150mA	Y	N/A	-40 to +85	5 Ld SC-70 T+R, 6 Ld μTDFN T+R
ISL9011		2.3 to 6.5	1.5 to 3.3	Y	±1.8	150	300	70	30	45	250 @ 300mA	Y		-40 to +85	10 Ld DFN
ISL9011A		2.3 to 6.5	1.5 to 3.3	Y	±1.8	150	300	70	30	45	250 @ 300mA	Y		-40 to +85	10 Ld DFN
ISL9012		2.3 to 6.5	1.5 to 3.3	Y	±1.8	150	300	70	30	45	250 @ 300mA	Y	1	-40 to +85	10 Ld DFN

Low Power (Continued)

Device	iSim	V _{IN} Range (V)	V _{OUT} Range (V)	Fixed Output Voltage Option	O/P Volt Accuracy (%)	I _{OUT1} (max) (mA)	I _{OUT2} (max) (mA)	PSRR @ 1kHz (dB)	Noise (V _{RMS} 10 to 100) (kHz)	I _q (μA)	Typical Drop-Out Voltage (mV)	Enable/Shutdown	# of PORs	Operating Temp. Range (°C)	Package
ISL9014		2.3 to 6.5	1.5 to 3.3	Y	±1.8	300	300	70	30	45	250 @ 300mA	Y		-40 to +85	10 Ld DFN
ISL9014A		2.3 to 6.5	1.5 to 3.3	Y	±1.8	300	300	70	30	45	250 @ 300mA	Y		-40 to +85	10 Ld DFN

High Voltage

Device	iSim	V _{IN} (min) (V)	V _{IN} (max) (V)	V _{OUT} (min) (V)	V _{OUT} (max) (V)	I _{OUT} (max) (mA)	I _{BIAS} (min) (mA)	Package
ISL6720A	Y	17	100	0	20	125	1.2	11 Ld DFN
ISL6719		17	100	1.5	20	100	1.1	9 Ld DFN

Power MOSFET Drivers

Integrated FET Bridge and High-Side Drivers

Device	Device Description	Max Bootstrap Supply Voltage (V)	Max Bias Voltage (V)	Sourcing Current Capability (A)	Sinking Current Capability (A)	Turn-On Prop Delay (μs)	Turn-Off Prop Delay (μs)	Rise Time (μs)	Fall Time (μs)	Package
HIP4020	Full Bridge Driver with Integrated 0.5A Power FETs for Small 3V, 5V and 12V DC Motors	N/A	15	0.5	0.5	2.5	0.1	4	0.1	20 Ld SOIC
ISL6801	High Voltage Bootstrap High Side Driver	110	6.5	0.2	0.2	1	0.1	4	0.1	Ld SOIC

Full Bridge and Three-Phase

Device	Device Description	Max Bootstrap Supply Voltage (V)	Max Bias Voltage (V)	Peak Pull-up Current (A)	Peak Pull-down Current (A)	Turn-On Prop Delay (ns)	Turn-Off Prop Delay (ns)	Rise Time (ns)	Fall Time (ns)	Package
HIP4080A	80V/2.5A Peak, High Frequency Full Bridge FET Driver with Charge Pump and Input Comparators	95	15	2.6	2.4	70	50	10	10	20 Ld PDIP, 20 Ld SOIC
HIP4081A	80V/2.5A Peak, High Frequency Full Bridge FET Driver with Charge Pump and Independent Control Inputs	95	15	2.6	2.4	60	35	10	10	20 Ld PDIP, 20 Ld SOIC
HIP4082	80V/1.25A Peak Current Full Bridge FET Driver	95	15	1.4	1.3	75	55	9	9	16 Ld PDIP, 16 Ld SOIC
HIP4083	80V/0.3A Peak Three Phase High Side Driver	95	15	0.24 (avg)	0.3 (avg)	65	60	35	30	16 Ld PDIP, 16 Ld SOIC
HIP4086	80V/0.5A Peak Three Phase Driver	95	15	0.5	1.1	65	75	20	10	24 Ld PDIP, 24 Ld SOIC
ISL83202	55V, 1A Peak Current H-Bridge FET Driver	70	15	1	1	75	55	9	9	16 Ld PDIP, 16 Ld SOIC
ISL83204A	60V/2.5A Peak, High Frequency Full Bridge FET Driver	75	15	2.6	2.4	70	50	10	10	20 Ld PDIP, 20 Ld SOIC

Half Bridge

Device	Device Description	Max Bootstrap Supply Voltage (V)	Max Bias Voltage (V)	Peak Pull-up Current (A)	Peak Pull-down Current (A)	Turn-On Prop Delay (ns)	Turn-Off Prop Delay (ns)	Rise Time (ns)	Fall Time (ns)	Package
HIP2100	100V/2A Peak High-Frequency Half Bridge Driver with CMOS Logic Inputs	114	14	2	2	20	20	10	10	12 Ld DFN, 16 Ld QFN, 8 Ld EPSON, 8 Ld SOIC
HIP2101	100V/2A Peak High-Frequency Half Bridge Driver with TTL Logic Inputs	114	14	2	2	25	25	10	10	12 Ld DFN, 16 Ld QFN, 8 Ld EPSON, 8 Ld SOIC
ISL2100A	100V, 2A Peak, High Frequency Half-Bridge Drivers	114	14	2	2	39	31	10	10	9 Ld DFN
ISL2101A	100V, 2A Peak, High Frequency Half-Bridge Drivers	114	14	2	2	39	34	10	10	9 Ld DFN
ISL2110	100V, 3A/4A Peak, High Frequency Half-Bridge Drivers	114	14	3	4	38	32	9	7.5	12 Ld DFN, 8 Ld SOIC
ISL2111	100V, 3A/4A Peak, High Frequency Half-Bridge Drivers	114	14	3	4	38	32	9	7.5	10 Ld TDFN, 12 Ld DFN, 8 Ld SOIC
ISL6700	80V/1.25A Peak High-Frequency Half Bridge Driver with TTL Logic Inputs	96	15	1.4	1.3	70	60	5	5	12 Ld QFN, 8 Ld SOIC
ISL89400	100V, 1.25A Peak, High Frequency Half-Bridge Drivers	114	14	1.25	1.25	39	31	16	16	9 Ld DFN, 8 Ld SOIC
ISL89401	100V, 1.25A Peak, High Frequency Half-Bridge Drivers	114	14	1.25	1.25	39	31	16	16	9 Ld DFN, 8 Ld SOIC

Low Side Single

Device	Device Description	# of Drivers	Max Operating Frequency (MHz)	Peak Output I _{PK} (A)	Rise Time (ns)	Fall Time (ns)	Turn On Delay (ns)	Turn Off Delay (ns)	I _S (mA)	R _{ON} (Ω)	Input Signal Range (V)	Input Supply Range (VP)	Max Input Signal (V)	Output Signal Range (V)	Max Output Signal Range (V)	Package
EL7104	High Speed, Single Channel, Power MOSFET Driver	1	10	4	10	15	18	18	7.5	1.5	0 to V _P	+4.5 to +16	16			8 Ld PDIP, 8 Ld SOIC
EL7154	High Speed, Monolithic Pin Driver	1	10	4	20	20	10	20	2.5	1.5	0 to V _P	+4.5 to +16	16	-3 to +15.5	15.5	8 Ld PDIP, 8 Ld SOIC
EL7155	High Performance Pin Driver	1	40	3.5	14.5	15	10	9.5	3	2.7	0 to V _P	+4.5 to +16.5	16	-5 to +16.5	16	8 Ld PDIP, 8 Ld SOIC
EL7156	High Performance Pin Driver	1	40	3.5	14.5	15	10	9.5	3	2.7	0 to V _P	+4.5 to +16.5	16	-5 to +16.5	16	8 Ld PDIP, 8 Ld SOIC
EL7158	Ultra-High Current Pin Driver	1	40	12	12	12	22	22.5	2.5	0.5	0 to V _P	+4.5 to +18	18	-5 to +12	12	8 Ld SOIC
EL7182	2-Phase, High Speed CCD Driver	2	10	2	10	13	18	20	5	3		+4.5 to +16	16			8 Ld PDIP, 8 Ld SOIC

Dual

Device	Device Description	V _{IN} (max) (V)	Max Operating Frequency (MHz)	Peak Output I _{PK} (A)	Rise Time (ns)	Fall Time (ns)	Turn On Delay (ns)	Turn Off Delay (ns)	I _S (mA)	V _{BIAS} (min) (V)	Package
EL7202	High Speed, Dual Channel Power MOSFET Drivers	15	10	2	10	13	18	20	7.5	4.5	8 Ld PDIP, 8 Ld SOIC
EL7212	High Speed, Dual Channel Power MOSFET Drivers	15	10	2	10	13	18	20	2.5	4.5	8 Ld PDIP, 8 Ld SOIC
EL7222	High Speed, Dual Channel Power MOSFET Drivers	15	10	2	10	13	18	20	5	4.5	8 Ld PDIP, 8 Ld SOIC
EL7232	Dual Channel, High Speed, High Current Line Driver with 3-State	15	10	2	10	13	18	20	2.5	4.5	8 Ld PDIP, 8 Ld SOIC
EL7242	Dual Input, High Speed, Dual Channel Power MOSFET Driver	15	10	2	20 (max)	20 (max)	20	20	3	4.5	8 Ld PDIP, 8 Ld SOIC
EL7252	Dual Input, High Speed, Dual Channel Power MOSFET Driver	15	10	2	20 (max)	20 (max)		20	3	4.5	8 Ld PDIP, 8 Ld SOIC
ICL7667	Dual Power MOSFET Driver	15	10	1	30	30		20	5	4.5	8 Ld PDIP, 8 Ld SOIC

Quad

Device	Device Description	# of Drivers	Max Operating Frequency (MHz)	Peak Output I _{PK} (A)	Rise Time (ns)	Fall Time (ns)	Turn On Delay (ns)	Turn Off Delay (ns)	I _S (mA)	R _{ON} (Ω)	Input Signal Range (V)	Input Supply Range (VP)	Max Input Signal (V)	Output Signal Range (V)	Max Output Signal Range (V)	Package
EL7412	High Speed, Four Channel Power MOSFET Drivers	4	10	2	10	13	18	18	5	3						20 Ld SOIC
EL7457	40MHz Non-Inverting Quad CMOS Driver	4	40	2	11	12	13	11.5	0.8	4.5	-V _P to +V _P	-4.5 to +16	16	-4.5 to +16	16	16 Ld QFN, 16 Ld QSOP, 16 Ld SOIC

Synchronous Buck

Device	Device Description	V _{IN} (max)/V _{PWM} (V)	V _{DRIVE} (V)	Output Per Driver I _{UGATE} Source/Sink (A)	Output Per Driver I _{LGATE} Source/Sink (A)	Phase V _{PHASE} (min) (V)	Phase V _{PHASE} (max) (V)	No Load I _S (max) (mA)	I _S (mA)	Package
ISL6614	Dual Advanced Synchronous Rectified Buck MOSFET Drivers with Protection Features	GND - 0.3V to 7V	5 to 12	1.25/2	2/3	GND - 0.3VDC GND - 8V (<400ns)	15VDC, 30V (<200ns)	4.5	7.1	14 Ld SOIC, 16 Ld QFN
ISL6614A	Dual Advanced Synchronous Rectified Buck MOSFET Drivers with Pre-POR OVP	GND - 0.3V to 7V	5 to 12	1.25/2	2/3	GND - 0.3VDC GND - 8V (<400ns)	15VDC, 30V (<200ns)	4.5	7.1	14 Ld SOIC, 16 Ld QFN
ISL6614B	Dual Advanced Synchronous Rectified Buck MOSFET Drivers with Protection Features	GND - 0.3V to 7V	5 to 12	1.25/2	2/3	GND - 0.3VDC GND - 8V (<400ns)	15VDC, 30V (<200ns)	4.5	7.1	14 Ld SOIC, 16 Ld QFN
ISL6594D	Advanced Synchronous Buck MOSFET Driver with 3V PWM Interface and Advanced Protection Features	GND - 0.3V to 7V	4.5 to 13.2	1.25/2	2/3	GND - 0.3VDC GND - 8V (<400ns)	15VDC, 30V (<200ns)	N/A	4.5	10 Ld DFN, 8 Ld SOIC
ISL6594A	Advanced Synchronous Buck MOSFET Driver with 3V PWM Interface and Advanced Protection Features	GND - 0.3V to 7V	5 to 12	1.25/2	2/3	GND - 0.3VDC GND - 8V (<400ns)	15VDC, 30V (<200ns)	2.5	8	10 Ld DFN, 8 Ld SOIC

Synchronous Buck (Continued)

Device	Device Description	V _{IN} (max)/V _{PWM} (V)	V _{DRIVE} (V)	Output Per Driver I _{UGATE} Source/Sink (A)	Output Per Driver I _{LGATE} Source/Sink (A)	Phase V _{PHASE} (min) (V)	Phase V _{PHASE} (max) (V)	No Load I _S (max) (mA)	I _S (mA)	Package
ISL6594B	Advanced Synchronous Buck MOSFET Driver with 3V PWM Interface and Advanced Protection Features	GND - 0.3V to 7V	5 to 12	1.25/2	2/3	GND - 0.3VDC GND - 8V (<400ns)	15VDC, 30V (<200ns)	2.5	4.5	10 Ld DFN, 8 Ld SOIC
ISL6596	Synchronous Rectified MOSFET Driver	3.3 and 5	5	2/2	2/4	GND - 0.3VDC GND - 8V (<20ns)	15VDC, 30V (<100ns)	Almost Negligible	0.19	10 Ld QFN, 8 Ld SOIC
ISL6609	Synchronous Rectified MOSFET Driver	-0.3V to VCC +0.3V	5	2/2	2/4	-8V (<20ns)	15VDC, 30V (<100ns)	Almost Negligible	0.132	8 Ld QFN, 8 Ld SOIC
ISL6609A	Synchronous Rectified MOSFET Driver	-0.3V to VCC +0.3V	5	2/2	2/4	GND - 0.3VDC GND - 8V (<20ns)	15VDC, 30V (<100ns)	Almost Negligible	0.132	8 Ld QFN, 8 Ld SOIC
ISL6610	Dual Synchronous Rectified MOSFET Drivers	22	5	2/2	2/4	-8	30	1.6 (typ)	240μA (typ)	14 Ld SOIC, 16 Ld QFN
ISL6610A	Dual Synchronous Rectified MOSFET Drivers	15	5	2/2	2/4	-8	30	1.6 (typ)	240μA (typ)	14 Ld SOIC, 16 Ld QFN
ISL6612A	Advanced Synchronous Rectified Buck MOSFET Drivers with Pre-POR OVP	GND - 0.3V to 7V	5 to 12	1.25/2	2/3	GND - 0.3VDC GND - 8V (<400ns)	15VDC, 30V (<200ns)	7.2	5	10 Ld DFN, 8 Ld EPSONIC, 8 Ld SOIC
ISL6612B	Advanced Synchronous Rectified Buck MOSFET Drivers with Pre-POR OVP	GND - 0.3V to 7V	5 to 12	1.25/2	2/3	GND - 0.3VDC GND - 8V (<400ns)	15VDC, 30V (<200ns)	4.5	8	10 Ld DFN, 8 Ld EPSONIC, 8 Ld SOIC
ISL6613A	Advanced Synchronous Rectified Buck MOSFET Drivers with Pre-POR OVP	GND - 0.3V to 7V	5 to 12	1.25/2	2/3	GND - 0.3VDC GND - 8V (<400ns)	15VDC, 30V (<200ns)	4.5	5	10 Ld DFN, 8 Ld EPSONIC, 8 Ld SOIC
ISL6613B	Advanced Synchronous Rectified Buck MOSFET Drivers with Pre-POR OVP	GND - 0.3V to 7V	5 to 12	1.25/2	2/3	GND - 0.3VDC GND - 8V (<400ns)	15VDC, 30V (<200ns)	4.5	4.5	10 Ld DFN, 8 Ld EPSONIC, 8 Ld SOIC
ISL6208A	High Voltage Synchronous Rectified Buck MOSFET Driver with Programmable Deadtime	-0.3V to VCC +0.3V	5	2/2	2/4	V _{BOOT} -7	30		0.08	8 Ld QFN, 8 Ld SOIC
ISL6605	Synchronous Rectified MOSFET Driver	17	5	2/2	2/4	V _{BOOT} -7	22		0.002	8 Ld QFN, 8 Ld SOIC
ISL6608	Synchronous Rectified MOSFET Driver	-0.3V to 7V	5	2/2	2/4	V _{BOOT} -7	22		0.08	8 Ld QFN, 8 Ld SOIC
ISL6207	High Voltage Synchronous Rectified Buck MOSFET Driver	-0.3V to VCC +0.3V	5	2/2	2/4	V _{BOOT} -7	30		0.05	8 Ld QFN, 8 Ld SOIC
ISL6208	High Voltage Synchronous Rectified Buck MOSFET Driver with Programmable Deadtime	-0.3V to VCC +0.3V	5	2/2	2/4	V _{BOOT} -7	30		0.08	8 Ld QFN, 8 Ld SOIC
ISL6209	High Voltage Synchronous Rectified Buck MOSFET Driver with Programmable Deadtime	-0.3V to VCC +0.3V	5	2/2	2/4	V _{BOOT} -7	30		0.085	8 Ld QFN, 8 Ld SOIC
ISL6210	Dual Synchronous Rectified MOSFET Drivers	25	5	2	2/4	V _{BOOT} -7	25		0.17	16 Ld QFN
HIP6601B	Synchronous Rectified Buck MOSFET Drivers	12	5 or 12		0.7	-5	15	6.6		8 Ld EPSONIC, 8 Ld SOIC
HIP6602B	Dual Channel Synchronous Rectified Buck MOSFET Driver	12	5 or 12		0.7	-5	15	9		14 Ld SOIC, 16 Ld QFN

Synchronous Buck (Continued)

Device	Device Description	$V_{IN} (max)/V_{PWM}$ (V)	V_{DRIVE} (V)	Output Per Driver I_{UGATE} Source/Sink (A)	Output Per Driver I_{LGATE} Source/Sink (A)	Phase V_{PHASE} (min) (V)	Phase V_{PHASE} (max) (V)	No Load I_S (max) (mA)	I_S (mA)	Package
HIP6603B	Synchronous Rectified Buck MOSFET Drivers	12	5 or 12		0.7	-5	15	7		8 Ld EPSON, 8 Ld SOIC
HIP6604B	Synchronous Rectified Buck MOSFET Drivers	12	5 or 12		0.7	-5	15	9.8		16 Ld QFN
PX3511A	Advanced Synchronous Rectified Buck MOSFET Drivers with Protection Features	15	5 or 12	1.25/2	2/3	GND - 0.3VDC GND - 8V ($<400ns$)	15VDC, 30V ($<200ns$)	2.5	4.5	10 Ld DFN, 8 Ld SOIC
PX3511B	Advanced Synchronous Rectified Buck MOSFET Drivers with Protection Features	15	5 or 12	1.25/2	2/3	GND - 0.3VDC GND - 8V ($<400ns$)	15VDC, 30V ($<200ns$)	2.5	4.5	10 Ld DFN, 8 Ld SOIC
PX3511D	Advanced Synchronous Rectified Buck MOSFET Driver with Protection Features	13.2	12	1.25/2	2/3	GND - 0.3VDC GND - 8V ($<400ns$)	15VDC, 30V ($<200ns$)	N/A	12	10 Ld DFN T+R
ISL6622	VR11.1 Compatible Synchronous Rectified Buck MOSFET Drivers	15	5 to 12	1.25/2	2/3	GND - 0.3VDC GND - 8V ($<200ns$)	15VDC, 30V ($<200ns$)	N/A	5.7	10 Ld DFN, 8 Ld SOIC
ISL6622A	VR11.1 Compatible Synchronous Rectified Buck MOSFET Drivers	15	5 to 12	1.25/2	2/3	GND - 0.3VDC GND - 8V ($<200ns$)	15VDC, 30V ($<200ns$)	N/A	5.7	10 Ld DFN, 8 Ld SOIC
ISL6615	High-Frequency 6A Sink Synchronous MOSFET Drivers with Protection Features	15	4.5 to 13.2	2.5/4	4/6	GND - 0.3VDC GND - 8V ($<400ns$)	15VDC, 30V ($<200ns$)	4.5	8	10 Ld DFN, 8 Ld SOIC
ISL6615A	High-Frequency 6A Sink Synchronous MOSFET Drivers with Protection Features	15	4.5 to 13.2	2.5/4	4/6	GND - 0.3VDC GND - 8V ($<400ns$)	15VDC, 30V ($<200ns$)	4.5	8	10 Ld DFN, 8 Ld SOIC
ISL6620	VR11.1 Compatible Synchronous Rectified Buck MOSFET Drivers	15	5	2/2	2/4	GND - 0.3VDC GND - 8V ($<100ns$)	15VDC, 30V ($<100ns$)	1.27 (typ)	1.85 (typ)	10 Ld DFN, 8 Ld SOIC
ISL6620A	VR11.1 Compatible Synchronous Rectified Buck MOSFET Drivers	15	5	2/2	2/4	GND - 0.3VDC GND - 8V ($<100ns$)	15VDC, 30V ($<100ns$)	1.27 (typ)	1.85 (typ)	10 Ld DFN, 8 Ld SOIC

Power Supply Support

ORing FET Control

Device	V_{BIAS} (V)	Transient Voltage Withstanding (V)	Response Time to Dead Short (ns)	Response Time to PS Slow Turn Off (μs)	Ramp	Reverse Current Threshold	Package
ISL6144	+10 to +75	100	<300	<100	Voltage	Resistor-Adjustable (0V to 5.3V)	16 Ld TSSOP, 20 Ld QFN

Power Sequencers

Device	V _{BIAS} (V)	Controlled Voltages (V)	Regulation or Latch-Off for Overcurrent	Int/Ext FET	UV/OV Feature	Reporting	Package
HIP1020	+12 or +5	≤Bias Voltage	N/A	Ext	N/A	N/A	5 Ld SOT-23 T+R

Device	V _{BIAS} Range (V)	Sequenced Voltages or Range (V)	# of Voltages Sequenced	Enable	Output	UV/OV Feature	Package
ISL6123	+1.5 to +5.5	+0.7 to +5.5	Up to 4	Active High	Charge Pumped FET Drive	UV Latch-Off	24 Ld QFN
ISL6124	+1.5 to +5.5	+0.7 to +5.5	Up to 4	Active Low	Charge Pumped FET Drive	UV Latch-Off	24 Ld QFN
ISL6125	+1.5 to +5.5	>+0.7	Up to 4	Active Low	Open Drain Logic	UV Latch-Off	24 Ld QFN
ISL6126	+1.5 to +5.5	+0.7 to +5.5	Up to 4	Active Low	Charge Pumped FET Drive	UV Latch-Off	24 Ld QFN
ISL6127	+1.5 to +5.5	+0.7 to +5.5	Up to 4	Active Low	Charge Pumped FET Drive	UV Latch-Off	24 Ld QFN
ISL6128	+1.5 to +5.5	+0.7 to +5.5	Up to 4	Active Low	Charge Pumped FET Drive	UV Latch-Off	24 Ld QFN
ISL6130	+1.5 to +5.5	+0.7 to +5.5	Up to 4	Active High	Charge Pumped FET Drive	UV Latch-Off	24 Ld QFN

Device	V _{BIAS} (V)	SEQ_ENABLE	# of Sequenced ENABLE Outputs	ENABLE Output Type	Power Down Sequencing	Conditions Reported	Package
ISL8700	2.5 to 24	Auto	4	Active High, Open Drain	N	N/A	14 Ld SOIC
ISL8700A	3.3 to 24	Auto	4	Active High, Open Drain	N	N/A	14 Ld SOIC
ISL8701	2.5 to 24	Auto	4	Active Low, Open Drain	N	N/A	14 Ld SOIC
ISL8701A	3.3 to 24	Auto	4	Active Low, Open Drain	N	N/A	14 Ld SOIC
ISL8702	2.5 to 12	Active High	4	Active High, Open Drain	Y	Power Fault	14 Ld SOIC
ISL8702A	3.3 to 24	SEQ_ENABLE	4	Active High, Open Drain	Y	UV/OV	14 Ld SOIC
ISL8703A	3.3 to 24	SEQ_ENABLE	4	Active Low, Open Drain	Y	UV/OV	14 Ld SOIC
ISL8704A	3.3 to 24	SEQ_ENABLE#	4	Active High, Open Drain	Y	UV/OV	14 Ld SOIC
ISL8705A	3.3 to 24	SEQ_ENABLE#	4	Active Low, Open Drain	Y	UV/OV	14 Ld SOIC
ISL8723	2.5 to 5	SEQ_ENABLE	4	Charge Pumped FET Drive	Y	UV Latch-Off	24 Ld QFN
ISL8724	2.5 to 5	SEQ_ENABLE#	4	Charge Pumped FET Drive	Y	UV Latch-Off	24 Ld QFN

Supervisors

Voltage Monitors with EEPROM I²C Interface

Single

Device	V _S Range (V)	Voltage Threshold 1	Reset Output Type	Watchdog Timer (s)	Manual Reset	Bus Interface	EEPROM Size (kbits)	Battery Monitor and Switchover	Fault Detection Register	Suffix	POR (ms)	RTC Function	Features	Package
X4003	4.5 to 5.5 4.5 to 5.5 2.7-5.5 2.7 to 5.5	4.62 (2.6%) 4.38 (3%) 2.92 (2.4%) 2.62 (2.7%)	Active High	OFF, 0.6, 0.2, 1.4	N	I ² C	0	N	N	-4.5A Blank -2.7A -2.7	200	N		8 Ld MSOP, 8 Ld SOIC
X4005	4.5 to 5.5 4.5 to 5.5 2.7 to 5.5 2.7 to 5.5	4.62 (2.6%) 4.38 (3%) 2.92 (2.4%) 2.62 (2.7%)	Active Low	OFF, 0.6, 0.2, 1.4	N	I ² C	0	N	N	-4.5A Blank -2.7A -2.7	200	N		8 Ld MSOP, 8 Ld SOIC

Single (Continued)

Device	V _S Range (V)	Voltage Threshold 1	Reset Output Type	Watchdog Timer (s)	Manual Reset	Bus Interface	EEPROM Size (kbits)	Battery Monitor and Switchover	Fault Detection Register	Suffix	POR (ms)	RTC Function	Features	Package
X4043	4.5 to 5.5 4.5 to 5.5 2.7 to 5.5 2.7 to 5.5	4.62 (2.6%) 4.38 (3%) 2.92 (2.4%) 2.62 (2.7%)	Active High	OFF, 0.6, 0.2, 1.4	N	I ² C	4	N	N	-4.5A Blank -2.7A -2.7	200	N		8 Ld MSOP, 8 Ld PDIP, 8 Ld SOIC
X4045	4.5 to 5.5 4.5 to 5.5 2.7 to 5.5 2.7 to 5.5	4.62 (2.6%) 4.38 (3%) 2.92 (2.4%) 2.62 (2.7%)	Active Low	OFF, 0.6, 0.2, 1.4	N	I ² C	4	N	N	-4.5A Blank -2.7A -2.7	200	N		8 Ld MSOP, 8 Ld PDIP, 8 Ld SOIC
X4C105	3.0 to 3.6	2.875 (2.6%)	Active High	N	N	I ² C	4	N	N	None	200	N	NOVRAM	20 Ld TSSOP

Dual

Device	V _S Range (V)	Voltage Threshold 1	Voltage Threshold 2	Reset Output Type	Watchdog Timer (s)	Manual Reset	Bus Interface	EEPROM Size (kbits)	Battery Monitor and Switchover	Fault Detection Register	Suffix	POR (ms)	RTC Function	Features	Package
X40010	2.7 to 5.5 2.7 to 5.5 2.7 to 3.6	4.6 (1%) 4.6 (1%) 2.9 (1.7%)	2.9 (1.7%) 2.6 (2%) 1.6 (3%)	Active High	OFF, 0.025, 0.2, 1.4	N	I ² C	0	N	Y	-A -B -C	50, 200, 400, 800	N		8 Ld SOIC, 8 Ld TSSOP
X40011	2.7 to 5.5 2.7 to 5.5 2.7 to 3.6	4.6 (1%) 4.6 (1%) 2.9 (1.7%)	2.9 (1.7%) 2.6 (2%) 1.6 (3%)	Active Low	OFF, 0.025, 0.2, 1.4	N	I ² C	0	N	Y	-A -B -C	50, 200, 400, 800	N		8 Ld SOIC, 8 Ld TSSOP
X40014	2.7 to 5.5 2.7 to 5.5 2.7 to 3.6	2.9 (1.7%) 2.6 (2%) 2.6 (2%)	1.3 (4%) 1.3 (4%) 1.0 (5%)	Active High	OFF, 0.025, 0.2, 1.4	N	I ² C	0	N	Y	-A -B -C	50, 200, 400, 800	N		8 Ld SOIC, 8 Ld TSSOP
X40015	2.7 to 5.5 2.7 to 5.5 2.7 to 3.6	2.9 (1.7%) 2.6 (2%) 2.6 (2%)	1.3 (4%) 1.3 (4%) 1.0 (5%)	Active Low	OFF, 0.025, 0.2, 1.4	N	I ² C	0	N	Y	-A -B -C	50, 200, 400, 800	N		8 Ld SOIC, 8 Ld TSSOP
X40020	2.7 to 5.5 2.7 to 5.5 2.7 to 3.6	4.6 (1%) 4.6 (1%) 2.9 (1.7%)	2.9 (1.7%) 2.6 (2%) 1.6 (3%)	Active High	OFF, 0.025, 0.2, 1.4	Y	I ² C	0	Y	Y	-A -B -C	50, 200, 400, 800	N	Battery Switch, WDO Out	14 Ld SOIC, 14 Ld TSSOP
X40021	2.7 to 5.5 2.7 to 5.5 2.7 to 3.6	4.6 (1%) 4.6 (1%) 2.9 (1.7%)	2.9 (1.7%) 2.6 (2%) 1.6 (3%)	Active Low	OFF, 0.025, 0.2, 1.4	Y	I ² C	0	Y	Y	-A -B -C	50, 200, 400, 800	N		14 Ld SOIC, 14 Ld TSSOP
X40410	2.7 to 5.5 2.7 to 5.5 2.7 to 3.6	4.6 (1%) 4.6 (1%) 2.9 (1.7%)	2.9 (1.7%) 2.6 (2%) 1.6 (3%)	Active High	OFF, 0.025, 0.2, 1.4	N	I ² C	4	N	Y	-A -B -C	50, 200, 400, 800	N		8 Ld SOIC, 8 Ld TSSOP
X40411	2.7 to 5.5 2.7 to 5.5 2.7 to 3.6	4.6 (1%) 4.6 (1%) 2.9 (1.7%)	2.9 (1.7%) 2.6 (2%) 1.6 (3%)	Active Low	OFF, 0.025, 0.2, 1.4	N	I ² C	4	N	Y	-A -B -C	50, 200, 400, 800	N		8 Ld SOIC, 8 Ld TSSOP
X40414	2.7 to 5.5 2.7 to 5.5 2.7 to 3.6	2.9 (1.7%) 2.6 (2%) 2.6 (2%)	1.3 (4%) 1.3 (4%) 1.0 (5%)	Active High	OFF, 0.025, 0.2, 1.4	N	I ² C	4	N	Y	-A -B -C	50, 200, 400, 800	N		8 Ld SOIC, 8 Ld TSSOP

